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Getting Started

About this Documentation
This document was output from the online help, which is topic driven and not meant to be read in a linear fashion. Therefore, the PDF might not be organized as smoothly as a typical book. However, searching the PDF should yield the information you need.

Introducing DB/TextWorks
Inmagic® DB/TextWorks® is a database and text retrieval system that administrators can use to build networked and standalone textbases for managing diverse types of information including documents, images, and multimedia. Users can be given different levels of access to the information, so they can search for and display the information they need.

DB/TextWorks is part of the DB/Text® Library Suite, which is designed for information professionals within workgroups managing single-site and multi-site libraries that want a single catalog covering multiple collections. The Library Suite includes the following components:

- DB/TextWorks: A specialized database and text retrieval system.
- DB/Text WebPublisher Pro: A Web publishing system that provides the ability to deploy, access, and maintain textbases on the Web.
- Inmagic Genie: A Web-based integrated library system (ILS).

SQL and non-SQL Platforms
You may be running DB/Text on either the SQL or non-SQL platform. Both platforms provide the same features and functionality, but some menus and dialogs differ slightly. The main difference is that DB/Text for SQL includes an Administration program, which provides functionality exclusive to the SQL platform, including Backup, Restore, and Upgrade.

The SQL platform also includes the Inmagic DB/Text Importer, which runs as a Windows service to import records in the background. (The non-SQL platform does not include the Importer, but it is available upon request to customers who purchased WebPublisher Pro.)

For more information, see DB/TextWorks for SQL.

Starting DB/TextWorks
Click the Start button and choose Programs>Inmagic Applications>DBTextWorks>DBTextWorks. When you start the software, only a few menu options are available on the Main window. To see more options, create or open a textbase.

Note: The first time you open this application, the User File Path dialog box opens so you can specify a location for your personal user files.

Opening a Textbase

To open a textbase
- After starting DB/TextWorks, choose File>Open. Use the resulting dialog box to specify the location of the textbase that you want to open, select a textbase, and click Open. The first time that you open a textbase, you may be asked for the user file path.
**Getting Started**

- When you open a textbase that does not yet contain records, you will be prompted to create records. When you open a textbase that contains records, the Query window appears, so you can begin searching for records.

**To open a textbase using a menu screen**
- If a menu screen appears when you start the software, click an item on the menu to open the associated textbase.

**To open a sample textbase**
The software comes with two sample textbases that you may have installed during Setup. You can open and use these textbases as you learn how to use the software. The textbases, Sample1 and Sample2, are located by default in the SAMPLE subfolder of the installation folder (for example, C:\DBTEXT\SAMPLE). There may also be a Sample Textbases icon or program item in the Inmagic Applications group on your Windows desktop.

**To create shortcuts for opening textbases**
You can create a shortcut on the desktop for each sample textbase, or add items to the Programs list. Each shortcut should point to the executable file DBTEXT32.EXE and a textbase file name. For example, to open the Sample1 textbase, your shortcut might look like this:

```
C:\DBTEXT\DBTEXT32.EXE C:\DBTEXT\SAMPLE\SAMPLE1
```

**To create shortcuts for loading menu screens**
To use a specific menu screen when you start the software, use the /m switch to include the menu screen name. The following example loads a menu file called MYMENU.TBM:

```
C:\DBTEXT\DBTEXT32.EXE /M C:\DATA\MYMENU
```

A menu screen can list several textbases, so you may find it more convenient to create one shortcut to a menu screen than to create multiple shortcuts to different textbases.

**Getting Help from Inmagic, Inc.**

Inmagic, Inc. provides many resources to help you learn and use the software:

- **Online help.** To open the help, start the application and press F1 or choose Help>Help Topics from the DB/TextWorks menu bar. Use the Help on this Window button for a topic specific to that window. For context-sensitive help, click on the toolbar, then click a menu command or toolbar button. See also Printing Help Topics.

- **Knowledgebase and Web site.** Choose Help>Inmagic on the Web to access options including Knowledgebase, the Inmagic web site, and the Support Page.

- **Error messages textbase.** The textbase DBTMSG.TBA is in the DB/TextWorks installation folder. It lists error messages and solutions.

- **README file.** An HTML file that lists new features and known and resolved issues.

- **Installation and Upgrade Notes.** A PDF document that explains how to install or upgrade the software.

- **HTML help pages for WebPublisher PRO.** Web_Begin.HTM, Web_IChoices.HTM, and Web_Msg.HTM are in the HELP subfolder of the WebPublisher PRO folder.
Contacting Inmagic, Inc.
If you have tried the resources listed above and you still need help, you can contact Inmagic, Inc. or your local Inmagic dealer.

If you have a maintenance agreement, please have the customer ID ready, and try to be at your computer when you call. If that is not possible, note exactly what you were doing when you encountered the problem, the exact text of any error messages you received, and your software version and serial number (choose Help> About DB/TextWorks to look it up). If you do not have a maintenance agreement, you can contact Customer Service to purchase one.

Inmagic, Inc.
200 Unicorn Park Drive
Fourth Floor
Woburn, MA 01801 U.S.A.
Tel: 781-938-4444 or 800-229-8398
Fax: 781-938-4446
http://www.inmagic.com

<table>
<thead>
<tr>
<th><a href="mailto:support@inmagic.com">support@inmagic.com</a></th>
<th>technical support questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:CustomerSvc@inmagic.com">CustomerSvc@inmagic.com</a></td>
<td>general company, product, and services questions</td>
</tr>
<tr>
<td><a href="mailto:sales@inmagic.com">sales@inmagic.com</a></td>
<td>sales, product pricing, and custom solution questions</td>
</tr>
<tr>
<td><a href="mailto:wishlist@inmagic.com">wishlist@inmagic.com</a></td>
<td>feature requests</td>
</tr>
</tbody>
</table>

If your message is intended for a particular person at Inmagic, Inc. (for example, a Technical Support representative who is expecting the message or files), please include the name of that person in the subject and the message.

Communicating with Other Users
You can participate in user-to-user discussions through an Inmagic forum on the Web. Note that the forums are not an official customer or technical support channel for Inmagic products. To participate in a forum, go to the Inmagic Customer Extranet at http://support.inmagic.com/downloads/extranet.html.

Printing Help Topics
To print a help topic, follow the instructions below.

- **Internet Explorer**: Use the Print button on the help toolbar. Or choose File, Print Preview in the browser, use the drop-down list at the top of the window to indicate which frame(s) you would like to print, then click the Print icon.
- **Firefox**: Right-click the topic, choose This Frame, Print Frame.

Navigating

DB/TextWorks Windows
The following list describes the most frequently used DB/TextWorks windows:

- The Main window is the first window that you see when you start DB/TextWorks.
The Query window allows you to search for records.

The Report window displays multiple records found by a search.

The Display window shows one record at a time.

The Edit window lets you edit one record at a time.

The Images window displays images referenced in the textbase.

You can open the Report, Display, Edit, and Images windows at the same time and display a different record in each window, or you can synchronize the windows so they all show the same record.

The way the records appear in the Report, Display, and Edit windows or in printed reports depends on the forms that are currently selected. You can use the Form Designer to create your own forms. To help you get started, DB/TextWorks automatically generates Basic forms that you can use until you design your own. To see which forms are in use, choose Display>Select Forms.

The appearance of the query window depends on which query screen is currently selected (Search>Select Query Screen).

Navigating in the Query Window

The query window appears when you open a textbase or choose Search>Query Screen. The query screen includes boxes that search fields. You can navigate between boxes and within a box, as explained in Navigating in Boxes.

Navigating in the Display and Edit Windows

The Display and Edit windows show one record at a time.

<table>
<thead>
<tr>
<th>To</th>
<th>Do this</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move up or down</td>
<td>Press Ctrl+Page Up or Ctrl+Page Down to move up or down one page, or Use the window scroll bars.</td>
</tr>
<tr>
<td>Navigate between records</td>
<td>Choose a Display menu option (Next Record, Previous Record, First Record, Last Record) Click the arrow buttons on the toolbar.</td>
</tr>
<tr>
<td>Change forms</td>
<td>Choose Display&gt;Select Forms, or Click the Select Form for this Window toolbar button.</td>
</tr>
<tr>
<td>Display a report</td>
<td>Choose Display&gt;Display Report.</td>
</tr>
</tbody>
</table>

The Display and Edit windows consist of information in one or more boxes. If the boxes have borders and scroll bars, this is obvious. If the borders and scroll bars are turned off, it is not so obvious. The appearance of each window is determined by the form selected for the window. To navigate in and among boxes, see Navigating in Boxes.
Navigating in the Report Window

The Report window displays multiple records after you execute a query or load a set.

<table>
<thead>
<tr>
<th>To</th>
<th>Do this</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move up or down</td>
<td>Press <strong>Page Up</strong> or <strong>Page Down</strong> to move up or down one page, or use the window scroll bars.</td>
</tr>
<tr>
<td>Navigate between records</td>
<td>Use the Display menu (<strong>Next Record</strong>, <strong>Previous Record</strong>, <strong>First Record</strong>, <strong>Last Record</strong>), or Use the arrow buttons on the toolbar, or press <strong>Tab</strong> (to move forward) or <strong>Shift+Tab</strong> (to move backwards).</td>
</tr>
<tr>
<td>Go to beginning or end of the selected record</td>
<td>Press <strong>Home</strong> or <strong>End</strong>.</td>
</tr>
<tr>
<td>Go to first or last record</td>
<td>Press <strong>Ctrl+Home</strong> or <strong>Ctrl+End</strong>.</td>
</tr>
<tr>
<td>Display the selected record</td>
<td>Choose <strong>Display&gt;Display Record</strong>.</td>
</tr>
<tr>
<td>Edit the selected record</td>
<td>Choose <strong>Records&gt;Edit Record</strong>.</td>
</tr>
<tr>
<td>Change forms</td>
<td>Choose <strong>Display&gt;Select Forms</strong>, or Click the <strong>Select Form for this Window</strong> toolbar button.</td>
</tr>
</tbody>
</table>

Navigating between Windows

To navigate between DB/TextWorks windows, use one of these methods

- Click a window.
- Choose a window from the list at the bottom of the Window menu.
- Press **Ctrl+F6**.
- Press **Ctrl+Tab** to cycle through each open window.

To arrange open windows

- Use the options on the Window menu.

To close a window

- Choose **Window>Close**.

To synchronize open windows so they show the same record

- Choose **Window>Synchronize Windows**. When the option has a checkmark next to it, all open windows will show information from the same record. When the option is not checked, you can display a different record and/or image in every window.

To resize a window to the selected form or query screen

- DB/TextWorks preserves window size and position. To quickly resize a window after selecting a different form or query screen, choose **Window>Fit Window to Form** or click the Fit Window to Form toolbar button.
Navigating in Boxes

In many windows, DB/TextWorks uses boxes to show information. You can navigate within a box and between multiple boxes in almost every window except the Report window.

**Between Boxes**

<table>
<thead>
<tr>
<th>To</th>
<th>Do this</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go to the next or previous box</td>
<td>Press <strong>Tab</strong> or <strong>Shift+Tab</strong>.</td>
</tr>
<tr>
<td>Go to a specific box</td>
<td>Click in a box or choose <strong>Edit&gt;Go to Box</strong>.</td>
</tr>
</tbody>
</table>

**Within a Box**

<table>
<thead>
<tr>
<th>To</th>
<th>Do this</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scroll through information</td>
<td>Use the arrow keys or box scroll bars</td>
</tr>
<tr>
<td>Display previous or next &quot;page&quot; of information in a box</td>
<td>Press <strong>Page Up</strong> or <strong>Page Dn</strong></td>
</tr>
<tr>
<td>Go to beginning or end of current line</td>
<td>Press <strong>Home</strong> or <strong>End</strong></td>
</tr>
<tr>
<td>Go to beginning or end of information in a box</td>
<td>Press <strong>Ctrl+Home</strong> or <strong>Ctrl+End</strong></td>
</tr>
<tr>
<td>Go to next or previous word</td>
<td>Press <strong>Ctrl+Right Arrow</strong> or <strong>Ctrl+Left Arrow</strong></td>
</tr>
<tr>
<td>Go to beginning of next or previous entry (in the Edit window, in a box that contains multiple entries)</td>
<td>Press <strong>Ctrl+Up Arrow</strong> or <strong>Ctrl+Down Arrow</strong></td>
</tr>
</tbody>
</table>
Selecting Information

You can select information and then use the Edit menu to copy, cut, paste, or delete the information. You can copy information from any window in which you can insert the cursor, except the Designers. You can cut, paste, or delete information in any editable box. When you cut or delete information, the box does not shrink until you save and redisplay the record.

<table>
<thead>
<tr>
<th>To</th>
<th>Do this</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select characters</td>
<td>Drag the mouse cursor over the text, or</td>
</tr>
<tr>
<td></td>
<td>Hold down the Shift key while pressing any of the keys used to navigate</td>
</tr>
<tr>
<td></td>
<td>within a box, or Click where you want to begin the selection and Shift+click</td>
</tr>
<tr>
<td></td>
<td>where you want to end.</td>
</tr>
<tr>
<td>End a selection</td>
<td>Release the mouse button or Shift key.</td>
</tr>
<tr>
<td>Select one word</td>
<td>Double-click the mouse, or</td>
</tr>
<tr>
<td></td>
<td>Press Ctrl+Shift+Right Arrow or Ctrl+Shift+Left Arrow.</td>
</tr>
<tr>
<td>Select one entry in the</td>
<td>Position the cursor anywhere within an entry and press Ctrl+F7, or</td>
</tr>
<tr>
<td>Edit window</td>
<td>Choose Edit&gt;Select Entry, or</td>
</tr>
<tr>
<td></td>
<td>Triple-click the mouse.</td>
</tr>
<tr>
<td>Deselect a selection</td>
<td>Click the mouse or press any navigational key (for example, arrow key).</td>
</tr>
<tr>
<td>Replace selected text</td>
<td>Type alternate text.</td>
</tr>
</tbody>
</table>

**Single Selection Lists**

In some lists, you can select only one item, using either method:

- Click to select the item, or
- Double-click to select the item and, in many cases, close the dialog box.

While an item is selected in the list, you can type a single letter to jump to the next entry in the list that begins with the letter you typed.

**Multiple Selection Lists**

In some lists, you can select multiple items, using either method:

- Drag the mouse or Shift+click to select multiple items that are next to each other, or
- Ctrl+click to select (or deselect) multiple items that are not next to each other.
## Keyboard Shortcuts

<table>
<thead>
<tr>
<th>Menu</th>
<th>Command</th>
<th>Quick Keys</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>File</strong></td>
<td>New Textbase</td>
<td>Ctrl+N</td>
</tr>
<tr>
<td></td>
<td>Open</td>
<td>Ctrl+O</td>
</tr>
<tr>
<td></td>
<td>Close Textbase</td>
<td>Ctrl+W</td>
</tr>
<tr>
<td></td>
<td>Print</td>
<td>Ctrl+P</td>
</tr>
<tr>
<td></td>
<td>Exit</td>
<td>Alt+F4</td>
</tr>
<tr>
<td><strong>Edit</strong></td>
<td>Undo</td>
<td>Ctrl+Z</td>
</tr>
<tr>
<td></td>
<td>Redo</td>
<td>Ctrl+A</td>
</tr>
<tr>
<td></td>
<td>Cut</td>
<td>Ctrl+X</td>
</tr>
<tr>
<td></td>
<td>Copy</td>
<td>Ctrl+C</td>
</tr>
<tr>
<td></td>
<td>Paste</td>
<td>Ctrl+V</td>
</tr>
<tr>
<td></td>
<td>Paste Entry</td>
<td>Ctrl+Shift+V</td>
</tr>
<tr>
<td></td>
<td>Browse Choices</td>
<td>F3</td>
</tr>
<tr>
<td></td>
<td>Browse Files</td>
<td>Shift+F3</td>
</tr>
<tr>
<td></td>
<td>Find</td>
<td>Ctrl+F</td>
</tr>
<tr>
<td></td>
<td>New Entry</td>
<td>F7</td>
</tr>
<tr>
<td></td>
<td>Insert Entry Mark</td>
<td>F11</td>
</tr>
<tr>
<td></td>
<td>Delete Entry</td>
<td>Shift+F7</td>
</tr>
<tr>
<td></td>
<td>Select Entry</td>
<td>Ctrl+F7</td>
</tr>
<tr>
<td></td>
<td>Insert Current Date</td>
<td>F4</td>
</tr>
<tr>
<td></td>
<td>Insert Current Time</td>
<td>Shift+F4</td>
</tr>
<tr>
<td><strong>Records</strong></td>
<td>New Record</td>
<td>Ctrl+F2</td>
</tr>
<tr>
<td></td>
<td>Edit Record</td>
<td>F2</td>
</tr>
<tr>
<td></td>
<td>Edit Secondary Record</td>
<td>Alt+F2</td>
</tr>
<tr>
<td></td>
<td>Save Record</td>
<td>F5 or Ctrl+S</td>
</tr>
<tr>
<td></td>
<td>Duplicate Record</td>
<td>Shift+F2</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>Next Record</td>
<td>Ctrl+R</td>
</tr>
<tr>
<td></td>
<td>Previous Record</td>
<td>Ctrl+Shift+R</td>
</tr>
<tr>
<td></td>
<td>Next Highlighted Term</td>
<td>F6</td>
</tr>
<tr>
<td></td>
<td>Previous Highlighted Term</td>
<td>Shift+F6</td>
</tr>
<tr>
<td><strong>Search</strong></td>
<td>New Query</td>
<td>Ctrl+Q</td>
</tr>
<tr>
<td><strong>Sets</strong></td>
<td>Omit Record</td>
<td>Alt+O</td>
</tr>
<tr>
<td><strong>Inmagic.net</strong></td>
<td>Place Order</td>
<td>Shift+F8</td>
</tr>
<tr>
<td><strong>Tools</strong></td>
<td>Spell Check</td>
<td>F8</td>
</tr>
<tr>
<td><strong>Window</strong></td>
<td>Refresh</td>
<td>F9</td>
</tr>
<tr>
<td><strong>Help</strong></td>
<td>Help Topics</td>
<td>F1</td>
</tr>
<tr>
<td></td>
<td>Context Help</td>
<td>Shift+F1</td>
</tr>
</tbody>
</table>
# Mouse Operations

<table>
<thead>
<tr>
<th>Action</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Click</td>
<td>Press and release the mouse button quickly</td>
</tr>
<tr>
<td>Double-click</td>
<td>Press and release the mouse button twice in rapid succession</td>
</tr>
<tr>
<td>Shift+click</td>
<td>Hold down the Shift key and press and release the mouse button quickly</td>
</tr>
<tr>
<td>Drag</td>
<td>Press and hold down the mouse button while you move the mouse</td>
</tr>
</tbody>
</table>
Customizing and Configuring

Configuring DB/TextWorks
You can run the DB/TextWorks Setup program to change the configuration settings. This takes only a minute or two. Configuration information is saved in the DBTEXT.INI file, which is located in the DB/TextWorks installation folder.

Note: Additional configuration can be performed by editing various INI files.

Languages for Month and Day Names
DB/TextWorks can recognize month and day names in more than one language. The language(s) it recognizes depend on those specified during Setup. If you specify more than one set of month or day names, all of them will be recognized in a date, but only the first set is used for dates generated by the software (for example, Edit>Insert>Current Date) or reformatted by a form.

Default Stop Word and Leading Article Lists
When you create a new textbase, DB/TextWorks supplies a default list of leading articles and stop words. Run the DB/TextWorks Setup program to change the default lists. You can edit the lists for an existing textbase by editing the textbase structure. The default lists are shown below.

Stop words: a an and by for from in of the to
Leading articles: a an the

Year 2000 Compliance
Four-digit years (1957, 2011, and so forth) are always interpreted correctly.

Two-digit years (for example, 4-12-01) are set by default to be Year 2000 compliant up to the year 2039. To extend beyond that date, you can modify the CenturyYear0= setting in the [Dates] section of DBTEXT.INI to specify a starting year to indicate a 100-year range into which two-digit years will be mapped. For information, see 2-digit Years. See also Date Formats for Year 2000.

Textbase-user Identification
If you select the Track who has textbase open check box on the Track Textbase Access dialog box, each time a user opens a textbase, their machine name and login name will be written to a line in the textbase .SLT file (providing that they have write-access to the folder containing the textbase). When the user closes the textbase, that line will be cleared. At any time, you can look at the textbase .SLT file (open it with any text editor) to see who has the textbase open.

This configuration setting permits you to specify that all textbases opened with this copy of DB/TextWorks will have this information recorded. When you select the Track who has textbase open check box, the EnableSlotLog= parameter is added to the [Advanced] section of the DBTEXT.INI file so that all textbases opened with the software are tracked. Alternatively, you can leave this check box cleared, and turn on tracking in any specific textbase by adding the EnableSlotLog= parameter to the [Advanced] section of the <textbase>.INI file.
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Single-User and Multi-User Environments

DB/TextWorks allows for single or shared access to a textbase. There are several features that help control access to a textbase:

- **Indexing mode.** To organize and retrieve information, DB/TextWorks builds indexes for field information. When you add, edit, and delete record information, the software updates the indexes to reflect the changes. You can select an indexing mode to determine when the indexes are updated.

- **Password protection.** You can assign passwords to protect your textbases on a field-by-field basis, to control who can view and edit information. For example, hide the Salary field and make all other fields read-only. Assign a Silent password that allows anyone to open a textbase (even without knowing a password), while still protecting your information by locking out the features you specify. You can also specify record-level security to restrict access to individual records.

- **Maximum number of users.** To enhance performance, limit the number of times a textbase can be opened simultaneously. (This is independent of the number of licensed users, which can never be exceeded.)

- **User files.** Each person who uses a textbase can save forms, query screens, sets, and record skeletons in a private file, to which no other users have access. See also: Textbase Elements and User Files

**Customize Toolbar command (Tools menu)**

You can customize the DB/TextWorks toolbars that appear in each window. A toolbar is a row of buttons most often displayed across the top of a window. The buttons provide a quick way to access frequently used menu options. Toolbar buttons are grouped together by relative function and are separated by spaces (called separators). You can customize toolbars with buttons and separators any way you want. Some toolbar buttons provide access to choices not available on any menu. These include:

- Select Form for this Window
- Help on this Window
- Center text
- Right Justify text
- Left Justify text

Toolbar customizations are user-specific and apply to all textbases opened by a particular user. Your custom toolbar settings are stored in the Windows Registry. Using the Customize Toolbars command, you can customize the toolbar for the Current Window and the Main Window.

**Applications menu**

You can add an additional Applications menu to DB/TextWorks. This menu can contain links to HTML pages or other files, including PDF, Microsoft Word, and Microsoft Excel documents. You can control which choices appear on the Applications menu.

Choosing one of the options on this menu does the following, depending on the type of file you want to open:
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- **HTML files.** Opens the HTML page in a window inside DB/TextWorks. All of the normal HTML behavior will work in this window (for example, JavaScript, links).
- **Other file types.** Uses local drive mappings to open another software program to display a document (for example, it opens Microsoft Word to display a Word document).

**Controlling which choices appear on the Applications menu**

In the <textbase>.INI file, the [DBTW_Apps] section controls which choices appear on the Applications menu for that textbase.

AppCnt= indicates the number of choices on the menu. Each menu choice has a numbered pair of appName and appFSpec settings, starting with number zero (0).

appName designates the text that appears on the menu; precede any shortcut key with an ampersand (&)

appFSpec identifies the URL or file location of the document to open. If just a file name is specified (for example, readme.htm or sales.doc), the software looks for the file in the textbase folder.

**Example**

```
[DBTW_Apps]
AppCnt=3
appName0=&Inmagic home page
appFSpec0=http://www.inmagic.com
appName1=&Textbase Help File
appFSpec1=catalog.htm
appName2=&Company Policy Handbook
appFSpec2=d:\Documents\policy.doc
```

**Textbase-Specific Help**

For each textbase that you create, you can supply one compiled Windows Help file that describes any topics you want. For example, you can explain the purpose of a textbase and provide tips on how to search, edit, and generate useful reports. Textbase-specific help supplements, not replaces, the DB/TextWorks help. Users can continue to access the DB/TextWorks help in the usual ways. To see an example of textbase-specific help, open the DBTMSG textbase that was installed with DB/TextWorks (located by default in the same directory as DB/TextWorks) and choose Help>Textbase-Specific Help.

**To supply supplemental online Help for a particular textbase**

1. Open the DB/TextWorks Help menu. If Textbase-Specific Help is disabled, DB/TextWorks does not detect a textbase-specific Help file (for example, a Help file with the same name and location as the associated textbase, or with the name/location specified in the <textbase>.INI file).
2. Create a compiled Windows help file using software from Macromedia (RoboHelp), ComponentOne (Doc-to-Help), or another supplier.
3. Place the compiled Help file in the same folder as the textbase OR in the location specified in the <textbase>.INI file. By default, a textbase-specific Help file must be in the same folder as the textbase and have the same name as the textbase. For example,
the Help file for a textbase called Loans must be called LOANS.HLP. To change this behavior, specify the name and path of the textbase-specific Help file in the [Help] section of the <textbase>.INI file. The <textbase>.INI file must be located in the same folder as the textbase. You may have to create this file yourself. For example, to point to a help file called C:\DEMO\LIBRARY.HLP, add these lines:

[Help]
HelpFilePath=c:\demo
HelpFileName=library

For the HelpFileName= line, an extension of .HLP is assumed. Do not include the .HLP extension. If the Help file is located in the same folder as the textbase, you can omit the HelpFilePath= line.

This feature is especially useful when you want multiple textbases to point to a single Help file, or if the Help file has a different name/location than its associated textbase.

4. When you open the textbase, you can access the Help by choosing Help>Textbase-Specific Help. The command is enabled whenever you open a textbase that has a Help file associated with it.

Application Options (Copy Special)

Use the Copy Special>Application options to pass record-specific information to other applications by way of the Windows Clipboard. Other applications must poll the Windows Clipboard and activate when they find something they recognize.

If you want to sort record-specific information before passing it to the Windows Clipboard, you can edit the <textbase>.INI file. You can also specify the exact wording that will appear on the Copy Special menu. For example, instead of the default wording Application (1), you can use the wording Pass to LiveNote. These options are explained below.

To enable the Copy Special function

1. Add information to the software initialization file, DBTEXT.INI, describing the signature text which each target application will use for recognition. This .INI file is located in the DB/TextWorks installation folder.

   Note: The DBTEXT.INI file shipped with DB/TextWorks already includes lines for several applications commonly used with DB/TextWorks (IPRO, LiveNote, Invzn, Discovery, Launch).

   For each target application, add a parameter to the [SpecialVendor] section of DBTEXT.INI. The name of the parameter is the application name you will use for reference in the <textbase>.INI file (described in step 2). Make up any name you wish: it need not bear any relation to the name of the target EXE. Follow this name with an equal sign (=) and three text strings separated by vertical bars (|). The first string is the beginning text, the second is the field entry separator, and the last is the ending text.

   When information from the field is copied to the Clipboard, it is preceded by the beginning text and concludes with the ending text. If multiple entries are copied, they are separated by the field entry separator text. Typically, the target application polls the Clipboard, looking for the beginning text as its signal. It then uses the other added text to parse out the information it needs.

   The text strings can include control characters using standard C notation. For example, a line break (carriage return-linefeed pair) is denoted by \n.
Example
This example specifies two applications, **Launch** and **LiveNote**:

```
[SpecialVendor]
launch=dbtext=\r\ndbtext=\r
LiveNote=LiveNote Command\r\nOpenLRL\r\nmode=exclusive\r\n```

If the **Launch** application is specified in the `<textbase>.INI` file, a field containing CONTR001.DOC would be copied to the Clipboard in the following format:

```
dbtext=CONTR001.DOC
```

If, instead, the **LiveNote** application is specified in the `<textbase>.INI` file, the Clipboard would contain this information:

```
LiveNote Command
OpenLRL
mode=exclusive
CONTR001.DOC
```

2. Create or edit a `<textbase>.INI` file, specifying which field in the textbase will be the source of the information, and which of the applications described in DBTEXT.INI is the target. You can specify up to two source/target options, using sections called `[SpecialVendor]` and `[SpecialVendor2]`. The `<textbase>.INI` file has the same name and location as the textbase (for example, a textbase called PRODUCT uses a file called PRODUCT.INI).

Two parameters are required in each `[SpecialVendor]` section, and three are optional.

The first parameter, **Vendor**, names the target application (as it was named in the DBTEXT.INI file).

The second, **SpecialField**, names the field from which the information will be copied when the Copy Special toolbar button or menu choice is clicked.

The third parameter, **MultipleRecs**, is optional. Type `MultipleRecs=0` if you want to copy information only from the record that is selected in the Report window. Omit this parameter if you want to copy information from all of the records in the set if the Copy Special button is clicked.

**Note:** If the Display or Edit window is active when you use **Copy Special>Application**, information is copied from a single record only.

The fourth parameter, **Sort**, is optional. To send sorted information to the Windows Clipboard, add the line `Sort=1`. Information will be sorted based on the sort option specified for the current Report window.

**Note:** You must display the report for the sort to occur. Sorting occurs only when information is copied from multiple records (`MultipleRecs=1`). If you do not want to sort records before passing them to the Windows Clipboard, type `Sort=0` or omit the Sort parameter altogether.

The fifth parameter, **Menu**, is optional. Add a line in the format `Menu=<text>` to indicate the text you want to display in the Copy Special menu, instead of the default text (“Application (1)” or “Application (2)”). To specify an accelerator character, precede it with an ampersand (&). Be sure not to use E or O for an accelerator, since these are used for **Copy Special>Record** and **Copy Special>Report**. For example, type `Menu=&Launch`
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**Application** to place the option **Launch Application** on the Copy Special pull-right menu, instead of one of the **Application** commands.

The following examples show two Copy Special application options. You do not necessarily have to define two. You can define just one, if that is all you need.

**Example 1:**
In Example 1, **Launch** is the target application, **Document Name** is the field in your structure that contains the information you want to pass to the Windows Clipboard, all records will be passed to the target application (**MultipleRecs=0** is omitted), the records will be sorted (**Sort=1**), and the wording in the Copy Special menu will change to **Pass to Launch**.

```
[SpecialVendor]
Vendor=launch
SpecialField=Document Name
Sort=1
Menu=Pass to Launch
```

**Example 2:**
In Example 2, **LiveNote** is the target application, **Annotation** is the field in your structure that contains the information you want to pass to the Clipboard, and the wording in the Copy Special menu changes to **Pass to LiveNote**.

```
[SpecialVendor2]
Vendor=LiveNote
SpecialField=Annotation
MultipleRecs=0
Menu=Pass to LiveNote
```

3. **[Optional]** As described above, you can use the Copy Special application commands that are already on the Edit menu, and you can change their text if you want to. Additionally, you may want to add Copy Special toolbar buttons to the DB/TextWorks main toolbar. To do this, start DB/TextWorks and choose **Tools>Customize Toolbar>Customize**. In the **Available buttons** list, double-click Copy Special (1) or (2) to add the button to the **Toolbar buttons** list. Then close the dialog box.

4. Now you are ready to use Copy Special. Be sure both DB/TextWorks and the other application are running before testing the Copy Special function.

5. If you need more information about how to use Copy Special after it has been properly set up for your textbase, consult the vendor or developer of the connecting application.

**Tip!** You can also use a **script** to launch another application or set up DB/TextWorks so that it can **detect** a recognizable URL, e-mail link, or file link in text in a box and convert it to a hypertext link.

**Setting User Options**
Options are maintained separately for each user. They are not textbase-specific. All options except the **Read/write extended characters in MS-DOS format** option on the General tab) persist across sessions, and are saved in the INMAGIC.INI file located on the computer where the change was made.

Choose **Tools>Options** to open the Options dialog box.

Options are categorized within tabs, based on their purpose.
General Tab

Options Group-General Tab (Tools>Options)

Use these options to specify how the software displays information.

- **Insert date using long format.** This option determines how dates appear in the Edit window when inserted using Edit>Insert>Current Date or Edit>Insert-Series. Changing this preference does not change the appearance of dates already pasted. Select the box if you want to use the long format (December 02, 2010) instead of the short format (12/02/10). The Regional settings of the Windows Control Panel determine the appearance of long and short date formats. You can use forms to change the appearance of dates in the Display Record window and reports.

- **Insert date as new entry.** This option determines how the software enters dates in the Edit window when inserted using Edit>Insert>Current Date or by pressing F4. When you select this option (DB/TextWorks standard default setting), when you press F4, the software inserts the date as a new entry. If you clear this option, the software inserts the date at the cursor position as part of the current entry.

The following examples illustrate how this option works. In the first illustration, an entry is made in the Date field.

```
Date
meeting with Janet
```

In the next illustration, with the **Insert date as new entry** option selected (DB/TextWorks standard default), a date for the meeting was entered as a new entry. Note that each entry is preceded by a bullet.

```
Date
*07/23/99
*meeting with Janet
```

In the last illustration, with the **Insert date as new entry** option cleared, a date for the meeting was entered as part of the current entry.

```
Date
07/23/99-meeting with Janet
```

- **Recently used file list.** Select or clear this check box to control whether the software displays a list of recently used textbases at the bottom of the File menu. You can specify the maximum number listed by entering a number, up to a maximum of 15 entries. This option is useful if you work with the same textbases over and over and want to easily open a textbase. If you clear this option, the software automatically reduces the number of displayed textbases to 0.

- **Notify when opening empty textbase.** This option determines whether a message notifies you when you open a textbase that does not contain any records (for example, when you create a new textbase).
  - By default, this check box is selected. A notification message appears when you open an empty textbase. When you click OK to dismiss the message, the Edit New Record window opens so you can add records.
Note: If the empty textbase is specified as read-only, you will be notified that it is empty, but the Edit New Record window will not open. This is because you do not have permission to add records. No window opens.

- If you clear this check box, you are not notified when you open an empty textbase (including a textbase that is read-only). The Query window opens, unless you use a menu screen box with a different initial action specified.

- **Read/write extended characters in MS-DOS format.** DB/TextWorks can interpret extended characters (codes above ASCII 127, such as é, £, and ¥) according to Microsoft Windows or MS-DOS specifications. Select this check box if you are importing from or exporting to an MS-DOS application. Clear the check box if the source is a file created using a Windows application.

  **Note:** The **Read/write extended characters in MS-DOS format** option is reset (cleared) each time you open DB/TextWorks.

- **Save new forms, etc. in Textbase File (Public) by default.** When you save a new form, query screen, record skeleton, or set, you can specify whether to save it in your User File (for your own private use) or the Textbase File (where others can use it as well). This option determines which file is selected by default.

**Report Options Group-General Tab (Tools>Options)**

On the Options dialog box, General tab, use the **Print using** drop-down list to specify the source of the form you want to use when you print a report.

- Select **Report Printing Form** if you want to use the form specified through the Select Forms dialog box (Display>Select Forms).

- Select **Form for current window** if you want to use the form for the selected window at printing time.

DB/TextWorks will do the following when you choose **File>Print** when a record window is active:

- If the selected report printing form and the form that is currently showing in the display window are the same, the Print dialog box displays.

- If the selected report printing form and the form that is currently showing in the display window are different, the software displays the Form Used to Print Report dialog box. This lets you specify which of these two forms to use for printing.

  **Note:** You can select **Always use this option without asking** on the Form Used to Print Report dialog box to use the selected form type without being prompted. By selecting this option, you are selecting the source of the form you want to use to print, not a specific form to use to print.

**Deferred Indexing Group-General Tab (Tools>Options)**

Use these settings to specify deferred indexing options for reports.

- **Show deferred changes in reports and display.** Select this box to see the new versions of any records with deferred updates when you display records or create reports. (In other words, you see the deferred changes.) This option also affects sorting. The Display and Report window titles say "(new version)" if a record with deferred updates is displayed.
Clear this box to see the old versions of records. If a search retrieves records that have deferred changes, you will **not** see the changes when you display records or create reports. The Display and Report window titles say "(old version)" if a record with deferred updates is displayed.

**Note:** Regardless of this preference setting, you always see the new version of a record in the Edit window, and you always see records waiting to be deleted (the Display and Report window titles say "deleted").

- **If indexes are busy.** The options in this drop-down list are useful if you are sharing a textbase on a network and using Shared Immediate indexing. Select an option to indicate what to do if Shared Immediate indexing is temporarily unavailable when you try to save a record.
  - **Save record deferred and display message.** Changes will be saved as deferred updates, and a message will inform you of this. Your indexing mode will continue to be Shared Immediate.
  - **Save record deferred with no message.** Changes will be saved as deferred updates, without any message. Your indexing mode will continue to be Shared Immediate.
  - **Do not save record.** You will have to try saving your changes again later OR change to Deferred indexing (**File>Change Indexing Mode**) and save your changes.

**Passwords Group-General Tab (Tools>Options)**

Select an option from the Primary and Secondary textbase drop-down lists to determine what happens when you open a primary or secondary textbase that has a Silent password.

**Note:** Once a textbase is opened, you can choose **File>Use Different Password>Primary Textbase/Secondary Textbase** to select a different password.

- **Use Silent password and show warning.** When you open a textbase that has a Silent password, a message will inform you that some operations may be restricted. This is the standard DB/TextWorks default option for primary textbases.
  
  **Note:** Textbases which do have passwords assigned, but do not have Silent passwords, will always prompt you for a password, regardless of this setting.

- **Use Silent password and do not show warning.** When you open a textbase that has a Silent password, no message will appear. This is the standard, DB/TextWorks default option for secondary textbases.

- **Always prompt for password.** You will be prompted to enter a password.

**User Options Group-General Tab (Tools>Options)**

The **User file directory** box displays the path to the folder in which your user files are located. This folder is typically local to your machine. To change the path, click the **Browse** button.

Note that if you change the user file directory, your existing user files will be automatically moved to the new location (if they are not found there already). In addition, your Inmagic.INI file and your user dictionary for Spell Check will also be moved to the new location.
Search Tab

Search Tab (Options)

Use the settings on the Search tab (choose Tools>Options>Search) to set options that affect the search appearance and behavior of DB/TextWorks. All the settings are listed in the Options group on this tab. The settings are:

- **Support multiple page TIFF images.** When this option is selected, DB/TextWorks is able to display and print all the images in multi-image TIFF files. For example, a file called PROPOSAL.TIF might contain ten separate pages. This feature may cause a slight performance degradation when displaying and printing images, so you should clear this option if you do not have any multi-image TIFF files.

- **Display and Print Highlighting**
- **Use inclusive search option for multiple fields**
- **Allow tabbing to Boolean query buttons**
- **Ignore accents on extended characters**

Display and Print Highlighting-Search Tab (Tools>Options)

Use the Display highlighting drop-down list to specify how words and terms that you search for should appear in the Report and Display windows after a search, as well as when you choose Send Report as Mail and Write Report to File in HTML or RTF format. This option determines how highlighting appears. The current form determines if highlighting appears (Tools>Form Properties>General in the Form Designer). Basic forms always highlight search items. You can choose from the following options:

- **Reverse Video.** The area around the words or terms you searched for is highlighted and the text is white.
- **Color.** The words or terms you searched for are displayed in color. To select the highlight color you want, click the Set Highlight Color button (which is enabled when you select this option) to access the Color dialog box.
- **None.** Words or terms you searched for are not highlighted.

**DB/Text WebPublisher:** This option affects expanded display on the Web. Also note that reverse video appears as bold in Web browsers.

Use the Print highlighting drop-down list in much the same as the Display highlighting drop-down list, except that this drop-down list affects how search items appear in printed reports on the desktop, or in Report forms used on the Web.

- **Bold.** Words or terms that you searched for appear like this.
- **Italic.** Words or terms that you searched for appear like this.
- **Bold Italic.** Words or terms that you searched for appear like this.
- **Underline.** Words or terms that you searched for appear like this.
- **None.** Words or terms that you searched for appear like this.

**Note:** In both Display highlighting and Print highlighting, None overrides the setting specified in Highlight search items (Tools>Form Properties>General). This is useful, for
example, if you want to use the same form for display and printing, but only want search items highlighted for display.

**Use inclusive search option for multiple fields - Search Tab**

This option affects query boxes that search multiple fields. It also affects Command queries that search multiple fields for multiple items in one statement (for example, Author/Title CT Smith & Mary). For more information, read about using the inclusive search option.

Select this option to specify that a search for an intersection of terms in a combination of fields be satisfied as if the fields were one field. For example, the search for Smith & Mary shown above or a search for Smith & Mary in a query box that searches the Author and Title fields is satisfied if both words appear somewhere in the specified fields (search the Author or Title field for Smith AND the Author or Title field for Mary).

If this option is not selected, both words must appear in the same field (search the Author field for both Smith and Mary OR the Title field for both Smith and Mary).

**Allow tabbing to Boolean query buttons (Search Tab)**

Select this check box if you want the Tab key to include Boolean buttons on a query screen. Clear this check box if you want the Tab key to skip Boolean buttons. If you choose to skip Boolean buttons, you can use the Tab key to move to another query box with fewer keystrokes. Users who cannot, or prefer to not, use a mouse should select this option.

To toggle a Boolean button between AND, OR, and NOT, you must use the mouse or press the Spacebar.

**Ignore accents on extended characters - Search Tab**

Select Ignore accents on extended characters on the Search tab (choose Tools>Options>Search) if you want to search for extended characters without having to type the accent. For example, to find mañana, type manana. Equivalence is based on the region selected on the Windows Control Panel and applies only to single characters. If you clear this check box, you cannot find mañana by searching for manana.

Note also that if you select this check box it means that searches on Code fields will be case-insensitive. However, sorts will still be case-sensitive.

**Display Tab**

**Display Tab (Options)**

Use the settings on the Display tab to set options that affect the appearance of how DB/TextWorks displays record information and also to specify default form and query screen settings. There are three options group on the Display tab:

- **Options group**
- **Form defaults group**
- **Designer settings group**

**Options Group - Display Tab (Tools>Options)**

Use these options to specify 3-D box borders; field entry delimiters; and the default window in which to display records; and to convert URLs, e-mail links, and file links into live hypertext.
Customizing and Configuring

To specify the size of toolbar buttons; and to sort field lists alphabetically. All of the settings affect how DB/TextWorks displays information.

- **3-D box borders.** Select this check box to create boxes with 3-D borders for the query, display, and edit windows. The following illustration shows a box with a 3-D border.

  ![3-D box border example](image)

  **Note:** 3-D borders appear only on boxes that already have borders (choose Tools>Box Properties>Labels). They will not appear on any boxes that have no borders.

- **Field entry delimiter.** Use this drop-down list to specify the character used to designate multiple (repeating) entries in a field in Edit windows. Be sure to select a character that will never appear in your data when editing records. The default is a bullet character (·). The following example shows two entries separated by bullets:

  ![Field entry delimiter example](image)

- **After a search, view records in.** Use this drop-down list to specify the default window in which to display records found after a search or when loading a set. After you execute a search, the Select Search Results Window dialog box opens with the window choice you selected last automatically selected. At this point, you can choose a different window in which to view the retrieved records. If you change the setting at this point, the new choice becomes the default setting.

  - **Always use this option without asking.** Select this check box to ensure the window you select will be the default window used to display records, or when you know you will always want to view search results in a particular window. When you select this option, the Select Search Results Window dialog box does not open after a search or when loading a set.

- **Detect URLs, e-mail links, etc. and convert to hypertext links.** Select this check box to detect a recognizable URL, e-mail link, or file link in text in a box and convert it to a hypertext link. By enabling this option, you can click on the link and go directly to your Web browser, e-mail program, or appropriate file application. For example, http://www.inmagic.com launches your Web browser, mailto:janedoe@inmagic.com launches your e-mail program, and file://c:\docs\sales.doc launches the appropriate word processor. Be sure to enclose file names and URLs containing spaces in angle brackets (for example, <file://c:\sales\monthly report.doc>).

  **Note:** This option is ignored in editable boxes in an Edit window and script input boxes in any window. Note also that the software converts only the first 512 characters to a hypertext link.

  **Tip!** If you want to use the file name as a hypertext link to the document when the record is displayed, open the form in the Form Designer and enter file:// as beginning text in the box containing the filename.

- **Large buttons on toolbars.** Select this check box to use large buttons on all toolbars in DB/TextWorks. This check box is cleared by default, meaning toolbar buttons are standard size. If you select this check box, only toolbar buttons on new windows will be affected during the current DB/TextWorks session. To have the larger buttons appear on
the Main toolbar, you must quit DB/TextWorks and restart the program. To have the larger buttons appear on any other window that is open at the time, close the window and re-open it.

- **Sort textbase field lists alphabetically.** Select this check box to have field names listed on many dialog boxes within DB/TextWorks appear in alphabetical order. If the list includes secondary fields, they will be interfiled with the primary fields. For example, if you select this check box, the field lists on the Box Properties dialog boxes in the Query Screen Designer, Menu Screen Designer, and Form Designer appear alphabetically. By default, this check box is not selected. This option does not apply to the following field lists:
  - The Fields list on the Edit Textbase Structure dialog box.
  - The Field Name list on the Edit Field dialog box.
  - The Field list on the Query Choices Browser dialog box for query boxes. (You can still use field order in the query box to control which field’s index appears first when you open the dialog box.)

  **Note:** The Field list is sorted alphabetically on the Query Choices Browser dialog box when doing a Command Query.
  - The Associated Field list on the Link Definition tab of the Edit Fields dialog box. (Applies to link fields only.)
  - The field lists on the Field Access Passwords and Silent Password tabs on the Textbase Passwords dialog box.

**Form Defaults Group-Display Tab (Tools>Options)**

Use these options to customize default form, query screen, and menu screen settings. You can specify custom text and label default font settings, as well as other custom default settings (See More Defaults below).

- **Set Text Font.** Click this button to specify the fonts DB/TextWorks uses for new forms, Basic Record forms, Basic Report forms, new and Basic Query screens, and box text on menu screens. The font that you select will also be used for the Textbase Information window, printed definitions of textbase elements; and printed lists (validation, substitution, stop words, leading articles, indexes).

- **Set Label Font.** Click this button to select the font to use for box labels in forms and query screens.

- **More Defaults.** Click this button to access the Form Defaults dialog box. This dialog box contains six tabs from which you can specify other default settings for the Basic Record form, the Basic Report form, the Basic Query screen, new forms, new query screens, and new menu screens.

**Designer Settings Group-Display Tab (Tools>Options)**

Use the **Number of undo levels** option to set the maximum number of actions that can be undone using Edit>Undo in the designers (form, query screen, and menu screen).

The default is 4. The minimum allowed is 0 (which disables the undo feature) and the maximum is 50.
Undo states are retained in memory, so if you have unusually large form definitions, many applications running simultaneously, or a modest amount of system memory, consider constraining the number of undo levels.

**Imaging Tab (Options)**

Use the settings on the Imaging tab to specify how DB/TextWorks handles searching for images and image display.

- **Image drive(s).** Type up to twelve drive letters to indicate where you want DB/TextWorks to look for image files referenced in records. Do not include spaces or punctuation between drive letters. For example, to look on the C:, D:, and H: drives, type "cdh" (without quotation marks). List drives in the order that you want DB/TextWorks to look. If you leave this box blank, the software will look for images on the drive where the textbase resides or the current drive.

  **Note:** If an image name in a record includes a drive letter (for example, C:\DOG.TIF), DB/TextWorks ignores the Image drive(s) setting and looks for the image only in the location specified in the record.

  **Tip!** You can also specify an optional volume ID field for each textbase to specify how DB/TextWorks handles searching for images.

- **Support multiple page TIFF images.** When this option is selected, DB/TextWorks is able to display and print all the images in multi-image TIFF files. For example, a file called PROPOSAL.TIF might contain ten separate pages. This feature may cause a slight performance degradation when displaying and printing images, so you should clear this option if you do not have any multi-image TIFF files.

- **Support only short filenames for images.** In most cases, you should clear this option to ensure that long file names in Image fields are interpreted properly. Check this check box if you want to include comments after the name of some image files without surrounding the image file name with quotation marks. (This option is useful if you added comments to image file names with v1 DB/TextWorks.) Counters after image file names (for example, MEMO.TIF 3) are interpreted correctly regardless of this option setting. However, if a long file name in an Image field contains numbers that might be misinterpreted as a counter, enclose the file name in double quotation marks ("Form 1040 Schedule 12"). If you are using a counter to increment image names, place the counter outside of the quotation marks ("Form 1040 Schedule 12" 3).

- **Fit Image to Window.** The options in this drop-down list determine if and how images are scaled when displayed in the Images window. They do not affect printing.
  - **Scale proportionally if necessary.** Proportionally fit each image to the window, scaling images up or down if necessary.
  - **Leave original size.** Do not scale images.
  - **Stretch horizontally to fit.** Stretch images horizontally to fit the window.
  - **Stretch vertically to fit.** Stretch images vertically to fit the window.
  - **Leave small images original size.** Select this box to allow images to be scaled down but not up when you choose Fit to Window (Images menu). A small image is one that is smaller than the Images window, such as a business card. Original size means the actual size of the image.
E-mail Tab

Use the settings on the E-mail tab to designate how to access mail services for the Send Report as Mail feature. You have two options:

- **MAPI (Messaging Application Program Interface).** MAPI (which is a program interface that lets you send e-mail from within Windows programs) uses the e-mail program already installed on your computer to access mail services. If you experience problems trying to use MAPI, then you should use SMTP instead.
  
  **Important!** MAPI users must also designate their e-mail program as their default simple MAPI client. To do so, please consult the documentation provided with your e-mail program as each one is different.

  **Tip!** To show an example of how to designate an e-mail program as your default simple MAPI client, this is what you would do if you use the Qualcomm Eudora Pro V4.1 program: Open the program, choose Tools>Options, and select the MAPI category. In the User Eudora MAPI Server section, select either the When Eudora Is Running option or the Always option. Click OK.

- **SMTP (Simple Mail Transfer Protocol).** SMTP accesses mail services directly, without the need to use an e-mail program. To use this option, you must provide the name or IP address of your mail server.
  
  **Note:** If you use SMTP, the maximum amount of text that you can place in the body of an e-mail message is 32,000 characters.
Creating and Editing Textbases

Planning Your First Textbase

Planning is the most important part of textbase development. Before you start creating textbases, determine what kinds of information you want to track and whether that information should be in one textbase or several.

If you put the information in several textbases, and those textbases contain related information, you may want to link them. For example, you may want to put employee names and addresses in one textbase, then access that information from several other textbases. By linking textbases, you only have to maintain common information in one place.

Before you create your first textbase, try creating one or more pilot textbases to test your ideas. Then design a few forms to display the results. Perform queries, sort records, and print reports to see what kinds of results you get. You can experiment and take chances with a pilot textbase that you might not want to try with a real textbase. A few minutes practicing on a pilot textbase is time well spent.

It is often a good strategy to start with something that can be produced rapidly. For example, create a small pilot textbase that may eventually be turned into a larger, real textbase. A pilot textbase of 10 or 20 records can introduce potential users to textbase possibilities. If you are designing textbases that others will use, enlist their support by including them in the design process. It is easier to give people what they want if you know their requirements and preferences from the start.

Testing the reactions of users is important even if you have limited time. Let people see the results of what they have said they want, before you invest time and effort in finishing the project. Seeing a search carried out and the results of a search printed or displayed provides immediate feedback and is a necessary part of the refinement process.

Here are some issues to consider before you start creating a textbase:

- Will some of the information that you are tracking be common to several textbases, or common to a number of records in one textbase? For example, are there names and addresses that you may want to access from multiple textbases? If so, consider linking the textbases.
- Which fields should each record include?
- What type of information will each field hold and how will each field be indexed? The settings that you select for each field as you create the textbase will determine how the information can be retrieved, sorted, and printed.
- Will you apply validation to any of the fields to control the information that is allowed into the textbase? If so, what type of validation will you apply?
- Will you assign passwords for security? You might want to restrict some fields or individual records so they are read-only or hidden. Even if the information is not confidential, you may want to impose some limitations on who can do what to a textbase. In a shared environment, most textbases have a Master password that protects the textbase structure from being changed.
- How will you get the record information into the textbase? The most efficient method is to prepare a text file that you can import. The alternative is to type each record by hand.
Will you publish the textbase to the Web (using DB/Text WebPublisher PRO)? If so, consider what HTML features you want to give query screens, forms, and menu screens (for example, whether you want URLs to be detected and turned into hypertext links that can launch a Web site or application).

An Example
Assume you work for an environmental consulting firm that submits proposals to prospective clients. To keep track of the proposals, you create a textbase called Proposal.

The textbase contains client names and addresses, document titles, authors, dates, and telephone notes recorded after important conversations. It also includes the full text of each proposal, imported in one simple operation, so you can search for any word or phrase in the document. It includes image file names, associated with photographs, drawings, and scanned faxes or memos, so you can view and print images along with the other data.

By organizing these materials into a textbase, you can now do a quick search for all proposals written in 2002 for a study of wetlands in the Florida panhandle. Or for all proposals written by Hector Thoreau. You can design reports to print the information you want, formatted the way you want it. For example, you can print a summary of proposal titles and dates, or the full text of one or more proposals, or a set of architectural site drawings, or generate mailing labels for your client list.

One of the most important considerations in creating a textbase is deciding what will constitute records and fields. For this pilot textbase, each proposal constitutes a record. Each field represents a shared characteristic of all proposals, such as Title, Client Company, and Street Address. Here is a partial list of fields used in the textbase, followed by a summary of suggested indexing and validation settings:

**Field Name - Field Type, Indexing, Validation and/or Special Filing**

*Title* - Text, Term and Word, Field Entry Required

*Client Company (to whom the proposal was sent)* - Text, Term, Use Validation List

*ID* - Automatic Number, Term

*Street Address* - Text, Word

*City* - Text, Term & Word

*State* - Text, Term, Use Validation List

*Country* - Text, Term, Use Validation List

*Postal Code* - Text, Term, clear Numbers File Numerically

*Contact Name* - Text, Term & Word, clear Ignore Leading Articles, clear Use Stop Word List

*Phone* - Text, Term, uncheck Ignore Leading Articles, clear Numbers File Numerically

*EMail* - Code, Term

*Authors* - Text, Term & Word, clear Ignore Leading Articles, clear Use Stop Word List

*Date Completed* - Date, Term, Require Strictly Correct Type, Allow Trailing Text

*Awarded* - Text, Term, Use Validation List (Yes/No/Pending), Field Entry Required

*Expenses* - Number, Term

*Summary* - Text, Term & Word

*Telephone Notes* - Text, Term & Word

*Full Text (OCR proposal text)* - Text, Word

*Images (scanned photos and drawings)* - Image, Term

*Record Created* - Automatic Date (when record is created), Term

*Record Modified* - Automatic Date (when record is created or last modified), Term

As you plan the textbase, keep in mind that each field can hold multiple (repeating) entries of the same type of information. You do not need to create separate fields for each entry. For
example, if a particular client has a home phone, business phone, and fax number, make each number a separate entry in the Phone field (by pressing F7 when editing the record). Each entry can be searched and formatted separately, based on the indexing choices that you select.

Be sure that the field names you assign are clear and unambiguous. For example, will a field called Date hold the date a project was begun or completed? To avoid ambiguity, call the field Date Completed or Date Started, depending on the information it will hold.

After creating the textbase and entering records into it, test it. Search for records, display them in various windows, and then print some reports using forms that you have designed.

Despite the most careful planning, you may find that you need to make some changes. DB/TextWorks is flexible enough to allow you to change most aspects of the textbase structure at any time. For example, you can add, rename, or delete fields and change how they are indexed. Knowing in advance that you have this kind of flexibility, you can experiment, and refine your textbases until they provide the results that you want.

Creating a Textbase

1. Choose File>New Textbase, specify a name and location for the new textbase, and click Save.

2. In the Create Textbase Structure dialog box, select Define New Textbase and click OK. **Note:** You do not have to create a textbase from scratch. You can copy or import a textbase structure. To do this, select one of the other options on the Create Textbase Structure dialog box, as appropriate.

3. In the Edit Fields dialog box, add a field by typing a name in the Field Name box and clicking Add. Field names can be up to 20 characters and can include letters, digits, spaces, hyphens, and underbars. Do this for each field you want to add. The fields you add appear in the Field Name list.

4. Select a field from the Field Name list.

5. On the Type and Indexing tab, specify the appropriate field type, indexing, and Special Filing options for that field, then click the Change button.

6. On the Validation tab, when applicable, specify the appropriate validation options for the selected field, then click the Change button.

7. Depending on the type of field selected, one of the following tabs may appear on the Edit Fields dialog box. Specify the options you want, as appropriate, then click the Change button.
   - **Text Options tab.** For Text fields, specify whether to use a substitution list and type the entries you want in the list. For Text and Code fields, specify whether to connect a thesaurus textbase to the field.
   - **Automatic Number Definition tab.** For Automatic Number fields, specify how numbers appear, including number increment and whether thousand separators are used.
   - **Automatic Date Definition tab.** For Automatic Date fields, specify when dates are updated, as well as whether both date and time appear, and in what format.
   - **Computed Number Definition tab.** For Computed Number fields, specify the formula you want to use, as well as how computed numbers are formatted.
• **Computed Date Definition tab.** For **Computed Date fields**, specify the formula you want to use, as well as how computed dates are formatted.

• **Link Definition tab.** For **Link fields**, specify a secondary textbase and its associated field.

8. Repeat steps 4-7 for each field in the Field Name list.

9. Click **Finish** on the Edit Fields dialog box to return to the Edit Textbase Structure dialog box.

10. Specify Textbase Options by clicking the following buttons on the **Edit Textbase Structure dialog box**:
- **Passwords**
- **Sort Order**
- **Stop Words**
- **Leading Articles**
- **Log File**
- **Maximum Users**
- **XML Match Fields**

11. Click **OK** to close the Edit Textbase Structure dialog box, then click **OK** in response to the confirmation message that appears.

12. A message tells you that the textbase is empty. Click **OK** to open the Edit window. (This window lets you add new records to the textbase.)

   **Note:** If you do not want to be notified when you open an empty textbase, clear the **Notify when opening empty textbase** check box on the General tab of the Options dialog box (choose **Tools>Options>General**).

13. To create a record, fill in the boxes and choose **Records>Save Record**. Choose **Records>New Record** each time you want to add another record. If you do not want to type information into one record at a time, you can **import multiple records** from a text file.

**To make changes to the textbase structure**
- Choose **Maintain>Edit Textbase Structure**.

**To see information about the textbase**
- Choose **Display>Textbase Information**.

**To change the appearance of the information in your textbase**
- Choose **Display>Design Form** to create forms for the Report, Display, and Edit windows.

Or, if you have already designed forms or there are designed forms available:
- Choose **Display>Select Forms** and select the form(s) you want to use.

**Technical Specifications for a Textbase**
Creating and Editing Textbases

- Maximum number of records per textbase: Depends on average record size (two gigabytes available for records storage)
- Maximum number of fields per textbase: 250
- Maximum number of entries per field: Unlimited
- Maximum size of each record, field, and entry: Up to two gigabytes (total)

Textbase Information

Choose Display>Textbase Information to see detailed information about the textbase.

The Textbase Information window displays a list of fields and their settings, information about validation, indexing mode, textbase defaults, user file folder, lists of public elements and those currently selected, serial number, number of licensed users, and other information. It also displays the contents of the DBTEXT.INI file and the optional <textbase>.INI file. This information is especially useful in diagnosing problems with Copy Special or Textbase-Specific Help.

Note: If the Edit Secondary Record window is active when you choose Textbase Information, you see information about the secondary textbase. If any other window is active, you see information about the primary textbase.

You can resize or move the window to a more convenient location.

While the Textbase Information window is open, it is not updated as the textbase status changes. To refresh the window, choose Textbase Information again.

To search for information, use Edit>Find.

To copy information to the Windows Clipboard, select the information and use Edit>Copy.

To print textbase information, click the Print button in the Textbase Information window toolbar or choose File>Print while the Textbase Information window is active.

Field Type and Indexing

Field Type

Each field in a textbase has a field type that indicates the type of information it will hold. Choose a field type before selecting indexing information, because changing the field type resets any indexing or Special Filing options that you have already made for that field.

To define or change the field type

2. Click the Edit Fields button to open the Edit Fields dialog box.
3. Select the field for which you want to change or define field type from the Field Name list.
4. On the Type and Indexing tab, select one of the following field types from the Field Type drop-down list:
### Field Type | Used for fields that will hold
--- | ---
**Text** | Any text or combination of alphanumerical characters, punctuation, spaces, and line breaks (carriage returns).

**Number** | A series of digits that may be calculated or sorted as a value. Sorts negative numbers before positive numbers.

**Date** | Dates, in any of the many formats that the software recognizes.

**Automatic Number** | A unique number generated by the software, which cannot be edited.

**Automatic Date** | The current date or current date at the time a record is saved and time when a record is saved. The field cannot be edited.

**Automatic ID** | An automatically generated sequence of characters, representing the next value in a series. The field can be edited.

**Computed Number** | An automatically generated value derived from a formula that you specify. The field cannot be edited.

**Computed Date** | An automatically generated date derived from a formula that you specify. The field cannot be edited.

**Image** | The name(s) of associated image file name(s).

**Link** | Text that will be matched against a corresponding field in another textbase, in order to associate information in that textbase with this one.

**Code** | Any items in which case and punctuation should be considered significant during searches and sorts, such as chemical names or scientific formulas.

**UDC** | Universal Decimal Classification numbers, used for the classification and retrieval of documents.

**Access Control** | Record class designations for records in a textbase to which you want to restrict access (Full Access, Read-Only, or Hidden).

5. Depending on the field type that you select, the dialog box may change to show an additional tab for you to specify more information related to that field type. For example, if you select **Link** from the **Field Type** drop-down list, the **Link Definition** tab appears. Use this tab to specify the secondary textbase and associated field for the Link field.

6. Click the **Change** button. Notice that the changes you made are reflected in the Field Name list.

**Note:** Before you add records to a textbase, you can freely change the field type. When you change the field type, all **validation**, **indexing**, and **Special Filing** settings for that field revert to the default settings. If a textbase contains records, changing the field type might leave non-conforming information in the textbase. For example, if you change a **Number** field to a **Date** field, the software will attempt to interpret existing numbers as dates. Changes in field type cause any affected indexes to be rebuilt automatically.
Require Strictly Correct Type

On the Type and Indexing tab of the Edit Fields dialog box, you can select the **Require Strictly Correct Type** check box for Number, Date, or Link fields. A strict field accepts information only if it conforms to the field type for that field. Before you add records to a textbase, you can change a field from strict to non-strict. When a textbase contains record information, changing from non-strict to strict might leave non-conforming information in the textbase.

<table>
<thead>
<tr>
<th>Strict</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| Date     | Accepts any entry that appears to be a date. Does not accept text other than day or month names, or numbers that do not appear to be dates.  
**See Also:** [Entering Information in Strict Date Fields](#) |
| Number   | Accepts any entry that appears to be a numeric value.  
**See Also:** [Entering Information in Strict Number Fields](#) |
| Link     | Accepts information only if it matches existing information in the associated field in the secondary textbase. A strict Link field prevents users from typing entries that do not match entries in the associated field, by requiring that the matching record in the secondary textbase exist before you can fill in the Link field in the primary textbase.  
If you clear the **Require Strictly Correct Type** check box, users can create the matching record in the secondary textbase after filling in the Link field, or leave the field without a match. |

Selecting the **Require Strictly Correct Type** check box enables the **Allow Trailing Text** check box for Number and Date fields. Link fields cannot have trailing text.

Entering Information in Strict Date Fields

If you want a Date field to accept date information only, make it strict by selecting the **Require Strictly Correct Type** check box on the Type and Indexing tab of the Edit Fields dialog box. A strict Date field will accept information only if it appears to be a date. Words other than day or month names, and numbers that do not appear to be dates will not be allowed.

Select the **Allow Trailing Text** check box to allow text to follow the date, while still having the date interpreted as a date. If the field allows trailing text, you can append text after a date and the date will still be interpreted correctly. Here are some examples of trailing text:

- 10-Dec-1998, draft submitted
- November 3, 2002 Set up meeting
- March 2003 by the author

Trailing text that follows a partial date should not begin with a number or word that looks like the abbreviation for a month, date, or year because DB/TextWorks might assume that the trailing text is part of the date. For example, 12/03, may ship product yields a date of May 12, 2003. Similarly, the entry Feb 1998, 40 units does not index as a date because Feb. 40, 1998 is not a valid date.
Creating and Editing Textbases

Entering Information in Strict Number Fields

A strict Number field accepts only the characters listed below.

<table>
<thead>
<tr>
<th>Allowed in a strict Number field</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digits 0-9</td>
<td>250</td>
</tr>
<tr>
<td>Decimal separator (usually . or ,)</td>
<td>3.5</td>
</tr>
<tr>
<td>Thousand separators (usually . or ,)</td>
<td>1,000</td>
</tr>
<tr>
<td>Parentheses or leading minus sign</td>
<td>-3 or (3)</td>
</tr>
<tr>
<td>Currency symbol such as $, £, ¥, kr, €</td>
<td>$15.00 or £19 or 200¥</td>
</tr>
</tbody>
</table>

You can include no more than one embedded decimal separator. The characters used for the currency symbol, thousand separator, and decimal separator are determined by the currency and number formats selected in the Regional settings of the Windows Control Panel at the time you start DB/TextWorks.

**Note:** If you create a textbase using a particular currency format and later change to another format, you might have problems manipulating numbers already typed in the textbase, due to the way decimal separators and thousand separators are represented.

If the Allow Trailing Text check box is selected for a strict Number field (on the Type and Indexing tab of the Edit Fields dialog box), you can append text after a number, and the number will still be interpreted as a value. Here are some examples of numbers with trailing text:

- $330. (estimated by H.R. Perkins)
- 500 sold
- 1549 Ordered by MIS Department

**Allow Trailing Text**

Trailing text is text that follows a strict date or number. The purpose of trailing text is to let you require a strict date or number, but still allow comments and other text after it.

To allow trailing text

1. Select a field with a Date or Number field type (choose Maintain>Edit Textbase Structure>Edit Fields).
2. On the Type and Indexing tab, select the Require Strictly Correct Type check box. This enables the Allow Trailing Text check box, if trailing text is applicable for the selected field type. For example, Link fields cannot have trailing text.
3. Select the Allow Trailing Text check box.
4. Click the Change button.

Here are some examples of Date and Number fields that include trailing text:

- 6/6/57 first published in USA
- July 1994 - dismissed
- 1500 (estimated number of items to be shipped)
- 256 ordered in error
Selecting Term and/or Word Indexing

Use the Type and Indexing tab on the Edit Fields dialog box to select Term and/or Word indexing for the currently selected field. You can also specify more specific indexing choices by setting Special Filing Options.

An index is a sorted list of information in a field, conceptually similar to an index in the back of a book. DB/TextWorks uses indexes when searching.

Every field in a textbase can have a Term index, a Word index, both, or neither. When you create a textbase, you decide how each field should be indexed. Based on your choices, DB/TextWorks may place each word or term in a field into an index. Each word or term in an index is called a key.

If you Term index a field, every complete entry (term) in that field is placed in the index. Note that DB/TextWorks actually indexes only the first 250 significant characters of each entry. A significant character is one that is retained in the index and which affects the filing order. For example, punctuation characters are significant in Code and UDC fields but are not significant in other field types. Alphanumeric characters are significant in all field types.

If you Word index a field, every word in that field is placed in the index (except stop words, if Use Stop Word List is selected for that field on the Type and Indexing tab). A word is defined as a consecutive series of alphanumeric characters. A space or punctuation character signals the end of a word. The exception is a decimal symbol followed by a number (for example, 3.5), which is considered part of the word.


<table>
<thead>
<tr>
<th>Term Index</th>
<th>Word Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete User’s Guide</td>
<td>complete</td>
</tr>
<tr>
<td>Product Guide</td>
<td>guide</td>
</tr>
<tr>
<td>Reference Manual</td>
<td>manual</td>
</tr>
<tr>
<td></td>
<td>product</td>
</tr>
<tr>
<td></td>
<td>reference</td>
</tr>
<tr>
<td></td>
<td>s</td>
</tr>
<tr>
<td></td>
<td>user</td>
</tr>
</tbody>
</table>

In the previous example, punctuation is not retained in the Term index because punctuation is not significant in a Text field. For example, User’s appears without the apostrophe in the Term index. It appears as two words in the Word index (user and s) because punctuation signals the end of a word. The way information is indexed does not affect how the information appears in the textbase. Information in the textbase is retained exactly as it was entered.

If you do not index a field, DB/TextWorks does not place the contents of the field in an index, so you cannot search the field. Unindexed fields do not appear on the query screen. However, you can still see the information in the field when you display or edit records, sort, or print. If you expect that you will never search a field, you should not index it. If you change your mind, you can always index the field at a later time. By not indexing, you save disk space and indexing time.

One of the benefits of indexing a field is that when you search a textbase, you can display the indexes by pressing F3 or choosing Edit-Browse Choices. To ensure accurate searches, you can paste words or terms from the index into the field, then search for those items.
To decide how a field should be indexed, consider what types of operations you want to be able to perform on the field, as shown in the following table. Choosing both Term and Word indexing gives you the most flexibility but requires more disk space and often may not be necessary. Note that a Number or Date field with no trailing text does not need a Word index. A Text field that holds an abstract or description does not need a Term index.

<table>
<thead>
<tr>
<th>This operation</th>
<th>Requires this type of index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browsing and pasting terms</td>
<td>Term</td>
</tr>
<tr>
<td>Term search</td>
<td>Term</td>
</tr>
<tr>
<td>Comparison search</td>
<td>Term</td>
</tr>
<tr>
<td>Range search</td>
<td>Term</td>
</tr>
<tr>
<td>Determining which records match during an import</td>
<td>Term</td>
</tr>
<tr>
<td>Ability to select an Associated field when defining a Link field *</td>
<td>Term</td>
</tr>
<tr>
<td>Ability to specify Unique Entries Only validation</td>
<td>Term</td>
</tr>
<tr>
<td>Browsing and pasting words</td>
<td>Word</td>
</tr>
<tr>
<td>Proximity search</td>
<td>Word</td>
</tr>
<tr>
<td>Word or Phrase search</td>
<td>Word</td>
</tr>
</tbody>
</table>

* Only Term indexed fields appear in the Associated Fields list on the Link Definition tab for a Link field.

**Special Filing Options**

Use the Type and Indexing tab on the Edit Fields dialog box to specify Special Filing Options for the currently selected field.

The default Special Filing settings depend on the field type and whether the **Term Indexed** and/or **Word Indexed** check boxes are selected. In certain situations, DB/TextWorks determines the best choices and disables some or all of the Special Filing Options.

All of the Special Filing Options (except **Use Stop Word List**), affect the filing order, which is the set of rules governing the order in which items are Term-indexed and sorted. You can see the indexes when you press **F3** in a box on the query screen. The field type for each field also determines filing order. Filing order for extended characters is governed by the Regional settings of the Windows Control Panel.

**Word by Word**

Select the **Word by Word** check box to index and sort each entry in a Term-indexed field word by word instead of letter by letter. Spaces sort before letters in Word-by-Word indexing. If you clear the **Word by Word** check box, DB/TextWorks ignores spaces and alphabetizes entries by comparing each letter in sequence.

<table>
<thead>
<tr>
<th>Letter by Letter</th>
<th>Word by Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newark</td>
<td>New Haven</td>
</tr>
<tr>
<td>New Haven</td>
<td>New London</td>
</tr>
<tr>
<td>New London</td>
<td>Newark</td>
</tr>
</tbody>
</table>
Ignore Leading Articles

Select the **Ignore Leading Articles** check box if you want the field to use the current leading article list. Words in the list that occur at the beginning of an entry in a Term-indexed field (such as A, An, and The) are ignored when information is sorted and indexed for searching purposes. **Ignore Leading Articles** is the default setting for a Text field. If you use a Text field to hold information such as a Library of Congress number, clear this option. Note that you would not use a Code field for Library of Congress numbers because they require numeric filing.

Numbers File Numerically

Select the **Numbers File Numerically** check box if you want a series of one or more digits not immediately preceded by a letter to be indexed and sorted numerically. Clear the check box if you want them sorted alphabetically.

<table>
<thead>
<tr>
<th>Numbers filed numerically</th>
<th>Numbers filed alphabetically</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>121</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>121</td>
<td>2</td>
</tr>
</tbody>
</table>

When numbers are filed numerically, they are indexed and sorted as values, and truncation searches may not find the anticipated records. For example, the search 2* will **not** find 20.

When numbers are filed alphabetically, they are indexed and sorted as if they were words, and truncation searches **do** find the desired records.

In a Text field where numbers are filed numerically, parentheses or a minus sign are interpreted as punctuation and are not considered for filing. For example, -2 is the same as 2, and is filed between 1 and 3. In a Number field, negative numbers file before zero (-2, -1, 0, 1, 2).

Both types of filing can be useful, depending on the situation. For example:

- Use numeric filing for publication volume or issue numbers in a Text field, so that Memoirs Vol. 2 will file before Memoirs Vol. 13.
- Use alphabetic filing for SICs (Standard Industry Codes) in a Text field so you can do truncation searches, such as SIC=12*.
- Use alphabetic filing for telephone numbers, Social Security Numbers, postal codes, or any sequence of digits not meant to be filed as numbers in a Text field. If you use numeric filing, leading zeros are removed in the Term indexes, so the phone number (02) 555-0089 would be indexed as 2 555 89.

Use Stop Word List

Select the **Use Stop Word List** check box for a Word-indexed field if you want the field to use the current stop word list. Using a stop word list can save disk space and indexing time, because words in the list will not be included in the Word index when information is added to the field.

As a result, a word or proximity search for words included in the stop word list will not find any records. Phrase searches will find records (as long as the phrase includes at least one unstopped word).
Text Fields

Use a Text field to hold text (for example, names and descriptions), as well as numbers that do not indicate quantities and/or will not be used in a calculation (for example, telephone numbers). Select the Type and Indexing tab on the Edit Fields dialog box to specify Text as the field type (choose Maintain>Edit Textbase Structure>Edit Fields).

A Text field can hold letters, digits, and any other keyboard or extended characters, including any combination of alphanumeric characters, punctuation, spaces, and line breaks. Like other field types, a Text field is unlimited in size. It might hold one word or a 40-page deposition.

For telephone numbers, Social Security Numbers, postal (ZIP) codes, or any sequence of digits not meant to be calculated, use a Text field with alphabetic filing (clear the Numbers File Numerically check box in the Special Filing Options group on the Type and Indexing tab). If you do not make this change, leading zeros will be removed in the Term index, so a phone number such as (02) 555-0089, will be filed as 2 555 89.

If you plan to do truncation searching on numbers in a Text field (for example, 25*), you should also file numbers alphabetically (that is, clear the Numbers File Numerically check box).

Creating Substitution Lists for Text Fields

To make data entry easier, you can specify that a Text field should use a substitution list during data entry and imports. After you create a substitution list and you start editing records, you can type a substitution code from the list. For example, type vt and the word Vermont will appear when you move the cursor off the field. You can choose Edit>Browse Choices or press F3 to see the substitution list (if any) for the current field and paste entries from the list into the field if desired. During import or batch modify, substitutions are made automatically for fields that have a substitution list.

Specifying Thesauri for use as Validation Lists

To provide a way to share a single list of approved terms among any number of fields and textbases, and therefore make data entry easier, you can connect one thesaurus textbase per field, which users can use as a validation list. Once a thesaurus textbase has been connected to a field, all your users can populate that field from the same list. Note that you can connect a different thesaurus to each field, or you can connect the same thesaurus to each field, or any combination thereof. However, remember that you can connect only one thesaurus to a field.

How Numbers in Text Fields are Handled

Numbers in a Text field file numerically by default (Special Filing). In other words:

- Numbers at the beginning of a field or preceded by a space file numerically (Vol 999 before Vol 1000), except when the number includes punctuation (Vol 1,000 before Vol 999).
- Numbers directly preceded by text file alphabetically (B12 files before B2).
- Numbers alone or numbers that come first in the field (4 units) can contribute that value to a calculation. Numbers that are preceded by other text (Sold 4 units) cannot contribute a value to a calculation.
- Negative numbers (-50) are treated as positive values for filing purposes. If you want negative numbers sorted before positive numbers, use a Number field.
- To make numbers in a Text field file alphabetically, use Special Filing. This is important for fields that will hold telephone numbers, as described at the beginning of this topic.
Number Fields

Use a Number field to hold digits that are intended to be used in calculations, such as quantities and amounts (for example, currency). Select the Type and Indexing tab on the Edit Fields dialog box to specify **Number** as the field type (choose **Maintain>Edit Textbase Structure>Edit Fields**).

You can perform calculations on Number fields, such as adding invoice amounts, either by using forms or by referencing a Number field in a formula for a **Computed field**.

You can use a form to change the appearance of the numbers (for example, to make the number 35 appear as $35.00 or 35,00 F depending on the currency and number formats selected on the Microsoft Windows Control Panel.

Number fields are the only field type that can accommodate negative numbers for sorting and indexing purposes as well as calculations.

Entries in a Number field are always sorted numerically. For example, Sold 2 models sorts before Sold 12 models.

You can prohibit non-numeric information in a Number field by making it strict (select the **Require Strictly Correct Type** check box on the Type and Indexing tab). Select the **Allow Trailing Text** check box to allow text to follow the number, while still having the number interpreted correctly.

A non-strict Number field will accept any information that you type into it, even if the information is not a number. For example, you can type Joe Smith in a Number field. However, the entry will not be sorted numerically (it will be sorted at the end) and will have a value of zero in any calculations or computations.

**Tip!** Do not use a Number field for telephone numbers or other information that is not intended to be calculated. Numbers that are not values should be stored in a Text field with alphabetic filing (clear the **Numbers File Numerically** check box in the Special Filing Options group on the Type and Indexing tab).

Date Fields

Use a Date field to hold dates. Select the Type and Indexing tab on the Edit Fields dialog box to specify **Date** as the field type (choose **Maintain>Edit Textbase Structure>Edit Fields**).

To prohibit non-date information, select the **Require Strictly Correct Type** check box on the Type and Indexing tab. This is called making the field strict. If you do not make the field strict, users will be able to type non-date information in the field (for example, Fred), but that entry cannot be sorted chronologically or used in a calculation.

**Characteristics of Date Fields**

Dates are sorted chronologically, which can be useful in reports. For example, you can sort invoices by date, in chronological or reverse-chronological order. You can perform calculations on a Date field by using forms or by referencing a Date field in a formula for a Computed field. For example, you can add 10 days to the date.

**Editing Information in Date Fields**

During editing, you can enter full or partial dates in almost any recognizable format. To ensure accurate interpretation of dates, separate date components with spaces, punctuation, or both.
To ensure accurate chronological sorting, an entry cannot include more than one day, month, or year.

Here are some acceptable date formats:

- 10-2-12; 10/02/12; Oct 2, 2012; October 2, 12; October 2; October 2012; 20121002; 2012

Here are some formats that are not acceptable:

- May/June 2012 (only one month permitted); 1975-1977 (only one year permitted); June sixth, 2012 (day must be numeric); 10-40-12 (not a valid date)

You can include the letter c before a year to indicate "copyright" and the date will be sorted correctly. The letter c is the only character that can precede a date and still have the date file correctly. The letter c must immediately precede the year (for example, c1998), and no month or day is permitted.

You can include AD or BC after a year alone and the date will be sorted correctly (267 BC). Case and punctuation do not matter. If you omit the letters, the date is interpreted as A.D. (for example, 267 means 267 AD). BC and AD are accepted when used with years only, not dates including months or days. Therefore, a date such as January 1200 BC will not be accepted as a strict date unless you allow trailing text. If a date includes a month or day, the letters BC are treated as trailing text, not as part of the date.

When you are editing records, we strongly recommend that you enter years using four digits instead of just two, to avoid any ambiguity. You can run the Setup program or edit DBTEXT.INI directly to specify how two-digit years should be interpreted across century boundaries.

DB/TextWorks recognizes month and day names in the language(s) specified in the DBTEXT.INI file. If more than one set of month or day names is specified, all of them will be recognized in a date, but only the first set is used for dates generated by the software (for example, when using Edit>Insert>Current Date) or reformatted in a report.

Date formats are interpreted using the Windows Control Panel settings in effect when the date is indexed. For example, 12-6-02 may be interpreted as month-day-year or day-month-year.

### Dates in Non-U.S. Formats

The Date Format selected in the Regional settings of the Windows Control Panel at the time the date is indexed determines how date formats are interpreted. For example, if a day-month-year format is selected, DB/TextWorks interprets dates such as 12-6-10 as day-month-year instead of month-day-year. Month and day names are interpreted based on configuration information supplied during the DB/TextWorks installation process.

### Changing How Dates Appear

You can design forms to make all dates appear in a consistent format when displayed or printed, regardless of how they were entered. For example, you can make all dates appear with the month spelled out. Date fields are sorted chronologically, regardless of how they are displayed in the form. For example, May 2011 and 5/11 come before December 2011.

### Searching for Dates

DB/TextWorks is flexible when searching for dates. The format you use in a query can differ from the format stored in the textbase, and retrieved dates may include day names or trailing text. For example, a search for June 2012 finds June ‘12, June 3, 2012, and JUN-2012.
Automatic Number Fields

Use an Automatic Number field if you want a unique number generated by the software to be assigned to each record, starting with a value that you specify. Select the Type and Indexing tab on the Edit Fields dialog box to specify Automatic Number as the field type (choose Maintain>Edit Textbase Structure>Edit Fields).

Automatic Number fields can provide a way of identifying records, by making sure that each one has a unique number. Automatic Number fields are Term indexed by default.

Automatic Number fields are maintained by the software. You cannot change Automatic Number values in existing records and you cannot dictate what the value will be in a new record.

The unique number is assigned to the record when it is created, not when it is indexed. Gaps created by deletions and similar situations, are not filled in. For example, if records are numbered 1, 2, 3, 4, and you delete record 3, that number will not be reassigned. The next number assigned will be 5.

To specify how automatic numbers appear, use the options on the Automatic Number Definition tab. Note that this tab appears on the Edit Fields dialog box when you select Automatic Number from the Field Type drop-down list.

- **Next Number.** The value displayed indicates the number that will be assigned to the next record added to the textbase. Normally, you start with 1. Each time you add or import records the software assigns each incoming record a unique number, starting with the number shown, and increments the number in the Next Number box accordingly.

  **Note:** The value in the Next Number box is not an accurate indicator of how many records are in the textbase, because there may be numbering gaps due to deletions and other situations.

- **Increment By.** Specify how much to increment each value. For example, if your starting value is 1 and you increment by 1, records will be numbered 1, 2, 3, 4. If you increment by 2, records will be numbered 1, 3, 5, 7.

- **Include Thousand Separators.** Select this check box if you want the thousand separator to be included in automatic numbers above 999. For example, a number might be shown as 1,000 or 1000 depending on whether this option is selected. The Number Format in the Regional settings of the Windows Control Panel determines which character is used for the thousand separator (for example, a comma or period).

  Do not select this check box if this textbase will be used by people with different regional settings, because different countries may use different characters to represent separators.

Automatic Date Fields

Use an Automatic Date field if you want DB/TextWorks to place the current date or current date and time in this field when you create and/or modify the record. Select the Type and Indexing tab on the Edit Fields dialog box to specify Automatic Date as the field type (choose Maintain>Edit Textbase Structure>Edit Fields).

By using an Automatic Date field, you can identify when each record was created or edited, without requiring the user to type the current date or time information.
The date, or date and time, are assigned to the record when it is saved, not when it is indexed. This fact is important to note if you are using Deferred indexing, because the date and time will not reflect when the updates were posted.

Automatic Date fields are maintained by the software. You cannot change Automatic values in existing records and you cannot dictate what the value will be in a new record.

To specify how and when automatic dates are saved, use the options on the Automatic Date Definition tab. Note that this tab appears on the Edit Fields dialog box when you select **Automatic Date** from the **Field Type** drop-down list.

1. Specify when the field will be updated, by selecting an option button in the Update Entry group:

   - **When Record is Created.** The date, or date and time, will be inserted when the record is created, and will not be changed again. Use this option if you want to know when the record was created.
     
     **Note:** If records already exist in a textbase and you add an Automatic Date field with this option button selected, when you modify an existing record with an empty Automatic Date field, that field will be populated when you save the record. The record does not have to be new for the new field to be populated, just empty.

   - **When Record is Created or Modified.** Use this option if you want to know when the record was last saved or edited. The date, or date and time, will be updated whenever the record is saved. Note that the record does not actually have to be modified, just saved.

2. Specify the date components that will appear in the field, by selecting an option button in the Automatic Date Components group:

   - **Both Date and Time.** The date and time that the record was created or modified will be inserted.
   
   - **Date Only.** The date that the record was created or modified will be inserted.

3. Specify the format of the date by selecting an option button in the Date Format group:

   - **Short Date Format.** For example, 4/18/2003.
   
   - **Long Date Format.** For example, Friday, April 18, 2003.
   
   - **Long Date Format without Day.** For example, April 18, 2003.
     
     **Note:** The actual format is governed by the Regional settings of the Windows Control Panel.

4. If the field will include the time, specify the format of the time by selecting an option button in the Time Format group:

   - 24 Hour Time
   
   - 12 Hour Time with AM or PM

**Automatic ID Fields**

Use an Automatic ID field if you want if you want an editable, automatically generated number with optional surrounding text and/or punctuation inserted in the field. Select the Type and Indexing tab on the Edit Fields dialog box to specify **Automatic ID** as the field type (choose **Maintain>Textbase Structure>Edit Fields**).
Creating and Editing Textbases

An Automatic ID field contains editable values generated by the software. The values can include text, numbers, punctuation, spaces, and leading zeros. This type of field is commonly used in combination with unique validation to generate a unique alphanumeric ID for each record.

When you open a textbase, the software automatically extracts the highest value in the Automatic ID field (including case and punctuation). The first time you create a new record, DB/TextWorks automatically increments this value (by 1) and fills in the Automatic ID box. You can edit this value if you like. For each new record you create thereafter during a session, the software will increment the last value saved. So you could, for example, have one user creating new records with values in the format LW-0001 and another in the format DH-0001.

In the above, "during a session" means until you close the textbase. The "last-saved" value during a session is stored in your computer's memory (not anywhere "permanent"). When you close the textbase (or close DB/TextWorks) and re-open it, the software reads the starting value from the end of the index for the Automatic ID field.

**Automatic IDs: Creating New Records in the Edit Window**

The first time you choose Record> New Record after opening a textbase, DB/TextWorks increments the last value in the index by 1. Thereafter, the software increments the last-saved value by 1. You can accept or change the value. For example, if the number 050 is generated and you change it to 051, the next generated value will be 052. If you enter alphabetic characters only, a value will be appended. For example, ABC is incremented as ABC1, ABC2, and so forth. If you enter a combination of numbers and letters, only the number is incremented. For example, DJH-003 becomes DJH-004, 1997-Oct becomes 1998-Oct, and G50A becomes G51A.

The Edit form must include a box for the Automatic ID field. If the Edit form does not include a box for the Automatic ID field, an ID will not be generated for new records.

To ensure that unique values are assigned, use **Unique Entries Only** validation.

**Automatic IDs: Editing Records in the Edit Window**

When you open an existing record in the Edit window, DB/TextWorks does not touch the Automatic ID value, unless it is empty. If you edit an Automatic ID in an existing record, the software does not do anything unless that field has unique validation and the value already exists. In such a case, DB/TextWorks auto-increments the ID until it finds a unique value.

**Automatic IDs: Adding Records Outside of the Edit Window**

The following information applies to records that are added to a textbase during an import, by scripts, or via a Web browser with WebPublisher PRO: If an incoming record does not include an Automatic ID value, DB/TextWorks does not generate one for a new record. If an incoming record includes an Automatic ID value, the software handles it as if you had typed the value in the Edit window: it either accepts the value or auto-increments it until a unique value is found.

**Automatic IDs: Validation**

**Single Entry Only** validation is applied and cannot be turned off. You can add other validation as needed.

If you select **Unique Entries Only** validation, DB/TextWorks increments the last-saved value until a unique key is found. Therefore, a user who does not recall where a series left off can type
a low value, and the software will substitute the next available value. For example, if you are using a numeric series (001, 002, 003 ...), and you have forgotten whether the last record was 098 or 099, type any lower value and the software will assign the next unique number in the series. The auto-increment happens when you move the cursor to another field, or press F9, or save the record.

If the field does not have Unique Entries Only validation, the software increments the last number by 1, even if that entry has already been used. This can result in duplicate entries throughout the textbase.

**Automatic IDs: Deferred Indexing**

Post deferred updates frequently if you are using Automatic ID fields and Deferred indexing. DB/TextWorks cannot check uniqueness of new entries against unposted updates, so duplicate values may be assigned. These duplicates will be detected and rejected when you post deferred updates (assuming the Automatic ID field has Unique Entries Only validation). You can edit the rejected deferred records to give them unique values (choose Maintain>Deferred Updates>Get Deferred Updates, edit the record, then enter a low value in the Automatic ID field and it will be auto-incremented), then post updates again.

**Computed Number Fields**

Use a Computed Number field to construct a number based on information in another field in the current record. Select the Type and Indexing tab on the Edit Fields dialog box to specify Computed Number as the field type (choose Maintain>Edit Textbase Structure>Edit Fields).

Use the Computed Number Definition tab to specify the formula you want used to compute the number, as well as the formatting for it. A formula for a Computed Number field can include field names (from the primary textbase only) and arithmetic operations, and must yield a number. For example, this formula subtracts the contents of two fields:

```
ordered - shipped
```

The result (a number) will appear in the Computed Number field:

```
13
```

You cannot directly edit information in a Computed Number field. Computed Number fields are calculated by DB/TextWorks when the record is saved or when information referenced in the formula changes. Use quotation marks around field names that include spaces ("quantity ordered" - "quantity shipped") or that are numbers (for example, "250"). A Computed Number field will be left blank if any field used in the calculation formula is blank.

To specify a formula for a Computed Number field

1. Select the Computed Number Definition tab on the Edit Fields dialog box.
2. Type a formula in the Formula box, or click the Enlarge button to open a larger, resizable text editor dialog box instead. When you click OK on the text editor dialog box, your text appears in the Formula box on the Computed Number Definition tab.
3. Specify the options you want, as applicable, in the Number Format group. See examples below.
Examples for Computed Number Fields

<table>
<thead>
<tr>
<th>This formula</th>
<th>Computes this</th>
</tr>
</thead>
<tbody>
<tr>
<td>quantity * price * 1.05</td>
<td>The total cost of an order, including sales tax (at a 5% rate).</td>
</tr>
<tr>
<td>&quot;completion date&quot; - &quot;starting date&quot;</td>
<td>The difference between the contents of two Date fields to determine the number of days required to complete a project. Note that the result is a number, not a date. Use quotation marks around field names that include spaces.</td>
</tr>
<tr>
<td>FCOUNT (&quot;sales person&quot;)</td>
<td>The number of entries in the Sales Person field in the current record.</td>
</tr>
<tr>
<td>FMIN (price)</td>
<td>The lowest value in the Price field in the current record.</td>
</tr>
<tr>
<td>FTOTAL (expenses)</td>
<td>The sum of all entries in the Expenses field in the current record.</td>
</tr>
<tr>
<td>FAVG (cost)</td>
<td>The average of all entries in the Cost field in the current record.</td>
</tr>
</tbody>
</table>

**Formula Components for Computed Number Fields**

A Computed Number formula can include one or more of the following components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fields</td>
<td>Any combination of fields from the primary textbase, containing a number or date value. For example, you can calculate the difference between two date fields to yield a number of days. If a field contains multiple entries, only the first entry is used (except in the case of Field Functions). If a field name is a number or includes spaces, surround it with single or double quotation marks (&quot;2&quot; or &quot;date of birth&quot;).</td>
</tr>
<tr>
<td>Numbers</td>
<td>Any whole or fractional number, such as 3 or 1.5.</td>
</tr>
<tr>
<td>Field Functions</td>
<td>FCOUNT, FMIN, FMAX, FTOTAL, and FAVG perform a calculation across entries in a specified field. For example, FMIN (price) finds the lowest value in the Price field.</td>
</tr>
</tbody>
</table>

**Note:** A Computed Number field will be left blank if it references a field that is empty. (The exception is FCOUNT on an empty field, which returns a value of 0.) If an entry in a referenced field does not start with a number, zero will be used for that value in the computation.

**Arithmetic Operations for Computed Number Fields**

You can use the following operators to connect components in a Computed Number formula:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Addition</td>
</tr>
<tr>
<td>-</td>
<td>Subtraction or negative numbers</td>
</tr>
<tr>
<td>*</td>
<td>Multiplication</td>
</tr>
<tr>
<td>/</td>
<td>Division</td>
</tr>
<tr>
<td>( )</td>
<td>Surround field names or expressions that follow functions, or for grouping items</td>
</tr>
</tbody>
</table>
Calculations are performed using the standard order of arithmetic operations. Operations
enclosed in parentheses are performed first. Multiplication (*) and division (/) are performed
second. Addition (+) and subtraction (-) are performed last. Among equally ranked operations
(such as multiplication and division), operations are performed from left to right. To avoid
ambiguity, use parentheses to ensure that the calculation produces the desired results. For
example:

\[(\text{price} - \text{cost}) / (\text{number} * 12)\]

**Settings for Computed Number Fields**

Once you have specified a formula on the Computer Number Definition tab, select settings to
indicate how the computed number should appear.

- **Number Format.** Specify whether numbers should appear as currency or numbers. If
  you select **Currency**, numbers will be formatted using the currency format in the
  Regional settings of the Windows Control Panel. If you select **Number**, specify the
  settings described below.

- **Number of Decimal Places.** Type the number of decimal places you want displayed.

- **Formatting.** Select **Include Thousand Separators** if you want the thousand separator
to be included in computed numbers above 999. Select **Include Leading Zero in
  Decimal** if you want decimals to include a leading zero (for example, 0.25 instead of
  .25). The Number Format in the Regional settings of the Windows Control Panel
determines which characters are used for the thousand separator and decimal
separator.

- **Show Negative Numbers With.** Indicate how negative numbers should be represented.

**Computed Date Fields**

Use a Computed Date field to construct a date based on information in another field in the
current record. Select the Type and Indexing tab on the Edit Fields dialog box to specify
**Computed Date** as the field type (choose **Maintain>Textbase Structure>Edit Fields**).

Use the Computed Date Definition tab to specify the formula you want used to compute the
date, as well as the formatting for it. A formula for a Computed Date field can include field
names (from the primary textbase only) and arithmetic operations, and must yield a date. For
example, this formula adds 90 days to the date in the **Invoiced** field:

\[\text{invoiced} + 90\]

The result (a date) will appear in the Computed Date field:

12/15/2002

You cannot directly edit information in a Computed Date field. Computed Date fields are
calculated by the software when the record is saved, or information referenced in the formula
changes. A Computed Date field will be left blank if any field used in the calculation formula is
blank or a Date field included in the formula does not contain a date.

When the software performs a computation, it ignores entries that do not start with a date. For
example, if the **Invoiced** field contains the entry On or about 8-2-98, the computation cannot be
performed, and the Computed Date field is left blank. Numbers in Date fields are interpreted as
dates, which can cause unexpected results. Incomplete dates (such as 2001) may also yield
unexpected results.
To specify a formula for a Computed Date field

1. Select the Computed Date Definition tab on the Edit Fields dialog box.
2. Type a formula in the Formula box, or click the Enlarge button to open a larger, resizable text editor dialog box instead. When you click OK on the text editor dialog box, your text appears in the Formula box on the Computed Date Definition tab.
3. Specify the options you want, as applicable, in the Date Format group.

Examples for Computed Date Fields

<table>
<thead>
<tr>
<th>This formula</th>
<th>Computes this</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due - 14</td>
<td>The date two weeks before the scheduled deadline.</td>
</tr>
<tr>
<td>&quot;check out date&quot; + &quot;borrowing period&quot;</td>
<td>The sum of the values in a Date field (check out date) and a Number field (borrowing period) to yield a date. Note the use of quotation marks for field names that include spaces.</td>
</tr>
<tr>
<td>FMIN (published)</td>
<td>The earliest date in the Published field in the current record.</td>
</tr>
<tr>
<td>FMAX (&quot;ship date&quot;) + 3</td>
<td>The date 3 days after the most recent ship date in the current record.</td>
</tr>
<tr>
<td>FMAX (&quot;contact date&quot;) + 30</td>
<td>When Telesales should next contact a customer by adding 30 days to the most recent contact date.</td>
</tr>
</tbody>
</table>

Formula Components for Computed Date Fields

A formula for a Computed Date field can include one or more of the following components.

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fields</td>
<td>Any combination of fields from the primary textbase, containing a number or date. If a field name includes spaces or is a number, surround it with quotation marks (&quot;2&quot; or &quot;Ship Date&quot;). If any of the fields in a formula contain multiple entries, only the first entry is used, unless you use FMIN or FMAX to request the earliest or most recent date in the field. A computation uses information from the specified field only from the current record. A formula can include Text or Number fields, as long as the result of the entire formula yields a date.</td>
</tr>
<tr>
<td>Numbers</td>
<td>Any number of days, such as 7 or 14 or 365.</td>
</tr>
<tr>
<td>Field Functions: FMIN and FMAX</td>
<td>FMIN and FMAX are intended to be used with fields that contain multiple entries. Follow FMIN or FMAX with a field name in parentheses. For example, FMIN (sold) finds the earliest date in the Sold field in the current record. For the specified field in the current record, FMIN finds the earliest date and FMAX finds the most recent date.</td>
</tr>
</tbody>
</table>
**Arithmetic Operations for Computed Date Fields**

You can use the following arithmetic operators in a Computed Date field.

<table>
<thead>
<tr>
<th>Operator</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Addition</td>
</tr>
<tr>
<td>-</td>
<td>Subtraction or negative numbers</td>
</tr>
<tr>
<td>( )</td>
<td>Surround field names that follow functions</td>
</tr>
</tbody>
</table>

**Image Fields**

Use an Image field if one or more records will have associated images. Select the Type and Indexing tab on the Edit Fields dialog box to specify **Image** as the field type (choose **Maintain>Edit Textbase Structure>Edit Fields**).

When you add records to the textbase, you can include the name of one or more images in the Image field. A textbase can include more than one Image field.

Image fields are Term indexed by default, so you can search for image names. If you do not plan to search the field, you can clear the **Term Indexed** check box on the Type and Indexing tab. You cannot apply validation to an Image field.

You can view images when you display or edit the record, and you can print images by selecting **File>Print** when the Images or Thumbnail window has focus.

An Image field can contain multiple entries. Each entry can reference one or more images. For example, the two field entries below reference four images (DRAG.001, DRAG.002, DRAG.003, ROADSTR1.BMP):

```plaintext
c:\model\drag.001 3
c:\model\roadstr1.bmp
```

You can see the images by choosing **Display>Show Record Images** then using the image options to zoom, rotate, display multiple images in a thumbnail view, and so forth.

Images can be stored on external storage devices, such as CD-ROMs or DVDs or any local or network drives. You can specify the drive letter(s) where images are stored by choosing **Tools>Options>Imaging**. You may want to avoid including the drive letter as part of the image name in the Image field, if the images are on a removable disk or a mapped drive.

If you are not storing images on external storage devices, we recommend you store images in the same folder as the textbase. By doing this, you can freely move the textbase and its associated images without having to modify records. This is because the software looks for image files in the textbase folder if no path is specified.

However, if necessary, you can store images in a different location than the textbase folder. If you do this, you must specify the full or partial path as part of the image name in a record. Specify a full folder path, starting with a backslash (`\MEMOS\LTR.JPG`). If you omit the backslash at the beginning of the path, the software looks in the subfolder of the current folder. If you do not specify a path in the image name (LTR.JPG), the software looks for the image in the textbase folder or the current folder on the drive(s) listed in the **Imaging options**.

**Note:** You can also include images on forms (for example, a logo) by using a picture box.
Link Fields

Use a Link field in a textbase if you want to access information from more than one textbase at the same time. Select the Type and Indexing tab on the Edit Fields dialog box to specify Link as the field type (choose Maintain>Edit Textbase Structure>Edit Fields).

Every Link field has one associated field in a secondary textbase. When information in the Link field matches information in the associated field, a link is made, and you have access to information in the secondary textbase. For more information, read about linking textbases.

Note that more than one Link field can link to the same textbase, with the same associated field or different ones. There is no limit to the number of Link fields, except that you cannot define links to more than four different secondary textbases.

To define a Link field

1. Open the primary textbase.
2. Choose Maintain>Edit Textbase Structure to open the Edit Textbase Structure dialog box.
3. Click the Edit Fields button to open the Edit Fields dialog box.
4. Add a field or select an existing field and select Link from the Field Type drop-down list on the Type and Indexing tab.
5. The Link Definition tab automatically appears. Click the Specify Textbase button.

   Note: If you want to edit an existing Link field, select it from the Field Name list, then select the Link Definition tab. The tab will only appear when the Link field is selected.

6. On the Link to Inmagic DB/TextWorks Textbase dialog box, select the secondary textbase to which you want to link and click Open.

   Note: There may not be room on the Link Definition tab to show the full path to the textbase. Use your mouse pointer to hover over the textbase name to see the full path appear in balloon text.

7. On the Link Definition tab, select the field in the secondary textbase that contains the same information as the Link field in the primary textbase. The field you select is called the associated field. For best results, the associated field should be unique and non-repeating or should be an Automatic Number field.

8. [Optional] Select the Type and Indexing tab and specify the options you want:

   Require Strictly Correct Type. Select this check box if you want the Link field to accept information only if it matches existing information in the secondary textbase. Making a Link field strict prevents people from typing entries that do not have matching records already in the secondary textbase. If you clear this check box, someone can create the matching record in the secondary textbase at a later time.

   Note that when you edit a record, you can press F3 in the Link field to browse entries from the Term index of the associated field in the secondary textbase. Pressing F3 in this situation essentially acts like a validation list for the Link field, and is especially useful when the Link field is strict.

   Note: You cannot select the Allow Trailing Text check box. There is no such thing as trailing text in a Link field.
**Indexing Information.** A Link field is automatically Term indexed. You cannot change this setting, because the Term indexes of the Link and associated fields are used to achieve the match. You can select the **Word Indexed** check box if you want to be able to do word, phrase, and proximity searching in a Link field.

**Use Stop Word List.** If the Link field is Word indexed, you can select or clear this check box. You cannot change any of the Special Filing options of the Term index, because a Link field "borrows" the filing rules of its associated field to ensure matching consistency.

**Validation.** The software automatically assigns **Single Entry Only** validation to Link fields to ensure that they contain only one entry. The only additional validation you can apply is **Field Entry Required** and/or **Unique Entries Only**.

9. In the Edit Fields dialog box, click **Add** if you are adding a field or click **Change** if you are editing a field.

10. Click the **Finish** button to return to the Edit Textbase Structure dialog box.

11. Click **OK** on the Edit Textbase Structure dialog box, then click **OK** to dismiss the confirmation message that appears.

**Code Fields**

Use a Code field if you want punctuation and case to be considered when searching and sorting. Select the Type and Indexing tab on the Edit Fields dialog box to specify **Code** as the field type (choose **Maintain>Edit Textbase Structure>Edit Fields**).

A Code field treats case and punctuation as significant for filing purposes (indexing and sorting). For more information, see **Searching Code and UDC Fields**.

Code fields can be useful when you are working with information in which case and punctuation are important (for example, chemical names, scientific formulas, and e-mail addresses). Code fields are also useful for URLs, when using DB/Text **WebPublisher** to publish textbases on the Web.

You can connect a thesaurus textbase to a Code field and optionally use the thesaurus as a validation list.

A Code field is Term indexed by default, but you cannot specify Special Filing options because the software determines the appropriate settings. Spaces sort first, then punctuation. Numbers come before letters and are sorted alphabetically, not numerically (for example, the numbers 1, 2, and 15 would be sorted to appear 1, 15, 2). Upper case letters sort before lower, and case variations are retained in the index. Lowercase characters file immediately after their uppercase equivalents (A, a, B). Leading articles are never ignored.

You can Word index a Code field. However, only case, not punctuation, is significant in the Word index. Punctuation is retained in the Term index only.

Stop words are **not** ignored when searching a Code field.

The software sorts Term entries in a Code field in the following ways. Notice that the entire list below is sorted as it would be in a Code field.

<table>
<thead>
<tr>
<th>Term Index</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Rn</td>
<td>Spaces sort first.</td>
</tr>
<tr>
<td>0.Rn</td>
<td>Punctuation sorts next.</td>
</tr>
</tbody>
</table>
Numbers come before letters and are sorted alphabetically, not numerically.

Uppercase letters sort before their lowercase equivalents and case variations are retained in the index.

Punctuation is retained in the Term index but not in the Word index.

Leading articles are never ignored.

**UDC Fields**

Use a UDC field if you want to sort fields according to the Universal Decimal Classification System, an international numerical system used for classifying and retrieving documents. Select the Type and Indexing tab on the Edit Fields dialog box to specify UDC as the field type (choose **Maintain>Edit Textbase Structure>Edit Fields**).

DB/TextWorks sorts Term entries in a UDC field in the order shown in the list below. You can type any of these characters in a UDC field. You can also include other information in a UDC field and still retain the proper filing, as long as the information comes after the UDC code and is preceded by a space. Information after the space is not interpreted as part of the UDC code. For more information, see **Searching Code and UDC Fields**.

A UDC field is Term indexed by default. A UDC field retains punctuation in a Term index. The punctuation shown below is significant when you search a UDC field. Other punctuation is ignored and case is ignored.

**UDC Sort Order**

+ / : [ ] :: = (0...) (1/9) (=...) "..." + * A/Z .00 -0/-9 .0 . , .1/.9 0/9
Note: DB/TextWorks can also sort information for other classification systems, such as Library of Congress and Dewey Decimal. Unlike UDC, those systems do not require a separate field type. Instead, use a Text field and clear the Special Filing option Ignored Leading Articles. If you retain a Word index, also clear the Use Stop Word List option.

Access Control Fields

Use an Access Control field to restrict access to particular records. Select the Type and Indexing tab on the Edit Fields dialog box to specify Access Control as the field type (choose Maintain>Edit Textbase Structure>Edit Fields).

The Access Control field type lets you assign records to a class. Then, using passwords, each class can have the following record-level security settings specified for it:

- **Full Access.** Users have full access to records. Records can be viewed, edited, deleted, searched, printed, imported, and exported.
- **Read-Only.** Records can be viewed, searched, printed, and exported. They cannot be edited, deleted, or imported.
- **Hidden.** Records cannot be seen, making them invisible to users.

To specify record-level security, you designate a field in your textbase as an Access Control field, then set up "record classes" by adding them to a special validation list for the Access Control field.

Once that is done, you can "classify" the records to which you want to restrict access by populating the Access Control field in those records with one of the record classes you set up.

You can also set up a series of Field Access passwords and/or enable the Silent password to grant appropriate permissions for each class of records.

For example, a library with multiple branches can give each branch access to the textbase used for cataloging, but restrict access to particular records within it. That means you can allow all branches to view all of the records, but only allow a branch to be able to alter its own records, not those of other branches.

Security settings are specified on the Record Level Security Settings dialog box. To access this dialog box, click the Record Level Security Settings button on the applicable password tab (Field Access Passwords tab or Silent Password tab) of the Textbase Passwords dialog box (choose Maintain>Edit Textbase Structure>Passwords).

There are several attributes associated with Access Control fields:

- Only one Access Control field is allowed per textbase.
- Only single entries are accepted.
- Access Control fields are always Term indexed.
- Overriding and user-updates are not allowed for the special validation list.
- The only way to add additional record classes is to edit the textbase structure (choose Maintain>Edit Textbase Structure), as the special validation list for the Access Control field is not available through Maintain>Edit Lists>Validation Lists. Note that when you edit the textbase structure, other users will not be able to access the textbase.
- If the Access Control field was modified using Deferred indexing to make a record more secure, you can still see and edit the record if you do not have the Show deferred.
changes in reports and display check box selected (choose Tools>Options>General) when you do the search.

Note: When users whose passwords restrict them from seeing particular records use the Query Choices Browser (F3) to paste items for which to search, an item in the list may show more hits than the number of records actually retrieved. One reason for this is that some of the records are in a record class marked Hidden for that password, and thus are not retrieved for that user.

Validation and Substitution

Specifying Validation

Validation rules determine what information will be allowed in a field during data entry, import, and batch modify operations to ensure consistency and reduce typographical errors. If information does not meet the validation criteria, the software informs the user and does not permit the change to be made (unless content validation overrides are allowed).

Applying validation is optional. You can specify validation rules for each field in a textbase except Automatic Number, Automatic Date, Computed Number, Computed Date, and Image field types. Note that some validation is implicit if the field type is strict.

You can specify validation when you create the textbase, or later by editing the textbase structure. If you change validation in a textbase that contains records, the changes are not applied retroactively to existing records.

To apply validation to a field

2. Click the Edit Fields button to open the Edit Fields dialog box.
3. Select a field from the Field Name list, then select the Validation tab.
4. Specify the Entry Validation options you want:
   - Field Entry Required. Select this check box to indicate that this field cannot be left blank when information is added to the textbase. When adding or editing a record, the user will not be able to save the record until information is entered in this field. During import, the record will be rejected. Some typical uses include fields that will hold purchase order numbers, part numbers, library classification numbers, or Bates numbers for documents.
   - Unique Entries Only. Select this check box to specify that each entry in the field must be different from any other entries in the field in the other records in the textbase. For example, you could make the Product field unique to ensure that you have only one record per product. To determine whether an entry is unique, the software checks the Term index for the field. Therefore, you can select this option only for fields that have a Term index. A field to which you plan to link should be specified as Unique Entries Only (or be an Automatic Number field). If it is not, a link will retrieve the first matching record that is found.
Note: To determine uniqueness, the software checks the field's Term index to see if the term has been used before. DB/TextWorks cannot detect if a term has been used in deferred updates (if any). In this case, uniqueness is verified when deferred updates are posted, by checking the deferred updates against the Term index.

Single Entry Only. Select this check box to specify that this field is non-repeating (cannot hold multiple entries). For example, you might want a field called Primary Contact to accept only one name. The software prevents users from adding more than one entry or rejects the record during an import.

Note: Link fields, Automatic ID fields, and Access Control fields are set to Single Entry Only and cannot be changed.

5. Specify the Content Validation options that you want:

No Content Validation. Select this option button to specify that information will not be validated during data entry, import, or batch modify operations. Anything will be allowed in the field, unless it is a strict Date, Number, or Link field.

Use Range and/or Mask. Select this option button if you want to specify range restrictions (for example, minimum 1, maximum 10) and/or a mask (for example, ### requires three digits). When you select this check box, the Range and Mask group on the Validation tab is enabled for you to enter maximum, minimum, and mask information.

Use Validation List. Select this option button to specify that the field entries must appear in the validation list. When you select this option button, the Edit List button is enabled so you can create a list of entries allowed in a field.

Use Thesaurus as Validation List. Select this option button to specify that the thesaurus connected to the selected field should be used as the validation list. This option is enabled after you specify a new or existing thesaurus textbase on the Text Options tab.

6. [Optional] If you want to allow entries into the field that do not match the validation list, or which violate range and/or mask validation, select the User May Override Content Validation check box. Users will be prompted at data entry time if they type an entry that does not match the validation. At that time, they can click Accept to allow the entry into the field even though it violates validation, or click Cancel to return to the record and change the entry to match the validation.

7. [Optional] If you want to allow entries into the field that do not match the validation list or which violate range and/or mask validation, and want those entries to be added automatically to the validation list, select the User May Update Validation List with Override Value check box (after you have already selected the User May Override Content Validation check box). Users will be prompted at data entry time if they type an entry that does not match the validation. At that time, they can click Accept & Update List to allow the entry into the field even though it violates validation and add the entry to the validation list, or click Cancel to return to the record and change the entry to match the validation.

Note: If you specified a thesaurus as a validation list, the option to update the validation list with the override value is not available.

8. Click the Change button.

Note: You can also add a new field, specify a field type that allows validation, and then specify validation options on the Validation tab.
Range and Mask

Use the Range and Mask group on the Validation tab of the Edit Fields dialog box to specify range and/or mask Content Validation.

Type the appropriate values in the Minimum, Maximum, and/or Mask boxes.

Range

Type the minimum and/or maximum values allowed in the field.

Examples:

- For a Number field, if you enter 1 in the Minimum box and 100 in the Maximum box, the field will accept values in that range only (inclusive).
- For a Text field, if you enter L in the Minimum box and ZZZ in the Maximum box, that field will accept items starting with L through Z. Note that using Z as the maximum instead of ZZZ rejects Zebra.
- For a Date field, if you enter 1/1/2003 in the Minimum box and 1/31/2003 in the Maximum box, that field will accept dates in that range (inclusive). You can type dates in any recognizable format.

Masks

A mask is a pattern that determines what information will be accepted in a field. You can include the characters shown below, plus any keyboard characters. Spaces and other characters embedded in a mask will be required during data entry or import. Information that does not match the mask will be rejected. Case is automatically corrected during data entry or import to match the validation. For example, the mask M*. !* will change mr. jones to Mr. Jones.

<table>
<thead>
<tr>
<th>Character</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>Uppercase letter</td>
</tr>
<tr>
<td>^</td>
<td>Lowercase letter</td>
</tr>
<tr>
<td>#</td>
<td>Digit (0 through 9)</td>
</tr>
<tr>
<td>?</td>
<td>Any single keyboard or extended character, including spaces. Cannot omit.</td>
</tr>
<tr>
<td>*</td>
<td>Any series of zero or more characters, including spaces. Can omit.</td>
</tr>
</tbody>
</table>

To include a mask character as a literal character, precede it with a backslash (\). For example, if the field entry must begin with a question mark, use \?* as the mask. To include the backslash character as part of the mask, use two backslashes (\\).

Examples of Masks

Ace* accepts Ace alone or followed by any number of characters (Ace Corp., Ace 123, Acetate).

!* requires a capital letter followed by any number of characters or words.

! requires a capital letter only. It cannot be followed by any other characters.

###---### requires a number such as 187-33-2627 (dashes are required).

(###)###-#### requires the punctuation and space shown and digits for each # symbol, such as (617) 123-4567.

###/###/#### requires a numeric date with a four-digit year, such as 08/26/2000 (slashes and leading zero are required).
Creating and Editing Textbases

^^ ???? requires two lowercase letters, followed by a space, followed by any four characters.

## requires any two digits followed by a # symbol, such as 15# or 38#. The backslash preceding a mask character tells the software to interpret the mask character literally.

### Allowing Users to Override Content Validation

If a field has range and/or mask validation or uses a validation list, you can allow users to override content validation during data entry and import. Select one or both of the following check boxes, located on the Validation tab of the Edit Fields dialog box:

- **User May Override Content Validation.** If you select this check box, the field will accept entries that are not in the validation list, or which violate range and/or mask validation, upon confirmation by the user.

- **User May Update Validation List with Override Value.** If you select this check box, the field will accept entries that are not in the validation list, but the new entry will be added automatically to the validation list. You can select this box only if the field uses a validation list (other than a thesaurus used as a validation list) and the User May Override Content Validation check box is selected. This provides a convenient way of keeping a list up to date. However, it introduces the risk of allowing unwanted items into a list.

  Clearing this check box introduces a different risk—that users might accept an entry into the field, but the list will not be updated with the entry. As a result, the field could end up containing items that are not in the validation list.

  Note that if you specified a thesaurus as a validation list, then the option to update the validation list with the override value is not possible.

  **Note:** Field Access or Silent passwords may prohibit users from changing validation lists, even if this option is checked.

### Edit Lists>Substitution Lists command (Maintain menu)

A substitution list is a list of short codes that you type in place of longer words or phrases to reduce keystrokes and typographical errors when editing records. You can create a different substitution list for each Text field in a textbase. For example, here is a substitution list for countries:

- can:Canada
- mex:Mexico
- usa:United States of America

Spaces at the beginning or end of a code or substitution are removed automatically. Spaces within codes or substitutions remain. The code is not case-sensitive, so capitalization does not matter. For example, the user can type either dc or DC to get the same substitution, District of Columbia. The substitution appears exactly as it is specified in the list.

Substitution lists are used during data entry and import:

- **Data entry.** When editing a record, type a code (for example, can). When you move off the entry, the substitution (Canada) occurs.

- **During import.** If the import file has the item can in a field that has this substitution list applied, the word Canada will be substituted.
Creating and Editing Textbases

Note that substitution only works when the entire field entry matches the code. For example, if you type only can in the field, the software substitutes Canada when you press the Tab key to move out of the field. However, it will not substitute can if you type Manitoba, can because the entry (Manitoba, can) does not match the code (can).

During data entry, you can choose Edit>Browse Choices or press F3 to see the substitution list (if any) for the current field. You can paste entries from the list into the field, if desired.

If you type an item that is not in the substitution list, the software accepts it (assuming it meets validation, if any). Substitution lists are not used for validation. However, if the field has validation, the entry is validated after the substitution is made.

Substitution lists are saved in the textbase, not as separate files.

To create a substitution list for a Text field
2. Click the Edit Fields button to open the Edit Fields dialog box.
3. Select a Text field from the Field Name list.
4. On the Text Options tab, select the Use Substitution List check box, then click the Change button.
5. Click the Edit List button.
6. Use the Edit Substitution List dialog box to specify which items should be in the list. Type a code, a colon, and the word or phrase you want to substitute, then press Enter or click the Add button. For example, type nh:New Hampshire. When you are done, click OK to return to the Edit Fields dialog box.

To edit a substitution list for a Text field
1. Choose Maintain>Edit Lists>Substitution Lists to open the Choose Substitution List dialog box.
2. Select a field from the list and click the Edit List button.
3. Use the Edit Substitution List dialog box to make changes to the list.

Note: Field Access or Silent passwords may prohibit you from editing substitution lists.

Edit Validation or Substitution List Dialog Box
Use one of the following methods to access the dialog box you want:
- Edit Validation List dialog box
  - Choose Maintain>Edit Lists>Validation Lists.
  - Choose Maintain>Edit Textbase Structure>Edit Fields, select a field, select the Validation tab, and click the Edit List button. This method requires you have exclusive access to the textbase.

  Note: Validation lists are applicable to Text and Code field types only.
- Edit Substitution List dialog box
  - Choose Maintain>Edit Lists>Substitution Lists.
Choose **Maintain>Edit Textbase Structure>Edit Fields**, select a Text field, select the Text Options tab, and click the **Edit List** button. This method requires you have exclusive access to the textbase.

**Note:** Substitution lists are applicable to Text field types only.

You can type items in any order. The software alphabetizes the items automatically. Each item can consist of up to 250 characters.

Use the buttons on the Edit Validation List and Edit Substitution List dialog boxes when creating or editing a list.

<table>
<thead>
<tr>
<th>Button</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add</td>
<td>To add an item, type it in the <strong>Entry</strong> box, then press <strong>Enter</strong> or click the <strong>Add</strong> button.</td>
</tr>
<tr>
<td>Change</td>
<td>To edit an item (for example, to correct a typo), select it, edit it, and click the <strong>Change</strong> button.</td>
</tr>
<tr>
<td>Delete</td>
<td>To delete an item, select it, then click the <strong>Delete</strong> button.</td>
</tr>
<tr>
<td>Find</td>
<td>To move quickly to an item, type the first one or more letters, then click the <strong>Find</strong> button. This method is especially useful when you are editing very long lists.</td>
</tr>
<tr>
<td>Clear All</td>
<td>To remove all items from the list, click the <strong>Clear All</strong> button.</td>
</tr>
<tr>
<td>Print List</td>
<td>To print a list, click the <strong>Print List</strong> button. To save it as a text file, select <strong>Print to file</strong> in the Print dialog box. Saving a list as a text file is a way of sharing lists among textbases.</td>
</tr>
<tr>
<td>Merge File into List</td>
<td>This option provides a way of importing a text file and merging it into the current list. Click the <strong>Merge File into List</strong> button, then specify the location of the text file that you want to import. This is how you combine two lists (duplicates are removed). To retain a copy of the current list before merging it, first click the <strong>Print List</strong> button to save it as a text file.</td>
</tr>
<tr>
<td>Replace List with File</td>
<td>This option provides a way of importing a text file to replace the current list. Click the <strong>Replace List with File</strong> button, then specify the location of the file that you want to import. To retain a copy of the current list before replacing it, first click the <strong>Print List</strong> button to save it as a text file.</td>
</tr>
</tbody>
</table>

If you select the **Update Records** check box, any terms that are changed in this dialog box will be changed accordingly in any records containing the old term in the selected field, AND any terms deleted in this dialog box will be removed in records containing them in the selected field. Note that the **Update Records** feature only applies if you accessed the dialog using **Maintain>Edit Lists>Validation Lists** (not when using **Maintain>Edit Textbase Structure>Edit Fields**).

**Note:** Field Access or Silent passwords may prohibit you from editing validation and/or substitution lists.

**Passwords**

**Creating and Editing Passwords**

To create or edit passwords: Choose **Maintain>Edit Textbase Structure>Passwords**.
Creating and Editing Textbases

Use the Textbase Passwords dialog box to assign passwords that restrict certain activities and protect important information. A password will be requested or applied when the textbase is opened. After you assign passwords, you can print the textbase structure to see all passwords. If you ever forget a password, you can refer to the printout. Although passwords are encrypted against casual view, the record information is not encrypted in the textbase and can be seen by file-browsing software. If you have a critical need to control unauthorized access, explore additional system security procedures.

- **Master Password.** The Master password allows full access to all operations. Every textbase can be protected by a Master password. A Master password must be assigned before you can create any other passwords.
- **Field Access Passwords.** You can create individual Field Access passwords that you can provide to different users, giving each user different rights to the textbase. For example, one password can prevent a user from editing validation and substitution lists. Another password can hide some fields and make other fields read-only.
- **Silent Password.** Enable a Silent password to allow users to open a textbase without knowing a password, while still protecting information in the textbase, including the textbase structure.

**Example #1**
You want to deny everyone access to the textbase, unless they have called and received a password from you.

**Solution:** Add a Field Access password (optionally hide fields, if desired), and do not assign a Silent password.

**Example #2**
You want everyone to have access to the Personnel textbase, but you want to hide confidential information from unauthorized users: *Salary* and *Date of Birth*.

**Solution:** Add a Silent Password that hides those two fields. Add a Field Access password that does not hide the fields (just accept the default settings). When the Personnel Director types the Field Access password, she will be able to search and display the hidden fields (assuming the query screen and reports include them). When anyone else opens the textbase, they will not be able to search the hidden fields, and in reports will be unaware that the hidden fields exist.

**Master Password**

For each textbase, you can assign one Master password, which grants full access to all operations. A Master password must be defined before you can create any other passwords. The Master password allows you to:

- Edit the textbase structure (including changing and creating new passwords).
- Use any of the operations on the Manage Textbases menu.
- Copy the textbase structure.
- Change textbase default forms, query screen, and record skeleton.
- Discard deferred updates.
- Change the default indexing mode.
- Delete the log file from within DB/TextWorks.
To assign the Master password
1. Choose Maintain>Edit Textbase Structure and click the Passwords button.
2. On the Master Password tab, type a password in the Master Password box, then click Add or Change. The Master password can include up to 15 alphanumeric characters, including spaces and punctuation. Case is not significant (ABC is the same as abc).

To change or delete the Master password
1. You must be using the Master password in order to have the right to change or delete it. If necessary, choose File>Use Different Password>Primary Textbase and enter the Master password.
2. Choose Maintain>Edit Textbase Structure and click the Passwords button.
3. On the Master Password tab, do the following, depending on what you want to do:
   - To change the Master password, edit it, then click Add or Change. Changing the Master password has no effect on any Field Access or Silent passwords.
   - To delete the Master password, click Clear. Clearing the Master password deletes all Field Access and Silent passwords, too.

Field Access Passwords
To create or edit Field Access passwords: Choose Maintain/Edit Textbase Structure, then click the Passwords button to open the Textbase Passwords dialog box, and select the Field Access Passwords tab. Note that you must have a Master password to be able to select this tab.
A Field Access password is a password with an associated set of permissions, granting or denying read or read-write access to particular fields, or to the textbase itself (including textbase elements). If you use an Access Control field type in a textbase to restrict access to particular records, you can use a Field Access password to control the access the password user will have to the various classes or records. You can create up to 255 individual Field Access passwords that you can assign to different users, giving each user different rights.

Access Password
Type the password you want to assign in the Access Password box, click the Add button, and select the settings you want. Each Field Access password can consist of up to 15 alphanumeric characters, including spaces and punctuation. Case is not significant (ABC is the same as abc).
   - To edit a password, select it from the list, then make the changes.
   - To delete a password, select it from the list and click Delete.

Textbase Settings for This Password
These settings affect the textbase as a whole, when it is opened using the currently selected password. Select one or more of the following settings:
   - Textbase is Read-Only. Make all fields read-only (and disable the next four options).
   - User May Edit Validation, Substitution Lists. Allow a user to change validation and substitution lists.
Creating and Editing Textbases

- **User May Save Forms, etc. in Textbase File.** Allow a user to save, change, and delete forms, query screens, sets, and record skeletons in the textbase file. If you clear this check box, the password will allow the user to save elements in the user file only, for private use.

- **Exclusive (Immediate) Access Permitted.** Allow a user to change the indexing mode to Immediate (as long as no other users are currently in the textbase). To prevent a user from locking others out of the textbase, clear this check box.

- **User May Annotate Images.** Allow a user to add, edit, or remove image annotations. If you clear this check box, anyone using this password will be denied access to commands such as Annotate Current Image, Remove All Annotations, and the Manage Image Annotations commands that involve writing to an annotation list (clear, replace, merge). Note that if you clear this check box, users will still be able to show or hide annotations.

**Field Settings for This Password**

Select one or more fields in the list, then specify a Field Security setting.

**Note:** If the textbase includes a Link field, it appears in the list followed by the item <Linked Information>. You can select settings for the Link field and/or for the linked information from the secondary textbase.

**Field Security Settings**

For the currently selected field(s), select an option to specify how you want to protect the field.

- **Full Access.** No security restrictions. Field entries can be viewed, edited, deleted, searched, printed, imported, and exported.

- **Read-Only.** Field entries can be viewed, searched, printed, and exported. They cannot be edited, deleted, or imported. If you make any field read-only, a user with that password will not be able to delete records. If you make a Required field read-only, a user with that password will not be able to add records to the textbase.

- **Hidden.** Field entries cannot be seen, so they cannot be modified in any way and cannot be printed. From the user's standpoint, it is as if the hidden fields do not exist. You cannot hide all of the fields in a textbase. At least one field must be visible. You can hide an Access Control field without affecting record-level security.

**Note:** A hidden field appears in a form as a blank area if the box containing the hidden field has a minimum height setting greater than zero (0) lines. This can serve as an unintended cue to the user that the hidden field exists. To avoid this situation, set the box's minimum height to zero (0) in the Form Designer.

If you hide any field in the textbase, a user with that password will not be able to delete records. If you hide a Required field, a user with that password will not be able to add records to the textbase.

**Record Level Security Settings Button**

Click the **Record Level Security Settings** button to open the **Record Level Security Settings dialog box**. Note that the current textbase must already have an Access Control field, or the software will display an error message.
Silent Password

To enable or disable a Silent password: Choose Maintain>Edit Textbase Structure, then click the Passwords button to open the Textbase Passwords dialog box, and select the Silent Password tab. Note that you must have a Master password to be able to select this tab.

If you want to allow users to open a textbase without knowing a password but you still want to protect information in the textbase, you can enable a Silent password (one per textbase). When a textbase has a Silent password assigned, anyone can open the textbase without typing a password, but the textbase structure cannot be edited and fields will be protected per your specifications. If you use an Access Control field type in a textbase to restrict access to particular records, you can use a Silent password to control the access everyone will have to the various classes or records.

Enable Silent Password

To assign a Silent password, select the Enable Silent Password check box, then specify the settings you want, and click OK. These settings determine what rights a user has when the textbase is opened without entering a password. To disable the Silent password, clear the Enable Silent Password check box.

Textbase Settings for Silent Password

These settings affect the textbase as a whole, when it is opened using the Silent password. Select one or more of the following settings:

- **Textbase is Read-Only.** Make all fields read-only (and disable the next four options).
- **User May Edit Validation, Substitution Lists.** Allow a user to change validation and substitution lists.
- **User May Save Forms, etc. in Textbase File.** Allow a user to save, change, and delete forms, query screens, sets, and record skeletons in the textbase file. If you clear this check box, a person who opens the textbase using the Silent password will be able to save elements in a user file only, for private use.
- **Exclusive (Immediate) Access Permitted.** Allow a user change the indexing mode to Immediate (as long as no other users are currently in the textbase). To prevent a user from locking others out of the textbase, clear check box.
- **User May Annotate Images.** Allow a user to add, edit, or delete image annotations. If you clear this check box, anyone using the Silent password will be denied access to commands such as Annotate Current Image, Remove All Annotations, and the Manage Image Annotations commands that involve writing to an annotation list (clear, replace, merge). Note that if you clear this check box, users will still be able to show or hide annotations.

Field Settings for Silent Password

Select one or more fields in the list, then specify a Field Security setting.

**Note:** If the textbase includes a Link field, it appears in the list followed by the item <Linked Information>. You can select settings for the Link field and/or for the linked information from the secondary textbase.
Creating and Editing Textbases

Field Security Settings
Select an option button to specify how you want to protect the currently selected field, when the textbase is opened using the Silent password.

- **Full Access.** No security restrictions. Field entries can be viewed, edited, deleted, searched, printed, imported, and exported.

- **Read-Only.** Field entries can be viewed, searched, printed, and exported. They cannot be edited, deleted, or imported. If you make any field read-only, a user with that password will not be able to delete records. If you make a Required field read-only, a user using the Silent password will not be able to add records to the textbase.

- **Hidden.** Field entries cannot be seen, so they cannot be modified in any way and cannot be printed. From the user's standpoint, it is as if the hidden fields do not exist. You cannot hide all of the fields in a textbase. At least one field must be visible.

  **Note:** A hidden field appears in a form as a blank area if the box containing the hidden field has a minimum height setting greater than zero (0) lines. This can serve as an unintended cue to the user that the hidden field exists. To avoid this situation, set the box's minimum height to zero (0) in the Form Designer.

If you hide any field in the textbase, a user who opens the textbase with the Silent password will not be able to delete records. If you hide a Required field, a user using the Silent password will not be able to add records to the textbase.

Record Level Security Settings Button
Click the **Record Level Security Settings** button to open the **Record Level Security Settings** dialog box. Note that the current textbase must already have an Access Control field, or the software will display an error message.

Specifying Record-Level Security
When using record-level security to restrict access to particular records in a textbase, use the Record Level Security Settings dialog box to specify the type of access for each record class, based on the password used. To access this dialog box, click the **Record Level Security Settings** button on the Field Access Password and/or Silent Password tabs on the Textbase Passwords dialog box. Note that the current textbase must already have an Access Control field, or the software will display an error message.

It is possible to define both field-access permissions and record-access permissions for the same password. If this is done, the most restrictive permission applies. For example, a hidden field remains hidden in a read-only or full-access record.

**Note:** The settings specified below apply to the password selected on the Textbase Passwords dialog box. The password is displayed in the title bar of the Record Level Security Settings dialog box.

1. Select an option button to specify the Default Record Access for This Password. The type of access you specify here (Full Access, Read-Only, or Hidden) will be used for records that do not have a record class specified in their Access Control fields and as the default for new record classes entered into the special validation list (unless you specify otherwise in step 3).

2. Select a record class from the Record Class Settings list. You can use **Shift+click** to select multiple record classes at one time.
Note: The items in this list are defined in the special validation list for the Access Control field in this textbase (choose Maintain>Edit Textbase Structure>Edit Fields, then select the Access Control field from the Field Name list and click the Edit List button on the Validation tab).

3. Specify the type of access for the selected record class by selecting an option from the Record Access group. The option specified here will apply when the specified password is used.

**Full Access.** Users have full access to records. Records can be viewed, edited, deleted, searched, printed, imported, and exported.

**Read-Only.** Records can be viewed, searched, printed, and exported. They cannot be edited, deleted, or imported.

**Hidden.** Records cannot be seen, making them invisible to users.

**Default.** Selected by default when a new record class is added to the special validation list. The option specified as the Default Record Access for This Password in step 1 will be used.

4. Repeat steps 2 and 3 for each record class in the Record Class Settings list.

5. Click **OK** to return to the Textbase Passwords dialog box.

**Edit Textbase Structure**

Use the Edit Textbase Structure dialog box (choose **Maintain>Edit Textbase Structure**) to make changes to the textbase structure. If the textbase has passwords, you must use the Master password to edit the structure (choose **File>Use Different Password**).

Editing the textbase structure requires exclusive access to the textbase.

<table>
<thead>
<tr>
<th>Item</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fields list</td>
<td>Shows all of the fields in the textbase.</td>
</tr>
<tr>
<td>Edit Fields</td>
<td>Opens the Edit Fields dialog box to change field type, indexing, Special Filing, and validation.</td>
</tr>
<tr>
<td>Description</td>
<td>Describes the textbase. A description can be up to 80 characters including spaces and punctuation.</td>
</tr>
<tr>
<td>Created</td>
<td>Shows the date and time the textbase was created.</td>
</tr>
<tr>
<td>Modified</td>
<td>Shows the date and time of the most recent structure edit.</td>
</tr>
<tr>
<td>Default indexing mode</td>
<td>Shows the default indexing mode (shared immediate, deferred, immediate) when users open the textbase.</td>
</tr>
<tr>
<td>Passwords</td>
<td>Assign passwords to protect the textbase structure, fields, records, public forms, validation lists, substitution lists, image annotations, and exclusive access settings.</td>
</tr>
<tr>
<td>Sort Order</td>
<td>Indicate the order in which records should appear in reports if no other sort is specified.</td>
</tr>
<tr>
<td>Stop Words</td>
<td>Specify a list of words that can be excluded from the Word index created for a field. If you add, change, or remove words from a stop word list, the</td>
</tr>
</tbody>
</table>
Leading Articles

Specify a list of leading articles (a, an, the) to be ignored during indexing, sorting, and searching. If you add, change, or remove articles from a leading article list, the software does not automatically rebuild indexes.

Log File

Enable or disable a log file to record textbase changes, specify field(s) to identify records in log file.

Maximum Users

Specify how many times a textbase can be open simultaneously.

XML Match Fields

If you plan to edit/delete records over the Web, specify the field(s) on which you want to match. The software uses match fields to uniquely identify the appropriate record to modify. Note that editing over the Web requires WebPublisher PRO version 7.0 or later.

Print Structure

Print the structure definition on paper or save it in a file.

Export Structure

Create an ASCII text file that contains all of the information specified in the Edit Textbase Structure dialog box and all of its subdialog boxes.

OK

Save a new textbase or save changes to an existing textbase.

Cancel

Do not save changes. Abandon work done in this dialog box and all dialog boxes accessed from it.

Adding Fields

Add a field to hold a specific category of information, such as a name. A general rule is to add one field for each piece of information that you may want to search, sort, or print independently.

To add a field

2. Click the Edit Fields button to open the Edit Fields dialog box.
3. Type a name in the Field Name box and click the Add button. Field names can be up to 20 characters and can include letters, digits, spaces, hyphens, and underbars.
4. On the Type and Indexing tab, specify the options you want, then click the Change button.
   - Field Type
   - Require Strictly Correct Type (optional)
   - Allow Trailing Text (optional)
   - Indexing Information
   - Special Filing Options (optional)
5. On the Validation tab, specify the validation options you want, then click the Change button.
   - Entry Validation
   - Content Validation
6. Depending on the field type you specified, one of the following tabs may appear on the Edit Fields dialog box. Specify the options you want, as appropriate, then click the Change button.

- **Text Options tab.** For Text fields, specify whether to use a substitution list and type the entries you want in the list. For Text and Code fields, connect a thesaurus to the field.
- **Automatic Number Definition tab.** For Automatic Number fields, specify how numbers appear, including number increment and whether thousand separators are used.
- **Automatic Date Definition tab.** For Automatic Date fields, specify when dates are updated, as well as whether both date and time appear, and in what format.
- **Computed Number Definition tab.** For Computed Number fields, specify the formula you want to use, as well as how computed numbers are formatted.
- **Computed Date Definition tab.** For Computed Date fields, specify the formula you want to use, as well as how computed dates are formatted.
- **Link Definition tab.** For Link fields, specify a secondary textbase and its associated field.

7. Click Finish to return to the Edit Textbase Structure dialog box.

8. Click OK on the Edit Textbase Structure dialog box, then click OK to dismiss the confirmation message box that appears.

**Note:** Fields that you add to an existing structure are fully accessible under existing passwords, unless the textbase is read-only. After adding fields, you may want to edit password definitions (click the Passwords button in the Edit Textbase Structure dialog box before clicking OK).

**Renaming, Copying, Reordering, and Deleting Fields**

Use the Edit Fields dialog box to rename, copy, reorder, or delete fields in the textbase structure.

**To rename a field**

2. Click the Edit Fields button to open the Edit Fields dialog box.
3. From the Field Name list, select a field that you want to rename.
4. Type a new name in the Field Name box and click the Change button.

You can freely rename fields. However, if the field that you rename is referenced in the formula for a Computed field or a form calculation definition, change the formula or calculation to reflect the new field name. If the field name is referenced in a saved set, change the query criteria to reflect the new field name. Form and screen scripts in this and other textbases may also use specific field names, and thus need to be updated.

Renaming a Link field in the primary textbase or an associated field in a secondary textbase does not affect the link in any way, and is safe to do.

Because link definitions are stored internally based on field position, not name, avoid changing the associated field’s position in a secondary textbase structure. If you do move the associated
Creating and Editing Textbases

field, open the primary textbase and redefine any affected Link fields. If you re-order any fields in the secondary textbase structure, you may also need to fix any forms for the primary textbase that include secondary textbase fields (redefine Box Properties).

Forms, query screens, record skeletons, and sets that were exported using Maintain>Manage Textbase Elements contain field names in them. If you rename fields, you can still import elements into the textbase, but the imported elements may contain "undefined" information.

Records that have been exported to a file often contain field names, too. You can use a text editor to rename fields in exported tagged files (and sometimes in delimited files) before importing them.

To copy a field

2. Click the Edit Fields button to open the Edit Fields dialog box.
3. From the Field Name list, select a field that you want to copy.
4. Type a new name in the Field Name box and click the Add button. The new field appears at the bottom of the Field Name list.
5. [Optional] Change the field type, indexing, validation, and other settings for the new field by using the tabs on the Edit Fields dialog box. Click the Change button to apply the changes.

The new field has the same field type, indexing, and validation settings as the field from which it was copied. If the field that you copy has a validation or substitution list, those options are copied, but the contents of the validation or substitution list are not copied. You must edit the validation or substitution list for the new field.

To re-order fields

2. Click the Edit Fields button to open the Edit Fields dialog box.
3. From the Field Name list, select a field that you want to move.
4. Use the Up and Down buttons to change the order of the field.

You can freely re-order fields among a set of new fields added to the end of an existing structure, even if the textbase contains records or has existing forms, screens, or skeletons.

You can also re-order fields if the textbase file does not contain any records, forms, query screens, or skeletons. Re-ordering fields may cause problems with forms, query screens, or record skeletons saved in a user file.

You cannot re-order fields (except among a set of new fields added to the end of an existing structure) if the textbase contains records, or if you have already saved forms, query screens, or record skeletons in the textbase file. You also cannot re-order fields if you created the textbase by copying an existing structure and you selected the Copy Textbase Elements check box. In these cases, the Change Order buttons are disabled.

Note: Field order should not be a concern, because you can use forms and query screens to make fields appear in any order. Note that you can also specify that fields be listed alphabetically on various dialog boxes (choose Tools>Options>Display).
Avoid re-ordering fields in a secondary textbase, because link definitions are stored internally based on field position, not field name. If you move the position of an associated field in a secondary textbase, open the primary textbase and redefine the Link field. If you re-order any fields in a secondary textbase, you may need to fix any forms for the primary textbase that include secondary textbase fields (choose **Tools>Box Properties** and redefine the box contents).

**To delete a field**

1. Choose **Maintain>Edit Textbase Structure** to open the Edit Textbase Structure dialog box.
2. Click the **Edit Fields** button to open the Edit Fields dialog box.
3. From the Field Name list, select a field that you want to delete.
4. Click the **Delete** button and respond to the confirmation message.

If the deleted field is referenced in the formula for a Computed field, a form calculation definition, or the query criteria for a saved set, you must change the formula, calculation, or search so it no longer references the deleted field. Form and screen scripts in this and other textbases may also use specific field names, and thus need to be updated.

**Careful!** If you delete a field in a textbase that contains records, you **permanently delete all of the information in that field** in all of the records in the textbase. The deletion occurs when you click **OK** in the Confirm Textbase Structure Update dialog box.

If a textbase does not yet contain records and textbase elements have not yet been defined, you can delete fields freely. You can also delete fields among a set of new fields added to the end of an existing structure.

Note that forms, query screens, sets, and skeletons that were exported using **Manage Textbase Elements** contain field names in them. If you delete fields, you can still import elements into the textbase, but the imported elements may contain "undefined" information.

When you delete a field in a textbase that contains records or textbase elements, the field slot remains in the internal definition of the textbase, and appears as `<Deleted>` in the Field Name list. Additional fields that you add to a textbase will appear after any existing fields, including `<Deleted>` fields.

You can rename a deleted field, if desired, so you can use it to store information. For example, you can rename `<Deleted>` to **Company Name**. You cannot rename a deleted field during the current textbase editing session because the information in the deleted field has not yet been purged from the textbase. Information is purged when you click **OK** in the Confirm Textbase Structure Update dialog box. You can edit the textbase structure again to rename the deleted field.
Linking Textbases

You can link a textbase to one or more other textbases to access the combination of information that you need. By linking textbases, you reduce or eliminate duplication of effort and conserve disk space. You can access information from several textbases at once, but you only have to maintain the information in the textbase where it is stored.

For example, store telemarketing sales notes in Textbase A. Store customer names and addresses in Textbase B. Link the two textbases. Now when Textbase A is open, you can see, search, sort, print, and edit information from Textbase B as well.

Learning about Linking

There are several basic tasks involved in linking textbases.

First, you define a Link field in the primary textbase structure. When you define a Link field, you specify the secondary textbase and associated field to which you want to link.

Second, you add or edit records to ensure that you have matching terms in the Link field and its associated field.

Third, you design forms for the primary textbase that include fields from the secondary textbase, so you can see the secondary textbase information. Then you design a query screen for the primary textbase that includes fields from the secondary textbase, so you will be able to search secondary textbase fields.

Why Link Textbases?

The main reason to link textbases is to avoid having to replicate information that is common to many records or to more than one textbase. By storing the common information in one textbase, you can reference it from other textbases, and keep it up-to-date in one place. For example, keep customer names and addresses in one textbase, so you can access the information from other textbases.

Deciding which textbases to link is an important, but not difficult, decision. Typically, you use linking to model a many-to-one relationship between different types of records. For example:

- A manufacturer has multiple products that are supplied by a particular supplier.
- A legal firm has many tasks related to one trial.
- A library has several books on loan to a given patron.

In each of these cases, you would create two textbases: one for the "many" instances and another for the "one." For example, create one textbase that tracks products and another that contains vendor (supplier) names and addresses. By linking the Vendors textbase to the Products textbase, you can see, search, sort, and print vendor information from within the Products textbase.

In the simplest case, a many-to-one relationship can be accomplished without linking, simply by using multiple entries in a field. For example, many phone calls to a particular customer can be logged in a single field in each record. However, linking gives you the ability to track specific information separately (for example, date of call, the person initiating the call, summary of the discussion). In this case, create a record in Textbase A for each call made or received, and link these records back to the customer in Textbase B. Then it is easy to track how many calls were made in a particular week, how many were made by a particular staff member, and so forth.
Which Textbase Should be the Primary?

Part of the decision about linking textbases is to determine which textbase should be the primary and which should be the secondary. You can most easily edit information in the primary textbase, so make the primary textbase the one that you will be working in most frequently.

Make the secondary textbase the one that contains information that does not need to be revised very often. When accessed from a primary textbase, the secondary textbase is read-only, except when you use Edit Secondary Record or open the secondary textbase directly.

For example, you may be adding and editing records in the Calls textbase daily, making notes about who called, what the call was about, date of call, and so forth. Make this textbase the primary one. Customer names and addresses are less likely to change on a regular basis, so make that the secondary textbase.

How is a Link Made?

Linking is done dynamically, by comparing information in a Link field with information in an associated field in another textbase. If both textbases contain the same information in the specified field, a link is made for a particular record, and information from the secondary textbase becomes accessible.

Example

- Primary textbase called Telephone Notes contains information about outgoing sales calls. This textbase contains a Link field called "ID" that contains the entry "Acme."

- Secondary textbase called Company Info contains names, addresses, phone numbers, and other information about companies. This textbase contains an associated field called "ID" that also contains the entry "Acme."

When you open the primary textbase, you have access to the Company information for every record that contains a matching entry in the Link and associated fields.

Important! To see the information, you must be using a form that includes those fields from the secondary textbase.

DB/TextWorks evaluates a link dynamically by working in the background searching the associated field in the secondary textbase whenever needed. When information in the associated field matches information in the Link field, the record in the secondary textbase is retrieved so it can be accessed from within the primary textbase.

When you edit information in a Link or associated field, that information determines whether a link will be made for that particular record.

- If you type an entry in a Link field that is not in the associated field in the secondary textbase, no record will be linked.

- If you change an entry in a record in the secondary textbase so that the matching fields no longer match, the record will no longer be linked.

By way of a given Link field, only one record in a secondary textbase can be associated with a record in the primary textbase. The software automatically assigns Single Entry Only validation to Link fields, to ensure that they contain only one entry. This entry is used to determine a match. If multiple records in the secondary textbase contain the same information in the associated field, only one record is used.
Linking Textbases

The @ Link Indicator
A secondary textbase field is referenced by a combination of the secondary textbase field name, an @ symbol, and the name of the Link field in the primary textbase. For example, this field:

Street Address@Vendor

means "Street Address field from a secondary textbase, accessed by a Link field called Vendor in the primary textbase."

You will see this convention used in various situations, for example when selecting fields from lists while designing query screens or forms.

Characteristics of Link Fields
A Link field can have the following characteristics, all of which you define in the Edit Fields dialog box when editing the textbase structure (Maintain>Edit Textbase Structure).

- A Link field is Term indexed by default. You cannot change this setting, because the Term indexes of the Link and associated fields are used to achieve the match.
- A Link field can be Word indexed, if you want to be able to do word, phrase, or proximity searches.
- A Link field has Single Entry Only validation applied, to ensure that only one entry will be used to determine a match with a record in the secondary textbase. You cannot change this setting.
- A Link field can be strict (Require Strictly Correct Type), in which case the field will accept information only if it matches existing information in the associated field. Make a Link field strict if you want to prevent users from typing entries that do not have a matching record in the secondary textbase.

Tip! Do not use strict links if you will be using the textbase with the DB/Text Importer.

- A Link field cannot have trailing text.
- A Link field uses the same Special Filing rules as its associated field, to ensure matching consistency. You cannot select different filing rules. If you change the filing rules of the secondary textbase associated field, you should redefine the link so that the primary textbase can retrieve the new filing information.

Every Link field has one associated field. However, more than one Link field can link to the same textbase, with the same associated field or different ones. There is no limit to the number of Link fields, except that you cannot define links to more than four different secondary textbases.

Characteristics of Associated Fields
To determine a match, DB/TextWorks compares Term index entries in the associated and Link fields. Fields that are not Term indexed do not appear in the list of fields in the Link Definition dialog box. In this way, the software protects you from linking to a field that does not have a Term index.

For best results, the associated field in a secondary textbase should have unique and non-repeating validation or should be an Automatic Number field.
Linking Textbases

<table>
<thead>
<tr>
<th>If the associated field is:</th>
<th>You will:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique and non-repeating or Automatic Number</td>
<td>Link to a record when information in the Link field matches information in the associated field.</td>
</tr>
<tr>
<td>Repeating (has multiple entries)</td>
<td>Link to a record if any of the entries in the associated field match the entry in the Link field.</td>
</tr>
<tr>
<td>Not unique</td>
<td>Link to the first matching record that is found.</td>
</tr>
</tbody>
</table>

Using Intermediate Textbases

Typically, secondary textbases contain information that does not need to be revised very often. However, in some situations, you may need to make and break relationships between two relatively static textbases, such as Books and Patrons, shown below. For example, circulation of library materials involves loaning items (connecting a book with a borrower) and checking them back in (severing the connection).

- Books - This textbase tracks information about titles, authors, publishers, and ISBN numbers. Each record represents one book.
- Patrons - This textbase tracks information about borrowers, including names, addresses, and phone numbers. Each record represents one patron.

Where is the best place to record the transaction information? The most efficient approach is to set up a third textbase that contains information about transactions. This intermediate textbase will link to both of the other textbases, with additional fields for information about the transaction, such as loan date and due date. Each record in the textbase will represent one transaction (borrowed and returned). This approach protects the other textbases from inadvertent changes, and is more efficient because less information is being processed when records are edited.

How to Link Textbases

You link two textbases together by defining a Link field defined in the primary textbase structure. Every Link field has a "partner" field in another textbase. The partner is called an associated field. The textbase that contains the associated field is called the secondary textbase. To summarize this important relationship:

- The primary textbase contains a Link field. A Link field contains text that will be matched against a corresponding field in another textbase, in order to associate information in that textbase with information in the primary textbase.
- The secondary textbase contains an associated field. The terminology associated field is just a convenient way of referring to the "partner" field in the secondary textbase. The associated field can be any type (for example, Text or Number). You do not have to do anything in the secondary textbase’s structure to indicate that the field is associated (except ensure that the field has a Term index). The link definition is done solely in the primary textbase, and only the primary textbase is aware that the link exists.
- Both fields hold the same information, such as company names.

When you define the Link field in the primary textbase, you indicate the secondary textbase and associated field.
Linking Textbases

To determine a link, DB/TextWorks will compare Term index entries in the associated and Link fields. To protect you from linking to a field that does not have a Term index, the associated field list includes only those fields that have a Term index.

The two fields (Link and associated) should hold the same information. For example, the Vendor field in the primary textbase and the Vendor Name field in the secondary textbase both contain company names. When information in the Link field matches information in the associated field, a link is made, and you have access to information in the secondary textbase.

By way of a given Link field, only one record in the secondary textbase can be associated with a record in the primary textbase. If you change information in the Link or associated field so the information no longer matches, a link will no longer exist for that particular record.

Link Fields

Use a Link field in a textbase if you want to access information from more than one textbase at the same time. Select the Type and Indexing tab on the Edit Fields dialog box to specify Link as the field type (choose Maintain>Edit Textbase Structure>Edit Fields).

Every Link field has one associated field in a secondary textbase. When information in the Link field matches information in the associated field, a link is made, and you have access to information in the secondary textbase. For more information, read about linking textbases.

Note that more than one Link field can link to the same textbase, with the same associated field or different ones. There is no limit to the number of Link fields, except that you cannot define links to more than four different secondary textbases.

To define a Link field

1. Open the primary textbase.
2. Choose Maintain>Edit Textbase Structure to open the Edit Textbase Structure dialog box.
3. Click the Edit Fields button to open the Edit Fields dialog box.
4. Add a field or select an existing field and select Link from the Field Type drop-down list on the Type and Indexing tab.
5. The Link Definition tab automatically appears. Click the Specify Textbase button.
   
   **Note:** If you want to edit an existing Link field, select it from the Field Name list, then select the Link Definition tab. The tab will only appear when the Link field is selected.
6. On the Link to Inmagic DB/TextWorks Textbase dialog box, select the secondary textbase to which you want to link and click Open.
   
   **Note:** There may not be room on the Link Definition tab to show the full path to the textbase. Use your mouse pointer to hover over the textbase name to see the full path appear in balloon text.
7. On the Link Definition tab, select the field in the secondary textbase that contains the same information as the Link field in the primary textbase. The field you select is called the associated field. For best results, the associated field should be unique and non-repeating or should be an Automatic Number field.
8. [Optional] Select the Type and Indexing tab and specify the options you want:
Require Strictly Correct Type. Select this check box if you want the Link field to accept information only if it matches existing information in the secondary textbase. Making a Link field strict prevents people from typing entries that do not have matching records already in the secondary textbase. If you clear this check box, someone can create the matching record in the secondary textbase at a later time.

Note that when you edit a record, you can press F3 in the Link field to browse entries from the Term index of the associated field in the secondary textbase. Pressing F3 in this situation essentially acts like a validation list for the Link field, and is especially useful when the Link field is strict.

Note: You cannot select the Allow Trailing Text check box. There is no such thing as trailing text in a Link field.

Indexing Information. A Link field is automatically Term indexed. You cannot change this setting, because the Term indexes of the Link and associated fields are used to achieve the match. You can select the Word Indexed check box if you want to be able to do word, phrase, and proximity searching in a Link field.

Use Stop Word List. If the Link field is Word indexed, you can select or clear this check box. You cannot change any of the Special Filing options of the Term index, because a Link field "borrows" the filing rules of its associated field to ensure matching consistency.

Validation. The software automatically assigns Single Entry Only validation to Link fields to ensure that they contain only one entry. The only additional validation you can apply is Field Entry Required and/or Unique Entries Only.

9. In the Edit Fields dialog box, click Add if you are adding a field or click Change if you are editing a field.

10. Click the Finish button to return to the Edit Textbase Structure dialog box.

11. Click OK on the Edit Textbase Structure dialog box, then click OK to dismiss the confirmation message that appears.

Searching Secondary Textbase Fields

From within the primary textbase, you can search any field in the primary or secondary textbase. See Searching a Textbase that Contains Link Fields for more information.

To search secondary textbase fields, design a query screen for the primary textbase that includes fields from the secondary textbase. For example, load the Basic query screen into the Query Screen Designer (Search>Design Query Screen), add boxes that search fields from the secondary textbase, and save the screen under a new name.

You can browse the indexes of a secondary textbase field and paste terms or words into the current query box, just as you would browse any field. On the query screen, position the cursor in a field and press F3 or choose Edit>Browse Choices.

Records retrieved by a search are always from the primary textbase, even when you search a field from a secondary textbase. Here is what happens when you search a secondary textbase field:

1. DB/TextWorks searches the secondary textbase for records that match the specified criteria. Multiple records may be found.

2. For each record found, the software compares the information in the associated field against the information in the Link field.
3. The software retrieves records in the primary textbase whose information in the Link field matches information in the associated field.

As a result, the only records that you retrieve are from the primary textbase. A record in the secondary textbase might match zero, one, two, or more records in the primary textbase. If it does not match any records, no records are retrieved. This behavior explains why you sometimes retrieve fewer records than expected.

Consider the following situation in a legal firm:

- The primary textbase is called Tasks. Each record represents one task to be performed, for example, attending a deposition.
- The secondary textbase is called Case. Each record represents one case, for example Smith vs. Jones.

If a case does not have any tasks entered for it yet, searching a secondary textbase field will not retrieve any records. For example, if you are planning to search for Smith vs. Jones, you press **F3** on the query screen in a secondary textbase field to browse indexes, where you see one Smith vs. Jones listed.

However, when you perform the search, you do not retrieve any records, because the primary textbase does not contain a record (task) for Smith vs. Jones.

### Displaying Information from a Secondary Textbase

To see secondary textbase information from within the primary textbase, you must design a form for the primary textbase that includes fields from the secondary textbase. Use the Form Designer tools to add and position boxes, specify box content and label text, and perform other formatting.

A field in a secondary textbase is referenced by a combination of the field name, the @ symbol, and the name of the Link field in the primary textbase. For example, a field called Street Address@Vendor means "Street Address field from a secondary textbase, accessed by a Link field called Vendor in the primary textbase."

Fields from a secondary textbase are represented in this way in various lists and dialog boxes, for example, when you define box content in the Form Designer and Query Screen Designer. Whenever you see a field represented in this way, you know that it is a field from a secondary textbase, and you can also tell the field in the primary textbase by which it is linked.

When you design a form, note that there is no need to include both the associated field and the Link field in the form, because they contain the same information. A form that includes both shows redundant information, which can be confusing. Generally, just show the associated field, since the Link field will not necessarily show punctuation.

When the form is used, it will display information from the secondary textbase fields that you included in the form, whenever a match occurs between the Link and associated field. If a match does not exist for a particular record, that record will not show the secondary textbase information.

To edit information in a secondary textbase, open the secondary textbase directly, or use **Edit Secondary Record**.
Creating or Editing a Secondary Record

While working in the primary textbase, you can create and edit records in a secondary textbase; choose Records>Edit Secondary Record. This command is intended to supplement your editing activities in the primary textbase, should you find that information in a secondary textbase is incorrect or missing. It is not intended for large-scale data entry in a secondary textbase. If you have many records to add or change, open the secondary textbase directly.

To create or edit a secondary textbase record, from within the primary textbase

1. Open the primary textbase.

   This feature is designed to help you in the following situation: What typically happens is that you begin adding or editing records in the primary textbase, and you notice that a record in the secondary textbase contains incorrect information. Or you notice that a record does not yet exist in the secondary textbase (for example, if you are recording a new sale in the primary textbase and the customer is not listed in the secondary textbase). By displaying a primary textbase record in the Edit window, you will be able to open or create a corresponding record in the secondary textbase.

2. Perform one of the following:
   - To create a new record in the primary textbase, choose Records>New Record, and go to step 4.
   - To edit a record in the primary textbase, find the record and choose Records>Edit Record.

   - Note that the option may be disabled if the primary textbase has multiple Link fields. Put the cursor in the Link field for the textbase you want to edit.
   - If the Link field contains information (in the primary textbase record), the corresponding record in the secondary textbase appears in the Edit Secondary Record window, so you can edit it.
   - If the Link field is empty, a blank Edit form is presented so you can create a new record in the secondary textbase.

4. Add or edit record information, then choose Records>Save Record.

   If you created a record (that is, the Link field was empty when you chose Records>Edit Secondary Record), or you modified the contents of the associated field, the value that you entered in the associated field is automatically copied into the Link field in the primary textbase, to ensure that the records are linked.

   **Important!** The information can be copied only if the Link field is included on the Edit form currently used for the primary textbase, and the box containing the Link field is editable.

More about Adding or Editing Secondary Records

Troubleshooting

If you cannot choose Records>Edit Secondary Record, be sure that:
Linking Textbases

- The Edit window is open and active.
- The cursor is in a box that contains only one Link field or only field(s) from one secondary textbase record. The Edit Secondary Record command is inactive if there is any ambiguity about which secondary textbase record should be accessed (for example, if the textbase contains more than one Link field, or a box contains multiple Link fields).
- You are using a secondary textbase password that permits editing (see below).

Forms and Record Skeletons

The Edit Secondary Record window uses the form that was most recently selected. The same is true for record skeletons; the last-used skeleton is used. You can select a different edit form using the Select Form for this Window toolbar button on the Edit Secondary Record window (if present). There is no similar support for selecting a different record skeleton.

Passwords

If a secondary textbase has passwords, you can select a different password from within the primary textbase. Choose File>Use Different Password>Secondary Textbase. You may have to do this if the current secondary textbase password restricts access to certain fields, either by hiding them or making them read-only. Settings in Tools>Options>General control whether you are prompted for a secondary textbase password when the primary textbase is opened, or whether the Silent password is used.

Indexing Mode

Changes to secondary textbases are always made in Shared Immediate indexing mode, regardless of the selected indexing mode.

Multiple Links among Textbases

If the secondary textbase contains links to yet another textbase, the third textbase is never opened from the primary. For example, you have three textbases, where:

- A has a link to B, and
- B has a link to C.

If your primary textbase is A, textbase C will not be opened. If the link to C is strict (Require Strictly Correct Type), you cannot edit the strict Link field in textbase B; and if it is also required, you cannot use choose Records>Edit Secondary Record to create records in textbase B.

Browsing Link Fields while Editing a Record

When you add and edit records in the primary textbase, you nearly always want to establish a match so you will have access to record information from the secondary textbase. To establish a match, you need to make sure that information in the Link field in the primary textbase matches information in the associated field in the secondary textbase.

You could type information in the Link field and hope it matches information in the associated field. To guarantee a match, position the cursor in a Link field and press F3 or choose Edit>Browse Choices. The Query Choices Browser dialog box appears. It shows terms from the associated field in the secondary textbase. You can paste a term from the list into the
current field in the record you are editing. This guarantees a match, so you have access to the secondary textbase information for a particular record.

See Linking Textbases for more information.

**Refreshing Linked Information while Editing a Record**

When information in the **Link field** in the primary textbase matches information in the associated field in the secondary textbase, a link is made, and you can access information from the secondary textbase. If you change information in a Link field, you can access a different record in the secondary textbase.

**Important!** The form you are using for the Edit window should include fields from the secondary textbase. Otherwise, even if a match is made, you will not see secondary textbase information.

When you are editing a record, fields from a secondary textbase are automatically updated when you change information in the Link field then move the cursor off of the Link field. To see updated information from the secondary textbase without moving the cursor off the Link field, press **F9** or choose **Window>Refresh**.

**Change Secondary Password**

To access this dialog box: Open a primary textbase and choose **File>Use Different Password>Secondary Textbase**.

The Change Secondary Password dialog box enables you to select a different secondary textbase password while using the primary textbase. For example, you may want to use a secondary textbase password that provides write-access to all fields. You can access this dialog box only when the primary textbase is linked to more than one secondary textbase.

Select a textbase from the list of Secondary Textbases with Passwords, click the **Change Password** button, and specify the secondary textbase password that you want to use.

**Note:** To control whether you are prompted for secondary textbase passwords when you open a primary textbase, set the initial password handling for secondary textbases (choose **Tools>Options>General**).
Adding and Changing Records

New Record command (Records menu)
To create a new record, choose Records>New Record, or press Ctrl+F2, or use the New Record button on the toolbar. You see the Edit window, which uses the currently selected Record Edit form.

Each box typically represents one field. Click in the box where you want to begin typing, or press Tab or Shift+Tab to move from box to box. You can also use Edit>Go to Box or the standard navigation keys.

Type or paste information in the boxes, using the techniques summarized below.

<table>
<thead>
<tr>
<th>To:</th>
<th>Do this:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type one entry</td>
<td>Type information in a box.</td>
</tr>
<tr>
<td>Create multiple entries</td>
<td>Press F7 in a field that already contains an entry or choose Edit&gt;New Entry, then type or paste information. For example, to add three entries to the Synonyms field, type Cruise ship, press F7, type Sailboat, press F7 and type Boat.</td>
</tr>
<tr>
<td>Paste an entry from a validation or substitution list</td>
<td>Press F3 in a field that has a validation or substitution list.</td>
</tr>
<tr>
<td>Paste a term from the associated field in a secondary textbase</td>
<td>Press F3 in a Link field.</td>
</tr>
</tbody>
</table>

A record can include any keyboard or extended character. To type an extended character, use the Alt key and the numeric keypad. For example, you might type 0233 while holding down the Alt key to create the character é.

To save a record and continue displaying it, press F5 or choose Save Record on the Records menu or click the Save Record button in the Edit window toolbar.

To save a record and begin creating a new record (following a confirmation message), press Ctrl+F2 or choose New Record from the Records menu or use the New Record button.

If you perform certain operations without having saved a record, for example if you try to close the textbase, DB/TextWorks asks if you want to save the changes before proceeding.

Edit Record command (Records menu)

To edit a record
1. Do a search or load a set to find the record you want to edit.
2. Select a record in the Report window and/or display the record (Display>Display Record).
3. Choose Records>Edit Record, or press F2, or click the Edit Record toolbar button.
4. If a record has deferred changes, DB/TextWorks asks if you want to edit the changed version of the record. Click Yes if you want to edit the changed version of the record (you will see the pending changes), or No to cancel.
5. The record appears in the Edit window. Add and/or edit information, as applicable.
6. To determine how records appear in the Edit window, choose Display>Select Forms>Record Edit. To be sure you are seeing all fields, select the Basic Record form or use a form designed especially for editing.

7. To save changes, press F5 or choose Records>Save Record.

Checking Spelling

There are two ways to check a record to eliminate possible typographical errors. You can run a spell check on a record after you have finished typing or editing it, or you can choose to have your spelling checked as you type in the record. You can check spelling in the following windows: Edit Record, Edit Secondary Record, Record Skeleton Editor.

The spell checker helps you identify possible misspellings by comparing the text to a dictionary of accepted spellings. You can add, edit, and delete items in the dictionary.

To set up the spell checker

1. Decide which fields to check and which to skip. By default, DB/TextWorks checks Text fields only. To check other types of fields, choose Tools>Spell Check Setup and use the arrows to indicate which fields to check and which fields to skip. Because they are not editable fields, Automatic and Computed Date and Number fields can never be checked (but Automatic ID fields can be).

2. [Optional] Select the Check spelling as you type check box in the Spell Check Setup dialog box. Note that if you have the Edit window open when you select this option, it will not take effect until you close and re-open the Edit window.

3. Click OK.

Note: If you want to change the spell check settings while in the Edit Record, Edit Secondary Record, or Record Skeleton Editor window, close the window before specifying the new settings on the Spell Check Setup dialog box. If you do not, the changes will not apply to the record or record skeleton in the active window.

To run the spell checker

1. Open a record in the Edit window, or Edit Secondary Record window, or a skeleton in the Record Skeleton Editor window.

2. Select a form that includes all the fields that you want to spell check. For example, click the Select Form for this Window button on the Edit window toolbar and choose the Basic Record form.

3. Place your cursor in the box in which you want to begin the spell check, or select the text that you want to spell check.

4. Choose Tools>Spell Check, press F8, or click the Spell Check button on the Edit window toolbar.

5. Use the Check Spelling dialog box to correct spelling errors. Click the Help button in that dialog box for more information. DB/TextWorks checks editable boxes only. It skips:
   - Fields that do not appear on the Edit form.
   - Fields that are marked read-only by the current password.
Adding and Changing Records

- Uneditable boxes (boxes that contain automatic and computed date or number fields, variables, more than one field, and so forth).
- Fields in the Skip these Fields list on the Spell Check Setup dialog box.

**To check spelling as you type**

1. Create a new record or open a record for editing in the Edit window, or Edit Secondary Record window, or a skeleton in the Record Skeleton Editor window. As you type, words the spell checker considers misspelled will turn red.

2. Choose a method for correcting spelling errors. You can make corrections when a red word appears, or when you are done typing.
   - Right-click a red word. A list of suggested alternatives appears on the shortcut menu, as does commands to **Ignore All** (to skip the misspelled word and all other instances of it in the record) and **Add** (to add the word to your spell check dictionary). Choose an alternative word, if applicable, and the spell checker will replace the red text with the new word, and make the text color black. Note that if you have moved the cursor out of the box containing the red word, you must use the left mouse button (left-click) in the box before you right-click the red word in it.
     
     **Note:** Once you make a selection from the list of alternatives (or select the **Ignore All** or **Add** commands), the standard shortcut menu that opens when you right click appears. Click away from it to make it disappear.

   - Select the red word and type the correct word, if the word is one for which you do not need an alternative suggested (for example, you typed hte instead of the). The new word will appear black if it is spelled correctly.
     
     **Note:** Double-clicking a word does not highlight the entire word when using the **Check spelling as you type** option. You must highlight the word with your mouse to select it.

   - Continue typing and run the spell checker when you are done. Choose **Tools>Spell Check**, press **F8**, or click the Spell Check button on the Edit window toolbar. The spell checker will provide alternative spellings for each red word, one at a time, on the Check Spelling dialog box and turn each misspelled word black, if an alternative is selected to replace it.
     
     **Note:** If you choose to check spelling as you type, note that the text you type will only appear red or black, no matter what color text you specify for the record. Words spelled correctly while typing will appear black and misspelled words will appear red. Words chosen from alternative lists will be changed from red to black. This applies to alternatives provided by right-clicking a red word, or in the Check Spelling dialog box. To keep records looking uniform, you should use black text when typing records in the Edit window, or Edit Secondary Record window, or skeletons in the Record Skeleton Editor window, if you are using the **Check spelling as you type** option.

**Duplicate Record command (Records menu)**

You can copy an existing record, then edit the copy to make it unique. Duplicating a record can save you valuable editing time if the record you plan to add is very similar to an existing one.
To duplicate a record

1. Select a record in the Report window (or in the Display or Edit window).

2. Choose Records>Duplicate Record. If a record has changes made with Deferred indexing, DB/TextWorks informs you that updates are pending and asks if you want to edit (copy) the changed version. Click Yes to copy the changed version, or No to cancel.

   **Note:** If you copy a record that has been edited but not saved, the software asks if you want to save the record. If you click Yes, the changes are saved, and the copied record includes the changes. If you click No, the changes are not saved, and the copied record does not include the changes. If you click Cancel, you return to the original record.

3. Edit the new record.

4. Save the new record by pressing F5 or choosing Records>Save Record.

Notes about Duplicate Record

Only fields included in the Edit form are copied. If the Edit form omits any fields that have Field Entry Required validation, the software will force you to use the Basic Record form when you duplicate a record. If necessary, choose Display>Select Forms>Record Edit and select an Edit form that includes all of the fields that you want copied and all fields that have Field Entry Required validation.

If you are using a password, it must provide full access to all fields that have Field Entry Required validation.

The following table shows how information is handled when you duplicate a record.

<table>
<thead>
<tr>
<th>If the original record includes:</th>
<th>Then:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic Number fields or Automatic ID fields</td>
<td>The new record is assigned the next automatic value, just as if you had chosen Records&gt;New Record.</td>
</tr>
<tr>
<td>Automatic Date fields</td>
<td>The date or date and time in the new record indicates when the copy was made.</td>
</tr>
<tr>
<td>Hidden or read-only fields</td>
<td>Those fields are not copied.</td>
</tr>
<tr>
<td>Computed fields</td>
<td>Those fields are updated in the copy.</td>
</tr>
<tr>
<td>Fields omitted by the current Edit form</td>
<td>Those fields are not copied.</td>
</tr>
</tbody>
</table>

Record and Report Options (Copy Special)

You can copy information to the Windows Clipboard so you can paste it into another application. The form selected for the active window is used. If the active window is not a record window, Copy Special>Report uses the form selected for the Report Window. Only the information that is displayed by the current form will be copied. The copied information uses plain text format; form layout is retained but font, color, picture boxes, and so forth are ignored. Only the first 64K (approximately 64,000) characters are copied.

If you plan to copy records and reports to the Windows Clipboard regularly, you may want to create forms that have the following attributes, and select the appropriate form before copying a record or report:

- Courier New 10 point (Tools>Box Properties>Labels and Tools>Box Properties>Format>Font, Color)
Adding and Changing Records

- Vertical units set to Lines (Tools>Form Properties>General)
- Top Position Offset for boxes set to whole increments of lines, such as 1 or 2, not .5 (Tools>Box Properties>General).

To copy a record
Do a search or load a set, select a record in the Report window or display a record in the Display or Edit window, then choose Edit>Copy Special>Record. The form selected for the active window is used.

To copy a report
Do a search or load a set, then choose Edit>Copy Special>Report. The form selected for the Report window is used.

Browsing Choices
Press F3, or choose Edit>Browse Choices, or use the Browse Choices button on the Main window toolbar to display a list of items that you can paste in a box. The contents of the list depend on the operation that you are performing.

- In the Query window or Command Query window, you see the Query Choices Browser, which shows a list of terms, words, thesaurus terms, and/or saved sets.
- In the Edit window, you see the Editing Choices Browser, which shows the validation list, substitution list, links (terms from the associated field in the secondary textbase), and/or thesaurus.

<table>
<thead>
<tr>
<th>To:</th>
<th>Press F3:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browse Term and Word indexes or a thesaurus</td>
<td>In a query box when searching</td>
</tr>
<tr>
<td>Browse saved search sets</td>
<td>In a sets box when searching</td>
</tr>
<tr>
<td>Construct Command queries and browse Term and Word indexes or thesauri</td>
<td>In the Command Query window when searching</td>
</tr>
<tr>
<td>Browse a validation list, or a substitution list, or links, or a thesaurus</td>
<td>When adding or editing a record</td>
</tr>
</tbody>
</table>

Note: If you have a WebPublisher product, you can specify that your end users be able to browse choices when searching and editing over the Web. See the Using Validation on the Web topic for more information.

Delete Record command (Records menu)
You can permanently delete records from a textbase. If the textbase has passwords, the current password must provide full access to all fields. If necessary, choose File>Use Different Password>Primary Textbase and/or File>Use Different Password>Secondary Textbase and use a different password.

To delete a record
1. Search for the record that you want to delete and select it in the Report window (or in the Edit or Display window). The record currently selected in the active window is the record that will be deleted.
2. Choose Records>Delete Record.
3. On the confirmation message, click Yes to confirm deleting the record or click No to cancel the deletion request.

**Batch Modify command (Records menu)**

To change information in more than one record at once, you can batch modify all of the records in the current set. For example, you can change a word, phrase, or entry in all of the records in the set.

**To change more than one record at a time**

*Tip!* Before you begin, consider exporting the set of records to an ASCII file, in case you need to restore the information later.

1. Perform a search or load a set that contains the records you want to modify. You may want to view the records in either the Report or Display windows to verify that they are the ones you want to modify.
2. To remove a record from the set so it will not be modified, select it and choose Sets>Omit Record or press Alt+O. Omitting a record does not delete it from the textbase; it simply removes it from the set so it will not be affected by the batch modification.
3. Choose Records>Batch Modify to open the Batch Modify Records in Set dialog box and specify how records should be changed.
4. Click OK to confirm your settings.
5. A confirmation message appears. Read it carefully before you click Yes to begin the process. Clicking No returns you to the dialog box so you can make additional changes.
6. At the end of the batch modification process, a message indicates how many records were modified, how many were not, and why. If you want more information at that time, choose Maintain>View Log File.

**Importing and Exporting Records (Summary of Operations)**

You can copy record information into and out of a textbase, by importing and exporting text files. Importing and exporting is a way of sharing information among textbases or other applications, and of backing up and restoring record information.

<table>
<thead>
<tr>
<th>Option</th>
<th>Menu</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export</td>
<td>File</td>
<td>Writes copies of updated versions of all records in the current set or textbase to a text file. You can choose whether to include linked fields (from a secondary textbase). Records are exported as if deferred updates had already been posted. You can load the text file into another application or an Inmagic textbase.</td>
</tr>
<tr>
<td>Import</td>
<td>File</td>
<td>Loads records from a text file into a DB/TextWorks textbase. This is how you move records from another source into your textbase.</td>
</tr>
<tr>
<td>Import Document</td>
<td>File</td>
<td>Loads full text from documents into a field. This is how you import text from letters, faxes, e-mail messages, and other documents.</td>
</tr>
</tbody>
</table>
### Adding and Changing Records

| **Dump Textbase** | Manage Textbases | Writes copies of all records in the textbase to a text file, not including pending updates. Deferred additions, changes, and deletions are ignored. The Image annotation list is retained. This is how you back up records, as part of a regular maintenance routine. |
| **Load New Textbase** | Manage Textbases | Intended primarily as a recovery mechanism to load records into a new empty textbase. No validation or duplicate record checking is done. Leaves Automatic and Computed fields intact (exactly as they are in the import file). |
| **Recover Textbase** | Manage Textbases | Intended for use as a single-step recover textbase mechanism. Recovering a textbase involves dumping the contents to an ASCII file, making an empty copy of the textbase, and loading the ASCII file into the new textbase. Compare with the multi-step recover textbase procedure. |

The import and export options allow you to share records with any application that can import or export standard delimited text files.

The file that you import or export may contain extended characters such as é, ñ, and £. Microsoft Windows and DOS have different extended character sets. To ensure that the characters are interpreted properly when sharing files among DOS and Windows applications, choose Tools>Options>General before you import or export and select or clear **Read/write extended characters in MS-DOS format**. The default is the Windows format.

### Export Options

Choose File>Export to access the Export Options dialog box, to specify how records should be exported.

**File Format tab**

Select an option to specify the format of the export file:

- **Inmagic Tagged Format.** A text format for sharing files among Inmagic applications.
- **Delimited ASCII Format.** A text format in which values are separated by commas, tabs, or other characters. If you select this option, the dialog box expands so you can specify which characters to use to indicate field separators and other delimiters. Select delimiter options from the lists or type keyboard characters. `{CR}{LF}` denotes a carriage return and line feed. `{LF}` denotes a line feed only. `{TAB}` indicates a Tab character. To specify another control character, type its ASCII value inside curly braces; for example, `{29}`.
- **XML.** Exports Extensible Markup Language, used for structured documents on the Web.

If you selected **Delimited ASCII Format**, specify the **Delimiter Options**:

- **Record Separator.** Indicates where each record ends. The default is `{CR}{LF}`.
- **Entry Separator.** Indicates where each entry ends. The default is a vertical bar ( | ).
- **Quote Character.** Encloses field information. For example, a double quotation mark (") is used in this example: "Jones","15 Elm Street","Smalltown","CA"

Select {NONE} if you do not want to set off field information, as shown in this example: Jones,15 Elm Street,Smalltown,CA
• **Field Separator.** Indicates where each field ends. Commas are commonly used to separate fields, but \{TAB\} or another character can be used.

• **Comment.** This option is disabled, because DB/TextWorks always uses an exclamation point (!) to indicate comment lines. Comment lines provide information, such as the source or purpose of the file, and are ignored during an import into DB/TextWorks.

If you selected **Delimited ASCII Format**, specify whether to **Store Field Names in First Row.** Some applications require this format for import.

### Records to Export tab

• **Export Current Record Set.** Exports only those records in the current set. If you did not perform a search or load a set, or if the set contains 0 records, this option is disabled.

• **Export Entire Textbase.** Exports all records in the textbase.

• If you want to export records using the currently selected, user-specified sort, select the **Use Current Sort** check box. This check box is disabled if there is no user-specified sort. If this box is not selected, records will be exported in unsorted order.

### Fields to Export tab

• **Export All Fields.** Exports all of the information in the records you are exporting (primary textbase fields only).

• **Export Subset of Fields.** Exports information only from the fields that you select. Optionally, check **Include Linked Fields** if you want fields from linked textbases (secondary fields) to be available in the list of fields that can be exported.

• If you select the **Export Subset of Fields** option, you must specify which fields you want to export. Use the arrow buttons to move fields from the **Available Fields** list to the **Fields to be Exported** list. Fields will be exported in the specified order.

### Inmagic Tagged Format (Import/Export)

Use the Import and Export options to share record information between Inmagic textbases.

Inmagic tagged files are text files in a format specific to Inmagic textbases. A file can include one or more records. Each record includes at least one field name followed by one or more entries in that field. Field names that include spaces are surrounded by quotation marks. A dollar sign on a line by itself indicates the end of a record.

#### Example

```plaintext
! Comment lines are ignored during an import
! This is the first record
AUTHOR Dennis, Susan
TITLE Online Help
SUBJECT Illustration of Inmagic tagged text import format
; The word SUBJECT in the previous line is a field name.
; Each field name is followed by a space, then content.
Continuation lines within an entry (such as the one you are reading now) start with a space or a tab.
; Use a semicolon for each additional field entry.
Repeating field entries are a unique DB/TextWorks feature. This is the fourth entry in the SUBJECT field.
```
Adding and Changing Records

"Short Abstract" This field name is surrounded by quotation marks because it contains a space.
> A line starting with a "greater than" sign indicates a paragraph break to be retained in the data. A dollar sign on a line by itself indicates end-of-record.
$ ! This is the second record
AUTHOR Dwayne, Mark
TITLE Chuck Sawyer
SUBJECT A tale of two boys
"Short Abstract" This is the story of two boys on an adventure.
$

Characters at the beginning of a line indicate certain items, explained below.

<table>
<thead>
<tr>
<th>Item at beginning of line</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>Comment line (ignored during an import)</td>
</tr>
<tr>
<td>Field name</td>
<td>Field names can start with and include letters, digits, hyphens, and underbars. Field names that include spaces must be enclosed in quotation marks (&quot;single&quot; or &quot;double&quot;).</td>
</tr>
<tr>
<td>;</td>
<td>Additional entry in previously-named field</td>
</tr>
<tr>
<td>&gt;</td>
<td>Line break to be retained in the data for previously-named field</td>
</tr>
<tr>
<td>Space or Tab</td>
<td>Continuation line for previously-named field (permits wrapping)</td>
</tr>
<tr>
<td>$</td>
<td>A dollar sign on a line by itself indicates the end of a record</td>
</tr>
<tr>
<td>Any other character</td>
<td>An error, which causes the record to be rejected</td>
</tr>
</tbody>
</table>

To create a text file in Inmagic tagged format, use any text editor or use DB/TextWorks (Dump Textbase or the Export feature). If you use Dump Textbase or Export, you can be sure that the file is in the proper Inmagic format. If you create the file yourself using a text editor or word processor, follow these guidelines:

- Field names that include spaces must be surrounded by quotation marks. Capitalization is ignored.
- A line cannot exceed 65,534 characters. If you want to force a line wrap, press Enter and begin the next line with a space or Tab. This is called a continuation line. Continuation lines are interpreted properly during an import, even if you strip leading spaces. A tab character will be changed to a space during an import (whether it is at the beginning of a line or embedded in a line).

**Note:** Export and Dump Textbase automatically wrap lines at 80 characters.
- Do not include a space or Tab before any of the characters used to represent multiple entries, paragraph breaks, comment lines, or the end of a record (; > ! $). If you do, they will be interpreted as text in the field.
- Blank lines and comment lines are ignored during an import. Use comment lines to include useful information such as the textbase into which the file should be loaded.
- Records do not have to include every field that is in the textbase structure—just the fields that you want to modify. Fields can appear in any order. They do not have to be in the same order as the structure.
- Do not include a field name more than once in a record. Use a semicolon (;) at the beginning of a new line to indicate multiple entries.
- You can include any number of records in the file.
Query Methods

DB/TextWorks provides the two query methods listed below. Note: If you are using WebPublisher PRO, please see Creating query screens for Web Use.

- **Query Window.** This is the easiest and most common query method. When you open a textbase that contains records, you see a query screen, which consists of multiple boxes. Each box represents one or more fields that you can search. You can also have boxes containing items you cannot search, such as fixed text and pictures. Type criteria into the boxes, then execute the query. You can design your own query screens to search the fields you want.

- **Command Query.** Type criteria in this window as a statement, using a particular syntax. This method is especially useful when specifying complex criteria.

To execute either type of query, choose **Search>Execute Query** or press **Enter**.

Terminology

Depending on how a field is indexed, you can search for a word, phrase, or term:

- A **word** is a group of characters that does not contain spaces or punctuation (except a decimal symbol in a number).

- A **phrase** is two or more words separated by spaces or, in some cases, punctuation, such as local area networks or MS-DOS.

- A **term** is a word or phrase that is also a complete entry in a field. Date and Number fields typically are Term indexed, as are fields that hold discrete pieces of information, such as book titles.

- A **search item** is a single word, phrase, or term that you want to find in the textbase. You can specify one or more search items in a query box. A search item can also be a single comparison, range, or proximity search request. For example, here are three search items:

  - >100
  - 1999:2003
  - red p3 dog

  You can connect search items with Boolean symbols (&, /, !), either within a box or across boxes. For example, to find correspondence about cars and boats, you can type cars & boats in a query box.

- **Search criteria** refers to multiple search items or the entire search request.

A successful query finds a **set** of one or more records. You can display, sort, print, edit, and perform other operations on the records in the set. You can save a query set so you can use it again later, for example, in the Saved Queries window.

Toggling between Query Windows

You can toggle between the **Command Query window** and the **Query window**. The software minimizes the Query window that is not being used.

- To open the Query window, choose **Search>Query Screen**.
Searching

To open the Command Query window, choose Search>Command Query.

A quick way to learn Command query syntax is to fill in the Query window with criteria, then open the Command Query window. This converts the query criteria to a Command query.

If you open the Query window after typing a Command query, the software fills in the query screen with the search criteria specified in the Command Query window. If the Command query includes fields or combinations of fields that do not appear on the query screen, or is too complex for the current query screen, or includes the getDeferred command, the software displays a message, then fills in as much of the query screen as possible. The message is intended to alert you that part or all of the query has not been filled in on the query screen.

If only part of a query can be represented in the Query window, the title bar contains the text "partial" to alert you that some criteria may be missing.

There are two other types of queries that cannot be represented in the Query window: find all records and get deferred records. If you use Command queries or menu options to find all records or get deferred records, the title bar of the Query window will include the text "all records" or "get deferred updates."

Saved Search Sets (Overview)

Records found by a search are called a set. You can save a set to use again later. A set is not a collection of records, nor is it a separate textbase. It is a list of records, together with the search criteria that found those records. When you reuse a saved set, DB/TextWorks looks at the list to find records in the textbase.

The ability to save and reuse sets makes it easy to return to different sets of information extracted from a textbase, without having to retype the query. You can:

- Save sets to keep a permanent record of search criteria and records found by the search
- Load a set to access the records without re-executing the search and retaining omissions
- Combine sets with other searches, using Sets boxes and Boolean symbols and commands
- Specify that execution of the query criteria in a saved set be the first action performed when you open a textbase from a menu screen
- Refresh sets to make sure the set contains the most up-to-date results
- **Browse sets** by pressing F3 in a sets box on the query screen
- Copy, rename, delete, export, import, or print sets by choosing **Maintain>Manage Textbase Elements**
- Cause a list of saved queries to appear when you start DB/TextWorks
- Include saved queries on a menu screen (DB/Text **WebPublisher**)  
- Specify how many **query sets** should be retained on the server (DB/Text® **WebPublisher**)  

In most situations, the status bar shows the name of the current set and the number of records the set contains.
Managing Search Sets

A set is a list of records found in a search, together with the criteria that were used to perform the search. You can perform the following operations on a saved set.

Renaming a Set

1. Choose **Sets>Manage Sets** to open the Manage Sets dialog box.
2. From the Currently Saved list, select the set you want to rename.
3. Click the **Rename** button to open the Rename Set dialog box.
4. In the **New Name** box, type a new name. The name can include up to 20 characters, including spaces and punctuation. Set names cannot include curly braces ({}).
5. Click **OK** to change the name and close the Rename Set dialog box.
6. The new name appears in the Currently Saved list on the Manage Sets dialog box. Click **Close**.

Deleting a Set

You can delete one or more sets at a time. If you delete a set from your user file, you will not be able to use that set again. Note that when you delete a set, you delete the query criteria and list of found records, not the actual records in the textbase.

1. Choose **Sets>Manage Sets** to open the Manage Sets dialog box.
2. From the Currently Saved list, select the set(s) you want to delete.
3. Click the **Delete** button.
4. When prompted, click **Yes** to confirm the deletion, then click **OK**.
5. Click **Close** to close the Manage Sets dialog box.

Exporting and Importing Sets

There are several reasons why you might want to export or import sets:

- To share sets with other users. For example, you can export sets saved in your user file, and other people can import those sets into their user files.
- To use with another DB/TextWorks textbase that has the same fields.
- To back up sets as part of your regular maintenance routine, in case the originals are accidentally damaged or deleted.

Exporting a Set

You can export multiple sets to a file (for example, you can export sets called Loaned Books and Loaned Periodicals to a file called CIRCULATING.XPS). When you export a set, only its name, description, and search criteria are exported. Exporting a set does not export a list of records found. The default file extension used during the export of sets is .XPS.

1. Choose **Sets>Manage Sets** to open the Manage Sets dialog box.
2. From the Currently Saved list, select the set(s) that you want to export.
3. Click the **Export** button to open the Export Set As dialog box.
4. Specify a file name and location, then click **Save**.

5. Use the **Save in** drop-down list to navigate to the location where you want the file exported, then enter a name for the file in the **File name** box.

6. Click **Save**. DB/TextWorks performs the export and displays a message when done indicating how many sets were successfully exported. Click **OK** to dismiss the message.

7. Click **Close** to close the Manage Sets dialog box.

**Importing a Set**

You can import multiple sets from a file. The default file extension used during the import of a set is .XPS. If duplicate names are detected during an import, DB/TextWorks adds a suffix that consists of an underline and a sequential number (for example, MySet_1).

An imported set has no list of records found. It consists only of the query criteria. To generate a list of records found, you have to refresh or load and execute the set. You will not know whether the imported query criteria are valid until you execute the query. If the query references fields not defined for this textbase, an error message will appear when you execute the query.

1. Choose **Sets>Manage Sets** to open the Manage Sets dialog box.

2. Click the **Import** button to open the Import Set dialog box.

3. Use the **Look in** drop-down list to navigate to the location of the file you want to import.

4. Click **Open**.

5. DB/TextWorks performs the import and displays a message when done indicating how many sets were successfully imported. Click **OK** to dismiss the message.

6. Click **Close** to close the Manage Sets dialog box.

7. After an import, you should choose **Sets>Refresh Sets** to execute or refresh the query.

**Printing a Set Definition**

You can print a description of a set or save it in a text file. You can print multiple definitions at once, or save multiple definitions in one text file. A definition includes the set name, textbase name, description, creation date, number of records found, and Command equivalent of the search criteria that produced the set. It does not include record information. **Note:** A definition printed to a file is not formatted for import, and therefore is not a way of backing up or sharing sets among users. To back up or share sets, use the **Export** and **Import** buttons on the Manage Sets dialog box. Or, to export copies of the records in a set, load the set then use **File>Export**.

1. Choose **Sets>Manage Sets** to open the Manage Sets dialog box.

2. From the Currently Saved list, select the set(s) for which you want to print a definition.

3. Click **Print** to open the Print dialog box, then do one of the following:
   - To send the definition(s) to a printer, select the desired print options, then click **OK**.
   - To save the definition(s) in a text file, select the **Print to file** check box and click **OK**. In the Save File As dialog box, specify a location and a file name. The file extension .TXT is used by default. Click **Save**.
Copying a Set

You can copy a set by saving it under a new name.

1. Choose **Sets>Load Set** to open the Load Set dialog box.
2. From the Currently Saved list, select the set you want to copy. Note that the number of records in each set is indicated in square brackets after the set name. If you want to see the query criteria that generated the set, click the **Show Query** button.
3. Click **OK** to load the set and open the Select Search Results Window dialog box.
4. [Optional] Select an option button to view the records in the Report or Display window, then click **OK**. **Note:** You can choose not to display the records.
5. Choose **Sets>Save Set As** to open the Save Set As dialog box.
6. In the **Name** box, type a new name. You can also optionally change the description of the set in the **Description** box.
7. Click **OK**.

Changing the Description of a Set

To change the description of a set, follow the same procedure for copying, but do not change the name in the **Name** box on the Save Set As dialog box.

Using the Query Window

To perform a query, type or paste information in the boxes on the query screen, and click the Boolean AND, OR, or NOT buttons between the boxes to combine multiple requests. To indicate **which fields to search** and **what to search for**, type or paste information into the boxes that reference the fields you want to search. To indicate **how to search**, you can include symbols that specify truncation, comparisons, ranges, proximity, and Boolean logic, and click the Boolean buttons to indicate how to combine the criteria.

The appearance of the Query window depends on which query screen is selected. If the current screen does not include the boxes for fields you want to search, you can use the Search menu to add and delete boxes or **select a screen** that was saved previously.

To perform a query

1. Choose **Search>Query Screen**.
2. Place the cursor in the box whose field(s) you will search. Each query box searches one or more fields, depending on how the query screen is designed. For example, a box labeled **Subject** might search two fields: **Subject** and **Description**. When a query box searches multiple fields, an implicit OR is used between the fields (search the **Subject OR Description** field for the specified item). Unindexed fields cannot be searched, so they cannot be included in a query box.
3. Type information in the box or press **F3** to browse and paste words or terms from the indexes, and toggle the Boolean AND, OR, or NOT button to combine criteria, as described below.
To: | Do this:  
---|---  
Find a word or phrase | In a Word indexed field, type the word or phrase. For example, type urgent or rush order. You can also press F3 and paste from the Word index.  
Find a term | In a Term indexed field, type the term preceded by an equal sign (=john smith). The equal sign tells the software to search the Term index for an exact match, except for punctuation and case. You can also press F3 and paste from the Term index.  
Find parts of items (truncation) | Type an asterisk at the end of a word, phrase, or term to find text that begins with the specified characters. For example, tel* finds telex and telephone repair.  
Use comparisons and ranges | Use comparison and range operators (=, <, >, <=, >=, :) in a Term indexed field. For example, <1998 finds all dates before 1998, and 100:300 finds values between 100 and 300 (inclusive).  
Find words near each other | Use the proximity operators w# and p# in a Word indexed field. For example, red w3 boat finds red within 3 words of boat. Red p3 boat finds red preceding boat by 3 words or fewer.  
Use Boolean logic | Type Boolean operators (& / !) between search items in a box to represent AND, OR, and NOT. For example, type cars & boats in the Subject box to find records that contain both words (cars and boats) in the Subject field. Type cars / boats to find records that contain either word (cars or boats). Type cars ! boats to find records about cars but not boats. Toggle the Boolean button in front of a box (AND, OR, NOT) to combine multiple requests. If no buttons appear, look at the status bar to see whether the current box uses AND, OR, or NOT.  
Include current date | Use the @DATE search variable to include the date the search is executed as part of the query criteria. You can also use date arithmetic operators. Example: <@DATE+7  

4. To start the query, press Enter or choose Search>Execute Query, or click the Execute Query button in the Query window toolbar. (Note that Execute Query is disabled unless a Query window is selected.)  
5. The software tells you how many records were found and displays the Select Search Results Window dialog box. Select how you want to display the results of the search.  

Tip! After you select a window in this dialog box, DB/TextWorks maintains this setting until you do another search and choose a different window. The software then maintains the new setting. To prevent this dialog box from appearing every time you do a search, select Always use this option without asking. If you want to change your window selection, and you have selected Always use this option without asking, choose Tools>Options>Display to reset your default.
6. Optionally, perform operations on the set of records found by the search.

<table>
<thead>
<tr>
<th>To:</th>
<th>Do this:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigate in the Report window</td>
<td>Choose Display&gt;Next Record, Display&gt;Previous Record, Display&gt;First Record, or Display&gt;Last Record, or use the equivalent buttons on the Report window toolbar.</td>
</tr>
<tr>
<td>Display one record</td>
<td>Select a record in the Report window and choose Display&gt;Display Record.</td>
</tr>
<tr>
<td>Edit records</td>
<td>Select one record in the Report window and choose Records&gt;Edit Record.</td>
</tr>
<tr>
<td>Delete records</td>
<td>Select one record in the Report window and choose Records&gt;Delete Record.</td>
</tr>
<tr>
<td>Omit a record</td>
<td>Choose Sets&gt;Omit Record to remove the selected record from the current set. Omitting a record does not delete it from the textbase.</td>
</tr>
<tr>
<td>Sort records</td>
<td>Choose Display&gt;Sort Report.</td>
</tr>
<tr>
<td>Print a report</td>
<td>Choose File&gt;Print.</td>
</tr>
<tr>
<td>Print one record</td>
<td>Open the Display or Edit window then choose File&gt;Print.</td>
</tr>
<tr>
<td>Send Report as Mail</td>
<td>Choose File&gt;Send Report as Mail. The Send Report as Mail dialog box appears and you have two options. You can send the whole report as mail to one or more people. Or, you can send each record in the report to the e-mail address specified in a field in the record.</td>
</tr>
<tr>
<td>Write Report to File</td>
<td>Choose File&gt;Write Report to File.</td>
</tr>
<tr>
<td>Export records</td>
<td>Choose File&gt;Export to export records to a file in Inmagic tagged, delimited ASCII, or XML format.</td>
</tr>
<tr>
<td>Save the search</td>
<td>Choose Sets&gt;Save Set to save the current search results and criteria.</td>
</tr>
</tbody>
</table>

7. The Query window remains on the screen until you close it. To perform another query, edit the criteria and execute the new search. To clear the criteria from the window, choose Search>New Query. Starting a new query closes all record and image windows.

Each time you execute a query, DB/TextWorks re-evaluates all of the search criteria, not just the criteria you added or changed since you last executed the query.

**Interruption a Query**

DB/TextWorks executes most queries almost instantaneously. When a search takes more than a few seconds, you see an Executing Query progress dialog box. To safely interrupt a query, click the Stop Executing Query button on the Executing Query dialog box or press the Esc key.
**Query Screen Syntax (Summary)**

You can use these search techniques in the [Query window](#).

<table>
<thead>
<tr>
<th>To:</th>
<th>Do this:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find a word or phrase</td>
<td>In a Word indexed field, type the word or phrase. For example, type urgent or rush order. Or press F3 and paste from the Word index.</td>
</tr>
<tr>
<td>Find a term</td>
<td>In a Term indexed field, type the term preceded by an equal sign (=john smith). Or press F3 and paste from the Term index.</td>
</tr>
<tr>
<td>Find parts of items (truncation)</td>
<td>Type an asterisk at the end of a word, phrase, or term (tel* finds telex and telephone repair).</td>
</tr>
<tr>
<td>Use comparisons and ranges</td>
<td>Use = &lt; &gt; &lt;= &gt;= : in a Term indexed field. For example, &lt;1998 finds all dates before 1998. 100:300 finds values between 100 and 300 (inclusive).</td>
</tr>
<tr>
<td>Find words near each other</td>
<td>Use the proximity operators w# and p# in a Word indexed field. For example, red w3 boat finds red within 3 words of boat. Red p3 boat finds red preceding boat by 3 words or less.</td>
</tr>
<tr>
<td>Find a field with anything in it</td>
<td>Type =* in a Term indexed field or type * in a Word indexed field.</td>
</tr>
<tr>
<td>Find an empty field</td>
<td>Same as above, but also toggle the Boolean button to NOT.</td>
</tr>
<tr>
<td>Include a date variable</td>
<td>Use @DATE to represent the current date (the date on which the search is performed) in search criteria. You can include date arithmetic operators. For example, type =@DATE-7 to search for the date one week before the date on which the search is performed. @DATE is especially useful for saved queries used in menu screens (for example, for use on the Web with a WebPublisher product) or the Saved Queries window.</td>
</tr>
<tr>
<td>Use Boolean logic</td>
<td>Type Boolean operators (&amp; / !) between items in a box to represent AND, OR, and NOT. For example, cars &amp; boats finds records only if they contain both words (cars and boats). Cars / boats finds records that contain either word (cars or boats). Cars ! boats finds records about cars but not boats. Toggle the AND, OR, NOT button in front of a box to combine multiple requests.</td>
</tr>
<tr>
<td>Execute a query</td>
<td>Press Enter or click the Execute Query button (&quot;Go&quot;) in the query toolbar or choose Search&gt;Execute Query.</td>
</tr>
<tr>
<td>Find all records</td>
<td>Click the Find All Records button or choose Search&gt;Find All Records.</td>
</tr>
<tr>
<td>Expand Thesaurus terms</td>
<td>To retrieve records containing preferred or related terms when searching for a thesaurus term in a field connected to that thesaurus, use this syntax: = &quot; ~ term&quot; The leading tilde triggers the expansion. The quotation marks and equals sign are required. If multiple fields are being searched for the given term, they will all be searched for the added terms, as well.</td>
</tr>
</tbody>
</table>
Customizing the Query Screen

There are two methods of customizing a query screen.

Make temporary changes
To make temporary changes to the current query screen, you can add and delete boxes "on the fly" using Add Query Box, Add Sets Box, or Delete Box on the Search menu. This provides a quick way of being able to search the desired fields or remove unnecessary boxes without having to enter the Query Screen Designer. Changes are not saved unless you load the current screen into the Query Screen Designer and save the screen.

You can add two types of boxes to a query screen using this method: query boxes and sets boxes.

Use the Query Screen Designer
Use the Query Screen Designer to create permanent, customized screens. The Query Screen Designer provides all the tools you need to truly customize and save a screen. Besides adding and deleting boxes, you can move, resize, and format boxes, change label text, change fonts, add instructions, and make other edits. When you are done, save the screen, then select the new screen for the Query window.

Query Screen Designer Editing Techniques
Use these features to design screens for queries.

<table>
<thead>
<tr>
<th>Action</th>
<th>Menu command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add a box to search fields</td>
<td>Edit&gt;Add&gt;Query Box</td>
</tr>
<tr>
<td>Add a box for saved sets</td>
<td>Edit&gt;Add&gt;Sets Box</td>
</tr>
<tr>
<td>Add instructions</td>
<td>Edit&gt;Add&gt;Text Box</td>
</tr>
<tr>
<td>Add pictures</td>
<td>Edit&gt;Add&gt;Picture Box</td>
</tr>
<tr>
<td>Add script buttons</td>
<td>Edit&gt;Add&gt;Script Button</td>
</tr>
<tr>
<td>Add a script input box</td>
<td>Edit&gt;Add&gt;Script Input Box</td>
</tr>
<tr>
<td>Delete boxes</td>
<td>Edit&gt;Delete Box</td>
</tr>
<tr>
<td>Select boxes</td>
<td>Use Click, Shift+click, Tab, Shift+Tab, or drag a lasso, or Edit&gt;Go to Box, or Edit&gt;Select All and click the type of box you want to select.</td>
</tr>
<tr>
<td>Cut, copy, and paste boxes</td>
<td>Edit&gt;Cut, Edit Copy, Edit Paste. To access the Paste Here command, click the right mouse button to display the shortcut menu.</td>
</tr>
<tr>
<td>Change box contents</td>
<td>Tools&gt;Box Properties</td>
</tr>
<tr>
<td>Show or hide buttons</td>
<td>Tools&gt;Screen Properties&gt;General</td>
</tr>
</tbody>
</table>
| Set button state        | Tools>Box Properties>Labels, or
                         | Click the button to toggle between AND, OR, and NOT; or
                         | Tab to button and press the space bar |
| **Move boxes** | **Tools>Box Box Properties>Position** (change Coordinates or Offset values), or  
Select and drag, or  
Select and use the arrow keys, or  
Select and use the **Ctrl+arrow keys**. |
|----------------|----------------------------------------------------------------------------------|
| Change box height | **Tools>Box Properties>Position** (Minimum / Maximum height)  
**Tools>Box Properties>Position**, or  
Drag resizing handle right or left (only one box can be selected) |
| Change box width | **Tools>Box Properties>Position**, or  
**Tools>Align Boxes>Anchor and Top** |
| Align boxes | **Tools>Align Boxes**. |
| Float or anchor boxes | **Tools>Box Properties>Position**, or  
**Tools>Align Boxes>Anchor and Top** |
| Borders, labels, scroll bars | **Tools>Box Properties>Labels**, or  
**Tools>Box Properties>Font, Color** (for text boxes) |
| Text font and color | **Tools>Box Properties>Font, Color**, or  
**Tools>Box Properties>Caption** (for script buttons) |
| Tab Order | **Tools>Tab Order** |
| Units | **Tools>Screen Properties>General** |
| Grid | **View>Grid Settings** |
| Show or hide dashed lines (while designing) | Check or uncheck **View>Boundaries** |
| Prepare a screen for Internet/Intranet use | Choose **Tools>Screen Properties>HTML** and/or **Tools>Screen Properties>Logos** and/or **Tools>Box Properties>HTML** and specify settings. Then use **Screen Operations>Export Query Screen to HTML**. |
| Prepare a screen to search multiple textbases | Use **Tools>WebPublisher Multiple Textbase Query** to specify textbases, select forms, and create a field name map. |
| Print a screen definition | **Screen Operations>Print Definition** |
| Save a screen | **Screen Operations>Save Query Screen** |
| Close Query Screen Designer | **Screen Operations>Close Query Screen Designer** |

### Query Screen Properties

When designing a query screen, choose **Tools>Screen Properties** to specify options that apply to the query screen. The Query Screen Properties dialog box contains the following tabs:

- **General**: Show or hide query buttons, set background color, specify units.
- **Logos**: Add images to a query screen to be used on the Web. The images will only appear in the exported HTML page for WebPublisher PRO.
- **HTML**: Specify properties for a query screen to be used on the Web. The properties only apply to the exported HTML page for WebPublisher PRO.
Scripts in Forms or Screens

When you are designing a form or screen, you can also design a script for use with that form or screen. The script can perform certain operations when the form or screen is opened or closed, when buttons on the form or screen are clicked, when you leave a box, or in other situations. For example, a script can fill in a box on a query screen or perform extra validation on the contents of a field in an edit form. You can use script buttons to bring up field-specific help on an edit form, open a document in its native application from a record display, or move or copy information among boxes on a form. You can write scripts in either JavaScript (JScript) or Visual Basic Scripting Edition (VBScript).

To open the Form Script dialog box so that you can create a script for the form you are currently designing, choose Tools>Form Script.

To open the Screen Script dialog box so that you can create a script for the menu screen or query screen you are currently designing, choose Tools>Screen Script.

Important! A script is part of a form or screen. If the form or screen closes, the script stops running. This means, for example, that a script running in a query screen cannot perform a search, open the Edit window, and then make changes in the record in the Edit window.

Also note that a script can only work within its DB/TextWorks desktop session through the objects documented in this help file. The DB/TextWorks desktop session has no knowledge of what is happening inside a script.

Important! Scripts are not applicable to forms and screens used on the Web with WebPublisher PRO.

Query Choices Browser

The Query Choices Browser displays information that you can paste as search criteria. Pasting is often quicker and more accurate than typing. To access this dialog box, press F3 from the query screen or Command Query window, or choose Edit>Browse Choices, or click the Browse Choices toolbar button.

What the Dialog Shows

- With the cursor in a query box on the query screen. The dialog box shows the Term or Word index for each field searched by the current box, or the thesaurus connected to a field. The Term or Word index is actual indexed information from the textbase. Pasting information normally guarantees a match, so you will find the records you want.

  Note: If you are viewing the Word index for a text-like field (that is, a field that is not a Number or Date field), the Choices List will automatically scroll past any numeric entries to the first alphabetic entry.

- With the cursor in a sets box on the query screen. The dialog box shows a list of saved sets, which you can combine with other criteria.

- With the cursor in the Command Query window. The dialog shows the Term or Word index for each indexed field in the primary and all secondary textbases, or the thesaurus connected to a primary field. This provides an easy way of building Command queries.
Dialog Box Options

- **Find.** To quickly find an entry, type one or more characters in the Find box. For example, type p to move to Plymouth Prowler, and then type o to move to Porsche. To move to an entry that starts with different characters, delete the characters in the Find box and type new characters.

- **Choices List.** For a Terms List or Words List only, the number at the beginning of each line indicates the number of records that contain the word or term shown. Because the word or term may appear more than once in each record, this number does not reflect the total number of occurrences in the textbase. Thesaurus entries do not include this information.

  **Note:** If the textbase is large, the administrator may have turned on an option which omit the number of hits for each key to improve performance.

To paste a term or word into a query box, double-click an item in the Choices List, or select an item and click Paste. Pasted terms or thesaurus entries are preceded by an equal sign (=), to indicate a Term search. If the query box already contains query criteria, pasted items appear after the existing items, preceded by a forward slash (/), which represents Boolean OR.

  **Note:** When you browse a sets box, the Choices List shows the names of saved search sets. The number in square brackets after the set name indicates the number of records in the set.

- **Number of entries pasted.** Shows the number of entries that you just pasted into the current box. Resets to zero when you click in a different box.

- **List Shows.** If the field is both Term and Word indexed, you can specify which index you want to see: Select the Terms List option button to see every term in this field in the textbase, or select the Words List option button to see every word in this field in the textbase (except stop words). If the field has a thesaurus connected to it, select the Thesaurus option button to see all its entries. The List Shows options are disabled when browsing a sets box.

  **Note:** When a field has a Word index but no Term index and has a thesaurus connected to it, the thesaurus entries are also not available (meaning the Words List option button is available on the Query Choices Browser but Terms List and Thesaurus are not). Fields that have only a Word index do not support = searches.

- **Field.** If the query box searches multiple fields, you can specify which field’s index(es) or thesaurus you want to see by using the Field drop-down list.

  **Note:** Regardless of which field you use to paste into the query box, all fields in that box are searched. If the query box contains a field from a secondary textbase, the field is indicated by the @ character (for example, Description@Name) and the Choices List shows terms from the secondary textbase.

  The Field drop-down list is disabled when browsing a sets box.

  **Note:** The Inclusive Search Option (Tools>Options>Search) controls how a search for an intersection of terms operates across multiple fields within one query box.

- **Paste.** Click the Paste button to paste the selected item from the Choices List into the query box. Pasted terms or thesaurus entries are preceded by an equal sign (=), to
Searching

indicate a Term search. See Choices List for more information. Note that if you paste a thesaurus term with a USE reference, the preferred term is pasted.

- **Properties.** If you want more information about a thesaurus entry, click the Properties button to open the Thesaurus Entry Properties dialog box.

- **Search.** If you want to search the thesaurus textbase connected to the field, to display a shorter list of terms, click the Search button to open the Search Thesaurus dialog box.

- **Print List.** To print the current index or thesaurus or save it in a text file, click the Print List button and select the desired options in the Print dialog box. Be sure to select the Print to file check box if you want to create a text file, then name the file when prompted. Print List prints or writes out the entire index, thesaurus, or list of saved sets, not just the section that is currently displayed in the Query Choices Browser. The printout includes information such as the current date and time, type of index or thesaurus, field name, and total number of keys (words or terms) in the index (for an index only, not for a thesaurus). Note that printing a thesaurus from this dialog box produces a list of preferred terms and non-preferred terms with USE references. Other cross-references (for example, BT, RT) are not included. If you want to print a more complete thesaurus listing, open the thesaurus directly, submit a search, and use one of the provided forms to print.

**Selecting a Query Screen**

Select the query screen that you want to appear in the Query window. The selected screen will be used until you choose a different one or revert to the default query screen.

Screens are listed alphabetically (Basic screen first, then screens saved in the user file, and then screens saved in the textbase file, which are indicated by the word (public)). If no query screens have been created, the Basic screen is the only one that appears in the list.

**To select a query screen**

- Choose Search>Select Query Screen, or click the Select Query Screen button in the Query window toolbar. To use the textbase default query screen, click the Revert to Default button instead of selecting a screen from the list.

**To select a default query screen**

- Choose Maintain>Change Textbase Defaults>Query Screen. If the textbase has passwords, this option is disabled unless you are using the Master password.

**To resize the window**

- To quickly resize a window after selecting a different query screen, choose Window>Fit Window to Form or click the Fit Window to Form toolbar button.

**Exporting Query Screens to HTML**

Before you can use a query screen on the Web, you must export it to HTML.

**To export a query screen to HTML.**

1. In the Query Screen Designer, open the query screen you designed for use on the Web.
2. Choose Screen Operations>Export Query Screen to HTML.
3. A message box appears asking if you want to use Cascading Style Sheets (CSS) to preserve formatting. Click **Yes** to preserve formatting (such as, box position and box background color); click **No** if you want *WebPublisher PRO* to use simple HTML to format the screen (for example, all boxes will appear left-justified).

4. A message box asks if you want to use Alternate Search Syntax in this query screen. Click **Yes** to enable users to type the words they want to find without Boolean AND symbols (&). Click **No** if you want to use the original *WebPublisher PRO* query syntax.

5. On the Save File As dialog box, name the file when prompted and click **Save**.

6. Click **OK** to dismiss the completion message.

**Notes about Exporting Query Screens to HTML**
- Buttons labeled **Submit Query** and **Reset**, and a **Help** icon are added automatically during the export.
- Sets boxes, script input boxes, and script buttons added in the Query Screen Designer are not exported.
- Tab Order specified in the Query Screen Designer is preserved during the export.
- You can put the resulting HTML page anywhere accessible to the HTTP server. Be sure to provide clients with a way to access the page, for example by providing a link on your home page that jumps to the HTML search page.

**Performing Command Queries**

Command queries are an alternative to using the Query window. You type the query as a command statement, using a particular syntax. Command queries allow all of the same operations as queries (Boolean, range, comparison, word and term searching, and so forth), but you can also perform searches that are not possible using the Query window (for example, complex nested Boolean queries).

**To perform a command query**

1. Choose **Search>Command Query** to open the Command Query dialog box.

2. Type a command using the **Command query syntax** or press **F3** to select items from a list. Using **F3** eliminates guesswork because you can browse and paste actual indexed words and terms.

3. To execute the query, press **Enter** or choose **Search>Execute Query** or click the Execute Query button on the Command Query window toolbar.

**Tip!** A good way to learn the Command query syntax is to type criteria in the Query window then open the Command Query window (choose **Search>Command Query**). This converts the query to its Command query equivalent. You can **toggle between the two Query windows** by choosing **Search>Query Screen** or **Search>Command Query**.
Command Query Syntax (Summary)

Choose **Search>Command Query**, then use these search methods. For more information, see the complete **Command Query Syntax**.

<table>
<thead>
<tr>
<th>Search method</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Contains word or phrase        | subject ct fax  
subject ct fax machine                                                                                                                |
| Proximity (p# or w#)           | red p3 boat finds red preceding boat by 3 words or fewer.  
red w3 boat finds red within 3 words of boat.                                                                                         |
| @DATE                          | due date=@DATE-7:@DATE                                                                                                                  |
| Equal to (exact match)         | subject =local area networks  
corporate author =john smith / =fred jones                                                                                               |
| Greater than                   | date >2008  
price >=500                                                                                                                           |
| Greater than or equal to       | date <1-Jan-2010  
last name <=miller                                                                                                                      |
| Less than                      |                                                                                                                                          |
| Less than or equal to          |                                                                                                                                          |
| Truncation (*)                 | description ct pric* w3 manufactur*                                                                                                      |
| Boolean AND OR NOT             | ingredient ct chocolate & nuts  
ingredient ct chocolate / nuts  
ingredient ct chocolate ! nuts  
company = models inc / = toys ltd  
author / recipient = john smith  
author / recipient ct smith & jones  
type=memo and author/recipient = smith not description ct pricing                                                                       |
| Find all records               | findall  
findall not author ct smith  
findall not author =* (records with empty *Author* field)                                                                                   |
| Saved search sets              | {2010 invoices}                                                                                                                          |
| Secondary textbase fields      | description@name ct auto* & cam*  
(searches "Description" field in secondary textbase)  
"date and time"@customer id <15-Jan-2010  
(searches "Date and Time" field in secondary textbase)                                                                                   |
| Press F3                       | Browse and paste entries from Word and Term indexes                                                                                         |
| Find deferred records          | getdeferred new  
getdeferred modified  
get deferred new modified deleted                                                                                                         |
Command Query Syntax (Complete)

Choose **Search>Command Query** to search with commands. A Command query consists of one or more search statements connected with Boolean commands (AND, OR, NOT), optionally beginning with the word FIND. For a Quick Reference, see **Command Query Syntax (Summary)**.

A good way to learn the Command syntax is to specify criteria in the Query window, then open the Command Query window. The query will be converted to its Command equivalent.

**Command Query Syntax**

<table>
<thead>
<tr>
<th>Search Statements</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>field-name(s) search-relation search-items</td>
<td>The field name is equivalent to a query box that searches a field. The search relation and search items are equivalent to the information that you would type in a query box (except that you must include the CT relation when doing a word, phrase, or proximity search). Follow the same guidelines as you would when constructing a query.</td>
</tr>
<tr>
<td>Examples:</td>
<td></td>
</tr>
<tr>
<td>author =john smith / =fred jones</td>
<td></td>
</tr>
<tr>
<td>order date &lt;2009</td>
<td></td>
</tr>
<tr>
<td>description ct pric* w3 manufactur*</td>
<td></td>
</tr>
<tr>
<td>author/recipient ct smith</td>
<td></td>
</tr>
<tr>
<td>FindAll</td>
<td>Finds all records in the textbase. Can be followed by NOT statements.</td>
</tr>
<tr>
<td>{saved-search-set}</td>
<td>To include a set in the search criteria, type the name of a saved set surrounded by curly braces. You can use Boolean symbols (&amp; / !) to join multiple set names, and you can combine set names with other criteria.</td>
</tr>
<tr>
<td>Example: {2008 invoices}</td>
<td></td>
</tr>
<tr>
<td>getDeferred [options]</td>
<td>Finds records that were added, changed, or deleted using Deferred indexing. Must be followed by any combination of the words new, modified, deleted.</td>
</tr>
<tr>
<td>Example: getdeferred new modified</td>
<td></td>
</tr>
</tbody>
</table>

**Command Query Methods**

You can use the following methods when you construct a Command query.

- Use **F3 (Browse Choices)** to build the query.
- Include or omit the word FIND preceding a search command.
- Place each statement on a separate line using **Ctrl+Enter**.
- Use single or double quotation marks to surround a field if the field name contains a word that might be misinterpreted as part of the search syntax. For example, the following command searches a field called *Date and Time*.

"date and time" <15-Jan-2009

It is never wrong to enclose a field name in quotation marks, even if the name consists of only one word. If you prefer, you can always use quotation marks, which aid in clarity and help avoid ambiguity. You can also use quotation marks for clarity in search items. For example, to find the phrase up and down without having the word and interpreted as a Boolean command, place quotation marks around the phrase:

subject ct "up and down"
Searching

- Use Boolean logic (AND, OR, NOT) between search statements and Boolean symbols (&, /, !) between field names or search criteria.
- Use search relations (CT, =, >, >=, <, <=, :) to describe a relationship. For example, type subject ct invoice to search the Subject field for the word invoice. Type price >500 to search the Price field for values greater than 500.
- Use proximity operators (w# and p#) to find words near each other. Proximity operators are used with CT (for example, subject ct blue w3 bird or subject ct red p2 bird).
- Use @DATE to include the current date (when the search is executed) in the query criteria.
- Use the truncation character (*) to find word stems (for example, subject ct tele*) or to truncate terms.
- Search fields in linked textbases as well as in the primary textbase.
- Use parentheses for clarity or to influence evaluation order.
- Use any combination of uppercase or lowercase letters. The only time that case is significant is when you are specifying search items in a Code field.
- Incorporate saved sets in your search.
- Toggle between the Query and Command Query windows, to see how the same query appears in each window.
- Search for records with deferred updates, and combine them with other criteria.

Building Command Queries Using F3

Typing search criteria in the Command Query window can be fast and efficient, if you know the field names and information that you want to search for. To make building Command queries even easier, you can use the Query Choices Browser to paste search criteria into the Command Query window. The Query Choices Browser shows indexed fields from the primary textbase and any secondary textbases. Primary textbase fields are listed first.

To build a Command query using F3

1. Choose Search>Command Query to open the Command Query window.
2. Press F3, choose Edit>Browse Choices, or click the Browse Choices toolbar button on the Main window to open the Query Choices Browser. The Query Choices Browser shows the index for the first indexed field defined in the textbase structure.
3. Select the field you want to search from the Field drop-down list.
4. In the List Shows group, select either the Terms List or Words List option button, depending on whether you want to see the field’s Term or Word index. You can switch between the indexes, as needed. Note that some fields may not have both indexes, so one of the options may be unavailable.
   **Note:** If you are viewing the Word index for a text-like field (that is, a field that is not a Number or Date field), the Choices List will automatically scroll past any numeric entries to the first alphabetic entry.
5. Select an item from the Choices List and click Paste to paste it into the Command Query window. (You can also double-click the word or term to paste it.)
Note: To find and select items in long lists, type one or more characters in the Find box. To paste the item, double-click it or click Paste or press Enter.

Both the field name and the word or term are pasted into the Command Query window. Pasted terms are preceded by an equal sign (=) to tell the software to search for an exact match. If the first item that you paste is a word, it is preceded by CT. If you paste multiple words or terms, each item after the first is preceded by a forward slash (/), representing Boolean OR.

6. To include another field as part of the search criteria, select a different field from the Field drop-down list, then paste one or more words or terms into the Command Query window. Each additional field that you search is preceded by the Boolean AND command. You can change the AND to an OR or NOT, to specify how the search statement should be combined with previous criteria.

7. The Query Choices Browser remains open until you close it or execute the query. To close the dialog without executing a query, press Esc while the dialog box is active or click Close.

8. To execute the query, click the Execute Query button in the Command Query window or choose Search>Execute Query. If the Command Query window is active, you can also press Enter to execute the query.

Note that the Command Query window cannot contain more than 4000 characters. If you attempt to type or paste more than 4000 characters, the software produces beeps (if sound is enabled on your computer).

Advanced Search Topics

Searching a Textbase that Contains Link Fields

A textbase that contains a Link field is called a primary textbase. The presence of a Link field indicates that the textbase is linked to a secondary textbase. To see if the current textbase contains a Link field, and to see the name of the secondary textbase and associated field, choose Display>Textbase Information.

When a primary textbase is open, you can search any indexed fields in the primary or secondary textbase. Records retrieved by a search are always from the primary textbase, even when you search a field from a secondary textbase.

For more information, see Searching Secondary Textbase Fields.

Example

You have two textbases:

- Orders contains information about orders placed with your company. Includes a Link field called Customer ID.
- Customers contains names and addresses of customers. Includes an associated field called Customer ID.

The Customer ID field in Orders is linked to the Customer ID field in Customers. When information in this field is the same in both textbases, a link is made for that record, and information about that secondary record is accessible from the primary textbase.
Now you want to know how many orders were placed by customers in New York. Open the primary textbase, *Orders*, and search the secondary textbase for NY to find customers in New York. You do this by typing criteria in a box that searches the *State* field in the secondary textbase.

DB/TextWorks searches the *State* field in the secondary textbase for NY. It finds four customers in New York, and remembers their Customer IDs. DB/TextWorks then searches the *Customer ID* field in the primary textbase for records with a matching ID (orders placed by any of these four customers). Three such orders are found. Those three orders make up the set of retrieved records.

The following illustration shows how the search takes place. As you can see, there is not necessarily a one-to-one correspondence between information in linked textbases. Records in a secondary textbase might be referenced by zero, one, two, or more records in the primary textbase.

Records that are found can be displayed in the Report window. The form that is selected for the Report window determines which fields are shown from the primary and secondary textbases.

The current query screen determines which fields can be searched. To search fields from a secondary textbase, use a query screen that contains boxes that search fields from a secondary textbase. The Basic Query Screen does not show fields from secondary textbases. You can add one or more boxes to the Basic Query Screen and save the screen under a new name.

The current query screen also determines how fields are labeled. By default, boxes that you add to search fields from a secondary textbase are indicated by the @ symbol. However, you can use the Query Screen Designer tools to change these labels.

**Browsing Secondary Textbase Fields**

When you search a textbase that contains a Link field, you can browse and paste from the Link field just as you would browse and paste from any field in the primary textbase. You can also browse and paste from the indexes of fields in secondary textbases. If you paste an item from the browse list for a secondary textbase field, you will find records (if any) in the primary textbase with links to secondary textbase records which meet the criteria.
For example, to see information about orders placed with The Model Company, browse fields in the primary textbase (Orders). To see information about customers, browse fields in the secondary textbase (Customers).

When you browse a secondary textbase field, remember that the number in front of each word or term in the Query Choices Browser indicates the number of times that the word or term appears in the secondary textbase. This number will often differ from the number of records retrieved when you search for that item, because you are retrieving records in the primary textbase.

**Searching Code and UDC Fields**

Code fields retain case in the Term and Word indexes. They also retain punctuation in the Term index. When you search a Code field, the search criteria must exactly match the record information as indexed. If you do not capitalize letters correctly or include the proper punctuation, you will not find the record. For example, a search for abc will not find ABC and a search for =A 123 will not find =A-123.

UDC fields retain punctuation in the Term index, so punctuation is significant when searching.

Note that truncation searches are allowed in either field type. For example, a search for A* will find both ABC and A-123.

If you want an asterisk, backslash, or quotation mark to be interpreted literally, precede it with a backslash. For example, to search for ab* type ab\*. If you omit the backslash in this example, the software interprets the asterisk as a truncation symbol. If you type a single backslash and follow it with anything other than an asterisk, backslash, or quotation mark, the backslash is ignored. For example, a search for on\line finds online.

Code and UDC fields often include characters that the software interprets as having special meanings. These characters include the Boolean symbols (& / !), comparison and range indicators (<> = :), and proximity operators (w# and p#). To search for these characters without having them misinterpreted as part of the search syntax, place quotation marks (' ' or " ") around the search item. For example, type "A/Z" to search for A/Z without having the forward slash interpreted as a Boolean OR. If you are doing a Term search, do not include the equal sign in the quotation marks. For example, search for ="A/Z".

Note that although Boolean symbols such as & are treated as standard characters when they appear inside a quoted item, the same is not true of asterisks. Asterisks at the end of words inside quoted items still signify truncation. To search for the literal asterisk character, precede it with a backslash.

A good way to ensure that you find the desired records when searching a Code or UDC field is to press F3 to browse and paste from the indexes. When you paste information from a Code or UDC field index, the software includes any necessary quotation marks or backslashes.
The following table provides several examples for how to search Code and UDC fields. In the last example, note that the UDC listing 622.341.1-78 does not contain any characters that can be misinterpreted, therefore quotation marks and a backslash are not necessary.

<table>
<thead>
<tr>
<th>To find</th>
<th>In a</th>
<th>Search for</th>
</tr>
</thead>
<tbody>
<tr>
<td>d52-60</td>
<td>Code field</td>
<td>d52-60 or do a truncation search for d5*</td>
</tr>
<tr>
<td>ABC*</td>
<td>Code field</td>
<td>=ABC*</td>
</tr>
<tr>
<td>017:63</td>
<td>UDC field</td>
<td>&quot;017:63&quot;</td>
</tr>
<tr>
<td>431.3&quot;2&quot;</td>
<td>UDC field</td>
<td>431.3&quot;2&quot;</td>
</tr>
<tr>
<td>339.5(931)</td>
<td>UDC field</td>
<td>&quot;339.5(931)&quot;</td>
</tr>
<tr>
<td>629.12(*58)</td>
<td>UDC field</td>
<td>&quot;629.12(*58)&quot;</td>
</tr>
<tr>
<td>622.341.1-78</td>
<td>UDC field</td>
<td>622.341.1-78</td>
</tr>
</tbody>
</table>

**Searching for Numbers**

Numbers can be treated two different ways in the DB/TextWorks indexes: as numeric quantities or as alphabetic words. Treated numerically, they file according to the number they represent: 2, 12, 100. Treated alphabetically, they file as words: 100, 12, 2.

Numbers are always indexed alphabetically in a Word index. Their treatment in a Term index depends upon field type and Special Filing options. In Number, Computed Number, Automatic Number, or Text fields using default filing options, numbers are filed numerically. (Also, negative numbers file before zero in Number or Computed Number fields only. Otherwise, the negative symbol is ignored.)

You can use truncation to search for numbers filed alphabetically. For example, you can search the Amount field for 35*. However, truncation does not work with numbers filed numerically. For example, the search \texttt{=35*} will not find 357.

The comparison operators (>, >=, <, <=) also function differently depending on how the number is filed. In a Number, Computed Number, or Automatic Number field, -20 is less than 3. In a Text field using default filing options, -20 is treated like 20, which is numerically greater than 3. In a Text field using alphabetic number filing, -20 is treated like 20, which is alphabetically less than (before) 3.

**Searching for Dates**

DB/TextWorks is flexible when searching for dates. The format you use in a query can differ from the format stored in the textbase, and retrieved dates may include day names or trailing text. For example, a search for June 2009 finds these entries:

```
June '09
June 3, 2009
JUN-2009
2009, June
Tuesday, June 23, 2009 meeting with Sales staff
```

Do not use a forward slash to separate date components in a query (3/4/2009). The slash is interpreted as a Boolean OR symbol and will not find the right records. Instead, use spaces, quotation marks, or punctuation that cannot be mistaken for Boolean symbols (do not use & / !):
Searching

3 4 2009
3-4-2009
"3/4/2009"

**Note:** A setting in the INMAGIC.INI file determines whether spaces are required around a Boolean or range symbol (for example, whether you should search for ant / bee or ant/bee. For more information about this issue in Boolean and range searches, see Spaces around Search Symbols.

Avoid using word, phrase, proximity, and truncation searches in Date fields, except to find alphabetic information in trailing text after dates.

To include the current date in a calculation that retrieves records based on dates, use @DATE. You can add or subtract a number to represent an offset from today's date. For example, the following search would retrieve records created on the date one week prior to the date the search is performed. This type of search is particularly useful if you are saving the query to be performed again on a different day (for example, a saved query specified as an initial action in a menu screen).

= @DATE - 7

**Searching for Full or Partial Dates**

To find all dates in a certain month or year, type the partial date in any recognizable format. To find a particular date with or without trailing text, include the month, day, and year as part of the criteria. To retrieve only the date you specify, precede the date with an equal sign (=).

<table>
<thead>
<tr>
<th>This search</th>
<th>Finds</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>All full or partial dates in 2009 (year, month and year, day month and year)</td>
</tr>
<tr>
<td>October 2009</td>
<td>All dates in October 2009</td>
</tr>
<tr>
<td>Oct 10 2009</td>
<td>That date with or without trailing text</td>
</tr>
<tr>
<td>=2009</td>
<td>That year alone</td>
</tr>
<tr>
<td>=October 2009</td>
<td>Dates that contain that month and year, but no specific dates</td>
</tr>
<tr>
<td>=Oct 10 2009</td>
<td>That date with no trailing text</td>
</tr>
<tr>
<td>=@DATE-7</td>
<td>The date one week before today</td>
</tr>
</tbody>
</table>

To search for the current date, press F4 or choose **Edit>Insert>Current Date** or type @DATE.

**Finding Dates Before and After Other Dates**

To find a date before or after another date, use <, <=, >, or >=. When used with a partial date, these operators search from the beginning of the date item (first day of the month or first day of the year). For example, <June 2010 finds all dates before June 1, 2010.

If dates in the textbase have trailing text or the textbase contains a mixture of full and partial dates, use < and >= rather than > or <=. For example, a search for >Oct-23-2010 ("greater than Oct 23, 2010") finds the date October 23, 2010 only if it contains trailing text. To include Oct-23-2010 without trailing text in your search results, search for >=Oct-23-2010 instead.

The following examples show how different operators affect a search.
Searching

<table>
<thead>
<tr>
<th>This search</th>
<th>Finds</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;Oct-10-2010</td>
<td>October 10, 2010 sent letter</td>
</tr>
<tr>
<td>&gt;=Oct-11-99</td>
<td>All dates on or after October 11, 1999</td>
</tr>
<tr>
<td>&gt;Oct 2010</td>
<td>All dates on or after October 1, 2010, but does not find &quot;Oct 2010&quot;</td>
</tr>
<tr>
<td>&gt;=Oct 98</td>
<td>All dates on or after October 1, 1998, including &quot;Oct 98&quot;</td>
</tr>
<tr>
<td>&lt;2007</td>
<td>All dates before January 1, 2007</td>
</tr>
</tbody>
</table>

**Note:** If the 2-digit Years option is set to 1901 or greater (default is 1940), a search for >0 in a date field will retrieve dates after the year 2000 (>January 1, 2000). To retrieve all records with contents in a date field, use =* rather than >0.

**Finding Dates within a Range**

To find dates that fall within a particular range, use a colon (:). The software finds all dates in the range, including both ends of the specified range. When you indicate a partial date, DB/TextWorks uses the beginning of the low date and the end of the high date.

<table>
<thead>
<tr>
<th>This search</th>
<th>Finds</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-Mar-2010:28-Mar-2010</td>
<td>All dates that fall within the range (inclusive)</td>
</tr>
<tr>
<td>Oct 2009:Dec 2009</td>
<td>All dates in the fourth quarter of 2009 (inclusive)</td>
</tr>
<tr>
<td>2009:2010</td>
<td>All dates from January 1, 2009 through December 31, 2010 (inclusive) as well as either year alone</td>
</tr>
<tr>
<td>@date-7:@date</td>
<td>All dates within the past week</td>
</tr>
</tbody>
</table>

**Converting a Form to a Query Screen**

You can use an existing Record form (any form designed for the Display or Edit window) as the basis for a query screen.

**Method #1: Open an Existing Record Form in the Query Screen Designer:**

1. Use one of the following methods to access the Open Query Screen dialog box:
   - Choose **Search>Design Query Screen**.
   - In the Query Screen Designer, choose **Screen Operations>Open Query Screen**.
2. From the **Start With** list, select **Existing Record Form**, then select a form from the **Currently Saved** list and click **OK**.

The form is copied and converted to query screen format and loaded into the Query Screen Designer, where you can edit and save it.

Content information and formatting that is not supported in the Query Screen Designer, such as added text, item numbering, calculations, and variables, is removed during the conversion. You will almost certainly need to make some changes in the Query Screen Designer after the conversion.

For example, Boolean query buttons do not appear until you select the option by choosing **Tools>Screen Properties>General**. Depending on the form you started with, you may also
want to use the Labels tab on the Box Properties dialog box to show borders, labels, and scroll bars, and to make sure that the labels clearly indicate which fields will be searched.

**Method #2: Copy and paste boxes from a form to a query screen:**

1. Open a form by choosing **Display>Design Form**. In the **Start With** list in the Open Form dialog box, select Existing Form and then select the form you want to open from the Currently Saved list. Click **OK**.

2. Select the boxes on the form that you want to replicate in the query screen.

3. Choose **Edit>Copy**. Close the Form Designer by choosing **Form Operations>CLOSE Form Designer**.

4. Choose **Search>Design Query Screen**. In the **Start With** list in the Open Query Screen dialog box, select **Blank Query Screen**. Click **OK**.

5. Choose **Edit>Paste**. DB/TextWorks pastes the boxes from the form into the query screen.

6. Save the query screen and close the Query Screen Designer.

**Note:** When using a Blank Query Screen as your design starting point, Boolean buttons are on by default, so your layout may be altered to make room for the buttons. Also, if you paste boxes with content (such as, variables and/or calculations) into a Blank Query Screen, they will be emptied out. This means they may appear in the designer, but not when you use the query screen.
Sorting Records

You can sort and subsort records to make them appear in a logical order in reports and when exporting records. You can use a variety of **sort options** to order the records precisely the way you want. For example, you could sort records alphabetically by name, then subsort by region, then by date in reverse chronological order. If you do not sort records, they appear in the approximate order that they were added to the textbase.

There are several ways to apply a sort:

- **After a search.** Do a search, then choose **Display>Sort Report.** This is called a user-specified sort. You can change it at any time, to sort the records in a different order.

- **As part of a form.** This is called a compulsory sort. It is defined as part of a form, and is typically used when a report contains calculations or subtotals that rely on a specific sort order. If you do not like the sort order, select a different form for the Report window.

  **While the form is in use, that is the only way records can be sorted.** You cannot sort records in any other way unless you select a form that does not have a compulsory sort.

- **As the textbase default.** A sort that is defined in the textbase structure, and which is used only when no other sort is specified.

Sort Options

Select sort options to determine record order in reports.

- **Use.** Select an option button from the **Use group** to specify whether to use the sort order specified by you, sort in descending order of relevance, use the textbase default sort, or revert to unsorted order.

  **Note:** If you are defining a **Textbase Default Sort**, you can specify your own sort method or sort records in descending order of their relevance. The textbase default sort and the unsorted order methods are not available.

- **Available Fields and Sort Fields.** To indicate which field to sort on, select a field in the **Available Fields** list and click the right arrow button (>) to move it into the **Sort Fields** list. Repeat to specify subsorts. Use the **Change Order** buttons to move a field in the Sort Fields list up or down (affects the sort order).

  To change or undo a sort, select a field in the Sort Fields list and click the left arrow button (<) to move it back into the Available Fields list. Use the double arrow button (<<) to remove all fields from the Sort Fields list.

- **Sort in Reverse Order.** Optionally, sort the currently selected Sort Field in reverse order (Z to A, highest to lowest value, or most recent to oldest date).

- **Exploded Sort.** (Not available when defining a textbase default sort.) Optionally, select the **Exploded Sort** check box for the currently selected Sort Field, so the record will appear in the report multiple times (once for each entry in the sort field). Without an exploded sort, each record appears only once, sorted by the first entry in the sort field.

  **Note:** The **Exploded Sort** option is ignored for a form used on the Web (DB/Text WebPublisher), because it can change the perceived number of records retrieved. However, if you set the WebAllowExplode=1 option in the DBTWPub.INI (or ICSWeb.INI) file to permit exploded sorts, all records are displayed on one page to avoid paging issues when changing the perceived number of records in the report.
• **Primary Sort Field Options.** Optionally specify what should occur if a sort field is empty.

• **Interfile.** (Not available when defining a textbase default sort.) Optionally, interfile up to five fields with the primary sort field. The Interfile option is ignored for a form used on the Web (DB/Text *WebPublisher*), because it can change the perceived number of records retrieved.

**Notes**

- Textbase filing options (textbase structure) also affect sort order.
- If the form being used has a compulsory form sort, your sort will be ignored.
- If the textbase has a textbase default sort, you can use the sort options to temporarily re-sort the records.

**Sorting Records after a Search**

You can sort records after you do a search or load a set. This is called a user-specified sort. The sort determines the order in which records appear in the Report window and printed reports. The sort remains in effect until you close the textbase or sort again.

**Note:** If the form in use has a compulsory sort, your user-specified sort will be ignored.

**To sort records after a search**

1. Perform a search or load a set.
2. Choose **Display>Sort Report** to open the Specify Sort Order dialog box.
3. Select the sort method you want to use from the Use group:
   - **Sort Order Shown Below.** Uses the sort you specify in this dialog box.
   - **Relevance-Ranked Order.** Sorts records in descending order of their relevance, with the most relevant records appearing first. For example, if you search for the word computer, the records with the most instances of the word will appear first, followed by records with fewer instances, in descending order. Note that relevance ranking can be used with word, phrase, and proximity searches, but it is not applicable to term searches. If the **Relevance-Ranked Order** option is selected and cannot be applied, records will display in unsorted order.
   - **Textbase Sort Order.** Reverts to the default sort order.
   - **Unsorted Order.** Speeds up the report display, if you do not care whether records are sorted.
4. If you selected **Relevance-Ranked Order**, **Textbase Sort Order**, or **Unsorted Order**, the remaining selections in the Specify Sort Order dialog box are disabled. Click **OK** to confirm your sort order selection.
5. If you selected **Sort Order Shown Below**, select a field in the Available Fields and click the right arrow button (>) to move the field into the Sort Fields list. The field at the top of the Sort Fields list is the primary sort field (Sort Level 1). You can subsort by up to four more fields (Sort Levels 2-5). This is a way of doing more refined sorts, such as alphabetically by region, then by name. You can use the **Change Order** buttons to
reorder the fields and use the left arrow button (<) or double left arrow button (<<) to remove fields.

Optionally, specify the sort options you want.

Click OK.

Compulsory Form Sort

A compulsory form sort is one that is defined as part of a form. When that form is used for a report, that is the only order in which records can appear. Avoid compulsory form sorts except when necessary, because they prevent records from being sorted in any other order.

Typically, you use a compulsory form sort when a report includes a Sort Header or Sort Footer that depends on a specific sort order. For example, if a report contains subtotals that require a sort on a specific field (such as Total Sales by Region), a compulsory form sort will prevent the records from being sorted in any other order. Compulsory form sorts are also commonly used for forms designed for printing, such as mailing labels, which you always want sorted by ZIP Code.

Important! For more information about specifying a sort as part of a form, read about Sort Keys.

To define a Compulsory Form Sort

1. Open the Form Designer and open the desired form (Display>Design Form).
2. Choose Report Options>Compulsory Sort.
3. Select the sort method you want for the form from the Use group:
   - Sort Order Shown Below. Uses the sort you specify in this dialog box.
   - Relevance-Ranked Order. Sorts records in descending order of their relevance, with the most relevant records appearing first. For example, if you search for the word computer, the records with the most instances of the word will appear first, followed by records with fewer instances, in descending order. Note that relevance ranking can be used with word, phrase, and proximity searches. It is not applicable to term searches. If the Relevance-Ranked Order option is selected and cannot be applied, records will display in unsorted order.
   - Textbase Sort Order. Reverts to the default sort order.
   - Unsorted Order. Speeds up the report display, if you do not care whether records are sorted.
4. If you selected Relevance-Ranked Order, Textbase Sort Order, or Unsorted Order, the remaining selections in the Specify Sort Order dialog box are disabled. Click OK to confirm your sort order selection.
5. If you selected Sort Order Shown Below, define the compulsory sort by choosing options from the Sort Specification group. Select a field in the Available Fields and click the right arrow button (>) to move the field into the Sort Fields list. The field at the top of the Sort Fields list is the primary sort field (Sort Level 1). You can subsort by up to four more fields (Sort Levels 2-5). This is a way of doing more refined sorts, such as alphabetically by region, then by name. You can use the Change Order buttons to reorder the fields and use the left arrow button (<) or double left arrow button (<<) to remove fields.
Optionally, specify the sort options you want.

Click OK.

Save the form (Form Operations>Save Form).

Textbase Default Sort
You can specify a default sort order for records to appear in reports if no other sort is specified. For example, you might sort alphabetically by last name, chronologically by date, or by the relevance of the records. You are not limited to the textbase default sort order, as you can sort records after a search by choosing Display>Sort Report, and you can still define sorts for forms.

To define a Textbase Default Sort

2. In the Edit Textbase Structure dialog box, click the Sort Order button.
3. In the Specify Textbase Sort Order dialog box, select a sort method from the Use group.
   - Sort Order Shown Below. Uses the sort you specify in this dialog box.
   - Relevance-Ranked Order. Sorts records in descending order of their relevance, with the most relevant records appearing first. For example, if you search for the word computer, the records with the most instances of the word will appear first, followed by records with fewer instances, in descending order. Note that relevance ranking can be used with word, phrase, and proximity searches. It is not applicable to term searches. If the Relevance-Ranked Order option is selected and cannot be applied, records will display in unsorted order.
4. If you selected Relevance-Ranked Order, the remaining options on the dialog box are disabled. Click OK to confirm you sort order selection.
5. If you selected Sort Order Shown Below, define your sort by choosing options from the Sort Specification group:
   - Select a field in the Available Fields list and click the right arrow button (>) to move it into the Sort Fields list. You can subsort on up to four additional fields, but this is not recommended for a textbase default sort, because it can slow down the display.
   - [Optional] Select the Sort in Reverse Order check box to have the selected field sorted in reverse order (Z to A, highest to lowest value, or most recent to oldest date).
   - [Optional] Click the Primary Sort Field Options button to specify what should occur if the primary sort field is empty.
   - Click OK.

How to Determine if a Sort Exists Currently
Follow the steps below to find out if a sort applies to the current Report window or printed report.

To determine if a textbase default sort or user-specified sort exists

1. Choose Display>Textbase Information to open the Textbase Information window.
2. Scroll down to the Textbase Defaults section. Or choose Edit>Find, type the word sort in the dialog box, then click the Find Next button.

3. The sort fields, if any, are listed in the Textbase Defaults and Currently in Use sections. If no sort exists, the word <none> appears.

To determine if a compulsory form sort exists
If a form has a compulsory form sort and you want to know which fields make up the sort, use this procedure to print the form definition.

Tip! If you are working in the Form Designer, you can choose Report Options>Compulsory Sort in the Form Designer to determine if a sort exists, rather than use this procedure.

1. Choose Maintain>Manage Textbase Elements.
2. Choose a form from the Currently Saved list, then click Print.
3. Select the appropriate options in the Print dialog box, then click OK. Click Close.
4. The sort fields, if any, are listed in the Compulsory Form Sort Order section near the end of the form definition. If no sort exists, the words <none specified> appear.

Notes about Sorting
- The purpose of a sort is to group information and/or assist the person who will be navigating through the report. It is not helpful to sort by a field that does not appear in the report--either explicitly or as a Sort Key.
- The software follows this sorting order: First it does the compulsory sort for the selected form (if any), then it does the sort for the current user-specified sort, specified using Sort Report (if any), then it does the textbase default sort (if any), finally the unsorted order.
- If a sort includes an exploded sort, alternate primary sort fields, or interfiled fields, you should use Sort Keys as box contents because they extract the appropriate field or field entry.
- If a form has more Sort Header/Footer levels than there are Sort Key fields defined, the additional Sort Header/Footer levels do not appear in the report.
- The records in a set are not actually sorted until they are displayed in the Report window or printed in a report. If you display or edit a record before displaying the report, the records will not appear in sorted order in the Display or Edit windows.
- For sorting purposes, DB/TextWorks uses approximately 250 characters of the combined primary sort field and subsort fields. For example, if you sort by a long Name, subsort by a long Title, and subsort next by Volume Number, the combined sort fields may exceed the character limit before the sort reaches the Volume Number.
- If Options are set so that new versions of records with deferred changes appear in reports, then these records are the versions that are sorted. If you display a report, then modify some of the records and redisplay the report, the order in which the records appear may change as well.
Using a Thesaurus

A DB/TextWorks thesaurus is a textbase that lets you maintain a controlled vocabulary (also called an authority list) of terms and the relationships among terms. DB/TextWorks comes with a template that you can use to create thesaurus textbases; see Set Up Thesaurus.

Note the following about DB/TextWorks thesaurus textbases:

- **Important!** You must not rename or remove the original fields in a thesaurus textbase. As well, do not change the information in the Status field, as it contains information used by the thesaurus engine.
- You should always use the Maintain Thesaurus window to add or modify individual thesaurus terms. Using this window assures that relationships are established when necessary (which will not happen if you try to add or modify a thesaurus term by editing the thesaurus textbase directly).
- You can add more fields to a thesaurus, but keep in mind that they will not appear on any thesaurus window.
- You can add a Master password to a thesaurus in order to protect the ability to make changes to the textbase structure, but you must also include a Silent password to grant users full write access to all thesaurus fields.

Thesauri can be shared across fields and non-thesaurus textbases. You can use a DB/TextWorks thesaurus to do the following:

- Add new terms that you expect to use in bibliographic or other kinds of records. You can add terms by importing a file or by typing each one into the thesaurus using the Maintain Thesaurus window.
- Add relationships, a scope note, and general notes.
- Modify a thesaurus term and its relationships, scope note, and general notes.
- Delete a term.
- Reconcile terms and relationships using a Rebuild Thesaurus function.
- Access and navigate (browse) a thesaurus from within a textbase.
- Select terms while browsing and paste them into a Query window or an Edit window.

This topic also provides you with the basic concepts and program construction rules for a DB/TextWorks thesaurus.

Basic Concepts

A DB/TextWorks thesaurus has the following characteristics:

- It is a monohierarchical thesaurus.
- The software uses a JavaScript-created user interface to facilitate the addition and maintenance of thesaurus records. Using this interface gives you the benefit of a great deal of error and validation checking that helps preserve thesaurus integrity. For example, the program automatically adds and edits reciprocal relationship records, checks for uniqueness of a term, and more.
Using a Thesaurus

- Thesaurus records, called term records, are stored in a DB/TextWorks textbase. Each record represents one term, either a preferred term or a non-preferred term. A term may be a subject, product, trade name, company, and so forth.
- Each term record also contains information about the other terms that are semantically related. The relationships allowed in a DB/TextWorks thesaurus are:
  
<table>
<thead>
<tr>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT ↔ NT</td>
</tr>
<tr>
<td>RT ↔ RT</td>
</tr>
<tr>
<td>USE ↔ UF</td>
</tr>
</tbody>
</table>

- You can create a complete term record and the program will automatically create the record for the reciprocal term(s) if they are not present in the thesaurus. Or, when a relationship between two terms is changed on one record, the program automatically updates the record for the reciprocal reference.
- A thesaurus can have an unlimited number of terms.
- You use the **Set Up Thesaurus dialog box** to associate a thesaurus with a field in a textbase. You also use the Set Up Thesaurus dialog box to create a new thesaurus.
- You can connect one or more thesauri to a textbase, up to the number of fields listed for that textbase. Only Text and Code fields may have associated thesauri. For example, if you have five fields in a textbase, you can connect a thesaurus to each of these fields. You can connect a different thesaurus to each field, or you can connect the same thesaurus to each field, or any combination thereof. However, keep in mind that you can connect only one thesaurus per field.

**Thesaurus Construction Rules**

The following rules (general rules, for preferred terms, and for non-preferred terms) are applied by the program during thesaurus record creation, editing, or deletion.

**General Rules**

- Each term must be unique. When you attempt to add a term that already exists, even if the new term is a unique concept, the program will prevent the new term from being added. You must edit one or all of the terms to make each unique. For example, in the case of a homograph you might add parenthetical qualifiers to distinguish one from the other(s):
  
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercury (planet)</td>
<td></td>
</tr>
<tr>
<td>Mercury (metal)</td>
<td></td>
</tr>
<tr>
<td>Mercury (Roman deity)</td>
<td></td>
</tr>
</tbody>
</table>

- When you add a term to the thesaurus, the program creates reciprocal records to that term or edits them as necessary to reflect the correct relationship.
- When you edit a term record or a relationship to a term, the program automatically updates all relationship records, or creates them if they are not present in the thesaurus. Take, for example, the following pair of records:

  Term: **Brakes**
  
  NT: Antilock brake system
Using a Thesaurus

Term: **Antilock brake system**

BT: Brakes

If you remove "Antilock brake system" as a narrower term (NT) of "Brakes," the program will automatically remove "Brakes" as a broader term (BT) of "Antilock brake system," leaving only the two main terms with no relationships.

- When you delete a term, you are deleting the term record only. The program will automatically update all the reciprocal term records to reflect the changed/canceled relationships, but it does not delete any other records. Relationships may be canceled, but term records may only be deleted explicitly by the user.

**Preferred Terms**

The following statements apply to preferred terms in a DB/TextWorks thesaurus.

- A preferred term may have only one broader term (BT).
- It may have unlimited narrower terms (NT), related terms (RT), and equivalent terms (UF).
- It may only use other preferred terms for narrower, broader, and related relationships.
- It may have a scope note and one other note of unlimited length.
- It is allowed to exist in the thesaurus with no relationships, scope note, and so forth. This term will, by definition, be designated a preferred term.

**Non-Preferred Terms**

The following statements apply to all non-preferred terms in a DB/TextWorks thesaurus.

- Non-preferred terms are defined by the presence of a USE reference in the term record.
- A non-preferred term can have only one relationship, the USE reference.
- Only one USE reference is allowed for a non-preferred term.

**Set Up Thesaurus**

**Note:** You can open this dialog box only when you have a non-thesaurus textbase open. You cannot connect a thesaurus to another thesaurus.

Use the Set Up Thesaurus dialog box to connect one or more thesauri to a textbase, up to the number of appropriate fields in that textbase. Only Text and Code fields are listed. If you have five fields in a textbase, you can connect a thesaurus to each of these fields. You can connect a different thesaurus to each field, or you can connect the same thesaurus to each field, or any combination thereof. However, keep in mind that you can connect only one thesaurus to a field.

You also use the Set Up Thesaurus dialog box to create a new thesaurus.

Once you have connected a thesaurus to a field, when you use the Query window or the Edit window for the textbase, you can browse the thesaurus for the connected field. With your cursor in the field, press **F3**, or choose **Edit>Browse Choices**, or click the Browse Choices toolbar button to open the applicable Browse Choices window.

1. **To connect an existing thesaurus to a field**
   1. Select a field from the Fields list.
Using a Thesaurus

2. Click **Connect to Existing Thesaurus** to open the Select DB/TextWorks Thesaurus Textbase dialog box. Select a thesaurus textbase, then click **Open** to return to the Set Up Thesaurus dialog box. Notice that the thesaurus textbase name appears next to the field name in the Fields list.

3. Click **OK**.

**To create a thesaurus and connect it to a field**

1. Select a field from the Fields list.

2. Click the **Connect to New Thesaurus** button to open the Specify New Thesaurus Textbase dialog box. Specify a name and location for the new thesaurus textbase, then click **Save** to return to the Set Up Thesaurus dialog box. DB/TextWorks creates a new empty thesaurus textbase in the specified location.

   **Note:** If you create your thesauri in the same folder as your textbase you can more easily move all of them to a new location. If thesauri are in a different location than the textbase, you may need to re-specify the connections if you move them.

3. Click **OK** to dismiss the confirmation message.

4. Use the **Maintain Thesaurus window** to populate your new thesaurus.

   **Note:** You should always use the Maintain Thesaurus window to add or modify individual thesaurus terms. Using this window ensures that relationships are established when necessary (which will not happen if you try to add or modify a thesaurus term by editing the thesaurus textbase directly).

**To disconnect a thesaurus from a field**

1. Select the field from the Fields list that is connected to the thesaurus you want to disconnect.

2. Click the **Disconnect Thesaurus** button. The name of the thesaurus no longer appears next to the field name in the Fields list.

   **Note:** You cannot disconnect a thesaurus that is used as a validation list. You must edit the textbase structure to remove this setting before you can disconnect the thesaurus.

**Maintain Thesaurus**

Choose **Maintain>Maintain Thesaurus** to open the Maintain Thesaurus window to add or modify a thesaurus term, including its relationships. Note that if you have more than one thesaurus connected to your textbase, the Select Thesaurus to Maintain dialog box opens first. If you have a thesaurus textbase open, the Maintain Thesaurus window for that thesaurus opens.

**Note:** You should always use the Maintain Thesaurus window to add or modify individual thesaurus terms. Using this window ensures that relationships are established when necessary (which will not happen if you try to add or modify a thesaurus term by editing the thesaurus textbase directly).

Only one person is allowed to maintain a thesaurus at one time, as individual changes can cause the modification of many related-term records in a thesaurus textbase. If anyone has the thesaurus textbase open directly (by choosing **File>Open**), Maintain Thesaurus cannot be used until the textbase is closed. The only exception to this is if the textbase has been opened read-
only (select the **Open as read-only** check box on the Open Inmagic DB/TextWorks Textbase dialog box).

To see if you have a thesaurus textbase (a textbase containing all the necessary fields) open, choose **Display>Textbase Information**. If “Thesaurus textbase” appears under the textbase name, you do.

Click the **Help** button on the Maintain Thesaurus window for more information.

### Rebuild Thesaurus

You use the Rebuild Thesaurus function when you want the software to examine thesaurus entries and establish links when found to be necessary. For example, to establish reciprocal thesaurus links (for example, if Apple BT Fruit, then Fruit NT Apple) after you import thesaurus data from an external system where they did not exist, use the Rebuild Thesaurus function.

To open the Rebuild Thesaurus window, open a thesaurus textbase directly in DB/TextWorks, choose **Maintain>Maintain Thesaurus** to open the Maintain Thesaurus window, then click the **Rebuild** button.

Note that if records could not be automatically repaired through this function, you should view the broken records so you can fix them individually. A broken record is a record whose relationships may not all be reciprocal. When the software tries to fix a broken record, it wants to make all of a broken record's relationships reciprocal, if possible. This may not always be possible. For example, a broken thesaurus record cannot be fixed if it would create incompatible references, such as USE and RT under the same term.

### Use Thesaurus as a Validation List

Text and Code fields can use a thesaurus as a validation list. This means that you can give your users the ability to browse through a network of semantically related terms. A validation list is a list of entries allowed in a field. A validation list provides a way of screening information to be added to a textbase. Only entries in the list are allowed during data entry or import. When you have specified a thesaurus as a validation list, users cannot enter a term that is not found in the thesaurus. Even if no term relationships are required, you can use a thesaurus for validation purposes to provide a way to share a single list of approved terms among any number of fields and textbases.

**To connect a thesaurus to a textbase field for use as a validation list**

**Tip!** If you are not planning to use a thesaurus as a validation list, you can use **Maintain>Set Up Thesaurus** to connect and disconnect thesauri.

1. Choose **Maintain>Edit Textbase Structure** to open the Edit Textbase Structure dialog box.
2. Click the **Edit Fields** button to open the Edit Fields dialog box.
3. Select a Text or Code field from the Field Name list.
4. On the Text Options tab, connect a new or existing thesaurus to the field.
   - To connect to an existing thesaurus, click the Connect to Existing Thesaurus button to open the Select DB/TextWorks Thesaurus Textbase dialog box. Select a thesaurus textbase, then click Open to return to the Edit Fields dialog box. Notice that the thesaurus textbase name appears above the Connect to Existing Thesaurus button.
To create a new thesaurus, click the Connect to New Thesaurus button to open the Specify New Thesaurus Textbase dialog box. Specify a name and location for the new thesaurus textbase, then click Save. Click OK to dismiss the confirmation message. The software creates a new empty thesaurus textbase in the specified location. Notice that the thesaurus textbase name appears above the Connect to Existing Thesaurus button. Use the Maintain Thesaurus function to populate your new thesaurus.

**Note:** If you create your thesauri in the same folder as your textbase, you can more easily move all of them to a new location. If thesauri are in a different location than the textbase, you may need to respecify the connections if you move them.

5. Click the **Change** button.

6. Depending on what you want to do, you can use the thesaurus as the validation list for the designated field, or you can leave it as a look-up list for the field.

To make the thesaurus the validation list, select the Validation tab and in the Content Validation group, select the **Use Thesaurus as Validation List** option button. Notice that if you previously had a separate validation list associated with this field, the software will ask you if you want to clear that validation list. Click **Yes**. Click the **Change** button.

To leave the thesaurus as a look-up list for the field, go to step 8.

7. **[Optional]** On the Validation tab, select the **User May Override Content Validation** check box to let users override content validation. Click the **Change** button.

8. Click **Finish**.

9. Click **OK** on the Edit Textbase Structure dialog box, then click **OK** to confirm your changes.

**To disconnect a thesaurus from a field**

1. Choose **Maintain>Edit Textbase Structure** to open the Edit Textbase Structure dialog box.

2. Click the **Edit Fields** button to open the Edit Fields dialog box.

3. From the Field Name list, select the field that is connected to the thesaurus you want to disconnect.

4. On the Validation tab, select the **No Content Validation** option button. Note that the software will not let you disconnect a thesaurus that has the **Use Thesaurus as Validation List** option button selected.

5. On the Text Options tab, click the **Disconnect Thesaurus** button. Notice that the name of the thesaurus no longer appears above the **Connect to Existing Thesaurus** button.

6. Click the **Change** button.

7. Click **Finish** on the Edit Fields dialog box.

8. Click **OK** on the Edit Textbase Structure dialog box, then click **OK** to confirm your changes.

**To use a thesaurus validation list**

1. While adding or editing a record, place the cursor in a field that uses a thesaurus as a validation list and press **F3**, or choose **Edit>Browse Choices**, or click the Browse Choices toolbar button to open the Editing Choices Browser dialog box.
2. Browse and paste entries from the validation list into the current field.

When you are adding or editing records, you do not have to display the validation list. If you are fairly sure about what a field will accept, just type the entry. If you type an entry that is not in the list, the Content Validation Mismatch dialog box will open to help you.

Note that case is corrected automatically to match the validation during data entry or import. For example, if the validation list contains the entry Urgent, and you type urgent in the field, it will be corrected to Urgent. If you type a term with a USE reference, the entry is replaced with the preferred term.

To convert an existing validation list to a thesaurus

Once you convert an existing validation list to a thesaurus, you can share the thesaurus among several textbases by connecting it to those textbases.

**Note:** You can use the method in the following set of steps to populate a thesaurus (and not have to use the Maintain Thesaurus window) because there are no cross-references that have to be made reciprocal.

1. Open the textbase that has a validation list that you want to convert to a thesaurus.
2. Choose Maintain>Edit Textbase Structure to open the Edit Textbase Structure dialog box.
3. Click the Edit Fields button to open the Edit Fields dialog box, and select the field that has the validation list you want to convert into a thesaurus.
4. On Validation tab, click the Edit List button to open the Edit Validation List dialog box.
5. Click the Print List button to open the Print dialog box, and select the Print to file check box. Click OK to open the Save File As dialog box, and name and save the file (which will be saved with a .TXT extension by default).
6. Close the Edit Validation List dialog box.
7. With the same field still selected, select the Text Options tab and click the Connect to New Thesaurus button to open the Specify New Thesaurus Textbase dialog box. Decide where to place the new thesaurus, name the new thesaurus, and save it. Click OK to dismiss the completion message.
8. Click the Change button on the Edit Fields dialog box.
9. On the Validation tab, select the Use Thesaurus as Validation List option button. Click Yes to confirm clearing the validation list.
10. Click the Change button on the Edit Fields dialog box, then click the Finish button to return to the Edit Textbase Structure dialog box. Click OK to close the Edit Textbase Structure dialog box, then click OK to confirm your textbase structure updates.
11. Choose File>Open and open the newly created thesaurus textbase, which opens the Edit window. Close this window.
12. Choose File>Import to open the Select Import File dialog box and select the .TXT file created in step 5. The software opens the Import Options dialog box.
13. On the File Format tab:
   - In the Import File Format group, select the Delimited ASCII Format option button.
   - In the Delimiter Options group:
Using a Thesaurus

- Ensure that \{CR}{LF} is selected from the Record Separator drop-down list.
- Select \{TAB\} from the Field Separator drop-down list (to retain commas in the validation list terms).
- Select \{NONE\} from the Comment and Quote Character drop-down lists (in case either of the default characters appears in validation terms).

In the Field Names group, select the Specify Order in which to Import Fields option button, then move Term from the Available Fields list to the Import Fields list. It should be the only field in the Import Fields list.

Click OK to proceed, then click Yes to dismiss the confirmation message.

14. Click OK to dismiss the completion message.
15. If you want to share this thesaurus among several textbases and incorporate their validation terms as well, repeat the steps above with the following exceptions:
   - In step 7, connect to this thesaurus rather than a new one (so click the Connect to Existing Thesaurus button instead).
   - In step 13, after you are done with the File Format tab, select the Add/Replace Options tab and specify how the incoming information will affect existing records:
     Select the Check for Matching Records check box.
     In the If Match is Found group, select the Reject New Record option button.
     Move Term to the Incoming Records Must Match list.
Using Reports

Printing a Report
You can print a formatted report using the currently selected Report Printing form or the form for the active window.

The default printer selected in Windows will be used, unless you select a different printer. Certain printer-specific options affect the output, such as page orientation (portrait or landscape), paper size, and available fonts. Before printing, you may want to change these settings using either the Setup button on the Print dialog or the Print Setup command on the File menu.

Note: To create a file in Plain Text, RTF, or HTML format, choose File>Write Report to File.

To print a report
1. Select a printing form (choose Display>Select Forms>Report Printing).
2. Search for the records you want to print. The Select Search Results Window dialog box opens. You do not have to view records, although you may want to.
   Important! If the Display or Edit window is selected, only the current record will be printed.
3. [Optional] To omit a record from the report, select it in the Report or Display window and choose Sets>Omit Record. (This does not delete the record from the textbase.)
   Note: If the form used for printing (which is not necessarily the Report Printing form) has a compulsory sort, that is the only order in which records can appear.
5. [Optional] Choose File>Print Preview. For information about Print Preview, see Print Preview command (File menu). If you do open the Print Preview window, you can choose to print the report by clicking the Print button, and skip step 6. If you do not want to print at this point, click the Close button.
6. Choose File>Print. For information about what may happen when you invoke the Print command, see Print command (File menu). When the Print dialog box opens, the name of the print form appears on the status bar.
7. Select the print options you want on the Print dialog box and click OK to begin printing.
8. [Optional] If you are printing labels, the Specify Starting Label dialog box appears. If applicable, you can specify the starting label.

To print just one record
1. Search for the record you want to print. The Select Search Results Window dialog box opens. Choose to display the records in the Display or Edit window.
2. Choose File>Print. For information about what may happen when you invoke the Print command, see Print command (File menu).
3. Select the print options you want and click OK to begin printing.

Troubleshooting
You may see the following message when you try to print a report:
Using Reports

Some information may not appear in the printed report. Possible reasons: form dimensions do not match page dimensions or boxes appear in the non-printable area. Continue?

This message indicates that the form dimensions do not match the page dimensions, or that one or more Margin boxes appear in the non-printable area of the page. The non-printable area is the area around the edges of a sheet of paper into which the printer cannot write. On a laser printer, this area is usually ¼ inch or less.

Respond Yes to print the report or No to cancel the report printing.

To correct the problem:

- **Move the Margin Area boxes away from the page edges.** Open the form in the Form Designer and move the boxes. To access the Margin Area, choose Report Options>Work in Margin Area.
- **Change the form dimensions.** Open the form in the Form Designer and choose Report Options>Set Up Page.

Sending a Report as Mail

1. Open a textbase and retrieve one or more records. All of the records in the current set will be included.

2. Choose File>Send Report as Mail, then select a message format from the drop-down list:
   - **Plain text in message body.** Inserts report as text into Message area of your e-mail program. Retains as much formatting as possible, including some approximation of side-by-side boxes. Does not retain font or color. **Note:** If you use SMTP to access mail services, the maximum amount of text that you can place in the body of an e-mail message is 32,000 characters.
   - **HTML in message body.** Inserts HTML-formatted report into Message area of your e-mail program.
   - **Plain text attachment.** Inserts the report as an attachment with a .TXT extension. The attachment retains as much formatting as possible, including some approximation of side-by-side boxes. Does not retain font or color.
   - **Rich Text Format (RTF) attachment.** Inserts the report as an attachment with an .RTF extension. Saves as much formatting as possible by converting it to instructions that most word processing and layout packages can read and interpret.
   - **HTML attachment.** Inserts the report as an attachment with an .HTM extension. Writes formatted record information to a file in Hypertext Markup Language (HTML), the document formatting language used by Web browsers. **Note:** With MAPI and certain e-mail clients, the HTML may appear in the body of the message instead of as an attachment.

3. Make sure the Mail to addresses specified in records check box is not selected.

4. [Optional] Click the Specify Form for Report button if you want to select a different form from the one shown on the Send Report as Mail dialog box. When done with the Select E-mail Report Form dialog box, click OK.

5. Do the following, depending on how you access mail services:
Using Reports

- If you use **MAPI**: Click **OK** on the Send Report as Mail dialog box. A new message window for your default e-mail program appears. Specify who should receive the report and fill in the other fields your e-mail program may have. Optionally, specify file attachments using your e-mail program. Click your e-mail program's Send button.

- If you use **SMTP**: Fill in mailing information on the Send Report as Mail dialog box. You must enter a valid e-mail address (for example, name@domain.com) in the **From** box. Optionally, click the **Select File Attachment** button to specify a file to attach to the e-mail, then click **Open**. Do this for each file you want to attach. **Note**: Because file attachments are recorded in your textbase .IDI file, the attachments from your previous Send Report As Mail sessions are automatically listed. This makes it easier to send the same attachment to multiple recipients. File attachment lists are textbase-specific. To remove a file from the File attachments list, select it and click the **Remove Attachment** button. Click **OK** on the Send Report as Mail dialog box to send the e-mail.

6. Click **OK** to dismiss the confirmation message box that appears.

Another way to use this feature is to create a textbase that contains a field that identifies a recipient (or recipients) for a record. Then when you use the Send Report as Mail feature, you can quickly and easily **send each record** (or a notice containing information pertinent to that record) to its identified recipients.

### Sending Each Record as Mail

Instead of **sending a report as mail**, you can send each record (or a notice containing information pertinent to that record) as mail to its identified recipients.

1. Open the textbase and retrieve one or more records.

2. Choose **File>Send Report as Mail**, then select a message format from the list:

- **Plain text in message body**. Inserts report as text into Message area of your e-mail program. Retains as much formatting as possible, including some approximation of side-by-side boxes. Does not retain font or color. **Note**: If you use SMTP to access mail services, the maximum amount of text that you can place in the body of an e-mail message is 32,000 characters.

- **HTML in message body**. Inserts HTML-formatted report into Message area of your e-mail program.

- **Plain text attachment**. Inserts the report as an attachment with a .TXT extension. The attachment retains as much formatting as possible, including some approximation of side-by-side boxes. Does not retain font or color.

- **Rich Text Format (RTF) attachment**. Inserts the report as an attachment with an .RTF extension. Saves as much formatting as possible by converting it to instructions that most word processing and layout packages can read and interpret.

- **HTML attachment**. Inserts the report as an attachment with an .HTM extension. Writes formatted record information to a file in Hypertext Markup Language (HTML), the document formatting language used by Web browsers. **Note**: With MAPI and certain e-mail clients, the HTML may appear in the body of the message instead of as an attachment.

3. Select the **Mail to addresses specified in records** check box.
Using Reports

4. Select the **Send one e-mail per record** check box to include information from one record in each e-mail message. Clear this check box to include all records sent to the same recipient(s) in a single e-mail message.

5. Select a field name from the **Field containing 'To:' address** drop-down list that contains e-mail addresses in the correct address format (for example, tjones@crafts.com, tmallory@carriers.com). **Note:** If a record has multiple e-mail addresses, they must be in repeating entries.

6. Do the following, depending on how you access mail services:
   - If you use **MAPI**: Type appropriate text in the **Subject** box.
   - If you use **SMTP**: Fill in mailing information. Note that you must enter a valid e-mail address (for example, name@domain.com) in the **From** box.

7. [Optional] Click the **Specify Form for Report** button if you want to select a different form from the one shown on the Send Report as Mail dialog box. When done with the Select E-mail Report Form dialog box, click **OK**.

8. [Optional] Click the **Select File Attachment** button to specify a file to attach to the e-mail, then click **Open**. Do this for each file you want to attach.
   **Note:** Because file attachments are recorded in your textbase .IDI file, the attachments from your previous Send Report As Mail session are automatically listed. This makes it easier to send the same attachment to multiple recipients. File attachment lists are textbase-specific. To remove a file from the File attachments list, select it and click the **Remove Attachment** button.

9. Click **OK** on the Send Report as Mail dialog box to send the messages.

10. Click **OK** to dismiss the confirmation message box that appears.
Designing Forms

You have a great deal of flexibility in how you approach form design. Use the order below as a guide. Some of the steps are optional, and some may be performed in a different order.

To create a form

1. **Search and retrieve records.** It helps to have at least a few records in the textbase before you start designing forms, so you can see actual record information as you lay out the form. Remember that you can access the query screen at any time before or after opening the Form Designer.

2. **Set form defaults.** Choose Tools>Options>Display to specify default settings for the forms you create. This is especially helpful if you will be creating many forms that will use the same settings.

3. **Open the Form Designer.** Choose Display>Design Form and select a form to edit or to use as the basis of a new form.

4. **Select form properties.** Choose Tools>Form Properties to specify settings that affect how information will appear when the form is used, either on the desktop, an intranet, or the Internet.

5. **View records.** Periodically change between Display>View Records and Display>View Content, to toggle between viewing actual record information and content descriptions. Viewing record information is like previewing the form. (To see record information, you must execute a query or load a set.) Viewing content descriptions reveals how the form is constructed.

6. **Show or hide box boundaries and anchoring indicators.** Check and uncheck View>Boundaries, to show or hide dashed lines around boxes to help you lay out the form.

7. **Perform design tasks.** The first task below is required. The remaining tasks are optional and may be performed in any order. Use the Edit and Tools menus to perform these tasks:
   - **Add and edit boxes.** Add form, text, and/or picture boxes and specify their contents (for example, fields, variables, text, images). You can also add script input boxes and script buttons. Each form box can include one item or several items (such as two fields and a variable). Delete any unwanted boxes or script buttons. (This does not delete record information.) Edit box content if needed (for example, to change the field that a box contains). You can also cut, copy, and paste a box or group of boxes.
   - **Format box text.** Specify how each content item in a box appears, including font, case, color, number and date formatting, and numbering, and whether extra text or punctuation appears (for example, make a field bold and italic, and number each entry).
   - **Change box size and position.** Move and resize boxes and determine whether the box position will be anchored or floating. (Most boxes should float.) You should find the Tools>Align Boxes commands especially helpful.
   - **Show label, border, and scroll bars.** Show or hide labels, borders, and scroll bars, and specify label text, font, and color.
Designing Forms

- **Format paragraphs.** Specify paragraph breaks, justification, and indentation, to affect all of the content items in the box. For example, make entries appear on separate lines.

- **Specify Web-specific properties.** If you plan to use the form on the Web with *WebPublisher PRO*, add logos to the top and/or button of the form, include hypertext links, add an expand record link (if the form is a report form), and specify other HTML attributes.

8. **Select report options.** If the form will be used for multiple-record reports, use the Report Options menu to specify these optional attributes:

   - **Compulsory Sort.** Specify that records be sorted in a certain way each time that form is used. A compulsory sort is typically used when a report contains subtotals and totals that rely on a specific sort order. It is also used to sort records on the Web, when using *WebPublisher PRO*.

   - **Add Headers and Footers.** Use a Report Header, which appears only once, at the beginning of the report. It typically contains variables, prompted text, fixed text, or a combination of these items. Use a Report Footer, which appears only once, at the end of the report. It typically contains summary calculations, such as grand totals and averages. Use a Sort Header as a group heading under which one or more records are listed. Use a Sort Footer to hold a count, subtotal, or other summary calculation for the current sort group.

   - **Set Up Page.** Specify the size, margins, orientation, and page breaks for the form when used for printing.

   - **Hide Margin Area and Work in Margin Area.** Hide the Margin Area from view or show the Margin Area and work in it. Information in the Margin Area is only used when printing on the desktop.

9. **Save the form.** When you save a form for the first time (or use *Save Form As*), you specify the operations for which the form can be used (for example, Display window, Edit window, Report window, printing, or for use on the Web). You also specify if the form should be saved in the user file or the textbase file. While you are first learning to design forms, you may not want your early, experimental forms to be seen by others. If this is the case, save the forms in your user file. Others who share the textbase will not see them in selection lists or have access to them. If you later want other to be able to see a form, use *Save Form As* and save it as public. If you plan to use the form on the Web with *WebPublisher PRO*, it must be saved as public.

   **Note:** You can save up to 450 forms in the textbase file and an additional 450 in your user file.

10. **Select the form.** After designing a form, choose **Display>Select Forms** and select the forms to use for various operations.

**Areas of a Form**

A form has two areas in which you can add boxes:

- **Margin Area.** Information in this area appears on every page of a printed report. This is useful for including page numbers and the current date. You cannot add script buttons in the Margin Area as they are not appropriate for printing. You can place boxes on all
sides of the Margin Area. The Display, Edit, and Report windows do not show boxes placed in the Margin Area. Use Print Preview to see Margin boxes.

- Record Area. Information in this area is used primarily for record information (fields). In a report, records appear one after the other, sorted as specified. The Record Area can also include a title on the first page, Sort Headers, a grand total on the last page, and so forth.

In the Form Designer, you can toggle between the Margin Area and Record Area as needed and place boxes in either area.

![Diagram of Margin Area and Record Area]

**Record Area Boxes**

The Record Area can include the box types listed below. The design of your report determines which box type you should use. When a form is used, Record boxes will appear in the Display, Edit, and Report windows and in printed reports. Header and Footer boxes will appear only in reports, as well as with Send as Mail, Write Report to File, and in WebPublisher reports.

To add a Record box, choose Edit>Add>Form Box while working in the Record Area.

To add any other type of box, choose Report Options>Headers and Footers while working in the Record Area.

**Note:** You can also use text and picture boxes as header/footer boxes. See Changing the Box Type for more information.

<table>
<thead>
<tr>
<th>Use this box...</th>
<th>In the Record Area, when you want the contents to appear...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record box</td>
<td>Once for each record in the report. A Record box can contain record information, such as names, or other content items, such as calculations and record images</td>
</tr>
<tr>
<td>Report Header box</td>
<td>Once at the beginning of the report. Typically used for report search criteria, prompted text, report title.</td>
</tr>
<tr>
<td>Sort Header box</td>
<td>Throughout the report whenever a new group of records begins. A Sort Header box typically has a Sort Key (Sort Level 1 through 5) as its content. However, it can contain other content items, such as fixed text.</td>
</tr>
<tr>
<td>Sort Footer box</td>
<td>Throughout the report whenever a group of records ends. A Sort Footer box is paired frequently with a corresponding Sort Header box. For example, you pair a Sort Header Level 1 with a Sort Footer Level 1.</td>
</tr>
</tbody>
</table>
Normally, a Sort Footer box contains a subtotal or other computed value for the current group.

| Report Footer box | Once at the end of the report. Typically used for report grand totals, counts, and averages. |

**DB/TextWorks: Form Design Tips**

You can specify the following uses for forms when you save them:

- **Report Window.** Display multiple records after a search.
- **Display Window.** Display one record at a time.
- **Edit Window.** Add or edit one record at a time.
- **Report Printing.** Print records found by a search (for example, financial reports, mailing labels, and so forth).
- **Web.** For Internet/intranet use, with WebPublisher PRO.
- **Web only.** Excludes a form from desktop form lists. Forms saved with this check box selected can only be used on the Internet/intranet, with WebPublisher PRO.

The following sections provide guidelines for designing each type of form.

Note that some form components do not appear in certain windows. For example, scroll bars rarely appear on boxes in the Report window. They only appear under the following circumstances:

- If a box with unlimited maximum height in a Report window contains extremely lengthy contents.
- If the text typed by a user into a script input box on the Report window exceeds the minimum height of the script input box.

[Click here](#) to see a chart that summarizes this information.

### Report Window

Typically, you design at least one form for the Report window to summarize the records found by a search. Here are some tips to help you design forms for the Report window:

- Summarize search results by showing just a few of the most important fields. The fewer fields you show, the more records can be seen at once. Decide which fields you can omit without confusing users. For example, if most people search by *Name*, then the form should probably include that field.

- To conserve space, combine multiple content items in one box (*Address, City, State or Province, Postal Code*). Choose **Tools>Box Properties>Paragraphs** and select **No added paragraph breaks** from the **Paragraph breaks** drop-down list (so items are not stacked in a column). Choose **Tools>Box Properties>Format>Added Text** and use a comma and a space as added text after the appropriate content item (for example, 123 South St., Dallas, TX 01234).

- Consider turning off box labels or specifying that label position is to the left of the box (choose **Tools>Box Properties>Labels**).
Designing Forms

- If you start with the Basic Record form, decide whether to turn off borders and scroll bars (choose **Tools>Box Properties>Labels**). If you start with the Basic Report form, they are turned off by default. Note that scroll bars seldom appear on boxes in the Report window.

- If you start with the Basic Record form, decide whether to increase the height of some boxes from the default (**Tools>Options>Display**) to unlimited by selecting the box(es) and choosing **Tools>Box Properties>Position** and increasing the **Maximum height** setting. Otherwise, only the default number of lines worth of information will appear. Note that if you start with the Basic Report form, the **Maximum height** setting is set to unlimited by default. In the same dialog box, set **Minimum height** to zero (0) to make boxes disappear when empty.

- Use **Tools>Form Properties>General** to set the distance between records.

- Number records by adding a box whose only content is the RECORD NUMBER variable.

- Preview the form to see how it really looks. The Form Designer shows only one record at a time and does not omit empty boxes, so you cannot see how it really looks until you preview it.

- Decide whether to turn search highlighting on or off (**Tools>Form Properties>General** in the Form Designer). Highlighting words in reverse video or color (**Tools>Options>Search**) can be a help or a hindrance.

- Note that you can use the same form for both the Report window and for printing reports. These forms are also used for the Send Report as Mail, Write Report to File, and Copy Report to Clipboard operations.

**Display Window**

The Display window shows one record at a time, when you choose **Display>Display Record**. Note that the Display window does not show header/footer boxes or sort keys. Design at least one form for the Display window that shows detailed information about one record at a time. Here are some tips for designing forms for the Display window:

- Start with the Basic Record form. Include most or all of the fields, as users displaying a record usually expect to see them.

- Use **Tools>Box Properties>Position** to increase the height (**Maximum height**) of some or all boxes from the default (**Tools>Options>Display>More Defaults**) to a larger value and set **Minimum height** to zero. These recommendations were explained in the previous section about designing Report window forms.

- Turn scroll bars on for boxes that may contain large amounts of text. This is because, in Display and Edit windows, boxes are never taller than the window—even if the **Maximum height** box setting is set to **unlimited**.

- Decide whether to turn search highlighting on or off (**Tools>Form Properties>General** in the Form Designer). Highlighting words in reverse video or color (**Tools>Options>Search**) can be a help or a hindrance.

**Edit Window**

The Edit window opens when you add or edit a record. Here are some tips for designing a form to be used in the Edit window:
Start with the Basic Record form. This shows all fields, with all boxes having borders and scroll bars.

Place fields that you edit most frequently at the top of the form. Move fields that you seldom edit to the bottom of the form. Then choose Tools>Tab Order and click the Reset to Default Tab Order button to reset the tab order to match the order in which boxes appear in the form.

Increase the height of boxes that include large amounts of text. Choose Tools>Box Properties>Position and increase the Maximum height setting to show enough text to provide adequate context. If you started with the Basic Report form, use the Labels tab to show scroll bars (they are on by default for the Basic Record form).

Place only a single field in a box or you will not be able to edit it. The field must be from the primary textbase and cannot be hidden or marked read-only by a password. Any other type of content can be seen but not edited. Note that in some cases you may want to include information even if it is not editable, such as Automatic or Computed fields, or information from a linked textbase. Using a different font or color for non-editable information or removing the border from the box can assist the user.

Be sure the form includes a box for every field that has Field Entry Required validation. Put each field in its own box. If each required field does not have its own editable box, you cannot use the form in the Edit window. To see which fields have Field Entry Required validation, choose Display>Textbase Information, then choose Edit>Find to search for the word required.

Be sure the form includes an editable box for any Automatic ID fields. Otherwise, the fields will not be populated.

If the Check spelling as you type feature will be used on the edit form, use a black text font in editable boxes.

When a form is used in the Edit window, the following attributes apply for editable boxes, no matter how the form was designed:

- Entry delimiters (bullet character by default) appear and each paragraph or entry has hanging indentation, so you can differentiate between line wrapping, paragraph breaks, and entries.
- All formatting except font and color is removed, so you can tell the difference between record information and formatting. All you see is the actual field information.
- Boxes never disappear when empty (unless the box contents are hidden by a password), even if Minimum height is set to zero on the Position tab of the Form Box Properties dialog box. This behavior permits you to add information to empty fields.

Note: If you are using WebPublisher PRO to modify (add, edit, delete) records via the Web, you can design an edit form, export it to HTML, and then use it to add records to your textbase via the Web. To enable the Export Editing Form to HTML command, you must first save the form for use in the Edit window.
Printed Reports

Printed reports can include page numbers, titles, calculations, Sort Headers (such as Sales by Territory), and many other sophisticated formatting techniques. Here are some tips for designing a form to be used for printing:

- Read about designing forms for the Report window (above). Many of the same recommendations apply.
- Use the Report Options menu to specify print-specific settings, including the page size, page breaks, and other attributes that affect how the report will appear when printed.
- Use the Margin Area to add information that will repeat on every page, such as page numbers. Use the Record Area to specify how record information appears in the body of the report. Carefully consider where to place the different report components and what type of box to use (for example, text box, form box, Header/Footer box).

WebPublisher PRO Reports

If you have WebPublisher PRO, you can design forms to be used with textbases that you publish on the Web. Internet or intranet users can use a Web browser to retrieve records, then choose one of the reports that you designed to change the appearance of the information that was retrieved. For more information, see Creating Forms for Web Use.

Using a Form in Multiple Windows/Reports

Some form components are omitted from display when the form is used in a specific window or operation.

<table>
<thead>
<tr>
<th>Form Component</th>
<th>Edit Window</th>
<th>Display Window</th>
<th>Report Window</th>
<th>Printed Report</th>
<th>Send Report as Mail</th>
<th>Mail Each Record to a Different Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box scroll bars appear</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Header/Footer boxes appear</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>yes $^3$</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Sort Keys appear</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>yes $^3$</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Margin boxes appear</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes $^3$</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Empty boxes will disappear if Box Minimum Height = 0</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Items found in a search can be highlighted</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes $^4$</td>
</tr>
<tr>
<td>Picture boxes/images</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Sorting</td>
<td>no $^5$</td>
<td>no $^5$</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
</tbody>
</table>
Designing Forms

1. Scroll bars appear only when needed to view information in a box. If the information fits in the box "as is," scroll bars do not appear.

2. Scroll bars only appear in the Report window for boxes with extremely lengthy content, or when the text typed in a script input box by a user exceeds the minimum height of the box.

3. If you choose File>Print while the Display or Edit window is active, only the record shown in that window is printed, and headers, footers, and sort keys are omitted from the printed report.

4. For Send Report as Mail, search highlighting appears only for RTF and HTML.

5. Records in the Edit/Display windows are only sorted if you display the Report window first.

Using a form on the Web

When using forms on the Web, different form components apply based on the use of the form.

<table>
<thead>
<tr>
<th>Form Component</th>
<th>Web Report</th>
<th>Web Expanded Display</th>
<th>Web Edit Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box scroll bars appear</td>
<td>no</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Header/Footer boxes appear</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Sort Keys appear</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Margin boxes appear</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Empty boxes will disappear if Box Minimum Height = 0</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Items found in a search can be highlighted</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Picture boxes/images</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

1. Scroll bars only appear if the maximum height of the box is greater than one (>1).


Form Defaults Group-Display Tab (Tools>Options)

Use these options to customize default form, query screen, and menu screen settings. You can specify custom text and label default font settings, as well as other custom default settings (See More Defaults below).

- **Set Text Font.** Click this button to specify the fonts DB/TextWorks uses for new forms, Basic Record forms, Basic Report forms, new and Basic Query screens, and box text on menu screens. The font that you select will also be used for the Textbase Information window, printed definitions of textbase elements; and printed lists (validation, substitution, stop words, leading articles, indexes).

- **Set Label Font.** Click this button to select the font to use for box labels in forms and query screens.

- **More Defaults.** Click this button to access the Form Defaults dialog box. This dialog box contains six tabs from which you can specify other default settings for the Basic Record.
form, the Basic Report form, the Basic Query screen, new forms, new query screens, and new menu screens.

Form Properties (Form Designer)
In the Form Designer, choose **Tools>Form Properties** to specify how information will appear when the form is used, either on the desktop or the Web. The Form Properties dialog box has the following tabs:

- **General**: Set properties for forms used on the desktop and on the Web. For example, turn search highlighting on or off and set the distance between records.
- **Logos**: Specify images to be included on forms used on the Web.
- **HTML**: Set properties that will be used for forms used on the Web, or when writing a report to HTML, or sending a report as mail in HTML format.

Distance Between Records

**To specify the distance between records on a form**

1. Choose **Tools>Form Properties** to open the Form Properties dialog box with the General tab active.
2. In the Measurements group, type a value for the **Distance between records**. If a box at the top of the form has a top offset (**Tools>Box Properties>Position**), that value is added to the distance between records.
3. Click OK.

The value you specify determines the amount of vertical space between records in a report, such as .15 inches or 1 line. To omit space between records, set the distance to 0.

The unit (inches, millimeters, points, or lines) is based on what is selected from the **Vertical units** drop-down list in the Measurements group.

**Note**: If you define the form’s **vertical** unit of measure to be lines, the font size can affect the record spacing.

The distance between records is measured from the bottom of the lowest box in the first record to the top of the highest box in the next record. The **Top Offset** (**Tools>Box Properties>Position**) can affect record spacing. For example, if you specify .15 inches between records, and the first box has a .05 inch **Top Offset**, you will see .2 inches between the first record and the top box in the second record.

**Tip!** You can design a report to show summary information only, by making each box a sort footer or report footer. To avoid large gaps in such a report, set the distance between records to zero.

Basic Forms

DB/TextWorks automatically generates simple forms, called Basic forms, which you can use for operations, such as display, edit, and print. Use Basic forms before you have created any of your own, or whenever you want to see all fields in a record (except fields hidden by passwords). Basic forms show every field in the primary textbase structure (except fields hidden by passwords).
There are two types of Basic forms:

- The Basic Record form is for single-record display.
- The Basic Report form is for multiple-record display and printing.

Basic forms are not stored in the textbase and are not separate files, but are generated "on-the-fly" as needed. When you add, rename, or delete fields in the textbase, the Basic forms reflect those changes automatically.

To specify which fonts are used in Basic forms, choose Tools>Options>Display and click the Set Text Font or Set Label Font button. To control other Basic form attributes (for example, form colors, box width), click the More Defaults button.

To see which forms are currently selected, or to select a different form, choose Display>Select Forms.

To create a new form, you may want to start with a Basic form, make edits, and save it under a new name (start by choosing Display>Design Form). You cannot overwrite, hide, or delete a Basic form.

Opening a Form

To access this dialog box: Open a textbase and choose Display>Design Form (this is how you enter the Form Designer). If the Form Designer is already open, choose Form Operations>Open Form.

- **Existing Form.** Select a form from the Start With list to load into the Form Designer, so you can modify it. Forms that have the word (public) after them are saved in the textbase file, so anyone who opens the textbase can use them. Forms without the word (public) are saved in your personal user file, so only you have access to them. You determine where forms are stored when you save the form. If no forms have been created, you cannot select the Existing Form option.

- **Basic Form.** This is often the easiest way to begin designing a form. The Basic forms provide one box for each field in the textbase. You can add, format, and delete boxes in the Form Designer. Select one of the Use These Defaults options to determine how the form will appear initially in the Form Designer.

- **Blank Form.** A blank form does not contain any boxes. Starting with a blank form can be useful when your textbase contains many fields but you want the form to include only a few fields. The first thing you should do in the Form Designer is add one or more boxes (Edit menu).

- **New Label Form.** Select a label format from a list of standard label stocks. This is the way you begin designing address labels, catalog cards, rotary cards, and so forth. If the desired stock number does not appear in the list, select what you guess to be the closest stock type. Then, in the Form Designer, choose Report Options>Set Up Page to change the position and size of the labels.

- **New Tabular Form.** Create a table, to present information in rows and columns. Tabular forms are useful when displaying information on the Web with WebPublisher PRO.
Box Types
A form consists of one or more boxes. To add a box to a form, choose Edit>Add and select the type of box you want. You can add the following box types:

- Form box. A box that contains field information, variables, and other information.
- Text box. A box that contains static, informational text, such as a title or instructions.
- Picture box. A box that contains static images or images referenced in a field in the record.
- Script input box. A box that lets the user type in information that will be used during the processing of a script.
- Script button. A button you place on a form that gives you the ability to call functions you have written in the Form Script dialog box.

You arrange information on a form by adding and editing these boxes. Every form must contain at least one box with contents.

Changing the Box Type
There are several reasons why you might want to change the box type when designing a form. For example:

- When you add a Header/Footer box, DB/TextWorks adds a form box. You can also make text boxes, picture boxes, script input boxes, and script buttons into Headers and/or Footers, but you first must add them to the form and then change them to Header or Footer boxes. In order to change a text box, picture box, script input box, or script button into a Header or Footer box, add it using Edit>Add. Then use Report Options>Headers and Footers to change the box to the appropriate type of header or footer.
- Occasionally, as you add and define boxes, you may find that you have inadvertently specified the wrong box type. Rather than having to delete the box and start over, you can change a Header or Footer box to a Record box, and vice versa.

To change a box type
1. While working in the Record Area, select the box to be changed.
2. Choose Report Options>Headers and Footers to open the Headers and Footers dialog box.
3. Depending on the change you want to make to the box, do the following:
   - To change the selected box to a Header or Footer box, select the box type you want from the Header/Footer list. If you select Sort Header or Sort Footer, select a level from the Sort Level drop-down list. Click the Change to Header/Footer button.
   - To change from a Header or Footer box to a Record box, click the Change to Record Box button.

Adding Boxes to a Form
A form consists of one or more boxes. Each box determines what information will be displayed when the form is used. The different box types and operations are described below.
Designing Forms

Adding a box to the Record Area or Margin Area
The area of the form that is active when you add a box determines whether the box appears in the Record Area or the Margin Area. To display and work in the different areas, use **Show Margin Area / Hide Margin Area / Work in Margin Area** (Report Options menu).

Adding headers or footers
Ensure that you are working in the Record Area. Then choose **Report Options>Headers and Footers**.

To modify a box
Use **Tools>Box Properties** to modify a box, or use the mouse to move or resize it.

To add a form box
To add a form box, choose **Edit>Add>Form Box**. When the Form Box Properties dialog box opens, use the subtabs on the Contents tab to specify the contents of the selected form box. After specifying box content, choose **Tools>Box Properties>Labels** to add a label. Use the other tabs to specify box position settings, formatting settings, paragraph settings, and HTML settings.

To add a text box
To add informational text such as instructions or a title, choose **Edit>Add>Text Box**. When the Text Box Properties dialog box opens, type the text you want in the **Text** box on the Text tab. Use the other tabs to specify box position coordinates and offsets, anchoring settings, font attributes, the appearance of box borders, box background color, text justification properties within the box, and HTML options.

To add a picture box
To add static images or images referenced in a field in the record, choose **Edit>Add>Picture Box**. A square, gray box appears on the Form Designer and the Picture Box Properties dialog box opens. Use the Picture tab to specify the type of image you want to appear on the form (fixed image or record image). Use the Position tab to specify box position coordinates and offsets, anchoring settings, and image size attributes.

To add a script input box
To add a script input box, choose **Edit>Add>Script Input Box**. When the Script Input Box Properties dialog box opens, use the Position, Labels, and Font, Color tabs to specify attributes for text and labels for the script input box. Script input boxes are for desktop use only; they are not applicable to forms used on the Web.

**Note:** You must also define a script to use with your form.

To add a script button
To add script buttons to a form, choose **Edit>Add>Script Button**. When the Script Button Properties dialog box appears, use the Caption tab to specify the text that will appear on the button and to set font attributes for the text. Use the Position tab to specify box position coordinates and offsets, anchoring settings, and button width. Script buttons are for desktop use only; they are not applicable to forms used on the Web.

**Note:** You must create a script to handle the click of the button (**Tools>Form Script**).
Moving Boxes in a Form

Use the methods below to move selected boxes in the Form Designer. When you reposition a box, other boxes in the form may move depending on their position and anchoring.

Moving Boxes Using the Mouse or Keyboard Keys

In the Form Designer, you can manually move one or more boxes using one of the following methods.

- Drag a box using the mouse. A ghost image of the selected box appears so you can position it on the screen. Release the mouse button at the position you want. When you release the mouse button, the boxes below the selected box move down to accommodate the repositioned box, if necessary.

- Select a box, then press **Ctrl+Arrow** to move the box in the direction of the arrow key. This simulates the mouse method. Release the **Ctrl** key at the position you want.

- Select a box, then press an arrow key to move the box. This method cannot move a box "across" another box. For example, when you move a box up, it will not go any higher than the box above it. However, when you move a box down, the boxes below it move down.

- Use the **Cut** and **Paste** commands.

The distance the box moves each time you press an arrow key is based on the measurements for Horizontal and Vertical grid settings selected as **View>Grid Settings**.

Moving Boxes Using Offsets or Coordinates

In the Form Designer, you can move a box by changing its Offsets or Coordinates settings on the Position tab of the Box Properties dialog box.

1. In the Form Designer, select one or more boxes.
   
   **Note:** The boxes you select do not necessarily have to be the same type. You can select different type boxes (for example, picture box and text box). When different type boxes are selected, the Multiple Selection Properties dialog box appears.

2. Choose **Tools>Box Properties>Position**.

3. Change the Offsets or Coordinates values, then click **Apply**.
   
   **Note:** The units of measurement used for offsets and coordinates are determined by the settings in **Tools>Form Properties>General**.

   - **Offsets.** Position offsets indicate the relative position of a box to the form or another box.

To move a box left or right, change the value for **Left**. For floating boxes or boxes anchored to the form, the left offset indicates the distance from the left edge of the selected box to the left margin, or the page edge if the box is in the Margin Area. For boxes anchored to another box, the left offset indicates the distance from the left edge of the selected box to the right edge of the box to which it is anchored. When you change the left offset of a box on the left side of an anchored pair, the box(es) on the right move accordingly.
Designing Forms

To move a box up or down, change the value for Top. For floating boxes, the top offset represents the distance from the top of the selected box to the bottom of the box above it, or the distance to the top of the form if there are no boxes directly above it. For boxes anchored to the form, the top offset represents the distance from the top of the selected box to the top of the form, or the page edge if the box is in the Margin Area. For boxes anchored to another box, the top offset represents the distance from the top of the selected box to the top of the box to which it is anchored.

- **Coordinates.** Coordinates indicate the absolute position of the box on the form.

To move a box left or right, change the value for X. The X coordinate indicates the distance from the left edge of the selected box to the left margin, or the page edge if working in the Margin Area.

To move a box up or down, change the value for Y. The Y coordinate indicates the distance from the top edge of the selected box to the top margin edge if the box is in the Record Area, or the page edge if the box is in the Margin Area.

**Anchored and Floating Boxes**

All types of boxes in the Form Designer can be anchored or floating.

Because DB/TextWorks allows variable-length fields, form boxes can shrink or grow to accommodate the current information. For example, the *Notes* field might hold one sentence in one record and three paragraphs in another record. As the height of a box changes, it can affect the position of the boxes below it. Because you can resize picture boxes, and text boxes grow with the amount of text they contain, the size of these boxes can vary as well. You can control how the boxes below react by determining whether they are:

- Floating
- Anchored to the form
- Anchored to another box

**Note:** A script input box will not grow to accommodate text on Report window forms. However, the above applies to script input boxes in the Query, Display, and Edit windows, as well as on menu screens. See Changing Script Input Box Height for more information on how to accommodate lengthy text in script input boxes in Report window forms.

**Floating boxes**

When a box is floating, the vertical position of the box varies depending on the height of the box(es) directly above it. As one box grows or shrinks, the floating boxes beneath it automatically float down or up. When all boxes are floating, you can be sure that information in one box will never overwrite information in another box.

A floating box is dependent on any box located above it if the boxes overlap in horizontal dimensions (if they are stacked above one other). They do not have to touch. If a box above a floating box grows or shrinks, the floating box moves beneath the lowest box above it.

By default, all boxes added in the Record Area are floating. Floating boxes move up or down automatically, depending on the amount of information that is displayed in the box(es) above them. Only the vertical (up and down) position of a floating box is affected, not the horizontal (right and left) position. By allowing boxes to float, you ensure that as one box grows to display
information, any floating boxes beneath it automatically move down so they do not overlap. Similarly, when a box shrinks, floating boxes beneath it move up.

To make a box float
1. In the Form Designer, select one or more boxes.
2. Choose Tools>Box Properties to open the applicable Box Properties dialog box.
3. On the Position tab, select the Floating option button from the Anchoring group, and click Apply.

Anchoring Boxes to the Form
When you anchor a box to the form, the box remains fixed in its current position, regardless of what the other boxes do. The box can still shrink and grow, but the top left position will not change. Boxes that are anchored to the form always remain in an absolute position. This can be useful when you want to fix a box position, for example, if you are laying out information to print on a preprinted form, such as an invoice.

By default, the first box added in the Margin Area is anchored to the form because it usually contains information, such as a title, that you want in a fixed position.

To anchor a box to a form
1. In the Form Designer, select the box you want to anchor.
2. Choose Tools>Box Properties to open the applicable Box Properties dialog box.
3. On the Position tab, in the Anchoring group, select the Anchor to form option button.
4. Click Apply.
5. Because the position of an anchored box is fixed to the form, information in the box might be obscured if a box above it grows. To avoid this situation, be sure to limit the maximum height for any boxes above the anchored box.

Anchoring a Box to Another Box
A box can be horizontally anchored to another box (side-by-side), so they always move up or down together. This is useful when you want two or more boxes to float up or down together. This keeps the boxes in the same relative position, even as the amount of information above or below those boxes shrinks or grows.

Anchoring a box does not restrict its size; it can still shrink and grow vertically.

The View>Boundaries command turns display of anchor-to-box arrows on or off in the Form Designer.

To anchor a box to another box
1. In the Form Designer, select the box that you want to anchor. Note: To anchor boxes, you select one box, then anchor it to a box on its left. The boxes must not overlap in horizontal dimensions. In other words, they cannot be stacked above one another.
2. Choose Tools>Box Properties>Position.
3. On the Position tab, select Anchor to Box in the Anchoring group.
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**Note:** The Anchor to Box option is disabled if more than one box is selected or if the current box cannot be anchored to any boxes. To align and anchor multiple boxes, select the boxes and choose Tools>Align Boxes>Anchor and Top.

4. From the drop-down list, select the box to which you want to anchor (it can be a floating box, anchored to the form, or anchored to another box.) Only boxes to the left of the current box appear in the list. Boxes are identified by their labels. Boxes without label text are identified by the first content item, shown in angle brackets, such as <field=Product>.

5. Click Apply.

6. To adjust the distance between the box(es), use the Left Offset setting on the Position tab in the Box Properties dialog box.

**Adding Textbase Fields to a Form Box**

You can select a field from the primary or secondary textbase to be added to the form box. For example, if you select a field called Title, you will see the field contents (for example, Myths and Magic) in this box when you use the form.

Fields from a secondary textbase are called linked fields and are designated by the link indicator (@). For example, the field Client name@Assignment ID is a linked field. Accessible linked fields in the textbase are listed after fields in the primary textbase in the Fields list.

**Note:** If you have selected the Sort textbase fields alphabetically check box on the Display tab of the Options dialog box (choose Tools>Options>Display), the secondary textbase fields will be interfiled with the primary fields.

Add a linked field whenever you want to see information from a secondary textbase. You cannot add linked fields unless the primary textbase contains at least one Link field.

**To add textbase fields to a form box**

1. In the Form Box Properties dialog box, select the Fields subtab on the Contents tab. From the Fields list, select the primary or secondary textbase field you want.

2. [Optional] In the If empty use box, type the text you want to appear in the form box if the field you specified is empty. For example, if the Edition field is empty, you might want the word unknown to appear. The text you specify does not appear when the field contains information. Because the text is part of the form, it does not appear when you edit a record, nor can you search for it.

3. Click Add.

The buttons on the Fields subtab perform the following actions:

- **Add.** Adds the item selected in the Fields list to the form box. The item is placed at the bottom of the Contents list and positioned last in the form box.

- **Replace.** Replaces the currently selected item in the Contents list with the item shown in the Fields list. Typically, you would select an item in the Contents list, select a field or change the data in the If empty use box, then click Replace.

**Adding Variables to a Form Box**

A variable is an item with a value that varies, unrelated to information in the record, depending on certain factors. For example, the DATE variable displays the current system date.
Some variables are intended to be used in a specific area of the form. For example, PAGE NUMBER only makes sense in the Margin Area, while RECORD NUMBER only makes sense in the Record Area. If you place a variable in the Margin Area of a form, the variable will be visible only when the report is printed.

You can change the variable's appearance by choosing Tools>Box Properties>Format and using the subtabs.

**To add a variable to a form box**

1. On the Form Box Properties dialog box, select the Variables subtab on the Contents tab.
2. Select a variable from the list. See below for an explanation for each item on the list.
3. Click the Add button to move your selection to the Contents list.
4. Click Close.

The buttons on the Variables subtab perform the following actions:

- **Add.** Adds the item selected in the Variables list to the form box. The item is placed at the bottom of the Contents list and positioned last in the form box.
- **Replace.** Replaces the currently selected item in the Contents list with the item selected in the Variables list. Typically, you would select an item from the Contents list, select an item from the Variables list, then click Replace.

**About the Variables list**

You can select one of these variables:

- **Current Date or Time.** The DATE and TIME variables display the system date and time. Use them to indicate when a report was generated or printed. To make the date and/or time appear on every printed page, place one or both variables in a box in the Margin Area. Date and time formats are controlled by the formats selected in the Regional settings of the Windows Control Panel. By default, the DATE variable appears in the short date format (for example, 7/25/2002 in the United States). You can change the format of the date (choose Tools>Box Properties>Format>Numbers, Dates), if you want.
- **Page Number.** The PAGE NUMBER variable generates page numbers in a printed report. Put the PAGE NUMBER variable in a box in the Margin Area, so it prints on every page. Each page is numbered with Arabic numerals, starting with page number 1 or another number you specify. Because the page number appears in the Margin Area, you would not include the PAGE NUMBER variable in a form not used for printing.
- **Record Number.** The RECORD NUMBER variable numbers each record sequentially in a report. The records are numbered in the order in which they appear in the report (determined by the sort order). Use the RECORD NUMBER variable in the Record Area of a form, typically in a separate box to the left of the record information.
- **Record Count.** The RECORD COUNT variable displays the total number of records in the set. Note that the count may be different than the number of records that appear in the report, if certain sort options are used. Use the RECORD COUNT variable in a Report Header or Report Footer box in the Record Area of a report form.

**Note:** When you do an exploded sort, the RECORD NUMBER counts up to the total number of records in the report, but the RECORD COUNT variable shows the number of
records in the set, so if you use these two variables together you could see something like Record 106 in a set of 53 records. In this situation, use a COUNT(1) calculation instead of the RECORD COUNT variable. (Note that this only works in Report Footers. However, you can use it in Sort Footers, but it only counts the total in the Sort Key, not the report.)

- **Textbase Name.** The TEXTBASE NAME variable displays the name of the current textbase. You may find it useful to display the textbase name in a Report Header box of a printed report. For example, a Report Header box might include the textbase name, record count, date, and search strategy.

- **Search.** The SEARCH variable displays the criteria of the search that generated the set of records in the report. The SEARCH variable is typically used in a Report Header box in a report. The SEARCH variable shows the search criteria in Command query format, regardless of whether you used the query screen or the Command query window.

Criteria typed in different query boxes appear on separate lines, for example:

```plaintext
find (Type =Letter)
and (Date >=2003-Jan-15)
```

You may want to precede the SEARCH variable with text (for example, Strategy:), which you can enter as beginning text (through the Format tab, on the Added Text subtab).

**Adding Calculations to a Form Box**

You can specify a calculation as the content of a form box. When you use the form, the software performs the calculation and displays the result in that box. Calculations operate on numeric and date information. You can also count entries in text fields.

You can use calculations to perform addition, subtraction, multiplication, and division on numeric information. Calculations can also compute averages, subtotals, and grand totals, find the highest or lowest value in a field or group of records, and supply other useful information. With dates, you can subtract two dates (to yield a number of days), or add or subtract a number from a date (to yield another date).

Case is not significant when you type the formula for a calculation. For example, if a field is called *Date Ordered*, you can refer to it as "date ordered" in the calculation. Field Functions and Record Functions are shown in this section in capital letters for clarity only.

A few examples of the many types of calculations are shown below.

<table>
<thead>
<tr>
<th>This calculation</th>
<th>Does this</th>
</tr>
</thead>
<tbody>
<tr>
<td>ordered - shipped</td>
<td>Calculates how many units are backordered by subtracting the quantity shipped (<em>Shipped</em> field) from the quantity ordered (<em>Ordered</em> field). The result is a number (such as 20).</td>
</tr>
<tr>
<td>&quot;invoice date&quot; + 90</td>
<td>Calculates when an account is overdue by adding 90 days to the first date found in the <em>Invoice Date</em> field. The result is a date (such as 10/12/2002).</td>
</tr>
<tr>
<td>MIN(price)</td>
<td>Calculates the lowest value in the <em>Price</em> field in a group of records.</td>
</tr>
<tr>
<td>FAVG(score)</td>
<td>Calculates one student's grade point average by averaging all entries in the <em>Score</em> field in the current record. The result is a number (such as 85).</td>
</tr>
</tbody>
</table>
The results of a numeric or date calculation are formatted based on the Number and Date Formats in the Regional settings of the Windows Control Panel, and the Numbers, Dates options you select for this content item by choosing Tools>Box Properties>Format>Numbers, Dates. By default, numbers appear without decimal digits, and dates appear with the short date format (for example, 7/25/2002 in the United States).

**Note:** A calculation specified in a form cannot be searched or sorted, because it is not a field. If you want to be able to search for or sort by computed information, edit the textbase structure to add a Computed Number or Computed Date field. Computed field formulas cannot include secondary fields or @DATE, like form calculations can.

### Where to Place a Calculation in a Form

You typically place a calculation in one of three box types within the form's Record Area:

- **Record box.** Use a Record box to perform a calculation on information in the current record. The calculation is performed once for each record. For example, if each order is a record, the calculation (qty * price) * (1 + tax) determines the invoice amount. Typically, a calculation in a Record box involves four-function arithmetic and, perhaps, Field Functions.

- **Sort Footer box.** Use a Sort Footer box for subtotals or other summary calculations. When you place a calculation in a Sort Footer, it appears only below the last record in the group sharing the sort key at the specified Sort Level. Typically, a calculation in this box involves Record Functions.

- **Report Footer box.** Use a Report Footer box for grand totals or other summary calculations. When you place a calculation in a Report Footer, it appears only once at the end of the report. Typically, a calculation in this box involves Record Functions.

Counts and totals for multiple field entries within the current record should be put in **Record boxes**. Counts and totals across records in a group should be put in a **Sort Footer box**. Counts and grand totals for all records in the report should be put in a **Report Footer box**.

In reports, calculations that are Record Functions operate within the current Sort Level if placed in a Sort Footer. They operate across all records if placed in a Report Footer. For example, if TOTAL(cost) is placed in a Sort Footer, and the report is sorted by product, the calculation finds subtotals by product. The result might be $300 in the Widgets category and $500 in the Gadgets category. If TOTAL(cost) is placed in a Report Footer box, the result is a grand total ($800 in this example).

### To add a calculation to a form box

1. In the Form Designer, select an existing form box or add a new box.
2. On the Form Box Properties dialog box, select the Calculations subtab on the Contents tab.
3. Type a calculation in the Calculation formula box, or click the Enlarge button to open a larger, resizable text editor dialog box instead. When you click OK on the text editor dialog box, your text appears in the Calculation formula box on the Calculations subtab automatically.
4. Click the Add button.
Calculation Components and Operators

A calculation can include one or more of the following components.

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fields</td>
<td>Any combination of fields from the primary or secondary textbases containing number or date values. A field may not contribute more than one number to a computation. If a field contains multiple entries, only the first entry is used (except in the case of Field Functions, which are intended to be used with multiple-entry fields).</td>
</tr>
<tr>
<td>Numbers</td>
<td>Any whole or fractional number, such as 3 or 1.5</td>
</tr>
<tr>
<td>Today's Date</td>
<td>The current date, specified as @DATE</td>
</tr>
<tr>
<td>Field Functions</td>
<td>FCOUNT, FTOTAL, FMIN, FMAX, and FAVG are used with fields that contain multiple entries. Follow a Field Function with a field name in parentheses.</td>
</tr>
<tr>
<td>Record Functions</td>
<td>COUNT, TOTAL, MIN, MAX, and AVG operate across records in a group. These functions are intended to be placed in a Report Footer or Sort Footer box. Follow a Record Function with a field name in parentheses.</td>
</tr>
</tbody>
</table>

To connect components in a calculation, you can use the following arithmetic operators.

<table>
<thead>
<tr>
<th>Operator</th>
<th>Used for</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Addition</td>
</tr>
<tr>
<td>-</td>
<td>Subtraction or negative numbers</td>
</tr>
<tr>
<td>*</td>
<td>Multiplication</td>
</tr>
<tr>
<td>/</td>
<td>Division</td>
</tr>
<tr>
<td>( )</td>
<td>Surrounding field names or expressions that follow functions, or grouping items</td>
</tr>
</tbody>
</table>

Calculations are performed using the algebraic order of arithmetic operations. Operations enclosed in parentheses are performed first. Multiplication (*) and division (/) are performed second. Addition (+) and subtraction (-) are performed last. Among equally ranked operations (such as multiplication and division), operations are performed from left to right. To avoid ambiguity, use parentheses to ensure that the calculation produces the desired results. For example, this calculation subtracts Cost from Price before dividing the result by the product of the Number field and 12:

```
(price - cost) / (number * 12)
```

Without the parentheses, this calculation would yield a different result, because it would divide Cost by Number, multiply the result by 12, and subtract that result from Price.

Note that a calculation interprets the result of division by zero to be zero.

Using Dates in a Calculation

When you subtract two dates, the result is a number of days. If you add or subtract a number of days from a date, the result is a date. DB/TextWorks looks for a date in a Date, Computed Date,
or Automatic Date field. In any other field, it looks for a number. Dates in any other field type are interpreted in a calculation as a number. For example, consider this calculation:

notes + 30

If the Notes field is a Text field (or any other non-date field) and it contains the date 3/10/03, the date will be interpreted as the number 3, to yield a result of 33.

Do not include a static date as part of a calculation. For example, 12/10/02 + 1 is not a valid calculation. To include dates in a calculation, reference a Date field ("date sold" + 1) or use @DATE, as explained below.

Using Today's Date

You can include @DATE in a calculation to represent the current system date. For example, if you place the calculation @DATE in a form box, that box will always show the current date. Be careful when using @DATE as part of a calculation, because the date generated changes daily. For example, @DATE + 14 yields a different date on June 1 than it does on June 2.

To generate a constant date, add an Automatic Date field to the textbase structure and specify that the entry should be updated only when the record is created (not modified). Then you can design a form that includes a calculation based on that static date. For example, the calculation "date borrowed" + 14 could be used to show the due date for a library book.

The decision to reference an Automatic Date field or use @DATE in a calculation depends on how you use your textbase, and what results you are trying to achieve.

Using Fields in a Calculation

A calculation can include any field from the primary or secondary textbases that contains a number or date. To indicate a primary textbase field, use the actual field name in the textbase. To indicate a secondary textbase field, use the @ symbol field name.

Note: The FCOUNT functions can also be used on other text information.

If a field name is a number or includes spaces, surround it with single or double quotation marks, such as '24' or "date sold" or "customer discount"@"customer phone number". In the following example, the calculation computes the customer discount amount by multiplying a field in the primary textbase (price) by the discount amount in the secondary textbase ("customer discount"@"customer ID").

price * "customer discount"@"customer ID"

If only one part of a secondary textbase field name is a number or includes spaces, you need quotation marks for that part only.

price * discount@"customer ID"

When a calculation references any non-date field, the software looks for a number at the beginning of that field. For example, in this calculation, DB/TextWorks expects to find a number at the beginning of the Price field:

price * 2

The number in the field can be preceded by a space, a currency symbol ($, £, and so on), a minus sign (-), or a left parenthesis, and it can contain an embedded thousand separator and decimal separator. The number cannot be preceded by any other characters. For example, 345 is a number, and so is $345.00, but Commission $345 is not.

If the field is empty or if it does not start with a number, zero (0) is used in the calculation.
Only one number from a field is used in a calculation. If the field starts with a number and contains other information after it, the other information is ignored. This means that only the first entry in a multiple-entry field will be used in a calculation (unless you use a Field Function). For example, DB/TextWorks sees only the number 12 in the following multiple-entry field.

12 units ordered and 8 shipped
6
10

Use a Field Function to include values from multiple entries in a field in the calculation. For example, if the Quantity field contains three entries (12, 6, 10), the calculation quantity + 5 adds 5 only to the first entry, to yield a result of 17. To add 5 to the total of all the entries in a field, use FTOTAL(quantity) + 5 to yield a result of 33.

**Using Functions in a Form Calculation**

The functions that you can use in a calculation are summarized in the following tables. Examples of how to use the functions follow the table. Functions that begin with the letter "F" are Field Functions. Functions that do not begin with "F" are Record Functions. Note that function names are shown in capital letters for clarity only. You can use any case when typing them.

**Note:** All the Field Functions are similar to Record Functions with the exception of FCOUNT and COUNT. While the other functions look only at numbers or dates in the field, FCOUNT counts all entries, even alphabetic ones. COUNT looks at nonzero numbers only.

**Field Functions**

Field Functions are used for summary calculations on the entries in a field in the current record. A Field Function must be followed by the name of a field in parentheses. For example, FMIN (price) finds the lowest value in the Price field in the current record.

<table>
<thead>
<tr>
<th>Field Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMIN(field)</td>
<td>Determines the lowest value of all entries (numbers and dates only) in the specified field for the current record.</td>
</tr>
<tr>
<td>FMAX (field)</td>
<td>Determines the highest value of all entries (numbers and dates only) in the specified field for the current record.</td>
</tr>
<tr>
<td>FAVG(field)</td>
<td>Averages all values in the specified field for the current record. Only numbers (not dates) can be averaged.</td>
</tr>
<tr>
<td>FCOUNT(field)</td>
<td>Counts the number of entries in the specified field for the current record. Can be used with textual information, as well as numbers and dates. FCOUNT used on an empty field returns a value of zero (0).</td>
</tr>
<tr>
<td>FTOTAL(field)</td>
<td>Determines the sum of all entries in the specified field in the current record. Only numbers (not dates) can be totaled.</td>
</tr>
</tbody>
</table>

**Record Functions**

Record Functions only make sense when used in a report, because they operate across multiple records in a group. A group refers to all of the records in the current report or Sort Level. See [Where to Place a Calculation](#).
Record Functions are always followed by a parenthetical expression, such as MIN (cost), which finds the lowest value in the first entry in the Cost field in all records in the current report or Sort Level.

Unlike Field Functions, the information in parentheses is not limited to a field name. It can be an entire expression. For example, AVG (FMAX (price - FMIN (price))) shows the average price spread.

Record Functions only look at the first entry in each record, unless they are combined with a Field Function. For example, the calculation TOTAL (price) only totals the first price in each record's Price field. The calculation TOTAL (FAVG (price)) totals the average price in each record.

<table>
<thead>
<tr>
<th>Record Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN (field)</td>
<td>Determines the lowest value in a group of records (numbers and dates only).</td>
</tr>
<tr>
<td>MAX (field)</td>
<td>Determines the highest value in a group of records (numbers and dates only).</td>
</tr>
<tr>
<td>AVG (field)</td>
<td>Averages numbers across a group of records (numbers only).</td>
</tr>
<tr>
<td>COUNT (field)</td>
<td>Counts the non-zero numbers in a group of records.</td>
</tr>
<tr>
<td>COUNT (1)</td>
<td>Counts all records, even if they do not start with a number.</td>
</tr>
<tr>
<td>TOTAL (field)</td>
<td>Finds the sum of the numbers in a group of records.</td>
</tr>
</tbody>
</table>

Finding the Lowest Value

Use MIN and FMIN to find the lowest number or earliest date, within the guidelines presented in the Field Function and Record Function tables.

Examples

MIN (price) finds the lowest price among first entries in the Price field in a group of records.

FMIN (price) finds the lowest price in all entries in the Price field in the current record.

MIN (FMIN (price)) finds the lowest value in any entry in the Price field in the group of records.

Finding the Highest Value

Use MAX and FMAX to find the highest value or most recent date, within the guidelines presented in the Field Function and Record Function tables.

Examples:

- MAX("order date") finds the most recent date that a product was ordered, by looking at the first entry in the Order Date field in all the records in the group. Note that a field name that contains a space must be surrounded by quotation marks.
- FMAX(contact) determines when a customer was most recently contacted.
- MAX(FMAX (contact)) finds the most recent date any customer in the group was contacted.
**Finding Averages**

Use AVG and FAVG to determine averages, within the guidelines presented in the Field Function and Record Function tables.

Note that there are several ways to compute the average value of a field. The calculation \( \text{AVG(field)} \) produces an average value across all records—even those containing no number or the number zero in the field. However, the calculation \( \frac{\text{TOTAL(field)}}{\text{COUNT(field)}} \) averages only the numbers greater than zero.

<table>
<thead>
<tr>
<th>To average:</th>
<th>Do this:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple entries in a field</td>
<td>Use FAVG. For example, place the calculation FAVG(score) in a box. If John Jones has three test scores in the Score field (80, 81, 85), the calculation will produce his average: 82.</td>
</tr>
<tr>
<td>The first (or only) value in a field in a group of records</td>
<td>Use AVG in a Sort Footer or Report Footer. For example, use AVG(price) in a Sort Footer to find the average price of records in a sort level. Use AVG(price) in a Report Footer box to find the average price of records in a set. Use AVG(price * quantity) to find the average sale amount.</td>
</tr>
<tr>
<td>All entries in a field in a group of records</td>
<td>Use AVG(FAVG (field)) in a Sort Footer or Report Footer. For example, to find the average of all entries in the Price field in the current group, use AVG(FAVG(price)).</td>
</tr>
</tbody>
</table>

**Counting Records and Field Entries**

Use COUNT to determine the number of records that start with a non-zero number in the specified field in a group of records.

Use FCOUNT to count the number of entries in the specified field in the current record, regardless of what the entry contains (text, numbers, dates). FCOUNT used on an empty field returns a value of zero (0).

Use COUNT(1) in a sort footer box to count all records in that Sort Level. Use COUNT(1) in a report footer box to count all records in the report.

**Note:** In an exploded sort, COUNT counts each occurrence of a record (a record that appears more than once in the report). So the numbers of records counted is almost always greater than the number of records in the set.

Examples:

- COUNT (price) counts the number of records that start with a non-zero number in the first entry of the *Price* field, to yield a number, such as 12. If the *Price* field in a record starts with text or does not contain a number, it is not included in the count.
- COUNT (1) counts the number of records in the report or in the Sort Level group.
- FCOUNT (author) counts the number of entries in the *Author* field in the current record.
- TOTAL (FCOUNT (author)) counts the number of entries in the *Author* field in all records in the report.
- COUNT (FCOUNT (author)) tells you how many records have at least one author.
**Producing Summary Calculations**

You typically place subtotals and similar summary calculations in a [Sort Footer box](#) and grand totals in a [Report Footer box](#). Some examples are listed below.

Examples:
- TOTAL ("total price") in a Sort Footer box totals the price of each order in the corresponding Sort Level group (for example, the total price of all orders in this Region).
- TOTAL ("total price") in a Report Footer box totals the price of all orders in the report.
- AVG (@DATE - "invoice date") in a Report Footer box shows the average age of your receivables.
- COUNT (1) in a Sort Footer box shows how many records are in that Sort Level group.

**Using Numbers in a Calculation**

A calculation can include any whole number or fraction. The number is interpreted as a value or a number of days, depending on whether the calculation references a Number or Date field. For example, consider this calculation:

```
sold + 30
```

If *Sold* is a Number field (quantity sold), the calculation adds 30 to the quantity to yield a numeric value. If *Sold* is a Date or Automatic or Computed Date field (date sold), the calculation adds 30 days to yield a date.

**Adding Fixed or Prompted Text to a Form Box**

Use the Text subtab on the Contents tab to add fixed or prompted text to a form box.

**Fixed Text**

Fixed text is text that always appears in the form box exactly as you type it in the Text box. Fixed text can include text, numbers, spaces, line breaks, and extended characters. It cannot include the Tab character.

You can combine fixed text with other content items, such as inserting Page in front of the PAGE NUMBER variable to achieve an effect such as Page 1. One space is added automatically after each content item in a box, so items do not run together. You can suppress the space by clearing Separate items or entries with spaces on the Paragraphs tab (choose Tools>Box Properties>Paragraphs).

Because fixed text is a content item, it always appears when this form is used. For example, if you place the text Written by in front of the Authors field, Written by will appear in the box even if the Authors field is empty. Compare this to added text, which does not appear if a field is empty.

For more information, see the recommendations about when to use or avoid fixed text.

You can add an unlimited number of fixed text items to a single box (type text, click Add, type new text, click Add again). Each item can be formatted individually (choose Tools>Box Properties).

**To add fixed text to a form box**

1. In the Form Designer, add a form box OR select an existing form box and choose Tools>Box Properties to open the Form Box Properties dialog box.
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2. On the Text subtab, select the **Fixed text** option button.

3. Type the text you want in the **Text** box, or click the **Enlarge** button to open a larger, resizably text editor dialog box instead. When you click **OK** on the text editor dialog box, your text appears in the **Text** box on the Text subtab automatically.

4. Click **Add**. Optionally click the **Up** or **Down** buttons on the Contents tab to position the fixed text in the Contents list.

**Prompted Text**

Prompted text is a question or an instruction, such as Enter your initials, that appears in a dialog box when you use the form. The user’s typed response to the prompt appears in the specified form box when the form is displayed, printed, and so forth.

Prompted text gives you the ability to display information that can only be obtained from the user. For example, you could prompt for the user’s initials, department, or the name of the field by which the report is sorted. If you place the form box in the Margin Area, the response appears on each page of the printed report.

**To add prompted text to a form box**

1. In the Form Box Properties dialog box, add a form box OR select an existing form box and choose **Tools>Box Properties** to open the Form Box Properties dialog box.

2. On the Text subtab, select the **Prompted text** option button.

3. Type the text you want in the **Text** box, or click the **Enlarge** button to open a larger, resizably text editor dialog box instead. When you click **OK** on the text editor dialog box, your text appears in the **Text** box on the Text subtab automatically. For example, type **Enter your initials**.

   **Note:** Avoid using the ampersand character (&), as it does not appear and the next character is underlined.

4. Click **Add**.

**To respond to the prompt when the form is used**

1. Type the requested information in the Information Needed dialog box.

2. Click **OK**.

**Added Text**

Added text is text and/or punctuation that appears with box contents when a particular form is used. For example, you can use beginning text to make the words Written by appear in front of the **Author** field: Written by John Brown.

Added text takes on the same font attributes as the content item to which it is applied, and does not appear when a content item is missing. For example, if a field is empty, its added text does not appear.

**Tip!** You can use HTML as added text to wrap around the data in the field specified as the box contents.

**To specify added text**

1. In the Form Designer, select one or more form boxes.
2. Choose **Tools>Box Properties>Format>Added Text**.

3. From the Contents list, select the item you want to format, or select `<all>` to apply the formatting to all content items in the selected box.

4. Select the type of added text you want to add, then type what you want to appear in the appropriate box, or click its **Enlarge** button to open a larger, resizable text editor dialog box instead. When you click **OK** on the text editor dialog box, your text appears in the appropriate box on the Added Text subtab automatically.

5. Click **Apply**. Then click **Close**.

You can add the following type of text:

- **Beginning text.** Type text or punctuation to appear before the content item. Include a space at the end of the beginning text if you want a space before the information that follows. If a field contains multiple entries, beginning text precedes only the first entry. If beginning text is added to an item that is also numbered, item numbering starts immediately after the beginning text. (To align numbered items in a list in this situation, press **Enter** at the end of the beginning text.)

  **Tip!** To enclose an item in parentheses, use beginning text to add a left parenthesis in front of the item, and ending text to add the right parenthesis after the item.

- **Ending text.** Type the text or punctuation you want to appear after the content item. Ending text is commonly used to add commas between several items in a box. If the content item is a multiple-entry field, the ending text follows only the last entry. If the field is empty, the ending text does not appear. If you want spaces between the text and the information that precedes it, include a space before the ending text (type a space as the first part of the ending text).

  For example, if a box contains several address fields (for example, *Street, City*), you can use ending text to add commas after each field:

  254 Elm Street, Anytown, VT

- **Ending punctuation.** Type punctuation to appear after the content item. A common use is to add a period at the end of a field. If a content item already ends with punctuation, the ending punctuation does not appear. This avoids duplication of punctuation and is what distinguishes ending punctuation from ending text (which always appears after non-empty fields).

  **Example:**

  Two book titles appear as follows, before any formatting is applied (the exclamation point is part of the record information):

  Let's Learn French!
The Case of the Missing Scarab

  If you specify a period as ending punctuation, the result is as follows. Notice that the period is **not** added after the existing punctuation:

  Let's Learn French!
The Case of the Missing Scarab.

  **Ending punctuation always appears before ending text.**

- **Separator text.** Use separator text to visually distinguish between multiple entries in a field. The separator text that you specify follows each entry except the last. If a field has
only one entry, the separator text does not appear. Separator text appears only for
fields, not for other content items.

Type the text or punctuation you want in the Separator text box. A comma or semi-
colon is commonly used to separate entries when No added paragraph breaks is
selected from the Paragraph breaks drop-down list. For example, if your field appears
like this without separator text:

Red Yellow Blue

You can use a comma and space as the separator text to make the entries appear like
this:

Red, Yellow, Blue

Separator text appears regardless of paragraph breaks. For example, if the Paragraph
breaks drop-down list is set to Make each item or entry a paragraph, the entries would
appear like this:

Red,
Yellow,
Blue

Separator text can be a combination of text and punctuation. For example, a space
followed by the word and and another space looks like this:

Red and Yellow and Blue

Using HTML as Added Text

You can use HTML as beginning, ending, and/or separator text on forms designed for use with
DB/Text WebPublisher. Use HTML to wrap around the contents of a form box.

For example, you can create a hyperlink on your form that, when clicked, will display an image
from a field containing an image file name. (The image will correspond to the record being
displayed in the form.) To do this, type the following HTML code in the appropriate boxes on the
Added Text subtab of the Format tab on the Form Box Properties dialog box.

```html
<a href="http://images/kitten.jpg">Click here</a>
```

Beginning text  |  Image name  |  Ending text

Note: The ending text begins with the closing quotation mark for the Image name.

More about Separator Text

Here are some hints and tips about specifying separator text as added text.

In the Edit window, multiple entries are separated by the field entry delimiter specified in
Tools>Options>Display.

If you do not specify separator text, a single space separates entries in display windows and
reports when the Paragraph breaks drop-down list is set to No added paragraph breaks
(choose Tools>Box Properties>Paragraphs and accept the default setting of one space
between content items).

To get a blank line between entries, press Enter twice.
You can use separator text to create a check list effect before each entry. Select **No added paragraph breaks**, from the **Paragraph breaks** drop-down list to specify an underbar (_) as beginning text, and specify a line break (press **Enter**) and an underbar (_) as the separator text:

__ M. Pierce
__ R. LaCivita
__ N. Chen

Adding Text and Punctuation to Field Information

There are several ways to add text and punctuation to field information in a form:

- Define it as fixed text (**Tools>Box Properties>Contents>Text**).
- Define it as added text (**Tools>Box Properties>Format>Added Text**).
- Add it as a box label (**Tools>Box Properties>Labels**).

Each method can be useful, depending on your purpose, as shown in the table below:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Fixed text (Content)</th>
<th>Added text (Format)</th>
<th>Box label (Labels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text will disappear if the field is empty</td>
<td>No</td>
<td>Yes</td>
<td>Yes*</td>
</tr>
<tr>
<td>No space between text and the field</td>
<td>Yes**</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Text will be a different font or color than the field</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>The fixed text will be visible in editable boxes in an Edit form</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Text and boxes for multiple boxes will be aligned</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*The box label will disappear only if the box is empty and the minimum box height is 0 lines.

**Use fixed text only if you have cleared the **Separate items or entries with spaces** check box on the Paragraphs tab in the Box Properties dialog box.

Using fixed text

Use **fixed text** (choose **Tools>Box Properties>Contents>Text**) when you want to specify text that should always appear in a form box, such as the title of a printed report. You can also use fixed text when you want the text to be a different font from the other box contents and using a box label is not appropriate. In the following example, the words and punctuation Record ID: are a normal font, while the Record ID field is a bold font.

**Record ID: 0123**

Be careful when using fixed text to specify punctuation, because a space is inserted by default between content items. For example, if you specify parentheses as fixed text around the **Title** field, there will be spaces between the parentheses and the title.

( The Sun Also Rises )
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To avoid this extra space, use text formatting (choose Tools>Box Properties>Format>Added Text) instead to add the parentheses; or choose Tools>Box Properties>Paragraphs and clear the Separate items or entries with spaces check box.

Fixed text always appears, even if other content items in the same box do not appear. For example, if you specify parentheses as fixed text around the Title field, and the Title field is empty for a record, the form box will display empty parentheses.

( )

A box that contains fixed text will never disappear (even if its minimum height is set to zero), because it will never be empty.

Using added text

Use added text (choose Tools>Box Properties>Format>Added Text) when you want to add text or punctuation that appears only when the field contains information. When the field is empty, the added text does not appear. For example, you may not want the words Written by to appear if the Author field is empty.

Added text has the same font as the content item it modifies. Any formatting, except the font, that you add (including text or punctuation) temporarily disappears while you are editing a record, to make the record content easy to identify. For example, if you insert Due Date: in front of a field, those words disappear while you are editing the record. When you display the record in a non-Edit window, the formatting appears again.

Tip! You can use HTML as added text to wrap around the data in the field specified as the box contents.

Using a box label

To identify what is in a field, you can use a box label (choose Tools>Box Properties>Labels) as an alternative to fixed text or added text. A box label is the method that should be used in the Edit window when one or more of the following conditions exist:

- The field is the only content item in the box or the label is appropriate for everything in the box.
- You want the label text to appear in a different font or color than the content.
- You want both the label text and box contents for a series of boxes to be aligned (for example, the box labels will be aligned right and the box contents will be aligned left.

<table>
<thead>
<tr>
<th>Label</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Leslie Jaynes</td>
</tr>
<tr>
<td>Address</td>
<td>144 Maple Ave.</td>
</tr>
<tr>
<td>City, State, ZIP</td>
<td>Newtown, Mississippi 62541</td>
</tr>
</tbody>
</table>

- You want the label text outside the box border, if a border is present.

If you use a box label to add text or punctuation, and the minimum box height is set to zero, the box label disappears when the field is empty in a non-Edit window.

Adding Column Headings to a Form

You can add column headings to any form. For non-tabular forms, column headings are typically text boxes or form boxes containing text. For tabular forms, use box labels. The design
of your form determines where you place the column headings. Typically, you would add column headings after you add and size the corresponding Record boxes.

<table>
<thead>
<tr>
<th>To place a column heading:</th>
<th>Do this:</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the top of every printed page</td>
<td>Add a text box in the Margin Area</td>
</tr>
<tr>
<td>At the top of the first page only or at the beginning of a displayed report</td>
<td>Add a text box in the Record Area and convert it to a Report Header box.</td>
</tr>
<tr>
<td>At the top of a tabular form</td>
<td>Use box labels (Tools&gt;Box Properties&gt;Labels).</td>
</tr>
</tbody>
</table>

Consider the form usage when planning column headings. If you place a column heading in a Margin box in the Margin Area, it will appear on every page of a printed report. Column headings placed in the Margin Area do not appear if the same form is used in the Report window, for Send Report as Mail, and so forth. If you place a column heading in a Report Header box, it will appear once at the beginning of the report. If you create a column heading using a box label in a tabular form, it will appear once at the beginning of the displayed report, or at the top of each printed page.

**Tip!** In a tabular form, the box labels are the column headings. They print on every page.

**To create column headings on every printed page (non-tabular forms)**

1. The Margin Area must be visible and active. To show it, choose Report Options>Show Margin Area. To activate it, choose Report Options>Work in Margin Area.
2. Click the Add Text Box button on the toolbar or choose Edit>Add>Text Box.
3. On the Text Box Properties dialog box, type a column heading in the Text box. Click Apply.
4. Move and size the box, as needed.
5. Repeat steps 2–4 for each column heading you want to add.
6. Format the box contents using the tabs of the Box Properties dialog box.
7. Click Apply, then Close.

**Tip!** To help align boxes for column headings, select the boxes at the top of all columns in the Record Area, copy them (Edit>Copy), switch to the Margin Area, and paste the boxes. Then, change the contents of each box.

**To create column headings at the top of the first printed page or displayed report**

1. The Record Area must be active. To activate it, choose Report Options>Work in Record Area.
2. Choose Edit>Add>Text Box to add a text box and open the Text Box Properties dialog box.
3. On the Text tab, type a column heading in the Text box. Click Apply.
4. Choose Report Options>Headers and Footers to open the Headers and Footers dialog box.
5. From the Header/Footer list, select Report Header.
6. Click the Change to Header/Footer button.
7. Move and size the box, as needed.
8. Repeat steps 2–7 for each column heading you want to add.
9. Format the box contents using the other tabs of the Box Properties dialog box.

**Underlining Column Headings**

You may want to underline text, especially when creating column headings. By default, an underline is length of the text. However, you can use spaces to extend the underline beyond the text in either direction.

**To underline text**
1. Select the box.
2. Choose **Tools>Box Properties** to open the Form Box Properties dialog box.
3. On the Font, Color subtab of the Format tab, click the **Set Font** button to open the Font dialog box.
4. Select the **Underline** check box in the Effects group, then click **OK**.
5. Click **Apply**, then **Close**.

**Note:** For tabular forms, to underline the column headings, choose **Tools>Box Properties>Labels**, then click the **Set Font** button and follow steps 4 and 5 above.

**To extend an underline beyond the text**
Follow the steps to create column headings, except when you type the column heading, use the spacebar to add spaces before and/or after the text. As a result, when you apply the underline, it will extend to include the spaces you add.

**Tip!** If you have used form boxes for column headings, you can avoid having to count the exact spaces to the edge of the box. Choose **Tools>Box Properties>Position**, set the **Maximum height** to 1, and then type several spaces. This setting will cause any spaces that wrap to the next line to be truncated.

**Formatting Numbers and Dates**

You can control the appearance of numbers and dates at the beginning of content items. The selected content item's field type (Date or Number) determines whether you see date or number formatting options on this subtab.

**To specify number or date format**
1. In the Form Designer, select one or more form boxes. If you want to apply date formatting, you must only select one box.
2. Choose **Tools>Box Properties>Format>Numbers, Dates**.
3. From the Contents list, select the item you want to format, or select **<all>** to apply the formatting to all content items in the selected box. Note that if you select **<all>**, you will only be able to select number formatting options.
4. Select formatting options.
5. Click **Apply**, then **Close**.
Number format group

The options in the Number format group affect how all numbers appear in the selected content items. The formatting options for numbers are only enabled if the selected content item is not a date (that is, not a Date field, Automatic Date field, or Computed Date field; a DATE variable; or a date calculation).

Note: The characters used for the decimal and thousand separators are determined by the Number Format selected in the Regional settings of the Microsoft Windows Control Panel.

Use the Number format drop-down list to specify the formatting options you want.

- **None.** Numbers appear exactly as they were entered into the textbase, along with any other text formatting options you specify. By default, calculations and variables appear without decimal digits.

- **Currency.** All numbers in the field appear as currency (as shown in the Examples box). Note that the Omit text check box is enabled when you select Currency from the Number format drop-down list. Select the Omit text check box if you do not want trailing text (text that follows the number) to appear. If you select this option and the field contains text but no value, zero currency appears in the form box. For example, a field that contains only the text Letter of Credit appears as $0.00 in the form.

The characters used for the currency symbol and decimal/thousand separators are determined by the Currency and Number Formats selected in the Windows Control Panel at the time you start the software. For example, the number 75.5 could appear in U.S. dollars as $75.50 or in French Francs as 75,50 F.

- **Number.** Specify the following options to determine how numbers appear:
  - **# of decimal places.** Type a number to indicate how many decimal places you want to display after the decimal point. For example, 2 causes the number 25.5 to appear as 25.50. If there are too few decimal places, numbers will be rounded when necessary. For example, if you request zero (0) decimal places, 25.4 becomes 25. The default is 0 decimal places.
  - **Negative numbers use.** From the drop-down list, select the option that indicates how you want negative numbers to appear: leading minus sign, trailing minus sign, or enclosed in parentheses.
  - **Thousand separators.** Select this option if you want numbers to include a thousand separator, such as a comma, in the appropriate place. For example: 1,523.
  - **Include leading zero in decimal.** Select this option if you want a zero to appear before a number with only decimal digits. For example, .75 appears as 0.75.
  - **Omit text.** Check this box if you do not want trailing text to appear. If you select this check box and there is no number in the field—only text—a zero appears in the form box. For example, if the field only contains the text none, and this option is selected, a zero (0) appears in the form box instead.

Date format group

Date format options are enabled only for a Date field, Computed Date field, Automatic Date field, the DATE variable, or a calculation that results in a date. The available date formats are based on the Date Format selected in the Regional settings of the Windows Control Panel.
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Note: If you select multiple boxes or select *<all>* from the Contents list, the Numbers, Dates subtab shows number formatting options. If you want to format multiple date fields, format each field individually.

- **Date format.** Select the date format you want from this drop-down list. Dates in the field will appear as shown in the Example section of the dialog box.
  - **None.** Dates appear exactly as they were entered into the textbase, along with any other text formatting options you specify, and the DATE variable appears with the short date format (for example, 7/5/2002 in the United States).
  - **Short.** Dates appear numerically (for example, 7/5/2002 in the United States).
  - **Long.** Dates appear in the long date format with the day included (for example, Monday, July 05, 1999).
  - **Long without day.** Dates appear in long date format without the day included (for example, July 05, 1999).
  - **Omit text.** Select this check box if you do not want trailing text to appear. If you select this check box and there is no recognizable date at the beginning of the field—only text—an asterisk appears in the form box. For example, if the field only contains the text unknown, an asterisk appears in the form box instead.

The Example section of the dialog box shows how dates will appear. Note that the formats are based on the format selected in Regional settings of the Windows Control Panel. For example, if a day-month-year format is selected, the DB/TextWorks **Long** date format would display with days and months written out, such as Friday, 14 March 2003 and the **Short** date format would display numerically, such as 03/14/2003. Use the Control Panel settings to specify exactly how you want long- and short-format dates to appear.

Formatting Paragraphs

You can apply paragraph formatting settings to text in form and text boxes. For form boxes, use the settings on the Paragraphs tab of the Form Box Properties dialog box to specify paragraph formatting options. For text boxes, use the Font, Color tab of the Text Box Properties dialog box to specify a justification option.

Before you begin formatting paragraphs, you may want to:

- Define the box contents (choose **Tools>Box Properties**).
- View actual record information. On the Display menu, if there is a **View Records** option, select it. If it is present but not available, you have to perform a search first. If the menu has a **View Content** option, you are already viewing records.
- Note that the distance between records is controlled by the **Tools > Form Properties** dialog.

**To apply paragraph formatting to a form box**

1. Select a form box and choose **Tools>Box Properties** to open the Form Box Properties dialog box.
2. On the Paragraphs tab, specify formatting settings:
   - **Paragraph breaks.** Select an option from this drop-down list to specify how paragraphs in the form box are presented (for example, as is, with a paragraph
break after each content item or field entry, or after each word). Select or clear the
**Separate entries or items with spaces** check box to specify whether multiple
items in a paragraph should be separated with spaces by default.

- **Justification.** Select **Left**, **Center**, or **Right** from this drop-down list to specify
  paragraph justification. The default is **Left**.
- **Indent first line by.** Specify a value to indent or outdent the first line of each
  paragraph. The default is zero.

**Note:** These options affect all paragraphs in the selected form box.

3. Click **Apply**.

**To apply paragraph formatting to a text box**

1. Select a text box and choose **Tools>Box Properties** to open the Text Box Properties
dialog box.
2. On the Font, Color tab, select an option (**Left**, **Center**, or **Right**) from the **Justify text**
drop-down list.
3. Click **Apply**.

**Formatting Text in Form Boxes**

You can apply different formatting to every content item in a form box. For example, if a form
box contains two fields, you can use different font and color settings for each field. However,
form box text formatting is not just about fonts and colors. You can add text, such as the word
Written by in front of the **Author** field; and punctuation, such as parentheses around the **Date**
field. You can also specify numbering options and date and currency options.

**To format form box text**

1. In the Form Designer, select one or more boxes.
2. Choose **Tools>Box Properties>Format**.
3. From the Contents list, select the item you want to format, or select **<all>** to apply the
   formatting to all content items in the selected box.
4. Select a subtab:
   - **Numbering.** Number each of the field entries or content items.
   - **Font, Color.** Change the font, color, and case for the selected item(s). The same
     attributes will be applied to any added text. Select box background color, which
     applies to the box as a whole.
   - **Numbers, Dates.** Specify a number or date format.
   - **Added Text.** Specify text and/or punctuation to precede or follow an item; and
     specify separator text (such as a semicolon) to appear between multiple entries in a
     field.
5. Click **Apply** to save changes, and **Close** to close the dialog.
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Formatting Text in Text Boxes
You can apply different formatting to text box content, as well as change the background color of the text box for impact. Use the Font, Color tab on the Text Box Properties dialog box (choose Tools>Box Properties) to specify font attributes, text box border display, text box background color, and justification settings for text box content.

Font attributes can affect the height of text boxes, so it is most efficient to decide on a font early in the form design. Before designing a new form, you may want to choose Tools>Options>Display and set the default fonts. Default fonts determine how new forms appear. They do not affect existing forms.

To format text in text boxes
1. In the Form Designer, select one or more text boxes.
2. Choose Tools>Box Properties to open the Text Box Properties dialog box.
3. On the Font, Color tab, specify the text and box background formatting options you want in the Text attributes group. The options are explained below.
4. Click Apply.

Text attributes group
- **Set Font.** Click the Set Font button to open the Font dialog box and specify the font, style, size, and color you want used for text. Click OK to close the Font dialog box.
  
  **Note:** The fonts that appear in the Font list depend on the currently selected printer. Printer fonts are preceded by a printer icon. If you choose a printer font, and subsequently use the form to print to a different printer which does not support that font, the report may not appear as you expect. To change your printer selection, choose File>Print Setup.

- **Show border.** Select this check box to display the text box border.

- **Background color.** Select this check box to choose a color to use for the form’s background. Click the Select Color button to specify the color (including custom colors). Use this option if you always want the form to use the specified color, regardless of any colors specified using Tools>Options>Display>More Defaults>Colors.

- **Justify text.** Use the Justify text drop-down list to justify text within the text box. If you find that you regularly justify text, you can add the appropriate text justification button to the toolbar by choosing Tools>Customize Toolbar>Current Window.

  **Tip!** To center a title on a form, type the text you want as the title in the text box, and choose Tools>Align Boxes>Center.

Formatting Text in Script Input Boxes
You can apply different formatting to script input box content, as well as change the background color of the script input box for impact. Use the Font, Color tab on the Script Input Box Properties dialog box (Tools>Box Properties) to specify font attributes and background color.

Font attributes can affect the height of script input boxes, so it is most efficient to decide on a font early in the form design. Before designing a new form, you may want to choose Tools>Options>Display and set the default fonts. Default fonts determine how new forms appear. They do not affect existing forms.
To format text in script input boxes

1. In the Form Designer, select one or more script input boxes.
2. Choose Tools>Box Properties>Font, Color.
3. Use the options on this tab to format the text and box background color.
4. Click Apply.

Text attributes group

- **Set Font.** Click Set Font to specify the font, style, size, and color you want used for text. Click OK to close the Font dialog box. To see the font you specified for your script input box, type some text into the box. A script input box is the only box type that lets you type text into it while in the designer.

  **Note:** The fonts that appear in the Font selection list depend on the currently selected printer. Printer fonts are preceded by a printer icon. If you choose a printer font, and subsequently use the form to print to a different printer which does not support that font, the report may not appear as you expect. To change your printer selection, choose File>Print Setup.

- **Background color.** Select this check box to choose a color for the background of a script input box. Click the Select Color button to specify the color (including custom colors). Use this option if you always want the form to use the specified color, regardless of any colors specified using Tools>Options>Display>More Defaults>Colors.

To format the label text used on a script input box, see the Labels tab on the Script Input Box dialog box or choose Tools>Box Properties>Labels.

Formatting Text on Script Buttons

You can type any text you want on script buttons, as well as format the text.

To format script button text

1. In the Form Designer, select a script button.
2. Choose Tools>Box Properties>Caption.
3. In the Caption box, type the caption as you want it to appear on the script button, to a maximum of 50 characters.
4. Click Set Font to specify the font, style, and size you want. If multiple buttons with different caption fonts are selected, the Font selection list is empty and the other settings show the default values. Click OK to close the Font dialog box.
5. Click Apply, then Close.

Paragraph Breaks

To access this option, select one or more form boxes in the Form Designer, and choose Tools>Box Properties>Paragraphs. The Paragraph breaks drop-down list specifies how multiple field entries or content items appear in a form box.

**Tip!** If the options do not seem to work as expected, it could be because the record includes line breaks inserted with the Enter key. Open the record in the Edit window to see if there are any unwanted line breaks, and remove them. You can see where line breaks occur in the data.
because the next line is **outdented** without a bullet character, which indicates a new entry, or the entry ends with a blank line, which looks like a blank line after the text.

Select one of the following options from the **Paragraph breaks** drop-down list:

- **No added paragraph breaks.** Do not add any line breaks between content items or multiple entries. For example, three entries in a field would appear like this:
  
  Brick Stucco Concrete

  **Note:** This option does not remove line breaks that exist in the record information or that were added with added text, so entries or content items still may appear in a vertical list.

  To help distinguish between entries when you use this option, choose **Tools>>Box Properties>>Format>>Added Text** and specify separator text, such as a comma and space:

  Brick, Stucco, Concrete

- **Separate items or entries with spaces.** When you choose **No added paragraph breaks** from the **Paragraph breaks** drop-down list, this check box is enabled. Select the **Separate items or entries with spaces** check box to specify that items in a paragraph be separated with spaces. (This is the default choice.) If separator text is specified as **added text** between entries, this option is ignored. When this check box is cleared, no additional spacing is added between entries. The ability to suppress spaces between fields is particularly useful if you want full control over their appearance. For example, you may want to show a file path from one field next to a file name from another field with no added space between them.

  Another example of this feature is when you want to format two fields in the same box and need added text and space formatting to define their relationship. For example, you may want the **Title** and **Subtitle** fields in the same box so they display results as **Title: Subtitle**, with a colon preceding the **Subtitle** field and no space preceding the colon. However, you do not want the colon to appear at all if there is no subtitle. To do this, select **No added paragraph breaks** and clear the **Separate items or entries with spaces** check box. Add a colon followed by a space to the **Subtitle** field as beginning text (**Format>>Added Text**).

  School Reform: What It Means to You and Your Child

  **Tip!** This option is also useful when formatting text that will be interpreted as HTML, especially "canned queries" or any text where spacing (or lack thereof) is important.

- **Make each item or entry a paragraph.** Add a break after each content item or field entry in the form box. This can be useful for generating a list, such as in the following example:

  Brick
  Stucco
  Concrete

- **Make each word a paragraph.** Place each word in the form box on a separate line. This is useful when for printing information such as Library of Congress classification numbers in a columnar format. If you want two words to stay together on a line, connect the words with a non-breaking space (**Alt+0160**).
Paragraph Indentation
To access this option, enter the Form Designer, select one or more form boxes, and choose Tools>Box Properties>Paragraphs.

In the Indent first line by box, enter a positive value to indent the first line of each paragraph in the selected form box. This is a good choice for blocks of text, such as long paragraphs (from the Paragraph breaks drop-down list, select No added paragraph breaks).

If you want to outdent the first line of each paragraph (hanging indentation), enter a negative value in the Indent first line by box. This is a good choice for lists (from the Paragraph breaks drop-down list, select Make each item or entry a paragraph). It is also useful for numbered lists (when using the Numbering subtab on the Format tab).

The unit of measure is based on the Horizontal units setting (choose Tools>Form Properties>General).

Paragraph Justification
To access this option, in the Form Designer, select one or more form boxes, then choose Tools>Box Properties>Paragraphs. The justification option that you select affects all paragraphs in the selected form box.

Left
Left justification is commonly used for text. This paragraph is left justified.

Right
You can use Right justification to align numbers:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>1,000</td>
<td></td>
</tr>
</tbody>
</table>

Center
You can use Center justification for report titles and column headings. This paragraph is center justified.

Note: To justify text in text boxes, select the text box and choose Tools>Box Properties>Font, Color. Select an option from the Justify text drop-down list.

Numbering Entries and Items in Form Boxes
You can number field entries or content items within a form box, using Arabic or Roman numerals or letters of the alphabet. A period and a non-breaking space are automatically included after the number or letter. Numbering always starts with 1 or A. Numbers or letters appear even if the box includes only one entry or item.
To specify numbering settings
1. In the Form Designer, select one or more form boxes.
2. Choose Tools>Box Properties>Format>Numbering.
3. From the Contents list, select the item you want to format, or select <all> to apply the formatting to all content items in the selected box.
4. Select numbering options, then click Apply and Close.
   - **Item numbering.** Use this drop-down list to specify the format in which you want numbering to appear. Item numbering always starts with 1 if numbered numerically, or with A, if numbered alphabetically.
   - **None** (entries are not numbered)
   - **1, 2, 3** (Arabic numerals)
   - **I, II, III** or **i, ii, iii** (uppercase or lowercase Roman numerals)
   - **A, B, C** or **a, b, c** (uppercase or lowercase letters of the alphabet)
   - **Continuous numbering across content items.** Select this check box to have numbering continue across content items. The following example shows the effect of continuous and non-continuous numbering on a box that contains two fields, *Dogs* and *Cats*.

<table>
<thead>
<tr>
<th>Continuous</th>
<th>Non-Continuous</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Doberman</td>
<td>1. Doberman</td>
</tr>
<tr>
<td>2. Rotweiller</td>
<td>2. Rotweiller</td>
</tr>
<tr>
<td>3. Poodle</td>
<td>3. Poodle</td>
</tr>
<tr>
<td>4. Siamese</td>
<td>1. Siamese</td>
</tr>
<tr>
<td>5. Manx</td>
<td>2. Manx</td>
</tr>
</tbody>
</table>

**Numbering Records in Forms**
To include numbers (1, 2, 3) before each record in a report, add the `RECORD NUMBER` variable in a box in the Record Area of a form. The records are numbered in the order in which they appear in the report, determined by the sort order. An exploded sort (which can include a record more than once) numbers each instance of a record, not just each record.

You can place the RECORD NUMBER variable in the same box as the record information. However, if you want to right-justify the numbers or align the subsequent information (as shown in the following example), put the variable in its own box.

1. Aluma Streetstar 82 (version 1.0A)
2. The Desmond DesertKraft (version 2.0A)
3. Lady Blue Sailboat (version 1.0C)

**To number records in a report**
1. Choose Report Options>Work in Record Area. (If the command does not appear on the menu, you are already working in the Record Area.)
2. Choose Edit>Add>Form Box to add a form box for the record number. The Form Box Properties dialog box opens. Omit this step if you want the record number to be in the same box as the record information.
3. On the Contents tab, select the Variables subtab. From the Variables list, select **RECORD NUMBER** and click **Add**.

4. Choose **Tools>Box Properties>Labels** and make sure the **Label** and **Border** check boxes are cleared.

5. If you added a box to hold the record number, **position it** to the left of the box that contains the record information. Select both boxes and choose **Tools>Align Boxes>Anchor and Top**.

6. [Optional] Select the box that contains the **RECORD NUMBER** variable. Choose **Tools>Box Properties>Paragraphs** and select **Right** from the **Justification** drop-down list.

7. [Optional] Add a period as ending punctuation after the **RECORD NUMBER** variable using the **Added Text** subtab on the **Format** tab.

**Numbering Pages**

You can number pages in a report by adding a box anywhere in the Margin Area and specifying its contents as the **PAGE NUMBER** variable. Each page is numbered with Arabic numerals, starting with 1. To change the starting page number, choose **Report Options>Set Up Page**.

You can choose **Tools>Box Properties>Format** and use the subtabs to change the appearance of the number (for example, you can change the font or add **fixed text**, such as Page, before the page number).

If you open the Basic Report form, a box for the page number appears automatically at the bottom of the page in the Margin Area. You can change the appearance of this page number, or you can delete the box.

**To add a page number in the Margin Area.**

1. Choose **Edit>Add/Form Box** or click the Add Form Box toolbar button.

2. On the Form Box Properties dialog box, select the Contents tab and do the following:
   - Select the Variables subtab.
   - From the Variables list, select **PAGE NUMBER**.
   - Click **Add**.

3. Use the tabs on the Form Box Properties dialog box to **format the box and its contents**.

**To add the word "Page" before a page number**

1. Select the box containing the page number. If the box is at the bottom of the page, use either the **Tab** key, **Edit>Go To Box**, or the vertical scroll bar to locate it.

2. Choose **Tools>Box Properties** to open the Form Box Properties dialog box.

3. On the **Format tab**, select the Added Text subtab and type **Page** in the **Beginning text** box. Note that if you want a space after the word or any punctuation, you should include it.

   **Tip!** If you want to surround the page number with text, such as a dash before and after the number (-1-), enter the preceding dash as beginning text and the succeeding dash as ending text.

4. Use the tabs on the Form Box Properties dialog box to **format box contents**.
5. Click **Apply**.

**To delete the page number box**
- Select the box containing the page number and press the **Delete** key on the keyboard or choose **Edit>Delete Box**.

### Designing Tabular Forms

Design a tabular form to present information as a table, in rows and columns. Each row in the table represents a record. Each column represents a field. Each cell in a row contains one or more fields or other content items (variables, calculations, and so forth). Use tabular forms to display a summary of records found by a search, showing just a little information from each record: **Author**, **Title**, **Subject**, **Date**.

**Tip!** Tabular forms are especially useful for forms that will be used on the Web with WebPublisher PRO.

### Creating a Table

1. Outside of the Form Designer, choose **Display>Design Form**, or from within the Form Designer, choose **Form Operations>Open Form**.
2. From the Start With list, select **New Tabular Form**.
3. On the **Choose Initial Tabular Form Fields** dialog box, specify which fields you want to include in the table, by moving fields from the Available Fields list to the Initial Fields list.
4. Click **OK**.

A table appears, consisting of the fields that you selected. Within the Form Designer, a table consists of one row, which represents one record. The row contains multiple cells, each of which contains a content item (a field, a variable, fixed text, and so forth). Rows are records. Columns are fields. When you use the form, the table will consist of multiple rows, each of which represents a record retrieved.

### Adjusting Table Appearance

For the most part, use the Form Designer options as you would to design a non-tabular form. For example, to change the size of a cell in the table, click a cell and choose **Tools<Box Properties>Position**. To add a cell to the right of the selected cell, choose **Edit>Add** and click the type of box you want to add. To delete a cell, choose **Edit>Delete Box**. You can drag a box to a new horizontal position using the mouse.

Note that tabular forms are available only for reports, which do not permit scrolling within a box. Therefore, choose **Tools<Box Properties>Position** and specify a **Maximum height** large enough to accommodate a reasonable amount of text.

To add column headings, choose **Edit>Select All<Form Boxes**, then choose **Tools<Box Properties>Labels**. From the Show group, select the **Label** check box and click **Apply**. Default label text is used. To change the text, select an individual cell then use **Tools<Box Properties>Labels**.

Form Designer options that are not supported in a table have been removed from the menus or disabled. For example, you cannot specify tab order, or that a tabular form be used for single record display or editing.
Designing Tabular Forms for Use on the Web

If you have WebPublisher PRO, you can design tabular forms for Internet/intranet use. Here are some issues specific to use on the Web:

- Choose Tools>Form Properties>HTML to specify attributes for forms used on the Web or File>Write Report to File or File>Send Report as Mail in HTML format. These options are ignored for forms used on the desktop.
- Choose Tools>Box Properties>HTML to treat the contents of a particular field as hypertext links. Each entry in the specified field generates a separate link.
- Box width is ignored in the Web browser. The browser expands the width of each cell as necessary.
- An important, though optional, part of designing a tabular form for the Web is to give the user a way to see a detailed view of each record. Choose Tools>Box Properties>HTML and select Expand record link from the Treat content item as drop-down list.
- To include images in a table, use a picture box (choose Edit>Add>Picture Box). An alternative method of including images in a table is to specify the contents of a particular cell as the Image field that holds the image you want to display (images should be in a format supported by the Web browser, such as JPEG or GIF). Images included in a table can be displayed inline or as a link, depending on the Treat content item as setting (choose Tools>Box Properties>HTML). For more information about images on the Web, see the WebPublisher PRO: Images topic.
- For related information, see WebPublisher PRO: Form Design Tips.

Designing Labels - Overview

You can create a variety of labels, such as address, shipping, file folder, rotary card, library catalog card, book label sets, or any custom, user-defined format. DB/TextWorks includes many blank label formats reflecting the dimensions for various stock numbers from numerous companies, including Avery, Gaylord, and University Products. To design custom labels, open a blank label format, change the layout, and save it under a new name.

Important! When you first open the Form Designer to design a new label or label set, DB/TextWorks displays internal lines in the Form Designer window, indicating the layout and location of the new label(s). These lines only appear this one time, during the first layout session, so it is very important that you lay out the boxes you want to use during this first design session.

You can design the following types of labels:

- Standard Label and Card Forms
- Customized Label and Card Forms
- Label Sets

Designing Label and Card Forms

To design label and/or card forms, open a New Label Form in the Form Designer, add boxes, and define the box content. The boxes that you define are used for all labels or cards on the page. The Form Designer window represents one label (or card).
Designing Forms

A black border indicates the outside edge of a single label or label set. For multi-label sets, inner lines also appear to show dimensions of each label in the set. These inner lines are available only for new label forms when you first open the Form Designer. Therefore, you should lay out all the boxes before closing the new form.

When to Use One Box versus Multiple Boxes

Because DB/TextWorks fields are unlimited in length and can include multiple entries and information which exceed the label height (and are cut off), designing a label form involves some planning. Issues to consider include:

- What type of box (or combination of boxes) to use. Form boxes, text boxes, and picture boxes are all perfectly acceptable on labels.
- Whether to use one box or multiple boxes for the label information.
- Whether to set a maximum height for each box.

For example, if any of the fields you are adding to a box have multiple lines of information, such as the Address field, you may want to put those fields in separate boxes, and set a maximum height for each box, such as 2 lines. This will prevent the information in one field from growing and possibly causing information in another field at the bottom of the label to be truncated. If you use multiple boxes, you should set the minimum height of each box to zero (0) lines, so that empty boxes do not appear. You should also set the Top Offset of all boxes, except the first, to zero (0), so that the maximum amount of information can fit onto the label.

If you are sure that the information in your label will not exceed the label height, you can place all fields in one box. Note that whatever does not fit on the label when it is printed is omitted.

To design a label or card

1. Open the Form Designer by choosing Display>Design Form.
2. On the Open Form dialog box, from the Start With list, select New Label Form.
3. From the Stock Number list, select the label format you want to use (for example, Avery 5662), then click OK.

   The Form Designer window opens and displays a black border indicating the label’s height and width. For multi-label sets, the inner lines are displayed only for new label forms. If you close the Form Designer and open the form to edit it at a later date, the inner lines will not appear. The lines for the outer box, however, are always displayed.
4. Add one or more boxes, define and format the box content.
5. Choose Form Operations>Save Form As. Type a form name and that clearly identifies the form’s purpose.

Before you print labels, you may want to preview them, then print one or two pages on plain paper and check their layout against the actual label or card stock. You print labels or cards the same way you print reports. However, printing labels requires you to specify the starting label, which means you can print on partially used label sheets, when applicable.

To preview all the labels or cards on the page before printing a report

1. Save the form, but keep the Form Designer open. (Doing this lets make adjustments to the form, if necessary, after previewing it.)
2. Open the Query window and perform a search.
3. Select the form you saved as your Report Printing form (choose **Display>Select Forms**).

4. Choose **File>Print Preview** to preview how the labels or cards on the page will look when printed.

**Designing Customized Label and Card Forms**

Follow these instructions to design a label or card (for example, catalog card, rotary card) for a stock that is not listed in the Open Form dialog box.

**To design a custom label or card**

1. Open a label form in the Form Designer to use as a basis for the custom label form.

2. Choose **Report Options>Set Up Page**.

3. In the Set Up Page dialog box, change the dimensions to correspond with your custom label stock.
   - **Page Width** and **Page Height**. The dimensions of the label or card stock
   - **Left Margin**. Distance from the left edge of the page to the left edge of the first label or card
   - **Top Margin**. Distance from the top edge of the page to the top edge of the first label or card
   - **Page Orientation**. Placement of the labels or cards relative to the page. Portrait is a vertical page orientation that prints across the narrower dimension of a rectangular sheet of paper. Landscape is a horizontal page orientation that prints “sideways.”
   - **Label Width**. The horizontal distance from the left edge of the first label, card, or label set to the left edge of the next label, card, or label set. If the label sheet is one across, this value is the width of one label.
   - **Label Height**. The vertical distance from the top edge of the first label, card, or label set to the top edge of the next label, card, or label set
   - **Number Across**. Number of labels, cards, or label sets that appear across the page
   - **Number Down**. Number of labels, cards, or label sets that appear down the page

4. Click **OK**.

5. Add one or more boxes, and define and format the box content.

6. Choose **Form Operations>Save Form As**. Type a form name and a description that corresponds to your custom label or card stock.

7. Preview and then print the labels. You will be asked to specify the starting label, meaning you can print on partially used label sheets, when applicable.

**Designing Label Sets**

A label set contains multiple labels for one textbase record. When you open a label set, such as the University Products book label set, the Form Designer window represents the area of all labels in a set.
Important! When the Form Designer opens, inner lines representing the label set boundaries appear. These lines only appear when you open a new label form. If you close and save the form and then re-open the form to edit it, the boundaries disappear. Therefore, it is very important to position boxes during your first session in the Designer.

In the following example, the label set comprises three labels.

Unlike a standard label, a label set typically contains fields that appear more than once. In this sample label set form, the Classification number is repeated in three boxes, and the Author field, and the Title field are repeated in two other boxes.

Designing a Report Form

A report form is a form that is designed to display or print multiple records. A report contains multiple records which appear one after the other, sorted and formatted as specified. Reports can be printed and/or viewed in the Report window, written to a file in a variety of formats, sent as e-mail, or used by WebPublisher.

Features of Report Forms

A report form is just like any other form except that it can include some additional features, such as sorting and numbering records, that would not make sense for single-record display.

When designing a report form, there are two areas in which you can add form boxes:

- The Record Area. The body of the report, consisting mainly of record information. Information in the Record Area appears in displayed and printed reports.
The Margin Area. The section of a report where you specify information to be printed on every page, such as page numbers. Information in this area repeats on every page in a printed report but does not appear at all in a displayed report.

The Record Area is always visible. The Margin Area is visible when you choose Report Options>Show Margin Area. To hide the Margin Area, choose Report Options>Hide Margin Area. Before you can add and edit boxes, you have to activate the area in which you want to work. Do this by choosing Report Options>Work in Margin Area or Report Options>Work in Record Area.

**Task Overview**

There are several tasks involved in designing a report form. Some tasks are optional.

<table>
<thead>
<tr>
<th>To</th>
<th>Do this</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a report form</td>
<td>Choose Display&gt;Design Form and select a form to start with an existing form, the Basic Report form, an blank form, a label form, or a tabular form.</td>
</tr>
<tr>
<td>Change the page size and margins</td>
<td>Choose Report Options&gt;Set Up Page, and set the page size, margins, starting page number, and page breaks. <strong>Tip!</strong> For printed reports, specify the page size and printer before you start adding boxes.</td>
</tr>
<tr>
<td>Add record information</td>
<td>With the Record Area active, choose Edit&gt;Add and select Form Box to add a Record box. Define and format the box contents using Tools&gt;Box Properties. Repeat for each Record box you want in the Record Area. Record boxes typically show field content.</td>
</tr>
<tr>
<td>Create column headings</td>
<td>Add and size boxes for record information first, then add column headings, so the boxes can be aligned vertically. Note that if you are designing a tabular form, the box labels function as column headings.</td>
</tr>
<tr>
<td>Specify a compulsory form sort</td>
<td>If you want information to be grouped and subtotalted by specific fields, choose Report Options&gt;Compulsory Sort. If a compulsory sort is not specified, users can sort records by any field they want. If your report form includes Sort Headers and Footers, consider using a compulsory sort to prevent users from sorting records any other way.</td>
</tr>
<tr>
<td>Add Report</td>
<td>While working in the Record Area, choose Report Options&gt;Headers</td>
</tr>
</tbody>
</table>
Headers at the beginning of the report

- **Add grand totals at the end of the report**
- **Add headers before each group of records**
- **Add subtotals after each group of records**
- **Print information in the margin of every page**
- **Create a form for Internet/intranet use**

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**Setting Up the Report Page**

When you are designing a form for a printed report, you should set up the page before you begin adding boxes. In the Form Designer, choose **Report Options>Set Up Page** and select the settings listed below.

**Size group**

- **Page Size.** Type values for the report **Width** and **Height** which correspond to the dimensions of the paper on which you are printing. In the United States, the default is 8.5 by 11 inches.

  *Note:* The unit of measure for the Page Size and Margins is based on the Measurements setting for **Horizontal units** and **Vertical units** selected on the General tab of the Form Properties dialog box (**Tools>Form Properties**).

**Margins group**

- **Margins.** Type values to create the Margin Area for printed reports.

**Settings group**

- **Orientation.** Portrait is a vertical orientation. Landscape is a horizontal orientation.
- **Starting Page Number.** Change this value if you want to start **numbering pages** at a number greater than 1.
Page Breaks group

Specify how to break pages. If no method is selected, DB/TextWorks breaks a page when the printed lines reach the bottom of the Record Area. This fits as much information on a page as possible and allows pages to break in the middle of a record or form box.

- **Break after Each Record.** Start a new page after the end of each record. If a record is too large to fit on a single page, DB/TextWorks continues the record on the next page, but the subsequent record will be placed on a new page.

- **Break if Record Does Not Fit.** Start a new page when the contents of a record cannot fit on the current page.

- **Break before Sort Header Level 1.** Start a new page when the contents of the Sort Header Level 1 change. For example, if the Sort Header Level 1 box content is the *Dept* field, each time the information in the *Dept* field changes (for example, Sales, Marketing, MIS), the Sort Header Level 1 and the first record in the new group start on a new page.

Setting the Tab Order in the Form Designer

Tab order is the order in which the *Tab* key cycles through the boxes on forms used in the Edit and Display windows and on forms that are exported to HTML for Web use. If you notice that the *Tab* key does not appear to move through boxes in a logical order, or if you want the *Tab* key to skip certain boxes (such as uneditable boxes), you can change the Tab order.

**Note:** Picture boxes and text boxes are skipped by default in the Tab order. For example, in an Edit form you would normally skip text boxes that hold a title or instructions, and uneditable boxes containing information, such as computed fields or fields from a secondary textbase.

The Tab order determines:

- The box in which the cursor first appears when you display or edit a record.
- The order in which the *Tab* key moves from box to box for navigational purposes.

**To change the Tab order**

1. In the Form Designer, choose **Tools>Tab Order**.

2. Specify the Tab order you want:

   - To reset the Tab order to match the order in which boxes appear on the screen, click the **Reset to Default Tab Order** button. This is helpful if you have re-ordered boxes and you want to quickly reset the Tab order.

     **Note:** The default order will list boxes in top-to-bottom order. However, there is no guarantee that boxes positioned next to each other will appear in left-to-right order.

   - To manually reorder boxes, select a box from the Current Tab Order list and use the Change Order buttons to move the box up or down. The *Tab* key will start at the first box in the list and cycle through boxes in the specified order.

     **Note:** The first unskipped box in the list is the one the cursor will be in when you display or edit a record using this form.

   - Select the **Skip this Box** check box if you want the *Tab* key to skip the selected box. For example, you could skip an uneditable box in a form used in the Edit window. You often skip boxes that hold any content except fields, unless they are...
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script input boxes. For example, skip a text box that holds fixed text, a form box that holds a variable, or a picture box that holds an image.

3. Click OK.

Boxes are identified in the Current Tab Order list on the Tab Order dialog box by their labels. Boxes without label text are identified by the first content item, shown in angle brackets, such as <field=Customer Number>.

You can specify the following settings on the Tab Order dialog box:

- **Change Order.** Select an item from the list, then use the **Up** or **Down** button to move the selected item up or down in the list. The position of a box in the list determines the Tab order.

- **Skip this Box.** Select this check box if you want the Tab key to skip the selected box. For example, you would probably want to skip an uneditable box in a form used in the Edit window, such as a Customer ID field that is automatically numbered. You will still be able to access the box by clicking in it or choosing Edit>Go to Box.

- **Reset to Default Tab Order.** Click this button to reset the Tab order to match the order in which boxes appear on the screen.

Adding a Report Title

A report title typically consists of a text box in the Margin Area. If you open the Basic Report form, a box for the report title appears automatically, containing the fixed text <Report Title Goes Here>. You can either change this title to correspond to the report you are designing or delete the box. If you delete the box, you can add a box at any time. Use the Box Properties dialog box to format the text.

**Tip!** The Margin Area appears only in printed reports. If you design a form for another use (for example, Report Window or Send Report as Mail), and you want a report title to appear, place the title in a Report Header box in the Record Area.

**To add a report title in the Margin Area**

1. Choose Edit>Add>Form Box to add a form box and open the Form Box Properties dialog box.

2. On the Contents tab, select the Text subtab and do the following:
   a. Select **Fixed text**.
   b. Type a report title in the Text box.
   c. Click **Add**.

3. Format the box and its contents using the tabs on the Form Box Properties dialog box.

   **Note:** You can also add a report title by choosing Edit>Add>Text Box. Type the report title in the Text box on the Text tab of the Text Box Properties dialog box. Format the box and its contents using the tabs on the Text Box Properties dialog box.

**To change the Basic Report title**

1. Select the box that contains the report title.

2. Choose Tools>Box Properties>Contents>Text. The **Fixed text** option button is selected by default.
3. In the Text box, type the report name you want to appear; for example, Monthly Sales, and click Replace.

4. Format the box and its contents using the tabs of the Form Box Properties dialog box.

**To delete a report title box**

- Select the box containing the report title and press the Delete key on the keyboard or choose Edit>Delete Box.

**Adding Headers and Footers (Report Options menu)**

To access this dialog box: In the Form Designer, choose Report Options>Headers and Footers. If the command is grayed out, choose Report Options>Work in Record Area first.

Headers and footers are form boxes. Sort header/footer boxes appear with a group of records based on the specified Sort Level. Use the Headers and Footers dialog box to add a header or footer or change the box type (change to header/footer or change to record box).

**Header/Footer List**

Select an item from the Header/Footer list to indicate what you want to insert or to which type of header/footer box you want to change the currently selected box.

- **Report Header.** Appears only once, at the beginning of the report, and typically contains one or more of the following:
  - A variable, such as the current date, time, textbase name, or search criteria
  - Prompted text that was entered by the user, such as the name of the person who is generating the report
  - Fixed text, such as a report title for a form used in the Report window, or a report distribution list
- **Sort Header.** Appears at the beginning of a group of records sharing a Sort Key at the specified Sort Level. Sort Headers typically contain the key by which the records are sorted.
- **Sort Footer.** Appears at the end of a group of records sharing a Sort Key at the specified Sort Level. Sort Footers typically contain summary calculations for the group of records, such as subtotals.
- **Report Footer.** Appears only once, at the end of the report, and typically contains summary calculations, such as grand totals and averages. For example:
  - a grand total of a numeric field (calculation)
  - an average of a field (calculation)
  - the total number of records (RECORD COUNT variable or, if an exploded sort is use, the COUNT(1) variable)
  - the current date, time, textbase name, or search criteria (variables) or fixed text

**Sort Level**

Select a Sort Level from the drop-down list for the Sort Header or Sort Footer that you will insert. You can select a Sort Level only if you selected Sort Header or Sort Footer from the
Header/Footer list. The Sort Level that you select will always refer to the current record sort, which may be a compulsory form sort (defined in the form), or a user-specified Sort (specified by choosing Display>Sort Report after a search), or the textbase default sort (defined in the textbase structure).

Insert Header/Footer
Click this button to insert the type of item selected in the Header/Footer list.

A box is added to the Record Area and the Form Box Properties dialog box opens so you can specify a content item. In the case of a Sort Header, the appropriate Sort Key has already been added. You can accept this item, add to it, or change it.

Change to Header/Footer
Click this button to change the selected box on the form to the type of Header or Footer selected in the Header/Footer list. If you select Sort Header or Sort Footer, select a Sort Level before clicking the Change to Header/Footer button.

Change to Record box
Click this button to change the selected Header or Footer box on the form to a Record box (a box in the Record area that typically contains record information or calculations).

Adding Sort Headers and Footers (Report Options menu)

Adding Sort Headers
Use a Sort Header box to hold a Sort Key field. A Sort Header serves as a group heading under which one or more records are listed.

To understand how Sort Headers work, it may help to review the concept of sorting. Sorting is a way of grouping records by a particular category. The fields that you sort by are referred to as Sort Keys. You can designate up to five fields per sort (Sort Levels 1 through 5). Do not feel compelled to use all 5 levels. It is often sufficient to specify 1, 2, or 3 levels.

Note: If you do a Relevance-Ranked Order sort, Sort Keys do not exist, and Sort Header and Sort Footer boxes do not appear.

To add a Sort Header
1. Choose Report Options>Work in Record Area. If you do not see that option, you are already working in the Record Area.
2. Choose Report Options>Headers and Footers to open the Headers and Footers dialog box.
3. Select Sort Header from the Header/Footer list, then select the Sort Level whose field contents you want to use. Remember that Sort Levels always refer to the current sort, which may be a compulsory form sort, a user-specified sort, or the textbase default sort.
4. Click the Insert Header/Footer button. A form box is added to the Record Area and the Form Box Properties dialog box opens. Footer boxes are added below all Record boxes, but you can move them.
5. Format the box label and contents using options on the Form Box Properties dialog box. For example, hide the box label, border, and scroll bars.

Adding Sort Footers

Use a Sort Footer box to hold a count, subtotal, or other summary calculation for the current sort group. When you add a Sort Footer box, you select its Sort Level. Enter a calculation, such as TOTAL(quantity*"price per unit"), as the box contents.

Typically, you pair a Sort Footer with Sort Header, using the same Sort Level for both. For example, you may want to subtotal sales by region, and you may also want to subtotal sales by customer.

Note: If you want to pair other information for a Sort Level with a calculation, both boxes must be Sort Footers. You cannot put a Sort Header "next to" a Sort Footer in a report. You can put them next to each other in a form, but when you use the form, the boxes will not align.

To add a Sort Footer

1. Choose Report Options>Work in Record Area. If you do not see that option, you are already working in the Record Area.

2. Choose Report Options>Headers and Footers to open the Headers and Footers dialog box.

3. Select Sort Footer from the Header/Footer list, then select the Sort Level whose field contents you want to use. Remember that Sort Levels always refer to the current sort, which may be a compulsory form sort, a user-specified sort, or the textbase default sort.

4. Click the Insert Header/Footer button. A form box is added to the Record Area and the Form Box Properties dialog box opens.

5. On the Contents tab, select the Calculations subtab, type the calculation you want in the Calculation formula box, then click Add.

6. On the Labels tab, format the box label and contents. For example, hide the box label, border, and scroll bars.

Related Topic
Adding Calculations to a Form Box

Emulating Inmagic Tagged Format with a Form

Ordinarily, you can use File>Export to copy record information to a file in Inmagic tagged format. However, if you want to combine fields, change field names, write out secondary fields, or make other changes, you can emulate Inmagic tagged format with a form. Follow the guidelines below to design a DB/TextWorks form. Then write the information to a file by choosing File>Write Report to File and selecting Plain Text.

Box Contents

- Place everything in a single form box (start with a blank form and add one box).
- On the Contents tab of the Box Properties dialog box, add each field that you want to export.
- End with the dollar sign end-of-record indicator as fixed text.
Box Size and Position, Labels and Borders

- Choose Tools>Box Properties>Position to set Maximum height to unlimited, set the Top and Left Offset to zero (0), and the Width to the size you want (for example, 6 or 8 inches).
- On the Labels tab, turn off the label (borders and scroll bars are ignored by Write Report to File>Plain Text).

Paragraph Formatting

- From the Paragraph breaks drop-down list, select No Added Paragraph Breaks (choose Tools>Box Properties>Paragraphs).
- Set Indentation to -1.0 inches (hanging indentation).

Added Text (apply to each field)

Use added text to specify the following items for each field:

- **Beginning text.** Type a field name followed by a space. If the field name includes spaces, enclose the name in single or double quotation marks (for example, "Image Name").
- **Ending text.** Add a line break (press Enter) for each field.
- **Separator text.** Separate entries with the following text: Line break (press Enter), semicolon, and space.

As long as you are not combining fields, you can select <all> from the Contents list when specifying ending text and separator text, then undo the ending text for the $ marking the end of each record.

**Tip!** To combine fields, omit the added text from one or more items. For example, to combine the Last Name and First Name fields, omit the added text from the First Name field. Substitute a comma for the line break as ending text after the Last Name field (Smith, John).

Usage

When saving the form, select the Report Window check box.

Example

```
AU Linkset, Marvin
TI New Manufacturing Standards
SUBJ Consumer protection Product safety; Standards; Toy industry 
"Image Name" MFG001.TIF $
```
View Records / View Content

When you design a form, you can toggle between viewing content descriptions and record information.

When you view content, you see the item(s) specified as box content in the Form Designer. For example, you may see that a box contains a field and a variable. View the content when you want to see what content items a box contains. For example, a date (10/27/02) could be field information, a variable, or a calculation. The content description would tell you which it is.

When you view records, you see actual records from the textbase, with any formatting and other options applied. Note that you must have done a search first, so you have records to view. This gives you a good idea of how the form will look when used. The Form Designer shows one record at a time. While you are viewing records, you may want to display other records in the set using the options on the Display menu (Next Record, Previous Record, and so forth) or the arrow buttons on the Form Designer toolbar.

To view record information or content description
1. Perform a search or load a set. If you do not have any records in the set, the View Records option is not available, and you can only select View Content.
2. In the Form Designer, select Display>View Records or Display>View Content, or click the View Records/Content button on the Form Designer toolbar.

Showing or Hiding Boundaries (Forms, Query Screens, and Menu Screens)

While you are designing a form, menu screen, or query screen, you can show or hide box boundaries by checking or unchecking View>Boundaries. This option affects the designers only. Boundaries never appear when you use the form, menu screen, or query screen.

Boundaries are dashed lines that indicate the size of each box in a form, menu screen, or query screen. Boundary color is determined by the highlight color on the Microsoft Windows Control Panel.

Showing boundaries can be helpful as you position boxes, especially for boxes that do not have borders. Hiding boundaries can help you get a better idea of what the final form, menu screen, or query screen will look like.

Form Designer and Query Screen Designer: When you show or hide boundaries, you also show or hide the arrows that indicate which boxes are anchored to another box. You cannot anchor boxes on a menu screen.

Note: Dashed lines indicate boundaries. Solid lines indicate selected boxes.

Showing or Hiding Empty Boxes (Form Designer)

Depending on the purpose of the form, you might want to hide empty boxes. A form box might be empty for several reasons. Some common reasons are:

- The box contains a field that does not have any entries.
- The box contains a field that is hidden by a password.
- The box contains a field from a secondary textbase for which there is no matching record.
Here are some guidelines to help you decide whether to hide empty form boxes:

- **Form used in the Display or Report windows.** Hide empty boxes so the user does not have to look at blank lines.

- **Form used in a Printed Report.** Hide empty boxes to make a printed report shorter and more legible. In some cases, you might want to show an empty box if you want to draw attention to the lack of content.

- **Form used in the Edit window.** Empty boxes for single fields are never hidden in the Edit window, even if you set *Minimum height* to zero, unless the field is hidden by a password. The Edit window needs to show empty boxes so users can enter information when creating or editing a record.

- **Any form type.** Hide empty boxes if they contain a field that may be hidden by a password. Otherwise, a user whose password hides a field will see an empty area on the form where that field would have appeared. If the form box has a label, it may unintentionally identify the hidden information.

**To show an empty box**

- On the Position tab on the Form Box Properties dialog box, set *Minimum height* to any value greater than zero.

When the form is used, the number of lines you specified for *Minimum height* appears as blank lines. If the box has a border or label, it will appear.

**To hide an empty box**

- On the Position tab on the Form Box Properties dialog box, set *Minimum height* to zero (0).

When the form is used, the box will disappear when it is empty. You will not see its label, border, or scroll bars (if any). For example, if you place the *Co-Authors* field in a box, and that field is empty for a particular record, the form box will disappear completely in that record. However, if the *Minimum height* is greater than zero and a form box is empty, the form box will still appear but it will be blank. If it has a border or label, you will see it.

**Note:** While you are working in the Form Designer, boxes never disappear (unless their contents are hidden by the current password). If they did, you could not edit them. To see how a form looks with disappearing boxes, choose *Display>Preview*, and display a record with an empty field in a box with *Minimum height* set to zero (0).

When a box disappears, any floating boxes below it automatically move up.

**Showing Sort Keys in a Form Box**

A Sort Key is a field by which records are sorted in a report. When you sort records, you can specify up to five Sort Levels (Level 1 through Level 5).

Sort Keys are used primarily in a Sort Header box or Sort Footer box in a report (choose *Report Options>Headers and Footers*). When you insert a Sort Header or Footer, the Sort Key level you select is automatically added to the form box. You do not have to select it in the Form Box Properties dialog box (Content tab, Sort Keys subtab). You can, however, use the Form Box Properties dialog box to change the Sort Key setting, add other information to a box, and so on.

**Note:** Sort Keys do not appear when a form is used in the Display or Edit windows because those windows display just one record at a time. They also do not appear if you use the *Send*
Report as Mail>Mail each record to a different address feature because you are sending only one record in each message.

**To add Sort Keys to a form box**

1. On the Form Box Properties dialog box, select the Sort Keys subtab on the Contents tab.

2. Select a Sort Level from the Sort Keys list, and click Add.

Sort Levels are determined by the current sort order. For example, if you sort by Department and subsort by Date, the Department field is Sort Level 1 and the Date field is Sort Level 2. If you later sort by Subject then Date, the Subject field is Sort Level 1.

The buttons on the Sort Keys subtab perform the following actions:

- **Add.** Adds the item shown in the Sort Keys list to the form box. The item is placed at the bottom of the Contents list and positioned last in the form box.

- **Replace.** Replaces the currently selected item in the Contents list with the item shown in the Sort Keys list. Typically, you would select an item in the Contents list, use the Sort Keys list to select a different Sort Key level, then click Replace.

**HTML Preview command (Display menu)**

Choose Display>HTML Preview while designing a form or query screen to see what it would look like if you exported it to HTML. This command is only enabled if:

- In the Query Screen Designer, there is at least one box on the screen.
- In the Form Designer, there is at least one box in the Record Area, a set of records to display in the preview window, and no Margin Area visible. To preview an edit screen, be sure it is saved with Edit Window selected on the Save Form As dialog box.

When you choose Display>HTML Preview, you may be asked to save your changes. You will also be asked whether you want to use Cascading Style Sheets (CSS) to control box positioning.

**Note:** This feature does not show controls typically added by WebPublisher PRO when a form or screen is exported to HTML, such as navigation buttons and form selection drop-down lists.

**Preview command (Display menu)**

The Preview window shows one record at a time, so you can preview forms from within the Form Designer. **Note:** This is different than File>Print Preview, which enables you to view a report prior to printing.

**To preview a record**

1. Perform a search or load a set.

2. In the Form Designer, choose Display>Preview.

3. You see the first record in the set. To display additional records, use the options on the Display menu or the arrow buttons on the Preview window toolbar.


**Note:** The recommended way to see how a form looks is to select it for the appropriate window. For example, if you are designing a Report form, save it even if it is in a preliminary stage. Then
select it for the Report window by choosing Display>Select Forms. Keep the Report window open while you work in the Form Designer. Each time you save the form, the Report window will be refreshed using that form, so you have constant visual feedback.

**Print Preview command (File menu)**

After you design and save a form for use in a printed report, you can preview the report to see how it will look when it is printed. You can see information in the Record Area and Margin Area, as well as headers, footers, page breaks, and other report components.

To preview a report
1. Select the form you want to preview (Display>Select Forms>Report Printing).
2. Perform a search that finds at least one record. Retrieving several records will give you a more realistic preview. The Select Search Results Window dialog box opens.
3. Select the No window (do not display records) option button or click the Cancel button.
4. Choose File>Print Preview. Note that depending on what type of form you are previewing, the following may happen:
   - If you are previewing a non-label form, the Preview window opens.
   - If you are previewing a label form, the Specify Starting Label dialog box opens. If applicable, you can **specify the starting label**. Click **OK** to open the Preview window.
   - To navigate through the pages, use the toolbar buttons or press the **PgUp** and **PgDn** keys on your keyboard.
5. To exit from Print Preview, click **Close** on the toolbar.

**Note:** Print Preview is not available when the Images or Thumbnail window has focus.

**Print command (File menu)**

Choose File>Print to print reports, labels, single records, textbase information, the contents of the textbase log file, the contents of an Inmagic.net window, and so forth. You can also print the Image(s) associated with a record or set.

- To print the contents of the Textbase Information window or an Inmagic.net window, choose File>Print. The Print dialog box opens for you to choose your printer settings.
- To print a report of all the records in the current set, print while the Report window is active or when no record windows are active. If an Edit or Display window is active, only the record shown in that window is printed. DB/TextWorks will do the following when you choose File>Print:
  - If the selected report printing form and the form that is currently showing in the record window are the same, the Print dialog box displays.
  - If the selected report printing form and the form that is currently showing in the record window are different, the Form Used to Print Report dialog box opens. You can select:
    - **Report printing form.** Select this option to use the Report Printing form selected in the Select Forms dialog box.
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- **Form for current window.** Select this option to use the form displayed in the current window. For example, if you are in the Report window, DB/TextWorks will use the selected Report window form.

- **Always use this option without asking.** Select this option to prevent the Form Used to Print Report dialog box from appearing the next time you print.

  **Note:** If you are printing labels, you will be asked to specify the starting label, which means you can print on partially used label sheets, when applicable.

To print a definition for a form, query screen, menu screen, set, or record skeleton, see Printing Element Definitions.

Other information stored in a textbase can be printed by pressing the appropriate button on a dialog box. For example, you can print an index from the Query Choices Browser dialog box.

The Print dialog box appears when you initiate a print operation. Some controls may be disabled if the feature is not supported by the selected printer. Use the context-sensitive help feature on the dialog box to learn about the settings in the Print dialog box.

**Printer Settings**

The following are typical printer settings. Depending on your brand of printer, you may have other printer settings.

- **Print Quality.** Specify the desired print quality.

- **Print to file.** Select this check box to send the output to a disk file rather than to a printer. See Printing to a file.

- **Printer Name or Setup or Properties.** Select a different printer, or configure the current printer. See Print Setup.

- **Print Range.** If desired, specify a range of pages to print. This control is effective only if you are printing records, images, lists, textbase information, and so forth. The page numbers you specify are counted from the beginning of the report, and bear no relation to whether or not pages are numbered in the form being used, or where the numbering begins. The default setting is All pages.

- **Copies.** Specify the number of copies to print.

- **Collate copies.** If you are printing multiple copies of the report, specify whether you want the pages collated. If you collate the pages, a 2-copy 3-page report is printed in this order: 1,2,3,1,2,3. If you do not select this check box, the pages appear in this order: 1,1,2,2,3,3.

**Printing a Report**

You can print a formatted report using the currently selected Report Printing form or the form for the active window.

The default printer selected in Windows will be used, unless you select a different printer. Certain printer-specific options affect the output, such as page orientation (portrait or landscape), paper size, and available fonts. Before printing, you may want to change these settings using either the Setup button on the Print dialog or the Print Setup command on the File menu.

**Note:** To create a file in Plain Text, RTF, or HTML format, choose File>Write Report to File.
To print a report
1. Select a printing form (choose Display>Select Forms>Report Printing).
2. Search for the records you want to print. The Select Search Results Window dialog box opens. You do not have to view records, although you may want to.
   **Important!** If the Display or Edit window is selected, only the current record will be printed.
3. [Optional] To omit a record from the report, select it in the Report or Display window and choose Sets>Omit Record. (This does not delete the record from the textbase.)
   **Note:** If the form used for printing (which is not necessarily the Report Printing form) has a compulsory sort, that is the only order in which records can appear.
5. [Optional] Choose File>Print Preview. For information about Print Preview, see Print Preview command (File menu). If you do open the Print Preview window, you can choose to print the report by clicking the Print button, and skip step 6. If you do not want to print at this point, click the Close button.
6. Choose File>Print. For information about what may happen when you invoke the Print command, see Print command (File menu). When the Print dialog box opens, the name of the print form appears on the status bar.
7. Select the print options you want on the Print dialog box and click OK to begin printing.
8. [Optional] If you are printing labels, the Specify Starting Label dialog box appears. If applicable, you can specify the starting label.

To print just one record
1. Search for the record you want to print. The Select Search Results Window dialog box opens. Choose to display the records in the Display or Edit window.
2. Choose File>Print. For information about what may happen when you invoke the Print command, see Print command (File menu).
3. Select the print options you want and click OK to begin printing.

Troubleshooting
You may see the following message when you try to print a report:

   Some information may not appear in the printed report. Possible reasons: form dimensions do not match page dimensions or boxes appear in the non-printable area. Continue?

This message indicates that the form dimensions do not match the page dimensions, or that one or more Margin boxes appear in the non-printable area of the page. The non-printable area is the area around the edges of a sheet of paper into which the printer cannot write. On a laser printer, this area is usually ¼ inch or less.

Respond Yes to print the report or No to cancel the report printing.

To correct the problem:
- **Move the Margin Area boxes away from the page edges.** Open the form in the Form Designer and move the boxes. To access the Margin Area, choose Report Options>Work in Margin Area.
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- Change the form dimensions. Open the form in the Form Designer and choose Report Options>Set Up Page.

Printing Labels (Specify Starting Label)
When printing labels, you can specify the label on which to start printing. This means you can print on partially used label sheets, when applicable.

To specify a starting label and print
1. Type the number of the label on which you want to start printing. Labels are ordered from left to right, starting from the top row, as shown in the Specify Starting Label dialog box.
2. Click OK.

Note: Depending on the label form created through Display>Design Form, the Specify Starting Label dialog box will only let you specify a starting label number up to the maximum on the sheet. The default starting label number on the Specify Starting Label dialog box is 1, meaning the printing will start with the top left label in the first row, unless you specify another number.

Print Definition command (Form Operations menu)
After you create or edit a form, you may want to print a definition of the form. A form definition includes information about the form, such as the form name, textbase name, date and time created, usage (Display, Edit, Report windows; printed report; and/or on the Web), form properties, settings for each box, compulsory sort (if any), and the page dimensions.

You can print a definition from within the Form Designer by choosing Form Operations>Print Definition. You can also print a definition by choosing Maintain>Manage Textbase Elements and clicking the Print button.

Important! A definition printed to a file is not a backup. It is only a description of form attributes. To back up or share forms, use Export or Import on the Manage Textbase Elements dialog box (choose Maintain>Manage Textbase Elements).

Managing Forms
Follow the instructions below to back up, delete, rename, and perform other operations.

Converting Forms to Query Screens
You can convert a Display or Edit form to a query screen. Choose Search>Design Query Screen, and select Existing Record Form from the Start With list.

Backing up and Sharing Forms
Forms are not separate files. They are saved in the textbase or user file. To back up forms saved in the textbase, back up the textbase. For example, if you copy the textbase Sales to a network drive, you will automatically back up any forms saved in that textbase. To back up forms saved in a user file, back up the user file. User files have the same name as the textbase with the extension .TBU. To see where your user files are located, choose Display>Textbase Information.

To export forms to a file (an alternative way to back up forms) or to share forms with other users, choose Maintain>Manage Textbase Elements, then select Forms from the Now
Managing drop-down list. Select one or more forms from the Currently Saved list and click the Export button. Name the file when prompted. All of the selected forms will be written to that file. If you ever need to restore the forms (for example, if you accidentally delete or damage them), you can use the Import button on the Manage Textbase Elements dialog box.

Tip! Export all forms saved in the textbase to one file. Note that you can tell which forms are saved in the textbase because they have the word (public) after the form name. Then export all forms saved in the user file to another file. You can easily restore each set of forms to its proper place, if need be.

Deleting Forms
To delete a form, choose Maintain>Manage Textbase Elements, then select Forms from the Now Managing drop-down list. Select one or more forms from the Currently Saved list, click the Delete button, then respond to the prompt. Note that you will not be able to delete a form stored in the textbase if the password you are using does not allow you to save forms.

Renaming Forms
To rename a form, choose Maintain>Manage Textbase Elements, then select Forms from the Now Managing drop-down list. Select a form from the Currently Saved list, click the Rename button, then respond to the prompt. Note that you will not be able to rename a form stored in the textbase if the password you are using does not allow you to save forms.

Changing Form Information
To change a form's description or purpose (for example, Edit, Display), open it in the Form Designer and choose Form Operations>Save Form As. You can also change the form's name and/or location (user file or textbase file), but this will save an additional copy of the form with the new name and/or location. Note that your password may prevent you from changing form information.

Selecting Forms
To select a form, choose Display>Select Forms. The forms that you choose will be used until you select different ones or revert to the textbase defaults. To change textbase default forms, choose Maintain>Change Textbase Defaults>Forms.

To select forms for most operations
1. Choose Display>Select Forms to open the Select Forms dialog box. The forms you are using are listed on the dialog box.
2. Specify which forms will be used for various operations:
   - To assign the textbase default forms for all operations, click the Revert to Defaults button.
   - To select a form for a particular operation, click one of the four buttons: Record Display, Record Edit, Report Window, or Report Printing. A dialog box for that operation opens. (Note that each operation has its own dialog box.) Do the following, depending on the form you want to use:
     - From the Currently Saved list, select a form to use with the operation and click OK. Forms are listed alphabetically within type. Basic forms are listed first, then forms
saved in the current user file, and then forms saved in the textbase file, which are identified by the word (public). The form currently in use is highlighted in the dialog box.

**Note:** When you saved a form, you specified the operations for which it could be used (Display, Edit, Report, printing). Your decision at that time determines which forms appear in each list now. If you do not see a form you want to use in the current list, open the form in the Form Designer and use the **Save Form As** option to change the uses of the form.

- Click the **Revert to Default** button to assign the current textbase default form for the operation and click **OK**.

### To select a form for the current window

1. With a Display, Edit, or Report window open and active, choose **Display>Select Forms**.
   
   **Note:** You can also click the **Select Form for this Window** button on the window’s toolbar or click the **Select Report Printing Form** button on the Main window toolbar. This is the only way to select a form for the Edit Secondary Record window.

2. From the Currently Saved list, select a form for the current window (or for printing) or click the **Revert to Default** button to use the current textbase default form. Click **OK**.

3. To quickly resize the window to fit the form, choose **Window>Fit Window to Form** or click the Fit Window to Form toolbar button.
Designing Menu Screens

Menu screens and DB/TextWorks
A menu screen consists of a list of links to commonly-used textbases. Clicking a link opens the textbase. This provides an alternative to using File>Open, so users do not have to remember the location of multiple textbases.

Menu screens also provide a starting environment for users, with each listed textbase having a default set of forms, a query screen, and a record skeleton (these are known collectively as initial elements). Each listed textbase can also result in an initial action occurring when the link is clicked.

A menu screen can also point to other menu screens, if you want to "branch" users from one menu to another. For example, the initial menu screen can list the top five textbases, plus a link to another menu screen that lists additional textbases.

When a textbase is open, the menu screen is no longer visible. To redisplay the menu screen, close the textbase.

To create or select a menu screen, close any open textbase, then use the options on the Menu Screens menu.

Using menu screens on the Web
If you have WebPublisher PRO you can create menu screens and export them as HTML to use on the Web. Menu screens used on the Web are quite different from menu screens used within DB/TextWorks. Each menu screen for the Web contains predefined searches. When the page is displayed in a Web browser, the searches look like regular links (for example, Find recent documents). When the link is clicked, a query is performed and records are displayed in the Web browser.

To specify a predefined search, use DB/TextWorks to perform a query and save it as a public set. Then create a menu screen that includes the search. Each search is a textbase box with an initial action. The menu screen also specifies which Report form and Expanded Display form to use by default (initial elements). Export the menu screen to HTML, then place the HTML page on the HTTP server, for use on the Internet or an intranet.

Creating Menu Screens
A menu screen is a list of the most commonly-used textbases. Clicking an item opens the textbase or brings up another menu screen. Every menu screen consists of boxes. A typical menu screen can include the following types of boxes:

- **Textbase boxes.** Add at least one textbase box for each textbase that you want to access from the menu screen.

- **Menu Screen boxes.** Add a menu screen box for each menu screen you want to access from the current menu screen.

- **Text boxes.** Add a text box for instructions or a title (for example, Click the textbase you want to open).

- **Picture boxes.** Add a picture box to hold static images (for example, a company logo).
• **Script input boxes.** Add a script input box to let the user type in information that will be used during the processing of a script. Note that although a script input box can be added to a menu screen, it is not commonly used.

• **Script buttons.** A script button allows you to call functions you have written in the Menu Screen Script dialog box. For example, you can launch a script that opens another menu screen and dismisses the current one.

You cannot create a menu screen until you have created at least one textbase. Create the textbases first, then list them on the menu screen.

To create or edit a menu screen
1. Start DB/TextWorks. If a textbase is open, choose *File>*Close.
2. Choose *Menu Screens>*Design to open the Open Menu Screen dialog box.
3. Select the appropriate option, depending on what you want to do:
   - **Open Current Menu Screen File.** Opens the currently selected menu screen.
   - **Create a New Menu Screen File.** Opens a blank menu screen (no boxes). When prompted, specify a name and location for the new menu screen file. The extension .TBM is added automatically. **Note:** If you name the file **DBTEXT.TBM**, it can be used by default at startup time.
   - **Open an Existing Menu Screen File.** Select a previously saved menu file (.TBM) to edit.
4. Click **OK**.
5. Now you are working in the Menu Screen Designer. You can perform these operations:
   - Add boxes to a menu screen
   - **Perform other operations available on the Menu Screen Designer menus**

**Operations on the Menu Screen Designer Menus**
Once you have added boxes to a menu screen you can use the menus in the Menu Screen Designer to modify the menu screen. Note that you must select a box in order to change its size, position, or attributes.

<table>
<thead>
<tr>
<th>Use the:</th>
<th>To:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menu Operations menu</td>
<td>Open or save a menu screen; print a definition of a menu screen; export a menu screen to HTML for use on the Web; or close the designer.</td>
</tr>
<tr>
<td>Edit menu</td>
<td>Add and delete boxes. When you add a box, you use its Box Properties dialog box to specify its attributes, including contents, text, picture, position, font attributes, icon usage, initial elements, initial actions, and so forth. Use the Cut, Copy, and Paste commands to cut, copy and/or move boxes within a menu screen or between menu screens.</td>
</tr>
<tr>
<td>Tools menu</td>
<td>Change box properties, including size and position; show or hide box borders (for text boxes and script input boxes only); specify a background color for boxes; align boxes; change Tab order; set menu screen properties, including HTML options for use on the Web; specify</td>
</tr>
</tbody>
</table>
Designing Menu Screens

<table>
<thead>
<tr>
<th>Script code for the menu screen. <strong>Note:</strong> Be sure to specify the menu screen properties, especially Path Settings.</th>
</tr>
</thead>
<tbody>
<tr>
<td>View menu</td>
</tr>
<tr>
<td>Mouse or the Tools menu</td>
</tr>
</tbody>
</table>

**To use a menu screen**

After closing the Menu Screen Designer and saving the menu screen, you need to select it by choosing **Menu Screens>Select**.

**Specifying Initial Elements (Menu Screen Designer)**

To access this dialog box: In the Menu Screen Designer, select a textbase box and choose **Tools>Box Properties>Initial Elements**.

**DB/TextWorks**

For the selected textbase box, specify which forms, query screen, and record skeleton will be loaded when the textbase is opened by clicking this menu item:

- Click **Forms** to specify which forms are used for the Report window, report printing, Display window, and Edit window.
- Click **Query Screen** to specify which query screen appears when the textbase is opened.
- Click **Record Skeleton** to specify which "template" is used for creating new records in the Edit window.

By specifying initial elements, you can set up a starting environment without requiring the user to select forms, query screens, and so forth. This can be especially useful if you perform multiple tasks using the same textbase. For example, you could create a menu screen that lists the same textbase several times:

```plaintext
Serials Check-in
Serials Claiming
Serials Routing
```

Each item opens the same textbase (*Serials*), but uses a different set of forms, query screen, and record skeleton appropriate to the specified task (check-in, claiming, or routing).

**Note:** You can change the forms, query screen, and/or record skeleton during a DB/TextWorks session (choose **Display>Select Forms**, **Search>Select Query Screen**, and/or **Records>Select Record Skeleton**, respectively). However, once you close the textbase and open it again from the menu screen, the initial elements specified on the Initial Elements tab are used.

**WebPublisher PRO**

Menu screens that you export to HTML to use on the Internet or on an intranet ignore all initial elements, except the forms specified for Record Display and the Report Window. The **Report Window** form will be used in the Web browser to display records found by a search. The
**Record Display** form will be used for expanded display of a single record (when a user clicks the expand record link from a report).

**Organizing Menu Screen Files**

Many people use just one menu screen, which contains the names of all of their textbases or a single top-level menu screen with menu items that open other menu screens. However, you may want to create several different menu screens. To switch between the various menu screens, choose **Menu Screens>Select**.

You can also use Microsoft Windows to create separate shortcuts, each of which references a different menu screen file, using the `/m command-line switch`. When you specify the shortcut properties, include the full path name of the DB/TextWorks executable file (DBTEXT32.EXE) followed by the `/m switch and the name of the menu screen file. For example, to open a menu screen called SAMPLE1, use this command:

```
C:\DBTEXT\DBTEXT32.EXE /M SAMPLE1
```

Because DB/TextWorks accepts both `/ and `- in command line arguments, menu screen names containing a hyphen must be enclosed in quotation marks. For example, to open a menu screen called SALES-NH, use this command:

```
C:\DBTEXT\DBTEXT32.EXE /M "SALES-NH"
```

If the software is installed on a network server, and all of the workstations will be accessing the same set of textbases that are also located on the server, the administrator may want to create one menu screen file, named **DBTEXT.TBM**, and place it in the software installation folder on the server. This special feature allows all users to share the same menu screen file.

If the software is installed on your local hard disk, or if you typically use textbases stored on your local hard disk, a personal **DBTEXT.TBM** file can be created in the Start In folder associated with the program icon or shortcut.

**Where DB/TextWorks Looks for Menu Screen Files**

Menu screen files have the extension `.TBM`. You can move, copy, or delete them just as you would any other file (for example, using Windows Explorer). You can rename menu screen files freely, and move or copy them from one location to another. If you move a menu screen file, and the **Path setting** property is set to **Do not retain path**, then all of the files (for example, textbases and images) should also be moved to the new menu screen file location.

When you start DB/TextWorks, the software attempts to find a menu screen file (.TBM) to use:

- If a menu file has been specified on the command line, that menu is used.
- If no menu file has been specified on the command line, the software looks in the INMAGIC.INI file to find the menu file that was most recently selected.
- If the INMAGIC.INI file does not contain a menu screen selection, the software looks for a file called **DBTEXT.TBM** in the Start In folder associated with the icon or shortcut used to start the software.
- If there is no **DBTEXT.TBM** file in the working folder, the software looks for the file in the folder in which the software was installed.

If all of these steps fail, a menu screen will not be used.
Selecting a Menu Screen

Select a menu screen if you want it to appear whenever you start DB/TextWorks:

1. Start DB/TextWorks but do not open a textbase. (If a textbase is open, close it.)
2. Choose **Menu Screens>Select**.
3. Use the Select Menu Screen dialog box to choose a menu screen.

**Tip!** If you inadvertently close the Menu Screen window, choose **Menu Screens>Display Current** to select the last-used menu screen.
Scripting

When you are designing a form or screen, you can also design a script for use with that form or screen. The script can perform certain operations when the form or screen is opened or closed, when buttons on the form or screen are clicked, when you leave a box, or in other situations. For example, a script can fill in a box on a query screen or perform extra validation on the contents of a field in an edit form. You can use script buttons to bring up field-specific help on an edit form, open a document in its native application from a record display, or move or copy information among boxes on a form. You can write scripts in either JavaScript (JScript) or Visual Basic Scripting Edition (VBScript).

To open the Form Script dialog box so that you can create a script for the form you are currently designing, choose Tools>Form Script.

To open the Screen Script dialog box so that you can create a script for the menu screen or query screen you are currently designing, choose Tools>Screen Script.

Important! A script is part of a form or screen. If the form or screen closes, the script stops running. This means, for example, that a script running in a query screen cannot perform a search, open the Edit window, and then make changes in the record in the Edit window.

Also note that a script can only work within its DB/TextWorks desktop session through the objects documented in this help file. The DB/TextWorks desktop session has no knowledge of what is happening inside a script.

Important! Scripts are not applicable to forms and screens used on the Web with WebPublisher PRO.

Form Script and Screen Script Dialog Boxes

To define a script
1. Choose Tools>Form Script or Tools>Screen Script to access the Form Script dialog box or Screen Script dialog box, depending on which designer you are in.
2. Use the Script tab to specify which scripting language to use and to insert the script in the box provided.
3. Use the Names tab to designate a script name for each box in the form you will use in your program. The script is able to read the contents of the box (and, if permitted, modify it and write it back). Note that if you have added script buttons to the form, each needs to be assigned a name in order to access the script.
4. Click OK.

Specifying Script Language and Program
Use the Script tab to choose a scripting language and to insert the script. You can paste the script here if you constructed it in a different environment.

1. From the Script language drop-down list, select either JScript (JavaScript) or VBScript (Visual Basic Scripting Edition) as the scripting language used by the program.
2. Type your script for the form in the Script box (or paste it in).
3. Click OK when you are done.
For scripting purposes, you must also use the **Names tab** to assign names to the boxes in the form or screen.

### Assigning Names to Boxes for Scripting

Use the Names tab to assign names to the boxes in the form or screen for scripting purposes. Note that the script cannot access boxes that have no script names assigned to them.

1. From the Boxes list, select the box to which you want to assign a name.
2. Type the new name in the **Box Name** box.
   
   **Note:** The name must begin with a letter and may consist of up to 20 alphanumeric characters (and may include the underbar character [ _ ]). Box names are case-sensitive (while textbase field names are not). Use the same case in the name that you will use in referencing the box in the script.
3. Click **Change**. The assigned name appears next to the box in the Names list.
4. Repeat this process for as many boxes as needed.
5. Click **OK** when you are done.

You must also use the **Script tab** to choose a scripting language and to insert the script in the box provided.

### Troubleshooting Scripts

There is no “error checking” in scripts. If your script is broken, it may fail to execute, it may hang DB/TextWorks, or it may cause DB/TextWorks to exit abnormally. If you encounter problems with your scripts, review the following troubleshooting tips:

- Make sure that your case is consistent (for example, if you name a function moveEntry, you cannot refer to it as moveentry). JavaScript (JScript) is case sensitive; Visual Basic Scripting Edition (VBScript) is not.
- Make sure you have selected the appropriate scripting language on the **Script tab**.
- Do not forget to name the boxes you will be working with. Do this on the **Names tab**.
- Make sure to test for empty strings, missing boxes, errors, and so forth.
  
  (For example, **Sample JavaScript Script 1**: Add a script button to swap the contents of two fields assumes the boxes are present and named. **Sample JavaScript Script 5**: Copy first word of one field to another field (if the second field is empty) when the record saved is more defensive, and less likely to fail if the form is changed such that the needed boxes are renamed or absent.)
- Review your script for general syntax errors.
- If you add a button to a form or screen, do not forget to create a script that must run when someone clicks the button. Conversely, if you create a script to work when a button is clicked, do not forget to add the button to the form or screen.
- Keep in mind that scripts are limited to 30,000 characters.
Script Events
You can attach a script to a form. There can be multiple functions in the script to respond to various events, such as the clicking of a button or on saving a record. An event triggers a script to do something. Events let you manipulate information in boxes on a form or screen, manipulate information in records in the current set or a new set, and call certain menu commands.

The following events are available in form or screen scripts:

- onFormOpen()
- onFormClose()
- onFormClear()
- onQueryExecute()
- onQueryExecuted()
- onRecordOpen()
- onRecordSave()
- onRecordSaved()
- onRecordNew()
- onRecordDelete()
- onRecordOmit()
- onRecordDuplicate()
- onReportInitialize()

- <buttonName>_onClick() (where <buttonName> is the name of a script button that you have added to your screen or form) This event triggers when the button is clicked.

- <boxName>_onFocus() (where <boxName> is the name of a box on the screen or form) This event triggers when the specified box receives focus. Note that menu commands such as Spell Check set the focus to each box to be checked, in turn. That change in focus can trigger this event if it is present in a script in an Edit form.

- <boxName>_onBlur() (where <boxName> is the name of a box on the screen or form) This event triggers when the specified box loses focus. Note that menu commands such as Spell Check set the focus to each box to be checked, in turn. That change in focus can trigger this event if it is present in a script in an Edit form.

Where it makes sense (for example, onRecordSave), the event function returns a Boolean to permit the operation to proceed. Specifically, returning false from the onRecordSave() event handler function will prevent the record from being saved, and leave the form in the state it was in before the save was attempted. Not returning a value is the same as returning true, permitting the operation.

onFormOpen()
This event function, which is available for form or screen scripts, can be used in a menu screen, query screen, Edit window, Display window, or Report window.
Note: This function is called before any form boxes are created, so this is not a good function for populating boxes with preset information. Use this function to set global variables that will be used elsewhere in your script.

Example
This script sizes the window to fit the form dimensions when the form is first opened.

function onFormOpen()
{
    Command.fitWindowToForm();
}

onFormClose()
This event function, which is available for form or screen scripts, can be used in a menu screen, query screen, Edit window, Display window, or Report window.

onFormClear()
This event function is called when New Query is used or when the screen is opened. It is not called when the Query window is already up and a different screen is selected. This is a good function to use to prepopen query boxes.

This event function is only appropriate in a query screen; therefore, you should use it only in a screen script.

Example
The script below, running in a query screen, initializes the content of a query box having the script name "boxType" when you open the query screen or press the New Query button. For more examples of onFormClear(), see Sample JavaScript 2: Prepopulate a query screen for new queries and Sample JavaScript 11: Reset button for all query boxes to AND when you click New Query.

function onFormClear()
{
    Form.boxes("boxType").content = "book";
}

onQueryExecute()
This event function is only appropriate in a query screen; therefore, you should use it only in a screen script.

Note: This function is called before the query is executed. If your function returns false, it will prevent the query execution from proceeding.

Example
This script forces a query box having the script name "boxType" and the visible label "Type" to be filled in before the query can proceed.

function onQueryExecute()
{

if (Form.boxes("boxType").content == "")
{
    Application.message("Please fill in the Type box.");
    return false;
}
else
    return true;
}

onQueryExecuted()
This event function is only appropriate in a query screen; therefore, you should use it only in a query screen script. Use onQueryExecuted() if you want to capture the search terms, the number of records retrieved, or other search-specific information.

Note: This function is called after the query is executed.

Example
This script logs information about every search done with this query screen to a separate textbase.

function onQueryExecuted()
{
    var nrs = Application.newRecordset("logSearch", "c:\DBTlog\", ");
    var today = new Date();
    if (nrs)
    {
        nrs.Open("");
        nrs.AddNew();
        nrs.Fields("Date").Value = today.toString();
        nrs.Fields("Textbase").Value = Application.activeTextbase.name;
        nrs.Fields("Query").Value = Form.boxes("QBox").content;
        nrs.Fields("RecsFound").Value =
            Application.activeTextbase.currentRecordset.RecordCount;
        nrs.Update();
        nrs.Close();
    }
}

onRecordOpen()
This function triggers after the boxes have been populated with information, but before they are displayed. It can be used in an Edit window, Display window, Report window, or printed report. A common use for this function would be to modify the contents of a box. Note that the box must exist or have a minimum height greater than zero (0) in order to be modified. For example, a box in a Display window or report that has minimum height set to 0 lines and is empty because it contains a field not present in the current record may not "exist" for the purposes of script manipulation.

See Box object for notes about the contents of a box on a form.

Note: This function is called after onFormOpen(), for new as well as existing records. For new records, onRecordOpen() is called before onRecordNew().
Example

This script supports the design of a non-tabular report with header information that will appear at the top of the report when displayed in the Report window, or at the top of each page when printed. The script removes the second set of headers that would otherwise appear on the first page of the printed report.

Create the report by laying out the headers in the margin area, then selecting the header boxes as a group and copying them to the page area and changing them to report header boxes. The script below empties out the report headers when the report is printed, so that only one set of headers appears to the user. The report header boxes have been given script names boxHead1, boxHead2, and boxHead3. (Note that the script is setting the contents of each header box to a single space. They could be set to an empty string instead, as long as each box is assigned a minimum height of 1 line.)

```javascript
function onRecordOpen()
{
    // if printing, suppress the report headers
    if (Window.type != "Report")
    {
        Form.boxes("boxHead1").content = " ";
        Form.boxes("boxHead2").content = " ";
        Form.boxes("boxHead3").content = " ";
    }
}
```

onRecordSave()

This event function is only appropriate in an Edit window; therefore, you should use it only in a form script.

**Note:** This function is called before the record is saved. It can return false to cause the record not to be saved. Compare with onRecordSaved().

Example

This script illustrates a more sophisticated validation rule that can be enforced by a script in an edit screen. The script prohibits a record from being saved if the Requestor field has information in it but the RequestedBy field is empty. "boxRequestor" and "boxRequestedBy" are the script names assigned to the respective boxes on the edit form.

```javascript
function onRecordSave()
{
    if (Form.boxes("boxRequestor").content != "")
    {
        if (Form.boxes("boxRequestedBy").content == "")
        {
            Application.message("Please fill in the RequestedBy field.");
            return false;
        }
    }
    return true;
}
```
onRecordSaved()
This event function is only appropriate in an Edit window; therefore, you should use it only in a form script.
You could use this function in a script to bring up the next record in the Edit window after the current record has been saved.
Note: This function is called after the record is successfully saved. Compare with onRecordSave().

Example
This script automatically brings up the next record in the set in the Edit window after the current record has been saved.

```javascript
function onRecordSaved()
{
    Command.nextRecord();
}
```

onRecordNew()
This event function is only appropriate in an Edit window; therefore, you should use it only in a form script.
Note: This function is called after onRecordOpen() for a new record.

onRecordDelete()
This event function is only appropriate in an Edit, Display, or Report window; therefore, you should use it only in a form script.

onRecordOmit()
This event function is only appropriate in a Display or Report window; therefore, you should use it only in a form script.

onRecordDuplicate()
This event function is only appropriate in an Edit window; therefore, you should use it only in a form script.

Example
This script erases the content of some of the boxes in an Edit screen when a record is duplicated, retaining only the information likely to be replicated in the copy. The boxes to be emptied are declared in an array, so that it is easy to customize the script for use in different situations. Note that the names in the array must match script names assigned to each of the boxes to be emptied.

```javascript
var boxNames = new Array("box1", "box2");

function onRecordDuplicate()
{
    var tgtBox; // box to be cleared
```
var i; // loop index

// clear the contents of each box named in the array
for (i = 0; i < boxNames.length; i++)
{
  tgtBox = Form.boxes(boxNames[i]);
  if (tgtBox) // ensure that the box exists
    tgtBox.content = ""; // and clear its contents
}

// now set focus to the first box listed
tgtBox = Form.boxes(boxNames[0]);
if (tgtBox)
  tgtBox.setFocus();
}

onReportInitialize()
This event function is only appropriate in the Report window; therefore, you should use it only in
a form script. Note that this function is similar to onFormOpen(), except that it is also called
when the report is being repainted; for example, when Refresh is chosen or the sort is changed.

Script Objects
DB/TextWorks exposes a series of objects accessible to scripts.
Within a form script, there are the following "top-level" objects: Application, Form, Command,
and Window.
The following topics detail the implemented objects, collections, properties, and methods
(properties are generally read-only, unless otherwise noted):

Application Object
Box Object
Command Object
Error Object
ExportDescriptor Object
ImportDescriptor Object
Field Object
Form Object
Recordset Object
SendMailDescriptor Object
SortDescriptor Object
Store Object
Textbase Object
Window Object
Application Object

Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>applicationTitle</td>
<td>A string.</td>
</tr>
<tr>
<td>applicationVersion</td>
<td>A string.</td>
</tr>
<tr>
<td>activeTextbase</td>
<td>A <a href="#">Textbase object</a>.</td>
</tr>
<tr>
<td>entrySeparator</td>
<td>A string consisting of the unique internal character used to separate entries within a field. This character may appear in box.content strings when accessing editable boxes in the Edit window, or Fields.value strings when accessing information directly from the textbase. In a script, the JavaScript <code>string.split()</code> and <code>array.join()</code> methods may be used to manipulate entries:</td>
</tr>
<tr>
<td></td>
<td>var es = Application.entrySeparator;</td>
</tr>
<tr>
<td></td>
<td>var fieldString = Form.boxes(&quot;someName&quot;).content;</td>
</tr>
<tr>
<td></td>
<td>var entryArray = fieldString.split(es);</td>
</tr>
<tr>
<td></td>
<td>// entryArray is an array of entry strings</td>
</tr>
<tr>
<td></td>
<td>// ... do something to the entries ...</td>
</tr>
<tr>
<td></td>
<td>var newFieldString = entryArray.join(es);</td>
</tr>
<tr>
<td></td>
<td>Form.boxes(&quot;someName&quot;).content = newFieldString;</td>
</tr>
<tr>
<td>sessionStore</td>
<td>A <a href="#">Store object</a> that persists for the duration of a DB/TextWorks session.</td>
</tr>
<tr>
<td>userStore</td>
<td>A permanent <a href="#">Store object</a> associated with the user. Written to the INMAGIC.TBS file in the user file folder when DB/TextWorks exits.</td>
</tr>
<tr>
<td>currentMenuPath</td>
<td>Exposes the path of the current menu screen.</td>
</tr>
<tr>
<td>currentMenuName</td>
<td>Exposes the file name of the current menu screen.</td>
</tr>
</tbody>
</table>

Methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>message (string)</td>
<td>Puts up an OK message box displaying the string.</td>
</tr>
<tr>
<td>messageOkCancel (string)</td>
<td>Puts up an OK/Cancel message box, returns true if OK is clicked.</td>
</tr>
<tr>
<td>messageYesNo (string)</td>
<td>Puts up a Yes/No message box, returns true if Yes is clicked.</td>
</tr>
<tr>
<td>promptForInput (string)</td>
<td>Prompts the user for input and returns the character string that is typed in response. The argument string is the text that appears on the Information Needed dialog box.</td>
</tr>
<tr>
<td>statusMessage (string)</td>
<td>Puts a message in the status bar.</td>
</tr>
<tr>
<td>shellExecute (appFile, docFile)</td>
<td>Executes appFile, with docFile as argument. To open the document with the application associated with it in the registry, pass the file name as the first argument, and an empty string &quot;&quot; as the second argument: <code>shellExecute(docFile, &quot;&quot;)</code>.</td>
</tr>
<tr>
<td>newRecordset (name, path,</td>
<td>Returns a new <a href="#">Recordset object</a> opening textbase &quot;name&quot; in the &quot;path&quot; folder using the specified password.</td>
</tr>
</tbody>
</table>
Box Object

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>A string, the name assigned to the box.</td>
</tr>
<tr>
<td>content</td>
<td>A string, the text content of the box (read/write). This is the default value</td>
</tr>
<tr>
<td></td>
<td>of the Box object.</td>
</tr>
<tr>
<td>booleanValue</td>
<td>A number, meaningful only for a box in a query screen. It can have any of the</td>
</tr>
<tr>
<td></td>
<td>values listed below. Note that these properties are read-only, for use as</td>
</tr>
<tr>
<td></td>
<td>constants with booleanValue.</td>
</tr>
<tr>
<td>BooleanOR</td>
<td>Represents OR</td>
</tr>
<tr>
<td>BooleanAND</td>
<td>Represents AND</td>
</tr>
<tr>
<td>BooleanNOT</td>
<td>Represents NOT</td>
</tr>
</tbody>
</table>

Methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>setFocus()</td>
<td>Changes focus (the text input cursor) to this box.</td>
</tr>
</tbody>
</table>

Note: The content of a form box depends upon the type of box and the window in use. For example, a box in an Edit window may contain field information you can modify with a script. The content of a “box” on a menu screen is the text you see, not the textbase or menu you select. You cannot access the content of a box without a script name, and you cannot provide a script name for text or picture boxes.

Keep in mind that if you access the contents of a box in a Report window, it is likely to include formatting codes. These codes ensure that font and highlighting information is retained as the user scrolls back and forth in a report. If a script is comparing the contents of a box against some other text, the formatting codes should be removed first.

A formatting signal consists of a 0x1b character (which appears as a hollow rectangle) followed by a code letter, 10 digits, and a 0x1c character. For example, in an Application.message dialog box (which you may use for diagnostic purposes), it might look like this: \033[6553500001\033. The following fragment of sample code in JavaScript strips a formatting sequence off the beginning of the contents of a box:

```javascript
var boxText = Form.boxes("boxName").content;
if (boxText.charAt(0) == "\x1b")
  boxText = boxText.substr(13);
```

Command Object

The methods in this object provide access to many of the DB/TextWorks menu commands. In each case, calling the method simulates selecting the command from the menu. If the user would normally be asked to supply additional information, the appropriate dialog box appears. Control is returned to the script immediately after the command is initiated. Subsequent code in the script will proceed to execute, even as the specified command is interacting with the user.
(dialog boxes, and so forth) or performing its functions. Note that this can have unintended consequences, particularly if the command is one that closes the form hosting the script that is still executing. (Examples of commands that can close a form include closeTextbase(), closeWindow(), and selectFormsEx().)

If a script attempts to execute a menu command that is currently disabled in DB/TextWorks, nothing happens.

**Methods**

<table>
<thead>
<tr>
<th>Method</th>
<th>Associated Menu Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>batchDelete()</td>
<td>Records&gt;Batch Delete</td>
</tr>
<tr>
<td>batchModify()</td>
<td>Records&gt;Batch Modify</td>
</tr>
<tr>
<td>browseChoices()</td>
<td>Edit&gt;Browse Choices</td>
</tr>
<tr>
<td>browseFiles()</td>
<td>Edit&gt;Browse Files</td>
</tr>
<tr>
<td>cascadeWindows()</td>
<td>Window&gt;Cascade</td>
</tr>
<tr>
<td>changePrimaryPassword()</td>
<td>File&gt;Use Different Password&gt;Primary Textbase</td>
</tr>
<tr>
<td>changeSecondaryPassword()</td>
<td>File&gt;Use Different Password&gt;Secondary Textbase</td>
</tr>
<tr>
<td>closeTextbase()</td>
<td>File&gt;Close</td>
</tr>
<tr>
<td>closeWindow()</td>
<td>Window&gt;Close</td>
</tr>
<tr>
<td>commandQuery()</td>
<td>Search&gt;Command Query</td>
</tr>
<tr>
<td>copy()</td>
<td>Edit&gt;Copy</td>
</tr>
<tr>
<td>copyRecord()</td>
<td>Edit&gt;Copy Special&gt;Record</td>
</tr>
<tr>
<td>copyReport()</td>
<td>Edit&gt;Copy Special&gt;Report</td>
</tr>
<tr>
<td>copySpecial1()</td>
<td>Edit&gt;Copy Special&gt;Application (1)</td>
</tr>
<tr>
<td>copySpecial2()</td>
<td>Edit&gt;Copy Special&gt;Application (2)</td>
</tr>
<tr>
<td>cut()</td>
<td>Edit&gt;Cut</td>
</tr>
<tr>
<td>deleteEntry()</td>
<td>Edit&gt;Delete Entry</td>
</tr>
<tr>
<td>deleteRecord()</td>
<td>Records&gt;Delete Record</td>
</tr>
<tr>
<td>displayRecord()</td>
<td>Display&gt;Display Record</td>
</tr>
<tr>
<td>displayReport()</td>
<td>Display&gt;Display Report</td>
</tr>
<tr>
<td>duplicateRecord()</td>
<td>Records&gt;Duplicate Record</td>
</tr>
<tr>
<td>editRecord()</td>
<td>Records&gt;Edit Record</td>
</tr>
<tr>
<td>editSecondaryRecord()</td>
<td>Records&gt;Edit Secondary Record</td>
</tr>
<tr>
<td>executeQuery()</td>
<td>Search&gt;Execute Query</td>
</tr>
<tr>
<td>Scripting</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td><strong>exportData()</strong></td>
<td>File&gt;Export</td>
</tr>
<tr>
<td><strong>find()</strong></td>
<td>Edit&gt;Find</td>
</tr>
<tr>
<td><strong>findAll()</strong></td>
<td>Search&gt;Find All Records</td>
</tr>
<tr>
<td><strong>firstRecord()</strong></td>
<td>Display&gt;First Record</td>
</tr>
<tr>
<td><strong>fitWindowToForm()</strong></td>
<td>Window&gt;Fit Window to Form</td>
</tr>
<tr>
<td><strong>importData()</strong></td>
<td>File&gt;Import</td>
</tr>
<tr>
<td><strong>importDocument()</strong></td>
<td>File&gt;Import Document</td>
</tr>
<tr>
<td><strong>InmagicNETCatalogWeb()</strong></td>
<td>Inmagic.net&gt;Catalog Web Pages</td>
</tr>
<tr>
<td><strong>inmagicNETConfigure()</strong></td>
<td>Inmagic.net&gt;Configure</td>
</tr>
<tr>
<td><strong>inmagicNETPlaceOrder()</strong></td>
<td>Inmagic.net&gt;Place Order</td>
</tr>
<tr>
<td><strong>insertDate()</strong></td>
<td>Edit&gt;Insert&gt;Current Date</td>
</tr>
<tr>
<td><strong>insertEntryMark()</strong></td>
<td>Edit&gt;Insert Entry Mark</td>
</tr>
<tr>
<td><strong>insertSeries()</strong></td>
<td>Edit&gt;Insert&gt;Series</td>
</tr>
<tr>
<td><strong>insertTime()</strong></td>
<td>Edit&gt;Insert&gt;Current Time</td>
</tr>
<tr>
<td><strong>lastRecord()</strong></td>
<td>Display&gt;Last Record</td>
</tr>
<tr>
<td><strong>loadSet()</strong></td>
<td>Sets&gt;Load Set</td>
</tr>
<tr>
<td><strong>maintainThesaurus()</strong></td>
<td>Maintain&gt;Maintain Thesaurus</td>
</tr>
<tr>
<td><strong>newEntry()</strong></td>
<td>Edit&gt;New Entry</td>
</tr>
<tr>
<td><strong>newQuery()</strong></td>
<td>Search&gt;New Query</td>
</tr>
<tr>
<td><strong>newRecord()</strong></td>
<td>Records&gt;New Record</td>
</tr>
<tr>
<td><strong>nextHit()</strong></td>
<td>Display&gt;Next Highlighted Term</td>
</tr>
<tr>
<td><strong>nextRecord()</strong></td>
<td>Display&gt;Next Record</td>
</tr>
<tr>
<td><strong>omitRecord()</strong></td>
<td>Sets&gt;Omit Record</td>
</tr>
<tr>
<td><strong>openTextbase()</strong></td>
<td>File&gt;Open</td>
</tr>
<tr>
<td><strong>paste()</strong></td>
<td>Edit&gt;Paste</td>
</tr>
<tr>
<td><strong>pasteEntry()</strong></td>
<td>Edit&gt;Paste Entry</td>
</tr>
<tr>
<td><strong>prevHit()</strong></td>
<td>Display&gt;Previous Highlighted Term</td>
</tr>
<tr>
<td><strong>prevRecord()</strong></td>
<td>Display&gt;Previous Record</td>
</tr>
<tr>
<td><strong>print()</strong></td>
<td>File&gt;Print</td>
</tr>
<tr>
<td><strong>printPreview()</strong></td>
<td>File&gt;Print Preview</td>
</tr>
<tr>
<td><strong>redo()</strong></td>
<td>Edit&gt;Redo</td>
</tr>
<tr>
<td>Method</td>
<td>Menu Command</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>refreshSets()</td>
<td>Sets&gt;Refresh Sets</td>
</tr>
<tr>
<td>refreshWindow()</td>
<td>Window&gt;Refresh</td>
</tr>
<tr>
<td>replace()</td>
<td>Edit&gt;Replace</td>
</tr>
<tr>
<td>savedQueries()</td>
<td>Search&gt;Saved Queries</td>
</tr>
<tr>
<td>saveRecord()</td>
<td>Records&gt;Save Record</td>
</tr>
<tr>
<td>saveSet()</td>
<td>Sets&gt;Save Set</td>
</tr>
<tr>
<td>saveSetAs()</td>
<td>Sets&gt;Save Set As</td>
</tr>
<tr>
<td>scanImage()</td>
<td>Records&gt;Scan Image</td>
</tr>
<tr>
<td>selectEntry()</td>
<td>Edit&gt;Select Entry</td>
</tr>
<tr>
<td>selectForms()</td>
<td>Display&gt;Select Forms</td>
</tr>
<tr>
<td>selectMenuScreen()</td>
<td>Menu Screens&gt;Select</td>
</tr>
<tr>
<td>selectPrintForm()</td>
<td>(toolbar button only)</td>
</tr>
<tr>
<td>selectQueryScreen()</td>
<td>Search&gt;Select Query Screen</td>
</tr>
<tr>
<td>selectWindowForm()</td>
<td>(toolbar button only)</td>
</tr>
<tr>
<td>sendMail()</td>
<td>File&gt;Send Report as Mail</td>
</tr>
<tr>
<td>setupThesaurus()</td>
<td>Maintain:Set Up Thesaurus</td>
</tr>
<tr>
<td>showImages()</td>
<td>Display&gt;Show Record Images</td>
</tr>
<tr>
<td>sortReport()</td>
<td>Display&gt;Sort Report</td>
</tr>
<tr>
<td>spellCheck()</td>
<td>Tools&gt;Spell Check</td>
</tr>
<tr>
<td>textbaseHelp()</td>
<td>Help&gt;Textbase-Specific Help</td>
</tr>
<tr>
<td>tileHorizontal()</td>
<td>Window&gt;Horizontal Tile</td>
</tr>
<tr>
<td>tileVertical()</td>
<td>Window&gt;Vertical Tile</td>
</tr>
<tr>
<td>undo()</td>
<td>Edit&gt;Undo</td>
</tr>
<tr>
<td>writeReportToFile()</td>
<td>File&gt;Write Report to File</td>
</tr>
</tbody>
</table>

The following methods support menu commands that can have parameters set by the script:

- `exportDataEx` (ExportDescriptor) exports a file as specified by the ExportDescriptor.
- `importDataEx` (ImportDescriptor) imports a file as specified by the ImportDescriptor.
- `newExportDescriptor()` returns a new, empty `ExportDescriptor object`.
- `newImportDescriptor()` returns a new, empty `ImportDescriptor object`.
- `newSendMailDescriptor()` returns a new, empty `SendMailDescriptor object`.
- `selectFormsEx` (displayForm, editForm, reportForm, printForm) specifies the forms to select for the Display window, Edit window, Report window, and printing, respectively. If any of the arguments is an empty string or null, the form previously selected for that window or
purpose is unchanged. **selectFormsEx** returns true if the selection succeeds, false if any one of the forms cannot be selected (for example, if it does not exist). If a form selection fails, the previously selected form is left unchanged. The **exception** to this is if the form exists but is not saved for use in that window, then the Basic form is selected and the function returns true. Note that only public forms should be selected if the script is intended to be shared with other users. Note also that this command changes the forms shown on the Select Forms dialog box.

**selectMenuScreenEx** (*menuScreen*) specifies the menu screen to select for the Menu Screen window. If the path is omitted, DB/TextWorks will look in the folder containing the currently selected menu screen. **selectMenuScreenEx** returns true if the selection succeeds, false if the menu screen cannot be selected (for example, if it does not exist).

**selectQueryScreenEx** (*queryScreen*) specifies the query screen to select for the Query window. If the argument is an empty string or null, the query screen previously selected is unchanged. **selectQueryScreenEx** returns true if the selection succeeds, false if the query screen cannot be selected (for example, if it does not exist). If a query screen selection fails, the previously selected query screen is left unchanged. The exception to this is if the query screen exists but is not saved for use in that window; then the Basic query screen is selected and the function returns true. Note that only public query screens should be selected if the script is intended to be shared with other users.

**sendMailEx** (*SendMailDescriptor*) sends a report as mail, with parameters set in the **SendMailDescriptor** object.

### Error Object

**Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>A string, the textual description of the error.</td>
</tr>
<tr>
<td><strong>Number</strong></td>
<td>Numeric error code.</td>
</tr>
<tr>
<td><strong>Source</strong></td>
<td>A string, the name of the object that generated the error.</td>
</tr>
</tbody>
</table>

**Note:** To find more about the error messages that can be returned from the **Recordset object**, see the DBTMSG textbase.

### ExportDescriptor Object

**Note:** Using the ExportDescriptor object does not use or change the last-used settings on the Export Options dialog box.

**Properties**

Unless otherwise specified, the properties at the first indentation level are read/write. Some of them can be set to specific values only. These values are available as read-only properties, shown at the second indentation level.

Note that you do not need to set all properties. If a property is omitted, DB/TextWorks uses the defaults (for example, Inmagic tagged format, Export All Fields, and so forth). The only required property is **exportFileName**.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>exportFileName</strong></td>
<td>(Required) Text string containing the full name of the file into which the records will be exported.</td>
</tr>
<tr>
<td>formatFlag</td>
<td>Numeric flag indicating the format of the file (Inmagic tagged, delimited ASCII, or XML) can be set to any of these values:</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>FormatFlagTAGGED</td>
<td>Flag indicating Inmagic tagged format. This is the default value if not set by the script.</td>
</tr>
<tr>
<td>FormatFlagDELIMITED</td>
<td>Flag indicating delimited ASCII format.</td>
</tr>
<tr>
<td>FormatFlagXML</td>
<td>Flag indicating XML format.</td>
</tr>
</tbody>
</table>

exportAllRecs

Boolean, true if the entire textbase should be exported, false if only the current set should be exported. Note that "current set" refers to the current DB/TextWorks session, not any Recordset created by the script. Defaults to false if there is a set, true otherwise. You cannot sort the report being exported unless you are exporting a set.

sortRecs

Boolean, true if the records should be sorted before being exported. Note that the current sort will be used (as specified within the DB/TextWorks session). This applies only if there is a current set and exportAllRecs is false. The default value is false.

exportFieldNames(n)

A string specifying the name of a field to be exported. Fields will be exported in the order specified. Note that n must not exceed MaxEXPORTFIELDS - 1.

Example (presented in correct syntax for JavaScript):

```javascript
exportFieldNames(0) = "Author";
exportFieldNames(1) = "Title";
exportFieldNames(2) = "Date Acquired";
```

MaxEXPORTFIELDS

Numeric, contains the maximum number of fields you can export (currently 250, the same as the maximum number of fields that can be defined in a textbase).

RecordCount

(READ-ONLY) Numeric, contains the number of records exported after the operation is completed.

RejectedCount

(READ-ONLY) Numeric, contains the number of records not successfully exported after the operation is completed.

The following properties apply only to delimited ASCII imports:

storeFieldNames

Boolean, specifies that field names should be exported in the first line of the delimited ASCII file. The default value is false.

recordSeparator

String containing the character(s) used to separate records in the delimited ASCII export file. Example in JavaScript: \r represents a carriage return, \n represents a linefeed, and \t represents a tab. The default separator is \r\n.

fieldSeparator

String containing the character(s) used to separate fields in the delimited ASCII export file. The default separator is the comma character (,).

entrySeparator

String containing the character(s) used to separate field entries in the delimited ASCII export file. The default separator is the pipe or bar character (|).
quoteCharacter | String containing the character used to surround field information in the delimited ASCII export file. The default is the double quotes character (").

See Also: [Sample JavaScript Script 9: Export all records in textbase in delimited ASCII format](#).

**ImportDescriptor Object**

**Note:** Using the ImportDescriptor object does not use or change the last-used settings on the Import Options dialog box.

**Properties**

Unless otherwise specified, the properties at the first indentation level are read/write. Some of them can be set to specific values only. These values are available as read-only properties, shown at the second indentation level.

Note that you do not need to set all properties. If a property is omitted, DB/TextWorks uses the defaults (for example, Inmagic tagged format, interruptible, no matching, default exception file name, and so forth).

<table>
<thead>
<tr>
<th>importFileName</th>
<th>(Required) Text string containing the full name of the file to be imported.</th>
</tr>
</thead>
<tbody>
<tr>
<td>formatFlag</td>
<td>Numeric flag indicating the format of the incoming file (Inmagic Tagged, delimited ASCII, or XML) can be set to any of these values:</td>
</tr>
<tr>
<td></td>
<td><strong>FormatFlagTAGGED</strong> Flag indicating the import file is in Inmagic tagged format. This is the default value if not set by the script.</td>
</tr>
<tr>
<td></td>
<td><strong>FormatFlagDELIMITED</strong> Flag indicating that the import file is in delimited ASCII format.</td>
</tr>
<tr>
<td></td>
<td><strong>FormatFlagXML</strong> Flag indicating that the import file is in XML format.</td>
</tr>
<tr>
<td>xslFileName</td>
<td>Name of file containing a style sheet to use when importing XML. Used only with FormatFlagXML. Include the full path and file name. If this property is not set or is set to an empty string (&quot;&quot; ) when FormatFlagXML is used, the automatically generated default style sheet will be used instead.</td>
</tr>
<tr>
<td>methodFlag</td>
<td>Numeric flag specifying whether Express or Interruptible import will be used, can be set to either of these values:</td>
</tr>
<tr>
<td></td>
<td><strong>MethodFlagINTERRUPTIBLE</strong> Flag indicating that the import method should be interruptible. This is the default value if not set by the script. <strong>MethodFlagEXPRESS</strong> Flag indicating that the import method should be express.</td>
</tr>
<tr>
<td>matchFlag</td>
<td>Numeric flag specifying whether incoming records will be matched against records already in the textbase, and what action should be taken if a match is found.</td>
</tr>
<tr>
<td></td>
<td>Note: It is the script author’s responsibility to avoid conflicting option settings. No error is returned if a conflict occurs, but the behavior may not be what is expected. For example, if <strong>matchFlag</strong> is set to <strong>MatchFlagREJECT</strong> and <strong>noMatchFlag</strong> is set to...</td>
</tr>
<tr>
<td><strong>NoMatchFlag</strong>REJECTNEWRECORD</td>
<td>then <strong>noMatchFlag</strong> is ignored.</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Can be set to any one of these values:</td>
<td></td>
</tr>
<tr>
<td><strong>MatchFlagNONE</strong> Flag indicating that the records should be imported with no matching. This is the default value if not set by the script.</td>
<td></td>
</tr>
<tr>
<td><strong>MatchFlagREJECT</strong> Flag indicating that when a match is found, the incoming record should be rejected.</td>
<td></td>
</tr>
<tr>
<td><strong>MatchFlagDELETE</strong>RECORD Flag indicating that when a match is found, the textbase record should be deleted and the incoming record discarded.</td>
<td></td>
</tr>
<tr>
<td><strong>MatchFlagAPPEND</strong>FIELD Flag indicating that when a match is found, the incoming record and the textbase record should be merged, with incoming field entries appended to the entries already in the textbase record.</td>
<td></td>
</tr>
<tr>
<td><strong>MatchFlagREPLACE</strong>FIELD Flag indicating that when a match is found, fields in the incoming record should replace the equivalent fields in the textbase record.</td>
<td></td>
</tr>
<tr>
<td><strong>MatchFlagREPLACE</strong>RECORD Flag indicating that when a match is found, the incoming record should replace the textbase record.</td>
<td></td>
</tr>
<tr>
<td><strong>noMatchFlag</strong> Numeric flag specifying what action should be taken if matching has been turned on, and no match is found.</td>
<td></td>
</tr>
<tr>
<td><strong>NoMatchFlagADDNEW</strong>RECORD Flag indicating that when no match is found, the incoming record should be imported into the textbase. This is the default value if not set by the script.</td>
<td></td>
</tr>
<tr>
<td><strong>NoMatchFlagREJECT</strong>NEWRECORD Flag indicating that when no match is found, the incoming record should be rejected.</td>
<td></td>
</tr>
<tr>
<td><strong>matchFieldNames(n)</strong> A string specifying the name of a field to be used to match incoming records against textbase records. Maximum number of entries is MaxMATCHFIELDS.</td>
<td></td>
</tr>
<tr>
<td>MaxMATCHFIELDS</td>
<td>(READ-ONLY) Numeric, the maximum number of fields that can be used to match incoming records against records in the textbase (currently 5).</td>
</tr>
<tr>
<td><strong>trimFlag</strong> Numeric flag used to specify whether leading spaces should be removed from field entries on import. Can optionally be set to:</td>
<td></td>
</tr>
<tr>
<td><strong>TrimFlagSTRIPLEAD</strong>INGSPACES Flag indicating that leading spaces should be stripped from field entries on import. This flag is off by default.</td>
<td></td>
</tr>
<tr>
<td><strong>validationFlag</strong> Numeric flag specifying what should happen if an incoming record contains fields that violate content validation.</td>
<td></td>
</tr>
<tr>
<td><strong>ValidationFlagREJECT</strong> Flag indicating that records that do not meet validation will be rejected, even if the field allows users to override content validation. This is the default value if not set by the script.</td>
<td></td>
</tr>
<tr>
<td><strong>ValidationFlagACCEPT</strong> Flag indicating that if an incoming record</td>
<td></td>
</tr>
</tbody>
</table>
meets all field validation criteria except those for which user overrides are permitted, the record will be accepted into the textbase.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ValidationFlag</strong></td>
<td><strong>ACCEPTANDUPDATE</strong> Flag indicating that if an incoming record meets all field validation criteria except those for which user overrides are permitted, the record will be accepted into the textbase, and validation lists will be updated to include the new values where permitted by the field definition, and passwords.</td>
</tr>
<tr>
<td><strong>logFlag</strong></td>
<td>Boolean, true if the import process should copy rejected records to an exception file. This flag is on by default. If it is left on and no <strong>logFileName</strong> is specified, the exception file name will be derived from the import file name in the usual way, with an extension of the form .X01, .X02, and so forth, as needed to be unique.</td>
</tr>
<tr>
<td><strong>logFileName</strong></td>
<td>String, name of exception file (if used). If file already exists, it is replaced.</td>
</tr>
<tr>
<td><strong>RecordCount</strong></td>
<td>(READ-ONLY) Numeric, contains the number of records imported after the operation is completed.</td>
</tr>
<tr>
<td><strong>RejectedCount</strong></td>
<td>(READ-ONLY) Numeric, contains the number of records rejected after the operation is completed.</td>
</tr>
<tr>
<td><strong>ReplacedCount</strong></td>
<td>(READ-ONLY) Numeric, contains the number of records changed (using matching) after the operation is completed.</td>
</tr>
</tbody>
</table>

The following properties apply only to delimited ASCII imports:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>fieldOrderFlag</strong></td>
<td>Flag used when the import file is in delimited ASCII format, to specify how the software will determine what fields are being imported and in what order. Can be set to any of these values:</td>
</tr>
<tr>
<td><strong>FieldOrderFlag</strong></td>
<td><strong>TEXTBASE</strong> Flag indicating that fields in a delimited ASCII file should be imported in the order in which they are defined in the textbase structure. Do not use this option if there are fewer fields in the import file than in the textbase structure. This is the default value if not set by the script.</td>
</tr>
<tr>
<td><strong>FieldOrderFlag</strong></td>
<td><strong>FIRSTROW</strong> Flag indicating that the first row or record in the delimited ASCII import file specifies the order in which fields will be imported.</td>
</tr>
<tr>
<td><strong>FieldOrderFlag</strong></td>
<td><strong>SPECIFY</strong> Flag indicating that the order of fields in a delimited ASCII import file is specified by the <strong>importFieldNames</strong> property.</td>
</tr>
<tr>
<td><strong>importFieldNames(n)</strong></td>
<td>A string specifying the name of a field to be imported from a delimited ASCII file. Note that <strong>importFieldNames(0)</strong> is the first field in the import record, <strong>importFieldNames(1)</strong> is the second, and so forth. This property should be used when <strong>fieldOrderFlag</strong> has been set to <strong>FieldOrderFlag</strong> <strong>SPECIFY</strong>. The maximum size of the array is <strong>MaxIMPORTFIELDS</strong>. Note also that <strong>n</strong> must not exceed <strong>MaxIMPORTFIELDS</strong> - 1.</td>
</tr>
</tbody>
</table>

Example (presented in correct syntax for JavaScript):

```
var nid=Command.newImportDescriptor( );
```
nid.importFieldNames(0) = "Author";
nid.importFieldNames(1) = "Title";
nid.importFieldNames(2) = "Date Acquired";

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MaxIMPORTFIELDS</td>
<td>Numeric, the maximum number of fields that can be imported (currently 250, the same as the maximum number of fields that can be defined in a textbase structure).</td>
</tr>
<tr>
<td>recordSeparator</td>
<td>String containing the character(s) used to separate records in a delimited ASCII import file. Example in JavaScript: \r represents a carriage return, \n represents a linefeed, and \t represents a tab. The default separator is \r\n.</td>
</tr>
<tr>
<td>fieldSeparator</td>
<td>String containing the character(s) used to separate fields in a delimited ASCII import file. The default separator is the comma character (,).</td>
</tr>
<tr>
<td>entrySeparator</td>
<td>String containing the character(s) used to separate field entries in a delimited ASCII import file. The default separator is the pipe or bar character (</td>
</tr>
<tr>
<td>quoteCharacter</td>
<td>String containing the character used to surround field information in a delimited ASCII import file. Fields containing field delimiter characters as part of the data should be surrounded with quotation marks. The default is the double quotes character (&quot;).</td>
</tr>
<tr>
<td>commentCharacter</td>
<td>String containing the character used to indicate a comment in a delimited ASCII import file. Everything between the commentCharacter and the next record separator will be ignored. The default is the exclamation character (!).</td>
</tr>
</tbody>
</table>

See Also: [Sample JavaScript Script 8: Import file using delimited ASCII format](#)

### Field Object

**Properties**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>A string, the name of the Field.</td>
</tr>
<tr>
<td>Value</td>
<td>A string, the text content of the Field (read/write). This property is the default value of the object.</td>
</tr>
</tbody>
</table>

The following properties are read-only.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>String, returns the field type. May have the values Text, Number, Date, Automatic Number, Automatic Date, Automatic ID, Computed Number, Computed Date, Image, Link, Code, UDC, Access Control, or unknown.</td>
</tr>
<tr>
<td>isWriteable</td>
<td>Boolean, true if field can be updated.</td>
</tr>
<tr>
<td>isTermIndexed</td>
<td>Boolean, true if field has a term index.</td>
</tr>
<tr>
<td>isWordIndexed</td>
<td>Boolean, true if field has a word index.</td>
</tr>
<tr>
<td>isValidList</td>
<td>Boolean, true if field has a validation list.</td>
</tr>
<tr>
<td>isValidListUpdate</td>
<td>Boolean, true if field has a validation list that can be updated when</td>
</tr>
</tbody>
</table>
the record is saved.

| isValidMask | Boolean, true if field has mask validation. |
| isValidOverride | Boolean, true if field has validation that can be overridden. |
| isValidRange | Boolean, true if field has range validation (minimum and/or maximum). |
| isValidRequired | Boolean, true if field is required. |
| isValidSingle | Boolean, true if field accepts single entries only. |
| isValidUnique | Boolean, true if field entries must be unique. |

### Form Object

#### Collections

**boxes** A collection of Box objects; supports Count property and Item method.

**Form.boxes.Count** returns the number of boxes in the form.

**Form.boxes.Item**("Title") returns the box object named Title.

Because Item is the default, **Form.boxes("Title")** is equivalent.

### Recordset Object

#### Collections

**Fields** A collection of Field objects. Supports Count property and Item method.

**Recordset.Fields.Count** returns the number of fields in the recordset.

**Recordset.Fields.Item**("Title") returns the Field object named Title. (Because Item is the default, **Recordset.Fields("Title")** is equivalent.)

**Recordset.Fields.Item(n)** returns the nth field in the textbase (zero-origin).

**Errors** A collection of Error objects. Supports Count property and Item and Clear methods.

**Recordset.Errors.Count** returns the number of errors in the current collection.

**Recordset.Errors.Clear()** clears the current error collection.

(Collection is automatically cleared at the start of any operation that may generate an error.)

**Recordset.Errors.Item**(n) returns the nth Error object in the current collection (zero-origin). Because Item is the default, **Recordset.Errors(n)** is equivalent.

### Properties

The following properties are read-only.

| textbase | The associated Textbase object. |
| isOpen | Boolean, true if the Recordset is open. |
| BOF | Boolean, means positioned before first record. |
| EOF | Boolean, means positioned after last record. |
RecordCount | Number of records in Recordset.
AbsolutePosition | 1-origin ordinal number of current record in Recordset (read/write): -1=unknown, -2=BOF, -3=EOF

The following property is read/write.

**validationFlag**

Numeric flag that dictates how validation rules should be treated during an update operation. It can have any of the following values, which are read-only:
- **ValidationFlagNORMAL** Flag indicating that all validation rules should apply during an update operation.
- **ValidationFlagOVERRIDE** Flag indicating that an update operation can forego validating data in fields for which validation may be overridden.
- **ValidationFlagOVERRIDEUPDATE** Flag indicating that an update operation can forego validating data in fields for which validation may be overridden, AND the validation list for a field should be updated to reflect any new entries if permitted for that field.

**Methods**

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Open</strong> (QueryString)</td>
<td>Execute the query and make the Recordset available. If the supplied query string is empty (&quot;&quot;), the Recordset is opened with an empty set. Note that a Recordset must be opened before records can be added.</td>
</tr>
<tr>
<td><strong>Close()</strong></td>
<td>Close the Recordset (may be re-opened with a new query).</td>
</tr>
<tr>
<td><strong>AddNew()</strong></td>
<td>Creates a new, empty record (added to the textbase when Update() is called).</td>
</tr>
<tr>
<td><strong>Update()</strong></td>
<td>Writes the current record back to the textbase, with any changes.</td>
</tr>
<tr>
<td><strong>Delete()</strong></td>
<td>Deletes the current record from the textbase.</td>
</tr>
<tr>
<td><strong>Move</strong> (NumRecords)</td>
<td>Move current record pointer NumRecords (from present position, may be negative).</td>
</tr>
<tr>
<td><strong>MoveFirst()</strong></td>
<td>Moves the current record pointer to the first record.</td>
</tr>
<tr>
<td><strong>MoveLast()</strong></td>
<td>Moves the current record pointer to the last record.</td>
</tr>
<tr>
<td><strong>MoveNext()</strong></td>
<td>Moves the current record pointer to the next record.</td>
</tr>
<tr>
<td><strong>MovePrevious()</strong></td>
<td>Moves the current record pointer to the previous record.</td>
</tr>
<tr>
<td><strong>NewSortDescriptor()</strong></td>
<td>Returns a new, empty SortDescriptor object.</td>
</tr>
<tr>
<td><strong>Sort</strong> (SortDescriptor)</td>
<td>Sorts the Recordset, using the parameters in the SortDescriptor object.</td>
</tr>
<tr>
<td><strong>OmitCurrentRecord()</strong></td>
<td>Omits the current record from the set and automatically does a MoveNext().</td>
</tr>
</tbody>
</table>

**Example**

This script inserts a new entry in the ClaimDate field in all of the records in the current set. The entry contains the current date followed by " (sent claim letter)". The script is performing the
same function as batch modify but with many fewer keystrokes. The script is invoked by clicking a script button having the name "btnUpdate" in a query screen.

```javascript

// Function: strToday
// Purpose: return string containing current date
// Parameters:
// Returns: date string
function strToday()
{
    var now = new Date();
    var mnumber = now.getMonth();
    var dateString=  " + now.getDate() + " - " + gMonths[mnumber] + " - " + now.getYear();

    return dateString;
}

// Function: btnUpdate_onClick()
// Purpose: insert date and comment in ClaimDate field
// in all records in the current set
// Parameters:
// Returns:
function btnUpdate_onClick()
{
    var crs = Application.activeTextbase.currentRecordset;
    var es = Application.entrySeparator;
    var claimField, newEntry;

    // Proceed only if there is a nonempty current set.
    if ((crs != null) && (crs.RecordCount > 0))
    {
        // Construct the new entry - today's date plus the status information.
        newEntry = strToday() + " (sent claim letter)";

        // Initialize for walking through the records in the set.
        crs.MoveFirst();

        // Loop through the records in the set.
        while (crs.EOF == false)
        {

            // Get the current value of the ClaimDate field.
            claimField = crs.Fields("ClaimDate").Value;

            // If there is information already in that field, precede it with
            // an entry separator.
            if (claimField.length > 0)
                claimField = es + claimField;

            // Now insert the new entry at the beginning.
            crs.Fields("ClaimDate").Value = newEntry + claimField;
        }
    }
}
```
// Save the updated record.
crs.Update();

// And move to the next record in the set.
crs.MoveNext();
}
**reportFormName**
String, should contain name of the report form to use. If the script does not specify the report form name, the current Report Window form will be used by default.

<table>
<thead>
<tr>
<th><strong>reportFormFlag</strong></th>
<th>Numeric value specifying whether the form is Public or Private, can be either of these values:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ReportFormFlagPUBLIC</td>
<td>Flag indicating public form. This is the default if no flag is set.</td>
</tr>
<tr>
<td>ReportFormFlagPRIVATE</td>
<td>Flag indicating private form. Must be specified if the form is private.</td>
</tr>
</tbody>
</table>

**SendCnt** *(READ-ONLY)*
Numeric, set to the number of messages sent after the operation is completed.

**SendFailCnt** *(READ-ONLY)*
Numeric, set to the number of messages that could not be sent after the operation is completed.

**SendEmptyCnt** *(READ-ONLY)*
Numeric, set to the number of messages that could not be sent because the e-mail address field was empty.

### Methods

**addAttachment** *(filename)*
Adds the named file to the list of attachments.

See Also: [Sample JavaScript Script 12: Send report as mail with attachments](#)

### SortDescriptor Object

Using the SortDescriptor object changes the current user-specified sort, the sort shown on the Sort Report dialog box.

### Properties

The following properties are read/write. **Note:** Only fields in the primary textbase can be used for sorting.

<table>
<thead>
<tr>
<th><strong>sortFlags</strong></th>
<th>Numeric flags governing the overall sort. See SortFlagX (for example, SortFlagEMPTIESFIRST) properties.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>sortFieldName(n)</strong></td>
<td>A string specifying the name of a field to sort by. Note that sortFieldName(0) is the primary (most significant) sort field, sortFieldName(1) is the first subsort field, and so forth. Note also that n must not exceed MaxSORTFIELDS - 1.</td>
</tr>
<tr>
<td><strong>sortFieldFlags(n)</strong></td>
<td>Numeric flags governing the sorting properties of the nth sort field. See FieldFlagX properties (for example, FieldFlagREVERSE).</td>
</tr>
<tr>
<td><strong>alternateFieldName(n)</strong></td>
<td>A string specifying the name of an alternate field to sort by. If the field specified in sortFieldName(0) is absent in a record, the software looks for alternateFieldName(0), then alternateFieldName(1), and so forth. Note that n must not exceed MaxALTFIELDS - 1.</td>
</tr>
<tr>
<td><strong>alternateFieldFlags(n)</strong></td>
<td>Numeric flags governing the sorting properties of the nth alternate</td>
</tr>
</tbody>
</table>
sort field. See FieldFlagX properties (for example, FieldFlagREVERSE).

mergeFieldName(n) A string specifying the name of a field to interfile with the top-level sort. The order in which these fields are specified is not relevant. Note that n must not exceed MaxMERGEFIELDS - 1.

mergeFieldFlags(n) Numeric flags governing the sorting properties of the nth merge field. See FieldFlagX properties (for example, FieldFlagREVERSE).

The following ten properties are read-only. They are intended to be used to set numeric values in the properties listed above.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MaxSORTFIELDS</td>
<td>Maximum number of sort fields (currently 5).</td>
</tr>
<tr>
<td>MaxMERGEFIELDS</td>
<td>Maximum number of merge fields (currently 4).</td>
</tr>
<tr>
<td>MaxALTFIELDS</td>
<td>Maximum number of alternate fields (currently 4).</td>
</tr>
</tbody>
</table>

These sort flags are mutually exclusive. You may assign any one of them to the sortFlags property:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SortFlagEMPTIESFIRST</td>
<td>Records having nothing in the primary or alternate sort fields appear first.</td>
</tr>
<tr>
<td>SortFlagOMITEMPTIES</td>
<td>Records having nothing in the primary or alternate sort fields do not appear.</td>
</tr>
<tr>
<td>SortFlagTEXTBASESORT</td>
<td>Flag indicating that the textbase default sort should be used. If this value is set, the rest of the properties in the SortDescriptor object are ignored.</td>
</tr>
<tr>
<td>SortFlagRELEVANCESORT</td>
<td>Flag indicating that a relevance-ranked sort should be used. If this value is set, the rest of the properties in the SortDescriptor object are ignored.</td>
</tr>
<tr>
<td>SortFlagNOSORT</td>
<td>Flag indicating that no sort should be used. If this value is set, the rest of the properties in the SortDescriptor object are ignored.</td>
</tr>
</tbody>
</table>

The following sort flags can be combined. Specify both by setting the appropriate property to the sum of these values.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FieldFlagREVERSE</td>
<td>Sort by this field in reverse (or descending) order.</td>
</tr>
<tr>
<td>FieldFlagEXPLODE</td>
<td>Sort by each separate entry of this field.</td>
</tr>
</tbody>
</table>

**Store Object**

**Properties**
The following property is read/write.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>value</td>
<td>A string. Key is a string. Value is the default property of Store, so Store (key) is equivalent to Store.value(key). A non-existent entry returns a null string; writing a null string (&quot;&quot;) deletes the entry.</td>
</tr>
</tbody>
</table>
The following properties are read-only.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>entryCount</td>
<td>A number, the number of entries currently in the Store.</td>
</tr>
<tr>
<td>currentKey</td>
<td>A string, current key while iterating.</td>
</tr>
<tr>
<td>currentValue</td>
<td>A string, current value while iterating.</td>
</tr>
</tbody>
</table>

**Methods**

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>beginIteration()</td>
<td>Starts an iteration. Returns false if Store empty, true otherwise.</td>
</tr>
<tr>
<td>nextIteration()</td>
<td>Sets currentKey and currentValue to next entry in Store. Returns false if no next entry (past end). Sample syntax:</td>
</tr>
</tbody>
</table>

```
var store = Application.sessionStore;
store.beginIteration();
while ( store.nextIteration() )
{
    // do stuff with store.currentKey and store.currentValue
}
```

**Example 1**
This code saves a value. "keyName" represents the key string you will later use to retrieve the value and "boxName" is the script name given to a box on a form.

```
Application.userStore.value("keyName") = Form.boxes("boxName").content;
```

**Example 2**
This code retrieves a previously saved value. "boxName" is the script name given to a box on a form and "keyName" represents the name of the key under which the value was stored.

```
Form.boxes("boxName").content = Application.userStore.value("keyName");
```

**Textbase Object**

**Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>A string.</td>
</tr>
<tr>
<td>path</td>
<td>A string.</td>
</tr>
<tr>
<td>currentRecordset</td>
<td>A Recordset object. This property is the default value of the Textbase object.</td>
</tr>
<tr>
<td>recordCount</td>
<td>The number of records in the textbase.</td>
</tr>
<tr>
<td>textbaseStore</td>
<td>A permanent Store object associated with the textbase and the user. Written to the &lt;textbase name&gt;.TBS file in the user file folder when you close the textbase.</td>
</tr>
</tbody>
</table>

**Methods**

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>printReport()</td>
<td>Prints the current set using the specified form, returns false on failure (for example, there is no current set). The form name must match exactly the name of a form accessible for printing. If it does not, the Basic form will be used instead.</td>
</tr>
</tbody>
</table>
Window Object

The methods in this object provide access to information about the current window.

Properties

<table>
<thead>
<tr>
<th>type</th>
<th>A string, the type of window this script is executing in. Possible values: &quot;Query&quot;, &quot;Display&quot;, &quot;Report&quot;, &quot;Edit&quot;, &quot;EditLinked&quot;, &quot;Menu&quot;, &quot;MenuCascade&quot;, &quot;HTMLApplication&quot;, &quot;unknown&quot;.</th>
</tr>
</thead>
<tbody>
<tr>
<td>formName</td>
<td>Exposes the name of the form or query screen being used in the current window. Not available for Menu Screen window; use Application.currentMenuName and Application.currentMenuPath instead.</td>
</tr>
</tbody>
</table>

Methods

| appendToTitle(string) | Appends the specified text string to the window's title bar. |

Menu choices on the Applications menu open the DBTW Application window. Within a DHTML (Dynamic Hypertext Markup Language) page running in the DBTW Application window, window.external returns the same top-level objects that a form sees. (There is no Form object in the Application window.) Specifically, window.external.Application returns the Application object, window.external.Form returns the form from which the DHTML page was invoked (where applicable), window.external.Window returns the window containing the DHTML page, and window.external.Command returns the Command object.

Sample JavaScript Scripts

The following topics provide sample JavaScript scripts. You may copy and modify them for your own use. For more sample scripts, visit the Inmagic Web site (http://www.inmagic.com).

Note: Scripts are limited to 30,000 characters.

- **Sample JavaScript script 1**: Add a script button to swap the contents of two fields
- **Sample JavaScript Script 2**: Prepopulate a query screen for new queries
- **Sample JavaScript Script 3**: Add buttons to a query screen to print the current set using either of two report forms
- **Sample JavaScript Script 4**: Add a "help" button next to a box on an edit screen, telling the user what to type in that field
- **Sample JavaScript Script 5**: Copy the first word of one field to another field (if the second field is empty) when the record is saved
- **Sample JavaScript Script 6**: Launch document(s) in a field in the Edit, Display, or Report window in its native application
- **Sample JavaScript Script 7**: Add button to report to sort by a specific field exploded
- **Sample JavaScript Script 8**: Import file using delimited ASCII format
- **Sample JavaScript Script 9**: Export all records in textbase in delimited ASCII format
- **Sample JavaScript Script 10**: Specify forms for use with an individual query screen
Sample JavaScript Script 11: Reset the buttons for all query boxes to AND when you click New Query

Sample JavaScript Script 12: Send report as mail with attachments

Sample JavaScript Script 1: Add a script button to swap the contents of two fields

```javascript
function button1_onClick()
{
    var temp = Form.boxes("name1").content;
    Form.boxes("name1").content = Form.boxes("name2").content;
    Form.boxes("name2").content = temp;
}
```

Sample JavaScript Script 2: Prepopulate a query screen for new queries

```javascript
function onFormClear()
{
    Form.boxes("name1").content = ">=\@date - 7";
    Form.boxes("name1").setFocus()
}
```

Sample JavaScript Script 3: Add buttons to a query screen to print the current set using either of two report forms

```javascript
function button1_onClick()
{
    if (!Application.activeTextbase.printReport("name of first form"))
        Application.message("There are no records to print.");
}
function button2_onClick()
{
    if (!Application.activeTextbase.printReport("name of second form"))
        Application.message("There are no records to print.");
}
```

Sample JavaScript Script 4: Add a "help" button next to a box on an edit screen, telling the user what to type in that field

```javascript
function button1_onClick()
{
    Application.message("Type the last name followed by a comma and the first name.");
}
```

Sample JavaScript Script 5: Copy first word of one field to another field (if the second field is empty) when the record saved

```javascript
function onRecordSave()
{
    var srcBox = Form.boxes("name1");
    if (srcBox) // be sure there is a box with the given name
    {
```
Sample JavaScript Script 6: Launch document(s) in field in the Edit, Display, or Report window in its native application

This script will open each of the documents listed in a field using its native application. This script can be used in the Edit, Display, or Report window, as long as the documents are shown in a single box on the form, and are separated by the same sequence of characters (such as semicolon-space).

This script makes the following assumptions:

- The box containing the document or file names has the script name "doc", has no content other than the document names, uses no added paragraph breaks, and separates the entries in the field with semicolon-space (in a display or report).
- The button used to open the documents has the script name "launch".
- The document names are in separate field entries.

You may copy and modify the script as needed to accommodate your situation.

```javascript
function launch_onClick()
{
    // Substitute your field separator for the semicolon-space
    // shown in quotes below.
    //
    var docSeparator = "; ";
    var editSeparator = Application.entrySeparator;
    // Substitute the script name for your form box for the
    // word shown in quotes below.
    //
    var docBox = Form.boxes("doc");
    
    if (docBox)
    {
        var dispDocs = docBox.content.split(docSeparator);
        var editDocs = docBox.content.split(editSeparator);
        var docs;
        
        if (editDocs.length > 1)
        docs = editDocs;
        else if (dispDocs.length > 1)
        docs = dispDocs;
        else
        docs = editDocs;
    }
}
```
for (var i=0; i<docs.length; i++)
{
    if (docs[i] != "")
        Application.shellExecute(docs[i], "");
}

Note: If you start with a Basic form and add this script, or if you choose to display the document names in a list, specify "r" as the docSeparator.

Sample JavaScript Script 7: Add button to report to sort by a specific field exploded

function subj_onClick()
{
    var crs = Application.activeTextbase.currentRecordset;
    var sd = crs.newSortDescriptor();
    sd.sortFieldName(0) = "Subject";
    sd.sortFieldFlags(0) = sd.FieldFlagEXPLODE;
    crs.Sort(sd);
    Command.refreshWindow();
}

Sample JavaScript Script 8: Import file using delimited ASCII format

This script shows a simple example of using the ImportDescriptor object. It Imports the file "c:\data\import.add" using delimited ASCII format, Express Import, and accepts content validation overrides and updates validation lists. It displays a completion message at the end.

function button_onClick()
{
    var nid = Command.newImportDescriptor();
    nid.importFileName = "c:\data\import.add";
    nid.formatFlag = nid.FormatFlagDELIMITED;
    nid.methodFlag = nid.MethodFlagEXPRESS;
    nid.validationFlag = nid.ValidationFlagACCEPTANDUPDATE;
    Command.importDataEx(nid);
    var addct = nid.RecordCount;
    var rejct = nid.RejectedCount;
    var repct = nid.ReplacedCount;
    Application.message("Import done.\r"+addct+" added\r"+rejct+" rejected\r"+repct+" replaced");
}

Sample JavaScript Script 9: Export all records in textbase in delimited ASCII format

This script shows a simple example of using the ExportDescriptor object. It exports all records in a textbase in delimited ASCII format to "c:\data\export.dmp". It displays completion message at the end.

function export_onClick()
{
    var ned=Command.newExportDescriptor();
    if (ned)
Sample JavaScript Script 10: Specify forms for use with an individual query screen

This script specifies forms for use with an individual query screen. When you open the query screen, the desired forms are selected. The script displays an error message if one or more of the forms does not exist.

```javascript
function onFormOpen()
{
if (!Command.selectFormsEx("Display Form","Edit Form","Short Report","Print Summary"))
Application.message("Problem selecting a form");
}
```

Sample JavaScript Script 11: Reset the button for all query boxes to AND when you click New Query

This script resets the Boolean operator buttons back to AND for all query boxes when you click New Query.

**Note:** All of the query boxes must have unique script names for it to work. Any name can be used.

```javascript
function onFormClear()
{
var bcount = Form.boxes.Count;
for (var i=0; i < bcount ; i++)
{
Form.boxes(i).booleanValue = Form.boxes(i).BooleanAND;
}
}
```

Sample JavaScript Script 12: Send report as mail with attachments

This script makes it possible for a user to click a button to send a report as e-mail with two attachments without further interaction. Note that this sample script assumes that you are using SMTP (Simple Mail Transfer Protocol).

```javascript
function button_onClick()
{
if (Application.activeTextbase.currentRecordSet.RecordCount > 0)
{
var smDesc = Command.newSendMailDescriptor();
```
smDesc.formatOpt = smDesc.FormatOptATTHTML;
smDesc.emailFrom = "\"Library\" <library@domain.com>";
smDesc.emailTo = "username@domain.com";
smDesc.emailSubject = "The book you ordered is here";
smDesc.addAttachment("c:\docs\toc.rtf");
smDesc.addAttachment("c:\docs\abstract.txt");

smDesc.reportFormName = "Books Here";
smDesc.reportFormFlag = smDesc.ReportFormFlagPRIVATE;

Command.sendMailEx(smDesc);

var sendCnt = smDesc.SendCnt;
var failCnt = smDesc.SendFailCnt;

Application.message("Send Mail operation done.\r\nsendCnt+" messages sent,\r\nfailCnt+" messages not sent.");
}
else
Application.message("There is no current set.");
}

See Also
SendMailDescriptor Object

Sample Visual Basic Scripting Edition (VBScript) Scripts

Sample Visual Basic Scripting Edition Scripts

The following topics provide you with sample Visual Basic Scripting Edition (VBScript) scripts You may copy and modify them for your own use.

Note: Scripts are limited to 30,000 characters.

Sample VBScript Script 1: Add a script button to swap the contents of two fields

Sample VBScript Script 2: Add buttons to a query screen to print the current set using either of two report forms

Sample VBScript Script 1: Add a script button to swap the contents of two fields

Sub button1_onClick()
    dim temp
    temp = Form.boxes("Box1").content
    Form.boxes("Box1").content = Form.boxes("Box2").content
    Form.boxes("Box2").content = temp
End Sub
Sample VBScript Script 2: Add buttons to a query screen to print the current set using either of two report forms

Sub button1_onClick()
If Not Application.activeTextbase.printReport("DAILY") Then
Application.message("There are no records to print.")
End If
End Sub

Sub button2_onClick()
If Not Application.activeTextbase.printReport("MONTH END") Then
Application.message("There are no records to print.")
End If
End Sub
Working with Images

Your textbases can include color, grayscale, and black and white images in over 30 of the most common image file formats, such as GIF and JPG. You can search for, display, and print these images, and annotate them using text and graphics.

Only the image names are stored in the textbase. The actual image files are stored in external locations, such as network servers or your local hard drive.

To associate images with records, add an Image field to the textbase structure, then populate that field with image file names (either by editing individual records or by importing a text file). To display images, do a search and display the records in the Report, Display, or Edit window, then choose Display>Show Record Images. The Window>Synchronize Windows command determines whether the image and record display remains synchronized.

Finding Images

To find images, use either of these methods

- Search an indexed Image field just as you would search any other type of field. For example, press F3 and paste image file names from the index.
- Search for a particular record or set of records, some or all of which happen to include image references (names of images) in an Image field.

To find all records with an entry in an Image field

- Type =* in a Query box that searches a particular Image field.

To find all records where the Image field is empty

- Type =* but change the Boolean button in front of the box to NOT.

After you retrieve records, you can display the images in the Images window (display records in the Report, Display, or Edit window then choose Display>Show Record Images). From the Images window, you can use the image options to zoom, rotate, display multiple images in a thumbnail view, and perform other display operations.

Displaying Images

After you find records that contain images, you can view the images by displaying them in the Images window. The Images window shows all of the images referenced in all of the records in the current set (one at a time). You can navigate among images, zoom in and out, see a Thumbnail view of all images at once, and perform other display operations.

To display images

1. Retrieve records that contain image references.
2. Select a record in the Report window or display a record in the Edit or Display window. You must open one of these windows if you want to display images. The record that is selected or displayed determines which image you will see first.

Note: If you start displaying images while your cursor is in an Image field in an Edit or Display window, you can see images from that field only. Otherwise, you can see all images associated with all records in the set.
3. Click the Show Record Images toolbar button or choose Display> Show Record Images.

**Thumbnail View**

The Thumbnail window displays all of the images in the current record or field, at a reduced size, providing a quick way to find and view a particular image.

**Opening the Thumbnail Window**

To display images in the Thumbnail window, you must first access the Images window by choosing Display> Show Record Images. Then click the Thumbnail button on the Images window toolbar or choose Images> Thumbnail.

The cursor placement when you access the Images window determines whether the Thumbnail window displays images in the current record or field. If the cursor is in an Image field in an Edit or Display window when you access the Images window, the Thumbnail window shows images in the current field, not the current record.

**Thumbnail Operations**

While the Thumbnail window is active, you can perform the following operations:

- **View an image full size.** The Thumbnail window shows multiple images at once. When you find the one you are looking for, you can view it full-size in the Images window. You can double-click the image in the Thumbnail window. Or you can select the image, then click the Show Selected Image button, or choose Thumbnail> Show Selected Image.

- **Change the number of images displayed at one time.** Click the Set Rows and Columns button or choose Thumbnail> Set Rows and Columns. When prompted, type the number of rows and columns you want. This setting persists until you change it.

- **Show or Hide Annotations.** Choose Thumbnail> Show Annotations or Hide Annotations to make annotations appear or not appear.

- **Annotate images.** Choose Thumbnail> Annotation Current Image. The Image Annotation window appears with a floating drawing tools toolbox.

- **Sharpen black and white images.** Click the Scale to Gray button or choose Thumbnail> Scale to Gray. This setting persists until you change it. This setting also affects the Images window. It does not affect the image file itself, nor does it affect printing.

- **View images in the next or previous record.** Click the Next Record or Previous Record button.

**Scanning Images**

If you have a TWAIN compliant scanner, you can scan an image to a file while editing a DB/TextWorks record, and DB/TextWorks will insert the file name in the Image field. Only TWAIN-compatible scanners are supported. Check your scanner documentation to see if a TWAIN scanner driver is available.

While editing a record, place the cursor in an Image field and choose Records> Scan Image. The Scan Image dialog box appears. If you have multiple scanners, use the Select Source button to choose a scanner. Click the Scan Image button to continue.
Working with Images

The next dialog box that appears is provided by the TWAIN driver for the selected scanner. Supply the requested information and begin scanning. After the scan is completed, close the dialog box.

When the Save File As dialog box appears, specify a name for the image file and select a file type (TIF, BMP, and so forth). The file will be saved to disk and the file name inserted in the DB/TextWorks Image field. The path will be omitted if it is the same as the textbase path. If the Image field already contains information, a new entry is created.

**Note:** The **Scan Image** command does not support automatic document feeders or compressing a series of image names using the shortcut representation, such as IMG001.TIF (3).

Printing Images

To access this dialog box: With the Images window, Thumbnail window, or Image Annotation window active, choose **File>Print**. On the Select Images to Print dialog box, select a Print Range option, and click **OK**. Use the standard Print dialog box to specify the desired printing options and click **OK**.

- **Print Current Image.** Print the image currently displayed in the Images or Image Annotation window or selected in the Thumbnail window.

- **Print Images in the Current Record.** Print all images referenced in the field(s) highlighted in the Select Image Fields list, in the current record.

- **Print Images in the Current Set.** Print all images referenced in the field(s) highlighted in the Select Image Fields list, in the current set of records.

Notes

- The Show/Hide Image Annotations command (Images menu) determines whether images are printed with or without annotations.

- Rotate, Despeckle, and Deskew affect printing. All other image display options (for example, zoom, scale to gray, and so forth) do not affect printing.

- When printed, images are scaled to fit the Paper Size selected in the Print Setup dialog box.

- Because image files are complex, they generally take longer to print than a page of text. While images are printing, progress indicators show the total number of images printed and the percentage of the current image printed. You get a completion message when the job is done.

- To increase the speed at which images print, select a non-Postscript printer driver in the Print dialog box. Another way to increase printing speed is to modify the [Imaging] section of the **INMAGIC.INI** file to include the line **FastPrint=1**. This option works only with certain kinds of printers and images. If you receive printer errors, change the line back to **FastPrint=0**.

- To stop printing images, click the **Cancel** button on the printing progress dialog box. Before the printer can stop, it must finish printing any images that are already in its memory.

- Some Postscript printer drivers include a “Print as negative image” option.
Adding Image Names to Records

How to Get Image File Names into Records

If you plan to reference just a few images in your textbase, you can type the image file names directly in the Image field of each appropriate record.

If you plan to reference many images, it is more efficient to import image file names from a text file.

If you have a TWAIN compatible scanner, you can scan images while editing records, and insert the file name(s) directly into an Image field.

Image File Names and the Counter Shortcut

An Image field in a record can contain one or more image file names. Make each file name a separate field entry (use F7). For example:

    LETTER1.JPG
    LETTER2.JPG

If you have several consecutively named files, you can reference multiple image files in one entry by using a counter at the end of the entry. For example, the following entry references three image files (FILE1.JPG, FILE2.JPG FILE3.JPG):

    FILE1.JPG 3

DB/TextWorks does not use the file extension to recognize the file type. This gives you more freedom in naming your image files. For example, a file could be called LETTER.001.

Important! Do not use this shortcut if you plan to use inline images or image links with a DB/Text WebPublisher product.

Image Drive and Path

A general guideline when specifying image file names in a field is to include the folder path, starting with a backslash, but not the drive letter. For example, an Image field might include this entry:

    \MEMOS\LETTER.JPG

If you omit the backslash at the beginning of the path, DB/TextWorks looks for the image in the subfolder of the current folder:

    MEMOS\LETTER.JPG

If you prefer, you can specify just the image file name (no path), and DB/TextWorks will look for the image in the textbase folder or current folder on all drives specified in Tools>Options>Imaging:

    LETTER.JPG

To specify which drives DB/TextWorks should look on, choose Tools>Options>Imaging and specify up to 12 drive letters.

Note: If the drive is included in the image file name in a record, DB/TextWorks ignores the Image drive(s) option for that image, and looks for images on the drive specified in the record.

Tip! You can also specify an optional volume ID field for each textbase to specify how DB/TextWorks handles searching for images.
**Long File Names**

If you used DB/TextWorks prior to version 1.2 and your Image fields contain comments after image file names, those entries could be misinterpreted as long file names. For example, the entry MEMO.TIF Revision is interpreted as a valid file name, instead of an image file name followed by a comment. To prevent this problem, enclose the file name in double quotation marks ("MEMO.TIF" Revision) or choose **Tools>Options>Imaging** and select the **Support only short filenames for images** check box.

**Specifying the Image Drive and Path**

A general guideline when specifying image file names in a field is to include the folder path but not the drive letter. For more information, see **Adding Image Names to Records**.

**Specifying a Path**

For best results, specify the image file name using a full folder path, starting with a backslash (for example, \SALES\MEMO.TIF). If you omit the backslash at the beginning of the path, DB/TextWorks looks for the image in the subfolder of the current folder. If you do not include a path (for example, MEMO.TIF), DB/TextWorks looks for the image in the same folder where the textbase is located.

**Specifying a Drive**

Image files may be stored on local drives, shared network drives, external storage devices such as CD-ROMs, or other locations. For this reason, avoid including a drive letter as part of the image file name in a record. To indicate the drives on which DB/TextWorks should look for images, choose **Tools>Options>Imaging** and specify one or more drive letters.

**Note:** If the drive is included in the image file name in a record, DB/TextWorks ignores the Image Drives user preference for that image, and looks for images on the drive specified in the record.

**Using Counters to Reference Multiple Image Files in One Entry**

**Note:** Do not use this shortcut if you plan to use the images with a DB/Text product, or in picture boxes in DB/TextWorks.

An entry in an Image field can be a file name or a file name followed by a counter. Using a counter can be more efficient than specifying each file name as a separate entry.

When an image file name is followed by a counter, DB/TextWorks expects to find additional image files. To determine the additional image file names, DB/TextWorks increments the last number found in the file name (including the extension). You can include parentheses or other punctuation around or before the image counter in an Image field: LETTER1.JPG (3)

You can use counters in text files that you plan to import. In the import file, type the name of the image followed by a number that indicates the total number of images in the sequence, the same as you would type it in an Image field.

**Example 1:** ENG.001 3 references three images (ENG.001, ENG.002, ENG.003).

**Example 2:** FAX1.TIF 2 references two images (FAX1.TIF, FAX2.TIF).
Following Long File Names with Counters

Windows supports long file names, which can contain spaces. If the last word in an Image field entry is a number, DB/TextWorks looks for a number earlier in the entry. If it finds one, it assumes that the final number is a counter. Otherwise, the entire field entry is assumed to be a single file name. To avoid confusion, you can enclose the file name in double quotation marks. Note that you can follow a quoted file name with a counter (see Example 4).

Example 1
Auto Diagram 2 is interpreted as a valid file name and is not incremented.

Example 2
Auto Diagram 29 2 references two images (Auto Diagram 29, Auto Diagram 30).

Example 3
"Form 1040 Schedule 12" is interpreted as a valid file name and is not incremented. If you omit the double quotation marks, the name is incorrectly interpreted as 12 images (Form 1040 Schedule, Form 1041 Schedule, and so forth).

Example 4
"Form 100" 2 references two images (Form 100, Form 101).

Supported Image File Formats

DB/TextWorks supports color, grayscale, and black and white images in the file formats listed below. If you do not see a particular format listed, you can contact Inmagic, Inc. to find out if that format has recently been added or will be supported in the future.

<table>
<thead>
<tr>
<th>Supported File Formats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amiga IFF</td>
</tr>
<tr>
<td>ATT (G4)</td>
</tr>
<tr>
<td>BMP</td>
</tr>
<tr>
<td>Brooktrout</td>
</tr>
<tr>
<td>CALS</td>
</tr>
<tr>
<td>CLP</td>
</tr>
<tr>
<td>DCX</td>
</tr>
<tr>
<td>DIB</td>
</tr>
<tr>
<td>EPS (screen preview only)</td>
</tr>
<tr>
<td>G3</td>
</tr>
<tr>
<td>G4</td>
</tr>
<tr>
<td>GEM IMG</td>
</tr>
<tr>
<td>GIF</td>
</tr>
</tbody>
</table>

*There is a user option that controls whether DB/TextWorks displays and prints all the images in multi-image TIFF files.
Annotating Images

Annotations are text and graphics that you can add to an image to mark it up, as if the image were a sheet of paper. You and other users of the textbase can display and print images with or without annotations. Annotations do not change the image file itself. Annotations are stored as separate files, with the default extension .ANN. The annotation layer sits "on top of" the image for display or printing.

Image Annotation Window

Use the Image Annotation window to add or edit annotations.

Note: You cannot annotate images if a textbase is opened as read-only, or if the current password prohibits annotation.

To open the Image Annotation window

1. Search for records that contain images.
2. With the Report window active, or with a record displayed in the Edit or Display window, choose Display>Show Record Images.

Adding Annotations to an Image

You can add text and graphic annotations to an image, such as the arrow and sticky note shown below. The image file itself is not altered, because annotations are stored as a separate file with the default extension .ANN.

To add image annotations

1. Search for records that contain references to the images you want to annotate.
2. With the Report window active, or with a record displayed in the Edit or Display window, choose Display>Show Record Images.
3. Navigate to the image you want to annotate.
4. Choose Images>Annotate Current Image to open the Image Annotation window.
   
   Note: You cannot annotate images if a textbase is opened as read-only, or if the current password prohibits annotating images.

5. Use the drawing tools on the Annotations menu or in the floating toolbox to add annotations. To show or hide the toolbox, choose Annotations>Show Annotations Toolbox or Annotations>Hide Annotations Toolbox.
   
   Note: You can add annotations anywhere on the image. If an image is not too large, you can also add annotations to the right of or below the image, but you may have to resize
Working with Images

the Image Annotation window first. You cannot add annotations above or to the left of an image.

6. **Edit annotations** to change the appearance of the selected object(s), using any of the following methods:
   - Use the Annotation Properties dialog box (choose **Annotations>Annotation Properties**).
   - Double-click text to enter editing mode, so you can retype the text.
   - Move or resize an object using the mouse.

7. **Save annotations** by choosing **Annotations>Save Annotation**.

8. Close the Image Annotation window.

To show or hide annotations during display and printing

With the Images window active, choose **Images>Show Image Annotations** or **Images>Hide Image Annotations** to show or hide all image annotations during display and printing. After turning annotation display on or off, you can **print images** as you normally would (make an image window active and choose **File>Print**).

**Annotation Drawing Tools**

Use the drawing tools to **add annotations** to an image. You can choose a tool from the floating toolbox shown below, or from the Annotations menu. To show or hide the floating toolbox, choose **Annotations>Show Annotations Toolbox** or **Annotations>Hide Annotations Toolbox**.

Use the Annotation Properties dialog box (choose **Annotations>Annotation Properties**) to set the defaults for the following properties: font, line style, line thickness, foreground color and background color. Notice that any object selected while you make your settings will be affected.

**Editing Annotations**

Use the **Image Annotation window** to add or edit annotations. If necessary, navigate to the image that you want to annotate.

**Note:** You cannot edit annotations if a textbase is opened as read-only or if the current password prohibits editing annotations.
Selecting Objects
You must select an object in order to edit it. You can use Shift+click to select multiple objects, or you can lasso them.

Changing Object Attributes
Use the Annotation Properties dialog box (choose Annotations>Annotation Properties) to change the appearance of the selected object(s). You can change the font, line style, line thickness, and foreground and background colors for text and objects, where applicable. Note that property changes made on the Annotation Properties dialog box set the default properties for the tools and affect any currently selected objects and new annotation objects you add.

Navigational shortcut menu
Click the right mouse button to display a navigational control shortcut menu that gives you the option to move to the next image, previous image, or to jump to a particular image. This menu does not appear if you are in editing mode on a Text or Sticky Note object; a text editing shortcut menu appears instead.

Editing Text
To edit text or sticky note text, double-click it. A blinking cursor indicates that you are in editing mode, and you can retype the text. To exit editing mode, click anywhere not on the text.

Click the right mouse button while in editing mode on a Text or Sticky Note object to display a text editing shortcut menu containing these commands: Undo, Cut, Copy, Paste, Delete, Select All.

Moving Objects
To move a selected object, position the cursor over a selected object (but not over a handle), so the cursor appears as a four-headed arrow. Drag and release the mouse. If you decide that you do not want to move the object, press the Esc button on your keyboard while you are moving the object to return it to its original position.

Resizing Objects
To resize a selected object, click a handle, then drag and release. When a handle is clicked, the cursor changes to a two-headed arrow, indicating that you are in "resizing" mode. Drag from a corner of a bounding box to maintain proportions. Drag from a side to change proportions.

Edit menu (Annotations)
When the Image Annotation window is active, you can use the Edit menu to perform the following actions on the selected object(s).

- Delete. Deletes the selected annotation object(s). Deleted objects are not copied to the Windows Clipboard. Therefore, you cannot paste a deleted object.

  If you delete all of the annotation objects and then save the annotation, the image will no longer be annotated, and the annotation file (default extension .ANN) will be deleted.

  Tip! You can also press the Delete key on your keyboard to delete the selected object(s).

- Select All. Selects all annotation objects for the current image.
**Images menu**

Use the Images menu options and toolbar buttons listed below to display images in any of the records in the set.

**Note:** If you started displaying images with the cursor in an Image field in an Edit or Display window, you can navigate among images from that field only.

<table>
<thead>
<tr>
<th>To see:</th>
<th>Do this:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The next image in the current record*</td>
<td>Click the Next Image button or choose Images&gt;Next Image.</td>
</tr>
<tr>
<td>The previous image in the current record*</td>
<td>Click the Previous Image button or choose Images&gt;Previous Image.</td>
</tr>
<tr>
<td>A specific image in the current record*</td>
<td>Choose Images&gt;Jump to Image. When prompted, type the number of the image you want to see.</td>
</tr>
<tr>
<td>All images in the current record*</td>
<td>Click the Thumbnail button or choose Images&gt;Thumbnail.</td>
</tr>
<tr>
<td>The first image in the next record</td>
<td>Click the Next Record button.</td>
</tr>
<tr>
<td>The first image in the previous record</td>
<td>Click the Previous Record button.</td>
</tr>
</tbody>
</table>

*Read "current field" instead of "current record" if your textbase has multiple Image fields, and the cursor was positioned in a particular Image field when you accessed the Images window.

**Note:** To show or hide the toolbar on the Images window, use the View menu.

**Navigational Control Shortcut Menu (Annotations)**

Click the right mouse button in the Image Annotation window to display a shortcut menu that lets you perform the actions listed below. Note that if you right-click while in editing mode on a Text or Sticky Note object, you will see a text editing shortcut menu instead.

- **Next Image.** Moves to the next image. If you have not saved your current annotation, you will be prompted to do so.
- **Previous Image.** Moves to the previous image. If you have not saved your current annotation, you will be prompted to do so.
- **Jump to Image.** Opens the Jump to Image dialog box so you can specify the image to which you want to jump. If you have not saved your current annotation, you will be prompted to do so.

**Text Editing Shortcut Menu (Annotations)**

To access this menu, double-click text to activate editing mode (indicated by a blinking cursor), then click the right mouse button.

- **Undo.** Select to undo the last operation. Selecting it again performs a Redo operation.
- **Cut, Copy, Paste.** These commands make use of the Windows Clipboard. The Paste command is available only after you cut or copy text. The pasted text appears at the cursor position. Note that the standard shortcut keys (Ctrl+X, Ctrl+C, and Ctrl+V) do not work--you must use the shortcut menu.
Working with Images

- **Delete.** Deleted text is not copied to the Windows Clipboard. Therefore, you cannot paste deleted text. However, you can undo a deletion. Note that you can also delete text by selecting it and pressing the Delete key on your keyboard.

- **Select All.** Select all of the text in the selected object.

**Redacting Images**

To "redact" an image means to black out parts of an image to hide them from sight. For example, you can hide a signature on a document. You can do this by adding a black highlight or other opaque annotation object. See Adding Annotations for instructions.

Annotations do not alter the image file, so the information is not permanently hidden.

Also, anyone who opens the textbase can turn off image annotation display, so areas that you have hidden can easily be seen. Because you cannot guarantee that redacted areas will always be hidden, redaction is useful mainly for printing and then distributing hard copies of images. For example, after blacking out a signature, print the image and then distribute that hard copy.

**Saving Annotations**

Annotations do not alter the original image. Each set of annotations is saved as a separate file (with the default extension .ANN). The objects in the annotation file are "layered" on top of the associated image for display and printing.

Each image referenced in a textbase can have one annotation file associated with it. You save annotations for one image at a time, by choosing Annotations>Save Annotation while the Image Annotation window is active. You are prompted to specify a file name and location. The default extension is .ANN but you can use a different extension if you prefer.

When an Image window is active, the name of the current annotation file appears on the status line, in angle brackets, after the image file name.

If an image is used several times in one textbase, every instance of that image in that textbase will have the same annotations. If the same image is referenced in a different textbase, it can have different annotations. For example, if Textbase A references MAP.TIF in several different records, every instance of that image will have the same annotations. If Textbase B references the same image (MAP.TIF), it may not have the same annotations.

**Notes**

- Annotations are "tracked" in a table, or list, that relates image file name to annotation file name. To print, back up, clear, merge, or replace annotation lists, choose Maintain>Manage Image Annotations. These operations affect annotations for all images in the textbase.

- To remove annotations from a particular image and optionally delete the image annotation file, open the image in the Images window, then choose Images>Remove All Annotations.

- All of the annotations for a single image are stored in one file (default extension .ANN) outside of the textbase. Annotations for different images are in different files. You supply the file name when you save the annotations. Be sure to back up these files when you back up your other important information.

- If you rename, move, or delete annotation files, DB/TextWorks will not be able to display the annotations for that image. If you rename or move the files, you can export, edit, and
re-import the annotation table to make it match the new annotation file names and locations. To export a list, choose Maintain>Manage Image Annotations, click the Back Up Annotation List button, and then name the file. Open it in a text editor and make changes. To re-import the list, choose Maintain>Manage Image Annotations and click the Replace Annotation List with File button, then select the edited file.

- Annotation list information (but not the actual .ANN files) is included when you use the Manage Textbases>Dump Textbase command. The list is restored when you use Manage Textbases>Load New Textbase.

Show or Hide Image Annotations

With the Images window active, choose Images>Show Annotations to show annotations during display and printing. If an annotation file cannot be found (for example, if an .ANN file has been deleted), the image is displayed unannotated with no message.

Choose Images>Hide Annotations make annotations not appear during display and printing. These commands affect all images that have annotations (not just the current image).

Using Passwords to Prevent Users from Editing Annotations

To prevent users from adding, editing, or removing annotations, choose Maintain>Edit Textbase Structure>Passwords. Enable a Silent password, and clear the User May Annotate Images check box. You can also assign Field Access passwords that prevent users from editing annotations.

Anyone who uses this password will not have access to commands such as Annotate Current Image, Remove All Annotations or any of the Manage Image Annotations commands that involve writing to an annotation list (clear, replace, merge).

Users will still be able to show or hide annotations.

Remove All Annotations

To remove annotations from the image currently displayed in the Images window, choose Images>Remove All Annotations. This command breaks the connection between an image and its annotation file, and gives you the option of deleting the annotation file (default extension .ANN).

Note that this command is disabled if the current password prohibits annotating images, or if the textbase was opened as read-only.

When you choose Images>Remove All Annotations, a message appears asking you to confirm the removal action as well as giving you an opportunity to delete the annotation file.

- Click Yes to delete the annotation file (this is the default).
- Click No to retain the annotation file and all of its contents, but to disassociate the file from the current image. The file will no longer be associated with the current image, so the image will not appear to have annotations. This command is useful if other images (for example, in a different textbase) share the same annotation file.
- Click Cancel to close the message dialog box without any action.

To remove annotations from all images in the textbase
Working with Images

- In a non-Images window, choose **Maintain>Manage Image Annotations** and click the **Clear Annotation List** button.

### Manage Image Annotation Lists (Print, Back Up, Clear, Merge, Replace)

To keep track of image annotations, DB/TextWorks creates a table, or list, to indicate which annotations go with which images. An annotation list does **not** contain the actual annotation objects (arrows, rectangles, text, and so forth). It is a list of "pointers" relating each image file to its annotation file. Annotation files have the default extension .ANN.

Choose **Maintain>Manage Image Annotations** to print, back up, clear, merge, or replace lists. These operations affect all images in the current textbase. For related information, see **Saving Annotations**.

**Note:** If the current password prohibits annotating images or the textbase was opened as read-only, you cannot clear, merge, or replace annotation lists.

- **Print Annotation List.** Print a list of images which contain annotations, and the names of the annotation files associated with those images.

- **Back Up Annotation List.** Back up the annotation list to a text file, using the default extension .IAB (Image Annotation Backup). If the original annotation list is lost or damaged, you can click the **Replace Annotation List with File** button to import this list and restore the annotation pointers.

  This command also provides a way of sharing annotation files among textbases that reference some or all of the same images. For example, if Textbase A and B reference the same image files, and you annotate images in Textbase A, the images in Textbase B will not be annotated. You could back up the list for Textbase A, then open Textbase B, choose **Maintain>Manage Image Annotations**, and click the **Merge File into Annotation List** button. Images in both textbases would then share the same annotations.

- **Clear Annotation List.** Remove all entries from the annotation list for this textbase. Annotation files are not deleted. Rather, the "links" between images and annotation files are broken. This command provides a way of removing all annotations from all images in a textbase.

  To remove annotations from a single image, open the image in the Images window, then use **Remove All Annotations**.

  **Note:** If you want to delete annotation files after clearing the list, do so manually using Windows Explorer. You may find it helpful to print the annotation list first, then clear the list, then delete the annotation files (referring to the printed list, if necessary, to determine file names and locations). Before deleting annotation files, be sure that no other textbase uses those same files.

- **Merge File into Annotation List.** Import an annotation list (default extension .IAB) into the current annotation list. This is a way of merging two annotation lists.

- **Replace Annotation List with File.** Replace the current annotation list with the annotation list in the specified file (default extension .IAB). This is a way of associating annotation files with images.
Textbase Management

Backing Up Textbases

To protect against accidental loss or damage, be sure to make backups on a regular basis. You may want to back up daily or weekly, depending on how often you add, edit, and delete records.

Step 1. Back up Textbase Files.

Use one of the following methods, depending on which version of DB/TextWorks you are using:

- If you are using DB/TextWorks, choose Manage Textbases>Copy Textbase, or use Windows Explorer to back up all of the textbase files (all files with a given name, such as SALES.*). This backs up the complete textbase, including all records, indexes, structure information, stop word and leading article lists, validation and substitution lists, elements stored in the textbase (forms, query screens, sets, and record skeletons), and the annotation list (which maps annotations to images). If the textbase is ever damaged, you can restore it using these files.

- If you are using DB/TextWorks for SQL, start the Administration program and choose Back Up & Restore>Back Up Textbases. This copies records, indexes, and other information from the specified textbase into a .DAT file and creates a copy of all the textbase files (.CAC, .CBA, .CBS, .INI, and .LOG) in the specified location.

Step 2. Back up User Files, Menu Screens, Images, and Annotations.

In addition to backing up textbase files, you must back up files residing outside of the textbase, as described below:

- **User files.** User files have the same filename as the textbase, with the extension .TBU (or .CBU if used with DB/TextWorks for SQL). Each user of the textbase can have his or her own user file (one per user per textbase). To see where your own user files are stored, choose Display>Textbase Information. To back up user files, use Windows Explorer. User files provide a way to store textbase elements outside of the textbase, so they are only available to an individual user.

- **Menu screen files.** Menu screen files have the extension .TBM (or .CBM if used with DB/TextWorks for SQL) and are located in the directory you specified when you created them. To back up menu screen files, use Windows Explorer. If you want a printed description of a menu screen file, open each menu screen in the Menu Screen Designer and choose Menu Operations>Print Definition.

- **Image and annotation files.** If your textbase includes references to image files, back up the image files, using Windows Explorer. If the images are annotated, back up the annotation files as well. Each annotated image has its own annotation file (default extension .ANN) stored outside of the textbase. You supply the file name and location when you save the annotations.

There are other files that you may also want to back up:

- **Textbase-specific files (.IDI).** Located in the user file directory, these files contain position information about all of the windows and parameters used by operations such as import and batch modify that are "remembered" from the last time you performed such an operation.

- **INMAGIC.INI file.** This file contains the options you specify using Tools>Options.
Step 3. Supplemental procedures [OPTIONAL]
The procedures outlined below can provide an additional measure of security, in case your backups are corrupted or damaged.

- Open a textbase, choose Maintain>Edit Textbase Structure and click the Print Structure button, then use the Print dialog box to print the structure or save it as a file. This ensures that you have a description of the fields and settings that make up the textbase. This file is only a description of the structure, and cannot be used as the basis of a new textbase. Note: Printing the structure is the only way to see the passwords that have been defined.

- Use Maintain>Edit Textbase Structure, and click Export Structure to write the textbase structure definition to a text file, which you can use as the basis of a new textbase. This file contains structure information, not record data.

- Use Manage Textbases>Load New Textbase, or Manage Textbases>Dump Textbase, or File>Export to write records to a text file. You can use Import to load the records into a new textbase, if necessary. Dump Textbase also includes the image annotation list in the resulting file.

- Choose Maintain>Manage Textbase Elements to export definitions of forms, query screens, sets, and record skeletons to text files. If an element is accidentally damaged or deleted, you can import it from the exported file.

- Use Print to File to print stop word, leading article, validation, and substitution lists to text files. If necessary, you can import the lists into a new textbase.

- Back up the image annotation list. The image annotation list maps image files to annotation files. Choose Maintain>Manage Image Annotations and click Back Up Annotation List. This creates an Image Annotation Backup file (.IAB) which you can restore using the Merge or Replace buttons in the Manage Image Annotations dialog box.

- Print textbase information. For a summary of information about a textbase, including the name, creation date, number of records, number of deferred changes, field list, textbase default settings, and your current user preferences, choose Display>Textbase Information, then click the Print button in the toolbar or choose File>Print.

- Keep a log of textbase activity. A log file records changes to the textbase. A log file has the same name and location as its textbase, with the extension .LOG. To enable a log file, edit the textbase structure. To view the log file, choose Maintain>View Log File. Note that information is continually appended to the log file. Periodically, after reviewing changes and/or printing the log file, you may want to delete it by choosing Maintain>Delete Log File. Deleting a log file clears the file contents but leaves an empty log file in place to record subsequent activity.

- Monitor passwords. If you are using passwords to manage different levels of access, establish a process to monitor password assignments. To see the currently assigned passwords and settings, print the textbase structure (Maintain>Edit Textbase Structure>Print Structure).
Exporting and Importing a Textbase Structure Definition

Note: Exporting the structure definition does not back up record information.

You can export the textbase structure definition to a text file (extension .TBB for DB/TextWorks, or .CBB for DB/TextWorks for SQL) that describes all of the structure information specified on the Edit Textbase Structure dialog box and its subdialog boxes. This includes the textbase name, description, passwords (encrypted), field names, field types, indexing settings, special filing information, sort order, stop words, leading articles, log file information, maximum users, validation settings, validation lists, and substitution lists.

You can use the textbase structure definition file as the basis of a new textbase. This is especially convenient if your original textbase has been damaged. The definition file also provides a human-readable record of your textbase settings.

Important! Exporting a structure definition is not a substitute for backing up your textbase. You must either use Manage Textbases>Copy Textbase or Windows Explorer to back up all of the textbase files (all files with a given name, such as SALES.*); or, if you are using DB/TextWorks for SQL, start the Administration program and choose Back Up & Restore>Back Up Textbases. Additionally, you must back up files residing outside of the textbase, such as menu screens and images. For complete information, see Backing Up Textbases.

To export the structure definition
1. Open a textbase.
2. If the textbase has passwords, enter the Master password when prompted.
3. Choose Maintain>Edit Textbase Structure and click the Export Structure button.
4. When prompted, supply a name for the textbase structure backup file. The file has an extension of .TBB (or .CBB if you are using DB/TextWorks for SQL).

To import a structure definition
2. Assign a name to the new textbase when prompted.
3. On the Create Textbase Structure dialog box, select Import from Textbase Structure Definition File and click OK.
4. On the Textbase Structure Backup dialog box, select the .TBB or .CBB file that you want to use as the basis of the new textbase.
5. Now you have a new, empty textbase:
   - To populate the textbase, use Load New Textbase.
   - To import forms, query screens, and other elements, choose Maintain>Manage Textbase Elements.

Dump Textbase command (Manage Textbases menu)
The Dump Textbase command:
- Exports (copies) all of the records in the primary textbase, including image annotation information (the image annotation list, not actual .ANN files).
Textbase Management

- Does not include deferred updates, thereby providing a way of backing up a textbase prior to posting deferred updates. **Note:** You can print deferred updates to a file to preserve them.

- Creates a text file in Inmagic tagged format. You can load this "dump file" into a new, empty textbase using the Load New Textbase command.

**Dump Textbase** is the easiest way to back up records and should be used as part of your regular maintenance routine. **Dump Textbase** is also a way of retrieving records if you are unable to open a damaged textbase. Every attempt is made to extract field information from as many records as possible. Indexes are not involved in the dump process, nor are user files. DB/TextWorks needs to be able to open only these files: .TBA, .ACF, .DBS, .DBR, .DBO.

If you are dumping a textbase because you were unable to open a damaged textbase, you should copy the textbase structure after dumping, load the dumped records into the new empty textbase, then delete the damaged textbase. If the textbase is open, close it by choosing **File>Close**.

**To dump records**
1. Choose **Manage Textbases>Dump Textbase**.
2. Select the textbase whose records you want to dump, then click **Open**.
   - **Note:** If the textbase has passwords assigned, you are prompted for the Master password.
3. On the Specify Dump File dialog box, specify the name and location of the file that will be created, then click **Save** to begin the process.

**Load New Textbase command (Manage Textbases menu)**
Use Load New Textbase to load records into a new empty textbase without checking for duplicate records or validation. Load New Textbase is intended primarily as a recovery mechanism, to be used on an empty textbase or in situations where you are sure records will not be duplicated. If you load into a textbase that contains records, you run the risk of having duplicate records.

Load New Textbase is normally used to load a "dump file" created with **Dump Textbase**, to reconstruct a damaged textbase without changing the contents of any records. If the textbase is open, close it by choosing **File>Close**.

**Features of Load New Textbase**
- Adds all of the records to the textbase without checking for matching records
- Adds all of the records without checking validation or strict record types
- Loads Computed and Automatic fields as if they were text (does not change incoming values or create new values)
- Restores the image annotation list from the dump file.
- Assumes the file is in Inmagic tagged format
- Uses the Express Import indexing method to ensure the fastest loading
- Uses Exclusive textbase access, locking others out of the textbase during the load
Uses Immediate indexing, locking others out of the textbase during the load [does not apply to SQL platform]

Places records rejected for structural problems (invalid or duplicate field names, and so forth) in an exception file, which you can edit and reload

To load records into a new, empty textbase
1. If you have a textbase open, close it by choosing File>Close. All other users must also close the textbase.
2. Choose Manage Textbases>Load New Textbase to open the Load Inmagic DB/TextWorks Textbase dialog box.
3. Select a new empty textbase, then click Open.
   **Note:** If the textbase has passwords, you are prompted for the Master password.
4. On the Select Dump File dialog box, select a file to load. The software looks for files with the extension .DMP, but you can specify a different extension, such as .TXT or .ASC. Then click Open.
5. [SQL platform only] On the SQL Server Bulk Insert Options dialog box, specify the maximum records buffer and the SQL Server location. If the SQL Server is located on another computer, you also need to specify a folder on or accessible to that machine, where temporary files will be stored during the import.

Recover Textbase command (Manage Textbases menu)
Recovering a textbase involves dumping the contents to an ASCII file, making an empty copy of the textbase, and loading the ASCII file into the new textbase. You can perform the necessary steps individually (multi-step recovery), or, if you have enough disk space, the software can perform them for you (single-step recovery).

Either way, before you begin, post deferred updates in the original textbase and/or export them to a file (Maintain>Deferred Updates). The Dump Textbase and Recover Textbase commands ignore any deferred updates.

Here are reasons to use the multi-step recovery procedure instead of the single-step recovery procedure:
- The damage is in the .TBA file (for example, a public form). You need to clear the Copy Public Textbase Elements check box.
- You need to modify the structure before loading the records.
- You have insufficient disk space to use the single-step recovery.

Analyze Textbase command (Manage Textbases menu)
The Analyze Textbase command analyzes each record in the specified textbase and generates a tabular report listing the following information about each field in the textbase:
- **Max Entries.** The maximum number of entries in a single record.
- **Max Entry Length.** The maximum length of a single entry.
- **Max Record Length.** The maximum length of this field in a single record.

The report also includes other information about a textbase, including the total textbase size.
Textbase Management

If any textbase is open, close it by choosing File>Close.

To analyze a textbase

1. Choose Manage Textbases>Analyze Textbase to open the Analyze Inmagic DB/TextWorks Textbase dialog box.
2. Use the Look in drop-down list to navigate to the folder in which the textbase is located, select it, then click Open.
3. If the textbase has passwords, you are prompted for the Master password. Type the password in the Password box, then click OK. You must use the Master password and have exclusive access to the textbase to analyze it.
4. On the Specify Text File dialog box, do the following:
   - In the File name box, type a name for the report to be generated.
   - Navigate the Save in drop-down list to the location where you want to save the report.
   - Click Save.
5. Wait while DB/TextWorks analyzes the textbase. While the textbase is being analyzed, the Analyze Textbase Operation Status dialog box opens.
   - Note: If you want to stop the process before it is completed, click the Stop Analyze Textbase Operation button.
6. A completion message appears, detailing the number of records analyzed and the location of the resulting report. Click OK to open the report.

If you want to view the report again later, use a text editor (for example, Microsoft Notepad) to open the report file, located in the folder you specified in step 4 (for example, C:\PROGRAM FILES\INMAGIC\DBTEXTWORKS).

Check Textbase

You can check a textbase to detect and repair problems in the textbase and the user file. Checking a larger textbase can take a considerable amount of time Before checking a textbase, you must close it (File>Close).

To check a textbase and optionally repair problems

1. Choose Manage Textbases>Check Textbase.
2. Specify a textbase to check and click Open. If the textbase has passwords, you will have to supply the Master password. You must also have exclusive access to the textbase.
3. Select Check User File Only if you are having problems using a form, query screen, set, or record skeleton saved in your user file, and you do not have the time to also check the textbase. Checking only the user file is much faster than checking a textbase.
4. Select Repair Structural Problems to fix problems in the textbase and user file. See the Note about repairing user files. Check Rebuild Damaged Indexes to rebuild indexes found to be damaged during the check, so they accurately reflect information in the textbase. Rebuilding an index can take a considerable amount of time. Specify a value between 1 and 100 to indicate the maximum number of Term and/or Word indexes to rebuild. This setting prevents the rebuilding of indexes if too many are damaged.
   - Note: You cannot rebuild a damaged index if Check User File Only is selected.
5. Specify a name and location in the Specify Problem Report File dialog box for the report file that will be created (default extension .CHK).

6. After the check is done, DB/TextWorks displays the report file, which describes any problems found and suggests how to fix the problems. Perform the suggested repair activities using DB/TextWorks and run **Check Textbase** again, to ensure the textbase is sound.

7. If the report file lists serious errors that it could not fix, you may need to [recover the damaged textbase](#).

### What Can and Cannot be Fixed

- One of the things that **Check Textbase** reports is if the keys in any index are out of sequence. This may help you detect changes in international filing. In the example below, `<key>` represents the entry which is out of order:

  ***Term index node 5, field 'SUBJ', key 53=<key>
  key is not sorted in correct sequence. Index rebuild recommended.***

  Choose **Maintain>Rebuild a Field Index** and rebuild the Term and/or Word index for that field, or run **Check Textbase** again with the **Rebuild Damaged Indexes** check box selected.

- **Repair Structural Problems** can clear the abort message "*The textbase files are in an inconsistent state due to an abort...*". This message occurs every time you open a textbase if the computer was rebooted or lost power while maintenance activities were being performed on that textbase. You should not perform any maintenance activities (for example, editing, importing, batch modify) until the problem has been resolved.

  The only way to eliminate this message is by running **Check Textbase** and selecting the **Repair Structural Problems** option. If no problems are found, the "abort" message will be removed. You may have to rebuild some indexes and run **Check Textbase** again in order to clear the message.

- Some problems cannot be repaired. If there are any problems that have not been fixed, you may need to [recover the textbase](#).

- **Check Textbase** does not check the contents of records or textbase elements or the validity of index keys.

### A note about repairing user files

If you suspect that a user file is damaged, you can restore the user file (.TBU) from a backup.

If a recent, good backup is not available, run **Check Textbase** and select both the **Repair Structural Problems** and **Check User File Only** options. If the report file generated by **Check Textbase** indicates that the number of problems and the number of repairs is the same, all of the problems have been corrected and you can continue to use your user file.

If **Check Textbase** is unable to repair the user file, and you do not have a good backup, choose **Maintain>Manage Textbase Elements**, and export all private elements (any element in the list that is not followed by the word "public") to a file. Do this separately for each type of element (forms, query screens, and so forth). Then close the textbase and delete the damaged user file. Open the textbase again, choose **Manage Textbase Elements**, and import the exported files into the new empty user file (which was created automatically when you opened the textbase).
Dead URL Link Checker
Use the Dead URL Link Checker to check the status of URL links recorded in a textbase. You can do this for a set of records in a textbase or for the whole textbase. Status information about whether a URL link still works is written to another field in the same textbase. From the information provided after running the Dead URL Link Checker, you may do whatever you deem appropriate (for example, you may have to correct the URL address or you may decide to delete a non-working address).

To check the status of URL links recorded in a textbase
1. Open the textbase for which you want to check the status of the URLs recorded in that textbase.
2. If you only want to check a subset of records, find those records by doing a query first.
3. Choose Tools>Dead URL Link Checker to open the Dead URL Link Checker dialog box.
4. In the Field containing URL to check box, select the field that contains the URLs you want checked. Note: The Dead URL Link Checker assumes that each entry in the field is a separate URL.
5. In the Field to receive URL status box, select the field to which status information about a URL link should be written. Note: This field cannot have validation.
6. Depending on if you have a subset of records or want to check all the records in the textbase, select either Check Current Record Set or Check Entire Textbase.
7. Depending on whether you want to retain or replace previous information in the status field, select either Add to Existing Status or Replace Existing Status.
8. Click OK, then click Yes to confirm the requested action.
9. Wait while the Dead URL Link Checker performs the requested action. Note that if your textbase or set is large and has many URL links to check, this process may take a while.
10. Review the message box that displays summary information for the completed action (or canceled action, if you stopped the process before it completed). Click OK to dismiss the message box.
11. To see the status of the URL links checked by the Dead URL Link Checker, look at the field in the textbase that you designated to receive URL status information (step 5). Note that each time you perform this check for a textbase, the software adds the latest status information as a new entry at the beginning of that field or replaces the information in the field, depending on your selection in step 7.

About the status message
Each status message tells you the following:
- URL checked by the Dead URL Link Checker
- Date and time the URL was checked
- The status of the checked URL
- Details for the status of the checked URL
Examples:
URL: 'http://www.inmagic.com'
Checked: 12/1/2008 2:29:56 PM
Status: Live
Details: HTTP status 200 - Usual success response

URL: 'http://www.inmgc.com'
Checked: 12/5/2008 3:19:01 PM
Status: Error
Details: Failed to send HTTP request (WinHttpRequest)

The following table lists the status values that the Dead URL Link Checker can return:

<table>
<thead>
<tr>
<th>Status</th>
<th>Details</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dead</td>
<td>HTTP status 404 - Not found</td>
<td>The link is not usable.</td>
</tr>
<tr>
<td>Error</td>
<td>Failed to send HTTP request</td>
<td>The link has errors that prevent successful testing. Typically, this indicates syntax errors.</td>
</tr>
<tr>
<td></td>
<td>(WinHttpRequest)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Failed to establish HTTP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>connection (WinHttpConnect)</td>
<td></td>
</tr>
<tr>
<td>Live</td>
<td>HTTP status 200 - Usual success response</td>
<td>The link is live and usable.</td>
</tr>
<tr>
<td></td>
<td>HTTP status 204 (Not Content)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Success code group</td>
<td></td>
</tr>
<tr>
<td>Live but</td>
<td>HTTP status 401 - Not authorised</td>
<td>The link is live and usable, but requires HTTPS, or</td>
</tr>
<tr>
<td>restricted</td>
<td>HTTP status 403 - Forbidden; server</td>
<td>forbids GET/POST, and so forth.</td>
</tr>
<tr>
<td></td>
<td>refused request</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HTTP status 405 - Request method (POST</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or GET) is not allowed on the requested</td>
<td></td>
</tr>
<tr>
<td></td>
<td>resource</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HTTP status 406 - Not accepted</td>
<td></td>
</tr>
<tr>
<td>Moved</td>
<td>HTTP status 301 - Moved</td>
<td>The link exists, but has moved (redirected). You</td>
</tr>
<tr>
<td></td>
<td>HTTP status 302 - Moved temporarily</td>
<td>may want to substitute the new URL.</td>
</tr>
<tr>
<td>Problem</td>
<td>HTTP status 500 - Server error</td>
<td>The link may be live, but an HTTP error was</td>
</tr>
<tr>
<td>reported</td>
<td></td>
<td>reported.</td>
</tr>
</tbody>
</table>

Tip! We suggest you recheck records that have a status of "Error" or "Problem reported" if the records were in a larger set of records. Status results for individual records within a large set of records may be inaccurate because of other factors (for example, if your Internet connection is busy). Try again with a smaller set of records or just the individual records.
Copying a Textbase
Use the Copy Textbase dialog box to copy a textbase to a different folder, or within the same folder under a different name. This operation requires exclusive access to a textbase (no one else can have it open), and the Master password, if the textbase has passwords.

**To copy a textbase**
1. Close the textbase (File>Close).
2. Choose Manage Textbases>Copy Textbase.
3. In the Copy Textbase dialog box:
   - **Existing Textbase.** Specify the full path and name of the textbase you want to copy.
   - **New Textbase.** Specify the full path and name of the textbase you want to create.
   - **Note:** The Copy Textbase command will not create a new folder for you. If you type the name of a folder that does not exist, a textbase by that name will be created. For example, if you type C:\OOPS, a textbase called OOPS will be created. Also note that you cannot overwrite an existing textbase.
   - Click OK.

**Note:** If you gave the textbase a new name, and a user file of that name does not exist, the software copies the user file to the local user file folder.

**Example #1 - Copy in the same folder**
Copy a textbase called Sales in C:\DIR to Sales2 in C:\DIR.
Existing Textbase: C:\DIR\SALES
New Textbase: C:\DIR\SALES2

**Example #2 - Copy to a different folder**
Copy a textbase called Sales from the folder C:\DIR to the folder C:\BAK.
Existing Textbase: C:\DIR\SALES
New Textbase: C:\BAK\SALES

Renaming a Textbase
Before renaming a textbase, you must close it (File>Close).

**To rename a textbase**
1. Choose Manage Textbases> Rename Textbase.
2. In the Rename Textbase dialog box:
   - **Existing Textbase.** Specify the full path name of the textbase that you want to rename. For example, to rename a textbase called Old, type: C:\DIR\OLD
   - **New Textbase.** Specify the new full path name. For example, to call the new textbase New, type: C:\DIR\NEW
   - Click OK, then respond to the confirmation prompts.
3. If you renamed a secondary textbase, open the primary textbase (the one that contains the Link field), and edit the textbase structure to redefine the link definition.

This command automatically renames the local textbase user file. If a textbase is on a network and is used by others, remind anyone else who uses the textbase to rename their corresponding user file, using Windows commands. User files are stored locally, so each user must rename his/her own user file.

**Note:** This command cannot be used to move a textbase to a different drive or server.

### Deleting a Textbase

Before deleting a textbase, you must close it (File>Close).

**To delete a textbase**

1. Choose Manage Textbases>Delete Textbase.

2. In the Delete Textbase dialog box, type the full path and name of the textbase you want to delete or click the **Browse** button to navigate to the textbase.

3. Decide whether to delete the user file. User files contain locally-stored forms, query screens, sets, and skeletons:
   
   Select the **Delete user file for this textbase (privately stored forms, query screens, sets, & skeletons)** check box if you want to delete the user file.

   Clear the **Delete user file for this textbase (privately stored forms, query screens, sets, & skeletons)** check box to preserve the user file. For example, if you just copied a textbase to a new location, and you are now deleting the old textbase, do not delete its user file.

   Click **OK**, then respond to the confirmation message and completion message that appear.

### List Textbases

This command pertains only to DB/TextWorks for SQL.

Use this command to list each textbase on the current SQL Server. The Textbase List window displays the location and name of each textbase and the corresponding SQL database name.

The Textbase List window also displays information about the current SQL Server. Note that more detailed information about the SQL Server is available using the **Textbase Information** command.

**To display a list of textbases on your SQL Server**

1. Choose Manage Textbases>List Textbases. The Textbase List window opens, listing the textbases on your SQL Server.

2. Use the toolbar buttons in the Textbase List window to:
   
   - **Find information in the list.** Click the **Find** button to locate any text or numeric information in the list, such as a textbase, folder, or SQL Server database name.
   
   - **Print the list.** Click the **Print** button to print the list to a printer.
   
   - **Save the list to a file.** Click the **Print** button and print the list to a text file (.txt).
Clear Textbase Record Locks (Manage Textbases menu)

This command pertains only to DB/TextWorks for SQL.

Clear Textbase Record Locks should be run as part of routine maintenance. This function checks for records left locked by SQL Server when a user aborted or lost power or connection while editing a record, and unlocks the records. For example, if the power goes out while you have records open in the Edit Window, those records will remain locked by SQL Server. Clearing locks is safe because this function requires exclusive access to the textbase, meaning you cannot clear a lock on a record held by another user.

If you do not clear locks, a user attempting to edit a locked record will be denied access, whether it is an active lock held by another user editing that record, or a non-active lock that was not previously released. In the latter case, that record remains locked for 20 minutes, at which time the lock is automatically cleared. You can change the default 20-minute value by adding the RecordLockInterval= parameter to the [Advanced] section of the InmCSrv.INI file. The time must be entered in milliseconds (the default is RecordLockInterval=1200000).

To unlock records in a textbase
1. If the textbase is open, choose File>Close.
2. Choose Manage Textbases>Clear Textbase Record Locks to open the Select Inmagic Textbase dialog box.
3. Select the textbase whose record locks you want to clear, then click Open. You must have exclusive access to the textbase.

   Note: If the textbase has a Master password, you will be prompted for it before the records can be unlocked. If you are using Windows Authentication, you must also have either sysadmin privileges or be a member of the SQL Server fixed database role of db_owner.

4. If the textbase has any locks to clear, a confirmation message appears. Review the message, then click Yes to unlock the record(s).
5. Click OK.

Organizing Menu Screen Files
Many people use just one menu screen, which contains the names of all of their textbases or a single top-level menu screen with menu items that open other menu screens. However, you may want to create several different menu screens. To switch between the various menu screens, choose Menu Screens>Select.

You can also use Microsoft Windows to create separate shortcuts, each of which references a different menu screen file, using the /m command-line switch. When you specify the shortcut properties, include the full path name of the DB/TextWorks executable file (DBTEXT32.EXE) followed by the /m switch and the name of the menu screen file. For example, to open a menu screen called SAMPLE1, use this command:

```
C:\ DBTEXT\DBTEXT32.EXE /M SAMPLE1
```

Because DB/TextWorks accepts both / and - in command line arguments, menu screen names containing a hyphen must be enclosed in quotation marks. For example, to open a menu screen called SALES-NH, use this command:

```
C:\ DBTEXT\DBTEXT32.EXE /M "SALES-NH"
```
If the software is installed on a network server, and all of the workstations will be accessing the same set of textbases that are also located on the server, the administrator may want to create one menu screen file, named **DBTEXT.TBM**, and place it in the software installation folder on the server. This special feature allows all users to share the same menu screen file.

If the software is installed on your local hard disk, or if you typically use textbases stored on your local hard disk, a personal DBTEXT.TBM file can be created in the Start In folder associated with the program icon or shortcut.

**Where DB/TextWorks Looks for Menu Screen Files**

Menu screen files have the extension .TBM. You can move, copy, or delete them just as you would any other file (for example, using Windows Explorer). You can rename menu screen files freely, and move or copy them from one location to another. If you move a menu screen file, and the Path setting property is set to **Do not retain path**, then all of the files (for example, textbases and images) should also be moved to the new menu screen file location.

When you start DB/TextWorks, the software attempts to find a menu screen file (.TBM) to use:

- If a menu file has been specified on the command line, that menu is used.
- If no menu file has been specified on the command line, the software looks in the INMAGIC.INI file to find the menu file that was most recently selected.
- If the INMAGIC.INI file does not contain a menu screen selection, the software looks for a file called DBTEXT.TBM in the Start In folder associated with the icon or shortcut used to start the software.
- If there is no DBTEXT.TBM file in the working folder, the software looks for the file in the folder in which the software was installed.

If all of these steps fail, a menu screen will not be used.

**Manage Textbase Elements (Copy, Delete, Export, and so forth)**

Forms, query screens, sets, and record skeletons are referred to as textbase elements. Choose **Maintain>Manage Textbase Elements** to:

- Rename an element
- Delete an element
- Export and import elements
- Print an element definition

The Now Managing list determines whether the Currently Saved list shows forms, screens, sets, or skeletons.

**Related Operations**

To perform these other operations, use the appropriate Save As dialog box:

- Copy or move elements
- Change the description or location
Printing Element Definitions

You can print a description of a form, screen, set, or skeleton, or save it in a text file that you can view or print using a text editor or word processor. You can print multiple definitions at once, or save multiple definitions in one text file. Definitions provide a way of seeing and saving information about an element, and are especially helpful for analyzing problems in a form or query screen.

Important! A definition printed to a file is not formatted for import, and therefore is not a way of backing up or sharing elements among users. To back up or share elements, use the Export and Import buttons in the Manage Textbase Elements dialog box.

Definitions include information such as the element name, textbase name, optional description, and creation date and time. Elements saved in the textbase file include the word (public) after the name. Query screen definitions also include screen preference settings and a list of boxes and their attributes. Form definitions contain similar information, including the form’s purpose (display, edit, report window, and/or printing). Record skeleton definitions contain a list of fields with record skeleton information in them. Set definitions include the number of records found and the Command equivalent of the search criteria that produced the set.

Note that a set definition does not include record information. To export copies of the records in the set, load the set, then use Export from the File menu to export the current record set.

To print a definition

1. Choose Maintain>Manage Textbase Elements.
2. Select an element type in the Now Managing drop-down list.
3. Select one or more items from the Currently Saved list.
4. Click Print to open the Print dialog box.
   - To send the definition(s) to a printer, select the print options you want, then click OK.
   - To save the definition(s) in a text file, select the Print to file check box and click OK. In the Save File As dialog box, specify a location and a file name. The file extension .TXT is used by default. Click Save.

Note that you can also print a definition from within the appropriate designer.

<table>
<thead>
<tr>
<th>In the:</th>
<th>Choose:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form Designer</td>
<td>Form Operations&gt;Print Definition</td>
</tr>
<tr>
<td>Query Screen Designer</td>
<td>Screen Operations&gt;Print Definition</td>
</tr>
<tr>
<td>Record Skeleton Editor</td>
<td>Record Skeletons&gt;Print Skeleton</td>
</tr>
<tr>
<td>Menu Screen Designer</td>
<td>Menu Operations&gt;Print Definition</td>
</tr>
</tbody>
</table>

Print to File / Sharing Information

You can use various commands to copy record and non-record information to a file, or to copy it to the Windows Clipboard so you can paste it into another application.
Non-Record Information

To print non-record information to a text file, use the commands shown in the table below, and check **Print to file** in the Print dialog box, then name the file when prompted. When you print to a file, no font information is included.

<table>
<thead>
<tr>
<th>To Print:</th>
<th>Choose:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validation lists</td>
<td>Maintain&gt; Edit Lists&gt; Validation Lists&gt; Edit List&gt; Print List</td>
</tr>
<tr>
<td>Substitution lists</td>
<td>Maintain&gt; Edit Lists&gt; Substitution Lists&gt; Edit List&gt; Print List</td>
</tr>
<tr>
<td>Stop word lists</td>
<td>Maintain&gt; Edit Textbase Structure&gt; Stop Words&gt; Print List</td>
</tr>
<tr>
<td>Leading article lists</td>
<td>Maintain&gt; Edit Textbase Structure&gt; Leading Articles&gt; Print List</td>
</tr>
<tr>
<td>Textbase structure</td>
<td>Maintain&gt; Edit Textbase Structure&gt; Print Structure</td>
</tr>
<tr>
<td>Log files</td>
<td>Maintain&gt; View Log File, then File&gt; Print</td>
</tr>
<tr>
<td>Image annotation list</td>
<td>Maintain&gt; Manage Image Annotations&gt; Print Annotation List</td>
</tr>
<tr>
<td>Textbase information</td>
<td>Display&gt; Textbase Information, then File&gt; Print</td>
</tr>
<tr>
<td>Deferred updates</td>
<td>Maintain&gt; Deferred Updates&gt; Print Deferred Updates</td>
</tr>
<tr>
<td>Field indexes</td>
<td>With cursor in query box, choose Edit&gt; Browse Choices&gt; Print List</td>
</tr>
<tr>
<td>Descriptions of menu screens</td>
<td>Menu Screens&gt; Design, select menu screen, then Menu Operations&gt; Print Definition</td>
</tr>
<tr>
<td>Descriptions of forms, query screens, sets, and record skeletons</td>
<td>Maintain&gt; Manage Textbase Elements&gt; Print</td>
</tr>
</tbody>
</table>

Printing to a file does not always produce a file that you can import into another textbase. The following table indicates backup commands where necessary.

<table>
<thead>
<tr>
<th>To Back Up:</th>
<th>Choose:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textbase structure</td>
<td>Maintain&gt; Edit Textbase Structure&gt; Back Up Structure</td>
</tr>
<tr>
<td>Image annotation list</td>
<td>Maintain&gt; Manage Image Annotations&gt; Back Up Annotation List</td>
</tr>
<tr>
<td>Descriptions of forms, query screens, sets, and record skeletons</td>
<td>Maintain&gt; Manage Textbase Elements&gt; Export</td>
</tr>
</tbody>
</table>

Formatted Record Information

To copy formatted record information to a file as Plain Text, RTF, or HTML using the currently selected Report window form, use **File> Write Report to File**. You can import the resulting file into another application, or put the HTML page on your Web site.

To copy a report to the Windows Clipboard as Plain Text so you can paste it into another application, use **Edit> Copy Special> Report**.
To copy a **record** to the Windows Clipboard as Plain Text so you can paste it into another application, use **Edit>Copy Special>Record**.

To create a file containing printer codes for the destination printer, which you can later copy to that device, do a search that finds the desired record(s), and choose **File>Print**. In the Print dialog box, select the destination printer and check the **Print to file** box. Name the file when prompted. This is useful when your computer is not connected to a printer. In general, the resulting file cannot be imported into another application or printed on a different printer, because the file contains specific printer codes.

**Note:** To ensure that extended characters such as accented letters are translated properly, choose **Tools>User Preferences** and check or clear **Read/write extended characters in MS-DOS format**.

**Unformatted Record Information**

To copy unformatted record information to a file as Plain Text (ASCII), use **File>Export**. You can import the resulting file into another textbase or application.

To combine fields, change field names, and make other changes, you can emulate Inmagic tagged format with a form, instead of using Export.
DB/TextWorks Files

Initialization Files
You can use initialization (INI) files to customize DB/TextWorks on both the desktop and the Web:

- **DB/TextWorks** requires Inmagic.INI and DBText.INI (or INMCSRV.INI if you have the SQL platform). You can optionally use <textbase>.INI for individual textbases.
- **WebPublisher PRO** requires only DBTWPub.INI (or ICSWeb.INI if you have the SQL platform). You can optionally use Inmagic.INI, DBText.INI (or INMCSRV.INI), and <textbase>.INI for individual textbases.

Each INI file has a specific purpose:

- **Inmagic.INI**. Includes settings for both DB/TextWorks and WebPublisher PRO. It is stored in each user’s personal user file path folder and includes personal customizations and preference settings. To affect WebPublisher PRO, a copy of this file must reside in the WebPublisher PRO installation folder. **Note:** Platform-specific section names for the SQL or non-SQL version of the software are different where they need to coexist in the same file, e.g., [Window Placements] vs. [Content Server Window Placements].
- **DBText.INI** (or INMCSRV.INI if you have the SQL platform). Includes configuration settings for the software (for example, date settings). It is stored in the DB/TextWorks installation folder. It also contains some settings that can be used with WebPublisher PRO; however, a copy of this file must be placed in the WebPublisher PRO installation folder for the settings to apply on the Web.
- **DBTWPub.INI** (or ICSWeb.INI if you have the SQL platform). Stores information specific to WebPublisher PRO, including where it looks for textbases and images. The file is located in the WebPublisher PRO installation folder.
- **Textbase.INI Files**. Each textbase can have its own <textbase>.INI file with the same name and location as the textbase. For example, the Loans textbase can have a Loans.INI file. You can create or edit this file using a text editor.
- **WPEngMsg.INI**. Lists all of the WebPublisher PRO messages that can be copied to another INI file and modified. It is located in the WebPublisher PRO installation folder.

Most parameters can be set to either 1 (on) or 0 (off).

**Inmagic.INI**

Inmagic.INI is stored in each user's personal user file path folder and includes personal customizations and preference settings.

The following table lists parameters by section. Entries that must be set by editing the Inmagic.INI file (when DB/TextWorks is not open) are in *italics*; other options can be set using DB/TextWorks controls and menu options.

For options that are set equal to a value, =1 turns the option on, =0 turns it off.

**Important!** If you have a dual-boot machine, make sure the Inmagic.INI file for each operating system has the same user file directory, and other settings you want to share across platforms (for example, SpacedRelOps=).
Tip! For WebPublisher PRO, you can use the Options dialog box in DB/TextWorks to select most of the desired settings, then copy the Inmagic.INI file to the WebPublisher PRO installation folder on the HTTP server machine and restart IIS (the World Wide Web Publishing Service) using the Services option through the Computer Management window.

These settings only affect DB/TextWorks unless otherwise noted.

Note for SQL platform: Platform-specific section names for the SQL or non-SQL version of the software are different where they need to coexist in the same file, e.g., [Window Placements] vs. [Content Server Window Placements].

[Inmagic DB/TextWorks] or [Inmagic Content Server]

The following options always appear in this section of Inmagic.INI:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>AutoReport=</td>
<td>Controls the <strong>Always use this option without asking</strong> setting (choose Tools&gt;Options&gt;Display in DB/TextWorks).</td>
</tr>
<tr>
<td></td>
<td>0 = Display the Select Search Results Window dialog box (default)</td>
</tr>
<tr>
<td></td>
<td>1 = Use the selected window automatically without asking</td>
</tr>
<tr>
<td>AutoReportOpt=</td>
<td>Controls the <strong>After a search, view records in</strong> setting (choose Tools&gt;Options&gt;Display).</td>
</tr>
<tr>
<td></td>
<td>0 = Report window (default)</td>
</tr>
<tr>
<td></td>
<td>1 = Edit window</td>
</tr>
<tr>
<td></td>
<td>2 = Display window</td>
</tr>
<tr>
<td></td>
<td>3 = Do not display records</td>
</tr>
<tr>
<td>AutoURLDetect=</td>
<td>Controls the <strong>Detect URLs, e-mail links, etc. and convert to hypertext links</strong> setting (choose Tools&gt;Options&gt;Display).</td>
</tr>
<tr>
<td></td>
<td>0 = Do not convert to hypertext links</td>
</tr>
<tr>
<td></td>
<td>1 = Convert to hypertext links (default)</td>
</tr>
<tr>
<td>CustomColor1=</td>
<td>Stores the 16 colors that appear on the Custom Colors dialog box.</td>
</tr>
<tr>
<td>CustomColor16=</td>
<td></td>
</tr>
<tr>
<td>Edge3D=</td>
<td>Controls the <strong>3-D box borders</strong> setting (choose Tools&gt;Options&gt;Display).</td>
</tr>
<tr>
<td></td>
<td>0 = Do not use 3-D borders (default)</td>
</tr>
<tr>
<td></td>
<td>1 = Use 3-D borders</td>
</tr>
<tr>
<td>EmptyTBNotify=</td>
<td>Controls the <strong>Notify when opening empty textbase</strong> setting (choose Tools&gt;Options&gt;General).</td>
</tr>
<tr>
<td></td>
<td>0 = Do not display message when opening empty textbase</td>
</tr>
<tr>
<td></td>
<td>1 = Display message when opening empty textbase (default)</td>
</tr>
<tr>
<td>ExportQBEtoHTMLOption=</td>
<td>Controls whether exported HTML query and menu screens use &lt;noscript&gt; sections with links instead of buttons, to make the pages accessible to the visually impaired. This parameter affects commands such as <strong>Next Record, New Search</strong>, and so forth.</td>
</tr>
<tr>
<td></td>
<td>0 = Normal query and menu screen</td>
</tr>
</tbody>
</table>
1 = No scripts
2 = Normal section and `<noscript>` section
There are other ADA compliance settings for WebPublisher PRO that you can specify in the DBTWPub.INI (or ICSWeb.INI) file.
This option does not appear in Inmagic.INI unless you add it explicitly using a text editor.

**ExpressImportBuffer**
Normally, Express Import appropriates about 5MB of memory to provide maximum speed. However, if you find Windows is swapping a lot when using Express Import, you can set the size of the import buffer. For example, if you specify ExpressImportBuffer=4096, then the buffer will be 4096 KB (4MB) even if there is more memory available (and less if that much memory is not available). You can also specify more than 5MB if you find that it improves load speed on your computer. This option does not appear in Inmagic.INI unless you add it explicitly using a text editor.

**IgnoreAccents**
Controls the Ignore accents on extended characters setting (choose **Tools>Options>Search**).
0 = Do not ignore accents when searching (default)
1 = Ignore accents when searching
This setting affects DB/TextWorks and WebPublisher PRO.

**Inclusive**
Controls the Use inclusive search option for multiple fields setting (choose **Tools>Options>Search**).
0 = Do not use the inclusive search option
1 = Use the inclusive search option (default)
This setting affects DB/TextWorks and WebPublisher PRO.

**InitialWindow**
Controls which window appears when you open a textbase (unless the menu screen in use specifies a different initial window).
1 = Query window (default)
2 = Command Query window
3 = Saved Queries window
4 = Edit: New Record window
**Note:** If the textbase contains no records, DB/TextWorks opens the New Record window regardless of which initial window is specified (unless EmptyTBNotify=0).

**InsertNewEntry**
Controls the Insert date as new entry setting (choose **Tools>Options>General**).
0 = Insert date at cursor position
1 = Insert date as new entry (default)

**LargeButtons**
Controls the Large buttons on toolbar setting (choose **Tools>Options>Display**).
0 = Do not use large buttons (default)
1 = Use large buttons

**LDate**
Controls the Insert date using long format setting (choose **Tools>Options>General**).
<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
</table>
| LinkP=           | Controls the **Secondary textbase** password setting (choose **Tools>Options>General**).  
|                  | 0 = Use the Silent password and do not show warning (default)  
|                  | 1 = Always prompt for password  
| MaxMRU=          | Controls the **Recently used file list** setting (choose **Tools>Options>General**). The default is 4. This affects the number of recent textbases on the File menu.  
| NewData=         | Controls the **Show deferred changes in reports and display** setting (choose **Tools>Options>General**).  
|                  | 0 = Show old version of record (default)  
|                  | 1 = Show record with deferred changes  
| PrintUsing=      | Controls the **Always use this option without asking** setting (choose **Tools>Options>General**).  
|                  | 0 = Display the Form Used to Print Report dialog box if the Report, Display, or Edit window is active (default)  
|                  | 1 = Use the selected print form automatically without asking  
| PrintUsingOpt=   | Controls the **Print using** setting (choose **Tools>Options>General**).  
|                  | 0 = Use the Report Printing form  
|                  | 1 = Use the form for the active Report, Display, or Edit window  
| RptBorderWidth=  | Sets the width of the selection box in the Report window. If you use this feature, the tops of characters may be "whited out" when you move the selection box off a record. A value somewhere between 3 and 5 will increase the visibility of the selection box without obscuring the records in the report. This option does not appear in Inmagic.INI unless you add it explicitly using a text editor.  
| SilentP=         | Controls the **Primary textbase** password setting (choose **Tools>Options>General**).  
|                  | 1 = Use the Silent password and show warning (default)  
|                  | 2 = Use the Silent password and do not show warning  
|                  | 3 = Always prompt for password  
| SortFieldLists=  | Controls the **Sort textbase field lists alphabetically** setting (choose **Tools>Options>Display**).  
|                  | 0 = Field lists appear in textbase structure order (default)  
|                  | 1 = Field lists are sorted alphabetically  
| SMTPServerName=  | Specifies the name of SMTP server.  
| SMTPIPAddress1=  | Specifies the four parts of the SMTP Server IP address.  
| SMTPIPAddress2=  |  
| SMTPIPAddress3=  |  
| SMTPIPAddress4=  |  
| SMTPUsername=    | Specifies the username and password to pass to an SMTP server that requires authentication. This option does not appear in Inmagic.INI  
| SMTPPassword=    |  

0 = Use the short date format (default)  
1 = Use the long date format
### SpacedRelOps=
- **Controls whether spaces are required around search operators (colon, slash, ampersand, and so forth).**
  - \(0\) = Characters are always interpreted as search operators, for example, Boolean OR (default)
  - \(1\) = Characters are only interpreted as search operators if surrounded by spaces
- We recommend setting this parameter \(=1\), so users can search for dates such as 12/31/98 and URLs such as http://www.inmagic.com without having to use the surrounding quotes.
- This setting affects DB/TextWorks and WebPublisher PRO.
- This option does not appear in Inmagic.INI unless you add it explicitly using a text editor.

### SwitchDeferredOption=
- **Controls the If indexes are busy setting** (choose Tools>Options>General, the Deferred Indexing group). This setting tells DB/TextWorks what to do if it cannot save a record using Shared Immediate indexing.
  - \(1\) = Do not save record and suggest switch to Deferred indexing
  - \(2\) = Silently save record using Deferred indexing
  - \(3\) = Save record using Deferred indexing and display message (default)

### SynchWin=
- **Controls the Synchronize Windows setting** on the Window menu.
  - \(0\) = Do not synchronize windows (default)
  - \(1\) = Synchronize windows

### TabToHTMLBoolean=
- **Controls whether the Tab order on Web query screens includes Boolean drop-down lists:**
  - \(0\) = The Tab order skips AND/OR/NOT drop-down lists. The only way to change the state of the drop-down list is with the mouse.
  - \(1\) = Tab behavior corresponds to the Allow tabbing to Boolean query buttons setting (choose Tools>Options>Search). (default)
  - \(2\) = Tab goes to AND/OR/NOT drop-down lists.
- If you want to modify this setting, you must edit the Inmagic.INI file when DB/TextWorks is not running, before you use the Export Query Screen to HTML command.
- When TabToHTMLBoolean=1, any query screen that has already been exported to HTML must be re-exported if you change the Allow tabbing to Boolean query buttons setting (choose Tools>Options>Search).

### TabToQBEButton=
- **Controls the Allow tabbing to Boolean query buttons setting** (choose Tools>Options>Search).
  - \(0\) = Pressing the Tab key skips AND/OR/NOT buttons. The only way to change the state of the buttons is with the mouse.
  - \(1\) = Pressing the Tab key moves to AND/OR/NOT buttons. Press the spacebar (in DB/TextWorks only) to change the state of a button. (default)
If you accept the default setting of TabToHTMLBoolean=1, then the Tab
order in exported HTML query screens for use with WebPublisher PRO
is controlled by TabToQBEButton= parameter.

| TBMenu_Path= | The folder and file name for the current menu screen. |
| TBMenu_File= |

| UseSMTP= | Controls the Access e-mail services using setting (choose Tools>Options>E-mail).
| 0 = Use MAPI (default)
| 1 = Use SMTP |

**[FormSettings]**

The default form and query screen settings (for example, form and box background colors) are
specified using the Form Defaults dialog box (choose Tools>Options>Display>More Defaults
in DB/TextWorks).

These settings affect DB/TextWorks and WebPublisher PRO.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>BoxBkgColor=</td>
<td>Specifies the box background color if no color is specified in the form or screen. Applies to reports, expanded displays, edit/delete pages, query screens, and text boxes on menu screens. Type R,G,B (Red, Green, Blue) values separated by commas (for example, 255,255,128 for yellow).</td>
</tr>
<tr>
<td>FormBkgColor=</td>
<td>Specifies the page background color if no explicit color is specified in the form or screen. Type R,G,B (Red, Green, Blue) values separated by commas (for example, 255,255,128 for yellow).</td>
</tr>
</tbody>
</table>
| ApplyBkgOpt= | Controls whether FormBkgColor= and BoxBkgColor= are applied to forms and screens with no explicit background colors.
| 1 = FormBkgColor and BoxBkgColor are applied to saved forms with no explicit background color
| 2 = FormBkgColor and BoxBkgColor are used when creating new forms and query screens in the Form Designer, Query Screen Designer, or Menu Screen Designer |
| UndoLevels= | Specifies the number of Undo/Redo levels supported in the Form Designer and Query Screen Designer. Set it to 0 (zero) to turn off the Undo feature. Default is 4; maximum is 50. |
| UndoBufferInitSize= | Specifies the initial size of the memory buffer that holds each snapshot of the form state to support Undo and Redo. Each time the memory buffer size needs to increase to accommodate the form state, it grows by this number of bytes. Default is 4096. |

**[Highlight]**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Purpose</th>
</tr>
</thead>
</table>
**Display**= Controls the **Display highlighting** setting (choose **Tools>Options>Search** in DB/TextWorks).
- 1 = Reverse Video (default)
- 2 = Color (in this case, a Color= line also appears)
- 3 = None

This parameter affects search highlighting behavior of the single-record display for both DB/TextWorks and **WebPublisher PRO**. It also affects multi-record display for DB/TextWorks. Note that in **WebPublisher PRO**, reverse video equates to bold.

**Printing**= Controls the **Print highlighting** setting (choose **Tools>Options>Search**).
- 1 = Bold (default)
- 2 = Italic
- 3 = Bold Italic
- 4 = Underline
- 5 = None

This parameter also affects the search highlighting behavior on multi-record reports in **WebPublisher PRO**.

**[Entry Mark Format]**

The numeric value for the delimiter selected using the **Field entry delimiter** setting (choose **Tools>Options>Display** in DB/TextWorks).

**[Box Font]**

The **Text Font** settings (choose **Tools>Options>Display**).

**[Title Font]**

The **Label Font** settings (choose **Tools>Options>Display**).

**[Designers]**

The location on the screen of the dialog boxes in the designers.

**[Imaging]**

Entries in *italics* must be set by editing the Inmagic.INI file (when DB/TextWorks is not open). Other options can be set using various DB/TextWorks controls and menu options.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Despeckle=10</td>
<td>This number can be anywhere from 0 to 100, and specifies how aggressive</td>
</tr>
<tr>
<td></td>
<td>the despeckling procedure should be. Higher numbers take out more</td>
</tr>
<tr>
<td></td>
<td>extraneous dots, but may wind up taking out some real ones too if the</td>
</tr>
<tr>
<td></td>
<td>image was not sharp to begin with.</td>
</tr>
<tr>
<td>FastPrint=0</td>
<td>Controls fast image printing.</td>
</tr>
<tr>
<td></td>
<td>0 = Do not use fast image printing (default)</td>
</tr>
<tr>
<td></td>
<td>1 = Use fast image printing</td>
</tr>
</tbody>
</table>
May cause printer errors or problems with certain images or printers. If you receive printer errors, change the line back to FastPrint=0.

ImageDrive=
Controls the Image drive(s) setting (choose Tools>Options>Imaging).

MultiplePageImage=
Controls the Support multiple page TIFF images setting (choose Tools>Options>Imaging).
   0 = Only first image is displayed
   1 = All images are displayed (default)

PreferenceFlags=0
Causes the Thumbnail window to use less memory. Aspect ratios may not be preserved.

ScaleToGray=1
Specify if Scale to Gray is selected for the Images, Thumbnail, and Image Annotation windows.
   0 = Scale to Gray is not selected
   1 = Scale to Gray is selected

ThumbNailColumns=
The Columns value specified using the Set Rows and Columns setting in the Thumbnail window.

ThumbNailRows=
The Rows value specified using the Set Rows and Columns setting in the Thumbnail window.

Win3xFileName=
Controls the Support only short filenames for images setting (choose Tools>Options>Imaging).
   0 = Image file names can contain spaces (default)
   1 = Image file names cannot contain spaces

Set this parameter =1 only if the Image fields contain text other than the number of images after the image file name.

WinFitFlags=
Controls the Fit image to window setting (choose Tools>Options>Imaging). The default value is 2, which corresponds to Scale proportionally if necessary with the Leave small images original size check box cleared.

XipPrint=1
Takes advantage of Xionics XipPrint enabled printers.

The following options reflect the current settings of the matching options on the Annotation Properties dialog box in the Image Annotation editor:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>BackColor=</td>
<td>Background Color</td>
</tr>
<tr>
<td>FontFace=</td>
<td>Font (default is Times New Roman)</td>
</tr>
<tr>
<td>FontParams=</td>
<td>Other font information, including size. DB/TextWorks makes a &quot;best guess&quot; for the font size the first time you annotate an image, then saves the specified font size.</td>
</tr>
<tr>
<td>ForeColor=</td>
<td>Foreground Color</td>
</tr>
<tr>
<td>LineStyle=</td>
<td>Line Style</td>
</tr>
<tr>
<td>LineThickness=</td>
<td>Line Thickness</td>
</tr>
</tbody>
</table>
[Window Placements] or [Content Server Window Placements]

This section is called [Content Server Window Placements] if you have the SQL platform, or [Window Placements] for the non-SQL version. These settings control the window size, position, and maximization settings for windows that are not textbase-specific (for example, the Menu Screen window or the List Textbases window).

[WebPublisher] or [ICSWeb]

The [WebPublisher] section, or [ICSWeb] for the SQL platform, must be added manually. The parameters in this section affect WebPublisher PRO and the Export Query Screen/Menu Screen/Editing Form to HTML commands in DB/TextWorks.

If you plan to use any of the following parameters, be sure to either place a copy of the INMAGIC.INI file in the WebPublisher PRO root folder, or modify the copy already located there.

**Important!** If you change any of the following parameters after query or edit pages have been exported to HTML from within DB/TextWorks, you must re-export those pages. For edit pages that are dynamically generated by WebPublisher PRO, you must restart your World Wide Web publishing service after changing a parameter.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>AutoIncludeValidationLinks=</td>
<td>On edit forms, controls whether the box labels for fields with validation lists are turned into hypertext links that display the validation list. For this parameter to affect static HTML edit forms, it must be set when DB/TextWorks is not running (and before you export the edit screen to HTML).&lt;br&gt;&lt;br&gt;0 = Only boxes with Validation specified in the Web box treatment drop-down list on the HTML tab (choose Box Properties&gt;HTML) in the Form Designer have validation list links&lt;br&gt;1 = All boxes containing a field with a validation list or a Link field have validation list links (default)</td>
</tr>
<tr>
<td>BoxHighlighting=</td>
<td>Controls whether the current box on Web query/edit forms has a selection box. For this parameter to affect exported HTML query and/or edit screens, it must be set when DB/TextWorks is not running (and before you export them to HTML).&lt;br&gt;&lt;br&gt;0 = No selection box&lt;br&gt;1 = Selection box displayed (default)</td>
</tr>
<tr>
<td>BrowseChoicesText=</td>
<td>Controls the text for the Browse Choices button. This must be set before you export a query screen to HTML. Type your text after the = sign. For example: BrowseChoicesText=Consult</td>
</tr>
<tr>
<td>WebLinkINM=</td>
<td>Controls the appearance of the Inmagic logo and hypertext link (that is, the &quot;Powered by DB/Text WebPublisher, from Inmagic&quot; attribution line). This setting affects pages exported to HTML using DB/TextWorks, and WebPublisher PRO.&lt;br&gt;&lt;br&gt;0 = The Inmagic logo in the attribution line is a hyperlink to the Inmagic Web site. (default)&lt;br&gt;1 = The Inmagic logo does not appear. In its place is plain text that is not a hyperlink: Inmagic, Inc. (<a href="http://www.inmagic.com">www.inmagic.com</a>).</td>
</tr>
</tbody>
</table>
**WebHideINM=1**  Completely remove the attribution line and the accompanying horizontal rule.

**WebEditValidation=**  Controls whether validation lists can be overridden and/or new terms can be added when users edit records over the Web.
- none = Validation rules cannot be overridden and new terms cannot be added to validation lists. (default)
- override = Validation rules can be overridden, but new terms cannot be added to validation lists.
- update = Validation rules can be overridden and new terms can be added to validation lists.

**WebDocType=**  Specifies the DOCTYPE declaration for emitted XHTML. If this parameter is absent, the following default DOCTYPE is used:

```xml
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3c.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

**Note:** WebPublisher PRO output may not match the specified DOCTYPE.

---

**DBText.INI (or INMCSRV.INI)**

The DBText.INI file (or INMCSRV.INI if you are using the SQL platform) contains information about software configuration settings, and is located in the DB/TextWorks installation folder. If it is absent, default settings are used. You can change some of this information (the first four bulleted items) by running the DB/TextWorks Setup program and choosing Configure. To make other changes, you can edit the DBText.INI file directly using a text editor, such as Microsoft Notepad.

**Important!** To ensure that settings are also applied to WebPublisher PRO, we strongly recommend you place a copy of DBText.INI (or INMCSRV.INI) in your WebPublisher PRO installation folder on the server. Whenever you make date-related changes to this file (either directly or via DB/TextWorks Setup), you should copy the modified file to the WPP installation directory, so the two copies remain identical.

The DBText.INI (or INMCSRV.INI) file contains information such as:

- Language(s) used for month and day names
- Default leading article and stop word lists
- Setting for interpreting 2-digit years
- Settings for tracking textbase activity
- Information about the Copy Special Application commands

The following tables list the various sections and parameters.

### [Dates]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>CenturyYear0=</td>
<td>For interpreting 2-digit years, specifies the first year in the current century. For</td>
</tr>
</tbody>
</table>
example, if you specify 1940, "96" means "1996" and "35" means "2035". The default is 1940.

**[defaults]**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>dfltDays=</td>
<td>Lists the primary day names that DB/TextWorks will recognize. These day names are also used when displaying formatted dates. Type seven day names in order, starting with Sunday, separated by spaces.</td>
</tr>
<tr>
<td>dfltMonths=</td>
<td>Lists the primary month names that DB/TextWorks will recognize. These month names are also used when displaying formatted dates. Abbreviations of these months are used when displaying date fields in the Query Choices Browser (for query screens used on the desktop) and the Inmagic Choices Browser (on Web query screens). Type 12 month names in order, starting with January, separated by spaces.</td>
</tr>
<tr>
<td>dfltDays2=</td>
<td>Lists the alternate day names that DB/TextWorks will recognize.</td>
</tr>
<tr>
<td>dfltMonths2=</td>
<td>Lists the alternate month names that DB/TextWorks will recognize.</td>
</tr>
<tr>
<td>sShortDate=</td>
<td>Controls short date format (for example, dd/mm/yyyy).</td>
</tr>
<tr>
<td>sLongDate=</td>
<td>Controls long date format, primarily for displaying formatted dates (for example, dddd, MMMM dd, yyyy)</td>
</tr>
<tr>
<td>iDate=</td>
<td>Controls the order of date components for interpreting dates. 0=M-D-Y, 1=D-M-Y, 2=Y-M-D</td>
</tr>
<tr>
<td>indexDateFmt=</td>
<td>Controls the format of date indexes shown in the Query Choices Browser (for query screens used on the desktop) and the Inmagic Choices Browser (on Web query screens). The default format is YYYY-Mmm-DD.</td>
</tr>
</tbody>
</table>

The sShortDate=, sLongDate= and iDate= parameters are an alternative to making the user account (the account used by *WebPublisher PRO*) a member of the group Users so that its Regional Settings are retained and used.

**[Advanced]**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>EnableSlotLog=</td>
<td>Add this parameter and set it equal to 1 to have DB/TextWorks write a line to the textbase .SLT file every time it opens the textbase, and clear the line every time it closes the textbase. You can open the .SLT file with a text editor. To have this parameter apply to the Web component as well, you must place a copy of the DBText.INI file in the WebPublisher PRO installation folder. To use this feature, the account used by WebPublisher PRO must have Full access to the .SLT file, which resides in the same folder as the textbase.</td>
</tr>
</tbody>
</table>
If you want to track users for some textbases but not for others, you can use this parameter in individual *.INI files.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RecordLockInterval</strong></td>
<td>[SQL platform only] Add this parameter to specify the amount of time you want non-active locks to remain active before the software automatically clears them. The default value is 20 minutes. The value you specify must be entered in milliseconds.</td>
</tr>
<tr>
<td><strong>LockTimeout</strong></td>
<td>[SQL platform only] Add this parameter to specify the amount of time you want the software to wait for an existing lock to be cleared before, for example, displaying a message. The default value is 60 seconds. The value you specify must be entered in milliseconds.</td>
</tr>
<tr>
<td><strong>CSErrorDump</strong></td>
<td>[SQL platform only, in either INMCSRV.INI or the textbase INI file] This parameter tracks SQL server errors that occur in a textbase or on a workstation. Set the value to 0 (off) or 1 (on). 0 or 1</td>
</tr>
<tr>
<td><strong>OptimizedPhraseSearch</strong></td>
<td>[SQL platform only] Add this parameter and set it equal to 1 to optimize phrase searching. Doing this increases the speed of phrase searching, but places some restrictions phrase recognition. If OptimizedPhraseSearch=1, searches cannot recognize phases in a textbase that have more than one punctuation or space character between words (for example, a period and a space, two spaces, a colon and a space, and so forth). To search for phrases that have multiple characters between words (such as, Mr. Jones), use a proximity search or the truncation symbol (<em>). Note that proximity searches (for example, submit mr p1 jones to find Mr. Jones) will not find phrases that include stop words, and the truncation symbol may find phases in addition to the one you want (for example, Mr</em> Jones would find Mr. Jones and Mrs. Jones). The default setting is 0, which is the traditional phrase searching without the restriction on punctuation and spaces.</td>
</tr>
</tbody>
</table>

**[Special Vendor]**

If you plan to pass record-specific information to other applications by way of the Windows Clipboard, you must specify those applications in the [Special Vendor] section. The name of the parameter is the application name you will use for reference in the *.INI file. Several vendors are included in the default DBText.INI file. See the Application Options (Copy Special) topic for detailed information.

**DBTWPub.INI (or ICSWeb.INI)**

The **DBTWPub.INI** file (or ICSWeb.INI if you are using the SQL platform) contains settings that are specific to WebPublisher PRO. This file is required for the Web component to run. Write access is recommended for this file.
Note for SQL platform: Section names that include "WebPublisher" are shortened to "Web" in ICSWeb.INI. Examples: [WebPublisher Defaults] vs. [Web Defaults], and [WebPublisher] vs. [ICSWeb].

Use a text editor to edit the file, to adjust the WebPublisher-specific settings listed below:

- Where the Web component looks for textbases and images used in reports, single-record displays, and on edit and delete pages.
- How many temporary query sets are retained.
- Whether Cascading Style Sheets (CSS) are used to format report/display/edit pages.
- Whether WebPublisher PRO messages are translated/modified.
- Whether each page has a New Search button next to the Next/Previous buttons.
- Whether expand record links and edit/delete pages open in a new browser window.
- ADA Compliance settings.
- The total number of records WebPublisher PRO displays for each search.
- Whether severe error messages are logged.
- Default Includes in output.
- XML settings including how to enable or disable XML for textbases and how to specify the total number of records displayed on the Web.
- Whether navigational buttons appear on Web pages.
- Whether exploded sorts are supported on the Web.
- Whether hit navigation is enabled for records displayed on the Web.
- Whether query navigation is turned on for queries performed over the Web.

Textbase Log Files

For each textbase, you can enable a log file to record textbase activity. A log file is a standard ASCII text file. It is saved in the same location as the textbase and has the same file name as the textbase, with the extension .LOG. You can enable, view, print, or delete a log file from within DB/TextWorks.

Note: A log file does not record activity performed using Manage Textbase Elements.

To enable a textbase log file

2. In the Textbase Log File dialog box, select Enable Logging to File.
3. In the First Identifying Field list, select a field. Its name and contents (first 250 characters only) will appear in the log file to identify records that have been added, changed, or deleted. Select a field with short, unique contents (such as an Automatic Number field or other unique identifier).
4. If you want to use two fields as identifiers, select a field in the Second Identifying Field list. Use a second identifying field if one field does not uniquely identify a record, or if you need a second field for clarity.
5. To revert to the default settings, click **Reset to Default**. The default settings are the first field defined in the textbase structure for the First Identifying Field and **<none>** for the Second Identifying Field.

**To record user activity in the textbase log file**

You can add a Details = parameter to the [LogFile] section of the `<textbase>.ini` file if you want the textbase log file to record who is opening the textbase, editing records, and locking records.

Example:

```
[LogFile]
Details = 2
```

You can set this to one of the following:

- 0 - No enhanced logging
- 1 - Logs when a user opens or closes the textbase
- 2 - Logs when a user modifies records (and opens/closes the textbase)
- 3 - Logs when a user locks/unlocks record (and opens/closes the textbase or modifies records)

**To disable a textbase log file**

1. Choose **Maintain>Edit Textbase Structure>Log File**.

2. In the Textbase Log File dialog box, clear the **Enable Logging to File** check box.

**To view a textbase log file**

Choose **Maintain>View Log File** to examine the log file for the current textbase. DB/TextWorks automatically scrolls to the end of the log file so you can see the most recent information.

Information is continually appended to the log file. Periodically, after reviewing changes and/or printing the log file, you may want to delete it by choosing **Maintain>Delete Log File**. A new log file will be created automatically to record subsequent activity.

**Query Log Files**

For each textbase, you can enable query logging. By default, queries on the textbase will be logged to `<textbase>_query.log` in the folder containing that textbase. Users searching the textbase need write-access to that folder.

If you prefer to use a different location, specify a QueryLogPath. Use the UNC path if the folder is on a network drive, and ensure that users have write-access to the folder.

**To enable a query log file**

Open the `<textbase>.ini` file and add `QueryLog = 1` to the [LogFile] section. Optionally, specify a QueryLogPath. Example:

```
[LogFile]
QueryLog = 1
QueryLogPath = \servername\logfolder\`
```
Textbase.INI Files

Each textbase can have its own <textbase>.INI file with the same name and location as the textbase. For example, the Loans textbase can have a Loans.INI file. You can create or edit this file using a text editor.

A <textbase>.INI file contains textbase-specific settings for the following purposes:

- Control which choices appear on the Applications menu
- Configure Copy Special
- Configure Textbase-Specific Help
- Configure performance settings for the Query Choices Browser and Inmagic Choices Browser
- Record user activity in a textbase log file
- Textbase and Query log files
- Track who has the textbase open (EnableSlotLog)
Textbase Files (non-SQL platform)

A textbase consists of a number of files with the same name as the textbase but different extensions. For example, the textbase Sales consists of SALES.TBA, SALES.ACF, etc.

Note for SQL platform: If you are using DB/TextWorks for SQL, see Textbase Files (SQL platform).

<table>
<thead>
<tr>
<th>Extension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.ACF</td>
<td>Access control file; controls simultaneous access to the textbase by multiple users or software instances, or applications (for example, DB/Text PowerPack).</td>
</tr>
<tr>
<td>.ACS</td>
<td>File used with the optional record-level security feature. Created if the textbase has an Access Control field with a populated special validation list.</td>
</tr>
<tr>
<td>.BTX</td>
<td>Contains the Term and Word indexes.</td>
</tr>
<tr>
<td>.DBO</td>
<td>Contains a directory to the records in the .DBR file.</td>
</tr>
<tr>
<td>.DBR</td>
<td>Contains records (including deferred).</td>
</tr>
<tr>
<td>.DBS</td>
<td>Textbase structure file, contains field definitions and other information.</td>
</tr>
<tr>
<td>.IXL</td>
<td>Indexed list file, contains the validation and substitution lists.</td>
</tr>
<tr>
<td>.OCC</td>
<td>Contains the lists of records indexed by the terms and words in the .BTX file.</td>
</tr>
<tr>
<td>.SDO</td>
<td>Contains a directory to records with deferred updates in the .DBR file.</td>
</tr>
<tr>
<td>.TBA</td>
<td>Primary textbase definition file, which also contains textbase elements (for example, forms, query screens, sets, record skeletons) stored in the textbase.</td>
</tr>
<tr>
<td>.HLP</td>
<td>Optional textbase-specific help file.</td>
</tr>
<tr>
<td>&lt;textbase&gt;.INI</td>
<td>Optional file used with Copy Special applications, Textbase-Specific Help, the ODBC driver, and the Applications menu.</td>
</tr>
<tr>
<td>.LOG</td>
<td>Optional textbase log file; lists changes to records and the textbase structure.</td>
</tr>
<tr>
<td>.SLT</td>
<td>Optional file to indicate who has a textbase open, if EnableSlotLog=1 in the [Advanced] section of DBTEXT.INI or &lt;textbase&gt;.INI.</td>
</tr>
<tr>
<td>.TML</td>
<td>Thesaurus maintenance locking file, prevents more than one person at a time from modifying records in a thesaurus. Does not need to be backed up.</td>
</tr>
</tbody>
</table>
Textbase Files (SQL platform)

A DB/TextWorks for SQL textbase consists of a number of files with the same name as the textbase, but different extensions. For example, *Sales* consists of SALES.CAC, SALES.CBA, etc.

**Important!** Records, indexes, and other important files reside inside SQL server. Backing up the textbase files shown below does not provide a complete backup. For more information, see Back Up Textbases (Back Up & Restore menu).

<table>
<thead>
<tr>
<th>Extension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.CAC</td>
<td>Access control file; controls simultaneous access to the textbase by multiple users or software instances, or applications.</td>
</tr>
<tr>
<td>.CBA</td>
<td>Primary textbase definition file, which also contains textbase elements (for example, forms, query screens, sets, record skeletons) stored in the textbase.</td>
</tr>
<tr>
<td>.CBS</td>
<td>Textbase structure file, contains field definitions and other information about the structure of the textbase.</td>
</tr>
<tr>
<td>.HLP</td>
<td>Optional textbase-specific help file.</td>
</tr>
<tr>
<td>.INI</td>
<td><code>&lt;textbase&gt;.INI</code> is an optional file used with Copy Special applications, Textbase-Specific Help, and the Applications menu.</td>
</tr>
<tr>
<td>.LOG</td>
<td>Optional textbase log file; lists changes to records and the textbase structure.</td>
</tr>
<tr>
<td>.SLT</td>
<td>Optional file that is created when EnableSlotLog=1 appears in the [Advanced] section of the <code>INMCSRV.INI or &lt;textbase&gt;.INI</code> file. This option can be set in INMCSRV.INI during Setup using the <strong>Track Textbase Access</strong> button on the Configuration dialog box. The machine name and login name of each user who has a textbase open is recorded in the .SLT file. The line is cleared when each user closes the textbase.</td>
</tr>
<tr>
<td>TML</td>
<td>Thesaurus maintenance locking file, prevents more than one person at a time from modifying records in that thesaurus textbase. TML files do not have to be backed up. The software automatically creates them if they do not exist.</td>
</tr>
</tbody>
</table>

User Files

A user file is a file in which you can save textbase elements, as an alternative to saving them in the textbase. DB/TextWorks creates one user file for each textbase that you open. For example, a textbase called *Sales* has a user file called SALES.TBU.

User files provide a "private" place to store elements. Only you have access to elements in your user file. User files are intended for convenience, not security. For example, if you are practicing designing forms and you do not want other users to see your early or not finished attempts, save the forms in your user file.

User files for all of the textbases that you open are kept in the same location on your local hard drive, or some other location not shared by other users. To see your user file path, choose **Display>Textbase Information**.

The location for user files is determined the first time you run the software, when you are asked to specify a User File Path. You can accept the suggested path or specify a different one. If you specify a different location, be sure you have full (read/write/delete) access to it.
You can change the location for user files at any time by selecting Tools>Options.

Here is a typical example of how one textbase can have multiple user files:

There is one textbase on a shared network drive: `\SERVER\VOL1\PUBLIC\SALES`.
Betsy’s user file is on her local hard drive: `C:\PROGRAM FILES\INMAGIC\SALES.TBU`.
John’s user file is on his local hard drive: `D:\DBTEXT\USERFILE\SALES.TBU`.
Richard’s user file is on a shared network drive:
`\SERVER\VOL1\USERS\RICH\SALES.TBU`.

# Saving Elements in User Files

Elements are not saved as separate files. They are saved as elements within a user or textbase file. When you save an element, the Save As dialog box asks where to store the element:

- **User File (Private).** Elements saved in the user file are available only to that particular user. This is the default option.
- **Textbase File (Public).** Elements saved in the textbase file are available to all users. Elements saved in the textbase file are followed by the notation `(public)` when they appear in selection lists. The notation `(public)` is not part of the element name.

Elements of a given type can have the same name if one is stored in the textbase and the other in the user file. For example, a form called Summary can be saved in both the user file and the textbase file. The form saved in the textbase file appears as **Summary (public)** when it appears in a selection list.

# User File Collisions

When specifying a user file path on a network drive, be sure to specify a folder that no one else uses for their user files. Otherwise, you run the risk of overwriting each other’s elements in the user files. (The whole user file is not overwritten; just individual elements that are actually changed and saved, such as forms or query screens.)

Because all of your user files are stored in one place, you should not give two textbases the same name, even if they are in different directories or on different computers, because they will be given identical user file names. For example, if you open `C:\COMPANY\SALES`, a user file called `C:\USERFILES\SALES.TBU` will be created. If you then open `C:\BACKUP\SALES`, the same user file will be used.

When the software detects a potential collision, it displays this message:

*The last textbase you opened with this name was in C:\COMPANY\ rather than C:\BACKUP\*. If you have different textbases with the same name, information stored in your user file may be incompatible with one of them. Continue?

- If you click **Yes** to continue, the user file will be changed to reference the new path. Elements stored in the user file may not work with the current textbase.
- If you click **No**, the textbase will not be opened. To avoid future user file collisions, you have to decide which textbase the user file belongs to and rename the other textbase, so you do not have two textbases with the same name.

**Tip!** For more information, open the Messages textbase (`DBTMSG`, normally located in the same folder as DB/TextWorks) and search for the message "The last textbase you opened with this name..."
Note: In addition to user files, there are some files that are both textbase-specific and user-specific that are located in the user file folder. These include the .TBS file, which stores persistent scripting information, and the .IDI file, which stores last-used settings (for example, window size and position, batch modification settings).

Temporary Files

Like most Windows applications, DB/TextWorks creates temporary files during certain operations. Under normal circumstances, the software deletes these temporary files when you exit the software, so you will not see them. However, if you reboot while the software is running, temporary files may remain. To free up disk space, you can safely delete these temporary files.

DB/TextWorks temporary files are named ~DTnnnn.TMP, where n represents digits; for example, ~DT2345.TMP, and are saved in the folder specified by the TEMP environment variable.

Text File Extensions

The extensions listed below are recommended but not required for text files used with DB/TextWorks. For example, when you export records, the extension .DMP is assigned by default, but you can change this extension in the Export File As dialog box.

<table>
<thead>
<tr>
<th>Extension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.ADD or .DMP</td>
<td>Records to be imported</td>
</tr>
<tr>
<td>.CHK</td>
<td>Check Textbase problem report file</td>
</tr>
<tr>
<td>.DMP</td>
<td>Exported records</td>
</tr>
<tr>
<td>.IAB</td>
<td>Image annotation list backup file</td>
</tr>
<tr>
<td>.TBB or .CBB</td>
<td>Textbase structure definition (.TBB for non-SQL, .CBB for SQL platform)</td>
</tr>
<tr>
<td>.TXT</td>
<td>Information printed to a file (validation lists, textbase elements, etc.)</td>
</tr>
<tr>
<td>.X01, .X02, etc.</td>
<td>Exception files</td>
</tr>
<tr>
<td>.XPF</td>
<td>Exported form definitions</td>
</tr>
<tr>
<td>.XPK</td>
<td>Exported record skeleton definitions</td>
</tr>
<tr>
<td>.XPQ</td>
<td>Exported query screen definitions</td>
</tr>
<tr>
<td>.XPS</td>
<td>Exported set definitions</td>
</tr>
</tbody>
</table>
Inmagic.net

Inmagic.net gives you the ability to connect to the Inmagic server from within a DB/TextWorks session to accomplish the following tasks:

- **Order your information resources (for example, books) online.** From the Inmagic.net menu you can place an order.
- **Catalog Web pages for easy searching.** From the Inmagic.net menu you can access a Web site and catalog information from it to a textbase, including its URL.
- **Configure Inmagic.net to be able to accomplish these tasks and others.**

Note that Inmagic.net is an evolving feature. New functionality may be presented periodically. For the latest information, see the on-screen text for the function pages. You may also see a Help button on the toolbar and/or the page.

To print the contents of an Inmagic.net window, choose File>Print.

**To use Inmagic.net to order information resources**

- To place an order, choose Inmagic.net>Place Order. A browser window opens within your current DB/TextWorks session and goes to the Web page for your chosen information resources supplier. If you need help on this page, use the supplier's online help resource.
  
  **Note:** If you have not designated a supplier beforehand, select one by clicking a logo on the Place Order page. To designate a preferred supplier, choose Inmagic.net>Configure to open the Configure page.

- To configure Inmagic.net (for example, to designate a preferred online information resources supplier), choose Inmagic.net>Configure. The Inmagic.net Configure page appears. For more information about this page, see the page.

**To use Inmagic.net to catalog a Web page**

- Choose Inmagic.net>Catalog Web Pages. A browser window opens within your current DB/TextWorks session. For more information about this page, see the page.
  
  **Note:** If you have not already specified the fields in your textbase into which you want to catalog information from a Web site, open the textbase, then choose Inmagic.net>Configure to open the Configure page.

**Configure (Inmagic.net menu)**

Choose Inmagic.net>Configure to configure Inmagic.net (for example, to designate a preferred online information resources supplier, to map fields in a textbase for Web page cataloging on the desktop, or to configure support for WebPublisher features such as check box forms, RSS feeds, or SOAP applications. Note that before you attempt to map fields in a textbase, you must have the textbase open.

**Navigating in the Inmagic.net Window**

The Inmagic.net window appears when you select a command from the Inmagic.net menu.

For example, when you choose Inmagic.net>Place Order, a browser window opens within your current DB/TextWorks session and goes to the Web page for your chosen information resources supplier. You can navigate within the Inmagic.net window:
• To go back to the previous Web page (when applicable), choose Display>Back or click the Back button on the toolbar for the Inmagic.net window.

• To go forward one Web page (when applicable), choose Display>Forward or click the Forward button on the toolbar for the Inmagic.net window.

• To stop the display of a Web page, choose Display>Stop or click the Stop button on the toolbar for the Inmagic.net window.

• To find specific text within a Web page, choose Edit>Find or click the Find button on the toolbar for the Inmagic.net window.

**Place Order (Inmagic.net menu)**

Choose Inmagic.net>Place Order to go to the Web page for your chosen information resources supplier.

**Note:** If you have not designated a supplier beforehand, select one by clicking a logo on the Place Order page. To designate a preferred supplier, choose Inmagic.net>Configure to open the Configure page.

**Catalog Web Pages**

Choose Inmagic.net>Catalog Web Pages to go to the Inmagic.net Catalog Web Pages browser window so that you can access one or more Web pages and catalog information from them into a textbase, including URL, title, keywords, and selected page content.

To catalog information, follow the on-screen instructions on the Inmagic.net Catalog Web Pages browser window, then click the Catalog Current Web Page toolbar button.

**Note:** If you have not already specified the fields in your textbase into which you want to catalog information from a Web site, open the textbase, then choose Inmagic.net>Configure to open the Configure page.

**Reload command (Inmagic.net)**

Choose Display>Reload to reload the current page.
**WebPublisher PRO**

**What is WebPublisher PRO?**

*WebPublisher PRO* is a server version of DB/TextWorks that enables you to publish textbases on the Internet or an intranet. Web users can search the textbases using any supported browser, and can add, edit, and delete records. *WebPublisher PRO* is used together with DB/TextWorks, which is the "buildware" for creating and maintaining searchable textbases.

Because it supports Extensible Markup Language (XML) and Simple Object Access Protocol (SOAP), *WebPublisher PRO* enables you to integrate your DB/TextWorks textbases with other applications using standard third-party tools.

*WebPublisher PRO* accepts queries submitted over the Web and returns search results as formatted HTML reports. For the Webmaster, there is no user interface, and no icon on the desktop or option in the Start menu. Clients point their Web browser to a page on your Web site, where they can search for information by doing a query.

*WebPublisher PRO* is ideal for publishing text-intensive information that is likely to change on a regular basis, including:

- Catalogs and other information products on an intranet or the Web.
- Intranet publishing, such as Human Resource policies and competitive intelligence documents.
- Customer or prospect services, such as Help Desk, knowledgebase, and product catalogs.
- Research and resources for a company project, to which users can add URLs of relevant Web sites they discover.

**How Do They Work Together?**

You can place information in a DB/TextWorks textbase, and put that textbase on your server, so users who go to your Web site can search your textbases to find the information they need. *WebPublisher PRO* can run in an intranet or Internet environment. A typical LAN/WAN topology is illustrated below.
The following components are involved:

- **Web browser.** The only client requirement is a Web browser that supports JavaScript.
- **HTTP Server Software.** Passes information between the browser and **WebPublisher PRO**.
- **WebPublisher PRO.** Processes client queries and returns formatted results in HTML or XML format.
- **DB/TextWorks.** The buildware, a database application used to create and maintain textbases, forms, and HTML search and edit screens.

### How Do I Publish a Textbase on the Web?

Publishing a textbase involves a textbase designer and a Webmaster:

1. The textbase designer uses DB/TextWorks to perform these tasks:
   - **Create a textbase and populate it with records.** This is the "text database" that WebPublisher PRO will search.
   - **Create forms.** Forms determine how records appear in the Web browser. Using the Form Designer within DB/TextWorks, design the forms that will be used to display records in the browser. You should design one or more Report forms for displaying multiple records retrieved, and one or more Display forms for expanded display of one record at a time. If you have **WebPublisher PRO version 7.0 or later**, you may also want to design one or more Edit forms for adding, editing, and deleting records over the Web.
   - **Create a query screen and export it to HTML.** This is the HTML page that clients will use to submit queries. Note that a query screen can allow clients to search multiple textbases.
   - [Optional] **Create a menu screen and export it to HTML.** This is an HTML page that contains links. Clicking a link runs a predefined query.
• [Optional] **Create an edit form and export it to HTML.** This is an HTML page that lets you and/or your clients add records directly from a Web browser. (This edit screen can be accessed by a URL and does not require a search be submitted first.)

2. The designer passes the files to the Webmaster, who mounts them on a server. The Webmaster sets up a link that points to the HTML search page. When preparing to publish a textbase, the designer and Webmaster need to coordinate the following issues:

   - **Textbase file locations.** DB/TextWorks and **WebPublisher PRO** need access to the textbase. The textbase can be in a shared location, or you can store the textbase locally and then copy it up to the HTTP server whenever you make changes.
   - **HTML and image file locations.** Clients need access to the HTML search pages you created and any images referenced in these pages or reports.
   - **Initialization files.** Many **WebPublisher PRO** settings are controlled by **initialization (INI) files** stored on the HTTP server. From time to time, you may need to edit these files. In addition, you can override the settings in these files by including special parameters in the HTML query screen or the XML sent to **WebPublisher PRO**.
   - **Intranets.** If you are publishing on an intranet, you can provide access to document or image file names specified in records using HTTP or network file addressing protocols.

3. Before allowing the textbase to be searched by clients, test it thoroughly to ensure you can successfully perform a search and any other operations you have allowed, such as adding or editing records.

### How Do Clients Use WebPublisher PRO?

Clients can point a Web browser to the HTML query screen and submit a query. An HTML query screen includes boxes where clients can type query criteria. It may also include Choices Browser buttons or links and/or choices drop-down lists, so clients can select items from a list. These query methods eliminate guess-work, to make searching easier and more intuitive.

If the textbase designer supplied a menu screen, clients can click links to run queries. Used on the Web, a menu screen is an HTML page that includes one or more predefined queries. To the client, the predefined queries look like regular hypertext links. Clicking a link submits a query directly to WebPublisher, which processes the query and returns results.

**Note:** The textbase designer can specify that search results are returned in Extensible Markup Language (XML) format instead of HTML.

The client's Web browser displays the results of the search. The client can use the standard browser controls to navigate. Other controls, such as navigation buttons on the report, are provided by the software. Record appearance is controlled by forms that were designed with DB/TextWorks. Clients can change record appearance dynamically by selecting different forms from a drop-down list in the browser.

Forms that display multiple records (search results) often include a hypertext link to a single-record display. Clients can click the link to see a detailed view of one record at a time. This is called expanding a record. After expanding a record, the client can perform some or all of these tasks:

- Display the next or previous record using the Next/Previous navigation buttons.
• Select a different form from the drop-down list to change the record's appearance.
• Return to the report (multi-record display) by clicking the Rewind (<<) button.
• Print the page, using the currently selected form to format the output.

**WebPublisher PRO Directory Structure**

WebPublisher PRO uses the directory structure illustrated below. Additional subdirectory levels are not shown.

**Important!** A **DBTW-WPD** virtual directory is required for the software to function properly. To learn how to set up a virtual directory for various HTTP servers, see the Inmagic DB/Text WebPublisher PRO Installation Notes.

**Note for SQL platform:** The virtual directory for the SQL platform is **ICS-WPD**. Also, the SQL platform uses **ICSWeb.INI**, not **DBTWPub.INI**.

![Directory Structure Diagram]

**Desktop vs. Internet Use**

If you have WebPublisher PRO, you can use DB/TextWorks to create textbases, forms, query screens, and menu screens for desktop as well as Web use.

As a general rule, you should design separate forms, query screens, and menu screens for desktop and Web use. Some things that you can do on the desktop are not fully supported by HTML. On the other hand, you can do things in the HTML version of a form or screen, such as add hypertext links, that do not function on the desktop.

Most of the features that are specific to Web use are located on tabs in the Screen Properties dialog box and Box Properties dialog box. To access the Screen Properties dialog box in each designer, choose **Tools>Screen Properties** in the Menu and Query Screen Designers and **Tools>Form Properties** in the Form Designer. Web settings are found on the Logos and HTML tabs in all three designers.

To access the Box Properties dialog box in each designer, select a box and choose **Tools>Box Properties**. Not all box types in each designer support HTML settings. The HTML tab (with HTML-related settings) only appears on the Box Properties dialog box when you select a box that can be successfully exported to HTML.
In the Query Screen Designer, a query screen can be designed to search more than one textbase by choosing Tools>WebPublisher Multiple Textbase Query and specifying the textbases and fields to be searched simultaneously. (Note that this feature is not available for XML input/output or for editing over the Web.)

HTML properties take effect only when the form or screen is used with a textbase on the Internet or an intranet.

Query screens and menu screens, as well as edit screens that you want to be able to access directly on the Web (for example, a registration form), have to be exported to HTML for Internet use. Forms used to display, edit, and delete information after a search do not. You establish form usage in the Save Form As dialog box in the Form Designer. If you select the Web check box, the form will appear in the WebPublisher drop-down list. The Web Only check box prevents a form from appearing in lists on the desktop.

The Form Designer, Query Screen Designer, and Menu Screen Designer contain several menu options intended specifically for publishing textbases on the Web. Some options apply to all three designers, while others are specific to individual designers. Those options are listed in the following table.

### All Designers

<table>
<thead>
<tr>
<th>Menu Path</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools&gt;Form/Screen Properties&gt;Logos</td>
<td>Specify image files to be used at the top and/or bottom of the page. Especially useful in conjunction with tabular forms.</td>
</tr>
<tr>
<td>Tools&gt;Box Properties&gt;HTML</td>
<td>Treat contents of box as HTML links. In the Form Designer, each entry in the field can generate a separate link (for example, URL or &quot;See also&quot; link.)</td>
</tr>
<tr>
<td>File&gt;Write Report to File&gt;HTML</td>
<td>Write a formatted report to an HTML file that you can publish on the Web. This provides a way of producing static reports.</td>
</tr>
</tbody>
</table>

### Menu Screen Designer

<table>
<thead>
<tr>
<th>Menu Path</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools&gt;Screen Properties&gt;HTML</td>
<td>Specify position of navigation buttons, whether form lists appear, the number of records per page, and the use of background images for the screens.</td>
</tr>
<tr>
<td>Menu Operations&gt;Export Menu Screen to HTML</td>
<td>Save a menu screen as an HTML page for use on the Web.</td>
</tr>
</tbody>
</table>

### Form Designer

<table>
<thead>
<tr>
<th>Menu Path</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools&gt;Form Properties&gt;General</td>
<td>Specify search highlighting settings, how to show underbars on forms, background color for form, and the distance between records.</td>
</tr>
<tr>
<td>Tools&gt;Form Properties&gt;HTML</td>
<td>Specify whether to use record separators and/or a background image for the form when used on the Web. Click the Advanced Options button to add information to the &lt;head&gt; section of the HTML report and to specify Includes for one or more seams of the HTML report.</td>
</tr>
<tr>
<td>Form Operations&gt;Save Form (As)</td>
<td>Specify whether a form will appear in Web browser drop-down lists and/or desktop drop-down lists.</td>
</tr>
</tbody>
</table>
Form Operations>Export Editing
Form to HTML

Save an editing form as an HTML page to use to add records to a textbase via the Web.

Query Screen Designer

Tools>Screen Properties>HTML

Specify whether to show Boolean drop-down lists (AND, OR, NOT), whether to use background images for the screens, the initial forms used (report, display, and edit forms), whether form lists appear, the number of records per page, and the position of navigation buttons.

Screen Operations>Export Query
Screen to HTML

Save a query screen as an HTML page for use on the Web.

Tools>WebPublisher Multiple
Textbase Query

Specify which textbases to search if more than one is being searched from a single query screen. Select report and display forms, and create a field name map.

Tools>Box Properties>HTML

Add Choices Browsers and/or choices drop-down lists to query boxes; or turn a query box into a password box.

How to Publish Textbases on the Web

To publish textbases, you need DB/TextWorks and WebPublisher PRO. The basic steps for publishing a textbase are summarized below.

1. **Create the textbases.** Use DB/TextWorks to create textbases that Internet/intranet users will search. Put the textbases anywhere that WebPublisher PRO can access them. The textbases can be in a shared location, or you can store the textbase locally and copy it up to the HTTP server whenever you make a change.

2. **Specify the path to the new textbase** in the [WebPublisher Textbase Paths] section of your DBTWPub.INI (or the [Web Textbase Paths] section of the ICSWeb.INI file if you are using the SQL platform) file, so WebPublisher PRO can find the textbase. The INI file is located in your WebPublisher PRO installation folder. This example shows the path to the "test1" textbase set to the default installation path. Change the path to match your situation:

   ```
   test1=C:\Program Files\Inmagic\WEBPUB\Textbase\n   ```

3. **Create the forms.** Use the Form Designer to create forms that will be used to display records in the Web browser. You should design one or more Report forms for displaying multiple records retrieved, and one or more Display forms for expanded display of one record at a time. If you have WebPublisher PRO, you may also want to design one or more Edit forms for adding, editing, and deleting records over the Web.

   In the Form Designer, be sure to choose **Tools>Box Properties>HTML** and **Tools>Form Properties>Logos/HTML** and specify HTML attributes.

   **Note:** If you want to provide users direct Web access to an edit screen from which they can add records (for example, a registration form for an event), create an Edit form and **export it to HTML**. Edit forms are the only type of form that can be exported to HTML.

4. **Save the forms.** When you save each form in the Form Designer, select these options:

   - **Save in Textbase File (Public).** This ensures that when you place the textbase files on the server the forms will be there too.
Web Publisher PRO

- **Web** from the Use For group.

- One or more of the following, depending on the purpose of the form:
  
  **Display Window.** Select this check box to have this form appear in the expanded display form lists on the Web.

  **Report Window.** Select this check box to have this form appear in report form lists on the Web.

  **Edit Window.** Select this check box to enable the form to be used to add, edit, and delete records over the Web.

Note the following:

- Forms are not separate files. They are saved in the textbase, so you do not have to take any extra steps to place forms on the server, nor do you have to convert them to HTML.

- **Note:** If you want to provide users direct Web access to an edit screen from which they can add records (for example, a registration form for an event), create an Edit form and **export it to HTML**. Edit forms are the only type of form that can be exported to HTML.

- Use **Tools>Screen Properties>HTML** for query screens, and **Tools>Box Properties>Initial Elements** for menu screens to specify which Report, Display, and Edit forms to use initially in the Web browser.

- Printed reports use whichever form is displayed in the browser when the browser **Print** command is used.

4. **Create an HTML query screen and export it to HTML.** A query screen is a search form that users type query criteria into, in order to search for records. Use the Query Screen Designer to design a query screen, then export it as HTML. Place the resulting HTML page anywhere on your Web site.

5. [Optional] **Create an HTML menu screen and export it to HTML.** You can use a menu screen instead of, or in addition to, a query screen.

   A menu screen is a list of one or more predefined searches. The searches appear to a Web user as a list of hypertext links. Clicking a link generates a search and returns records to the Web browser. Use menu screens when you want to "protect" users from having to specify query criteria, or when many users are likely to want to perform the same searches. Use the Menu Screen Designer to create a menu screen and export it to HTML.

6. **Give users a way to get to the query screen or menu screen.** Put the HTML page anywhere accessible to the HTTP server. Then make sure that Web users have a way to get to that page. For example, add a hypertext link to a page on your Web site that jumps to the HTML page. Or make your home page the query screen or menu screen itself. If you are publishing multiple textbases, a page on your Web site could include a list of the textbases, with each item being a jump to the appropriate HTML query screen.

7. **Test your textbases.** Before you make your textbases widely available on the Internet or an intranet, test them locally to be sure that everything works the way you intended. For example, point your Web browser to http://localhost/dbtw-wpd/textbase/testqs.htm, where **localhost** is your Web server name. **Note for SQL platform:** The SQL platform...
uses ics-wpd instead of dbtw-wpd. Enter search criteria in one of the boxes and click Submit Query.

Tip! If you receive an error when trying to retrieve records, ensure that the correct permissions and access rights are assigned for both the WebPublisher PRO folder tree and its mapped virtual directory. Details about these permissions/access rights are supplied in the Installation Notes.

Publishing on an Intranet
You can publish textbases on a local or wide-area network (LAN or WAN) to make information available within an organization across a variety of platforms. Typical applications include publishing company policy and procedures manuals, tracking sales and expenditures, and providing access to image files such as scanned photographs or scanned documents.

Publishing textbases on an intranet is the same as publishing on the Internet, with two differences:

- You can use HTML file references in a form to launch applications, if your Web clients have the appropriate access to the needed application(s) and files. For example, a click from a user can start a demo or open a document in Microsoft Word.

- If your textbases contain image references, you can select the Use file:// reference for image option when designing a form (that is, open the Form Designer, then choose Tools>Box Properties>HTML).

WebPublisher PRO: Linking to Other Pages
A form, query screen, or menu screen designed for use on the Web with WebPublisher PRO can include links to other HTML pages.

For Query Screens
1. Choose Search>Design Query Screen, and create a new screen or load an existing one.
2. Choose Edit>Add>Text Box to add a text box and open the Text Box Properties dialog box.
3. On the Text tab, in the Text box, type the link destination you want (for example, type http://www.inmagic.com).
4. On the HTML tab, from the Treat text as drop-down list, select URL.
5. [Optional] Select the Use alternate link text check box, then, in the Text box below it, enter the text you want to appear as the hypertext link. (This check box becomes enabled after you select URL from the Treat text as drop-down list.)
6. Click Apply, then click Close.
7. [Optional] If you want users to be able to add new records to the textbase from the query screen, add a New record link.
8. Save the query screen.
9. Export the query screen to HTML.
For Forms
1. Choose Display>Design Form, and create a new form or load an existing one.
2. Select the form box with the content item that contains the link destination and choose Tools>Box Properties to open the Form Box Properties dialog box.
3. On the HTML tab, from the Contents list, select the content item that contains the link destination, then do the following:
   a. From the Treat content item as drop-down list, select URL.
   b. [Optional] Select the Use alternate link text check box, then, in the Text box below it, enter the text you want to appear as the hypertext link. (This check box becomes enabled after you select URL from the Treat content item as drop-down list.)
4. Click Apply, then click Close.
5. Save the form.

Approaches that you can use when designing forms
- Add a hypertext link to a report form so users can jump to an expanded display of one record at a time.
- Add a hypertext link to a report and/or display form so users can jump to an edit screen to add, edit, or delete a record. Note that editing over the Web requires WebPublisher PRO version 7.0 or later.
- Use settings from the Treat content item as drop-down list on the HTML tab (choose Tools>Box Properties>HTML) to generate hypertext links. These settings include: Raw HTML, URL, e-mail link, HTML file reference, Expand record link, “See Also” search link, Inline image, Image link, New record link, Edit record link, Delete record link.

For Menu Screens
1. Close any open textbase.
2. Choose Menu Screens>Design, and create a new screen or open an existing one.
3. Choose Edit>Add>Text Box to add a text box and open the Text Box Properties dialog box.
4. On the Text tab, in the Text box, type the link destination you want (for example, type http://www.inmagic.com).
5. On the HTML tab, from the Treat text as drop-down list, select URL.
6. [Optional] Select the Use alternate link text check box, then, in the Text box below it, enter the text you want to appear as the hypertext link. (This check box becomes enabled after you select URL from the Treat text as drop-down list.)
7. Click Apply, then click Close.
8. Save the menu screen.
9. Export the menu screen as HTML.
Launching Applications with WebPublisher PRO

If you are publishing textbases on an intranet, you can use WebPublisher PRO to launch other applications, such as a video clip or a spreadsheet, from within a form, query screen, or menu screen. You do this by including the name of the file you want to open in a field in the textbase, or as fixed text in a text box on a query or menu screen.

When the user clicks the file name or other text that you supply, the application associated with that file is launched to open the file. The file extension (defined in the Windows Registry or browser preferences) dictates what application is used.

In general, you should provide links which launch applications only across an intranet where you know the users have access to the software and hardware needed to run the application(s) associated with the referenced files.

Important! All intranet users will have access to the files (documents, spreadsheets, and so forth) to which you provide a link. If you do not want users to be able to edit files, place the files in a read-only folder or link to .PDF files.

Be sure that the target file is set up properly on the server to be accessible to all users. One of the following conditions must be true:

- The end user is capable of opening the target file using the associated application software from his or her desktop using network file access protocols, OR
- The end user is capable of running the associated application, and can access the target file using HTTP addressing protocols.

In the first case, it is advisable to use the UNC filename to specify the file path, to avoid conflicts over logical drive mappings. Place the file information in a box on the form or screen, and select the HTML tab on the Box Properties dialog box. Select HTML file reference from the Treat text as drop-down list (as applicable). If you want to show alternate text instead of the file name, select the Use alternate link text check box and type in the text you wish to substitute. Example:

<table>
<thead>
<tr>
<th>file name:</th>
<th>\server\vol1\docs\myfile.doc</th>
</tr>
</thead>
<tbody>
<tr>
<td>alternate text:</td>
<td>Click here</td>
</tr>
<tr>
<td>result in report:</td>
<td>&lt;a href=&quot;file:///server/vol1/docs/myfile.doc&quot;&gt;Click here&lt;/a&gt;</td>
</tr>
</tbody>
</table>

In the second case, use an HTTP-formatted path specification.

For example, on a query screen, menu screen, or form, add a text box that contains this text:

```
http://test/myfile.doc
```

On the Text Box Properties dialog box, select the HTML tab and select URL from the Treat text as drop-down list. To specify alternate text for the link on the screen, select the Use alternate link text check box, then type the text you want in the Text box below it (for example, type Click here).

<table>
<thead>
<tr>
<th>file name:</th>
<th><a href="http://test/myfile.doc">http://test/myfile.doc</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>alternate text</td>
<td>Click here</td>
</tr>
<tr>
<td>result in report:</td>
<td>&lt;a href=&quot;http://test/myfile.doc&quot;&gt;Click here&lt;/a&gt;</td>
</tr>
</tbody>
</table>
If you use an HTTP-formatted path specification on a form, you can create the link with a form box instead of with a text box. Add a form box and specify the field content or another content item (for example, Fixed Text) whose content you want to use as the link. On the Form Box Properties dialog box, select the HTML tab and select URL from the Treat content item as drop-down list. To specify alternate text for the link on the screen, select the Use alternate link text check box, then type the text you want in the Text box below it (for example, type Click here).

**Using Passwords on the Web**

When designing query and edit screens for use on the Web with WebPublisher PRO, you can add a box to the screen in which users can enter a password.

This can be useful on intranets, where the textbase administrator can assign passwords to allow certain users access. This can also be useful on the Internet for limiting access to a textbase on your Web site, perhaps if you are charging for services offered. Only those users who request and obtain a password can gain access to the textbase.

Be careful when assigning passwords, especially on the Internet. Inadvertently assigning a password may guarantee that no one will be able to search the textbase. (This would be the case only if no Silent password was defined. If a Silent Password exists, it will be used.)

*Passwords are defined in the textbase structure.*

If a textbase has a Silent password assigned, and you do not put a password box on the query or edit screen, the Silent password is used.

If the query screen has a password box but the user does not type anything in it, the Silent password is used. If the textbase has any passwords assigned, no Silent password has been defined, and there is no password box on the query screen, no one will be able to gain access to the textbase from that screen.

When you use a query screen with a password box on the Web, the software automatically retains the password throughout your current browser session. For example, if a user submits a search, edits a record, then clicks the Rewind (<-- button to return to the query screen, the password box will still be populated with the password.

**Important!** For the password to be remembered during the current browser session, cookies must be enabled.

WebPublisher PRO honors the passwords defined in the textbase structure (that is, Master, Field Access, and Silent passwords). You can use them to restrict access to a textbase, to certain fields, and/or to individual records.

**To add a password box to a query screen**

1. In the Query Screen Designer, add a query box (choose Edit>Add>Query Box) to the query screen you plan to use on the Web. Do not add any contents to the box.
2. On the Query Box Properties dialog box, select the Labels tab and do the following:
   a. In the Label box, enter the label you want to appear on the box. For example, type Enter Password.
   b. From the Label position drop-down list, select an option to specify where the label appears (for example, Left or Top center.)
3. On the HTML tab, check Treat query box as, and select the Password option.
4. Click Apply, then Close.

To add a password box to an edit screen

1. In the Form Designer, add a form box (choose Edit>Add>Form Box) to the edit form you plan to use on the Web.
2. On the Form Box Properties dialog box, select the Labels tab and check the Label box, enter a label, such as “Enter Password”, then specify a label position.
3. Save the form for use in the Edit Window on the Save Form As dialog box (choose Form Operations>Save Form As). The form must be saved for use in the Edit Window for the Web box treatment drop-down list (see the next step) to be enabled.
4. On the HTML tab, from the Web box treatment drop-down list, select Password.
5. Click Apply, then Close.

WebPublisher PRO Images

WebPublisher PRO handles image files in the ways described below, for any textbases that you publish on the Web. You may use the following types of images with WebPublisher PRO:

- **Logos.** Image files (typically, your organization's logo) placed at the top and/or bottom of a query screen, menu screen, or form. To add a logo, open the appropriate designer and choose the Tools menu, the appropriate Properties command (for example, Form Properties), and select the Logos tab. Type the name of the image file name (for example, COMPANY.JPG) for the leading and/or trailing logo, as appropriate.

- **Backgrounds.** Image files used as the page background for a form, query screen, or menu screen used on the Web. To specify a background image, open the appropriate designer, choose the Tools menu and then the appropriate Properties command (for example, Form Properties), select the HTML tab, then choose an image file name.

- **Picture boxes.** A picture box is a box that contains a static image or an image referenced in an Image field in the record. For example, use a picture box to display a company logo on a form. If the specified Image field contains multiple entries, only the first image is shown. When specifying the name and location of the image you want to display, you cannot use the image filename shortcut (for example, image.001 (3)).

- **Inline images/image links.** Image file names specified in textbase records and included as Inline images or image links in a form. If you want to use text other than the image name for the image link, use alternate link text.

Images Referenced in Records

A textbase may include Image fields that hold the names of image files. For example, a field called Schematics might contain the entry DIAGRAM1.JPG. To control how images should appear in the Web browser, you can:

- Add a picture box to display the image. Using a picture box leaves CSS on by default, and lets you resize the image by changing the dimensions of the picture box. If you use a picture box on a Web form with CSS, the file path is used to determine the size of the image in order to preserve the aspect ratio or prevent text from overlapping the image.

- Display an Inline image. In the Form Designer, choose Tools>Box Properties>HTML and select Inline image from the Treat content item as drop-down list. This option
allows you to display multiple images, if more than one is referenced in the Image field. The image size is as specified by the software used to create the image file. Turns off CSS.

- Display a link that opens the image on a new page. In the Form Designer, choose Tools>Box Properties>HTML and select Image link from the Treat content item as drop-down list.

**Note:** If you are publishing textbases on an intranet using file:// references for images, the images have to be accessible to the Web clients by way of a network file system.

**Image File Locations**

When adding a background image or logo to a query screen, menu screen, or exported edit screen, the software expects the images to be located in /DBTW-WPD/IMAGES (or /ICS-WPD/IMAGES for the SQL platform). If you are storing these images elsewhere, you must specify the location for the images using a path which includes a forward slash (/).

For images added to a form, the software expects the images to be in a location specified in DBTWPub.INI (or ICSWeb.INI), unless a Web path to the image has already been specified (for example, /dbtw-wpd/pics1/img1.gif). For more information about adding logos, background images, and other types of images to forms, see Specifying Where WebPublisher PRO Looks for Images.

**WebPublisher PRO Query Screens**

If you have WebPublisher PRO, you can design query screens for use on the Web. A query screen is a page that users fill in to perform a search. You can design a query screen for each textbase that you want to publish on the Web, or you can design a single query screen to search multiple textbases simultaneously.

The following steps provide a general overview on how to design a query screen for use with WebPublisher PRO.

1. Use DB/TextWorks to open the textbase that you will publish, then open the Query Screen Designer.
   **Note:** If you plan to search multiple textbases from your query screen, open the textbase you want as the lead textbase.

2. Use the Query Screen Designer to specify which fields can be searched. Only query boxes, text boxes, and picture boxes should be used. (Sets boxes, script input boxes, and script buttons are for desktop use only and will be ignored when you export the query screen to HTML.)

3. Specify HTML properties for the query screen and/or the boxes on that screen. For example, you can show or hide Boolean drop-down lists and limit the number of records displayed per page.
   - Choose Tools>Screen Properties>HTML and specify HTML screen options.
   - Select a box and choose Tools>Box Properties>HTML to specify HTML box properties for query boxes and text boxes.

4. [Optional] If the textbase has passwords, add a query box and change it to a password box (choose Tools>Box Properties>HTML). If the textbase has no Silent password, this step is required.
5. [Optional] Specify multiple textbases to search. Choose Tools>WebPublisher Multiple Textbase Query to specify more than one textbase to be searched from your query screen, select report and display forms for those textbases, and create a field name map. (Note that this feature is not available for XML input/output.)

6. Save the query screen. Choose Screen Operations>Save Query Screen, and save the screen in the textbase file or your user file. If the query screen is being used to search multiple textbases on the Web, it must be saved in the textbase file.

7. Export the query screen to HTML. Choose Screen Operations>Export Query Screen to HTML and name the HTML file when prompted. Place the HTML page anywhere on your Web site.

Web Multiple Textbase Query

When you publish textbases on the Web with WebPublisher PRO, you can design a query screen so users can search more than one textbase from it. Typically, the textbases being searched are similar in structure, with similar fields.

Searching multiple textbases from a single query screen is helpful when users are searching for information that is kept in different textbases. For example, you may have product sales information in separate textbases for each year. Creating a query screen to search multiple textbases will let users search the data from all years (or whatever years you specify) from a single query screen.

If your information resources (for example, books, serials, electronic journals) are in separate textbases, designing a query screen to search multiple textbases will let users search records from all of your information resources at once.

**To set up a Web query screen to search multiple textbases**

When you design a query screen for use on the Web with WebPublisher, you can specify more than one textbase to be searched from the query screen. For more information, see Query Screens: Overview.

1. Open the textbase you want as a lead textbase. In the Query Screen Designer, choose Tools>WebPublisher Multiple Textbase Query to view the WebPublisher Multiple Textbase Query dialog box.

   **Note:** The textbase chosen as the lead textbase is typically the one that has fields you want to search but do not want to explicitly map to other textbases. It may also have secondary fields you want to search, or be the textbase with the index you want displayed in a Choices Browser. A Choices Browser can only be used to show the index for the lead textbase.

2. Select the Lead Textbase for WebPublisher Multiple Textbase Query check box to specify the textbase you have open as the lead textbase.

3. Add the textbases you want searched from the query screen. Click Add and choose a textbase from the Open Inmagic DB/TextWorks Textbase dialog box. Do this for each textbase you want to search from your query screen. The textbases will appear in the Textbases to Search list. Note the following:

   - Textbases must have different names. For example, you could not add three textbases named Catalog, but could use all three if you rename them Catalog1, Catalog2, and Catalog3.
• Search textbases must either have no passwords assigned to them, or a Silent password that provides the level of access you want. Note that the lead textbase can have a password assigned. However, if the lead textbase has a password and you add a password box to the query screen, the password only applies to the lead textbase.

• To remove a textbase from the query screen, select it from the Textbases to Search list and click the Remove button.

• Records found through multiple-textbase searches are displayed by textbase. Records retrieved from the lead textbase will be displayed first, followed by records from the next textbase added, then records from the third textbase, and so on.

4. Specify how search results will be displayed for each textbase when a query is processed through this HTML query screen. Select a textbase in the Textbases to Search list, then click:

• Initial Report Form to access the Select Report Form dialog box to specify which Report form to use when the user retrieves records. The selected form will be used every time a new query is submitted. Click OK when done.

• Initial Display Form to access the Select Record Display dialog box to specify which Display form to use when the user expands a record in the browser. This form determines the appearance of single-record display. Click OK when done.

Do this for each search textbase. Note that you specify the forms for the lead textbase on the HTML tab by choosing Tools>Screen Properties>HTML. Note that you do not have to specify an initial edit form, as you cannot edit records over the Web when searching multiple textbases.

**Note:** If you do not specify initial forms, the textbase default forms will be used (if they were saved as Web forms). If the textbase default forms are not saved as Web forms, and no form is selected at export time, a Basic form will be generated automatically, showing all non-hidden primary textbase fields, with minimal formatting.

**Important!** Do not mix tabular forms and non-tabular forms in a single multiple-textbase report.

Records from each textbase will be displayed in the form designated for that particular textbase. Some form attributes behave differently when used in a multiple-textbase query. See Web Multiple Textbase Query Reports for more information.

5. Click Create Field Name Map to open the Create Field Name Map dialog box and specify which fields will be searched in each textbase when a user submits a query. When done with this dialog box, click OK to return to the WebPublisher Multiple Textbase Query dialog box.

6. Click OK on the WebPublisher Multiple Textbase Query dialog box when done.

7. Choose Screen Operations>Save Query Screen As and name your query screen.

**Note:** You must also save your query screen as public by selecting the Textbase File (Public) option button on the Save Query Screen As dialog box, before you can export it to HTML.

8. Export the query screen to HTML by choosing Screen Operations>Export Query Screen to HTML. Name the query screen file, and designate a location for it anywhere
that is accessible to the HTTP server. Click **Save** in the Save File As dialog box when done.

**Browsing Indexes on the Web**

When designing a Web query screen, you can make the indexes available with a *Choices Browser* or a *choices drop-down list*, by using the **HTML tab of the Query Box Properties dialog box**. Note that you can use both methods on the same search screen.

A box without a Choices Browser or drop-down list can still be searched. However, users cannot see a list of available choices, so they may not know what to search for.

To see the Choices Browser or drop-down list in use, export the query screen to HTML and view it on the Web.

**Choices Browser**

A Choices Browser:

- Displays indexed information from the textbase.
- Is intended for boxes containing one or more fields.
- Is a Web application, which requires .NET.
- Lets you specify whether the browser is accessed with a button or link on the query page. If using a button, you can **specify button text**.
- Is attached to a regular searchable box, so users can type or paste multiple search criteria. For example, users can type search criteria and paste items from the indexes.
- Lets users toggle between the Term and Word indexes.
- Lets users select which field to browse, for boxes that search multiple fields.
- Does not require the query screen to be re-exported if you add a Word or Term index for a field, or if you remove an index.
- Requires that a valid password be entered to view the index, if the textbase has passwords.

**Choices Drop-down List**

A choices drop-down list:

- Is intended for a query box containing only one field which is term indexed. The field should contain a short list of items that does not change (for example, a field called *State/Province* that contains a list of states and provinces in the United States and Canada).
- Displays a static list of choices, generated when the query screen is exported to HTML. The list is saved as part of the HTML file. If the index changes (if you edit that field in the textbase), the query screen must be re-exported to HTML (or the HTML file be manually edited).
- Shows entries from the Term index. If there is no Term index, the drop-down list shows entries from the Word index. It does not allow users to toggle between the Term and Word indexes (if both exist).
- Shows entries only from the **first** field in the box, if the box searches multiple fields. Field order within a box has no effect on search results, so you can freely re-order fields using **Tools>Box Properties>Fields** in the Query Screen Designer.
- Allows users to select only one item.
- Does not allow users to type in the box.
- Lets users leave a box empty (for example, not specify search criteria) if they select the blank line from the top of the drop-down list.
- Has a default of unlimited entries. If you choose to limit, the default is 1,000 and the maximum is 65,000 (However, we recommend you use a choices drop-down list for fields with fewer entries.)

**HTML Query Box Properties (Query Screens): HTML tab**

Use the HTML tab on the Query Box Properties dialog box when designing a query screen to be exported to HTML for use on the Web with WebPublisher PRO. You can allow users to browse field indexes for a particular query box (with the Choices Browser or choices drop-down list) or make the query box a password box.

**To add HTML properties to a query box**

1. In the Query Screen Designer, select a query box and choose **Tools>Box Properties**.
2. On the HTML tab of the Query Box Properties dialog box, check **Treat query box as**. _**Note:** By default, this check box is cleared, so users will not see a Choices Browser or choices drop-down list, nor will they be able to enter a password in the box. However, users can still search the field on the Web by typing a word, phrase, or term._
3. Select one of the following buttons:
   - **Index box, use**. Select this button to include a Choices browser, so users will be able to browse indexes on the Web. (Your selection will not appear until the query screen is exported to HTML and viewed over the Web.) Then select one of the following options from the drop-down list to specify how the user will access the choices:
     - **Choices Browser (button)**. Displays a **Browse Choices** button in the Web browser (to the right of the query box) that, when clicked, opens the Inmagic Choices Browser. The user can paste terms or words from the index into the search box, switch fields, and so forth. _**Note:** For more information, see_.
     - **Choices Browser (link)**. Turns the query box label into a hypertext link in the Web browser that, when clicked, opens the Inmagic Choices Browser. The user can paste terms or words from the index into the search box, switch fields, and so forth.
     - **Choices drop-down list**. Adds a drop-down list to the selected box when the query screen is exported to HTML. When a user clicks the down arrow on the drop-down list, a list of indexed terms will appear. (If there is no term index, they will see a list of words.) The user can select an item from the list and search for that item.

Drop-down lists are most often used with boxes that search fields that contain short (for example, less than 200 items) and unchanging lists. For example, you may want to use a choices drop-down list with a field called **Size** that contains
the entries **Large, Medium, and Small**. A drop-down list is typically not used with lengthy field entries or fields having many different entries.

If you selected **Choices Browser** (button or link), you can check **Show terms by default** if you want the Choices Browser to show terms instead of words initially.

If you selected **Choices drop-down list**, you can check the **Restrict number of entries** box, then type the maximum number of entries that you want to appear in the list. This provides a way of limiting the list for a field that contains many entries. For example, if you specify 20 for a field containing names, only the first 20 names in the index will be listed. The default value is 1,000. For best performance, we recommend you accept the default or specify a lower number.

- **Password box**. Select this button to turn the selected query box into a password box. A user may enter a password in the box before clicking the **Submit Query** button. (They may also need to enter a password before opening the Inmagic Choices Browser or clicking a New record link on the query screen.) The password can restrict access to the textbase entirely, to specific fields, or to specific records. Note that if the textbase has passwords, but has no Silent password, the user must specify a password to access the textbase.

**Choices Browser Illustration**

The Inmagic Choices Browser allows users to select an entry from a list when browsing indexes on a Web query page or when browsing validation lists on a Web edit page. Note that the appearance of the Inmagic Choices Browser varies, depending on whether you are searching or editing. The entry you select can be pasted into a query box or edit box, as appropriate.

The designer of the Web query page can specify that the Inmagic Choices Browser be accessed by a link or a button. On an edit page, the Inmagic Choices Browser can only be accessed by a link.

This image shows the Inmagic Choices Browser for browsing **indexes** on a Web query page:

![Inmagic Choices Browser for indexes](image1)

This image shows the Inmagic Choices Browser for browsing **validation lists** on a Web edit page:

![Inmagic Choices Browser for validation lists](image2)
This image shows the Inmagic Choices Browser for browsing a thesaurus used as a validation list on a Web edit page:

**Choices Drop-down List Illustration**

Here is a picture of a Web search screen with a choices drop-down list. Drop-down lists are appropriate for boxes that search fields that contain short, unchanging lists (for example, 2 to 15 items), such as a field called Size that contains the entries **Large**, **Medium**, and **Small**. A drop-down list is not intended to be used with lengthy field entries or fields having many different entries.
Launching Applications (WebPublisher PRO)

If you are publishing textbases on an intranet, you can use WebPublisher PRO to help you launch other applications, such as a video clip or a spreadsheet or word processing program, from within a form, query screen, or menu screen. You do this by including the name of the file you want to open in a field in the textbase, or as fixed text in a text box on a query or menu screen.

When the user clicks the file name or other text that you supply, the application associated with that file is launched to open the file. The file extension (defined in the Windows Registry or browser preferences) dictates what application is used.

In general, you should provide links which launch applications only across an intranet where you know the users have access to the software and hardware needed to run the application(s) associated with the referenced files.

Important! All intranet users will have access to the files (documents, spreadsheets, and so forth) to which you provide a link. If you do not want users to be able to edit files, place the files in a read-only folder or link to .PDF files.

Be sure that the target file is set up properly on the server to be accessible to all users. One of the following conditions must be true:

- The end user is capable of opening the target file using the associated application software from his or her desktop using network file access protocols, OR
- The end user is capable of running the associated application, and can access the target file using HTTP addressing protocols.

In the first case, it is advisable to use the UNC filename to specify the file path, to avoid conflicts over logical drive mappings. Place the file information in a box on the form or screen, and select the HTML tab on the Box Properties dialog box. Select HTML file reference from the Treat text as or Treat content item as drop-down list (as applicable). If you want to show alternate text
instead of the file name, select the **Use alternate link text** check box and type in the text you wish to substitute. Example:

<table>
<thead>
<tr>
<th>file name</th>
<th><code>\\server\vol1\docs\myfile.doc</code></th>
</tr>
</thead>
<tbody>
<tr>
<td>alternate text</td>
<td><code>Click here</code></td>
</tr>
<tr>
<td>result in report</td>
<td><code>&lt;a href=&quot;file:///\\server/vol1/docs/myfile.doc&quot;&gt;Click here&lt;/a&gt;</code></td>
</tr>
</tbody>
</table>

In the second case, use an HTTP-formatted path specification.

For example, on a query screen, menu screen, or form, add a text box that contains this text:

```html
http://test/myfile.doc
```

On the Text Box Properties dialog box, select the HTML tab and select **URL** from the **Treat text as** drop-down list. To specify alternate text for the link on the screen, select the **Use alternate link text** check box, then type the text you want in the **Text** box below it (for example, type `Click here`).

<table>
<thead>
<tr>
<th>file name</th>
<th><code>http://test/myfile.doc</code></th>
</tr>
</thead>
<tbody>
<tr>
<td>alternate text</td>
<td><code>Click here</code></td>
</tr>
<tr>
<td>result in report</td>
<td><code>&lt;a href=&quot;http://test/myfile.doc&quot;&gt;Click here&lt;/a&gt;</code></td>
</tr>
</tbody>
</table>

If you use an HTTP-formatted path specification on a form, you can create the link with a form box instead of with a text box. Add a form box and specify the field content or another content item (for example, Fixed Text) whose content you want to use as the link. On the Form Box Properties dialog box, select the HTML tab and select **URL** from the **Treat content item as** drop-down list. To specify alternate text for the link on the screen, select the **Use alternate link text** check box, then type the text you want in the **Text** box below it (for example, type `Click here`).

**Using Command Queries on the Web**

You can use the **QY** parameter to specify *WebPublisher PRO* search criteria in Command Query format.

This feature permits users to do searches using fields that do not appear on the query screen, and to do that are not possible using a query screen, such as complicated nested Booleans or searches using set names.

You must use the QY parameter for queries submitted using XML input.

You can use this option to make creating canned queries simpler, instead of including all the QB0/QF0/QI0 parameters.

**Examples**

```
<a href="/dbtw-wpd/exec/dbtwpub.dll?QY=find+name+ct+ford&MR=10&TN=Cars&DF=Images+and+Text&RF=Prices&DL=1&RL=1&EL=1&NP=3&AC=QBE_QUERY">QY Example</a>
```

Or, you can permit your end users to enter Command Queries using the Web. For example, you could replace the query boxes with the following:

```
<b>Command Query:</b><br>
<input type="text" name="QY" size="82"><p>
```
Because users type Command Queries (for example, features ct glass) in this box, they will need to know field names and, if they want to do word, phrase, or proximity searches, how to use CT.

**Note:** You cannot have Command Query boxes (QY) and normal query boxes (QB0/QI0/QF0) on the same query screen.

**Exporting Query Screens to HTML**

Before you can use a query screen on the Web, you must export it to HTML.

To export a query screen to HTML.

1. In the Query Screen Designer, open the query screen you designed for use on the Web.
2. Choose **Screen Operations>Export Query Screen to HTML**.
3. A message box appears asking if you want to use Cascading Style Sheets (CSS) to preserve formatting. Click **Yes** to preserve formatting (such as, box position and box background color); click **No** if you want **WebPublisher PRO** to use simple HTML to format the screen (for example, all boxes will appear left-justified).
4. A message box appears asking if you want to use Alternate Search Syntax in this query screen. Click **Yes** to enable users to type the words they want to find without Boolean AND symbols (&). Click **No** if you want to use the original **WebPublisher PRO** query syntax.
5. On the Save File As dialog box, name the file when prompted and click **Save**.
6. Click **OK** to dismiss the completion message.

**Notes about Exporting Query Screens to HTML**

- Buttons labeled **Submit Query** and **Reset**, and a **Help** icon are added automatically during the export.
- Sets boxes, script input boxes, and script buttons added in the Query Screen Designer are not exported.
- Tab Order specified in the Query Screen Designer is preserved during the export.
- You can put the resulting HTML page anywhere accessible to the HTTP server. Be sure to provide clients with a way to access the page, for example by providing a link on your home page that jumps to the HTML search page.

**WebPublisher PRO Help Files in HTML Format**

**WEB_BEGIN.HTM.** Explains how to perform a query and display results. Clients can access this page by clicking the Help icon on an HTML query screen in the Web browser.

**WEB_MSG.HTM.** An alphabetical list of error messages. Intended primarily for administrators, although you may allow client access. Clients can access this page from links provided on the previous two pages.
WEB_ICHOICES.HTM. Explains how to use the Inmagic Choices Browser window when browsing validation lists on a Web edit screen. Clients can access this page by clicking the Help button on the Inmagic Choices Browser window.

You are free to edit the help pages, with the following caveats:

- WEB_BEGIN.HTM includes links to other pages.
- HTML query screens include a Help icon that points to WEB_BEGIN.HTM. Do not move or rename WEB_BEGIN.HTM.
- The Inmagic Choices Browser window contains a Help button that points to WEB_ICHOICES.HTM. Do not move or rename WEB_ICHOICES.HTM.
- Edits you make will apply universally to HTML query screens on the server unless you copy and rename the help files or move them to a different location. If you copy or move pages, edit the HTML query screen source to point to the correct destination.
- After making changes, check all links in a browser to make sure everything works as you intended.

HTML Query Screen Properties

HTML Query Screen Properties

A query screen designed for Web use can include the properties listed below. These properties only affect query screens exported to HTML for use on the Web with WebPublisher PRO. They are ignored for query screens used on the desktop. To specify these properties, choose Tools>Screen Properties in the Query Screen Designer and select the Logos and HTML tabs. After specifying the desired properties, click the OK button.

Logos tab

- **Leading/Trailing Logo.** Add a logo or other image to the top or bottom of a query screen. **Tip!** You can also use picture boxes to add images to query screens.

HTML tab

- **Show Boolean operators.** Show or hide a Boolean drop-down list (AND, OR, NOT) for searchable boxes.
- **Use background image.** Specify an image file for the page background. **Tip!** You can also use Background color on the General tab to specify a page background color.
- **Initial Report Form.** Specify which Report form to use when the user retrieves records. The selected form will be used every time a new query is submitted.
- **Initial Display Form.** Specify which Display form to use when the user expands a record in the browser. This form determines the appearance of single-record display.
- **Initial Edit Form.** Specify which Edit form to use when the user adds, edits, or deletes a record in the browser. Note that editing over the Web requires WebPublisher PRO.
- **Show form list on report page.** Specify whether drop-down lists will appear in reports.
- **Show form list on display page.** Specify whether drop-down lists will appear in an expanded display page.
- **Show form list on edit page.** Specify whether drop-down lists will appear on edit screens. Note that editing over the Web requires WebPublisher PRO.
• **Records per page.** Limit the number of records displayed at one time, and specify where the navigation buttons appear.

• **Navigational controls.** Specify whether navigational buttons and form drop-down lists appear on reports, expanded display pages, and edit screens and where on the page they are placed.

### HTML Query Screen Properties: Logos tab

Choose **Tools>Screen Properties** in the Query Screen Designer and select the **Logos** tab if you want to include an image, such as a logo, at the top and/or bottom of an HTML query screen to be used on the Web. The images will only appear in the exported HTML page for WebPublisher PRO. They are ignored for query screens used on the desktop.

• **Leading Logo.** In the **Leading Logo** box, type the file name, including extension, of the image file to display at the top of the query screen. You can also use the **Browse** button to find the location of the image you want to use. For example, type **NEWLOGO.JPG**.

• **Trailing Logo.** In the **Trailing Logo** box, type the file name, including extension, of the image file to display at the bottom of the query screen. You can also use the **Browse** button to find the location of the image you want to use. For example, type **MYLOGO.GIF**.

WebPublisher PRO expects to find the logos in `/DBTW-WPD/IMAGES` (the HTTP equivalent to `C:\PROGRAM FILES\INMAGIC\WEBPUBL\IMAGES`). For example, if you type **MYLOGO.GIF** in this dialog box, a URL such as this one might be used:

`http://www.inmagic.com/dbtw-wpd/images/mylogo.gif`

If your logos are stored in a different location (that is, not `/DBTW-WPD/IMAGES`), you must type a path that includes a forward slash (`/`) in the **Leading Logo** and/or **Trailing Logo** box. Here are some examples:

`http://www.myco.com/logos/mylogo.gif`
`
jones/mrs.gif`
`
pictures/me.gif`

A logo or image location that starts with a forward slash is relative to the server root. A location without a leading "http://host" or "/" is relative to the location of the query screen.

### Query Screen Properties: HTML tab

Choose **Tools>Screen Properties** in the Query Screen Designer and select the **HTML** tab if you want to specify the following properties for an HTML query screen to be used on the Web. These properties are only for query screens that will be used on the Web with WebPublisher PRO.

**Query page group**

• **Show Boolean operators.** Select this check box to specify that DB/TextWorks display Boolean drop-down lists (AND, OR, NOT) associated with each query box when a query screen is exported to HTML.

• **Use background image.** Select this check box to display a static image to use as the query screen background.

  **Note:** You can also specify a query screen background color (choose **Tools>Screen Properties>General**).
Form settings group

- **Initial Report/Display/Edit Form.** Click these buttons to specify which forms should be used initially in the Web browser, when a query is processed through this HTML query screen. If you do not specify initial forms, the textbase default forms will be used (if they were saved as Web forms by selecting the Web check box on the Save Form As dialog box). If the textbase default forms are not saved as Web forms, and no form is selected at export time, a Basic form will be generated automatically, showing all non-hidden primary textbase fields, with minimal formatting.

- **Show form list on report page.** This option determines whether users will be able to change report forms in the Web browser. If you select this check box, the form drop-down list will appear in the Web browser.

- **Show form list on display page.** Check this box if you want users to be able to change expanded display forms in the Web browser. An expanded display form shows detailed information about one record at a time.

- **Show form list on edit page.** This option determines whether users will be able to change edit forms in the Web browser. Note that editing over the Web requires WebPublisher PRO. An edit form lets users add a new record or modify or delete an existing one. When you save the form, specify that it can be used for the Edit Window and the Web, and that it should be saved in the Textbase File (Public).

- **Records per page.** Use this option to specify the maximum number of records to be displayed on each page, so records meeting search criteria can be viewed in batches.

- **Navigational controls.** Specify whether you want navigation buttons and form drop-down lists to appear on the top of the page, the bottom of the page, or both. The navigation buttons will appear in the Web browser on the page of records found after users do a search. **Tip!** If this option is grayed out, type a number in the Records per page box (type over the word "unlimited") and click OK.

**HTML Query Screen Properties: Show Boolean Operators (HTML tab)**

Use this HTML property when designing a query screen for use on the Web with WebPublisher PRO, to show or hide Boolean drop-down lists.

When a query screen is exported to HTML, the Boolean operator (AND, OR, NOT) associated with each box is used in the HTML query screen.

If you want Web users to be able to change the Boolean operator, select the Show Boolean operators check box. Selecting this check box causes a Boolean drop-down list (AND, OR, NOT) to be added for all query boxes on the HTML query screen. This gives a user the ability to specify how to combine search criteria in multiple boxes. The Boolean operator selected for a box determines how the search criteria in that box will be combined with criteria already evaluated.

**Note:** This option affects Web use only, and is implemented when the query screen is exported to HTML. To control Boolean operators for the desktop, use Tools>Screen Properties>General. Because there are separate controls for desktop and Web use, the same query screen can have Boolean controls when used on the desktop and not on the Web, and vice versa.

**Deciding on Boolean Operators**
As a general rule, set all boxes to the same Boolean operator (AND or OR). If you decide to show Boolean operators, Internet/intranet users can change the Boolean operator at search time. For example, the user may decide to set a box to NOT, to exclude certain records.

OR searches find records if any of the criteria are met. This generally results in more records being found. For example, the following search finds information about any college OR about New York:

- OR School college
- OR State new york

AND searches find records only if all of the criteria are met. This generally results in fewer records found. For example, the following search finds colleges located in New York:

- AND School college
- AND State new york

**HTML Query Screen Properties: Use Background Image (HTML tab)**

Use this HTML property when designing a query screen for use on the Web with WebPublisher PRO.

Select the **Use background image** check box to specify an image as the page background. You can use the **Browse** button to find the location of the image you want to use. Most Web browsers handle GIF and JPEG files only. Select another file type only if you are sure that all of your users can view that image type. For example, if you are publishing on an intranet, everyone in your company may have a plug-in that can display TIFF files.

WebPublisher PRO expects to find the background image file in /DBTW-WPD/IMAGES (the HTTP equivalent to C:\PROGRAM FILES\INMAGIC\WEBPUB\IMAGES). For example, if you type MYLOGO.GIF in this dialog, a URL such as this one might be used:

http://mydomain.com/dbtw-wpd/images/mylogo.gif

**Note:** The SQL platform uses a the ics-wpd directory instead of dbtw-wpd.

To specify a different location, type a path that includes a forward slash (/) in the **Image file** box. Here are some examples:

- http://www.myco.com/logos/mylogo.gif
- /jones/mrs.gif
- pictures/me.gif

A location that starts with a forward slash is relative to the server root. A location without a leading "http://host" or "/" is relative to the location of the query.

**Note:** You can also use **Tools>Screen Properties>General** to specify a page background color for query screens.

**Using images and background color**

If you are using a background image that is transparent, you can also specify a background color for the query screen and have both appear. Background colors on a form or screen are transparent.

Note, however, that if you specify color for the background of boxes on the screen, you will not be able to see the page background image where the boxes are located. This is because box background colors are not transparent.
**HTML Query Screen Properties: Records per page (HTML tab)**

Select these HTML properties when designing a query screen for use on the Web with WebPublisher PRO.

- **Records per page.** Type the maximum number of records you want displayed on one report page after a search, or select **unlimited** from the drop-down list. Limiting the number of records displayed per page lets users view the records matching their search criteria in batches. This option controls how many records can be displayed at one time. It does not restrict the number of records that can be retrieved.

  **Note:** In addition to setting the maximum number of records per report page, you can limit the number of records displayed in total after a search. To do this, add the `TotalRecords=` parameter to the [WebPublisher] section of the DBTWPub.INI file (or the [Web] section of the ICSWeb.INI file, if you are using the SQL platform).

- **Navigational controls.** Specify whether you want the Next and Previous buttons to appear on the top of the page, the bottom of the page, or both. The buttons appear in the Web browser on the page of records found after users do a search. This setting also controls the location of form drop-down lists, the Back (<) and Rewind (<<) buttons, the optional New search button, and, if you have specified that expanded display pages open in a separate window, the optional Close button.

**HTML Query Box and Text Box Properties**

**HTML Query Box Properties (Query Screens): HTML tab**

Use the HTML tab on the Query Box Properties dialog box when designing a query screen to be exported to HTML for use on the Web with WebPublisher PRO. You can allow users to browse field indexes for a particular query box (with the Choices Browser or choices drop-down list) or make the query box a password box.

To add HTML properties to a query box

1. In the Query Screen Designer, select a query box and choose **Tools>Box Properties**.

2. On the HTML tab of the Query Box Properties dialog box, check **Treat query box as**.

   **Note:** By default, this check box is cleared, so users will not see a Choices Browser or choices drop-down list, nor will they be able to enter a password in the box. However, users can still search the field on the Web by typing a word, phrase, or term.

3. Select one of the following buttons:

   - **Index box, use.** Select this button to include a Choices browser, so users will be able to browse indexes on the Web. (Your selection will not appear until the query screen is exported to HTML and viewed over the Web.)  Then select one of the following options from the drop-down list to specify how the user will access the choices:

     - **Choices Browser (button).** Displays a Browse Choices button in the Web browser (to the right of the query box) that, when clicked, opens the Inmagic Choices Browser. The user can paste terms or words from the index into the search box, switch fields, and so forth. **Note:** For more information, se

     - **Choices Browser (link).** Turns the query box label into a hypertext link in the Web browser that, when clicked, opens the Inmagic Choices Browser. The user can paste terms or words from the index into the search box, switch fields, and so forth.
- **Choices drop-down list.** Adds a drop-down list to the selected box when the query screen is exported to HTML. When a user clicks the down arrow on the drop-down list, a list of indexed terms will appear. (If there is no term index, they will see a list of words.) The user can select an item from the list and search for that item.

Drop-down lists are most often used with boxes that search fields that contain short (for example, less than 200 items) and unchanging lists. For example, you may want to use a choices drop-down list with a field called **Size** that contains the entries **Large**, **Medium**, and **Small**. A drop-down list is typically not used with lengthy field entries or fields having many different entries.

If you selected **Choices Browser** (button or link), you can check **Show terms by default** if you want the Choices Browser to show terms instead of words initially.

If you selected **Choices drop-down list**, you can check the **Restrict number of entries** box, then type the maximum number of entries that you want to appear in the list. This provides a way of limiting the list for a field that contains many entries. For example, if you specify 20 for a field containing names, only the first 20 names in the index will be listed. The default value is 1,000. For best performance, we recommend you accept the default or specify a lower number.

- **Password box.** Select this button to turn the selected query box into a password box. A user may enter a password in the box before clicking the **Submit Query** button. (They may also need to enter a password before opening the Inmagic Choices Browser or clicking a New record link on the query screen.) The password can restrict access to the textbase entirely, to specific fields, or to specific records. Note that if the textbase has passwords, but has no Silent password, the user must specify a password to access the textbase.

**HTML Text Box Properties (Query Screens): HTML tab**

When designing a query screen for use on the Web with WebPublisher PRO, use the **Treat text as drop-down list** to determine whether and how text box content will be interpreted as HTML. You can specify whether text acts as a link, launches an application, or opens a Web edit screen to add records to the textbase.

**To specify HTML properties for a text box on a query screen**

1. Select a text box and choose **Tools>Box Properties** to open the Text Box Properties dialog box.
2. On the HTML tab, select an option from the **Treat text as** drop-down list, then click **Apply**.

- **Do not alter.** Use this option for boxes that contain information that you do not want to be interpreted as HTML by the client's Web browser, such as titles and instructions. The text will appear in the browser exactly as it appears in the text box. The Web browser will not attempt to interpret any characters as HTML tag delimiters.

- **Raw HTML.** Use this option when the selected text box contains HTML that you want passed through to the user's Web browser. When the HTML query screen is used on the Web, the Web browser will attempt to interpret the text in that box as HTML. For example, if you add a text box that contains this text:
<a href="myquery.htm" target="_blank">Click here to search.</a>
the Web user will see the following text in the browser: **Click here to search.**
Clicking the text will bring up the specified query screen (MYQUERY.HTM) in a new browser window.

- **URL.** Use this option for a text box containing a single URL. The software will add the necessary HTML tags to turn this into a link. The URL appears as the text as well as the target of the link, by default. For example: http://www.inmagic.com becomes:
  If you want to use different text for the link use alternate text.

- **E-mail link.** Use this option if a text box contains an e-mail address and you want it turned into a "mailto" link. The text appears as the text as well as the target of the link, by default. For example: Inmagic@Inmagic.com becomes:
  <a href="mailto:Inmagic@Inmagic.com">Inmagic@Inmagic.com</a>
  If you want to use different text for the link use alternate text.

- **HTML file reference.** Use this option to enable users to launch applications on a suitably configured intranet. Select a text box that contains a file URL and select **HTML file reference** from the drop-down list. The text in the selected box will appear in the Web browser as a hypertext link. When the intranet user clicks the link, the application associated with the file (by means of the Windows Registry or browser preferences) will be launched and the file will be opened. For example, if you add a text box that contains this text:
  \server\vol1\public\tutorial.avi
  that text will appear as a link in the browser, and clicking the text will run the video clip. If you want to use different text for the link use alternate text.

- **New record link.** Use this option to make the text appear on the Web as a link that, when clicked, opens an editing screen so users can add a new record. The New record link will use the Initial Edit Form specified for the query screen (choose **Tool>Screen Properties>HTML**), or the textbase default edit form if no Initial Edit Form is specified and the textbase default is a Web edit form. If the textbase default is not a Web edit form, then a Basic form will be used. Note that this option requires WebPublisher PRO.

**WebPublisher PRO Menu Screens**
If you have WebPublisher PRO, you can create menu screens and export them to HTML to use on the Web. Menu screens used on the Web are quite different than menu screens used within DB/TextWorks. Each menu screen for the Web contains predefined searches. When the page is displayed in a Web browser, the searches look like regular links. When the user clicks a link, a query is performed and records are displayed in the Web browser.

**Guidelines for Using Menu Screens on the Web**
Create menu screens for the Web when you want to set up frequently performed queries for your users, so they don't have to specify query criteria.
A menu screen can include a hypertext link to an HTML search page that you have designed. In the Menu Screen Designer, use a text box to provide the link. To make sure the text is interpreted as HTML, choose the following options in the Menu Screen Designer: Select a text box, choose Tools>Box Properties>HTML. From the Treat text as drop-down list, select URL, then specify alternate link text.

If you have too many queries to fit on one screen, you can design a Web page that includes a number of jumps to a number of different menu screens.

You can use a menu screen as a Web page all by itself, or you can add surrounding HTML text. For example, one link on the page could run a predefined query. Other links could be standard hypertext links to static HTML pages.

To add a predefined search to a Web page that was created outside of DB/TextWorks, design a standard page, perhaps using HTML-authoring software. Then use DB/TextWorks to create a menu screen that consists of the search(es) that you want to add to the Web page. Export the menu screen to HTML, then use any text editor to copy the appropriate lines from the HTML menu screen file to the HTML Web page file. You can omit the <title> information.

**Instructions**

A menu screen created for Web use typically includes a title, some explanatory text, a logo, and a list of predefined searches (textbase boxes with initial actions). It may also specify which Report form, Expanded Display form, and Edit form to use by default with each search (initial elements). You export the menu screen to HTML, then place the HTML page on the server.

1. **Create the saved sets.**
   To specify a predefined search, you use DB/TextWorks to perform a query and save it as a set.
   Start the software, open a textbase, and create one or more saved sets. To create a set, perform a query, choose Search>Save Set, name the query, and save it as Textbase File (Public). For example, search for Child* & Shoe* then save the set as Children's Shoes. Repeat to create additional saved queries. These are the predefined queries that you will "attach" to an item on the menu screen.

2. **Open the Menu Screen Designer.**
   If a textbase is open, close it (choose File>Close). Then choose Menu Screens>Design. On the Open Menu Screen dialog box, select an option button to specify how you want to begin:
   - **Open Current Menu Screen File.** Open the currently selected menu screen file (.TBM).
   - **Create a New Menu Screen File.** Start with a blank menu screen, to which you can add boxes that hold textbase names and descriptive text. When prompted, specify a name and location for the new menu screen file. The extension .TBM is added automatically.
   - **Open an Existing Menu Screen File.** Select a previously saved menu file (.TBM), which you can edit and save, or save under a new name.
   Click OK to open the Menu Screen Designer.

3. **[Optional] Add titles and other text.**
   To add text such as a title or brief instructions, choose Edit>Add>Text Box. Using the Text Box Properties dialog box, specify the text on the Text tab. For example, type Welcome to the Bayside Kids Catalog! Position and size the box with the mouse, or use the Position tab.
4. **Specify saved queries and initial forms for displaying results.**

In this step, you will specify which textbase to open, which saved query to use, and which forms to use initially in the browser to display search results. A saved query is always associated with a particular textbase. In the Menu Screen Designer, choose **Edit>Add>Textbase Box** to add a textbase box and open the Textbase Box Properties dialog box. Use the tabs on the dialog box to specify the options you want. Note that not all of the options available on the tabs of the Textbase Box Properties dialog box are applicable to menu screens used on the Web.

- **Contents tab.** Click the **Specify Textbase** button and select the textbase to search (for example, CATALOG. TBA). In the **Description** box, type the text that users can click to initiate the search (for example, Children's Shoes).

- **Position tab.** Only the **Top** offset setting applies to menu screens exported to HTML for use on the Web. All other settings on this tab are ignored.

- **Font, Color tab.** The settings on this tab do not apply to textbase boxes on menu screens exported to HTML for use on the Web. While you can format font style, size and color for text boxes, the text in a textbase box appears as a standard Web link, created automatically by the software.

- **Icon tab.** The settings on this tab do not apply to menu screens exported to HTML for use on the Web. Icons (.BMP files) do not translate to the Web.

- **Initial Elements tab.** Select a Report form, Record Display form (for expanded display), and a Record Edit form. These forms will be used initially to display and modify records found by the search. If you do not specify these elements, the textbase default forms will be used (if they were saved for use on the Web). All other initial elements are ignored for a menu screen used on the Web.

- **Initial Action tab.** Specify a saved query that will be performed, by selecting one of the queries that you saved in step 1. All other initial actions do not apply to menu screens used on the Web.

Repeat this step for each search that you want to list on the menu.

5. **Specify HTML settings.**

Choose **Tools>Screen Properties>General**, **Tools>Screen Properties>Logos**, **Tools>Screen Properties>HTML** and/or **Tools>Box Properties>HTML** and specify the settings listed below. These settings only affect menu screens exported to HTML for use on the Web. They are ignored for menu screens used on the desktop.

- **Logos** (**Tools>Screen Properties>Logos**). A menu screen can include a logo or other graphic at the top and/or bottom of the page.

- **Background image.** Use an image file for the page background.

- **Background Color.** Specify a color to use as the page background.

- **Show form list on report page.** This option determines whether users will be able to change report forms in the Web browser. If you select this box, the form drop-down list will appear in the Web browser.

- **Show form list on display page.** Select this check box if you want users to be able to change **expanded display forms** in the Web browser. An expanded display form shows detailed information about one record at a time.
• **Show form list on edit page.** Select this check box if you want users to be able to change edit forms in the Web browser.

• **Records per page** (Tools>Screen Properties>HTML). You can limit the number of records displayed on one page after a search, so records meeting search criteria can be viewed in batches. Also, you can specify the location of the navigation controls.

• **HTML Box Properties** (Tools>Box Properties>HTML). You can specify whether text in a text box on the menu screen is interpreted as a URL or HTML. The most common use is to create a hypertext link to another Web page.

### 6. Adjust menu screen appearance.

Continue editing the menu screen by moving, resizing, and changing the attributes of boxes. Here are some guidelines:

- You must select a box in order to make changes to it.
- Use the Edit menu to add, copy, paste, and delete boxes.
- Use the Tools menu to change the attributes of the selected box and specify menu preferences.

You may prefer to do most of the editing in an HTML editor after exporting the menu screen to HTML, because some DB/TextWorks features do not get exported to HTML.

### 7. Save the menu screen.

Choose **Menu Operations>Save Menu Screen**.

### 8. Export the menu screen to HTML.

The menu screen that you want to export should be open in the Menu Screen Designer. Choose **Menu Operations>Export Menu Screen to HTML**. When prompted, name the file and click **OK**. Use the default extension .HTM, or .HTML if you prefer.

The only items that are exported are text boxes, picture boxes, and textbase boxes whose initial action is a Saved Query (choose Tools>Box Properties>Initial Action). The export process ignores any textbase box that does not have a Saved Query specified as the initial action, and ignores icons.

### 9. Give users a way to access the menu screen.

Put the HTML file in any location accessible to the HTTP server.

Give Internet/intranet users a way to access the menu screen. For example, include a jump to it from some other page on your Web site.

If you are using the menu screen "as is," place the HTML page on the server wherever you keep HTML pages.

**WebPublisher PRO: Menu Screen Design Tips**

If you have WebPublisher PRO, you can publish textbases on the Web, and use menu screens to provide a way to access those textbases. Here are some tips to help you design menu screens for Internet/intranet use:

- Use compatible versions of DB/TextWorks and WebPublisher.
Consider adding explanatory text to a menu screen (use a text box) to describe the textbase or your organization. If you have a great deal to say, include a link to another Web page that you author. If you want to give users the ability to specify their own queries, include a link to an HTML query screen.

Consider adding a title (use a text box) and logos or other graphics (choose Tools>Screen Properties>Logos). The size of the graphic is determined by the application used to generate the image. The position of the graphic is flush left on the page. To change the position, edit the exported HTML file.

If you are publishing multiple textbases, a page on your Web site can include a list of the textbases, with each item being a jump to a separate menu screen. Each menu screen can then include a number of predefined queries. Even if you publish only one textbase, a Web page can jump users to their choice of menu screens and/or query screens.

The Web browser ignores the position settings (choose Tools>Box Properties>Position), except for Top offset. Set the Top offset to zero (0) to avoid excess space between boxes.

Menu screens that contain side-by-side boxes will export to HTML successfully, but the boxes will appear in a list, rather than side by side.

The Web browser controls typeface, font style, size, and hypertext link color for textbase boxes that are exported to HTML. However, you can control font color, style, and size for text boxes.

After exporting a menu screen to HTML, you can modify the HTML to add text and images and perform other editing.

When you export to HTML, the Report Form, Display Form, and Edit Form are the only initial elements that are used. All other initial elements (printing form, query screen, record skeleton) are ignored.

When you export to HTML, the only items that are exported are text boxes, picture boxes, and textbase boxes that have a Saved Query specified as the initial action (choose Tools>Box Properties>Initial Action). The export process ignores any textbase box that does not have Saved Query specified as the Initial Action. Icons (.BMP files) are also ignored.

**Differences between Menu Screens for DB/TextWorks and WebPublisher PRO**

Menu screens designed for use with DB/TextWorks are intended to open textbases and provide a particular starting environment (by using Initial Elements). Menu screens for Internet/intranet use are intended to provide a way of doing predefined searches. The following list explains the different ways that certain features of menu screens are interpreted, depending on whether the menu is being used with DB/TextWorks or WebPublisher PRO.

- **Tools>Box Properties>Contents.** A textbase box on a menu screen for WebPublisher PRO determines which textbase will be opened and which query (initial action) will be performed. Textbase boxes that do not have a saved query defined as the initial action (choose Tools>Box Properties>Initial Action) will not be exported to HTML.

- **Tools>Box Properties>Icon.** Icons on a menu screen (.BMP files) are ignored when the screen is exported to HTML.

- **Tools>Box Properties>Initial Elements.** For WebPublisher PRO, specify initial elements (forms) for the Report, Display, and Edit Window. Those forms will be used
when records are displayed in the Web browser. All other initial elements are ignored for Internet/intranet use.

- **Tools>Box Properties>Initial Action.** For WebPublisher PRO, this is the option that you use to specify which query is performed when a menu item is clicked.

- **Tools>Tab Order.** Tab order has no effect on an HTML menu screen.

- **Tools>Screen Properties>General (Path setting).** WebPublisher PRO ignores the Path setting.

- **Tools>Screen Properties>Logos.** These options are specific to WebPublisher PRO. They are ignored for menu screens used with DB/TextWorks.

- **Tools>Screen Properties>HTML.** These options are specific to WebPublisher PRO. They are ignored for menu screens used with DB/TextWorks.

- **Menu Operations>Export Menu Screen to HTML.** To use a menu screen on the Web, you must export it to HTML. The only items that are exported are textbase boxes that have a Saved Query (Initial Action) specified, text boxes, and picture boxes. Other boxes are ignored for export purposes.

- **Displaying a menu screen at startup.** DB/TextWorks users can specify a particular .TBM file (menu screen) to use when the software starts. This has no equivalent in WebPublisher PRO.

### HTML Menu Screen Properties

A menu screen designed for WebPublisher PRO use can include the HTML properties listed below. To specify these settings, use the Logos and HTML tabs on the Menu Screen Properties dialog box (choose **Tools>Screen Properties>Logos/HTML**) in the Menu Screen Designer.

These settings only affect menu screens when they are exported to HTML for use on the Web. They are ignored for menu screens used on the desktop.

**Logos tab**
- **Logos.** Add a logo or other image to a menu screen.

**HTML tab**
- **Use background image.** Specify an image file for the page background.

- **Show form list on report page.** Determines whether users can change forms used to display information on the report page.

- **Show form list on display page.** Determines whether users can change forms used to display information on the expanded display page.

- **Show form list on edit page.** Determines whether users can change forms on the edit page.

- **Records per page.** Limits the number of records that can be displayed at one time after a search.

- **Navigational controls.** Specify placement of navigation buttons and form drop-down lists.
Menu Screen Properties: HTML tab

Use the HTML tab when designing a menu screen for use on the Web with WebPublisher PRO.

- **Use background image.** Select this option to specify an image to use as the background for the menu screen. Most Web browsers support only .JPG and .GIF files.
  
  *Note:* You can also use **Tools>Screen Properties>General** to specify background color.

- **Show form list on report page.** This option determines whether users will be able to change report forms in the Web browser. If you select this check box, the form drop-down list will appear in the Web browser.

- **Show form list on display page.** Select this check box if you want users to be able to change single-record display forms in the Web browser.

  An expanded display form is a form that shows detailed information about one record at a time. To create a form for expanded display, use the Form Designer to create a form that includes information from most or all fields in the textbase. When you save the form, specify that it can be used for the **Display Window** and the **Web**, and that it should be saved in the **Textbase File (Public)**.

- **Show form list on edit page.** This option determines whether users will be able to change edit forms in the Web browser. Note that editing over the Web requires WebPublisher PRO version 7.0 or later.

  An edit form lets you add a new record or modify or delete an existing one. When you save the form, specify that it can be used for the **Edit Window** and the **Web**, and that it should be saved in the **Textbase File (Public)**.

- **Records per page.** Use this drop-down list to specify the maximum number of records to be displayed at one time, so records meeting search criteria can be viewed in batches. This option controls how many records can be displayed on each page. It does not restrict the number of records that you can retrieve. The number you specify will apply to all predefined searches referenced in this menu screen.

  If you select **unlimited**, a query will display all records that meet the search criteria in one batch. This can result in significant delays when many records are retrieved.

  If you specify a value (by typing a number right over the word "unlimited"), that number of records will be displayed at one time, and a **Next** button will appear on the screen (for example, Next 10 Records). To view the next batch of records, the Internet/intranet user can click the button. At that point, a **Previous** button appears (for example, Previous 10 Records), so the user can display the previous batch.

- **Navigational controls.** Specify whether you want navigation buttons and form drop-down lists to appear on the top of the page, the bottom of the page, or both. The navigation buttons will appear in the Web browser on the page of records found after users do a search.

  *Tip!* If this option is grayed out, type a number in the **Records per page** box (type right over the word "unlimited") and click the **OK** button.

Menu Screen Properties: Logos tab

Use the HTML settings on the Logos tab to include a graphic at the top and/or bottom of a menu screen to be used with WebPublisher PRO. Most Web browsers support only JPEG and GIF
files. The size of the graphic is determined by the application used to generate the image. The position of the graphic is flush left on the page.

- **Leading Logo.** In this box, type the file name, including extension, of the image file to display at the top of the menu screen. For example, type NEWLOGO.JPG.

- **Trailing Logo.** In this box, type the file name, including extension, of the image file to display at the bottom of the menu screen. For example, type MYLOGO.GIF.

WebPublisher PRO expects to find the logos in /DBTW-WPD/IMAGES (the HTTP equivalent to C:\PROGRAM FILES\INMAGIC\WEBPUB\IMAGES). For example, if you type MYLOGO.GIF in this dialog box, a URL such as this one might be used:

http://www.inmagic.com/dbtw-wpd/images/mylogo.gif

**Note for SQL platform:** The SQL platform uses ics-wpd instead of dbtw-wpd.

If your logos are stored in a different location (that is, not /DBTW-WPD/IMAGES), you must type a path that includes a forward slash (/) in the **Leading Logo** and/or **Trailing Logo** box. Here are some examples:

http://www.myco.com/logos/mylogo.gif
/jones/mrs.gif
pictures/me.gif

A logo or image location that starts with a forward slash is relative to the server root. A location without a leading "http://host" or "/" is relative to the location of the menu screen.

**HTML Menu Screen Properties: Number of Records (HTML tab)**

Use these HTML settings when designing a menu screen for use on the Web with WebPublisher PRO.

- **Records per page.** Specify the maximum number of records to be displayed at one time, so records meeting search criteria can be viewed in batches. This option controls how many records can be displayed at one time. It does not restrict the number of records that you can retrieve. The number you specify will apply to all predefined searches referenced in this menu screen.

If you select **unlimited**, a query will display all records that meet the search criteria in one batch. This can result in significant delays when many records are retrieved.

If you specify a value (by typing a number right over the word "unlimited"), that number of records will be displayed at one time, and a **Next** button will appear on the screen (for example, Next 10 Records). To view the next batch of records, the Internet/intranet user can click the button. At that point, a **Previous** button appears (for example, Previous 10 Records), so the user can display the previous batch.

- **Navigational controls.** Specify whether you want navigational controls to appear on the top of the page, the bottom of the page, or both. The navigational controls will appear in the Web browser on the page of records found after users do a search and on display/edit pages. This setting controls the location of navigational controls, such as the **Next/Previous** buttons, form/screen drop-down lists, Back (<) and Rewind (<<) buttons, and the optional **New Search** button.

**Tip!** If this option is unavailable, type a number in the **Records per page** box (type right over the word "unlimited") and click **OK**.
WebPublisher PRO: Linking to Other Pages

A form, query screen, or menu screen designed for use on the Web with WebPublisher PRO can include links to other HTML pages.

For Query Screens
1. Choose Search>Design Query Screen, and create a new screen or load an existing one.
2. Choose Edit>Add>Text Box to add a text box and open the Text Box Properties dialog box.
3. On the Text tab, in the Text box, type the link destination you want (for example, type http://www.inmagic.com).
4. On the HTML tab, from the Treat text as drop-down list, select URL.
5. [Optional] Select the Use alternate link text check box, then, in the Text box below it, enter the text you want to appear as the hypertext link. (This check box becomes enabled after you select URL from the Treat text as drop-down list.)
6. Click Apply, then click Close.
7. [Optional] If you want users to be able to add new records to the textbase from the query screen, add a New record link.
8. Save the query screen.
9. Export the query screen to HTML.

For Forms
1. Choose Display>Design Form, and create a new form or load an existing one.
2. Select the form box with the content item that contains the link destination and choose Tools>Box Properties to open the Form Box Properties dialog box.
3. On the HTML tab, from the Contents list, select the content item that contains the link destination, then do the following:
   a. From the Treat content item as drop-down list, select URL.
   b. [Optional] Select the Use alternate link text check box, then, in the Text box below it, enter the text you want to appear as the hypertext link. (This check box becomes enabled after you select URL from the Treat content item as list.)
4. Click Apply, then click Close.
5. Save the form.

Approaches that you can use when designing forms
- Add a hypertext link to a report form so users can jump to an expanded display of one record at a time.
- Add a hypertext link to a report and/or display form so users can jump to an edit screen to add, edit, or delete a record. Note that editing over the Web requires WebPublisher PRO version 7.0 or later.
- Use settings from the Treat content item as drop-down list on the HTML tab (choose Tools>Box Properties>HTML) to generate hypertext links. These settings include: Raw
For Menu Screens
1. Close any open textbase.
2. Choose Menu Screens>Design, and create a new screen or open an existing one.
3. Choose Edit>Add>Text Box to add a text box and open the Text Box Properties dialog box.
4. On the Text tab, in the Text box, type the link destination you want (for example, type http://www.inmagic.com).
5. On the HTML tab, from the Treat text as drop-down list, select URL.
6. [Optional] Select the Use alternate link text check box, then, in the Text box below it, enter the text you want to appear as the hypertext link. (This check box becomes enabled after you select URL from the Treat text as drop-down list.)
7. Click Apply, then click Close.
8. Save the menu screen.
9. Export the menu screen as HTML.

Launching Applications (WebPublisher PRO)

If you are publishing textbases on an intranet, you can use WebPublisher PRO to help you launch other applications, such as a video clip or a spreadsheet or word processing program, from within a form, query screen, or menu screen. You do this by including the name of the file you want to open in a field in the textbase, or as fixed text in a text box on a query or menu screen.

When the user clicks the file name or other text that you supply, the application associated with that file is launched to open the file. The file extension (defined in the Windows Registry or browser preferences) dictates what application is used.

In general, you should provide links which launch applications only across an intranet where you know the users have access to the software and hardware needed to run the application(s) associated with the referenced files.

Important! All intranet users will have access to the files (documents, spreadsheets, and so forth) to which you provide a link. If you do not want users to be able to edit files, place the files in a read-only folder or link to .PDF files.

Be sure that the target file is set up properly on the server to be accessible to all users. One of the following conditions must be true:

- The end user is capable of opening the target file using the associated application software from his or her desktop using network file access protocols, OR
- The end user is capable of running the associated application, and can access the target file using HTTP addressing protocols.

In the first case, it is advisable to use the UNC filename to specify the file path, to avoid conflicts over logical drive mappings. Place the file information in a box on the form or screen, and select the HTML tab on the Box Properties dialog box. Select HTML file reference from the Treat text
as or Treat content item as drop-down list (as applicable). If you want to show alternate text instead of the file name, select the Use alternate link text check box and type in the text you wish to substitute. Example:

| file name: | \\server\vol1\docs\myfile.doc |
| alternate text: | Click here |
| result in report: | `<a href="file:///server/vol1/docs/myfile.doc">Click here</a>` |

In the second case, use an HTTP-formatted path specification.

For example, on a query screen, menu screen, or form, add a text box that contains this text:

```
http://test/myfile.doc
```

On the Text Box Properties dialog box, select the HTML tab and select URL from the Treat text as drop-down list. To specify alternate text for the link on the screen, select the Use alternate link text check box, then type the text you want in the Text box below it (for example, type Click here).

| file name: | http://test/myfile.doc |
| alternate text | Click here |
| result in report: | `<a href="http://test/myfile.doc">Click here</a>` |

If you use an HTTP-formatted path specification on a form, you can create the link with a form box instead of with a text box. Add a form box and specify the field content or another content item (for example, Fixed Text) whose content you want to use as the link. On the Form Box Properties dialog box, select the HTML tab and select URL from the Treat content item as drop-down list. To specify alternate text for the link on the screen, select the Use alternate link text check box, then type the text you want in the Text box below it (for example, type Click here).

### Exporting Menu Screens to HTML

To use a menu screen on the Web with WebPublisher PRO, you must export the menu screen to HTML.

1. Close any textbase that may be open, then open the menu screen you want to export in the Menu Screen Designer (choose Menu Screens>Design).
2. Choose Menu Operations>Export Menu Screen to HTML.
3. Name the file and specify a location in which to save it, then click OK. You can save the HTML page anywhere accessible to the HTTP server.

### Notes about exporting menu screens to HTML

Designing a menu screen for Web use is different from designing one for the desktop. Some of the options you can specify are only applicable to the Web, while others are for desktop use only. The following list provides some of the differences. For more information, refer to the related topics listed below.

- The only items that are exported are text boxes, picture boxes, and textbase boxes whose initial action is a Saved Query (choose Tools>Box Properties>Initial Action).
The export process ignores any textbase box that does not have Saved Query specified as the initial action. Icons are also ignored.

- Text in a textbase box does not retain the font, font style, font size, and color attributes specified in DB/TextWorks. When exported to HTML, the software automatically formats text in textbase boxes to appear as a standard hypertext link.

**WebPublisher PRO Forms**

**Creating Forms for Web Use**

The following topics contain information about designing forms for use on the Web with WebPublisher PRO. These forms will be used to format records for display and editing. Users can select different forms in the Web browser to see various views of the records they retrieve.

**Summary**

You design forms using DB/TextWorks. When you design forms for Web use (as opposed to desktop use), be sure to choose **Tools>Box Properties>HTML** and **Tools>Form Properties>Logos/HTML** in the Form Designer. These options are intended specifically for Web use.

Finally, when you save a form in the Form Designer (choose **Form Operations>Save Form** or **Form Operations>Save Form As**), be sure to select the **Web** check box and at least one other check box based on the type of form you are designing (**Display Window**, **Report Window**, or **Edit Window**). Forms must also be saved as **Textbase File (Public)**. This ensures that the forms will appear in drop-down lists in the Web browser.

Forms are not saved as separate files. They are saved as part of the textbase. The only type of form that has to be exported to HTML is an edit form you plan to access directly from the Web (as opposed to from a query screen) to add records to a textbase (for example, a registration form). For all other types of forms, the software does the HTML processing for you dynamically.

**Forms for the Web**

For each textbase that you will publish on the Web, use DB/TextWorks to design these types of forms:

- **Report forms.** Report forms show multiple records found by a search. They usually summarize the search results. For example, they might show a few fields in a tabular format (columns and rows). Report forms often include a hypertext link to an expanded display.

- **Display forms.** Also known as expanded display forms. They show one record at a time. They usually show most or all of the information about a record.

- **Edit forms.** Edit forms typically show all or most non-hidden fields so that users can add, edit, or delete records over the Web.

  **Note:** If you only want to add records to a textbase directly from the Web, you can design an edit form and export it to HTML. This method is for when you do not want users to have to open a query screen, or submit a search, or display records. The edit screen is opened directly from its URL (for example, by clicking a link on your intranet).
Use the Form Designer to decide which information each form will show. For example, a Report form might include just three fields: Title, Author, and Summary. When you design a form for expanded display or for editing, you typically include most or all of the fields in the textbase.

Users can select a form from the drop-down list that appears in the Web browser to change the way records appear. If the textbase does not include any forms marked as Web (in the Save Form As dialog box), a Basic form is generated automatically and displayed in the browser. This form shows all of the non-hidden fields in the primary textbase, with minimal formatting. Note: In order for form drop-down lists to appear in the Web browser, you must select the Show form list on report/display/edit page check boxes (as applicable) on the Query Screen Properties dialog box or Menu Screen Properties dialog box.

**Instructions**

A. **Create Report Forms**
   1. For each textbase that you will publish, use the Form Designer to create at least one Report form that shows a summary of records found. Tabular forms are good for this purpose.
   2. [Optional] Choose Tools>Form Properties>General, and clear the Highlight search items check box, as it can make a report look cluttered and be hard to read.
   3. Specify which text in the Report form to use as a link to the expanded record.
      
      If you use a text box, do the following:
      
      a. Select the text box, then choose Tools>Box Properties to open the Text Box Properties dialog box.
      b. On the Text tab, in the Text box, enter the text you want as the hypertext link (for example, type More info).
      c. On the HTML tab, from the Treat text as drop-down list, select Expand record link.  
         **Note:** If a Report form does not include an Expand record link, users will not be able to access an expanded display.
      
      If you use a form box, do the following:
      
      a. Select a form box, then choose Tools>Box Properties>HTML.
      b. From the Contents list, select the item whose content will be the hypertext link. **Note:** You can use field content or other form box content (for example, Fixed Text or the RECORD NUMBER variable). If you use field content as the hypertext link, choose a field that holds an item that is present in every record, such as a title of a publication, a product name, or a person’s name.
      c. From the Treat content item as drop-down list, select Expand record link.
   4. Choose Form Operations>Save Form (or Save Form As). Name the form and specify these options:
      
      - **Textbase File (Public).** This saves the form inside the textbase.
      - **Report Window.** This makes the form available in the drop-down list for displaying reports.
      - **Web.** Only forms that have this check box selected will be available to Web users. You can also select the Web Only check box, to omit a form from desktop form
lists, because some forms designed for Web use may not be suitable for desktop use.

B. Create Display Forms

1. For each textbase that you will publish, create at least one form that shows detailed information about one record at a time. Typically, you would include most or all of the fields, plus whatever text formatting, paragraph formatting, HTML formatting, and other attributes you want.

2. [Optional] Choose Tools>Form Properties>General, and select the Highlight search items check box (if it is not selected already), as highlighting can be useful on an expanded display page.

3. Choose Tools>Box Properties>HTML and Tools>Form Properties>Logos/HTML to format the forms.

4. Choose Form Operations>Save Form for a new form or Form Operations>Save Form As for an existing form. Name the form and specify these options:
   - Textbase File (Public). This saves the form inside the textbase.
   - Display Window. This makes the form available in the drop-down list for single-record, expanded display.
   - Web. Only forms that have this check box selected will be available to Web users. You can also select the Web Only check box, to omit a form from desktop form lists, because some forms designed for Web use may not be suitable for desktop use.

C. Create Edit Forms

1. If you plan to let your clients add, edit, and/or delete records over the Web, create at least one Edit form for each textbase that you will publish. Design each edit form to show the fields you want to be able to enter information for and/or edit. Typically, you would include most or all of the fields. Be sure to include any fields with Field Entry Required validation.

2. Choose Tools>Box Properties>HTML and Tools>Form Properties>Logos/HTML to format the forms. Note: If you want to add a password box or apply a validation link, you must save the form (as explained in the next step) before specifying these features.

3. Choose Form Operations>Save Form for a new form or Form Operations>Save Form As for an existing form. Name the form and specify these options:
   - Textbase File (Public). This saves the form inside the textbase.
   - Edit Window. This makes the form available in the drop-down list on editing screens.
   - Web. Only forms that have this check box selected will be available to Web users. You can also select the Web Only check box, to omit a form from desktop form lists, because some forms designed for Web use may not be suitable for desktop use.

D. Specify Initial Forms

The initial Report form is the one that is used in the browser when Web users retrieve records after a search. The initial Display form is the one that is used for expanded display.
WebPublisher PRO

The initial Edit form is the one that is used for editing on the Web. You specify initial forms in different places for query screens (choose Tools>Screen Properties>HTML) and menu screens (choose Tools>Box Properties>Initial Elements for textbase boxes).

**Forms Used for Printing**

Printed pages use whichever form is selected in the browser when the browser's Print command is used.

**WebPublisher PRO: Form Design Tips**

If you have WebPublisher PRO, you can publish textbases, together with forms saved in the textbase file, on the Internet or an intranet. For the most effective use of forms on the Web, follow the guidelines below.

- Consider designing separate forms for desktop and Web use. Some things that you can do on the desktop are not supported in HTML. But you can do things in the HTML version of a form, such as use Raw HTML (for example, for a canned query), that may not appear correctly on the desktop. Use the Save Form As dialog box to establish form usage.

- In the Form Designer, for form boxes use added text (choose Tools>Box Properties>Format>Added Text) or fixed text (choose Tools>Box Properties>Contents>Text) to specify HTML attributes. Then, with the form box selected, choose Tools>Box Properties>HTML. From the Contents list, select the item that contains the HTML code, and select Raw HTML from the Treat content item as drop-down list. Click Apply and Close. In the following example, URL and Title are field names:

  `<a href="URL">b>Title</b></a>`

- The initial form that you supply for reports should provide a summary of records found. Tabular forms are a good choice, showing just a few pieces of information from each record: Author, Title, Date, Abstract. Include an expand record link so users can expand each record to see detailed information.

- When you export a query screen to HTML, you can specify some form settings. For example, you can select initial forms and prohibit users from changing forms.

- Highlighting the words and terms found by a search can be useful in expanded display forms, but distracting when used in reports. To specify whether search terms are highlighted for an individual form, select or clear Highlight search items in the Form Designer (choose Tools>Form Properties>General).

To specify the highlighting method for report and expanded display, use Tools>Options>Search. Web reports use the Print highlighting setting (Bold, Underline, and so forth). Expanded displays on the Web use the Display highlighting setting (Reverse Video, Color); reverse video appears as bold in the Web browser. The settings will be saved in the INMAGIC.INI file located on the machine from which this change was made. Copy this INMAGIC.INI file to the Windows directory on the HTTP server, to make the selected options available to WebPublisher PRO.

- To provide users with a way to return to the query or menu screen, add WebNewSearchButton=1 to the [WebPublisher] section of the DBTWTPub.INI file (or the [Web] section of the ICSWeb.INI file, if you are using the SQL platform). This will add a
New Search button with the other navigational controls (for example, form drop-down lists and Next/Previous buttons).

- You can display a horizontal rule between records in a WebPublisher PRO report (choose Tools>Form Properties>HTML).

- You can include logos or other graphics at the top and/or bottom of a form (choose Tools>Forms Properties>Logos) and/or picture boxes in the body of the form (choose Edit>Add>Picture Box). The size of the logo is determined by the application used to generate the image and the size of the picture box is the same as the specifications for it in the form. The position of the logo is flush left on the page.

- When creating tabular forms, you can use box labels for column headings (choose Tools>Box Properties>Labels).

- Sorting. Sort order is determined by the textbase default sort order (choose Maintain>Edit Textbase Structure) or by the compulsory form sort (in the Form Designer, choose Report Options>Compulsory Sort). To allow users to sort records, create several forms, each sorted in a different way (Sort by Title, Sort by Date). Note that the following compulsory form sort options are ignored: Interfile and Omit Those Records (click Primary Sort Field Options). Note that exploded sorts are also ignored by default. If you set the WebAllowExplode=1 option in the DTBPub.INI file (or the ICSWeb.INI file, if you are using the SQL platform).to permit exploded sorts, all records are displayed on one page to avoid paging issues when changing the perceived number of records in the report.

- The number of records retrieved is shown in the browser title bar. If you want the form itself to indicate how many records were retrieved, include the RECORD COUNT variable in the form. In a non-tabular form, you can put the variable in a Report Header or Report Footer box in the Record Area (for example, "This report contains <RECORD COUNT> records"). You may also want to use other variables, such as date, time, name of textbase that was searched, and search criteria.

- If the textbase does not include any forms marked for use on the Web (select the Web check box on the Save Form As dialog box), a Basic form is generated automatically and displayed in the browser. This form shows all of the non-hidden fields in the primary textbase, with minimal formatting.

**Limitations**

Some Form Designer features are either unsupported or interpreted differently on the Web than on the desktop.

- **Margin Area.** Boxes in the Margin Area of a form do not appear when the report is displayed or printed using a browser.

- **Page Layout.** The browser controls page breaks, numbering, and other marginalia.

- **Horizontal Spacing.** The browser collapses multiple spaces in data to a single space.

- **Vertical Spacing.** Vertical spacing between boxes is interpreted as a line break (<br>) or paragraph (<p>). To avoid excessive vertical space between items of information on a form, set the Top Offset for all boxes to zero (choose Tools>Box Properties>Position). This is the only way to avoid blank lines between boxes. Any value other than 0 is interpreted as one line.
• **Indentation.** Indentation settings (choose **Tools>Box Properties>Paragraphs**) are ignored.

• **User Questions.** Prompted text in a form (choose **Tools>Box Properties>Contents>Text**) is ignored.

• **Tabular Forms.** *WebPublisher PRO* places borders flush against the information in table cells.

### Designing Tabular Forms

Design a tabular form to present information as a table, in rows and columns. Each row in the table represents a record. Each column represents a field. Each cell in a row contains one or more fields or other content items (variables, calculations, and so forth). Use tabular forms to display a summary of records found by a search, showing just a little information from each record: *Author, Title, Subject, Date.*

**Tip!** Tabular forms are especially useful for forms that will be used on the Web with *WebPublisher PRO*.

#### Creating a Table

1. Outside of the Form Designer, choose **Display>Design Form**, or from within the Form Designer, choose **Form Operations>Open Form**.

2. From the Start With list, select **New Tabular Form**.

3. On the Choose Initial Tabular Form Fields dialog box, specify which fields you want to include in the table, by moving fields from the Available Fields list to the Initial Fields list.

4. Click **OK**.

A table appears, consisting of the fields that you selected. Within the Form Designer, a table consists of one row, which represents one record. The row contains multiple cells, each of which contains a content item (a field, a variable, fixed text, and so forth). Rows are records. Columns are fields. When you use the form, the table will consist of multiple rows, each of which represents a record retrieved.

#### Adjusting Table Appearance

For the most part, use the Form Designer options as you would to design a non-tabular form. For example, to change the size of a cell in the table, click a cell and choose **Tools>Box Properties>Position**. To add a cell to the right of the selected cell, choose **Edit>Add** and click the type of box you want to add. To delete a cell, choose **Edit>Delete Box**. You can drag a box to a new horizontal position using the mouse.

Note that tabular forms are available only for reports, which do not permit scrolling within a box. Therefore, choose **Tools>Box Properties>Position** and specify a **Maximum height** large enough to accommodate a reasonable amount of text.

To add column headings, choose **Edit>Select All>Form Boxes**, then choose **Tools>Box Properties>Labels**. From the Show group, select the **Label** check box and click **Apply**. Default label text is used. To change the text, select an individual cell then use **Tools>Box Properties>Labels**.

Form Designer options that are not supported in a table have been removed from the menus or disabled. For example, you cannot specify tab order, or that a tabular form be used for single record display or editing.
Designing Tabular Forms for Use on the Web

If you have WebPublisher PRO, you can design tabular forms for Internet/intranet use. Here are some issues specific to use on the Web:

- Choose Tools>Form Properties>HTML to specify attributes for forms used on the Web or File>Write Report to File or File>Send Report as Mail in HTML format. These options are ignored for forms used on the desktop.
- Choose Tools>Box Properties>HTML to treat the contents of a particular field as hypertext links. Each entry in the specified field generates a separate link.
- Box width is ignored in the Web browser. The browser expands the width of each cell as necessary.
- An important, though optional, part of designing a tabular form for the Web is to give the user a way to see a detailed view of each record. Choose Tools>Box Properties>HTML and select Expand record link from the Treat content item as drop-down list.
- To include images in a table, use a picture box (choose Edit>Add>Picture Box). An alternative method of including images in a table is to specify the contents of a particular cell as the Image field that holds the image you want to display (images should be in a format supported by the Web browser, such as JPEG or GIF). Images included in a table can be displayed inline or as a link, depending on the Treat content item as setting (choose Tools>Box Properties>HTML). For more information about images on the Web, see the WebPublisher PRO: Images topic.
- For related information, see WebPublisher PRO: Form Design Tips.

Expanded Display Forms for Use on the Web

An expanded display form is a form designed for WebPublisher PRO that shows detailed information about one record at a time. To create a form for expanded display, use the Form Designer to create a form that includes information from most or all fields in the textbase. When you save the form, specify that it can be used for the Display Window and Web, and that it should be saved as Textbase File (Public).

How do users see an expanded display? They click a hypertext link in a Report page.

How does this hypertext link get onto the Report page? You add it when you design the Report form, by choosing Tools>Box Properties>HTML, and selecting Expand record link. For example, this Report form specifies the Title field as the Expand record link:

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABCs of Finance</td>
<td>Ingrid Spy</td>
<td>A beginner’s guide.</td>
</tr>
<tr>
<td>Financial Trends</td>
<td>Joe Doe</td>
<td>Trend analysis.</td>
</tr>
<tr>
<td>Managing Your Moolah</td>
<td>Moe Jones</td>
<td>A perennial favorite.</td>
</tr>
</tbody>
</table>

An alternative to using a field as the Expand record link is to add a box containing fixed text such as "More" and defining that content item as the Expand record link. The report would look like this:

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
When the user clicks the hypertext link in the browser, a detailed view of the record will appear, using the specified Display form. You specify the initial Display form using Tools>Screen Properties>HTML (Query Screen Designer) or when you define Initial Elements for a textbase box on a menu screen (Menu Screen Designer). If you do not specify an initial Display form at that time, the textbase defaults are used. If you supply more than one Display form for Web use, the user can select a different Display form from a drop-down list in the Web browser.

**Note:** Users can select a different form from the drop-down list in the Web browser if the Show form list on report/display/edit page check boxes are selected (as applicable) on the Query Screen Properties dialog box or Menu Screen Properties dialog box. (These options are disabled for query screens used to search multiple textbases.)

**WebPublisher PRO: Initial Forms for Web Use**

An initial form is the form that is first used in the browser. The initial Report form is applied when the user retrieves records. The initial Display form is applied when the user expands a record. The initial Edit form is applied when the user clicks a New record link, Edit record link, or Delete record link.

Users can change forms using the drop-down list in the Web browser if the Show form list on report/display/edit page check boxes are selected (as applicable) on the Query Screen Properties dialog box or Menu Screen Properties dialog box. (These options are disabled for query screens used to search multiple textbases.)

You specify which Report, Display, and Edit forms to use as initial forms using Tools>Screen Properties>HTML in the Query Screen Designer, or when you specify Initial Elements for a textbase box on a menu screen (in the Menu Screen Designer, choose Tools>Box Properties>Initial Elements). The form lists for those dialog boxes include only those forms that have the Web check box selected in the Save Form As dialog box.

If you do not specify initial forms at those times, the textbase default forms will be used (if they were saved for use on the Web).

If no form has been selected and the textbase default form was not saved as for use on the Web (with the Web check box selected in the Save Form As dialog box), a Basic form is generated automatically to display records in the browser. The Basic form shows all of the non-hidden fields in the primary textbase, with minimal formatting.

**Note:** For menu screens used on the Web, only Initial Elements (forms) for the Report, Display, and Edit Window need to be specified. All other initial elements are ignored for Internet/intranet use.

**HTML Form Properties**

A form designed for Web use can include the properties listed below. These properties only affect forms used on the Web with WebPublisher PRO, or when writing a report to HTML, or sending a report as mail in HTML format. They are ignored for forms used on the desktop. To specify these properties, choose Tools>Form Properties in the Form Designer and use the Logos and HTML tabs. After specifying the properties you want, click Apply.
- **Logos tab.** Add a logo or other image to a form. (Logos are ignored for the Send Report as Mail function.)

- **HTML tab.**
  - **Record separators.** Specify whether records are separated by a horizontal line.
  - **Background image.** Specify an image file for the page background. (Images are ignored for the Send Report as Mail function.)
  - **Advanced options.** Specify the HTML you want to add to the `<head>` section of HTML reports and specify Includes for one or more seams on the page (up to six seams).

**Form/Tabular Form Properties: Logos tab**

Use these HTML properties to include a graphic at the top and/or bottom of a form to be used on the Web with WebPublisher PRO.

In the **Leading Logo** box, type the file name, including extension, of the image file to display at the top of the form. For example, type NEWLOGO.JPG.

In the **Trailing Logo** box, type the file name, including extension, of the image file to display at the bottom of the form. For example, type MYLOGO.GIF.

**Important!** WebPublisher PRO expects to find the logos in the location specified in the [WebPublisher Defaults] section of the DBTWPub.INI file. If you accepted the default during the installation of WebPublisher PRO, this location is /DBTW-PD/IMAGES (the HTTP equivalent to C:\PROGRAM FILES\INMAGIC\WEBPUB\IMAGES).

If you are storing your logos in a different location from the one specified during installation, be sure to specify it in the [WebPublisher Logo Locations] section of the DBTWPub.INI file.

To display the images, WebPublisher PRO constructs a URL to send to the browser, prepending that information. For example, if you type MYLOGO.GIF in this dialog, a URL such as this one might be used:

```
http://www.inmagic.com/dbtw-wpd/images/mylogo.gif
```

To specify a different location (that is, a location that is not specified in the DBTWPub.INI file), you must type a path that includes a forward slash (/) in the **Leading Logo** and/or **Trailing Logo** box. Here are some examples:

```
http://www.myco.com/logos/mylogo.gif
/jones/mrs.gif
pictures/me.gif
```

A logo or image location that starts with a forward slash is relative to the server root. A location without a leading "http://host" or "/" is relative to the location of the query or menu screen that passed the query to WebPublisher PRO.

**Form Properties: HTML tab**

Use the HTML tab when designing a form for use on the Web with WebPublisher PRO, or when writing a report to HTML, or sending a report as mail in HTML format. **Note:** For tabular forms, this tab has slightly different settings.
Options group

- **Use record separators.** When records are retrieved, they are displayed one after another, in a report. If you want a horizontal rule to appear between records, select the **Use record separators** check box. Then specify the **Alignment**, **Height**, and **Width** in pixels. Click **OK** when done. The Web browser software controls the final appearance of the record separator.

- **Use background image.** Check this box to specify an image file to display as the page background. (Images are ignored for the Send Report as Mail function.) You can use the **Browse** button to locate the image file you want to use.

  Background images should be in the location specified in DBTWPub.INI (or ICSWeb.INI). You can specify a single default location for all background images used in forms, or specify a different location for individual textbases. For more information, see [Specifying Where WebPublisher PRO Looks for Images](#).

  To use a background image whose location is not specified in the INI file, you must type a path that includes a forward slash (/) in the **Image file** box. Here are some examples:

  - http://mydomain.com/newlogos/mylogo.gif
  - /jones/mrs.gif
  - pictures/me.gif

  A location that starts with a forward slash is relative to the server root. A location without a leading "http://host" or "/" is relative to the location of the query or menu screen passing the query to **WebPublisher PRO**. For [edit forms that are exported to HTML](#), the location is relative to the edit form.

  **Note:** You can also specify background color for forms using **Tools>Form Properties>General**.

Advanced options group

- **Advanced Options.** Click the **Advanced Options** button to open the Advanced HTML Options dialog box. Use the tabs on this dialog box to specify advanced HTML options for your form.

  - **<head> Section tab.** Specify information you want included in the <head> section of the HTML report. The information (<script>, <style>, or other HTML elements you specify) is inserted after the information added by the software, such as the page title, and after the first seam for Includes.

  - **Includes tab.** Specify Includes for one or more seams on the HTML report. You can specify up to 1,024 characters per seam (up to six seams). Note that Includes do not apply to writing a report to HTML or to sending a report as mail in HTML format.

WebPublisher PRO: Linking to Other Pages

A form, query screen, or menu screen designed for use on the Web with WebPublisher PRO can include links to other HTML pages.

**For Query Screens**

1. Choose **Search>Design Query Screen**, and create a new screen or load an existing one.
2. Choose **Edit>Add>Text Box** to add a text box and open the Text Box Properties dialog box.

3. On the Text tab, in the **Text** box, type the link destination you want (for example, type http://www.inmagic.com).

4. On the HTML tab, from the **Treat text as** drop-down list, select **URL**.

5. [Optional] Select the **Use alternate link text** check box, then, in the **Text** box below it, enter the text you want to appear as the hypertext link. (This check box becomes enabled after you select **URL** from the **Treat text as** drop-down list.)

6. Click **Apply**, then click **Close**.

7. [Optional] If you want users to be able to add new records to the textbase from the query screen, add a **New record link**.

8. Save the query screen.

9. **Export** the query screen to HTML.

**For Forms**

1. Choose **Display>Design Form**, and create a new form or load an existing one.

2. Select the form box with the content item that contains the link destination and choose **Tools>Box Properties** to open the Form Box Properties dialog box.

3. On the HTML tab, from the **Contents** list, select the content item that contains the link destination, then do the following:
   a. From the **Treat content item as** drop-down list, select **URL**.
   b. [Optional] Select the **Use alternate link text** check box, then, in the **Text** box below it, enter the text you want to appear as the hypertext link. (This check box becomes enabled after you select **URL** from the **Treat content item as** drop-down list.)

4. Click **Apply**, then click **Close**.

5. Save the form.

**Approaches that you can use when designing forms**

- Add a hypertext link to a report form so users can jump to an **expanded display** of one record at a time.
- Add a hypertext link to a report and/or display form so users can jump to an edit screen to **add, edit, or delete a record**. Note that editing over the Web requires **WebPublisher PRO** version 7.0 or later.
- Use settings from the **Treat content item as** drop-down list on the HTML tab (choose **Tools>Box Properties>HTML**) to generate hypertext links. These settings include: **Raw HTML**, **URL**, e-mail link, HTML file reference, Expand record link, "See Also" search link, Inline image, Image link, New record link, Edit record link, Delete record link.

**For Menu Screens**

1. Close any open textbase.

2. Choose **Menu Screens>Design**, and create a new screen or open an existing one.
3. Choose **Edit>Add>Text Box** to add a text box and open the Text Box Properties dialog box.

4. On the Text tab, in the Text box, type the link destination you want (for example, type http://www.inmagic.com).

5. On the HTML tab, from the **Treat text as** drop-down list, select **URL**.

6. [Optional] Select the **Use alternate link text** check box, then, in the **Text** box below it, enter the text you want to appear as the hypertext link. (This check box becomes enabled after you select **URL** from the **Treat text as** drop-down list.)

7. Click **Apply**, then click **Close**.

8. Save the menu screen.

9. **Export** the menu screen as HTML.

**HTML Query Screen Properties**

A query screen designed for Web use can include the properties listed below. These properties only affect query screens exported to HTML for use on the Web with WebPublisher PRO. They are ignored for query screens used on the desktop. To specify these properties, choose **Tools>Screen Properties** in the Query Screen Designer and select the Logos and HTML tabs. After specifying the desired properties, click the **OK** button.

**Logos tab**

- **Leading/Trailing Logo.** Add a logo or other image to the top or bottom of a query screen. **Tip!** You can also use picture boxes to add images to query screens.

**HTML tab**

- **Show Boolean operators.** Show or hide a Boolean drop-down list (AND, OR, NOT) for searchable boxes.

- **Use background image.** Specify an image file for the page background. **Tip!** You can also use Background color on the General tab to specify a page background color.

- **Initial Report Form.** Specify which Report form to use when the user retrieves records. The selected form will be used every time a new query is submitted.

- **Initial Display Form.** Specify which Display form to use when the user expands a record in the browser. This form determines the appearance of single-record display.

- **Initial Edit Form.** Specify which Edit form to use when the user adds, edits, or deletes a record in the browser. Note that editing over the Web requires WebPublisher PRO.

- **Show form list on report page.** Specify whether drop-down lists will appear in reports.

- **Show form list on display page.** Specify whether drop-down lists will appear in an expanded display page.

- **Show form list on edit page.** Specify whether drop-down lists will appear on edit screens. Note that editing over the Web requires WebPublisher PRO.

- **Records per page.** Limit the number of records displayed at one time, and specify where the navigation buttons appear.
Navigational controls. Specify whether navigational buttons and form drop-down lists appear on reports, expanded display pages, and edit screens and where on the page they are placed.

Exporting Editing Forms to HTML

If you have WebPublisher PRO, you can design an edit form in DB/TextWorks, export it to HTML, and then use it to add records to a textbase over the Web. If you use this method, you will only be able to add records from a Web browser-- you will not be able to edit or delete records over the Web using this form.

This is useful if you want to provide users direct access to an edit form on the Web from which they can submit information (for example, a registration form for an event).

The Export Editing Form to HTML command is an alternative way to add records over the Web. If you want Web users to have the ability to add, edit, and/or delete records in your textbase from a browser, use New record, Edit record, and/or Delete record links in your screens and forms.

Important! When saving the edit form, select the Edit Window check box on the Save Form As dialog box. This check box must be selected for the form to be exported to HTML.

To export an edit form to HTML

1. In the Form Designer, open the form you want to export.
2. Save the form for use in the Edit Window (choose Form Operations>Save Form As and select the Edit Window check box), if it has not been done already.
3. Choose Form Operations>Export Editing Form to HTML.
4. A message appears asking if you want to use Cascading Style Sheets to preserve the formatting you specified in the Form Designer. Click Yes to preserve formatting (for example, box position and box background color) when the edit form is displayed on the Web. Click No to have DB/TextWorks use simple HTML to place elements on the edit form (that is, boxes will be left-justified, box labels will appear on top rather than to the left, and so forth).
5. On the Save File As dialog box, do the following:
   - In the File name box, type a name for the HTML editing form.
   - Navigate the Save in drop-down list to the location in which you want to save the form. The location should be accessible to the HTTP server on which WebPublisher PRO is installed.
   - Click Save.
6. Click OK to dismiss the completion message.

Once your edit form has successfully been exported to HTML, you can add records to the textbase over the Web. Using a Web browser, open the edit form, enter record information in the applicable fields, then click the Submit Record button. Notice that the Tab order specified in the Form Designer is preserved during the export.

Tip! Be sure the textbase for which you have exported an editing form is accessible to WebPublisher PRO and that your virtual directory DBTW-WPD (or ICS-WPD if you have the SQL platform) and the account accessing WebPublisher PRO have the appropriate access rights. See the installation notes for more information about access rights.
Note that if you plan to add new records from a browser, you can design a Web edit form so that a default value appears in the field(s) you specify. For more information, see Using Default Values on a Web Edit Screen.

Includes tab

To access this tab: In the Form Designer, choose Tools>Form Properties>HTML, click the Advanced Options button and select the Includes tab.

Use this tab to specify Includes for forms used on the Web with WebPublisher PRO. Includes can be used on report, display, and edit pages used to view, add, and/or modify WebPublisher PRO results. (They cannot be used on edit forms that are exported to HTML.)

An Include is information that you want to add to one or more seams of an output page. The information is typically HTML and/or script (for example, JavaScript, Perl, and so forth) that will impact the appearance of the page.

Adding Includes allows you to:

- Enhance the look and feel of an HTML form in the Form Designer. For example, an Include can change the look of your WebPublisher PRO output to match the design of your company Web site.

- Access areas of a form that were previously not accessible in the Form Designer. For example, an Include can add controls above or below the navigational controls provided by WebPublisher PRO. For more information about these special areas (called seams), including an illustration of an HTML report showing their locations, see the Seams Illustration.

- Change the appearance of many or all forms all at one time. This can be done in the following ways:
  - You can create one text file containing the Include you want used, then reference that file on the Includes tab for each form for which you want it applied. Doing this enables you to make a change in one place (the text file) and have it affect all forms that reference this file. This means you do not have to edit each form.
  - You can specify default Includes information in the DBTWPub.INI (or ICSWeb.INI) file to appear in all forms. However, the Includes tab in the Form Designer for a specific form overrides the .INI defaults, as long as the Override Default Include check box is selected next to the corresponding seam box.

To add information to a seam

1. In the box corresponding to the appropriate seam, type the Include information you want for that location. For example, to add information at the very top of the page (seam 1), type information in the 1 box. Separate multiple entries with the pipe character (|).

Include information can be entered in the following ways:

- **Directly.** You can type the Include information directly into the box on the Includes tab (for example, <h2>Information provided is company confidential.</h2> ). This example results in the words "Information provided is company confidential." appearing on the page. Note that there is a 1,024 character limit. (This is the maximum for the whole text box, not the per-entry limit)
Indirectly. You can type the name and location of a text file containing the information you want to use as the Include. You can use the following types of references:

**Absolute or relative HTTP reference.** For example, the absolute reference http://localhost/dbtw-wpd/sample/seam2.htm or the relative HTTP reference /includes/seam2.htm. In both examples, the content of SEAMS2.HTM is processed on the server and inserted into the HTML that is streamed to the client browser.

**File system reference.** For example, C:\PROGRAM FILES\INMAGIC\WEBPUBPRO\SAMPLE\SEAM2.TXT. If you use this type of file reference, the content of SEAM2.TXT is processed on the server and inserted in the HTML that is streamed to the client browser.

**Note:** If the file does not reside on the same machine as WebPublisher PRO, you must use a Universal Naming Convention (UNC) file path to reference it.

2. Click OK on the Advanced HTML Options dialog box.

### Overriding Default Includes

The **Override Default Include** check box is selected automatically when you type in a box on the Includes tab. This means that, for a particular form, what you type in the box will override any default Include information specified in DBTWPub.INI (or ICSWeb.INI). Note that if you select this check box and leave the box blank, the default Include for that seam will be ignored and nothing will appear in the seam. For more information about default Includes, see [Specifying Default Includes for Forms Used on the Web](#).

**Tip!** When experimenting with the design of your form, you can clear this check box to remove the Include from a seam in the output. This is helpful because it means you do not have to delete the Include you entered for a particular seam to see how the page looks without it, then re-type it later if you decide you want it back.

### Using Advanced Includes

WebPublisher PRO supports server-side includes and script execution.

To do this in WebPublisher PRO, you must modify the calling syntax of the script or file. For example, to execute the Perl script in the file /scripts/welcome.pl, you would type `<!-#exec cgii="/scripts/welcome.pl" -->` in an SHTML or ASP page. To execute that script in your WebPublisher PRO report, just type /scripts/welcome.pl in the appropriate box on the Includes tab. The results of the server-side command will be included in your WebPublisher PRO output.

### Seams Illustration

You can add Includes to seams on an HTML report using the Advanced HTML Options dialog box.

You can include up to 1,024 characters per seam. To specify multiple entries per seam, separate entries with the pipe character (|). There are six seams on an HTML report.

The following list describes the location of the seams:

- **Seam 1** is located at the very beginning of the <head> section, immediately following the opening <head> tag.
WebPublisher PRO

- **Seam 2** is located at the very beginning of the `<body>` section, immediately following the opening `<body>` tag. This is before any leading logo you may have on your page.

- **Seam 3** is located immediately before the WebPublisher PRO report. This is the area immediately following the upper navigational controls (such as, a form selection dropdown list and Next/Previous buttons), if you specified that these controls appear at the top of the page.

- **Seam 4** is located after the WebPublisher PRO report and any trailing logo you may have on the page. This is before the lower navigational controls, if you specified that these controls appear at the bottom of the page.

- **Seam 5** is located immediately after the lower navigational controls, if present, and before the Inmagic attribution line.

- **Seam 6** is located after the Inmagic attribution line and immediately before the closing `</body>` tag.

**Important!** Because Inmagic Web products use absolute positioning, HTML rendered in the seams may not appear positioned as expected. Be sure to test your page to ensure the output is what you intended.

The following illustration shows the locations of the six seams:
Allowing Record Editing over the Web

Adding a New Record Link

This topic pertains to WebPublisher PRO.

When designing screens and forms for use on the Web, you can add a New record link to open an empty edit form from which you can add a new record.

You can add a New record link to query screens, report forms, display forms, and edit forms.

On a query screen, report form, and display form, the New record link opens an empty edit form from which you can add a new record.

On an edit form, it creates a copy of the current record in the edit screen. The duplicate record can be edited, as needed, and saved as a new record.

To add a New record link to a query screen

1. Open the query screen in the Query Screen Designer.
2. Choose Edit>Add>Text Box to add a text box and open the Text Box Properties dialog box.
3. On the Text tab, in the Text box, enter the text you want to appear as the link text on the query screen when viewed on the Web. For example, type Add New Record.
4. On the HTML tab, from the Treat text as drop-down list, select New record link.
5. Click Apply, then Close.

To add a New record link to a form

When adding a New record link to a report or display form, you can create the link from content in a form box or from text you type in a text box.

1. Open the form in the Form Designer.
2. Add a text box or a form box, depending on what you want to do:
   - If you want to use text you type as the link to an empty edit screen:
     a. Choose Edit>Add>Text Box to add a text box and open the Text Box Properties dialog box.
     b. On the Text tab, in the Text box, enter the text you want to appear as the link to an empty edit screen. For example, type Add New Record.
     c. On the HTML tab, from the Treat text as drop-down list, select New record link.
     d. Click Apply, then Close.
   - If you want to use field content or other form box contents (for example, Fixed Text) as the link to an empty edit screen:
     a. Choose Edit>Add(Form Box to add a form box or select an existing form box and choose Tools>Box Properties. The Form Box Properties dialog box opens.
     b. Select or add the content item whose content you want to use as the link to the empty edit screen.
     c. On the HTML tab, from the Treat content item as drop-down list, select New record link.
d. Click **Apply**, then **Close**.

3. Save the form for use on the Web and in the appropriate window (for example, Report Window, Display Window, Edit Window), depending on the type of form you designed. (Note that if you save it for use in the Edit Window, the link will make a copy of the current record in the edit screen, not open an empty edit screen.)

Note that if you plan to add new records from a browser, you can design a Web edit form so that a default value appears in the field(s) you specify. For more information, see **Using Default Values on a Web Edit Screen**.

**Editing Records Over the Web**

This topic applies to WebPublisher PRO. If you want users to be able to add, edit, and delete records in your textbase from a Web browser, you need to perform several steps to prepare your textbase and to design the forms and screens for it.

**Important!** To edit records over the Web, the account accessing WebPublisher PRO must have Read-Write access to the folder in which the textbase resides, and JavaScript must be enabled on the end user's machine.

**To enable users to edit your textbase over the Web**

1. Modify the textbase structure to enable it for editing over the Web.
   a. Open the textbase and choose **Maintain> Edit Textbase Structure** to open the Edit Textbase Structure dialog box.
   b. Click the **XML Match Fields** button to open the Specify XML Match Fields dialog box and specify the fields on which you want to match when editing or deleting records over the Web.

   **Tip!** To add records over the Web, textbase passwords (if any) must have at least Read-Only access to the match fields you specify. To edit or delete records over the Web, textbase passwords need Full Access to the match fields you specify.

2. Design Report and/or Display forms to use when results are displayed on the Web. There are several things to consider when designing these forms:
   - When you save each form, on the Save Form As dialog box, select the **Textbase File (Public)** option button in the Save In group, and the appropriate check boxes in the Use For group. For Report forms, save the form for use in the **Report Window** and on the **Web**. For Display forms, save the form for use in the **Display Window** and on the **Web**. Doing this makes the form appear in the appropriate form drop-down lists on the Web.
   - Add **New record**, **Edit record**, and/or **Delete record** links to the Report and Display forms. You do not have to add all three types of links to all forms. (You can add the links using text or form boxes.)

3. Design one or more Edit forms to use on the Web. There are several things to consider when designing an Edit form for the Web:
   - When you save each form, on the Save Form As dialog box, select the **Textbase File (Public)** option button in the Save In group, and select the **Edit Window** and **Web** check boxes in the Use For group. Doing so makes the form appear in the appropriate form drop-down lists on the Web.
• Add a **New record link** to the Edit form to enable you to **duplicate a record**. Note that **Delete record links** and **Edit record links** do not appear on Edit forms used on the Web.

• [Optional] Add a **password box** to control who can add, edit, and delete records from this edit screen. **Passwords are defined in the textbase structure.**

**Note:** If a password is specified on the query screen, it is automatically passed to the edit page and you do not need to add a password box to the edit screen.

4. Design a query screen and specify its default forms:

• In the Query Screen Designer, choose **Tools>Screen Properties** to open the Screen Properties dialog box. On the HTML tab, click the **Initial Report Form**, **Initial Display Form**, and **Initial Edit Form** buttons to specify the form you want to use initially for each page on the Web.

• If you want users to be able to add a new record from the query screen, add a **New record link**. Note that **Delete record links** and **Edit record links** are not available in the Query Screen Designer.

• [Optional] Add a **password box** to control access to the textbase from this query screen.

• **Export the query screen to HTML.**

Note that if you plan to add new records from a browser, you can design a Web edit form so that a default value appears in the field(s) you specify. For more information, see **Using Default Values on a Web Edit Screen.**

**An alternative**

If you only want to add new records to the textbase from the Web (not edit or delete records), you can use an alternative method.

Design an edit form and **export it to HTML**. This provides users direct Web access to the edit screen, from which they can add records (for example, a registration form for an event).

Note that this method is appropriate for when you do not want users to have to open a query screen, or submit a search, or display records. The edit screen is opened directly from its URL (for example, by clicking a link on your intranet).

**Editing information on the Web**

When entering information on the Web, you can type information in the applicable boxes on the screen or paste information from a validation list (if the designer of the screen provided validation list links).

Each box represents one field. Click in the box where you want to begin typing, or press **Tab** or **Shift+Tab** to move from box to box. Tab order is preserved on the Web.

To create multiple entries in a field, use the pipe character (**|**). The pipe character is the Web equivalent to pressing **F11** on the desktop.

**Duplicating a Record (WebPublisher PRO)**

You can design an edit screen that lets users duplicate the current record when editing records over the Web. Duplicate records can only be created from an edit screen and are created using a **New record link**.
To create a duplicate record link on the Web

1. In the Form Designer, open the edit form to which you want to add the duplicate record link.
2. Choose Edit>Add>Text Box to add a text box and open the Text Box Properties dialog box.
3. On the Text tab, in the Text box, enter the text you want to appear as the link that creates the duplicate record. For example, type Duplicate Record.
4. On the HTML tab, from the Treat text as drop-down list, select New record link.
5. Click Apply, then Close.
6. Choose Form Operations>Save Form As and save the form for use on the Web and in the Edit Window.

When a user is editing a record using the form you just saved, the phrase Duplicate Record will appear as a link in the record. Clicking the link will create a copy of the current record in the edit screen. The new record can be edited, as needed, then saved as a new record.

Adding a Delete Record Link

This topic pertains to WebPublisher PRO.

When designing screens and forms for use on the Web, you can add a Delete record link to open the current record in an edit screen from which you can delete the record. You can add a Delete record link to report and display forms.

To add a Delete record link to a form

When adding a Delete record link to a report or display form, you can create the link from content in a form box or from text you type in a text box.

1. Open the form in the Form Designer.
2. Add a text box or a form box, depending on what you want to do:
   - If you want to use text you type as the link to a delete record page:
     a. Choose Edit>Add>Text Box to add a text box and open the Text Box Properties dialog box.
     b. On the Text tab, in the Text box, enter the text you want to appear as the link to a delete record page. For example, type Delete Record.
     c. On the HTML tab, from the Treat text as drop-down list, select Delete record link.
     d. Click Apply, then Close.
   - If you want to use field content or other form box contents (for example, Fixed Text) as the link to a delete record page:
     a. Choose Edit>Add>Form Box to add a form box or select an existing form box and choose Tools>Box Properties. The Form Box Properties dialog box opens.
     b. Select or add the content item whose content you want to use as the link to the delete record page.
c. On the HTML tab, from the **Treat content item as** drop-down list, select **Delete record link**.
d. Click **Apply**, then **Close**.

3. Save the form for use on the Web and in the appropriate window (that is, Report Window and/or Display Window), depending on the type of form you designed.

### Adding an Edit Record Link

This topic pertains to WebPublisher PRO.

When designing screens and forms for use on the Web, you can add an **Edit record link** to open the current record in an edit screen from which you can make changes.

You can add an **Edit record link** to report and display forms.

**To add an Edit record link to a form**

When adding an **Edit record link** to a report or display form, you can create the link from content in a form box or from text you type in a text box.

1. Open the form in the Form Designer.
2. To specify the text to use as the link to an edit screen:
   a. Choose **Edit>Add>Text Box**.
   b. On the Text tab, in the **Text** box, enter the text you want to appear as the link to an edit screen. For example, type Edit Record.
   c. On the HTML tab, from the **Treat text as** drop-down list, select **Edit record link**.
   d. Click **Apply**, then **Close**.

3. To use field content or other form box contents (for example, Fixed Text) as the link to an edit screen:
   a. Choose **Edit>Add>Form Box** to add or select a form box, and choose **Tools>Box Properties**.
   b. Select or add the content item whose content you want to use as the link to the edit screen. For example, you may select the **Title** field so that the title of the publication appears as an Edit record link that, when clicked, opens the record for that publication in an edit screen.
   c. On the HTML tab, from the **Treat content item as** drop-down list, select **Edit record link**.
   d. Click **Apply**, then **Close**.

4. Save the form for use on the Web and in the appropriate window (that is, Report Window and/or Display Window), depending on the type of form you designed.

### Using Default Values on a Web Edit Screen

When you design an Edit form for use on the Web, you can specify that default information automatically appear in a specific field each time the edit screen is used to create new records.

For example, if you are using a Web edit screen to add sales orders to your textbase, you can design a custom edit form for each sales representative so that his or her name automatically
appears in the *Sales Rep* field for each new record. This ensures that this field always has information in it, and reduces the amount you have to type.

**Note:** Default values only appear on edit forms used to add new records, they will not appear on edit forms used to edit existing records.

**To specify that default field information appear on a Web edit screen**

1. In the Form Designer, open the Edit form you plan to use on the Web to add new records.

2. Select the form box containing the field for which you want a default value inserted. For example, on a sales order edit form, select the form box containing the *Sales Rep* field.

3. Choose **Tools>Box Properties** to open the Form Box Properties dialog box. (Notice that the field in the form box you selected in the previous step appears in the Contents list and is selected in the Fields list.)

   **Note:** To have a default value appear automatically on the screen, the field must be the first item in the form box.

4. On the Fields subtab of the Contents tab, in the **If empty use** box, enter the default information you want to appear in the field when the Web edit screen opens in a browser. For example, type Marlena Bryce.

5. Click the **Replace** button.

6. Click **Close**.

When you use this edit form to create new records on the Web, **Marlena Bryce** will appear automatically in the *Sales Rep* box.

**Note:** This also applies to editing forms that are exported to HTML.

**Submitting XML to WebPublisher PRO**

**Using XML Input for Queries to WebPublisher PRO**

Instead of a query or menu screen or a canned query, you can use XML input to send commands to *WebPublisher PRO*. The following example performs a search in the *Vehicles* textbase (<TN>vehicles</TN>) and displays the records using the *Prices* form (<RF>Prices</RF>) in HTML format (<XM>0</XM>):

```xml
<?xml version="1.0" ?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>query</AC>
  <TN>vehicles</TN>
  <QY>Findall</QY>
  <RF>Prices</RF>
  <XM>0</XM>
</Query>
```

**Notes**

- Use the <AC> element to specify the action you want the software to take. See **Submitting XML Actions to WebPublisher PRO** for a list of the supported actions.
- When you submit XML, output is returned in XML format by default unless you explicitly specify that you want HTML output (<XM>0</XM>).

- You must use the QY (Command Query format) parameter when specifying a query using XML input. HTML query screen searches still use the QBN/Qln/QFn parameters, and you can still use this syntax when specifying canned queries.

- You can specify how much query detail (about the search you performed) is returned by using detail= in the opening <Query> tag. For example:
  
  `<Query xmlns="http://www.inmagic.com/webpublisher/query" detail="off">`

  The options are:
  
  - qy = shows just the contents of the QY tag (default)
  - full = shows the entire contents of the <Query> input
  - off = does not show any query input

  You have the following options for specifying what is returned in the output:

  - Use the `<KeyFields>` element to list the fields you want returned. You can only specify fields from the primary textbase. If you need to return secondary fields, use the `<RF>` element.

  - Use the `<SortFields>` element to sort records. This element lets you specify the type of sort you want, including the ability to specify a primary sort field, alternate primary sort field(s), and subsort fields. If no explicit sort order is specified, and the textbase has a default sort order, that is the order in which records appear in the returned XML. You can only sort by fields in the primary textbase with the `<SortFields>` element. If you need to sort by a secondary textbase field, use the `<RF>` element.

Example

```xml
<?xml version="1.0" ?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <QY>Findall</QY>
  <AC>query</AC>
  <TN>vehicles</TN>
  <KeyFields>
    <KeyField>Name</KeyField>
    <KeyField>Features</KeyField>
  </KeyFields>
  <SortFields sort="specify">
    <SortField type="sort" reverse="y">DateReleased</SortField>
    <SortField type="sort">Name</SortField>
  </SortFields>
</Query>
```

Using Third-Party Tools with WebPublisher PRO

By combining its searching and editing power with Extensible Markup Language (XML), WebPublisher PRO allows you to integrate your textbases with other applications and create interactive forms using standard third-party tools (such as Microsoft FrontPage).

Once you have built your own Web interface, use the read-write XML features of WebPublisher PRO (including the ability to query a DB/TextWorks textbase via the Web using XML) to enable
that interface to search, add, edit, and/or delete records in your textbase over the Web. This method is for advanced users, or those with access to a Web designer with XML/XSL skills.

**Note:** For information about the XML you can submit to *WebPublisher PRO*, see the input schema documentation. An HTML version of the schema documentation is located at http://support.inmagic.com/web.

We strongly recommend you do the following before and/or while you build your custom interface:

- Review the [three general phases you need to follow](#) when you design an interface to let your end users search for, edit, add, and delete records via the Web.
- Familiarize yourself with the structure of the *WebPublisher PRO* input schema.
- Ensure that all XML elements and attributes submitted to *WebPublisher PRO* are well formed and valid.
- Use the [required namespace](#) in the `<Query>` element with any action submitted to *WebPublisher PRO*.
- [Create tag names for fields](#) that meet the requirements of XML and your development environment.
- Use CDATA if you want to [preserve white space in the content of a field](#).

**Three Phases for Designing a Web Interface with a Third-party Tool**

Before you start designing an interface for *WebPublisher PRO*, take some time to familiarize yourself with the read-write features available to you.

There are three general phases you need to follow when you design an interface to let your end users search for, edit, add, and delete records via the Web.

**Phase 1: Create the XML query**

Using the `<Query>` tag as the root element, develop a request to *WebPublisher PRO* asking it to perform an action (for example, an **insert**). The action you request will be enclosed in the `<AC></AC>` element.

There are numerous ways to build your XML query, including using JavaScript in an .ASP page. You can even type the XML in Microsoft Notepad.

For more information about the actions you can submit and for sample code, see [Submitting XML Actions to WebPublisher PRO](#).

**Phase 2: Send the XML query to WebPublisher PRO**

Once you have a well-formed, valid query, you can send it to *WebPublisher PRO*. There are a variety of ways you can do this.

For example, you can use Microsoft XML Core Services 4.0 (MSXML4), which was installed with *WebPublisher PRO*. MSXML4 has an HTTP response-and-request mechanism. You can also use other methods, such as Microsoft ASP.NET or [SOAP](#).

**Phase 3: Get a response back in XML**

When you submit an action in XML format (for example, an **update**), the software returns results in XML format.
The XML returned is enclosed in the <inm:Results> root element. The “inm” namespace prefix is used in all output tags in a WebPublisher PRO response.

For more information about WebPublisher PRO responses and sample output code, see Submitting XML Actions to WebPublisher PRO.

Schemas for WebPublisher PRO

WebPublisher PRO uses three schemas, one for input and two for output. These schemas describe the structure of the data that can be submitted to and returned by WebPublisher PRO.

Input Schema

Use the schema_input command in the <AC> element to generate the input schema. This input schema shows the structure of the XML that can be submitted to WebPublisher PRO.

Any actions you submit to WebPublisher PRO must be enclosed in the <Query> root element and include the appropriate namespace.

Schema documentation, in HTML format, is provided for this input schema at http://support.inmagic.com/web.

Output Schemas

WebPublisher PRO has two types of output schemas:

- Query output schema. When you search for records using WebPublisher PRO, results are returned within the <inm:Recordset> root element. There are two “flavors” of the query output schema that detail the tags that can be included in the root element. They can be generated using the <AC> element:
  - tb_schema_query. This command generates the output schema for the specified textbase. All fields in the primary textbase are included, except those hidden by a password.
  - rf_schema_query. This command generates the output schema for the specified report form. A query must be specified. Only fields specified in the form are included.

- Modify output schema. When submitting a request to WebPublisher PRO to modify the textbase in some way (that is, by adding, editing, or deleting records), results are returned within the <inm:Records-Processed> root element. To generate the modify output schema, which details the tags that can be included in the root element, use the tb_schema_output command.

The two types of output schemas used by WebPublisher PRO do not have schema documentation provided, as they are not used by the Web designer to enter information. Rather, these schemas are used by outside applications to understand the XML returned by WebPublisher PRO.

Using WebPublisher PRO with SOAP

If you plan to use your custom-built WebPublisher PRO interface with SOAP, by default the XML output is emitted in a format that is compatible with most development environments that use SOAP. Many third-party development environments impose strict requirements on identifiers.
Unless otherwise specified, **WebPublisher PRO** replaces spaces and hyphens in field names with underscores in its XML output. In addition, the old `<Records-Processed>`, `<Record-Processed>` and `<Record-Error>` elements are emitted as `<RecordsProcessed>`, `<RecordProcessed>`, and `<RecordError>`.

The following example shows XML input for a *query* that includes field names with underscores in place of spaces:

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>query</AC>
  <TN>staffing</TN>
  <QY>Find Employee_ID =AL4357</QY>
  <KeyFields>
    <KeyField>Employee_ID</KeyField>
    <KeyField>Employee_Name</KeyField>
    <KeyField>Job_Title</KeyField>
    <KeyField>Hire_Date</KeyField>
  </KeyFields>
</Query>
```

The output from the above *query* is returned with underscores in place of spaces, as well:

```xml
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="13.0"
 xmlns:inm="http://www.inmagic.com/webpublisher/query">
  <inm:QY>Find Employee_ID =AL4357</inm:QY>
  <inm:Recordset AC="query" setCount="1">
    <inm:Record setEntry="0">
      <inm:Employee_ID>AL4357</inm:Employee_ID>
      <inm:Employee_Name>Mia Alabiso</inm:Employee_Name>
      <inm:Job_Title>Staff Accountant</inm:Job_Title>
      <inm:Hire_Date>August 7, 2008</inm:Hire_Date>
    </inm:Record>
  </inm:Recordset>
</inm:Results>
```

The SQL version of WebPublisher PRO (Content Server) always used underscores by default, but non-SQL WebPublisher PRO prior to v12 used hyphens instead. If you have any XML WebPublisher PRO applications developed using hyphens for spaces instead of underbars, you can set SOAPformat=0 in the [WebPublisher] section of DBTPUB.INI.

### Formatting XML Input

**Using Well Formed and Valid XML**

When submitting XML to **WebPublisher PRO** all elements and attributes must be both:

- **Well Formed.** All XML must follow the standard established by the World Wide Web Consortium (http://www.w3c.org). Note that the W3C standard requires starting and ending tags to match, including case.

- **Valid.** Elements, attributes, and attribute values must follow the format specified in the **WebPublisher PRO** schema. All are case sensitive. For example, `<ac-update>` is not valid because the `<AC>` element is uppercase in the **WebPublisher PRO** schema.
**Required Namespace**

Any action submitted to *WebPublisher PRO* must declare the following namespace in the `<Query>` element:

```xml
<Query xmlns="http://www.inmagic.com/webpublisher/query">
```

All *WebPublisher PRO* output includes the namespace prefix *inm* in each element.

If your development environment requires it, you can optionally include the namespace prefix *inm* in all input elements. However, for *WebPublisher PRO* to recognize the input, you must specify the prefix in the namespace declaration:

```xml
<inm:Query xmlns:inm="http://www.inmagic.com/webpublisher/query">
```

The following example shows the declaration of the *inm* namespace prefix and its use in input elements:

```xml
<?xml version="1.0"?>
<inm:Query detail="qy" xmlns:inm="http://www.inmagic.com/webpublisher/query">
  <inm:AC>query</inm:AC>
  <inm:TN>sample</inm:TN>
  <inm:QY>Find id=*</inm:QY>
  <inm:KeyFields>
    <inm:KeyField>ID</inm:KeyField>
  </inm:KeyFields>
</inm:Query>
```

The option to include the namespace prefix in all input tags is not a requirement of *WebPublisher PRO*. If you do not want to submit XML with the prefix, do not include the prefix in the namespace declaration.

The examples in this online help file do not use the namespace prefix in XML input.

**Note:** The *inm* prefix is automatically included in all output elements, regardless of whether it was declared in the input.

**Creating Tag Names for XML Input**

When submitting field names to *WebPublisher PRO* in XML, all tags must be valid.

Field names containing characters that are unacceptable in XML should be modified as follows when being used as XML tags or when referring to the field name in a `<MatchField>`, `<KeyField>`, or `<FN>` tag:

- **Replace spaces and hyphens with underbars.** For example, if a field in your textbase is named *date added*, you must use `<date_added>`.

- **Replace extended characters with the equivalent character without the diacritic.** For example, if a field in your textbase is named *Société* ["Company" in French], you must use `<Societe>`.

- **Precede digits at the beginning of a field name with an underscore.** For example, if a field in your textbase is named *1stqtr*, you must use `<_1stqtr>`. (This is required regardless of whether you plan to use SOAP.)

The following table shows how field names with unacceptable characters should be submitted to *WebPublisher PRO* in XML, depending on whether SOAP formatting is on or off.
<table>
<thead>
<tr>
<th>Textbase Field Name</th>
<th>SOAP Formatting ON (default)</th>
<th>SOAP Formatting OFF (if specified, not recommended)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Name</td>
<td>First_Name</td>
<td>First-Name</td>
</tr>
<tr>
<td>4th-Qtr Revenue</td>
<td>_4th_Qtr_Revenue</td>
<td>_4th-Qtr-Revenue</td>
</tr>
<tr>
<td>-end- date</td>
<td>_end_date</td>
<td>_end--date</td>
</tr>
<tr>
<td>Réseau</td>
<td>Reseau</td>
<td>Reseau</td>
</tr>
<tr>
<td>[<em>Network</em> in French.]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you are unsure of how *WebPublisher PRO* will treat your special-case field names, ask the software to return a `tb_schema_query` (submit the following action: `<AC>tb_schema_query</AC>`) and review the field names listed there. For example:

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>tb_schema_query</AC>
  <TN>vehicles</TN>
</Query>
```

### Preserving White Space in XML Input

When submitting XML to *WebPublisher PRO*, you can specify that all of the white space in the content of a field be preserved.

To do this, wrap the content in a CDATA. If you do not use CDATA, leading and trailing white space will be removed. "White space" consists of spaces as well as line breaks.

**Example**

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC validation="none">insert</AC>
  <TN>vehicles</TN>
  <KeyFields>
    <KeyField>ProductNumber</KeyField>
  </KeyFields>
  <Recordset>
    <Record>
      <ProductNumber>DH0001</ProductNumber>
      <Name>Honda Civic</Name>
      <Description><![CDATA[ This model car has a working radio. Sold in CA only.]]></Description>
      <Colors>Blue</Colors>
    </Record>
  </Recordset>
</Query>
```

### Accepted Actions `<AC>`</AC>

**Submitting XML Actions to WebPublisher PRO**

Enclose any "action" you want *WebPublisher PRO* to perform between the opening `<AC>` tag and closing `</AC>` tag.
All actions are submitted within the `<Query>` root element. All results, except for those that return schemas, are returned within the `<inm:Results>` root element.

**Important!** Do not confuse the `<Query>` root element with the `<AC>` query</AC> command. The `<Query>` root element tells WebPublisher PRO that you are asking it to do something (for example, delete a record). The `query` command is used within the `<AC>` element to tell WebPublisher PRO that you are searching for records.

The following table lists the recognized actions and what they do. If the name of an action is a link in the first column, click it to view more information about that action and see sample code.

<table>
<thead>
<tr>
<th>This action:</th>
<th>Does this:</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>query</code></td>
<td>Searches for records.</td>
</tr>
<tr>
<td><code>update</code></td>
<td>Modifies one or more existing records. <code>Update</code> behaves like the DB/TextWorks import feature in that it checks for matching records, then modifies the records as specified by the <code>matchFound</code> attribute (the default is to replace fields) when a match is found. If no match is found, the information is treated according to the <code>matchNotFound</code> attribute (the default is to add as a new record).</td>
</tr>
<tr>
<td><code>insert</code></td>
<td>Adds one or more records to the textbase.</td>
</tr>
<tr>
<td><code>delete</code></td>
<td>Deletes one or more records from the textbase.</td>
</tr>
<tr>
<td><code>batch_delete</code></td>
<td>Deletes records that satisfy a query from the textbase.</td>
</tr>
<tr>
<td><code>tb_field_info</code></td>
<td>Returns an overview of field settings for a particular textbase. You can use <code>&lt;KeyFields&gt;</code> to return information for only the fields you want, or omit the <code>&lt;KeyFields&gt;</code> tag to return information on all fields in the textbase.</td>
</tr>
<tr>
<td><code>validation_lists</code></td>
<td>Returns detailed information on the field validation in a textbase. You can use <code>&lt;KeyFields&gt;</code> to return validation information for only the fields you want, or omit the <code>&lt;KeyFields&gt;</code> tag to return information about all fields in the textbase that have validation lists. If you specify any <code>&lt;KeyFields&gt;</code> that do not have a validation list, validation information for that field (if any) will be returned, but no list will appear. Note that if a thesaurus is used as a validation list, only preferred terms are included. To see non-preferred terms, submit the <code>validation_lists_thes</code> command instead.</td>
</tr>
<tr>
<td><code>validation_lists_thes</code></td>
<td>Returns detailed information on the field validation in a textbase, including non-preferred terms (if a thesaurus is used as a validation list). You can use <code>&lt;KeyFields&gt;</code> to return validation information for only the fields you want, or omit the <code>&lt;KeyFields&gt;</code> tag to return information about all fields in the textbase that have validation lists. If you specify any <code>&lt;KeyFields&gt;</code> that do not have a validation list, validation information for that field (if any) will be returned, but no list will appear.</td>
</tr>
<tr>
<td><code>term_index</code></td>
<td>Returns all existing term index entries for specified field(s). You can use <code>&lt;KeyFields&gt;</code> to return term index entries for only the fields you want, or omit the <code>&lt;KeyFields&gt;</code> tag to return information about all fields in the textbase. Note that <code>term_index</code> also returns validation information. <strong>Tip!</strong> Returning all index entries for a field that contains many entries</td>
</tr>
</tbody>
</table>
may take several minutes. If this is a concern, consider using `index_by_key` instead.

<table>
<thead>
<tr>
<th>word_index</th>
<th>Returns all existing word index entries for specified field(s). You can use <code>&lt;KeyFields&gt;</code> to return word index entries for only the fields you want, or omit the <code>&lt;KeyFields&gt;</code> tag to return information about all fields in the textbase. Note that <code>word_index</code> also returns validation information. <strong>Tip!</strong> Returning all index entries for a field that contains many entries may take several minutes. If this is a concern, consider using <code>index_by_key</code> instead.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>index_by_key</th>
<th>Returns index information for a single field in sets of 256 entries. Use this command when you know that a term or word index is very large. Note that you must specify only one field with the <code>&lt;KeyFields&gt;</code> element (or use its alternative, the <code>&lt;FN&gt;</code> element). If you specify more than one field, an error is returned.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>index_key_greatest</th>
<th>Returns the last set of 256 keys in an index. Use this command when you know that a term or word index is very large. Note that you must specify only one field with the <code>&lt;KeyFields&gt;</code> element (or use its alternative, the <code>&lt;FN&gt;</code> element). If you specify more than one field, an error is returned.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>tb_schema_query</th>
<th>Generates the output schema for the specified textbase. All fields in the textbase are included, except those hidden by a password.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>rf_schema_query</th>
<th>Generates the output schema for the specified report form. A query must be specified. Only fields specified in the <code>&lt;RF&gt;</code> form are included. If no <code>&lt;RF&gt;</code> is specified, the schema for the textbase default Report Window form is returned.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>tb_schema_output</th>
<th>Generates the output schema for results returned after a record has been modified using <code>insert</code>, <code>update</code>, <code>delete</code>, or <code>batch_delete</code>. Provides information about the textbase that you need to know when modifying records.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>schema_input</th>
<th>Generates the input schema.</th>
</tr>
</thead>
</table>

**Using the QUERY Command in XML Input**

Use the `query` command to search for records in a particular textbase and return record information in XML format.

Use the `<QY>` element to enclose the search syntax in Command Query format. Also, replace XML significant characters (for example, >, & ) with their encoded equivalents (for example, &gt;, &amp; ).

**Sample input for a query command:**

Note that the proper `namespace` must be included in the `<Query>` root element.

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>query</AC>
  <TN>vehicles</TN>
</Query>
```
<QY>Find Name =supra</QY>
<KeyFields>
<KeyField>Name</KeyField>
<KeyField>RetailPrice</KeyField>
<KeyField>DealerPrice</KeyField>
<KeyField>Features</KeyField>
</KeyFields>
</Query>

Sample output from a query command:
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="13.0"
xmlns:inm="http://www.inmagic.com/webpublisher/query">
 <inm:QY>Find Name =supra</inm:QY>
 <inm:Recordset AC="query" setCount="2">
  <inm:Record setEntry="0">
   <inm:Name>Supra</inm:Name>
   <inm:RetailPrice>266</inm:RetailPrice>
   <inm:DealerPrice>133</inm:DealerPrice>
   <inm:Features>Cleaning kit</inm:Features>
   <inm:Features>Independent suspension</inm:Features>
   <inm:Features>Interchangeable wheels</inm:Features>
   <inm:Features>Oil-filled shocks</inm:Features>
   <inm:Features>Tube tires</inm:Features>
   <inm:Features>Variable speed</inm:Features>
  </inm:Record>
  <inm:Record setEntry="1">
   <inm:Name>Supra</inm:Name>
   <inm:RetailPrice>428</inm:RetailPrice>
   <inm:DealerPrice>214</inm:DealerPrice>
   <inm:Features>Cleaning kit</inm:Features>
   <inm:Features>Independent suspension</inm:Features>
   <inm:Features>Interchangeable wheels</inm:Features>
   <inm:Features>Oil-filled shocks</inm:Features>
   <inm:Features>Tube tires</inm:Features>
   <inm:Features>Variable speed</inm:Features>
  </inm:Record>
 </inm:Recordset>
</inm:Results>

Sample output from a query that finds no records:
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="13.0"
xmlns:inm="http://www.inmagic.com/webpublisher/query">
 <inm:QY>Find name =volkswagen</inm:QY>
 <inm:Recordset AC="query" setCount="0">
  </inm:Recordset>
</inm:Results>
Notes about the query command

- Use the following elements to specify what is returned after a query:
  - Use the <KeyFields> element to list the fields you want returned. You can only specify fields from the primary textbase. If you need to return secondary fields, use the <RF> element instead.
  - Use the <SortFields> element to sort records. This element lets you specify the type of sort you want, including the ability to specify a primary sort field, alternate primary sort field, and subsort fields. If no explicit sort order is specified, and the textbase has a default sort order, that is the order in which records appear in the returned XML. You can only sort by fields in the primary textbase with the <SortFields> element. If you need to sort by a secondary textbase field, use the <RF> element instead.
  - There is an optional attribute for the <Query> root element called detail. This attribute specifies the amount of <Query> information that you want returned when you perform an action (<AC>) that searches the textbase (that is, query, or batch_delete). The detail attribute can have the following values:
    - "qy" returns only the search criteria submitted in the <QY> element. This is the default value.
    - "full" returns all XML input submitted. (That is, all XML contained in the <Query> root element.)
    - "off" turns off this feature.
  - The setCount and setEntry attributes are used to count the number of records in the set retrieved by a query. The setCount attribute appears within the parent <Recordset> element and shows the total number of records in the set; the setEntry attribute appears within each <Record> element and serves as a counter, starting with zero (that is, setEntry="0" for the first record retrieved).

Using the UPDATE Command in XML Input

Use the update command to update one or more records in a particular textbase.

When updating records, you can specify what the software should do when it finds records that match on the fields you specify in your input. (The software uses matching to uniquely identify the record to modify.)

Use the matchFound and matchNotFound attributes in the <AC> element.

Sample input for an update:

Note that the proper namespace must be included in the <Query> root element.

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>update</AC>
  <TN>vehicles</TN>
  <MatchFields>
    <MatchField>ProductNumber</MatchField>
  </MatchFields>
</Query>
```
<KeyFields>
  <KeyField>ProductNumber</KeyField>
</KeyFields>
</Recordset>

<Record>
  <ProductNumber>AP3673</ProductNumber>
  <RetailPrice>320</RetailPrice>
</Record>
</Recordset>
</Query>

**Tip!** The <AC> element in the input can contain the optional `validation` attribute, which lets you specify whether validation can be overridden and whether validation lists can be updated.

**Sample output from an update:**

```xml
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="13.0"
xmlns:inm="http://www.inmagic.com/webpublisher/records-processed">
  <inm:Records-Processed AC="update" succeeded="1" failed="0" amended="1">
    <inm:Record-Processed result="amended">
      <ProductNumber>AP3673</ProductNumber>
    </inm:Record-Processed>
  </inm:Records-Processed>
</inm:Results>
```

**Sample error output from an update:**

```xml
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="13.0"
xmlns:inm="http://www.inmagic.com/webpublisher/records-processed">
  <inm:Records-Processed AC="update" succeeded="0" failed="1" amended="0">
    <inm:Record-Processed result="rejected">
      <ProductNumber>AP3673</ProductNumber>
      <inm:Record-Error code="16458">Found multiple records in textbase that
          match the record in the incoming data.</inm:Record-Error>
    </inm:Record-Processed>
  </inm:Records-Processed>
</inm:Results>
```

**matchFound attribute**
The `matchFound` attribute specifies what the software should do if a match is found. It can have the following values:
• "replaceFields" to replace the information in the specified fields with the fields being submitted. This enables you to update or delete information in multiple fields without replacing the entire record. This is the default value.
• "rejectRecord" to reject the incoming record.
• "appendFields" to append the entries in the incoming record to the entries in those fields in the existing record.
• "replaceRecord" to replace the existing record with the incoming record.
• "deleteRecord" to delete the incoming record.

matchNotFound attribute
The matchNotFound attribute specifies what the software should do if a match is NOT found. It can have the following values:

• "acceptRecord" to accept the incoming record as a new record. This is the default value.
• "rejectRecord" to reject the incoming record.

Notes about the update command

• Whenever any records are processed, the <inm:Records-Processed> element contains the succeeded and failed attributes. This lets you know how many records were successfully processed and how many failed. The sum of the succeeded and failed attributes is equal to the total number of records submitted for processing. The <inm:Records-Processed> element may also include one of the following attributes: amended, replaced, or deleted. If the succeeded attribute is not equal to this attribute, then the difference is the number of new records that were added (because no match was found).

• One or more <inm:Record-Processed> elements are nested within the parent <inm:Records-Processed> element. Each <inm:Record-Processed> element represents an individual record. It will have a result attribute, which can have the following values:
  • "added" if the record was added as a new record (because no match was found).
  • "rejected" if the update failed to happen. To find out why a record was rejected, refer to the <inm:RecordError> element. One reason this may happen is if multiple textbase records matching the incoming record were found.
  • "amended" if the record matched an existing record and was updated (replaceFields or appendFields) with the new information you supplied.
  • "replaced" if the record matched an existing record and was replaced with the new information you supplied.
  • "deleted" if the record was deleted.

• You must specify one or more fields with the <MatchFields> element. If you do not, WebPublisher PRO will display an error message.

• You can specify up to five (5) MatchFields when doing an update.

• Use the <KeyFields> element to specify which fields you want included in the confirmation information returned in the XML output. If you omit the <KeyFields> element, no fields are included in the XML output.
Using the INSERT Command in XML Input

Use the `insert` command to add one or more records to a particular textbase. The `insert` command works like the `update` command. However, when submitting an `insert`, the software does not attempt to match records prior to adding the new record. That means you do not use the `<MatchFields>` element when doing an `insert`.

Sample input for an insert:

Note that the proper namespace must be included in the `<Query>` root element.

```xml
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>insert</AC>
  <TN>vehicles</TN>
  <KeyFields>
    <KeyField>ProductNumber</KeyField>
  </KeyFields>
  <Recordset>
    <Record>
      <ProductNumber>AP7707</ProductNumber>
      <Name>Mini Cooper</Name>
      <Features>Display case</Features>
      <Features>Glass</Features>
      <Colors>Chili Red</Colors>
      <Colors>Silk Green</Colors>
      <Type>Assembled Painted</Type>
      <Scale>1:10</Scale>
      <DateReleased>10/07/2002</DateReleased>
      <RetailPrice>430</RetailPrice>
      <ClubPrice>330</ClubPrice>
    </Record>
  </Recordset>
</Query>
```

Sample output from an insert:

```xml
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="13.00" xmlns:inm="http://www.inmagic.com/webpublisher/records-processed">
  <inm:Records-Processed AC="insert" succeeded="1" failed="0">
    <inm:Record-Processed result="added">
      <inm:ProductNumber>AP7707</inm:ProductNumber>
    </inm:Record-Processed>
  </inm:Records-Processed>
</inm:Results>
```

Sample error output from an insert:

```xml
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="13.00" xmlns:inm="http://www.inmagic.com/webpublisher/records-processed">
  <inm:Error code="16473" extra="">Unknown KeyField name: "ProductID".</inm:Error>
  <inm:Records-Processed AC="update" succeeded="0" failed="0">
  </inm:Records-Processed>
</inm:Results>
```
Notes about the insert command

- If your textbase has an Automatic ID field, *WebPublisher PRO* will not automatically populate this field when creating a new record with the `insert` command.

- To have the next available ID entered by the application, apply **Unique Entries Only** validation to the Automatic ID field in DB/TextWorks (using *Maintain>*Edit Textbase Structure). Then, when submitting an `insert`, supply a value for the Automatic ID field that already exists in the textbase and is lower than the ID you want to add. Because you are entering a value that already exists, *WebPublisher PRO* will automatically increment the field contents to the next available ID.

- Whenever any records are processed, the `<inm:Records-Processed>` element contains the **succeeded** and **failed** attributes. This lets you know how many records were successfully processed and how many failed. The sum of the **succeeded** and **failed** attributes is equal to the total number of records submitted for processing.

- One or more `<inm:Record-Processed>` elements are nested within the parent element. Each `<inm:Record-Processed>` element represents an individual record. It will have a **result** attribute, which can have the following values:
  - "**added**" if the record was added as a new record.
  - "**rejected**" if the insert failed. To find out why a record was rejected, refer to the `<inm:Record-Error>` element.

Using the DELETE Command in XML Input

Use the `delete` command to remove one or more records from a particular textbase.

Sample input for a `delete`:

Note that the proper namespace must be included in the `<Query> root element.

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>delete</AC>
  <TN>vehicles</TN>
  <MatchFields>
    <MatchField>ProductNumber</MatchField>
  </MatchFields>
  <KeyFields>
    <KeyField>ProductNumber</KeyField>
  </KeyFields>
  <Recordset>
    <Record>
      <ProductNumber>AP3673</ProductNumber>
    </Record>
    <Record>
      <ProductNumber>AP3674</ProductNumber>
    </Record>
  </Recordset>
</Query>
```

Sample output from a delete, including one error:
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="10.00"
xmlns:inm="http://www.inmagic.com/webpublisher/records-processed">
  <inm:Records-Processed AC="delete" succeeded="1" failed="1">
    <inm:Record-Processed result="deleted">
      <inm:ProductNumber>AP3673</inm:ProductNumber>
    </inm:Record-Processed>
    <inm:Record-Processed result="rejected">
      <inm:ProductNumber>AP3674</inm:ProductNumber>
      <inm:Record-Error code="16459">Found no matching record in textbase to
delete.</inm:Record-Error>
    </inm:Record-Processed>
  </inm:Records-Processed>
</inm:Results>

Notes about the delete command

- If the textbase has passwords, you can only delete records if the password you specify using the <ID> element has full access to all fields in the textbase.

- In the above output example, one record was deleted because it was found in the textbase as a unique record. The other record was not deleted because it was not found in the textbase. Because of this, the <inm:Records-Processed> element contains the attributes succeeded="1" failed="1".

  Note also that the <Record-Processed> element has a result attribute, which can have the following values:
  - "deleted" if the record was deleted.
  - "rejected" if the record was not deleted for the specified reason.

- When deleting records, only specify <KeyFields> that also appear in the <Record> element. Because the record is deleted, WebPublisher PRO cannot retrieve information from the textbase record, so it displays the <KeyFields> using the field content from the input record.

Using the BATCH_DELETE Command in XML Input

Use the batch_delete command to delete records from a textbase that satisfy a query.

Sample input for a batch_delete:

Note that the proper namespace must be included in the <Query> root element.

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>batch_delete</AC>
  <TN>vehicles</TN>
  <QY>Find ProductNumber =KU*</QY>
  <KeyFields>
    <KeyField>ProductNumber</KeyField>
  </KeyFields>
</Query>
```
Sample output from a batch_delete:

```xml
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="13.00"
xmlns:inm="http://www.inmagic.com/webpublisher/records-processed">
  <inm:QY>Find ProductNumber =KU*</inm:QY>
  <inm:Records-Processed AC="batch_delete" succeeded="8" failed="0">
    <inm:Record-Processed result="deleted">
      <inm:ProductNumber>KU1045</inm:ProductNumber>
    </inm:Record-Processed>
    <inm:Record-Processed result="deleted">
      <inm:ProductNumber>KU1087</inm:ProductNumber>
    </inm:Record-Processed>
    <inm:Record-Processed result="deleted">
      <inm:ProductNumber>KU4333</inm:ProductNumber>
    </inm:Record-Processed>
    <inm:Record-Processed result="deleted">
      <inm:ProductNumber>KU1655</inm:ProductNumber>
    </inm:Record-Processed>
    <inm:Record-Processed result="deleted">
      <inm:ProductNumber>KU2001</inm:ProductNumber>
    </inm:Record-Processed>
    <inm:Record-Processed result="deleted">
      <inm:ProductNumber>KU2023</inm:ProductNumber>
    </inm:Record-Processed>
    <inm:Record-Processed result="deleted">
      <inm:ProductNumber>KU2528</inm:ProductNumber>
    </inm:Record-Processed>
    <inm:Record-Processed result="deleted">
      <inm:ProductNumber>KU2909</inm:ProductNumber>
    </inm:Record-Processed>
  </inm:Records-Processed>
</inm:Results>
```

Sample output from a batch_delete that found no records to delete:

```xml
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="13.00"
xmlns:inm="http://www.inmagic.com/webpublisher/records-processed">
  <inm:QY>Find ProductNumber =KU*</inm:QY>
  <inm:Records-Processed AC="batch_delete" succeeded="0" failed="0">
  </inm:Records-Processed>
</inm:Results>
```
Notes about the batch_delete command

- If the textbase has passwords, you can only delete records if the password you specify using the <ID> element has full access to all fields in the textbase.

- For batch_delete, the result attribute within the <Record-Processed> element can have the following values, in addition to those listed above for delete:
  - "skipped-locked" if the record was not deleted because someone else was editing it.
  - "skipped-no-write-access" if the record was not deleted because you do not have write-access to it (for example, if the textbase has record-level security, and your password only grants you read access to that record).
  - "skipped-no-match" if the record was found, but was already deleted by the time batch_delete got to it.
  - "skipped-pending-deletion" if the record was found, but was already deleted using deferred indexing.

Using the BATCH_MODIFY Command in XML Input

Use the batch_modify command to make the same change to the contents of a specified field in all of the records from a textbase that satisfy a query.

Use attributes on the AC element to specify the action and entry to be modified. You can also specify what to do in the case of a validation failure, if the field being modified has the appropriate settings.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Possible Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>batchModAction</td>
<td>appendEntry</td>
</tr>
<tr>
<td></td>
<td>insertEntry</td>
</tr>
<tr>
<td></td>
<td>deleteEntry</td>
</tr>
<tr>
<td></td>
<td>substEntry (default)</td>
</tr>
<tr>
<td></td>
<td>substText</td>
</tr>
<tr>
<td>batchModEntry</td>
<td>first (default for all except substText)</td>
</tr>
<tr>
<td></td>
<td>last</td>
</tr>
<tr>
<td></td>
<td>all</td>
</tr>
<tr>
<td></td>
<td>matching (default for substText)</td>
</tr>
<tr>
<td>validation</td>
<td>update</td>
</tr>
<tr>
<td></td>
<td>override</td>
</tr>
<tr>
<td></td>
<td>none (default)</td>
</tr>
</tbody>
</table>

These additional elements are required:

- Use <QY> to specify the command query that will identify the records to be modified
- Use <FN> to identify the field to be modified

Depending on the action and entry specified, other elements are needed:
- Use `<EN>` to specify the new entry or text for all actions except `deleteEntry`
- Use `<OE>` to specify the old text or entry when specifying matching

**Sample input for a `batch_modify`:**
Note that the proper namespace must be included in the `<Query>` root element.

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC batchModAction="appendEntry" batchModEntry="last">batch_modify</AC>
  <TN>vehicles</TN>
  <QY>Find ProductNumber =KU10*</QY>
  <FN>Color</FN>
  <EN>purple</EN>
</Query>
```

**Sample output from a `batch_modify`:**

```xml
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="13.00"
   xmlns:inm="http://www.inmagic.com/webpublisher/records-processed" oex="ISO-8859-1">
  <inm:QY>Find ProductNumber =KU10*</inm:QY>
  <inm:Records-Processed AC="batch_modify" succeeded="2" failed="0">
    <inm:Record-Processed result="modified">
      <inm:Color>red</inm:Color>
      <inm:Color>purple</inm:Color>
    </inm:Record-Processed>
    <inm:Record-Processed result="modified">
      <inm:Color>white</inm:Color>
      <inm:Color>yellow</inm:Color>
      <inm:Color>purple</inm:Color>
    </inm:Record-Processed>
  </inm:Records-Processed>
</inm:Results>
```

**Notes about the `batch_modify` command**

- If the textbase has passwords, you can only modify records if the password you specify using the `<ID>` element has full access to the field you are modifying, and any Computed or Automatic fields that would be affected by the operation.

- For `batch_modify`, the `result` attribute within the `<Record-Processed>` element can have the following values, in addition to those listed above:
  - "skipped-locked" if the record was not changed because someone else was editing it.
Using the VALIDATION_LISTS Command in XML Input

Use the validation_lists command to return detailed information on the field validation in a textbase. You can specify the field(s) for which you want to see information by using the <FN> or <KeyFields> element, or you can omit the <FN> and <KeyFields> elements to return information for all fields in the textbase that have validation lists.

Sample input for the validation_lists command:

```xml
<?xml version="1.0"?
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>validation_lists</AC>
  <TN>Contractors</TN>
  <FN>State</FN>
</Query>
```

The above input is a request for validation information for the State field in the Contractors textbase.

Sample results from the input submitted above:

```xml
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="13.0" xmlns:inm="http://www.inmagic.com/webpublisher/query">
  <inm:ListSet AC="validation_lists">
    <inm:List fieldName="State" type="Text" term="1" word="1" validation="1" useList="1" useThesaurus="1" required="0" unique="0" single="1" min="" max="" mask="" mayOverride="0" mayUpdate="0">
      <inm:Entries>
        <inm:Entry>CA</inm:Entry>
        <inm:Entry>MA</inm:Entry>
      </inm:Entries>
    </inm:List>
  </inm:ListSet>
</inm:Results>
```

The above results show the following about the State field in the Contractors textbase:

- It is a Text field (type="Text").
- It has a Term and Word index (term="1" and word="1")
- It has validation applied (validation="1").
- It has a validation list (useList="1") and that validation list is a thesaurus used as a validation list (useThesaurus="1").
- It is not a required field (required="0"), nor does it require unique entries only (unique="0").
- It permits a single entry only (single="1").
- It does not have a minimum or maximum value (min="" and max=""), nor does it have a mask (mask="").
- Users may not override content validation (mayOverride="0"), nor may they update (mayUpdate="0") the validation list.
- It has the following entries: MA and CA.

**Using the VALIDATION_LISTS_THES Command in XML Input**

Use the `validation_lists_thes` command to return detailed information on the field validation in a textbase, including non-preferred (UF) terms if the field uses a thesaurus as a validation list. You can specify the field(s) for which you want to see information by using the `<FN>` or `<KeyFields>` element, or you can omit the `<FN>` and `<KeyFields>` elements to return information for all fields in the textbase that have a validation list.

**Note:** You can use the `validation_lists_thes` command on fields that do not use a thesaurus as a validation list. It will return the same information as the `validation_lists` command. The `validation_lists_thes` command is useful when you do not know whether a field will have a thesaurus as a validation list, but, if it does, you want non-preferred terms included in the output.

**Sample input for the validation_lists_thes command:**

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>validation_lists_thes</AC>
  <TN>Staffing</TN>
  <FN>Position</FN>
</Query>
```

The above input is a request for validation information for the *Position* field in the *Staffing* textbase.

**Sample results from the input submitted above:**

```xml
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="10.0" xmlns:inm="http://www.inmagic.com/webpublisher/query">
  <inm:ListSet AC="validation_lists_thes">
    <inm:List fieldName="Position" type="Text" term="1" word="1" validation="1" useList="1" useThesaurus="1" required="0" unique="0" single="1" min="" max="" mask="" mayOverride="0" mayUpdate="0">
      <inm:Entries>
        <inm:Entry use="attorney">lawyer</inm:Entry>
        <inm:Entry use="attorney">attorney</inm:Entry>
      </inm:Entries>
    </inm:List>
  </inm:ListSet>
</inm:Results>
```
Because the validation_lists_thes command includes non-preferred terms, the use attribute shows the preferred (USE) term attorney for the entry lawyer:

<inm:Entry use="attorney">lawyer</inm:Entry>

**Using the INDEX_BY_KEY Command in XML Input**

When you use the index_by_key command, index information for a single field is returned in sets of 256 entries. This command is useful when you have a textbase with many records and do not want to wait for all term or word entries in field to be returned.

When submitting the index_by_key command, you can use the <IX> element to specify whether you want a word, term, or validation list returned.

For a word list, use <IX>0</IX>
For a term list, use <IX>1</IX>. This is the default.
For a validation list, use <IX>2</IX>.

You can also use the <EN> element to return a specific part of the index. The <EN> element lets you specify the word, term, or validation item that you want used as the starting point of the index list to be returned. If <EN> is omitted, the first 256 keys are returned.

To return the next batch of 256 index entries, specify the last entry of the present batch with the <EN> element.

For example, in the following code, the word index display will start with the author Hawthorne.

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <TN>sample</TN>
  <AC>index_by_key</AC>
  <KeyFields>
    <KeyField>Author</KeyField>
  </KeyFields>
  <IX>0</IX>
  <EN>Hawthorne</EN>
</Query>
```

**Attributes**

**Using Validation with XML Input**

**Note:** This topic applies to XML submitted to WebPublisher PRO.

If a field entry in the incoming record is not in the validation list for that field or it violates range/mask validation, you can add the entry to the field in the record with or without adding it to the validation list.

To do this, use the validation attribute in the <AC> element.

**Note:** The field must have the appropriate settings specified in the textbase structure (for example, on the Edit Fields dialog box, Validation tab, select the User May Override Content...
Validation and User May Update Validation List with Override Value check boxes). When doing an update, the password specified (if any) must allow the editing of validation lists.

The validation attribute can have the following values:

- "none" to reject the record if the entry violates validation. This is the default value.
- "override" to accept the entry, but not add it to the validation list.
- "update" to accept the entry and add it to the validation list.

In the following example, the validation attribute is set to "override":

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC validation="override" matchFound="appendFields">update</AC>
  <TN>vehicles</TN>
  <MatchFields>
    <MatchField>ProductNumber</MatchField>
  </MatchFields>
  <Recordset>
    <Record>
      <ProductNumber>AP3673</ProductNumber>
      <Features>Working radio</Features>
    </Record>
  </Recordset>
</Query>
```

If you want to update the validation list to include the entry, set the validation attribute to "update". In the sample code above, you would change:

```xml
<AC validation="override" matchFound="appendFields">update</AC>
```

```xml
<AC validation="update" matchFound="appendFields">update</AC>
```

Recognizing Validation Settings in Output

When submitting a tb_field_info or validation_lists command in the <AC> element, validation information is returned using the mayOverride and mayUpdate attributes.

The mayOverride attribute can have the following values:

- "1" to allow users to override the validation list or mask/range validation for that field.
- "0" to restrict users from overriding the content validation (that is, validation list, range, or mask) for that field. Users will also be prohibited from updating the validation list, since they must be able to override in order to update.

The mayUpdate attribute can have the following values:

- "1" to allow users to update the validation list (and override the list, since the list cannot be updated without first being overridden). Note that if passwords are in use, the password must also permit editing validation lists.
- "0" to restrict the user from updating the validation list for that field.

Stripping Leading Spaces (when adding or editing records over the Web)
When doing an **insert** or **update**, you can specify whether *WebPublisher PRO* strips leading spaces. Leading spaces are spaces in a record at the beginning of a field entry or after a carriage return.

To specify whether leading spaces are stripped, use the **trim** attribute in the `<AC>` element. The **trim** attribute can have the following values:

- "y" to strip leading spaces.
- "n" to keep leading spaces intact. This is the default value.

For example:

```
<AC trim="y">insert</AC>
```

**Note:** The **trim** attribute is only necessary if you use CDATA to preserve white space (spaces, line breaks) at the beginning/end of field content. Using CDATA is recommended, especially if your data is likely to include characters significant to XML (for example, an ampersand or less than sign).

**XML Output**

**MatchFields and KeyFields**

The `<MatchFields>` and `<KeyFields>` elements used with *WebPublisher PRO* have distinct and specific functions. However, the same set of fields is often appropriate for both `<MatchFields>` and `<KeyFields>`, serving as record identifiers.

**MatchFields**

Use the `<MatchFields>` element to specify one or more fields on which you want *WebPublisher PRO* to match when modifying or deleting records (using the **update** or **delete** command).

For example, when doing an **update**, *WebPublisher PRO* looks for records that match based on the field(s) you specify. If a match is found, the record information is updated according to the value specified for the **matchFound** attribute. If a match is not found, the record is treated according to the **matchNotFound** attribute (the default is to add it as a new record).

When updating or deleting records, you must specify one or more `<MatchField>` elements within the `<MatchFields>` parent element. If you do not, the software will return an error.

**KeyFields**

Use the `<KeyFields>` element to specify the fields you want returned after an action is submitted to *WebPublisher PRO*.

Nested within the parent `<KeyFields>` element are one or more `<KeyField>` child elements, each representing a field name. To include a secondary textbase field when specifying fields to be returned by a query, use a period instead of an @ character. For example, use `<KeyField>Address.Borrower</KeyField>` to include the `Address@Borrower` field.

Fields are returned in the order in which the `<KeyField>` elements were specified in the XML input.

If a field listed as a `<KeyField>` has multiple entries, all of the entries will be returned.

**Note:** If you use both the `<KeyFields>` and `<RF>` elements, the software uses the `<KeyFields>` element to decide which fields to return and the `<RF>` element for the sort.
**An Alternative to KeyFields**

As an alternative to using the `<KeyFields>` element, you can use the `<FN>` element. This element can be useful when you only need to specify one field and do not want to use the `<KeyFields>` and `<KeyField>` elements (for example, when submitting the `index_by_key` command, which permits only one field to be specified). For example:

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>index_by_key</AC>
  <TN>vehicles</TN>
  <FN>Name</FN>
</Query>
```

**Tip!** You can specify multiple fields with the `<FN>` element by separating the field names with a pipe delimiter character (|). For example, in the following line of code, three fields—`ID`, `Name`, and `State`—are specified in the `<FN>` tag:

`<FN>ID|Name|State</FN>`

**Note:** The `<FN>` element can also be used to **find out the total number or records that will be retrieved by a query**, without actually retrieving and displaying the records. In this case, the `<FN>` element is not an alternative to the `<KeyFields>` element.

**Sorting Records Returned by an XML Query**

When submitting XML to WebPublisher PRO, you can use the `<SortFields>` element to specify how to sort the records returned (if you do not want to use the textbase default sort).

To specify sort order, use the `sort` attribute and set it equal to "specify". This tells the software that your XML input will contain the fields by which you want to sort.

Nested within the parent `<SortFields>` element are one or more `<SortField>` elements. Use the `<SortField>` elements to specify the sort order. The field listed first is the primary sort field; subsequent fields are subsort fields. You can have up to four (4) subsort fields. You can also specify what you want the software to do if the primary sort field is empty.

Note the following:

- XML does not support the Omit Those Records option on the Primary Sort Fields dialog box.
- XML does support Alternate Primary Sort Fields, which you specify by using `type="alternate"` instead of `type="sort"`.

For example, the following sample code sorts records first by the `ClientState` field (primary sort field), then by the `ID` field (subsort field):

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>query</AC>
  <TN>sample</TN>
  <QY>Find id =*</QY>
  <KeyFields>
```
Note: To sort records by a field in a secondary textbase, use a period instead of an @ character. For example, use `<SortField>Address.Borrower</SortField>` to include the `Address@Borrower` field in the sort specification.

**Specifying an Alternate Primary Sort Field on the Web**

When defining a sort in XML input submitted to *WebPublisher PRO*, you can specify what should occur if the primary sort field is empty. The primary sort field is the first field listed with a `<SortField>` element.

To specify an alternate primary field, include a `<SortField>` element with the `type` attribute set to "alternate".

For example, in the following sample code, the `Author` field is the primary sort field and the `Title` field is the alternate primary sort field that will be used if the `Author` field is empty for a particular record. The `Publisher` field is a subsort field.

```xml
<?xml version="1.0"?>
<Query detail="qy" xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>query</AC>
  <TN>sample</TN>
  <QY>Find id=*</QY>
  <KeyFields>
    <KeyField>Title</KeyField>
    <KeyField>Author</KeyField>
    <KeyField>Summary</KeyField>
    <KeyField>PublicationDate</KeyField>
  </KeyFields>
  <SortFields sort="specify">
    <SortField>Author</SortField>
    <SortField type="alternate">Title</SortField>
    <SortField>Publisher</SortField>
  </SortFields>
</Query>
```

Note: Alternate primary sort fields are only recognized and used if a primary sort field is defined. If a primary sort field is not defined in the input, then any alternate sort fields are ignored.

Related Topic

*Sorting Records in Reverse Order on the Web*
Sorting Records in Reverse Order on the Web

When defining a sort in XML input submitted to WebPublisher PRO, you can specify that results be sorted in reverse order.

To do this, use the reverse attribute in the <SortField> element. The reverse attribute can have the following values:

- "y" to sort in reverse order.
- "n" to sort in ascending order.

Important! As with sorting on the desktop, alternate primary sort fields use the same reverse attribute value as the primary sort field.

 Returning Records in Sets (XML)

You can specify that the software return the results of XML queries in sets. That is, you can specify the number of record you want per page and specify which page you want displayed (for example, you want records in sets of 10, but want to display the fourth set of 10 records).

To do this, use the following elements when submitting a query in XML.

- Use the <MR> element to specify the number of records per page (that is, number of records returned in each set of records).
- Use the <SP> element to specify which page you want.

In the following XML input example, the set size is 10 records per page (<MR>10</MR>) and the page that will be returned is the third one (<SP>3</SP>). That means, the third set of 10 records will be returned in XML after your search.

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>query</AC>
  <TN>temps</TN>
  <MR>10</MR>
  <SP>3</SP>
  <QY>Find Skills =accounting</QY>
  <KeyFields>
    <KeyField>Name</KeyField>
    <KeyField>EMail</KeyField>
  </KeyFields>
</Query>
```

To see other sets of records, change the value of the <SP> element. Note that <SP>1</SP> returns the first set of records.

The XML returned from a query will show the total number of records and the total number of records displayed on the page.

The following attributes, which appear in the <Recordset> element of the XML output, provide useful information:

- "queryCount" shows the total number of records returned.

  Note: The value of the queryCount attribute may be smaller than the number of records that meet the search criteria if XML output is limited by the <TX> element, TX= in the query screen, or TotalRecordsforXML= specified in the DBTWPUB.INI (or ICSWeb.INI) file.
• "setCount" shows the total number of records returned on this page.
• "page" shows the current page number. Note that a value of zero indicates an error with the search.
• "pageCount" shows the total number of pages available. Note that a value of zero indicates an error with the query.

If the values of the queryCount and setCount attributes are not equal, then it means that the <MR> element was used to specify the maximum number of records per page.

The following example shows the output from a query which had <MR>2</MR> specified in its input. It shows that 16 records match the criteria that was submitted (queryCount="16"), but that the page only contains two records (setCount="2"). Other attributes in the results show that the first page of results is being shown (page="1") and that there are eight total pages (pageCount="8").

<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="10.0" xmlns:inm="http://www.inmagic.com/webpublisher/query" oex="ISO-8859-1">
  <inm:QY>Find Color =red</inm:QY>
  <inm:Recordset AC="query" sn="AUTO4629" se="380" queryCount="16" page="1" pageCount="8" setCount="2">
    <inm:Record setEntry="0">
      <inm:Name>Supra</inm:Name>
      <inm:RetailPrice>266</inm:RetailPrice>
    </inm:Record>
    <inm:Record setEntry="1">
      <inm:Name>Supra</inm:Name>
      <inm:RetailPrice>428</inm:RetailPrice>
    </inm:Record>
  </inm:Recordset>
</inm:Results>

Returning Only the Record Count for a Web Query (XML)

When submitting an XML query, you can find out the total number of records a search will return, without actually returning all of the records.

To do this, submit <FN>/</FN> in the query input. This returns the total number of records that would be returned. Note, however, that this value may be limited by the total number of records setting.

Note: The <FN> element can also be used an alternative to the <KeyFields> element.

The following example is a search for all orders entered on April 14, 2004:

<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>query</AC>
  <TN>orders</TN>
  <FN/></FN>
  <QY>Find DateEntered =April 14 2010</QY>
</Query>
In the results of the above query, the **queryCount** attribute shows the number of records that meet the criteria, but no records are actually returned:

```xml
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<inm:Results productTitle="Inmagic WebPublisher PRO" productVersion="13.00"
xmlns:inm="http://www.inmagic.com/webpublisher/query">
  <inm:QY>Find DateEntered =April 14 2010</inm:QY>
  <inm:Recordset AC="query" sn="" se="0" queryCount="214" page="1"
pageCount="22" setCount="10">
    </inm:Recordset>
</inm:Results>
```

### Troubleshooting WebPublisher PRO

Before you make your textbases available on the Web, test them from a remote computer running a browser (not from the server itself) to be sure that everything works the way you intended. The best way to test is to run through a sample search, retrieval, and display. If you created a Web edit form for adding, editing, and deleting records from a browser, try adding a few sample records, editing a few others, and deleting some.

**Note:** Use a Web browser to access the HTML query or edit screen (for example, http://company.com/query.htm). Do not open it by double-clicking the file name in Windows Explorer.

Here are the main things to check for when testing:

- Are you using compatible versions of DB/TextWorks and WebPublisher PRO?
- Have you handed off all the necessary files to the Webmaster and coordinated issues about initialization files and textbase and **image locations**?
- Do all your search screens appear as you intended? Try several queries to see if you retrieve the intended records.
- Do all images appear correctly? Check logos, backgrounds, and textbase record images on forms, query screens, and menu screens.
- Do all links go to the correct destinations? Verify that there is a link on your Web site that takes you to the search screen. Check all links on query screens, menu screens, and reports.
- Does every report include an expand record link, if appropriate? Is the link text available for every record?
- Do all your reports look the way you intended? Try several different searches, to obtain different record sets. Select each Report form and Display form in the browser. Different record sets, such as records that lack information in a field, may affect appearance.
- If your Web query screen was designed to search multiple textbases, try a search that should retrieve records in all of the textbases. Try using each query box and click on any "See Also" search links to verify that you have mapped all the necessary fields. Verify that the Initial Report Forms specified for the lead and search textbases do not include any **New record**, **Edit record**, or **Delete record** links.
- If you made changes to the supplied help pages (WEB*.HTM), click the **Help** button on the query screen to be sure you access the changed help pages. If you renamed the
pages, test the inter-page links. For example, WEB_BEGIN.HTM includes links to WEB_MSG.HTM.

- Did you choose the correct options when saving forms? For each form that you will use on the Web, choose Save Form As in the Form Designer, then select these options:
  
  **Save In.** Select Textbase File (Public) to ensure that the form is saved as part of the textbase.

  **Use For.** Select Report Window to cause a form to appear in the reports drop-down list in the Web browser. Select Display Window to cause a form to appear in the expanded display drop-down list in the Web browser (for single-record display). Select Web to ensure that the form appears in the specified drop-down list in the Web browser. If you are saving an edit form for use on the Web, select Edit Window.

- If you changed message or button text by creating and connecting a MYMSG.INI file, verify that your modifications appear when and where you expect them.

- If you have specified that expanded records open in a separate browser window and/or you specified that a New Search button appears on screens, verify that they work as you intended. Note that these features are specified by adding parameters to DBTWPub.INI (or ICSWeb.INI).

- If your textbase has Link fields, verify that you can search for and display information from secondary textbases.

- If your textbase has passwords, verify that the query screen includes a password box. If the textbase has a Silent password, verify that it hides the fields or records you expect it to hide.

- If your screens and forms include any New record, Edit record, or Delete record links, verify that you have specified a unique combination of XML Match Fields in the textbase structure (choose Maintain>Edit Textbase Structure>XML Match Fields). If you do not have match fields specified properly, records you edit may be added to the textbase as new records, instead of being modified.

- Do you want all of your pages to have a default page and/or box background color? If so, specify the colors you want in DB/TextWorks (choose Tools>Options>Display>More Defaults>Colors). Then exit DB/TextWorks and copy the [FormSettings] section of the INMAGIC.INI file in your user file path to the INMAGIC.INI file in your WebPublisher installation folder. (Note that if you do not already have an INMAGIC.INI with settings you want to retain in your WebPublisher installation folder, you can copy the entire file.)

- Consider doing a usability test to be sure that your search screens and forms are clear and intuitive. Try having an uninitiated user go to your home page and see if that person can figure out what to do: how to jump to a search screen, which fields to query, what to search for, and what syntax to use.
WebPublisher PRO Configuration

Configuring Inmagic Browse

InmagicBrowse is an application that supports the Browse Choices feature in WebPublisher PRO. In query screens, it supports browsing through words and terms in the index for a field. In edit screens, it supports browsing through terms in a validation list associated with a field, or the associated field for a Link field.

InmagicBrowse is installed when WebPublisher PRO is installed.

You can configure the following for InmagicBrowse through the Web.CONFIG file, which is located in the InmagicBrowse subfolder of the main WebPublisher PRO installation folder:

- Leading article character (default is a non-breaking space, Alt+160)
- Number of keys displayed
- Whether terms wrap
- Button captions

To configure InmagicBrowse

1. Open the Web.CONFIG file in a text editor (for example, Microsoft Notepad).
2. In the <appSettings> section, depending on what you want to do, make the applicable change(s):
   - To change the leading article character, change the value for the key="SpaceSubst" parameter. The default value (\xA0) is a non-breaking space, which is presented as a hex value to clearly define the character as such. You do not have to enter values in hex format.

   The leading article character is the character used to replace the first space in added terms so that terms that, after having punctuation characters removed prior to being indexed, now appear to begin with a leading article. (For example, "A. Lincoln" appears in the index list as "A Lincoln" and a search for "A Lincoln" will fail, as it will actually search for "Lincoln"). Typically, you will not have to change this value. An example of when you will want to change it if your query screen has an .ASPX extension. Microsoft Internet Explorer loads .ASPX pages using UTF-8 encoding, which will cause problems with the default character. If you do change the default, do not use a plain space. We suggest you use a punctuation character, such as a hyphen, period, or underscore.

   - To configure the number of keys displayed, change the value for the key="NumKeys" parameter. For example, enter a higher number if you want to show more keys. The maximum value for WebPublisher PRO is 255. (Higher values revert to 10 entries.)

   - To configure whether terms wrap or not, change the value for the key="WrapKeys" parameter. If you enter a value of false, text wider than the column will be truncated in the list display. The entire term will still be pasted.

   - To configure button caption(s), change the value of the appropriate button key: AddButtonCaption, ReplaceButtonCaption, PrevButtonCaption, or NextButtonCaption.
3. Save your changes.

**To change the width of the hits column**

Create a file named MyIndex_Browse.css, with the following style defined. Specify the desired width. This example shows 50 pixels.

```css
.hitColWidth
{
  width: 50px;
}
```

To change the text on the Browse Choices button on a query screen

To change the text for the **Browse Choices** button, use the `BrowseChoicesText` parameter in the [WebPublisher] section of the INMAGIC.INI file.

**DBTWPub.INI (or ICSWeb.INI)**

The `DBTWPub.INI` file (or `ICSWeb.INI` if you are using the SQL platform) contains settings that are specific to WebPublisher PRO. To specify various settings, add a parameter to the file or edit an existing parameter.

**Note for SQL platform:** If you are using the SQL version of WebPublisher, some section names in `ICSWeb.INI` differ between versions. "WebPublisher" in non-SQL becomes "Web" in SQL, e.g., [WebPublisher Defaults] vs. [Web Defaults], and [WebPublisher] vs. [ICSWeb].

This file is required for the Web component to run. Write access is recommended for this file; though it is not required for the software to run. This file controls:

- Where the Web component looks for **textbases** and **images** used in reports, single-record displays, and on edit and delete pages.
- **How many temporary query sets are retained.**
- **Whether Cascading Style Sheets (CSS) are used** to determine how report/display/edit pages are formatted.
- Whether WebPublisher PRO messages are **translated/modified**.
- **Whether each page has a New Search button** next to the **Next/Previous** buttons.
- **Whether expand record links and edit/delete pages open in a new Web browser window.**
- **ADA Compliance settings.**
- The **total number of records** WebPublisher PRO displays for each search.
- **Whether severe error messages are logged.**
- **Default Includes** in output.
- XML settings including how to **enable or disable XML for textbases** and how to **specify the total number of records displayed on the Web.**
- **Whether navigational buttons appear** on Web pages.
- **Whether exploded sorts are supported on the Web.**
- **Whether hit navigation is enabled for records displayed on the Web.**
- **Whether query logging is turned on for queries performed over the Web.**
Specifying Where WebPublisher PRO Looks for Images

The following sections in DBTWPub.INI control where WebPublisher PRO looks for images.

[WebPublisher Defaults]

Note for SQL platform: Use the [Web Defaults] section of the ICSWeb.INI file. The virtual directory is ics-wpd.

Two parameters in the [WebPublisher Defaults] section specify where WebPublisher PRO looks for logos/background image files and images referenced from a textbase record.

- Default-Logo-Location= the default location for logo and background image files.
- Default-Image-Location= the default location for images referenced from textbase records.

These parameters are automatically set equal to the locations specified during the installation of WebPublisher PRO. If you accepted the defaults during the install process, both parameters are set equal to /dbtw-wpd/images/ (or /ics-wpd/images/ for the SQL platform).

This is the default location where the Web component looks for image files for all textbases. If you store your images in different folders, you must change the parameters.

Example:
In this example, the fixed images used for logos and form/screen backgrounds are stored in the IMAGES subfolder and the record images referenced in textbase records are stored in the PICTURES subfolder. (Both are relative to the installation folder, and thus the DBTW-WPD virtual directory to which it is mapped).

[WebPublisher Defaults]
Default-Textbase-Paths=c:\Program Files\inmagic\webpubpro\textbase\nDefault-Logo-Location=/dbtw-wpd/images/
Default-Image-Location=/dbtw-wpd/pictures/

If you are storing images in multiple locations (for example, if you have different image locations for each textbase), use the [WebPublisher Logo Locations] and [WebPublisher Image Locations] sections.

[WebPublisher Logo Locations]

Note for SQL platform: Use the [Web Logo Locations] section of the ICSWeb.INI file.

If you are not storing all of your fixed images (logos and background images) in the default logo location specified in the [WebPublisher Defaults] section (explained above), you can specify image locations by textbase.

Use the [WebPublisher Logo Locations] section of the DBTWPub.INI file to specify the location of fixed images for each textbase. This provides the text WebPublisher PRO should use to construct the URL for fixed images for specific textbases.

Note: The Web component looks for the textbase name in this section and, if it is not found, uses the default logo location specified in the [WebPublisher Defaults] section.

Example:
The following example specifies the location of fixed images for the Vacation textbase:
[WebPublisher Image Locations]

Note for SQL platform: Use the [Web Image Locations] section of the ICSWeb.INI file. The virtual directory is ics-wpd.

If you are not storing all of your record images in the default image location specified in the [WebPublisher Defaults] section (explained above), you can specify image locations by textbase.

To do this, use the [WebPublisher Image Locations] section of the DBTWPub.INI file to specify the location of record images for each textbase. This provides the text WebPublisher PRO should use to construct the URL for record images referenced in specific textbases.

Note: The software looks for the textbase name in this section and, if it is not found, uses the default image location specified in the [WebPublisher Defaults] section.

Example:
The following example specifies the default location of record images for the Cars and Vacation textbases:

[WebPublisher Image Locations]
cars=/dbtw-wpd/sample/
vacation=http://mydomain.org/me/photos/

Specifying Where WebPublisher PRO Looks for Textbases

When publishing textbases on the Web, you can use the DBTWPub.INI (or ICSWeb.INI if you are using the SQL platform) to specify the location of any textbase that does not reside in the default textbase path(s) specified during the installation of WebPublisher PRO. This default path (or paths, if you specified multiple locations during installation) is the location in which the software will look for textbases, if no other path is specified. The default textbase path appears in the [WebPublisher Defaults] section of DBTWPub.INI (or the [Web Defaults] section of the ICSWeb.INI file for the SQL platform), as shown in the following example:

[WebPublisher Defaults]
Default-Textbase-Paths=c:\Program Files\inmagic\webpubpro\textbase\n
For textbases that are in a different location, you can add each textbase and its path to the [WebPublisher Textbase Paths] section. The following example shows the path for the Cars and Catalog textbases.

[WebPublisher Textbase Paths]
cars=c:\Program Files\inmagic\webpubpro\sample\ncatalog=c:\data\library\n
Note for SQL platform: The SQL platform uses ICSWeb.INI instead of DBTWPub.INI, and the section names use "Web" instead of "WebPublisher". For example, [WebPublisher Defaults] vs. [Web Defaults], and [WebPublisher Textbase Paths] vs.[Web Textbase Paths].

How this information is used

When a user clicks the Submit Query button, the following occurs:

1. WebPublisher PRO checks the [WebPublisher Textbase Paths] section of the DBTWPub.INI file for the textbase name, and looks in the specified location.
2. If the textbase name does not appear in the [WebPublisher Textbase Paths] section or is not found in the specified location, the software looks in the locations specified in the Default-Textbase-Paths= line in the [WebPublisher Defaults] section.

3. If the textbase is not found in either location, the software displays a page giving the end user the option to do a recursive subfolder search on the folders listed in the Default-Textbase-Paths= line.

4. If the Web component finds the textbase in either step 2 or step 3, it writes the location to the [WebPublisher Textbase Paths] section, so the search will not be necessary in the future.

Any account that WebPublisher PRO uses must have Read access to the folders where textbases are located in order to search them. In order for the textbase search feature to work properly, this account must also have Full Control access to DBTWPub.INI and at least Read access to all folders specified in the Default-Textbase-Paths= line. (Note that if you plan to allow users to modify and/or delete textbase information over the Web, the account used by the Web component must have Full Control access to any folders containing these textbases.)

Specifying the Maximum Number of Query Sets

Records returned by a WebPublisher PRO query are called a set. A set is generated for each successful query. A set provides the Internet or intranet user with the ability to view successive subsets of the records retrieved without having to re-execute the query.

Query sets are stored temporarily on the HTTP server in /DBTW-WPD/QSETS (or /ICS-WPD/QSETS for the SQL platform), under automatically generated names. Two files track query sets: .WPD and .WPO. These files have the same name as the textbase. For example, a textbase called Sales uses SALES.WPD and SALES.WPO.

You can specify the maximum number of sets to retain. When the maximum is reached, slots will be re-used as needed, beginning with the oldest.

The default value is 2000. Specifying fewer than this number may use less disk space, but may cause sets to be re-used (thus removed) before users are finished with them. This can result in users getting messages such as Your current query has expired. Perform the search again. when they display records or change forms.

To change the value, edit the WebSetMax parameter in the [WebPublisher] section of the DBTWPub.INI file (or the [Web] section of the ICSWeb.INI file, if you are using the SQL platform). This file is located in the WebPublisher PRO installation folder on the HTTP server.

```
[WebPublisher]
WebSetMax=2000
```

Note: You must you must restart IIS (the World Wide Web Publishing Service) any time you make any changes to this parameter in the .INI file. You can use the Services option through the Windows Computer Management window to restart IIS.

WebPublisher PRO Form layout

By default, WebPublisher uses Cascading Style Sheets (CSS) and absolute positioning, so report, display, and edit forms look as much as possible as they would look in DB/TextWorks.

WebPublisher detects whether the browser supports Cascading Style Sheets. If not, WebPublisher uses simple HTML (boxes will be left-justified, box labels will appear on top rather than to the left, and so forth).
Forms that contain Raw HTML or inline images are incompatible with absolute positioning. Forms containing these elements will have overlapping text unless very carefully designed. Therefore, simple HTML is used for this type of form unless you explicitly set WebCSSOpt=2 in your DBTWPUB.INI file (or ICSWEB.INI if you are using the SQL version of WebPublisher).

**Note:** DB/TextWorks tabular forms do not use absolute positioning, so this issue does not affect them.

You can use picture boxes in place of inline images to retain CSS formatting. The **Image size** option specified using **Box Properties>Position** in the Form Designer is used. In order for the image sizing to work properly, the images must reside either in the textbase folder (for example, C:\CATALOG) or the folder specified in the Image field in the record (for example, C:\IMAGES\COYOTE.JPG).

To control whether the site uses CSS, set the WebCSSOpt= parameter in the DBTWPUB.INI file (or ICSWEB.INI) to one of the following:

- 0 = do not use CSS
- 1 = the default behavior
- 2 = use CSS regardless of whether forms contain Raw HTML or inline images

**Note:** The WebCSSOpt= parameter affects all forms and all textbases, unless you override it using the CS= parameter in an individual query screen.

**Example for DBTWPUB.INI (non-SQL platform)**

```
[WebPublisher]
WebCSSOpt=0
```

**Example for ICSWEB.INI (SQL platform)**

```
[Web]
WebCSSOpt=0
```

**Using Multiple Languages with WebPublisher PRO**

WebPublisher PRO supports the ability to specify different sets of messages for different query, edit, or menu screens. One common use for this feature is for bi-lingual or multi-lingual sites. You can have several query screens, each for a different language.

**Tip!** For more information about formatting messages, see Translating or Modifying Messages and Buttons on the Web.

To specify which message file to use, add the MF= parameter to your exported query, edit, or menu screen.

**For menu screens**, add the MF= parameter to the dbtw_m_link() call. You must make this change after exporting the menu screen to HTML. Example:

```
dbtw_m_link( "catalog",
  "myset","RF=repform&DF=dispform&MR=15&DL=0&RL=1&NP=2&MF=mymsg.ini", "My Set" );
```

**For exported query or edit screens**, add a line to the bottom of the page based on this example:

```
<input name="MF" type="hidden" value="mymsg.ini">
```
If you add this line using a text box in the Query Screen Designer or Form Designer, be sure to treat the box contents as **Raw HTML**. Alternatively, you can simply edit the query or edit screen after exporting it to HTML to add this line.

If you also want to change the *No query criteria specified.* message, modify the `dbtw_initialize()` line in the exported HTML query screen file to specify the message file name. You need to type the message file name between the third set of quotes. Example:

```plaintext
dbtw_initialize("", ",", "mymsg.ini");
```

**Example**

The CARSQMSG.HTM query screen in the SAMPLE subfolder of the *WebPublisher PRO* installation folder changes two of the error messages that can be returned.

- The *No records found by latest query.* message has been changed to: *Your search terms were not found. Press Back to return to the query screen and reformulate your search.* To see this new message, type *not there* in the **Model Type** box and click the **Submit Query** button.

- The *No query criteria specified.* message has been changed to: *Please type something in at least one of the query boxes.* To see this new message, click the **Submit Query** button without typing anything in any of the boxes.

**Translating or Modifying Messages and Buttons on the Web**

You can change the text of many of the messages and buttons that WebPublisher PRO displays. This allows you to translate them into another language or make them more specific to your environment.

You have two options when changing messages:

- Use the same set of messages for all exported query, edit, and menu screens (see below).

- Specify which set of messages to use with each query, edit, or menu screen (see Using Multiple Languages with *WebPublisher PRO*).

When you install WebPublisher PRO, a *WPEngMsg.INI* file is installed in the root of the installation folder. *WPEngMsg.INI* lists all of the *WebPublisher PRO* messages that can be copied to another INI file and modified or translated. It is located in the *WebPublisher PRO* installation folder.

We recommend leaving the original file intact and making a copy under a new name. You should copy only the section headings and the messages you want to change to the new messages INI file. Messages are limited to 250 characters, and must be all on one line. They can include HTML tags.

Once you have made the changes you want, specify the name of your messages INI file in the [WebPublisher] section of **DBTWPub.INI** (or the [Web] section of **ICSWeb.INI**, if you are using the SQL platform).

```plaintext
[WebPublisher]
MessageFile=MYWPMSG.INI
```

For example, you can change the *No records found by latest query* message to be more detailed for your users by adding the following to your message INI file:
msg_110=<br><br><br><center><hr>Your search did not find any records.<br>Please click your browser's Back button and try again.<hr></center>

If you also want to change the "No query criteria specified" message, you need to copy this section to your messages INI file, then change the message text to whatever you like:

    [Localized Query Parameters]
    qmNoQuery=No query criteria specified.

**Adding a New Search Button on the Web**

You can specify that a **New Search** button appears on every page, next to the **Next/Previous** buttons. When a user clicks the button, WebPublisher PRO returns to the query screen (or to the menu screen).

To make the button appear, add the **WebNewSearchButton**= parameter to the [WebPublisher] section of the **DBTWPub.INI** file (or the [Web] section of the **ICSWeb.INI** file, if you are using the SQL platform).

    [WebPublisher]
    WebNewSearchButton=1

A value of 1 turns the feature on; a value of 0 turns it off.

**Note:** If you use the **WebExpandInSeparate**= parameter, the **New Search** button will not appear on the expanded records or edit pages because the button could not return them to the query screen in the original browser window. The **New Search** button will still appear on the multiple-record report pages.

**Opening Records in a Separate Web Browser Window**

You can specify that when a user clicks an expand record link, new record link, edit record link, or delete record link, the record will open in a new Web browser window. This makes it easy for the user to return to their report by closing the new window.

To specify this option, add the **WebExpandInSeparate**= parameter to the [WebPublisher] section of the **DBTWPub.INI** file (or the [Web] section of the **ICSWeb.INI** file, if you are using the SQL platform).

    [WebPublisher]
    WebExpandInSeparate=1

A value of 1 turns the feature on; a value of 0 turns it off.

You can override the **WebExpandInSeparate**= parameter for searches performed using an individual query or menu screen by using the **ES** parameter within the screen. For example, you could add a line such as the following:

    <input name="ES" type="hidden" value="0">

**Note:** New records links on query screens explicitly set ES=0. Do not change this setting.

**ADA Compliance Settings**

You can specify that WebPublisher PRO should use links (<noscript> sections) instead of buttons for commands such as **Next Record, New Search**, and so forth, to make the pages accessible to the visually impaired.
WebPublisher PRO Configuration

To do this, add the WebScriptButtonsOption= parameter to the [WebPublisher] section of the DBTWPub.INI file (or the [Web] section of the ICSWeb.INI file, if you are using the SQL platform).

```
[WebPublisher]
WebScriptButtonsOption=2
```

The values for the WebScriptButtonsOption= parameter are:

- 0 = always use buttons
- 1 = always use links
- 2 = both: buttons and <noscript> section with links

To create the corresponding HTML query screens and menu screens, exit all copies of DB/TextWorks, add the following line to the [Inmagic DB/TextWorks] section of the Inmagic.INI file, and restart DB/TextWorks. Then export your menu screen or query screen to HTML.

```
[Inmagic DB/TextWorks]
ExportQBEtoHTMLOption=2
```

The values for the ExportQBEtoHTMLOption= parameter are:

- 0 = normal query and menu screen
- 1 = no scripts
- 2 = normal section and <noscript> section

**Note:** For HTML menu screens exported using a value or 1 or 2, you must manually add the BU= parameter to the HREF links in the page, if you intend to use the New Search button or images. Instructions for doing so are included as comments in the HTML source of the page.

Note that the HTML source includes <label> tags around box labels, regardless of the other options specified.

### Specifying the Total Number of Records Displayed on the Web

You can specify the total number of records WebPublisher PRO will return for a single search. All of the records are sorted according to any compulsory form sort or textbase default sort before the set is truncated.

To set the total number of records displayed, add the TotalRecords= parameter to the [WebPublisher] section of the DBTWPub.INI file (or the [Web] section of the ICSWeb.INI file, if you are using the SQL platform).

```
[WebPublisher]
TotalRecords=100
```

Even if a search finds more than the specified number of records, the user will only see as many records as the TotalRecords= parameter allows.

There is no indication that the search retrieved more records than the TotalRecords= value. For example, the RECORD COUNT variable and the browser title bar will display the TotalRecords setting.

The records are still broken into multiple pages according to the Records per page setting in the query screen or menu screen.

You can use the TR= parameter in a query screen, menu screen, or canned query to override any TotalRecords= parameter specified in the DBTWPub.INI file. For example:
Specifying the total number of records returned in XML format

Use the TotalRecordsforXML= parameter in DBTWPub.INI (or ICSWeb.INI) to set the total number of records returned in XML output:

```
[WebPublisher]
TotalRecordsforXML=100
```

You can override this value for individual queries by using one of the following:

- For searches submitted from a Web query screen, add the **TX= parameter to the source of the screen**.
- For a canned query, add &TX=10 to the URL or modify the &TX=1000 to be &TX=10, substituting your own preferred maximum for the number 10.
- For submitting XML queries, use the <TX> element in the XML input.

If none of these are specified (including the TotalRecordsforXML= parameter), the default total number is 1000. To remove the limit on the number of records returned, set the applicable parameter/element equal to 0 (for example, TotalRecordsforXML=0).

Using the <TX> element in XML input

When submitting a query in XML, use the <TX> element to specify the total number of records you want returned, regardless of how many records meet the criteria you specify.

In the following XML input example, the total number of records is set to 150. That means the XML returned will display the first 150 records. The remainder of the records (if the search finds more than 150 records) will not be returned. If there is a sort applied, the entire set is sorted before it is truncated to the number of records specified by the <TX> element.

If you do not specify the <TX> element, the default value used is 1000. This default can be changed in DBTWPub.INI (or ICSWeb.INI), but any <TX> element submitted in the input overrides the .INI file value.

```xml
<?xml version="1.0"?>
<Query xmlns="http://www.inmagic.com/webpublisher/query">
  <AC>query</AC>
  <TN>temps</TN>
  <TX>150</TX>
  <QY>Find Skills =accounting</QY>
  <KeyFields>
    <KeyField>Name</KeyField>
    <KeyField>EMail</KeyField>
  </KeyFields>
</Query>
```

Specifying Default Includes for Forms Used on the Web

You can specify that certain Includes appear on all WebPublisher PRO pages displayed.

To do this, add the following parameter(s) to the [WebPublisher Defaults] section of the DBTWPub.INI file (or the [Web Defaults] section of the ICSWeb.INI file, if you are using the SQL platform). Each of the six seams you can specify has its own parameter. For information about the locations of the six seams, see Seams Illustration.
WebPublisher PRO Configuration

```
Default-Seam1-Include=
Default-Seam2-Include=
Default-Seam3-Include=
Default-Seam4-Include=
Default-Seam5-Include=
Default-Seam6-Include=
```

Set the parameter for the applicable seam equal to the default Include you want. (Note that there is a 1,024 character limit.) For example, you could specify:

```
Default-Seam3-Include=<script language="javascript" type="text/javascript"
src="http://www.inmagic.com/includes/inm_search_results.js"></script>
```

To specify multiple Includes for a particular seam, separate them with the pipe character ( | ).

For example:

```
Default-Seam1-Include=<script language="javascript" type="text/javascript"
src="http://www.inmagic.com/inm_search_results.js"></script>|This is a
client-side HTML include</h1>|c:\program
files\inmagic\webpub\sample\report_top.txt
```

You can override the default Include(s) for a particular form by specifying the Include(s) in the Form Designer (choose Tools>Form Properties>HTML>Advanced Options>Includes) and selecting the Override Default Include check box for the applicable seam(s).

**Tip!** If you have a default Include specified for a particular seam, but do not want it output on a specific form, select the Override Default Include check box on the Includes tab for the applicable seam on that form, but do not enter anything in the seam box.

You can also specify that WebPublisher PRO output (that is, report, display, and edit pages) contains a specific Cascading Style Sheet (CSS) Include. To do this, add the Default-CSS-Include= parameter to the [WebPublisher Defaults] section of DBTWPub.INI (or the [Web Defaults] section of ICSWeb.INI).

For example:

```
[WebPublisher Defaults]
Default-CSS-Include=/home/standard.css
```

**Specifying HTTP Header Information**

You can use the DT (document type) and XP (expires) parameters to specify the content and expires settings in the HTTP header information passed to the Web browser. The expires setting is in seconds. For example, you could add these lines to your HTML query screen:

```
<input name="XP" type="hidden" value="120">
<input name="DT" type="hidden" value="text/html">
```

DT is primarily useful with XML output, but can be used with normal WebPublisher PRO reports in certain situations. If you specify an XML Style Sheet file (XS=) for XML output, DT is ignored for WebPublisher PRO messages (for example, No records found by latest query.); use the XE parameter instead.

**Turning Off Navigational Controls on Web Screens**

When using WebPublisher PRO, certain navigational controls always appear on forms and screens when viewed over the Web. To turn off these controls for all screens and forms used on the Web, add the appropriate parameter(s) to the [WebPublisher] section of the DBTWPub.INI
file (or the [Web] section of the ICSWeb.INI file, if you are using the SQL platform) and set them equal to 0. All of the controls are turned on by default (that is, they are set equal to 1).

The following table lists each control, what it does, and its applicable parameter:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
<th>Parameter in DBTWPub.INI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next/Previous</td>
<td>Displays the next or previous page in a report or the next or previous record in an expanded display. These buttons always appear. By default, if the user is on the first or last page or record, the appropriate button is disabled. <strong>Note:</strong> When set to 0, the disabled button that appears on the first and last page (for a report) or record (for expanded display) does not appear. That is, the first page/record only has a Next button and the last page/record only has a Previous button.</td>
<td>DisabledButtons=</td>
</tr>
<tr>
<td>Back (&lt;)</td>
<td>Returns to the previous page, just as the Back button on your Web browser toolbar does.</td>
<td>BackButton=</td>
</tr>
<tr>
<td>Rewind (&lt;&lt;)</td>
<td>Returns to the last page of a different type.</td>
<td>RewindButton=</td>
</tr>
<tr>
<td>Close</td>
<td>If a display page opens in a separate browser window, a Close button appear so the user can close the new window to return to the report page.</td>
<td>CloseButton=</td>
</tr>
<tr>
<td>OK (on error messages)</td>
<td>When an error message appears (for example, No records found by current query.), the message box includes an OK button which returns the user to the appropriate place (for example, back to the query screen to modify the query).</td>
<td>ErrorMsgButton=</td>
</tr>
</tbody>
</table>

**Note:** To turn off controls for individual query screens, you can use a message INI file.

### Sorting Records (for the Web)

Sort order is determined by the textbase default sort order (Maintain>Edit Textbase Structure) or by the compulsory form sort specified for the form selected in the Web browser.

The user has no way to sort records, so you should consider adding a compulsory sort to Report forms that you design for the Web, unless the textbase default sort is suitable. To specify a compulsory sort, choose Report Options>Compulsory Sort in the Form Designer.

The following Compulsory Sort options are ignored, because they can change the perceived number of records retrieved: Interfile and Omit Those Records (click Primary Sort Field Options).

Note that exploded sorts are also ignored by default. If you set the WebAllowExplode=1 option in the DBTWPub.INI (or ICSWeb.INI) file to permit exploded sorts, all records are displayed on one page to avoid paging issues when changing the perceived number of records in the report.

### Allowing Exploded Sorts on the Web

You can specify that WebPublisher PRO permit exploded sorts that are defined in a report form's compulsory sort. If such a form includes an exploded sort, paging will be turned off and all records will be returned after being sorted. Also, the browser title bar will list the number of records appearing in the report, not the actual number of records found by the search.
WebPublisher PRO Configuration

To enable exploded sorts on the Web, add or edit the WebAllowExplode parameter in the [WebPublisher] section of the DBTWPub.INI file (or the [Web] section of the ICSWeb.INI file for the SQL platform). This file is located in the WebPublisher PRO installation folder on the HTTP server.

```
[WebPublisher]
WebAllowExplode=1
```

**Tip!** If you have a report that uses an exploded sort and expand record links, we recommend that you click the expand record link for the first occurrence of a specific record in the report. This is to ensure that the Next Record and Previous Record functionality matches the record order shown in the report.

**Note:** You must restart IIS (the World Wide Web Publishing Service) any time you make any changes to this parameter in DBTWPub.INI (or ICSWeb.INI). You can use the Services option through the Windows Computer Management window to restart IIS.

**Disable XML (WebPublisher PRO)**

You can disable the XML input/output features for all WebPublisher PRO queries, or for those submitted to an individual textbase.

To disable XML for all Web queries, add the following line to the [WebPublisher Defaults] section of your DBTWPub.INI file (or ICSWeb.INI if you are using the SQL platform):

```
Default-DisableXML-Setting=1
```

**Note:** XML is enabled by default. However, you cannot have query/menu screen results returned in XML format until you specify it in a query screen or in a predefined query. If you submit XML input, results are returned in XML format by default.

To specify that individual textbases have the XML features enabled or disabled, add a [WebPublisher DisableXML] section to your DBTWPub.INI file, then add each textbase with the appropriate setting (=1 to disable XML, =0 to enable XML). In the following example, you can use the XML features with the History textbase, but not with the Orders textbase:

```
[WebPublisher DisableXML]
Orders=1
History=0
```

**Note:** The [WebPublisher DisableXML] section overrides the setting specified using Default-DisableXML-Setting=.

**Enabling Hit Navigation on the Web**

You can use the WebHitNavigation= parameter in the DBTWPub.INI file to enable hit navigation for records displayed on the Web with WebPublisher PRO.

When enabled, highlighted search terms are surrounded by hyperlink arrows that allow you to move to the previous and next occurrences of the term.

To turn this feature on, add the following to the [WebPublisher] section of the DBTWPub.INI file (or the [Web] section of ICSWeb.INI if you are using the SQL platform):

```
[WebPublisher]
WebHitNavigation=1
```

The values for the parameter are:
Enabling Query Logging on the Web

You can turn on query logging for queries submitted over the Web with WebPublisher PRO. The logged information includes the textbase name, query, start and end times, IP address of the requestor, and number of hits.

Web queries are logged in a comma separated values (CSV) text file called query.log, in the QSETS folder.

To enable query logging for WebPublisher PRO

Non-SQL platform: Open DBTWPub.INI and add the following lines to the [WebPublisher] section.

SQL platform: Open ICSWeb.INI and add the following lines to the [ICSWeb] section.

```
[WebPublisher]
WebLogQueries=1
```

The values for the parameter are:

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>off (default)</td>
</tr>
<tr>
<td>1</td>
<td>on</td>
</tr>
</tbody>
</table>

Logging WebPublisher PRO Severe Error Messages

To log severe error messages, add the EnableErrorLog=1 parameter to the [WebPublisher] section of the DBTWPub.INI file (or the [Web] section of the ICSWeb.INI file, if you are using the SQL platform). Severe errors will be recorded in WPTCErr.LOG in the QSets subfolder. The messages will be date and time stamped. The textbase name and path and the action (AC) performed appear beneath the message.

Parameters for Query Screens, Menu Screens, and Canned Queries Used on the Web

The following table lists parameters that you can add to the source of a query screen, menu screen, or canned query used on the Web.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>Tells WebPublisher PRO what to do. Examples: QUERY, VALIDATION_LISTS_THES.</td>
</tr>
<tr>
<td>BG</td>
<td>Sets background color for message pages. Obtained from background color on page that generated message.</td>
</tr>
<tr>
<td>BU</td>
<td>Specifies the base URL. Points to page used to generate search.</td>
</tr>
<tr>
<td>CS</td>
<td>Controls whether report/edit/display pages use Cascading Style Sheets. The equivalent setting in DBTWPub.INI (or ICSWeb.INI if you are using the SQL platform) is WebCSSOpt=.</td>
</tr>
<tr>
<td>DF</td>
<td>Specifies the expanded display form name.</td>
</tr>
<tr>
<td>DL</td>
<td>Specifies whether to show the form selection drop-down list on the expanded display page.</td>
</tr>
<tr>
<td>DT</td>
<td>Specifies the content setting for the HTTP header information passed to the Web browser. Called the Document Type.</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>EF</td>
<td>Specifies the edit form; also used for delete record.</td>
</tr>
<tr>
<td>EL</td>
<td>Specifies whether to show the form selection drop-down list on edit and delete pages.</td>
</tr>
<tr>
<td>ES</td>
<td>Specifies whether to open the expanded display in a new browser window. This parameter also affects edit and delete pages. The equivalent setting in DBTWPub.INI (or ICSWeb.INI if you are using the SQL platform) is WebExpandInSeparate=.</td>
</tr>
<tr>
<td>FG</td>
<td>Text color for messages. Obtained from box label font color for first box on page that generated message.</td>
</tr>
<tr>
<td>ID</td>
<td>Specifies the textbase password.</td>
</tr>
<tr>
<td>MF</td>
<td>Specifies message file name for message translation. The equivalent setting in DBTWPub.INI (or ICSWeb.INI if you are using the SQL platform) is MessageFile=.</td>
</tr>
<tr>
<td>MQ</td>
<td>Specifies name of query screen from which to read search textbase information for Web Multiple Textbase Query.</td>
</tr>
<tr>
<td>MR</td>
<td>Specifies number of records to display per page.</td>
</tr>
<tr>
<td>NP</td>
<td>Specifies the location of the form selection drop-down list and navigational buttons (for example, the Next, Previous, and New Search buttons).</td>
</tr>
<tr>
<td></td>
<td>1 = top</td>
</tr>
<tr>
<td></td>
<td>2 = bottom</td>
</tr>
<tr>
<td></td>
<td>3 = both</td>
</tr>
<tr>
<td></td>
<td>4 = neither</td>
</tr>
<tr>
<td>OEH</td>
<td>Specifies the encoding for HTML output returned by this screen or canned query. The default is ISO-8859-1, which matches the actual output emitted by WebPublisher PRO.</td>
</tr>
<tr>
<td>OEX</td>
<td>Specifies the encoding for XML output returned by this screen or canned query. The default is ISO-8859-1, which matches the actual output emitted by WebPublisher PRO.</td>
</tr>
<tr>
<td>QB0</td>
<td>Specifies query criteria (Boolean, field name, search criteria) for search; the number (0, 1, and so forth) corresponds to the query screen box number, starting with 0.</td>
</tr>
<tr>
<td>QF0</td>
<td></td>
</tr>
<tr>
<td>QI0</td>
<td></td>
</tr>
<tr>
<td>QS</td>
<td>Used in conjunction with the textbase password cookie.</td>
</tr>
<tr>
<td>QY</td>
<td>Specifies the Command Query criteria for search. Alternative to QB0/QI0/QF0.</td>
</tr>
<tr>
<td>RF</td>
<td>Specifies the report form.</td>
</tr>
<tr>
<td>RL</td>
<td>Specifies whether to show the form selection drop-down list on the report page.</td>
</tr>
<tr>
<td>RN</td>
<td>Specifies the record number in the current set.</td>
</tr>
<tr>
<td>SE</td>
<td>Specifies entry in the current set.</td>
</tr>
<tr>
<td>SN</td>
<td>Specifies the set name. Textbase set name for menu screen queries. Temporary autoset name for other queries.</td>
</tr>
<tr>
<td>SS</td>
<td>Specify whether to use alternate search syntax in this query screen. 0=original syntax (default), 1=alternate syntax.</td>
</tr>
<tr>
<td>TI</td>
<td>Specifies the textbase index. Used with Web Multiple Textbase Query. Specifies which textbase the record comes from. 0=lead textbase, 1=first search textbase, and so forth.</td>
</tr>
<tr>
<td>TN</td>
<td>Specifies textbase name.</td>
</tr>
<tr>
<td>----</td>
<td>-------------------------</td>
</tr>
<tr>
<td>TR</td>
<td>Sets the total number of records displayed by WebPublisher PRO. The equivalent setting in DBTWPub.INI (or ICSWeb.INI if you are using the SQL platform) is <code>TotalRecords</code>.</td>
</tr>
<tr>
<td>TX</td>
<td>Sets the total number of records displayed by WebPublisher PRO when using XML output. Defaults to 1000 if not specified. Use TX=0 to return all records. The equivalent setting in DBTWPub.INI (or ICSWeb.INI if you are using the SQL platform) is <code>TotalRecordsforXML</code>.</td>
</tr>
<tr>
<td>XC</td>
<td>Specifies whether to use CGI. Example: XC=/dbtw-wpd/exec/dbtwcgi.exe</td>
</tr>
</tbody>
</table>
| XE | Specifies how errors are returned if an XSL file is specified. For use with XML output.  
0 = HTML (default)  
1 = XML  
2 = XML errors are transformed (if possible) using the XSL and returned as XML.  
3 = XML errors are transformed using the XSL and returned as HTML. |
| XM | Specifies whether to return XML output.  
0 = HTML (default)  
1 = XML |
| XP | Specifies the **expires** setting for the HTTP header information passed to the Web browser. |
| XS | Specifies the XSL file to use to transform XML output. |
DB/TextWorks for SQL

SQL vs. Non-SQL Platform

DB/TextWorks (the desktop component of Inmagic DB/Text) is available in a SQL-based version, which requires a Microsoft SQL back-end database for infrastructure and data storage. Both the SQL and non-SQL platforms provide the same features and functionality, with the following exceptions:

- DB/TextWorks for SQL includes an Administration program, which provides functionality exclusive to the SQL platform, including Backup, Restore, and Upgrade.
- DB/TextWorks for SQL includes the Inmagic Importer for SQL, which runs as a Windows service to import records in the background. (The non-SQL version does not include the Importer, but it is available upon request to customers who purchased WebPublisher Pro.)
- DB/TextWorks for SQL does not include deferred indexing because it provides no performance benefits.
- Some menus and dialogs differ slightly. For example, the Manage Textbases menu includes the SQL-specific options List Textbases and Clear Textbase Record Locks.
- Some supplied and generated files and directories differ. See the table below.

<table>
<thead>
<tr>
<th></th>
<th>Non-SQL Platform</th>
<th>SQL Platform</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software configuration</td>
<td>DBText.INI</td>
<td>INMCSRV.INI</td>
<td></td>
</tr>
<tr>
<td>User customizations</td>
<td>Inmagic.INI</td>
<td>Inmagic.INI</td>
<td></td>
</tr>
<tr>
<td>and preferences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WebPublisher settings</td>
<td>DBTWPub.INI</td>
<td>ICSWeb.INI</td>
<td></td>
</tr>
<tr>
<td>Virtual directory</td>
<td>dbtw-wpd</td>
<td>ics-wpd</td>
<td></td>
</tr>
<tr>
<td>Textbase Files</td>
<td>Textbase Files (non-SQL)</td>
<td>Textbase Files (SQL version)</td>
<td></td>
</tr>
</tbody>
</table>
Textbase Files (SQL platform)

This topic pertains only to DB/TextWorks for SQL. If you are using the non-SQL platform, see Textbase Files (non-SQL platform).

A DB/TextWorks for SQL textbase consists of a number of files, all of which have the same name as the textbase, but different extensions. For example, a textbase called Sales consists of the files SALES.CAC, SALES.CBA, and so forth.

Important! Records, indexes, and other important files reside inside SQL server. Backing up the textbase files shown below does not provide a complete backup. For more information, see Back Up Textbases (Back Up & Restore menu).

<table>
<thead>
<tr>
<th>Extension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.CAC</td>
<td>Access control file; controls simultaneous access to the textbase by multiple users or software instances, or applications.</td>
</tr>
<tr>
<td>.CBA</td>
<td>Primary textbase definition file, which also contains textbase elements (for example, forms, query screens, sets, record skeletons) stored in the textbase.</td>
</tr>
<tr>
<td>.CBS</td>
<td>Textbase structure file, contains field definitions and other information about the structure of the textbase.</td>
</tr>
<tr>
<td>.HLP</td>
<td>Optional textbase-specific help file.</td>
</tr>
<tr>
<td>&lt;textbase&gt;.INI</td>
<td>is an optional file used with Copy Special applications, Textbase-Specific Help, and the Applications menu.</td>
</tr>
<tr>
<td>.LOG</td>
<td>Optional textbase log file; lists changes to records and the textbase structure.</td>
</tr>
<tr>
<td>.SLT</td>
<td>Optional file that is created when EnableSlotLog=1 appears in the [Advanced] section of the INMCSRV.INI or &lt;textbase&gt;.INI file. This option can be set in INMCSRV.INI during Setup using the Track Textbase Access button on the Configuration dialog box. The machine name and login name of each user who has a textbase open is recorded in the .SLT file. The line is cleared when each user closes the textbase.</td>
</tr>
<tr>
<td>TML</td>
<td>Thesaurus maintenance locking file, prevents more than one person at a time from modifying records in that thesaurus textbase. Note that .TML files do not have to be backed up. The software automatically creates them if they do not exist.</td>
</tr>
</tbody>
</table>

DB/Text for SQL Administration

DB/Text for SQL includes an Administration program (InmCSAdmin.EXE) that provides a number of administrative and maintenance tasks specific to the SQL platform.

Important! Access to the Administration program should be restricted, because it provides the ability to configure SQL Server security rights, change the SQL instance, rename and delete textbases, and perform similar tasks. You may want to allow certain members of the Information Technology (IT) department to use the Administration program.

The Administration program is installed with both DB/TextWorks for SQL and the corresponding WebPublisher for SQL application. If DB/TextWorks and WebPublisher are on different servers, you will have two (identical) versions of the Administration program (one on each server).
On the Start menu, the Administration program is identified as follows:

- **Administration (TW-SQL)** indicates the program installed with DB/TextWorks for SQL.
- **Administration (WP-SQL)** indicates the program installed with WebPublisher for SQL.

Both Administration options provide the same features; the only difference is that the server on which the program is installed might have different network access.

The Administration program provides the following menus and commands.

**Configure SQL Server**

- **Setup Wizard**
- **Initialize SQL Server->Select/Change SQL Instance**
- **Initialize SQL Server->Create Control Database**
- **Manage Security->Change SQL password**
- **Manage Security->Assign User Rights to SQL Server**
- **Manage Security->Assign User Rights to Textbase**

**Manage Textbases**

- **Clear Textbase Record Locks**
- **Dump Textbase**
- **Load New Textbase**
- **Analyze Textbase**
- **List Textbases**
  - *Recover Textbase*
  - *Check Textbase*
  - *View Check Textbase Report File*
  - *Copy Textbase*
  - *Rename Textbase*
  - *Delete Textbase*

  * A Manage Textbases menu appears in both the Main window and the Administration program. To access commands indicated by an asterisk, you must run the Administration program.

**Back Up & Restore**

- **Back Up Textbases**
- **Restore Textbases**

**Manage Upgrades**

- **Upgrade DB/Text for SQL->Control Database**
Replacing the Submit Query Button with an Image (SQL platform)

This topic only applies to DB/TextWorks for SQL.

When using query screens on the Web, you can replace the Submit Query button with an image.

To replace the Submit Query button with an image, use a text editor to change the following line at the bottom the exported query screen:

```html
<input type="submit" value="Submit Query">
```

Change the value of the type= parameter to image, remove the value= parameter and add a src= parameter showing the image file name. You must explicitly specify the image location.

For example:

```html
<input type="image" src="/ics-wpd/images/strtsrch.gif">
```

The above example replaces the Submit Query button with an image named STRTSRCH.GIF.

Configure SQL Server

Setup Wizard

During the installation of DB/TextWorks for SQL you can use the Setup Wizard to select the SQL instance, assign user rights to that SQL instance, and create the control database for the SQL instance for DB/TextWorks for SQL.

To use the Setup Wizard

1. Select Configure SQL Server>Setup Wizard.
2. On the Setup Wizard: Select SQL Instance dialog box, specify the SQL Server. Use the Browse button to choose from a list of available SQL Servers on your network. Then click Next.
3. Depending on your situation:
   - If you are using Windows Authentication, on the Setup Wizard: Assign User Rights to SQL Server dialog box, assign user rights to the SQL Server. Then click Finish.
   - If you are using SQL Authentication, on the Setup Wizard: Change SQL Password dialog box, fill in the New password box. Then click Finish.
4. Once you see the message "DB/TextWorks for SQL has been successfully configured on SQL Server <name of SQL instance>", the control database has been created. Click OK to dismiss the message.

If you do not use the Setup Wizard, you will have to use the separate functions to accomplish what the Setup Wizard does:

- **Configure SQL Server>Initialize SQL Server>Select SQL Instance**
- **Configure SQL Server>Initialize SQL Server>Create Control Database**
- **Configure SQL Server>Manage Security>Assign User Rights to SQL Server** or **Configure SQL Server>Manage Security>Change SQL Password**.

**Initialize SQL Server**

**Create Control Database**

**Note:** This command is available when you use the Inmagic DB/Text for SQL Administration program (InmCSAdmin.EXE). You must have SQL Server sysadmin privileges to use the Create Control Database command. (Note that Windows Administrators are automatically sysadmins on a local SQL Server.)

After installing DB/Text for SQL for the first time, you must run this command (on the **Configure SQL Server>Initialize SQL Server** menu) to prepare your Microsoft SQL Server for use with DB/TextWorks. If you use the **Setup Wizard** function on the Configure SQL Server menu, you do not have to use this command, as the control database is created automatically when you use the Setup Wizard.

This command creates the following required items on the SQL Server:

- A control database on the server, called _InmTextbases.
- A database table to store IDs for each textbase.
- If you are using SQL Authentication, a SQL login name for the server (called _Inmagic_Content_Server). During installation, a default password is assigned to this account. We recommend you change the password once DB/TextWorks for SQL is up and running.

For specific information on the files affected by this command, see the **Inmagic DB/Text for SQL Administrator’s Guide**.

To set up SQL Server for use with DB/TextWorks for SQL

**Note:** If you are using DB/TextWorks for SQL, you should have already specified a SQL Server instance (choose **Configure SQL Server>Initialize SQL Server>Select SQL Instance**), as explained in the **Inmagic DB/Text for SQL Installation Notes**.

1. Choose **Configure SQL Server>Initialize SQL Server>Create Control Database** to create the necessary databases and login on your SQL Server.
2. A message informs you when the setup is complete. Click OK to dismiss the message.

You should have to run this procedure only once, when you first install DB/TextWorks for SQL for your site if you do not use the Setup Wizard.
If you upgrade to a new version of the software, use the Manage Upgrades>Upgrade DB/Text for SQL>Control Database command. This step is not always necessary, but does no harm. Consult the installation notes to determine if this is needed.

**Select/Change SQL Instance**

Use this dialog box to set or change the default SQL Server.

**Important!** Back up any textbases you may have before you change to a different SQL Server. You will not be able to access textbases on the current SQL Server once you have changed to a different SQL Server. After you have changed to a different SQL Server, you can install your backed up textbases onto it, if needed.

1. Choose Configure SQL Server>Initialize SQL Server>Select SQL Server or Configure SQL Server>Initialize SQL Server>Change SQL Server.
2. Specify the SQL Server. If the Browse button is available, you can choose from a list of available SQL Servers on your network. Otherwise, use one of the following methods to specify the SQL instance:
   - IP address followed by a comma and the port number on the SQL Server. If you do not include a port number, the default port (1433) is used. Example (with port specified): 192.168.0.199, 1783
   - Instance name. Example: SQL254
      **Tip!** In some cases, you may be able to type a period in the SQL Instance box to automatically enter the SQL instance. In other cases, you may need to use the expanded format, for example, <machinename>\SQLExpress.
   - Server name followed by a backslash and the instance name. Example: SQLDATA\SQL254
3. Click OK.

**Manage Security**

**Change SQL Password**

**Note:** This command is available through the Inmagic DB/Text for SQL Administration program (InmCSAdmin.EXE), and is enabled only if you are using SQL Authentication (instead of Windows Authentication).

Use this command to change the password for your SQL Server user account for Inmagic DB/TextWorks for SQL. This user account, _Inmagic_Content_Server (created when you chose Configure SQL Server>Create Control Database during the installation of the product) controls access to all DB/TextWorks for SQL textbases.

**Important!** When you install DB/TextWorks for SQL, a default password is assigned for the _Inmagic_Content_Server account. If you plan to use both DB/TextWorks for SQL and WebPublisher PRO for SQL, you must first change this initial SQL password for each component. You must use the same password for both applications. Be sure to use the copy of the Administration program that is specific to that component.

If you are using DB/Text for SQL with Windows Authentication, you do not have to change the SQL password. In this case, the command is disabled because it is only applicable when SQL Authentication is used.
To change a SQL Server password

1. Choose **Configure SQL Server>Manage Security>Change SQL Password** to open the Change SQL Password dialog box.

2. Type a new password in the **New password** box.

3. Click **OK**. Your new password is in effect.

**Tip!** If you are publishing textbases on the Web and you change the SQL password for DB/TextWorks for SQL, you must also change it for WebPublisher PRO for SQL. To do this, run the copy of InmCSAdmin.EXE located in the Exec subfolder of the WebPublisher PRO for SQL installation folder and specify the same password. Note that you must restart IIS (the World Wide Web Publishing Service) before the change will take effect on the Web.

**Assign User Rights to SQL Server**

This command is available through the Inmagic DB/Text for SQL Administration program (InmCSAdmin.EXE). This command is only enabled if you are using Windows Authentication to secure access to the software. For more information, see the *Inmagic DB/Text for SQL Administrator's Guide*.

Use the Assign User Rights to SQL Server dialog box to add and remove users of the SQL Server control database. Each user name is given membership to a **DB/TextWorks for SQL** role to determine how much access that user name has to the control database. Note that there are also some SQL Server fixed server roles that can be assigned for additional access (for example, to create a new textbase, the user/group must also have membership to the **db_creator** fixed server role).

**Tip!** Before changing the access a user/group has to DB/TextWorks for SQL, be sure that user/group is not using the software.

To assign or change rights for a DB/TextWorks for SQL user on the SQL Server

1. Choose **Configure SQL Server>Manage Security>Assign User Rights to SQL Server**.

2. On the Assign User Rights to SQL Server dialog box, from the Current Database Users list, select the user name for which you want to set rights. If the user name is not in the list, click the **Add User** button to locate and add the user name to the list. (Note that for a user name to be visible, the user/group must exist in the Windows domain [of which SQL Server is a member] and have a login on the SQL Server.)

3. From the **DB/TextWorks for SQL** role membership group, select an option button to assign the user name membership to the appropriate **DB/TextWorks for SQL** role. A user can only be assigned one **DB/TextWorks for SQL** role. **Note:** If the user has **sysadmin** rights or is a member of **db_owner**, the options in this group will be disabled because the user already has administrator rights.

- **None.** The user name does not have membership to any **DB/TextWorks for SQL** role and cannot access the SQL Server or the control database. This means that user name will not be able to open any textbases or perform any operations.

- **DB/TextWorks for SQL User.** The user name has Read and Execute permission. This is required for any user you plan to let open any **DB/TextWorks for SQL** textbase.
**DB/TextWorks for SQL Administrator.** The user can perform all textbase management functions (for example, renaming and deleting a textbase). The user can also modify tables in the control database. We recommend this user also be a member of the SQL Server fixed server role of **db_creator**, which enables textbase creation.

**Note:** To set security for individual textbases, use the [Assign User Rights to Textbase dialog box](#).

4. Click **Apply**.
5. Repeat steps 2 through 4 for each user/group that you want to access DB/TextWorks for SQL.
6. Click **Close**.

To remove a database user from SQL Server

1. Choose **Configure SQL Server>Manage Security>Assign User Rights to SQL Server**.
2. Select a database user from the Current Database Users list.
3. Click the **Remove User** button.
4. Click **Yes** to confirm removing the database user.
5. Click **Close**.

**Assign User Rights to Textbase**

**Note:** This command is available through the Inmagic DB/Text for SQL Administration program (InmCSAdmin.EXE), and is enabled only if you are using Windows Authentication. For more information, see the [Inmagic DB/Text for SQL Administrator's Guide](#).

Use the Assign User Rights to Textbase dialog box to add and remove users of a particular DB/TextWorks for SQL textbase. Each user name is given membership to a DB/TextWorks for SQL role to determine how much access they have to the textbase.

**Tip!** Before changing the access a user/group has to a DB/TextWorks for SQL textbase, be sure that user/group does not have the textbase open.

**To assign or change rights for a DB/TextWorks for SQL user on a DB/TextWorks for SQL textbase**

4. Choose **Configure SQL Server>Manage Security>Assign User Rights to Textbase**.
5. On the Select Textbase dialog box, select the textbase on which you want to set security and click the **Open** button. If the textbase has passwords, you are prompted for the Master password.
6. On the Assign User Rights to Textbase dialog box, from the Current Database Users list, select the user name for which you want to set security. If the user name is not listed, click the **Add User** button to locate and add the user name to the list. (Note that for a user name to be visible, the user/group must exist in the Windows domain [of which SQL Server is a member] and have a login on the SQL Server.)
7. [Optional] If you want the user or group with the user name selected in step 3 to be able to edit the structure of the textbase, select the **Member of db_owner** check box from the Properties group. If you select this option, the user or group will also automatically have
membership to the **DB/TextWorks for SQL Textbase Writer** role and the options in the next step will be disabled. (This is also true if the user or group has **sysadmin** privileges.)

8. From the DB/TextWorks for SQL role membership group, select an option button to assign the user name membership to the appropriate DB/TextWorks for SQL role. Note that a user can only be assigned one DB/TextWorks for SQL role.

   - **None.** The user name does not have membership to any DB/TextWorks for SQL role and cannot access the textbase.
   - **DB/TextWorks for SQL Reader.** The user name has Read-Only access to the textbase. The user name has Select permission in SQL tables.
   - **DB/TextWorks for SQL Data Writer.** The user name can search and modify record information (that is, search for, add, edit, and/or delete records), but cannot modify validation and substitution lists.
   - **DB/TextWorks for SQL Textbase Writer.** The user name can search and modify record information (that is, search for, add, edit, and/or delete records), and update validation lists when overriding content validation (if the appropriate options are selected on the Edit Textbase Structure dialog box).

9. Click **Apply**.

10. Click **Close**. The Assign User Rights to Textbase dialog box closes, and the Select DB/TextWorks for SQL Textbase dialog box opens so that you can select another textbase for which to specify security. If you do not want to specify security for another textbase, click **Cancel** on that dialog box.

**To remove a database user from a DB/TextWorks for SQL textbase**

1. Choose **Configure SQL Server>Manage Security>Assign User Rights to Textbase**.

2. On the Select DB/TextWorks for SQL Textbase dialog box, select a textbase and click the **Open** button. If the textbase has passwords, you are prompted for the Master password.

3. On the Assign User Rights to Textbase dialog box, select a user name from the Current Database Users list.

4. Click the **Remove User** button.

5. On the confirmation message, click **Yes** to confirm removing the database user

6. Click **Close**.

**Manage Textbases**

**Manage Textbases menu (SQL Administration)**

This topic pertains only to the SQL platform.

DB/TextWorks for SQL includes a **Manage Textbases** menu in both the Main window and the Administration program. The options indicated below by an asterisk (*) are available only on the Manage Textbases menu in the Administration program.

- **Clear Textbase Record Locks**
- **Dump Textbase**
Backup and Restore

Back Up Textbases (Back Up & Restore menu)

Note: This command is available through the Inmagic DB/Text for SQL Administration program (InmCSAdmin.EXE).

Use this command to create a backup file set for any DB/TextWorks for SQL textbase. You can also use this command if you need to copy a textbase where the **Copy Textbase** command would not work. For example, if you need to move a textbase to a different Microsoft SQL Server, you could make a backup copy of the textbase and all the necessary files. Then, move the backup file set to a location accessible to the other SQL Server (for example, copy all the files onto a CD) and **restore the textbase files** to the other SQL Server.

Note: Because the software uses Windows Authentication by default, you must have membership to the SQL Server fixed database role of **db_owner** or to the SQL Server fixed server role of **db_backupoperator** in order to back up textbases.

To back up a textbase

1. Choose **Back Up & Restore>Back Up Textbases** to open the Back Up Textbase Options dialog box.

2. In the **Textbases** box, click the **Browse** button and navigate to the textbase(s) you want to back up. Note that you can select more than one textbase by using Windows commands to do so (for example, **Ctrl+Click**). If the machine from which you are running DB/TextWorks for SQL is different from the one on which the SQL Server resides, you must use a Universal Naming Convention (UNC) file path.

3. In the **Backup path** box, type the folder for the backup file set, or click the **Browse** button and navigate to it. The folder for the backup file set should be on the same machine as the SQL Server, or be a public folder on a shared network.

4. Select or clear the **Shrink SQL Server database** check box depending on whether you want to shrink the database during the backup process. Shrinking the database will release unused space in the data files, ultimately helping to prevent your log file from growing without limit. If selected, the free space after shrinking will be 10 percent. By default, this check box is selected.

5. Click **OK** to back up the textbase(s).
6. Review the information on the Back Up Textbases: Operation Status dialog box and click Close when you are done.

7. In addition to backing up the textbase, you must back up User Files, Menu Screens, Images, and Annotations. For instructions, see Backing Up Textbases.

The backup command copies the records, indexes, and other information from the specified textbase into a .DAT file and creates a copy of all the textbase files in the specified location. The backup file set is Read-Only, so that the files are not accidentally modified or deleted.

Any changes you make to the original textbase after the backup will not be reflected in the backup. If you need to restore the textbase from the backup, use the Restore Textbases command.

**Restore Textbases (Backup & Restore menu)**

*Note:* This command is available through the Inmagic DB/Text for SQL Administration program (InmCSAdmin.EXE).

Use this command to restore a textbase from a backup file set. Using this command, you can replace an existing textbase or create a new textbase from a backup.

Also, you can use this command to copy a textbase where the Copy Textbase command will not work. For example, if you need to move a textbase to a different Microsoft SQL Server, you could make a backup copy of the textbase and all the necessary files. Then, move the backup file set to a location accessible to the other SQL Server (for example, copy all the files onto a CD) and restore the textbase files to the other SQL Server. For more information, see the Inmagic DB/Text for SQL Administrator's Guide.

*Note to DB/TextWorks for SQL users:* Because the software uses Windows Authentication by default, you must have membership to the SQL Server fixed database role of db_owner or to the SQL Server fixed server role of db_backupoperator in order to restore textbases.

**To restore a textbase**

1. Choose Back Up & Restore>Restore Textbases to open the Restore Textbase Options dialog box.

2. In the Backup sets box, click Browse to navigate to the backup set(s). Note that you can select more than one backup set by using a Windows commands to do so (for example, Ctrl+Click). The location for the backup file set should be on the same machine as the SQL Server, or be a public folder on a shared network. If the machine from which you are running DB/TextWorks for SQL is different from the one on which the SQL Server resides, you must use a Universal Naming Convention (UNC) file path to the backup file set.

3. In the Restore path box, click Browse to select the location of the folder where the textbase(s) should be restored. Note that the SQL Server needs Write access to the folder.

4. Click OK.

5. If DB/TextWorks for SQL is using Windows Authentication, a message appears when the restore is complete, to remind you to use the Configure SQL Server>Manage Security>Assign User Rights to Textbase command to permit users to access the restore textbase(s). Click OK to dismiss the message.
6. Review the information on the Restore Textbases: Operation Status dialog box and click **Close** when you are done.

**Manage Upgrades**

**Upgrade DB/Text for SQL>Control Database**

**Note:** This command is available when you use the DB/Text for SQL Administration program (InmCSAdmin.EXE).

When you receive an update to the Inmagic DB/TextWorks for SQL program, you may need to run the **Manage Upgrades>Upgrade DB/Text for SQL>Control Database** command to upgrade the control database on your Microsoft SQL Server.

This command upgrades the control database to the current version of DB/TextWorks for SQL. You also have the option to upgrade all existing DB/TextWorks for SQL textbases. If you choose not to, you can use the **Manage Upgrades>Upgrade DB/Text for SQL>Textbases** command to upgrade your textbases individually or a few at a time, if you prefer.

**Note:** If you are installing DB/TextWorks for SQL for the first time at your site, you must choose **Configure SQL Server>Initialize SQL Server>Control Database** or use the **Setup Wizard** instead of **Manage Upgrades>Upgrade DB/TextWorks for SQL>Control Database**.

To update a SQL Server and textbases:

1. Choose **Manage Upgrades>Upgrade DB/Text for SQL>Control Database** to start the upgrade process.

2. A message asks if you want to upgrade all textbases on the SQL Server. Depending on what you want to do, click one of the following buttons:
   - **Yes** to upgrade the textbases. If a textbase has a Master password, you will be prompted for it before the textbase is upgraded. During the update, the Operation Status dialog box opens and its Operation log and status bars show the progress of the update.
   - **No** to not upgrade the textbases. Only the control database is updated on the SQL Server. When this upgrade is complete, a message displays. Click **OK** to dismiss the message. You can upgrade individual textbases later by using the **Manage Upgrades>Upgrade DB/Text for SQL>Textbases** command.

For specific information on the files affected by this command, refer to the **Inmagic DB/Text for SQL Administrator's Guide**.

**Upgrade DB/Text for SQL>Textbases**

**Note:** This command is available through the Inmagic DB/Text for SQL Administration program (InmCSAdmin.EXE).

This command upgrades existing textbases for use with the latest version of DB/TextWorks for SQL.

When you choose **Manage Upgrades>Upgrade DB/Text for SQL>Textbases**, the Select Textbase dialog box opens so that you can select the textbase(s) you want to upgrade and start the process.
You must upgrade textbases when you are upgrading to a new version of Inmagic DB/Text for SQL and the installation notes specify that this step is needed. Note, however, that if you upgrade all of your textbases when you upgrade your control database (choose Manage Upgrades>Upgrade DB/Text for SQL>Control Database and click Yes when prompted to upgrade your textbases), you do not have to use this Manage Upgrades>Upgrade DB/Text for SQL>Textbases command.

**Upgrade DB/Text for SQL>Menu Screens**

***Note:*** This command is available through the Inmagic DB/Text for SQL Administration program (InmCSAdmin.EXE).

This command (on the Manage Upgrades menu) upgrades your existing menu screens for use with the latest version of the DB/TextWorks for SQL platform.

You must upgrade your menu screens when you are upgrading to a new version of Inmagic DB/TextWorks for SQL and the installation notes for new and upgrade installations specify that this step is needed.

To upgrade menu screens

1. Choose Manage Upgrades>Upgrade DB/Text for SQL>Menu Screens to open the Specify Inmagic Menu Screen File dialog box. Select the menu screen(s) you want to upgrade, then click Open. The menu screens must all be in the same folder.

2. On the Confirm Settings dialog box, review the list of menu screens that will be upgraded, then click Finish to confirm them and start the upgrade.

3. On the Operation Status dialog box, wait while the upgrade completes and the Operation log shows what was upgraded. This information is logged to CSUpdates.LOG in the same folder as the menu screens. We recommend you review this information to ensure that all of the upgrades completed as intended.

**Converting from DB/TextWorks (non-SQL) to DB/TextWorks for SQL**

When converting from DB/TextWorks (non-SQL) to an Inmagic product with a SQL Server back end, you must convert your existing textbases and menu screens. If you are publishing textbases on the Web with WebPublisher PRO Web, you must also convert your screens, forms, and other Web-related files for use with your new system. For more information about this, see the PDF Converting to the Inmagic DB/Text for SQL Platform.

This topic provides an overview of the conversion process.

**To update textbases, menu screens, and Web components**

Use the following commands in the DB/Text for SQL Administration window:

- Manage Upgrades>Convert from DB/Text>Textbases to convert textbases that were created with the non-SQL platform so that they can be opened with DB/TextWorks for SQL. This command starts a wizard that takes you through the conversion process. You can update multiple textbases at once, as long as the textbases are in one folder. If they are not, you must run the wizard for each folder containing textbases. Before you start the conversion process, we strongly recommend you back up your existing textbases using your usual method.
- **Manage Upgrades>Convert from DB/Text>Menu Screens** to convert menu screens that were created on the non-SQL platform so that they can be opened with DB/TextWorks for SQL.

- **Manage Upgrades>Convert from DB/Text>Web Components** to convert Web components (for example, HTML query screens, script files, and other Web-related files) for use with WebPublisher PRO for SQL. You only need to use this command if you have WebPublisher PRO.

### Convert from DB/Text>Textbases

**Note:** This command is available through the Inmagic DB/Text for SQL Administration program (InmCSAdmin.EXE).

This command converts existing DB/TextWorks (non-SQL) textbases for use with the latest version of the DB/TextWorks for SQL platform.

When you choose **Manage Upgrades>Convert from DB/Text>Textbases**, the Select Textbases to Convert to DB/TextWorks for SQL dialog box opens so that you can select the textbase(s) you want to convert and start the process.

You must convert textbases when you are converting from DB/TextWorks (non-SQL) to DB/TextWorks for SQL.

**Note:** If any of the textbases you plan to update from non-SQL to SQL contain image annotations that were created with DB/TextWorks version 7.01 or earlier, copy the Art32.DLL file from your DB/TextWorks installation folder to your DB/TextWorks for SQL installation folder prior to choosing the **Manage Upgrades>Convert from DB/Text>Textbases** command.

### Convert from DB/Text>Menu Screens

**Note:** This command is available through the Inmagic DB/Text for SQL Administration program (InmCSAdmin.EXE).

This command (located on the **Manage Upgrades** menu) converts your existing DB/Text menu screens for use with the SQL platform.

**To convert menu screens**

1. Choose **Manage Upgrades>Convert from DB/Text>Menu Screens** to open the Select Menu Screens to Convert to DB/TextWorks for SQL dialog box. Select the menu screen(s) you want to update, then click **Open**. The menu screens must all be in the same folder.

2. On the **Convert Menu Screens from DB/Text: Confirm Settings** dialog box, review the list of menu screens that will be converted, then click **Finish** to confirm them and start the conversion.

3. On the **Operation Status** dialog box, wait while the conversion completes and the Operation log shows what was updated. This information is logged to CSUpdates.LOG in the same folder as the menu screens. We recommend you review this information to ensure that all of the conversion completed as intended.

When you convert your DB/TextWorks menu screens for use with DB/TextWorks for SQL, any textbase boxes on those menu screens that are pointing to a DB/TextWorks textbase will only work if both of the following are true:
You have converted your DB/TextWorks textbases for use with the DB/TextWorks for SQL platform (choose Manage Upgrades>Convert from DB/Text>Textbases). If you converted your menu screens first, you can still convert your textbases.

When you converted your textbases, you placed the new copies of the textbases in the same location as the originals. (Note that doing this did not overwrite your original textbases, as the new files have different extensions.)

If both of the above requirements are not met, you must open your menu screens in the Menu Screen Designer and re-direct any textbase boxes to point to your new, converted textbases in the location to which you converted them.

For more information, see Converting to the Inmagic DB/Text for SQL Platform, a PDF that explains how to migrate from the non-SQL to SQL platform.

**Convert from DB/Text>Web Components**

**Note:** This command is available through the Inmagic DB/Text for SQL Administration program (InmCSAdmin.EXE).

If you have Inmagic DB/Text WebPublisher PRO, use this command (located on the Manage Upgrades menu) to convert your existing Web components (for example, HTML query screens, script files, and so forth) so that they work with the latest version of the DB/TextWorks for SQL platform. For more information about this, see Converting to the Inmagic DB/Text for SQL Platform, a PDF that explains how to convert your software.

Your new version of WebPublisher PRO also uses a new virtual directory, named ics-wpd, instead of dbtw-wpd.

The Manage Upgrades>Convert from DB/Text>Web Components command makes a copy of certain files, updates them to point to the new virtual directory, and moves them to a new installation folder (ICSWEB, if you accepted the default folder during installation).

**Important!** Your existing WebPublisher PRO folder structure and files will remain intact.

Before you can use your converted Web components with the new version of WebPublisher PRO, you must also convert any textbases that are used on the Web for use with the DB/TextWorks for SQL platform (choose Manage Upgrades>Convert from DB/Text>Textbases). You can convert Web components and textbases in any order.
Run-time version

Distributing Textbases with the Run-time Version

This topic is intended for administrators who are planning to distribute textbases for search-only use.

The Run-time version software is a standalone, search-only version of DB/TextWorks (non-SQL platform). Run-time software is included with the full version of DB/TextWorks. You can copy and distribute the Run-time software together with any textbases that you create, according to the terms of the Run-time Master License Agreement.

End users who install the Run-time software will then be able to search the provided textbases. They cannot make any changes to records or the textbase structure or create their own textbases.

Note that the Runtime software requires exclusive access to a textbase and permits only one instance of the software to run at a time.

What to Give End-Users

The Run-time license agreement allows you to distribute one (1) copy of the Run-time software along with each copy of a search-only, stand-alone textbase that you create with DB/TextWorks.

To distribute textbases for search-only use, provide end-users with the following components:

- **Run-time software.** When you unzip the download for DB/TextWorks, you get an install kit that includes a folder called Runtime. In that folder is the install kit for the Run-time version. Provide the contents of that folder to the end-users who will search your textbase. This will enable users to run Setup to install the Run-time software locally.
  
  **Note:** You may want to make a master copy of the Run-time software, for safekeeping, by burning a CD that includes the contents of that directory. You can then copy the contents of that CD for distribution to end-users.

- **Textbase files.** Give each user the textbase you will allow them to search. Provide of the files that comprise the textbase. You can use the Copy Textbase command to copy the files onto a disk, or you can use Windows Explorer to copy the files yourself. You do not have to include the log file (.LOG). If you are distributing linked textbases, be aware that the link definitions include path information that may not be appropriate for the end-user's configuration. If possible, keep linked textbases together in the same folder. To ensure that all of the files will be accessible, consider placing all of the files in the same folder (for example, at the root if you are going to burn a CD).

- **Image files.** If the textbase includes image file references, provide the image files. **Note:** The Image field in the textbase records should include image names only (not drive letter and path). The referenced images should be in the same folder as the textbase.

- **Menu screen and icon files.** If you are distributing menu screens with your textbases, place the menu screen file (.TBM) and any icon files used by the menu screen in the same folder with the textbases referenced by that menu screen. If you are have a single menu screen, and you want it to be used automatically, name it DBTEXT.TBM. **Note:** Before distributing textbases, open each menu screen in the Menu Screen Designer,
Run-time version

choose **Tools>Screen Properties>General**, and select **Do not retain path** from the **Path setting** drop-down list.

- **DBTEXT.INI.** To ensure that the Run-time software will search textbases using the same rules as the ones with which the textbases were built, include a copy of your **DBTEXT.INI** file.

- **<textbase>.INI file.** If you built the **Copy Special** capability into your textbases or if you use the Applications menu, your users will need a copy of your **<textbase>.INI** file. You will need to tell users how to use Copy Special. If you created a textbase-specific help file, you would have specified it in the **<textbase>.INI** file.

- **Help file.** If your textbase includes textbase-specific help, give end users the compiled Windows help file. The help file must have the same name as the textbase and reside in the same folder as the textbase, unless you have specified otherwise in the **<textbase>.INI** file.

- **User files (.TBU).** If you store elements in the textbase file, you do not have to supply the user file. You can easily copy elements from your user file to the textbase file using the **Save As** command in the Form Designer or Query Screen Designer. If you do provide user files, instruct each end-user to copy the .TBU file to their own local user file folder.

Test the CD before duplicating or distributing it, to ensure that it contains all of the necessary files. **Tip!** Test it on a PC that does not have DB/TextWorks installed so that you are emulating the end user's environment.

End-users will copy all of these files locally, then run the Run-time Setup command to install the software. They can then search the provided textbases. See **Installing and Using the Run-time Version**.

### Installing and Using the Run-time Version

This topic is intended for users who have received the Run-time version software along with textbases to search. The Run-time software enables you to search any textbases that were provided.

**Note:** The Runtime software requires exclusive access to a textbase and permits only one instance of the software to run at a time. Therefore, it may not be installed on a server.

Unless the administrator indicates otherwise (for example, if they provided a customized installation program), follow these steps to install the Run-time software and begin using the provided textbases:

1. Copy the provided files onto your computer. Unless otherwise instructed, copy all of the files into a single directory. (Typically, this folder will include both the Run-time software and the textbases.)

2. Install the Run-time software locally by running **Setup** from the local directory where you copied the files. **Note:** If the Run-time software will be installed on a Windows Vista operating system, you must be logged in as an Administrator.

3. Open the Windows Start menu and choose **Programs>Imagic Applications>DBSearchWorks Run-time.**

4. Use the Run-time version to open any of the provided textbases.
Use the online help to learn how to search. Note that many of the topics in the help do not pertain to the search-only version.

**Run-time Master License - Additional Terms and Conditions**

This topic pertains only to the non-SQL version of DB/TextWorks.

The following terms and conditions supplement and modify the DB/TextWorks license agreement and apply to the Run-time program.

You may copy the Runtime program at no additional cost, solely for distribution of one (1) such copy along with each copy of a search-only, stand-alone textbase that you create with DB/TextWorks, and for no other purpose.

Inmagic, Inc. assumes no responsibility for the content, use, distribution, or any copyright or other proprietary right of or in information that is reproduced or distributed with copies of the Run-time program.

Except as modified by these Additional Terms and Conditions, the term and conditions of the DB/TextWorks license agreement apply to the Run-time program.
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