Copyright © 1995-2004 by Inmagic, Inc. All rights reserved.

Inmagic®, the Inmagic logo, DB/Text®, DB/TextWorks®, BiblioTech®, and BiblioTech PRO® are registered trademarks, and Inmagic.net™, BibSpeed™, IntelliMagic™, and PowerPack™ are trademarks of Inmagic, Inc. Other brand and product names are trademarks or registered trademarks of their respective holders.

The information in this document is subject to change without notice and should not be construed as a commitment by Inmagic, Inc., which assumes no responsibility for any errors that may appear in this document. Use of any other product name does not imply endorsement of that product by Inmagic, Inc.

WARRANTY

INMAGIC, INC. MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY AND FITNESS. INMAGIC, INC. SHALL NOT BE LIABLE FOR ANY LOST PROFITS OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES. IN PARTICULAR, INMAGIC, INC. SHALL HAVE NO LIABILITY FOR ANY DATA OR PROGRAMS STORED OR USED WITH THIS PRODUCT, INCLUDING THE COSTS OF RECOVERING SUCH PROGRAMS OR DATA.

U.S. GOVERNMENT: If Licensee is acquiring the software on behalf of any unit or agency of the U.S. Government, the following shall apply:

(a) For units of the Department of Defense: RESTRICTED RIGHTS LEGEND: Use, duplication or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data Clause at DFARS 252.227-7013. (b) For any other unit or agency: NOTICE - Notwithstanding any other lease or license agreement that may pertain to, or accompanying the delivery of, the computer software and accompanying documentation, the rights of the Government regarding its use, reproduction and disclosure are as set forth in Clause 52.227-19(c)(2) of the FAR.

Contractor/Manufacturer is:
Inmagic, Inc., 200 Unicorn Park Drive, Fourth Floor, Woburn, MA 01801, U.S.A.

1204/DBTW800
## Contents

Welcome! ........................................................................................................................................... vii
Conventions and Symbols .................................................................................................................. vii
Getting Help ......................................................................................................................................... ix

**Chapter 1: Getting Started** ............................................................................................................ 1
  Introducing DB/TextWorks ................................................................................................................. 1
  Feature Overview ............................................................................................................................... 3
  Installing Inmagic DB/TextWorks .................................................................................................... 12
  Starting Inmagic DB/TextWorks ...................................................................................................... 13
  Specifying the Number of Licensed Users ...................................................................................... 14
  Using the Run-time Software .......................................................................................................... 15
  Taking a Quick Tour of DB/TextWorks ........................................................................................... 16

**Chapter 2: Creating a Textbase** .................................................................................................... 27
  Overview ............................................................................................................................................ 27
  Planning a Textbase ........................................................................................................................... 28
  Creating a Textbase ........................................................................................................................... 32
  Specifying Textbase Options ......................................................................................................... 60
  Editing the Textbase Structure ...................................................................................................... 69
  Rebuilding Field Indexes .............................................................................................................. 73
  Copying, Renaming, Deleting, and Moving Textbases .................................................................... 74
  Displaying and Printing Textbase Information .............................................................................. 76
  Setting Textbase Defaults .............................................................................................................. 77
  Backing Up Files .............................................................................................................................. 77
  Other Management Activities ......................................................................................................... 81
  Checking a Textbase for Problems ............................................................................................... 82

**Chapter 3: Working with Records** ............................................................................................... 83
  Overview ............................................................................................................................................ 83
  Adding New Records One at a Time ............................................................................................... 83
  Working with Record Skeletons ..................................................................................................... 85
  Editing Records One at a Time ....................................................................................................... 87
  Editing Techniques ......................................................................................................................... 88
  Specifying Textbase Access .......................................................................................................... 99
  Copying Records ........................................................................................................................... 104
  Deleting Records ........................................................................................................................... 104
  Using Batch Modify ....................................................................................................................... 105
# Table of Contents

**Chapter 8: Linking Textbases** .................................................................................. 363  
Overview .................................................................................................................. 363  
Using Intermediate Textbases ................................................................................. 367  
How to Link Textbases ............................................................................................ 368  
Characteristics of Link Fields ................................................................................... 370  
Characteristics of Associated Fields ........................................................................ 371  
Searching Linked Textbases .................................................................................... 372  
Displaying Fields from a Secondary Textbase ........................................................ 375  
Editing Primary Records .......................................................................................... 377  
Editing Secondary Records ..................................................................................... 377  
Refreshing Linked Information while Editing a Record ............................................. 379  
Renaming or Rearranging Fields ............................................................................. 379  
Protecting Secondary Textbase Information ........................................................... 380

**Chapter 9: Managing Textbase Elements** .............................................................. 383  
Renaming Elements ................................................................................................ 383  
Deleting Elements .................................................................................................... 384  
Exporting and Importing Elements ........................................................................ 385  
Printing Element Definitions .................................................................................. 386  
Copying and Changing Elements ............................................................................ 387

**Chapter 10: Customizing DB/TextWorks** ............................................................... 389  
Setting Options ........................................................................................................ 389  
Customizing the Toolbars ....................................................................................... 398  
Providing Textbase-Specific Online Help ................................................................ 400  
Configuring DB/TextWorks ...................................................................................... 401

**Appendix: Reference Information** ....................................................................... 403  
Navigating in DB/TextWorks ................................................................................... 403  
Textbase Files ......................................................................................................... 410  
User Files ................................................................................................................ 411  
Using Copy Special .................................................................................................. 414  
Initialization Files ..................................................................................................... 416  
Extensions for Text Files .......................................................................................... 419

**Glossary** ............................................................................................................... 421

**Index** ................................................................................................................... 459
Welcome!

Welcome to Inmagic® DB/TextWorks®! This manual contains procedural and reference information, including instructions about how to use the software. It is designed to be task-oriented, starting with creating a textbase.

Conventions and Symbols

This manual uses the following conventions and symbols.

**Typeface**

This manual uses the following typeface conventions:

- **Boldface** type indicates menu bar actions; keyboard keys; objects on dialog boxes; buttons and boxes on query, form, and menu screens; and emphasis. For example, for:
  - **Menu bar actions**: choose Tools>Options, choose Edit>Copy Special>Record
  - **Keyboard keys**: press F1 for help, use F3 and paste items from the indexes
  - **Objects on dialog boxes**: type a number in the Width box, select the Sort in Reverse Order check box, select either the Terms List or Words List option button, click the Enlarge button
  - **Buttons and boxes on query screens, forms, and menu screens**: click the Submit Query button, type Inmagic in the Company box
  - **Emphasis**: close the designer and do not save the file, Tip!

- **Italics** indicate textbase names and field names. For example, open the Sample1 textbase, include the Street, City, State, and Country fields in the Address box.

- **Courier** type indicates text you should type and examples. For example: type 02/22/2003 in the Date box, author ct smith/jones

- **CAPITAL LETTERS** indicate directory and file names, and Boolean operators. Note that they do not mean that you must type them in capital letters (unless otherwise stated) or that you will see them for real in capital letters. For example: The INMAGIC.INI file may be saved in the C:\PROGRAM FILES\INMAGIC directory. The Boolean operators AND, OR, and NOT.
Numbered Lists and Bulleted Lists

This manual uses the following conventions for numbered lists and bulleted lists:

1. Numbered lists indicate that order is important, such as multi-step instructions.
   - A square bullet indicates a single-step instruction.
   • Bulleted lists indicate that the order of the items is not important. This is the first-level bullet.
     – This is the second-level bullet.
     ◆ This is the third-level bullet.

Menu Actions (>) and Mouse and Keyboard Actions (+)

An arrow (>) indicates sequential menu actions. For example: File>Open means, from the File menu, choose the Open command.

A plus sign (+) indicates that the keys and/or mouse clicks should be pressed simultaneously. For example: Alt+F4 and Shift+Click.
Getting Help

In addition to this manual, the following resources are available:

- **Online help.** The help file contains the most up-to-date information and includes more details than this manual. To open the help file, start DB/TextWorks and press F1, or choose Help>Help Topics from the DB/TextWorks menu bar. For context-sensitive help, click \( \text{\texttrade} \) on the DB/TextWorks toolbar, then click the menu command or toolbar button that you want to know about. Another useful feature is the Help on this Window button \( \text{\texttrade} \). Click the button and a help topic on specific tasks you can perform in that window appears.
- **Knowledgebase and Web site.** With the software open:
  - To search for solutions to common problems, choose Help>Inmagic on the Web>Knowledgebase to go to the Inmagic Product Support knowledgebase on the Web.
  - To visit the Inmagic Web site, choose Help>Inmagic on the Web>Home Page or Help>Inmagic on the Web>Support Page.
You must have a Web browser installed to be able to use these features.
- **Error messages textbase.** The software includes an error messages textbase (DBTMSG.TBA) in the DB/TextWorks installation directory. Use it to find out what an error message means and what you can do to fix the problem. You can search for any word or phrase.
- **README file.** This file tells you what is new with that particular version of the software; lists issues resolved from the previous release and any late-breaking information; and contains other important information. The README file is installed in the DB/TextWorks installation directory. Open it using a Web browser.
- **Installation Notes.** This booklet explains how to install the software. This booklet comes with the installation CD, and is available as a PDF file on the CD.
Contacting Inmagic, Inc.

If you have tried all the resources listed above and you still need help, you can contact Inmagic, Inc. or your local Inmagic dealer.

If you have a Product Support contract, please have the contract number handy, 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 Product Support contract, you can contact Inmagic Sales to purchase a support plan.

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

support@inmagic.com - product support questions and feature requests
sales@inmagic.com - sales, product pricing, and custom solution questions

If your message is intended for a particular person at Inmagic, Inc. (for example, a Product 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 communicate directly with other Inmagic users by participating in one or more Inmagic Web forums. To do so, go to the Inmagic Web site (http://www.inmagic.com).

Welcome!
Chapter 1: Getting Started

This chapter describes the main features of the Inmagic® DB/TextWorks® software and shows you how they fit together as a whole. DB/TextWorks comes with sample textbases that you can install during Setup. Use the sample textbases to learn the software.

Introducing DB/TextWorks

What is DB/TextWorks?
DB/TextWorks is a content management system—a type of database software that enables you to build networked and standalone textbases to manage text, numbers, dates, and electronic images. DB/TextWorks combines traditional database power, including the ability to manipulate data and perform arithmetic calculations, with the ability to handle large amounts of text.

DB/TextWorks also provides you with access to Inmagic.net™, which gives you the ability to connect to the Inmagic server from within a DB/TextWorks session to accomplish various tasks relating to cataloging, indexing, and disseminating information throughout an organization.

What is DB/Text WebPublisher PRO?
The software and documentation frequently refer to Inmagic DB/Text® WebPublisher PRO. WebPublisher PRO is a separate product that you can purchase. WebPublisher PRO enables you to publish textbases on the Internet or an intranet, so Web users can search and modify them (that is, add, edit, and delete records via a browser). All WebPublisher products (such as, DB/Text WebPublisher and DB/Text WebPublisher Lite) work together with DB/TextWorks, which is the “buildware” for creating searchable textbases. The WebPublisher line of products has its own user’s manual. Online help for WebPublisher products is integrated with the DB/TextWorks online help. If you do not own a WebPublisher product, you can ignore all references to it in the software and documentation.

What is a textbase?
A textbase is just like a database except that it can handle large amounts of text as well as numbers, dates, and images. Each textbase provides an efficient way to organize, update, retrieve, and present large amounts of information.
Who uses DB/TextWorks?

DB/TextWorks can help any organization that needs to organize, track, and print the diverse types of information encountered daily. Libraries use textbases to catalog books and periodicals. Law firms use textbases that contain the complete text of thousands of legal briefs. Businesses keep track of production, sales, and distribution information. Marketing departments track information about competitors, including internal documents as well as metadata and links to Web resources. Government agencies archive letters, faxes, EMail, and policy documents. Inmagic, Inc. uses DB/TextWorks to track software development, customer feedback, and technical publications. The uses are as varied as the marketplace.

How is a textbase constructed?

Every textbase has a structure, which consists of fields and settings that define how the textbase will operate. After defining the structure, you populate the textbase by adding records.

A record is what you find when you search a textbase. Each record represents one item, such as a document, a customer, a book, or a deposition. Records are made up of the fields you defined in the structure (for example, Name, Address, City, State). Fields in DB/TextWorks do not have length limitations, and can be fully indexed. That means you can store long pieces of text, such as a 20-page document, and still do a quick search.

Each field can hold multiple entries. An entry is a piece of information that can be retrieved, sorted, or formatted independently. For example, the Phone Number field can hold more than one number (such as home, business, and fax numbers). The ability to handle multiple entries in one field, instead of requiring separate fields, is one of the unique features of DB/TextWorks.
Feature Overview

With DB/TextWorks, you can build and maintain sophisticated textbases easily and find detailed information quickly and accurately. The following illustration shows a few of the key features that distinguish DB/TextWorks.

Flexible Textbase Structure

To create a textbase, you define a textbase structure, which is a list of fields and settings that determine how the textbase will operate. A textbase has the following features:

- **Variable-length fields.** You never have to define the length of a field. A field can contain any number of characters: a 50-page proposal, a 1000-word diagnosis, or a short phrase.
- **Multiple (repeating) entries in a field.** Fields can include not just one entry, but several. For example, you can put the names of several authors in one field and still be able to search for, format, and manipulate each name separately. This is an alternative to conventional databases that require a separate field for each entry.
- **Relational-like linking.** You can store common information in one textbase and access it from other textbases. For example, you can store names and addresses in one textbase, but search for, display, print, and edit them from another. This reduces the amount of time spent entering and editing data and eliminates redundant information.
- **Ability to make changes.** You are not locked into the initial textbase design, because you can change most aspects of the structure at any time (for example, add and rename fields, change indexing and validation).
• **Comprehensive indexing.** An index is a sorted list of information in a field, similar in concept to an index in the back of a book. Because every word of every entry can be indexed, you can find information quickly and precisely. DB/TextWorks accommodates even lengthy documents with ease.

• **Customizable.** You can customize DB/TextWorks to your particular needs with a series of options provided by the software. You can also re-organize the toolbars, specify languages for month and day names, and set many other configuration options.

• **Automated file management operations.** Built-in file management operations make it easy to copy, rename, and delete textbases and other files.

• **User-definable help.** You can include your own online help for each textbase.

**Streamlined Data Entry and Maintenance**

When you need to add information to your textbase, you can enter new records one at a time or import thousands of records automatically. Data entry and maintenance features include:

• **Easy information entry and editing.** You can add records one at a time or import them from a file. Importing records is a fast and easy way to build textbases. You can even import the full text of documents, such as letters, memos, and EMail messages. To automate record editing, use batch operations to add, edit, and delete information in many records at once.

• **Spell checking.** You can quickly check records to eliminate typographical errors, or have your spelling checked as you type.

• **Thesaurus.** You can create a thesaurus textbase that lets you maintain a controlled vocabulary of terms and the relationships among terms, and then connect the thesaurus to a field in the textbase. You can also use a thesaurus as a validation list.

• **Validation.** You can validate information as it is entered. For example, apply a mask so only phone numbers in a specific format are allowed. Or use a validation list to detect unauthorized entries, so you have a chance to correct them before they are entered in the field, or reject them.

• **Time-saving features.** You can use record skeletons (templates) to add information automatically to new records. You can define substitution lists to reduce keystrokes (that is, just type a few letters and the whole entry will appear). For example, type can and the software inserts Canada. You can use scripts in the forms and screens you design to perform certain operations when the form or screen is opened or closed, when buttons on the form or screen are clicked, or when you leave a box.

• **File conversion and sharing capabilities.** You can share information with other textbases and applications. You can write formatted record information to a file in Plain Text (ASCII), Rich Text Format (RTF), or Hypertext Markup Language (HTML), and you can import and export records in text formats, including Extensible Markup Language (XML).
Inmagic.net

Inmagic.net™ gives you the ability to connect to the Inmagic server from within a DB/TextWorks session to accomplish various tasks relating to cataloging, indexing, and disseminating information throughout an organization. If you catalog Web pages, you can use Inmagic.net to capture metadata in a textbase. Inmagic.net also helps you to configure other products (such as the Inmagic® Gatherer and Web Forms Library) for use with specific textbases.

Note that Inmagic.net is an evolving feature. New functionality may be presented periodically. Therefore, 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.

For Inmagic.net to work, you must have Microsoft Internet Explorer version 5.01 or later installed on your machine, and cookies must be enabled in that browser. (Internet Explorer does not have to be your default browser.)
Fast, Powerful Searching

Searching a textbase is fast and precise. Even if your textbase grows to millions of records, you can expect little or no reduction in search speed. You can define and save sophisticated queries to find the information you need. The search features in DB/TextWorks include the following:

- **Multiple search options.** You can use a variety of search options, including word, phrase, term (exact complete match), word stem (comput*), proximity (red within 2 words of wagon), range (1997:2003), comparison (<500), and Boolean (AND, OR, NOT) searches.

- **Flexible search methods.** You can type information in boxes or use the command language. Both methods are fast and accurate.

- **Customized search screens.** You can design your own query screens, which you can use to search for records. Each box on the screen represents one or more fields. For example, the box labeled **Name** searches the **Name** field. The box labeled **Type any phrase** searches all fields in the textbase. Type information into the boxes to do a search.

- **Guess-proof searching.** You can eliminate guesswork during a search by pressing the **F3** key on the keyboard to display actual record information. This is called browsing. For example, press **F3** in the **Name** box to see a list of names, then paste a name in the box so you can search for it.

- **Reusable record sets.** Records found by a search are called a set. You can save sets (search criteria and results) to use again. This is convenient if you do the same searches regularly.
Varied Display and Print Options

After you find records, you can display or print them. There are several windows you can use to display record information:

- The Report window shows multiple records, one after another.
- The Display window shows one record at a time.
- The Edit window lets you add or edit one record at a time.
- The Images window displays images referenced in the records.
- 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.

The following illustration shows four of the windows open at once. You can display a different record in each window or synchronize the windows so they all show the same record.
The way records appear when displayed or printed depends on the forms that are selected. A form is a layout for displaying or printing record information. DB/TextWorks automatically generates Basic forms that you can use until you design your own:

- The Basic Record form displays one record at a time.
- The Basic Report form displays multiple records.

You can design your own forms for each window, and for printing, to lay out your data in various ways. For example, you can design almost any type of label.

Forms can do more than just mirror textbase information. They can include calculations, variables, sorts (such as sales by territory), subtotals, and other arithmetic operations to help you analyze, track, and summarize information.

**Local Consultants**

For internal distribution to: D. Ernits, J. Barnet, M. Applegate

1. **Alaquer, William**
   943 Great Plain Avenue, Westboro, MA 01581 USA
   Skills: Accounting, C, Object, HTML
   Currently at: Prowessco Capital Investments, Inc.

2. **Bigelow, Daniel**
   17 Stonehouse
   Skills: Graphic
   Currently at: Sunday Graphics

3. **Davis, Brenda**
   545 Howard
   Skills: COR, Current at:

4. **James, Chris**
   07 Beakerwood
   Skills: HTML
   Currently at:

5. **Wallace, Mark**
   52 W. Bumby
   Skills: Athletic
   Currently at:

---

**Invoice Date | ID# | Quantity | Price/Unit | Total Price**
---

**Northeast**

**Concord Miniatures**

| 9/3/40 | 235-100 | 10 | 21.30 | 213.00

**Johnson Sinks**

| 9/3/40 | 324-200 | 1 | 75.00 | 75.00
| 9/19/00 | 555-100 | 15 | 175.00 | 2625.00

**Thompson Toys and Games**

| 9/3/40 | 236-100 | 20 | 223.00 | 4460.00
| 9/2/00 | 527-200 | 1 | 225.00 | 225.00

**Thompson Toys and Games SUBTOTAL** $4725.00

**Northeast SUBTOTAL** $9685.00
Multiple Sort Options

After a search, you can sort records so they appear in a certain order when displayed or printed:

- **Relevancy ranking.** Sort records in descending order of relevance, with the most relevant records appearing first.
- **Sort and subsort options.** You can sort records alphabetically, numerically, or by date, and specify whether records appear in reverse order. You can subsort by up to four additional fields and use a variety of options to order the records precisely the way you want.
- **Exploded sorts.** An exploded sort makes a record appear under each entry in the sort field, rather than just the first. For example, if the `Employees` field contains the names of three people, an exploded sort makes the record appear three times (once for each employee).
- **Interfiling.** You can interfile two or more fields, such as `Author` and `Corporate Author`.
- **Hardwired sorts.** You can specify a default sort order or hard wire a sort in a form. Using a form sort is particularly useful when a form depends on a particular order (for example, sales by territory) for totals and calculations.
- **Unsorted.** You can specify that records appear unsorted, meaning that they are listed in the approximate order they were added to the textbase. Use this option if you want to speed up the display of the report or produce a report with records in an as-entered order.

Convenient Browsing

When you search or edit, you can display information relevant to the task by using the Browse Choices feature. Instead of typing words or terms, you can pick them from a list by pressing F3 or choosing **Edit>Browse Choices** in a query or edit box.

- **On a query screen,** pressing F3 in a query box displays a list of terms, words, and/or thesaurus entries for which you can search. Pressing F3 in a sets box on a query screen displays a list of saved sets, which you can combine with other criteria.
- **On an edit screen,** pressing F3 displays the validation list, substitution list, links (terms from the associated field in the secondary textbase), and/or thesaurus entries.
Try pressing **F3** in various search and edit boxes, to see what it does.

With your cursor in a query box, press **F3** when searching to see a list of all the items in that field. Select an entry from the Choices List and click the **Paste** button to paste the entry into the query box as your search term.

### Single-User and Multi-User Environments

DB/TextWorks allows 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 relies on indexes. When you add, edit, and delete record information, DB/TextWorks 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 by controlling who can view and edit information. For example, hide the *Salary* field and make other fields read-only. Use a Silent password to allow 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, you can limit the number of times a textbase can be opened simultaneously.

- **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.
Textbase Elements and User Files

DB/TextWorks uses the phrase “textbase elements” as a convenient way of referring to the following items:

- **Forms**, which dictate how information is displayed or printed.
- **Query screens**, in which you enter criteria to conduct a search.
- **Sets**, which contain the results of previous searches.
- **Record skeletons**, which are templates used to automatically add information to new records.

Textbase elements are never saved as individual files. Instead, they are saved either in the textbase so all users sharing a textbase have access to them, or in a user file so only you (or someone using your computer) can have access to them. DB/TextWorks dialog boxes use the words **public** and **private** to distinguish between the two.

A user file provides a private place for you to keep your elements separate from other users. For more information about user files, see the Appendix.

Direct Access to Your Most-Used Textbases

When DB/TextWorks starts, it can display a menu screen that lists the textbases you use most often. You click an item on the menu screen to open a textbase.

Menu screens provide an alternative to opening a textbase the “Windows” way (File>Open). You create a menu screen when you want to:

- **Access textbases easily.** By listing textbases on a menu screen, you can just click to open them. You do not have to remember the location of multiple textbases.
- **Set up a starting environment.** For each textbase listed on the menu, you can specify the initial set of forms and query screens to use. For example, you can specify which query screen should appear and which forms should be used for editing and printing. You can even specify that a particular search be executed when you click the menu item.
Integrated Image Management

Textbase records can have images associated with them, which you can retrieve, display, and print. For example, you could include scanned documents or photographs. This function has the following features:

- **Multiple formats.** DB/TextWorks supports color, grayscale, and black and white images in a variety of formats, such as TIFF, PCX, JPEG, BMP, and TGA, giving you instant access to photographs, line drawings, 35mm slides, documents, schematics, permits, maps, and other types of visual information.
- **Seamless integration.** Adding images to a textbase is simple. You add an Image field type to the textbase structure, then type or batch-import file names into the field.
- **Open architecture.** Designed as an open system, DB/TextWorks is compatible with industry-standard monitors, printers, storage devices, and other hardware components.
- **Efficient image storage.** Image files are not stored inside the textbase, but externally on servers, hard disks, CD-ROMs, DVDs, or other storage devices.
- **Straightforward file management.** Batch editing, user-configurable drive letter specifications, and flexible naming conventions make image file management easy.

To learn more about working with images, see Chapter 7, “Working with Images.”

Installing Inmagic DB/TextWorks

To install DB/TextWorks, see the separate installation notes included with your software. You can install program files, online help, and sample textbases. We recommend installing all components, if you have enough disk space.

**DB/TextWorks**

Follow the prompts to install DB/TextWorks. When you get to the DB/TextWorks configuration dialog box, take a look at Chapter 10, “Customizing DB/TextWorks,” which explains the configuration options. You must specify the number of licensed users when prompted. For example, if you purchased a multi-user license agreement to share DB/TextWorks on a network, you must specify the number of licensed users, after running Setup (see page 14).

**DB/Text PowerPack Lite**

Optionally, install Inmagic DB/Text® PowerPack™ Lite, which is a set of two utilities that you can use on DB/TextWorks textbases to help automate management and maintenance tasks. After installing PowerPack Lite, open the Windows Control Panel and double-click one of the icons, depending on which program you want to use:

- **DB/Text® Updater,** which automatically and continually posts deferred updates using background processing.
- **DB/Text® Checker,** which analyzes textbase integrity and fixes certain problems.

You configure and run each utility independently. Each has its own icon in the Windows Control Panel, its own dialog boxes, and its own help file, which you can access from the dialog boxes.
Starting Inmagic DB/TextWorks

Once the software is installed, you are ready to start DB/TextWorks and open a textbase.

To start DB/TextWorks

- Click the Windows Start button and choose Programs>Inmagic Applications>Inmagic DBTextWorks>Inmagic DBTextWorks. When you start the software, only a few menu options are available. To see more options, create or open a textbase.

Note: The first time you open the software, the User File Path dialog box opens so you can specify a location for your user files. You can accept the default or specify another location. For more information about user files, see the Appendix.

To open a textbase using the File menu

1. Choose File>Open.
2. When prompted, select a textbase and click Open.

The following may happen, depending on the situation:

- When you open a textbase that does not yet contain any records, a message appears indicating that the Edit New Record window will open so that you can create some.

Tip! If you do not want to be notified when opening an empty textbase, choose Tools>Options to open the Options dialog box. On the General tab, clear the Notify when opening empty textbase check box, then click OK. When you open an empty textbase, you will not be notified and the Query window will open instead of the Edit New Record window.

- When you open a textbase that contains records, the Query window opens so that you can begin a search.

To open a textbase using a menu screen

Another way to open a textbase is to use a menu screen. A menu screen is a list of items, such as the names of often-used textbases. When you click an item, the textbase opens and certain options are preselected. Read about menu screens on page 11 of this chapter and in Chapter 6, “Working with Menu Screens.”
To open a sample textbase
If you installed the sample textbases, you can use them as you learn the software. Textbases Sample1 and Sample2 are located in a subdirectory of the DB/TextWorks installation directory. To open a sample textbase, follow the instructions given previously to open a textbase, or click the Windows Start button, point to Programs>Inmagic Applications>Inmagic DBTextWorks, then click Sample Textbases. When the menu screen appears, click an icon to open a textbase.

To close a textbase
- Choose File>Close.

To exit DB/TextWorks
- Choose File>Exit.

Specifying the Number of Licensed Users
If you purchased a multi-user license agreement to share DB/TextWorks on a network, you need to perform the steps below to specify the number of licensed users. Do this immediately after installing DB/TextWorks or after purchasing additional licenses.

1. Locate your Network Upgrade Password, which is supplied on a separate sheet of paper.
2. Log in to your network using an account with full access to the directory where DB/TextWorks is installed (for example, Administrator access).
3. Start DB/TextWorks, but do not open a textbase.
4. Choose Tools>Enable or Upgrade Network.
5. The Enable or Upgrade Network dialog box shows your serial number and the current number of licensed users. Type the new number of licensed users, and the password provided to you by Inmagic, Inc.

   __Important!__ Type the number of licensed users that you expect to have, not the number that you are adding. For example, if you have a 20-node network version, and have purchased an additional 10 nodes, type 30.

6. Click OK.

If you have any existing textbases and you need to have all of your users accessing them, open each one and edit the textbase structure to increase the number of maximum users to match or exceed the number of licensed users (choose Maintain>Edit Textbase Structure>Maximum Users).
Using the Run-time Software

A separate Run-time program is included with every full version of DB/TextWorks that you purchase. The Run-time software is a standalone version of DB/TextWorks, which lets users search textbases, but not do any editing. You can copy and distribute the Run-time software together with any textbases that you create. (See the online help for the license agreement.)

The Run-time software lets you share your textbases with other people who do not have access to DB/TextWorks. Users who install the Run-time software from the disks that you give them will be able to open your textbases and search them. They will not be able to make any changes to records or the textbase structure, nor can they create their own textbases.

**Note:** End users will need a 32-bit Windows operating system to use the Run-time software. In addition, they must have Microsoft Internet Explorer 5.01 or later installed on their machines before they install the Run-time software in order to use certain features, such as the Thesaurus or forms or screens that use scripts.

You can distribute your textbases using floppy disks or a CD-ROM. To learn how, see the DB/TextWorks online help, the “Distributing Textbases with the Run-time Version” topic.
Taking a Quick Tour of DB/TextWorks

When you use DB/TextWorks, you follow these basic steps:

1. You create a textbase.
2. You populate the textbase with records.
3. You search the textbase and retrieve records.
4. You manipulate the records (for example, display them, print them, edit them).

Note that you must retrieve records before you can do anything with them. That means whenever you open a textbase, the first thing you do is perform a search. However, if you open a textbase that does not contain any records, the first thing you do is add records.

This Quick Tour uses textbases that have already been created for you. In the tour, you will:

1. Open a textbase.
2. Search and display the records you find.
3. Display what you found in a report form, including sorting records.
4. Build and edit a textbase.

About the Sample Textbases

DB/TextWorks includes two sample textbases designed for a fictitious company called TechKnow Consulting. The company provides a variety of high-tech services to their client companies. The sample textbases are located in a subdirectory of the installation directory. If you did not install the sample textbases, do so now by running Setup from the Inmagic DB/TextWorks CD.

- *Sample1* is the primary textbase. It contains information about consultants registered with TechKnow. Placement counselors at TechKnow use this textbase to locate available consultants with skills that match the needs and budgets of their clients. The *Sample1* textbase is linked to *Sample2*.

- *Sample2* is the secondary textbase. It contains information about companies that employ TechKnow consultants.
Taking the Tour

The tour takes about 30 minutes.

**Stage 1: Opening a textbase**

1. Start DB/TextWorks by clicking the Windows Start button, point to Programs>Inmagic Applications>Inmagic DBTextWorks, then click Sample Textbases.

   **Note:** If this is the very first time you open the software, the User File Path dialog box opens to let you specify a location for your user files. Accept the default or specify another location. For more information about user files, see the Appendix.

2. When the menu screen appears, click Sample 1 - Consultants to open the Sample1 textbase.

   ![Menu Screen: Sample](image)

   *Use the sample textbases to learn about DB/TextWorks.*

   *Click a textbase to open.*

   - Sample 1 - Consultants
   - Sample 2 - Client Companies
Stage 2: Searching and displaying

Search criteria can be detailed and precise, to find exactly—and only—the records you want. In this exercise, you will do a simple search and display the records that you find, first in the Report window and then in the Display window.

When you open the Sample1 textbase, the Query window displays. The query boxes on this window represent fields you can search.

1. To find all consultants who live in Massachusetts, in the **Location** box, type MA.

2. Press **Enter** to start the query, or choose **Search>Execute Query**, or click the Execute Query button.

3. The Select Search Results Window dialog box opens, showing the number of records found and the windows in which you can view them. To choose the window in which you want to view the records, select the appropriate option button. For this exercise, accept the default setting—**Report window**—and click **OK**.
The records appear in the Report window, with the word you searched for highlighted.

1. **Christopher James**
   - Current Assignment: Northern Robotics (NorthRob)
   - Skills: HTML, Technical writing, Marketing communications, Networking, Visual Basic
   - Home address: 67 Eastwood Street, Woburn, MA 01801
   - To see a picture, click the "Show Record Images" button in the toolbar.

2. **Coughlin A. Bean**
   - Current Assignment: Acme Alarm Systems, Inc. (Acme)
   - Skills: XML, Marketing communication, Web design, HTML
   - Home address: 93 Mayflower Ave., Plymouth, MA 02360
   - To see a picture, click the "Show Record Images" button in the toolbar.

3. **Donna Carter**
   - Current Assignment: Label Financial Services (Label)
   - Skills: XML, Image design, User interface design, Usability, Web design

You can scroll through the report if you want. Note that the form selected for the Report window determines how the records appear. This form shows just a few lines for each record. You will learn more about forms in a later exercise.

**To display a single record**

Assume you want to see more detailed information about a particular record.

1. Click any record in the Report window, then choose **Display > Display Record** or click the Display Record toolbar button. The form that is selected for the Display window determines how the record appears. Click the Fit Window to Form button.

### Consultant Information

**Coughlin A. Bean**

- 93 Mayflower Ave.
- Plymouth, MA 02360
- 508-555-2662
- business-at-email.com

**Billing rate**: $5

**Skills**: XML, Marketing communication, Web design, HTML

**Education**: BS, Business Management, University of Vermont

### Project Information

- **Project ID**: Acme
- **Client**: Acme Alarm Systems, Inc.
- **Location**: Jamaica, MA
- **Start Date**: 23-Aug-1998

**Description**: Redesign website to reflect new parent company and new items added to company product line. Must incorporate information from parent company website. Customer wants site to be very interactive, graphical. They want to exclude product documentation, product support information, and marketing information on the website. An interactive customer forum should be considered.
2. Use the arrow buttons on the window’s toolbar to display the next or previous record. To see the images associated with the displayed record, choose Display>Show Record Images or click the Show Record Images button. You can use the toolbar buttons in the Images window to zoom in or out, display other images, and perform other image operations.

3. Close the Images window. Then close the Display and Report windows.

To paste from the index—a search alternative
Instead of guessing at keywords or terms to search for, you can browse indexes to see actual record data, which you can paste as search criteria. This is easier than trying to remember exactly what is in the textbase and it ensures that the search criteria match actual record information.

This time, you will search for all consultants who know Web design or user interface design.

1. To clear the query criteria so you can start fresh, choose Search>New Query, or click the New Query button.

2. Click in the Skills box, then press F3 or click the Browse Choices button. The Query Choices Browser dialog box opens to show actual record information (all indexed terms in the field that you are searching).

3. In the Find box, type Web to quickly jump to that portion of the Choices List. (You can also scroll down in the Choices List until you find the entry you are looking for.) Double-click the index entry Web design, then double-click the entry User interface design. This pastes both entries into the Skills box. Close the Query Choices Browser dialog box.

![Query Choices Browser](image)

20 Chapter 1: Getting Started
The search criteria should look like this:

```
Skills
AND
=Web design/=User interface design
```

4. Press Enter to start the query, or choose Search>Execute Query, or click the Execute Query button.

5. When the Select Search Results Window dialog box opens, click OK to view records in the Report window. After looking at the records, close the Report window.

**Stage 3: Using different forms and sorting records**

After finding records and displaying them in the Report window, you can sort them, or change the way they look by selecting a different form, or print them. In the following exercises, you will learn how to select a form, sort records, design a form, and print a report.

**To select a form**

A form is a layout that determines how records appear. A form can show or hide textbase information, change font and color, and include calculations and subtotals appropriate for complex financial reports. Forms can transform dry, ordinary data into vivid, **appealing** (and **sensible**) layouts. You can select a different form whenever you want to see a different view of the information.

For this exercise, we have already created the forms for you. All you have to do is select them.

1. Click the Find All Records button on the main toolbar to find all records in the textbase and open the Select Search Results Window dialog box. You use this dialog box to specify which window you want to use to display your records. You can also use it to specify that you do not want to display the records.

2. Click OK to accept the default, which displays the records in the Report window.

3. Click the Select Form for this Window button on the Report window toolbar to display a list of forms designed for this window.

4. Select a form and click OK to see the same records in a different way.

5. Try choosing different forms (repeat steps 3–4).

**Tip!** To quickly resize a window after switching forms, choose Window>Fit Window to Form or click the Fit Window to Form button on the Report window toolbar.
To sort records
You can sort records to organize your information and present it in a useful way.

1. You should still have records displayed in the Report window from your last search. Click the Select Form for this Window button on the Report window toolbar and select the form called Sort Consultant Info (public).

   **Note:** Typically, you do not need to select a particular form before you sort records.

2. Select **Display>Sort Report**. In the Available Fields list, scroll down and double-click **State** to move it into the Sort Fields list. Click **OK**. Records are now sorted by state.

3. Select **Display>Sort Report** again. Click the left arrow button (<) to move **State** out of the Sort Fields list. In the Available Fields list, scroll down and double-click **Hourly billing rate** to move it into the Sort Fields list. In the Settings for This Field group, select the **Sort in Reverse Order** check box, and click **OK**. Records are now sorted by hourly billing rate, from highest to lowest.

4. Try some other sorts on your own. You can choose up to four fields to do subsorts (for example, sort by **City** and subsort by **Consultant name**).

To design a form
In an earlier exercise, you saw how different forms can change the appearance of records. In the following exercise, you will edit a form to make a simple font and color change, to get a sense of how easy it is to design your own forms.

1. Choose **Display>Design Form**.

2. On the Open Form dialog box, **Sort Consultant Info (public)** should be selected. Click **OK** to load it into the Form Designer.

3. Select any box by clicking it, then choose **Tools>Box Properties** to open its Form Box Properties dialog box.

4. Select the Labels tab and do the following:
   - Ensure that the **Label** check box is selected.
   - Click the **Set Font** button to open the Font dialog box and do the following:
     a. Select a font from the Font list.
     b. From the **Color** drop-down list, select **Red**.
     c. Click **OK**.

5. On the Form Box Properties dialog, click **Apply**, then **Close**.

6. Choose **Form Operations>Save Form**.
Choose **Form Operations>Close Form Designer**. The Form Designer closes and you can see your changes in the Report window.

If you want to try designing your own form, choose **Display>Design Form** and select **Basic Form** from the Start With list. Use the Form Designer to make any changes you want. When you close the Form Designer, you will be prompted to save and name the form.

**Note:** If you want to design a new form based on one you have already designed, open the form in the Form Designer, then choose **Form Operations>Save Form As**, and type a new name in the **Name** box. This will create a copy of the form, which you can then edit to suit your needs without losing the form you modeled it after.

**To print a report**

If your computer is connected to a printer (either directly or through a network), you can print a report. Do a search, choose whether or not to display the search results, then choose **File>Print**, or click the **Print button.** If you do not display the results, the report is printed using the currently selected Report Printing Form. Note that if the selected report printing form and the form that is in use for the active window are different, the Form Used to Print Report dialog box opens. Specify whether to print using the form for the selected window; click **OK**.

**Stage 4: Creating a textbase and editing records**

Now you will create a very simple textbase, add records to it by importing a small text file, then edit a record.

**To define the textbase structure**

The textbase structure is a list of fields and settings that determine how the textbase will operate. To create a textbase, you define its structure.

1. Choose **File>New Textbase**. When prompted for the name of the textbase, type **SAMPLE3**, then specify a location (drive and directory) for it, and click **Save**.

2. When the Create Textbase Structure dialog box opens, click **OK** to accept the default option, **Define New Textbase**.

3. The Edit Fields dialog box opens, so you can specify the fields that will make up the textbase:
   - Type **Name** and press **Enter**.
   - Type **Company** and press **Enter**.
   - Type **Telephone** and press **Enter**.
   - Type **Notes** and press **Enter**.
   - Type **Follow-up**, select **Date** from the **Field Type** drop-down list, and click **Add**. (Note that if you already added the field, select **Date** from the **Field Type** drop-down list and click **Change**.)
4. Click Close to return to the Edit Textbase Structure dialog box, and click OK to save the new textbase.

5. A message displays telling you that the textbase is empty. Click OK to open the Edit window. (This window lets you add a new record to the textbase.)

You have created a textbase! Now you are ready to add records to it.

**To import files into a textbase**

Now you will populate the textbase with records by importing a text file provided with this tour. In a real situation, the file would have been downloaded from an online service, exported from an Inmagic textbase or other application, or created with a word processor or text editor.

1. Select File > Import. Find and select file SAMPLE3.DMP (located in a subdirectory of the installation directory), and click Open.

2. On the Import Options dialog box, select the File Format tab, select the Delimited ASCII Format option button (do not change any of the default settings), and click OK.

3. When prompted, click Yes to import the file; then click OK to dismiss the confirmation message that displays.

Your textbase now contains records. In the next exercise, you will edit the records.
To edit records interactively

Now you will edit a record. You want to change Emily Anne Gordon’s area code from 617 to 508 and add her new mobile phone number.

1. Find the record that you want to edit by performing a new search. Choose Search>New Query. In the Name box, type Emily and press Enter. The Select Search Results Window dialog box opens.

2. Select the Edit window option button and click OK. The Edit window opens.

3. In the Telephone box, delete 617 and type 508.

4. Press F7 to add a multiple (repeating) entry—you do not have to move the cursor—then type this entry, including the text:
   508-555-4321 (mobile phone)

   Notice how easy and fast it was to add a second and distinct entry to the Telephone field. You did not have to modify the data structure or create a table and do a join. You can add as many entries as you want to any field at any time without losing reporting and sorting distinctions. Remember that F7 is the key to use. Do not confuse it with Enter, which simply adds a line break to the data.

5. Choose Records>Save Record, or press F5, or click the Save Record button. Then close the Edit window. The changes will appear in your next search.

6. If you wanted to make the same change to more than one record, you could do a batch modification. For example, you could change all 617 area codes to 508. You would do a search for the records, then choose Records>Batch Modify. You can use Batch Modify to add, delete, or change entries, and even change text within an entry in multiple records.

   Chapter 3, “Working with Records,” describes the many editing techniques you can use.

Congratulations! Now that you have a basic understanding of DB/TextWorks, you can try creating and searching your own textbases. For specific instructions, follow the instructions in each chapter of this book, or consult the online help.
Chapter 2: Creating a Textbase

Follow the instructions in this chapter to create your own textbases. Feel free to experiment. Before you start creating a real textbase, create a pilot textbase and “play” with it—for example, create an electronic “card file” that contains one record per person. Include just a few fields, such as Name, Address, City, State, Postal Code, and Date of Birth. Try to include a variety of field types (for example, Text, Number, and Date). Then, add five or ten records and try a few searches and design some forms.

Actually working through the process will uncover many questions that will be resolved by the time you are ready to begin your real projects.

This chapter explains how create a textbase, details the types of fields you can include, and covers textbase maintenance activities.

Overview

Every textbase is made up of records, fields, and entries.

- **Record.** What you retrieve when you search. Each record represents a collection of information about something, such as a proposal, a company, or a product. For example, a library catalog textbase contains one record for each book or similar resource.

- **Field.** Contains a specific category of information, such as an author’s name or a publication date. As a rule, you include one field for each type of information that you want to be able to manipulate (for example, sort, search, print) individually. For example, if you want to be able to search for documents by title, include a field called Title. Each record consists of fields.

- **Entries.** These are items of information you enter in the field. An important aspect of DB/TextWorks is that each field can have one or multiple entries. (A field with multiple entries is called a repeating field.) For example, the Author field can hold multiple names, each of which is indexed and sorted separately. When you add records, you can use the F7 key to create new entries in a field. (The Enter key is not equivalent—it just creates a line break within the text.)
The following illustration shows the relationship between records, fields, and entries.

Records

<table>
<thead>
<tr>
<th>Supra</th>
<th>$390</th>
</tr>
</thead>
<tbody>
<tr>
<td>The latest in a long line of sophisticated vehicles, the Supra embodies the latest in automotive technology.</td>
<td></td>
</tr>
<tr>
<td>Features: Cleaning kit, Independent suspension</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TX Cruiser</th>
<th>$450</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thanks to an open cockpit and high rolling fenders, the Cruiser looks like a hotrod and English touring car rolled into one.</td>
<td></td>
</tr>
<tr>
<td>Features: Variable speed, Class, Multi-speed</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winger</th>
<th>$450</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winged rear fenders not only look stylish, they provide precise handling on tight curves.</td>
<td></td>
</tr>
<tr>
<td>Features: Independent suspension, Multi-speed</td>
<td></td>
</tr>
</tbody>
</table>

Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX Cruiser</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>$450</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thanks to an open cockpit and high rolling fenders, the Cruiser looks like a hotrod and English touring car rolled into one.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Features</th>
<th>Multiple entries (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable speed</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td></td>
</tr>
<tr>
<td>Multi-speed</td>
<td></td>
</tr>
</tbody>
</table>

Each textbase you create can have the following technical specifications:

- 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)

Planning a 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 can 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. Linking requires careful planning. See Chapter 8, “Linking Textbases” for more information about linking.

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 may 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 10–20 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 users 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 printed or displayed provides immediate feedback and is a necessary part of the refinement process.

Textbase Considerations

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

- Will some of the information 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. For more information, see Chapter 8, “Linking Textbases.”
- Which fields should each record include?
- What type of information will each field hold and how will each field be indexed? The settings you select for each field 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 may want to restrict some fields or individual records so that they are read-only or hidden. Even if the information is not confidential, you may want to impose some limitations on what certain users can do 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. An alternative is to type each record by hand.
- Will you use the textbase on the Web with a WebPublisher product? If so, consider what HTML features you want to give query screens, forms, and menu screens (for example, whether to display images as part of the page or as links which bring up a new page). For more information about publishing textbases on the Web, see the Inmagic DB/Text WebPublisher PRO User’s Manual and the DB/TextWorks online help.
**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 Joe 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 a proposal, 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 constitutes 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*.

The following table shows a partial list of fields used in the textbase, followed by a summary of suggested indexing and validation settings.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Field Type</th>
<th>Indexing</th>
<th>Validation and/or Special Filing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Text</td>
<td>Term &amp; Word</td>
<td>Select Field Entry Required</td>
</tr>
<tr>
<td>Client Company</td>
<td>Text</td>
<td>Term</td>
<td>Select Use Validation List</td>
</tr>
<tr>
<td>(to whom the proposal was sent)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>Automatic Number</td>
<td>Term</td>
<td></td>
</tr>
<tr>
<td>Street Address</td>
<td>Text</td>
<td>Word</td>
<td></td>
</tr>
<tr>
<td>City</td>
<td>Text</td>
<td>Term &amp; Word</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>Text</td>
<td>Term</td>
<td>Select Use Validation List</td>
</tr>
<tr>
<td>Country</td>
<td>Text</td>
<td>Term</td>
<td>Select Use Validation List</td>
</tr>
<tr>
<td>Postal Code</td>
<td>Text</td>
<td>Term</td>
<td>Clear Numbers File Numerically</td>
</tr>
<tr>
<td>Contact Name</td>
<td>Text</td>
<td>Term &amp; Word</td>
<td>Clear Ignore Leading Articles</td>
</tr>
<tr>
<td>Phone</td>
<td>Text</td>
<td>Term</td>
<td>Clear Numbers File Numerically</td>
</tr>
<tr>
<td>Field Name</td>
<td>Field Type</td>
<td>Indexing</td>
<td>Validation and/or Special Filing</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>------------</td>
<td>-------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>EMail</td>
<td>Code</td>
<td>Term</td>
<td>Clear Ignore Leading Articles Clear Use Stop Word List</td>
</tr>
<tr>
<td>Authors</td>
<td>Text</td>
<td>Term &amp; Word</td>
<td>Select Require Strictly Correct Type Select Allow Trailing Text</td>
</tr>
<tr>
<td>Date Completed</td>
<td>Date</td>
<td>Term</td>
<td>Select Use Validation List Select Field Entry Required</td>
</tr>
<tr>
<td>Awarded</td>
<td>Text</td>
<td>Term</td>
<td></td>
</tr>
<tr>
<td>Expenses</td>
<td>Number</td>
<td>Term</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td>Text</td>
<td>Term &amp; Word</td>
<td></td>
</tr>
<tr>
<td>Telephone Notes</td>
<td>Text</td>
<td>Term &amp; Word</td>
<td></td>
</tr>
<tr>
<td>Full Text (OCR proposal text)</td>
<td>Text</td>
<td>Word</td>
<td></td>
</tr>
<tr>
<td>Images (scanned photos and drawings)</td>
<td>Image</td>
<td>Term</td>
<td></td>
</tr>
<tr>
<td>Record Created</td>
<td>Automatic Date*</td>
<td>Term</td>
<td></td>
</tr>
<tr>
<td>Record Modified</td>
<td>Automatic Date*</td>
<td>Term</td>
<td></td>
</tr>
</tbody>
</table>

* When used with the Record Created field, Automatic Date is the date the record is created; when used with the Record Modified field, it is the date the record is created or last modified.

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. To do this, press F7 after typing each entry in the Edit window. 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 project’s starting or ending date? To avoid ambiguity, call the field Date Completed or Date Started, depending on the information it will hold.

After creating the textbase and populating it with records, 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

When you create a textbase you specify its structure by adding as many fields as you want (up to a maximum of 250). You decide each field’s name and type, and you specify how the software will index it and whether it has validation or Special Filing options applied to it.

To create a textbase from scratch
2. Type a name for the textbase in the File name box and navigate the Save in drop-down list to the location in which you want to save it. Click the Save button when done.
3. On the Create Textbase Structure dialog box, select the Define New Textbase option button and click OK.

Tip! You do not have to create every textbase from scratch. You can model a new textbase after another textbase. To do this, select one of the other options available on the Create Textbase Structure dialog box, as appropriate. See “To create a textbase by modeling it after an existing one” on page 36 for an explanation of the other options.

4. On the Edit Fields dialog box, type a name in the Field Name box and click the Add button. Do this for each field you want to add. The fields you add appear in the Field Name list.
5. Select a field from the Field Name list.
6. On the Type and Indexing tab, specify the appropriate options in the Type Information, Indexing Information, and Special Filing Options groups for that field. See “Type and Indexing Tab” on page 37 for an explanation of each option. Click the Change button when done.
7. [Optional] On the Validation tab, specify the appropriate options in the Entry Validation, Content Validation, and Range and Mask groups for the selected field. See “Validation Tab” on page 53 for an explanation of each option. Click the Change button when done.

**Note:** Validation options will not be enabled for field types that do not support validation.

8. 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) or connect to a thesaurus textbase if you plan to use one. This tab also appears for Code fields. However, only thesaurus options will be enabled, as a Code field cannot have a substitution list.

   - **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 field, 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.
9. Repeat steps 5–8 for each field in the Field Name list. You can specify different options for each field, as applicable.

   **Note:** You can rename, re-order, or delete any of the fields you added.

10. Click **Close** on the Edit Fields dialog box to confirm the options you specified and return to the Edit Textbase Structure dialog box.

   **Note:** Depending on the options you specified, you may be notified of an “incomplete definition” (for example, if you selected the **Use Validation List** option button on the Validation tab, but did not create a validation list).

11. [Optional] Type a description of the textbase (for example, *Tracks names of borrowers in library*) in the **Description** box.

12. [Optional] In the Textbase Options group, click the **Passwords**, **Sort Order**, **Stop Words**, **Leading Articles**, **Log File**, **Maximum Users**, and (if you have WebPublisher PRO and plan to edit records over the Web) **XML Match Fields** buttons to specify the appropriate options for the textbase. Each option is explained in this chapter, starting on page 60.

13. Click **OK** on the Edit Textbase Structure dialog box. The new textbase has now been created, and you are ready to start adding records.

14. A message displays telling you that the textbase is empty. Click **OK** to open the Edit window. (This window lets you add a new record 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**).
To create a textbase by modeling it after an existing one


2. Type a name for the textbase in the File name box and navigate the Save in drop-down list to the location in which you want to save it. Click the Save button when done.

3. On the Create Textbase Structure dialog box, select one of the following options, then click OK.

   - **Copy an Existing Inmagic Textbase Structure.** You will be prompted to select an existing textbase, whose structure will be copied. (Records are not copied. If the textbase has an Access Control field, validation and substitution lists are copied automatically.)

   - **Restore from Textbase Structure Backup File.** Use an existing textbase structure backup file (.TBB) as the basis of a new textbase.
**Type and Indexing Tab**

Use the Type and Indexing tab on the Edit Fields dialog box to specify what kind of information each field will hold and how the field will be indexed.

**Field Type**

For each field that you create, select a field type from the **Field Type** drop-down list on the Edit Fields dialog box to indicate the type of information that the field will hold. Each field type listed in the table below is explained in detail on the following pages.

<table>
<thead>
<tr>
<th>Field type</th>
<th>What it does</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>Holds text and numbers</td>
</tr>
<tr>
<td>Number</td>
<td>Holds numbers; sorts negative numbers and currency correctly</td>
</tr>
<tr>
<td>Date</td>
<td>Holds dates</td>
</tr>
<tr>
<td>Automatic Number</td>
<td>Generates a unique number for the record</td>
</tr>
<tr>
<td>Automatic Date</td>
<td>Inserts the current date, or date and time</td>
</tr>
<tr>
<td>Automatic ID</td>
<td>Generates an editable number that can include text, punctuation, and leading zeros</td>
</tr>
<tr>
<td>Computed Number</td>
<td>Computes a number using a formula you specify</td>
</tr>
<tr>
<td>Computed Date</td>
<td>Computes a date using a formula you specify</td>
</tr>
<tr>
<td>Image</td>
<td>References image files</td>
</tr>
<tr>
<td>Link</td>
<td>Links to another textbase, so information from it can be accessed</td>
</tr>
<tr>
<td>Code</td>
<td>Makes punctuation and case relevant to searching and sorting</td>
</tr>
<tr>
<td>UDC</td>
<td>Sorts Universal Decimal Classification System numbers</td>
</tr>
<tr>
<td>Access Control</td>
<td>Provides record-level security by letting you restrict access (Full Access, Read-Only, or Hidden) to individual records within a textbase</td>
</tr>
</tbody>
</table>
**Text**

Select **Text** from the **Field Type** drop-down list to specify that the field will hold text (for example, names and descriptions), as well as numbers that will not be used in calculations (for example, phone numbers). A Text field can hold any combination of alphanumeric characters, punctuation, spaces, and line breaks.

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

**Creating Substitution Lists for Text Fields**

A Text field can have a substitution list to be used during data entry and import. A substitution list is a list of short codes that you use in place of longer words or phrases to reduce keystrokes and typographical errors.

**To create a substitution list**

1. On the Type and Indexing tab, select **Text** from the **Field Type** drop-down list.
2. On the Text Options tab, select the **Use Substitution List** check box and click the **Edit List** button.
3. Type the code, a colon, and the replacement text in the **Entry** box, then click the **Add** button.

Use the **Merge File into List** or the **Replace List with File** button to combine or replace the list with items from a text file.

**Note:** To edit a substitution list, choose **Maintain>Edit Lists>Substitution Lists**.

38 Chapter 2: Creating a Textbase
Later, when you start editing records, you can type a substitution code from the list. For example, type vt and the word Vermont appears after 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. Then, you can paste entries from the list into the field. During import and batch modify, substitutions are made automatically for fields that have a substitution list.

**Number**

Select Number from the Field Type drop-down list to specify that the field will hold digits that may be used in calculations or sorted as values, such as quantities or currency. Number fields can accommodate negative numbers for sorting, indexing, and calculations. To prohibit non-numeric information, select the Require Strictly Correct Type check box. (This is called making the field strict.) Currency symbols (for example, $) are accepted in strict Number fields.

**Note:** For numbers that **should not** be treated as quantitative values, such as telephone or ISBN numbers, use a Text field type with alphabetic filing (clear the Numbers File Numerically check box in the Special Filing Options group on the Type and Indexing tab).

**Date**

Select Date from the Field Type drop-down list to specify that the field will hold dates. Dates are sorted chronologically, which can be useful in reports. For example, you can sort invoices by date, in chronological or reverse-chronological order. To prohibit non-date information, select the Require Strictly Correct Type check box. (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), and that entry cannot be sorted chronologically or used in a calculation.

*Entering and editing information in Date fields*

When adding or editing information in a Date field, you can enter full or partial dates in almost any recognizable format, including but not limited to the following examples:

- 10-2-03
- Oct 2, 2003
- 10/03
- 10/2003
- 10/02/03
- 2003

You can use forms to make all the dates appear in a consistent format, regardless of how they were entered.

You can include the letter c before a year to indicate “copyright” (for example, c1998) and the date will be sorted correctly. You can include AD or BC after a year alone (not including a month or day) and the date will be sorted correctly (for example, 267 BC). Case and punctuation do not matter.

When you are editing records, we strongly recommend that you enter years using four digits instead of just two, to avoid any ambiguity about the year 2000 and beyond. Run the DB/TextWorks Setup program to specify how two-digit years are interpreted across century boundaries. For more information, see the online help.
DB/TextWorks recognizes month and day names in the language(s) specified during Setup. 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, `12-6-99` may be interpreted as month-day-year or day-month-year.

**Automatic Number**

Select **Automatic Number** from the **Field Type** drop-down list if you want a unique number generated by the software to be assigned to each record, starting with a value that you specify. Automatic Number fields provide a way of uniquely identifying records. To change the definition of an Automatic Number field, change the settings on the Automatic Number Definition tab on the Edit Fields dialog box.

Automatic Number fields are maintained by the software. You cannot change automatic values in existing records, nor can you dictate what the value will be in a new record (except for the initial value that is used).

**Automatic Date**

Select **Automatic Date** from the **Field Type** drop-down list if you want DB/TextWorks to place the current date or current date and time in this type of field when you create and/or modify the record. By using an Automatic Date field, you can identify when each record was created or edited, without requiring user input. To change the definition of an Automatic Date field, use the options on the Automatic Date Definition tab on the Edit Fields dialog box.
**Automatic ID**

Select **Automatic ID** from the **Field Type** drop-down list to use ID values generated by DB/TextWorks. You can edit the values to include text, numbers, punctuation, spaces, and leading zeros. Use an Automatic ID field if you need an editable, automatically generated number with optional surrounding text and/or punctuation. This type of field is commonly used in combination with unique validation to generate a unique alphanumeric ID for each record.

The first time you choose **Records>New Record** after opening a textbase, it increments the last value in the index by one. Thereafter, it increments the last-saved value by one. You can accept or change the value. For example, if the number 50 is generated and you change it to 51, the next generated value will be 52. 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, MBP-003 becomes MBP-004, 2002-Oct becomes 2003-Oct, and G50A becomes G51A.

For best results, select the **Unique Entries Only** check box on the Validation tab. Then, if you do not recall where a series left off, you can type a low value and the software will substitute the next available value. For example, if you have forgotten whether the last record was 98 or 99, type any lower value and the software will assign the next unique number in the series when you move the cursor to another field, press F9 (to refresh), or save the record.

**Important!** If the Edit form does not include a box for the Automatic ID field, this field will not be generated for new records. This is because Automatic IDs are only generated in the Edit window; they are not generated during import or by scripts. This behavior is different from the Automatic Date and Automatic Number field types.

If you are using Deferred indexing, post deferred updates frequently. DB/TextWorks cannot check uniqueness of new entries against unposted updates, so duplicate values may be assigned. (They will be detected and rejected when you post deferred updates, so you can fix the problem at that time.)

For more information about Automatic ID fields, see the online help.

**Computed Number**

Select **Computed Number** from the **Field Type** drop-down list to have DB/TextWorks construct a number according to a formula you specify. The formula must yield a number. For example, the following formula subtracts the contents of two fields in the current record to determine how many units are backordered:

```
ordered - shipped
```

The result is a number, which appears in the Computed Number field:
You cannot edit a Computed Number field. Computed Numbers are calculated by DB/TextWorks. A formula for a Computed Number field can include field names (from the primary textbase only), numbers, and Field Functions, joined by arithmetic operators. Use + for addition, - for subtraction, * for multiplication, and / for division. You can use parentheses to avoid ambiguity (see examples).

Field Functions are intended for use on fields that contain multiple entries. They include:

- FCOUNT, which counts the number of entries
- FMIN, which finds the lowest value
- FMAX, which finds the highest value
- FTOTAL, which adds the values
- FAVG, which averages the values

Follow a Field Function with a field name in parentheses. For example, FMIN(Price) finds the lowest value in the Price field in the current record. Entries that do not start with a number are treated as zero in the computation for all Field Functions except FCOUNT, which counts entries regardless of content. For more information, see Chapter 5, “Working with Forms.”

**Note:** A Computed Number field will be left blank if any field used in the calculation formula is blank. This applies to all Field Functions except FCOUNT.

To change the definition of a Computed Number field, use the options on the Computed Number Definition tab.

Note: If you add a Computed Number field or change the formula of one in a textbase that already contains records, rebuild the field index to populate the Computed Number field. Choose Maintain>Rebuild a Field Index, select the Computed Number field, select the Recompute Field Value check box, and click OK.

42 Chapter 2: Creating a Textbase
Examples
The following table lists some examples of formulas that can be used with a Computed Number field, and what they compute. Notice that quotation marks are used around field names that include spaces.

<table>
<thead>
<tr>
<th>This formula…</th>
<th>Computes this…</th>
</tr>
</thead>
<tbody>
<tr>
<td>quantity * price * 1.05</td>
<td>Total cost of an order, including 5% sales tax.</td>
</tr>
<tr>
<td>&quot;completion date&quot; - &quot;starting date&quot;</td>
<td>The number of days required to complete a project. Note that the result is a number, not a date.</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>FTOTAL(expenses)</td>
<td>The total of all the 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>
<tr>
<td>(price - cost) / (number * 12)</td>
<td>Subtracts Cost from Price before dividing the results.</td>
</tr>
</tbody>
</table>

Computed Date
Select Computed Date from the Field Type drop-down list to have DB/TextWorks construct a date based on information in another field, according to a formula that you specify. The formula must yield a date. For example, the following formula adds 90 days to the date in the Invoiced field:

\[
\text{Invoiced} + 90
\]

The resulting date appears in the Computed Date field (if the Invoiced field contains the date 9/16/2002 and you are in the United States):

\[12/15/2002\]

You cannot directly edit information in Computed Date fields. They are calculated by DB/TextWorks when a record is saved, or information referenced in the formula changes.
To change the definition of a Computed Date field, use the options on the Computed Date Definition tab.

![Computed Date Definition](image)

**Note:** If you add a Computed Date field or change the formula of one in a textbase that already contains records, rebuild the field index to populate the Computed Date field. Choose **Maintain>Rebuild a Field Index**, select the Computed Date field, select the **Recompute Field Value** check box, and click **OK**.

The formula you type can include fields from the primary textbase, numbers, or Field Functions, connected by the arithmetic operator + for addition or - for subtraction.

**Note:** Only the Field Functions **FMIN** and **FMAX** can be applied to a Date field and return a date as a value.

You can use parentheses to avoid ambiguity. Place quotation marks around field names that include spaces. Field Functions are intended for use on fields that contain multiple entries:

- **FMIN** finds the lowest (earliest) value.
- **FMAX** finds the highest (latest) value.

Follow a Field Function with a field name in parentheses. For example, **FMIN(received)** finds the earliest date in the **Received** field in the current record. For more information, see Chapter 5, “Working with Forms.”

**Note:** 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.
### Examples

The following table lists some examples of formulas that can be used with a Computed Date field, and what they compute. Notice that quotation marks are used around field names that include spaces.

<table>
<thead>
<tr>
<th>This formula...</th>
<th>Computes this...</th>
</tr>
</thead>
<tbody>
<tr>
<td>due - 14</td>
<td>A date two weeks before the scheduled deadline.</td>
</tr>
<tr>
<td>&quot;check out date&quot; + &quot;borrowing period&quot;</td>
<td>Adds the values in a Date field and a Number field to yield a date.</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;contact date&quot;) + 30</td>
<td>Adds 30 days to the most recent contact date.</td>
</tr>
</tbody>
</table>

### Image

Select **Image** from the **Field Type** drop-down list if your textbase will reference image files. When you add records to the textbase, you can include the names of the image files in the Image field, as shown below.

<table>
<thead>
<tr>
<th>Image Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>rorsche.003</td>
</tr>
<tr>
<td>ragsel.bmp</td>
</tr>
</tbody>
</table>

To display the images after a search, choose **Display > Show Record Images**, then use the image options on the Images window toolbar to zoom, rotate, see multiple images in a thumbnail view, and perform other operations.
You can store images 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 directory as the textbase. By doing this, you can freely move the textbase and its associated images without having to modify records. This is because DB/TextWorks looks for image files in the textbase directory if no path is specified.

However, if necessary, you can store images in a different location than the textbase directory. If you do this, you must specify the full or partial path as part of the image name in a record. Specify a full directory path, starting with a backslash (\MEMOS\LTR.JPG). If you omit the backslash at the beginning of the path, DB/TextWorks looks in the subdirectory of the current directory. If you do not specify a path in the image name (LTR.JPG), the software looks for the image in the textbase directory or the current directory on the drive(s) listed in the Imaging options. For more information, see Chapter 7, “Working with Images.”

**Note:** You can also include images on forms (for example, a logo), see Chapter 5, “Working with Forms.”

**Link**

Select **Link** from the **Field Type** drop-down list if you want to associate this textbase with another textbase, so you can access information from the other textbase. For example, you may want to link a textbase that tracks sales orders to a textbase of customer names and addresses.

The textbase containing the Link field is called the primary textbase. The other textbase is called the secondary textbase. When you define the Link field, you specify a field in the secondary textbase to which you want to link. That field is called the associated field. The Link field and its associated field must contain identical information, such as company names.

Linking is accomplished on a record-by-record basis. When information in both fields matches, a link is made for that particular record and you have access to information in both textbases.

See Chapter 8, “Linking Textbases” for more information about linking.
Code
Select **Code** from the **Field Type** drop-down list if you want punctuation and case to be considered during searching and sorting. Code fields can be useful when you are working with information in which case and punctuation are important (for example, URLs, chemical names, scientific formulas, and EMail addresses).

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. Punctuation is retained in the Term index but not in the Word index. Leading articles are never ignored.

**Tip!** Do not use a Code field for Library of Congress numbers because they require numeric filing. Instead, use a Text field with the **Numbers File Numerically** check box selected and the **Ignore Leading Articles** check box cleared in the Special Filing Options group on the Text and Indexing tab. If you use a Word index, also clear the **Use Stop Word List** check box.

See the online help for more information about Code fields.

UDC
Select **UDC** from the **Field Type** drop-down list to have DB/TextWorks sort fields according to the Universal Decimal Classification System, an international numerical system used for classifying and retrieving documents. See the online help for the UDC sort order.

**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 with the **Numbers File Numerically** check box selected and the **Ignore Leading Articles** check box cleared in the Special Filing Options group on the Text and Indexing tab. If you use a Word index, also clear the **Use Stop Word List** check box.

Access Control
Select **Access Control** from the **Field Type** drop-down list if you want to restrict access to particular records using passwords.

The Access Control field type lets you specify the following record-level security settings for each class of records that you define:

- **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 set up “record classes” by adding them to a special validation list for the Access Control field type. Once that is done, you can classify the records by populating the Access Control field in those records. You can also set up a series of passwords (Field Access and/or Silent passwords) to grant appropriate permissions for each class of records. For more information about record classes and the special validation list, see the online help.

**Note:** The special validation list used with an Access Control field can only be modified via the Edit Textbase Structure dialog box. It cannot be modified using **Maintain>Edit Lists**.

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.

You can only have one Access Control field per textbase, and that field accepts only single entries and is always Term indexed. Overriding and user-updates are not allowed for the special validation list. 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 or Silent Password) of the Textbase Passwords dialog box (choose **Maintain>Edit Textbase Structure>Passwords**).

For more information about the Access Control field type, see the online help. For more information about restricting access to records and using passwords, see “Restricting access to records” on page 64 and “Passwords” on page 60.

### Require Strictly Correct Type

You can select the **Require Strictly Correct Type** check box on the Type and Indexing tab for Number, Date, or Link fields. A strict field will accept information only if that information conforms to the field type. In other words, Number fields will accept any entry that appears to be a numeric value. Date fields will accept any entry that appears to be a date. Link fields will accept an entry only if it matches existing information in the associated field in the secondary textbase. A strict Link field prevents users from adding entries that do not have a match in the secondary textbase. This essentially serves as a validation list for a Link field.

### Allow Trailing Text

You can select the **Allow Trailing Text** check box on the Type and Indexing tab to allow trailing text in a strict Date or Number field. 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 permit text after it. In the following examples, trailing text is shown in italics:

- June 6, 1957 *first edition*
- 1500 *(estimated number of items to be shipped by year’s end)*

**Note:** The **Allow Trailing Text** check box is only enabled if you select the **Require Strictly Correct Type** check box.
Term and Word Indexing

An index is a sorted list of information in a field, conceptually similar to an index in the back of a book. DB/TextWorks indexes the information you add to a textbase, and refers to those indexes to find records.

Fields in a textbase can have a Term index, a Word index, both, or neither. When you create a textbase, you decide if and how each field should be indexed. To specify indexing, select the Term Indexed and/or Word Indexed check box in the Indexing Information group on the Type and Indexing tab.

**Note:** Fields with neither a Term nor Word index cannot be searched.

If you Word index a field, every word in that field (except stop words) is placed in the index. If you Term index a field, every complete entry (term) is placed in the index. For example, look at the indexes for a field that holds book titles:

<table>
<thead>
<tr>
<th>Term Index</th>
<th>Word Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Guide</td>
<td>guide</td>
</tr>
<tr>
<td>Widget Reference Guide</td>
<td>product</td>
</tr>
<tr>
<td></td>
<td>reference</td>
</tr>
<tr>
<td></td>
<td>widget</td>
</tr>
</tbody>
</table>

Specifying both Term and Word indexing gives you the most flexibility but requires more disk space. Choosing neither saves you disk space but means you can never search that field.

To decide how a field should be indexed, consider the type of information it will hold. For example, Date and Number fields and fields that hold city or state names almost always have a Term index only. Fields that hold long passages of text should be Word indexed but not Term indexed. Book titles and full names are usually Term indexed (and may also be Word indexed).

Also consider the type of operations you will perform on the field. Word, phrase, and proximity searches require Word indexing. Term, comparison, and range searches require Term indexing. Term indexing is also required if you want to do matching during an import, or select an associated field when defining a Link field, or specify Unique Entries Only validation.

**Tip!** New users should not worry too much about indexing—just accept the defaults, which are based on field types. You can always change the indexing later with no problems. As you use the software, you will begin to understand what type of index is best.

You can see the indexes when you search a textbase, by placing the cursor in a query box and pressing F3 or choosing Edit>Browse Choices. This is called browsing. To ensure accurate searches, you can paste words or terms from the index into the field, then search for those items.
To select or change indexing settings
1. Choose Maintain>Edit Textbase Structure and click the Edit Fields button.
2. Select a field from the Field Name list or specify a new field by typing a name in the Field Name box.
3. On the Type and Indexing tab, select or clear the Term Indexed and Word Indexed check boxes. You can use the Special Filing Options group for more specific indexing choices, but the default settings are usually sufficient.
4. Click the Change button if you are modifying an existing field or the Add button to add a new field.

Special Filing Options
You can specify the order in which items are indexed and sorted by using the Special Filing Options on the Type and Indexing tab. All of the options, except the Use Stop Word List option, have an effect on the filing order. You can see the indexes when you press F3 in a box on the query screen.

The default Special Filing Options settings depend on the field type and whether Term or Word indexing is used. In most cases, the default settings are acceptable. However, in some situations, especially for Text fields, you may want to change the settings.

To change the Special Filing Options settings
1. Choose Maintain>Edit Textbase Structure and click the Edit Fields button.
2. Select a field from the Field Name list or specify a new field by typing a name in the Field Name box.
3. On the Type and Indexing tab, select or clear the appropriate options in the Special Filing Options group. Each option is explained on the following pages.
4. Click the Change button if you are modifying an existing field or the Add button to add a new field.

50 Chapter 2: Creating a Textbase
Word by Word

Select the **Word by Word** check box if you want each entry in a Term-indexed field to be indexed and sorted word-by-word, with spaces sorting before letters. If you clear this check box, DB/TextWorks compares each letter in sequence, ignoring spaces. This is called letter-by-letter filing.

<table>
<thead>
<tr>
<th></th>
<th></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 current field to use the leading article list defined for this textbase. This is the default setting for Text fields. Leading articles are words such as A, An, and The. By ignoring leading articles, you avoid having clumps of records sorted under meaningless words (for example, *A Tree Grows in Brooklyn*, filed with the A’s).

**Note:** If you are using a Text field to hold Library of Congress numbers, clear this check box.

To edit the leading article list, choose **Maintain> Edit Textbase Structure** and click the **Leading Articles** button. See “Leading Articles” on page 66 for more information.
**Numbers File Numerically**

Select the **Numbers File Numerically** check box if you want numbers to be indexed and sorted as values (for example, 1, 2, 13, 121). Note that truncation searches may not find the anticipated records. For example, the search 2* will not find 20.

When the **Numbers File Numerically** check box is cleared, numbers are filed alphabetically. That is, they are indexed and sorted as if they were words, by comparing each digit in sequence (1, 121, 13, 2). Truncation searches do find the anticipated records.

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. Numbers preceded by text will file numerically (Vol 999 files before Vol 1000) as long as the numbers do not contain thousands separators (in which case Vol 1,000 files before Vol 999) and are not preceded immediately by letters (ABC101 sorts before ABC2).
- 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 Term indexes, so the phone number (02) 555-0089 is indexed as 2 555 89.

---

**Note:** In a Text field where numbers are filed numerically, parentheses and minus signs are not considered for filing. For example, -2 is the same as 2. In a Number field, negative numbers file as expected (-2, -1, 0, 1, 2).

---

**Use Stop Word List**

Select the **Use Stop Word List** check box if you want the current field to use the stop word list defined for this textbase. This is the default setting for Text fields. Stop words are common words that will not be indexed (for example, a, an, the, in, on, to) to save disk space and indexing time. To edit the stop word list, choose **Maintain>Edit Textbase Structure**, and click the **Stop Words** button. See “Stop Words” on page 66 for more information.

---

**Tip!** If your textbase contains a field that includes abbreviations for states or provinces, such as IN (Indiana) or ON (Ontario), clear the **Use Stop Word List** check box for that field, or define the field as Term indexed only. Otherwise, the software will interpret the abbreviations as stop words and will not find records when you search for the words IN or ON.
Validation Tab

Use the Validation tab to specify validation rules for fields in a textbase. Applying validation is optional. The purpose of validation is to screen information being added to the textbase during data entry, import, and batch modify operations to ensure consistency and reduce typographical errors. If information does not meet the validation criteria, DB/TextWorks informs the user and does not permit the change to be made (unless content validation overrides are allowed).

**Note:** Some validation is implicit if the field is strict. See “Require Strictly Correct Type” on page 48 for information about strict fields.

You can specify validation when you create the textbase, or later by editing the textbase structure. Note that if you change validation in a textbase that already contains records, some of the existing records may not meet the new validation criteria.

To specify validation, select a field from the Field Name list on the Edit Fields dialog box. On the Validation tab, select or clear the options you want to apply to that field.

![Validation Tab in DB/TextWorks](image)

**Note:** If you have WebPublisher PRO and plan to edit records over the Web, fields with a validation list specified in the textbase structure will have their box labels turned into validation list links which, when clicked, open the Inmagic Choices Browser window. Users can then paste entries from a validation list into the Web edit screen. For more information, see the Inmagic DB/TextWebPublisher PRO User’s Manual.
There are two categories of validation:

- **Entry Validation.** Determines the number and type of entries allowed.
- **Content Validation.** Controls the type of information allowed.

The options you can select on the Validation tab are explained on the following pages.

**Field Entry Required**
Select the **Field Entry Required** check box to require that the selected field contain an entry. You cannot save a record that leaves this field empty, nor can you delete all entries in this field. This is sometimes called a required field and is typically used for fields that will hold vital information, such as employee names, library classification numbers, or Bates numbers for legal documents. If you want to add records, the current password must give you full access to all fields that have Field Entry Required validation. If the form selected for the Edit window omits any fields that have Field Entry Required validation, DB/TextWorks informs you and changes to the Basic Record form.

**Unique Entries Only**
Select the **Unique Entries Only** check box to require that an entry in the selected field be different from every other entry in that field in all other records in the textbase. For example, you can make the Employee ID field unique to ensure that you have only one record per employee. You can select this option only for fields that have a Term index.

**Single Entry Only**
Select the **Single Entry Only** check box to prohibit the selected field from holding multiple entries. For example, you may want the Primary Contact field to allow only one name. This is sometimes called a non-repeating field.

**No Content Validation**
Select the **No Content Validation** option button if you do not want the selected field validated for content. Anything will be allowed in the field, unless it is a strict Date, Number, or Link field.
Use Range and/or Mask

Select the Use Range and/or Mask option button to restrict information allowed into a field. When you select this option button, the Range and Mask group on the Validation tab on the Edit Fields dialog box is enabled. Specify the range and/or mask you want in the boxes provided.

Ranges

Type values in the Minimum and/or Maximum boxes to set the range of values allowed in the selected field. You can specify values, dates, or text, depending on the field type. For example, the Percent field could have a minimum of 0 and a maximum of 100. A Number field could use a range of 100 to 500. A Date field could use a range of 1-May-2001 to 31-May-2001. (Dates entered in the field can be in any recognizable date format, but they must fall within the specified range.) To restrict a Text field to items starting with the letters L through Z, type L as the minimum and ZZZ as the maximum. Note that if you type only Z as the maximum, items such as zebra will be rejected.
Masks

A mask is a pattern that governs how information can be entered in a field. To specify a mask, type it in the Mask box. Include one or more of the mask characters shown below. Any spaces or punctuation that you include become a part of the mask.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
<th>Can be omitted in the field entry (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>Upper-case letter.</td>
<td>No</td>
</tr>
<tr>
<td>^</td>
<td>Lower-case letter.</td>
<td>No</td>
</tr>
<tr>
<td>#</td>
<td>Any single digit (0-9).</td>
<td>No</td>
</tr>
<tr>
<td>?</td>
<td>Any single keyboard or extended character, including spaces.</td>
<td>No</td>
</tr>
<tr>
<td>*</td>
<td>Any series of zero or more characters, including spaces.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

To include a mask character as a literal character, precede it by a backslash. For example, to require any two digits followed by a # symbol (for example, 15# or 38#), type \##\# as the mask. To include a backslash as part of the mask, type two backslashes (\\).

The following table lists some examples of masks and what they do.

**This mask…**  **Does this…**

Ace*  Accepts Ace alone or followed by other characters (for example, 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 a numeric date with a four-digit year, such as 08-26-2000 (dashes and leading zero are required).

^^ ????  Requires two lowercase letters, followed by a space, followed by any four characters, such as ab 12X4.
Use Validation List

Select the Use Validation List option button to specify that the field entries must appear in the validation list. A validation list is a list of entries allowed in a Text or Code field. Entries not in the list will not be allowed in the field (unless you permit users to override the list, as explained in “Allowing Users to Override Content Validation” on page 58).

To create the validation list, click the Edit List button to open the Edit Validation List dialog box. To edit a validation list later, choose Maintain>Edit Lists>Validation Lists.

The following illustration shows the validation list created for the State field.

You can use the buttons on the Edit Validation List dialog box to perform various operations on the validation list. For example, you can combine the current list with a list in a text file by clicking the Merge File into List button. To replace the current list with the list in a text file, click the Replace List with File button, then specify the file that you want to use. For more information, see the online help.
Use Thesaurus as Validation List

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

**Note:** Only Text and Code fields can use a thesaurus as a validation list.

Using a thesaurus as a validation list 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. It 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.

For more information about using a thesaurus as a validation list, see the online help.

Allowing Users to Override Content Validation

If a field has mask or range validation or uses a validation list, you can specify the following options on the Validation tab on the Edit Fields dialog box:

- **User May Override Content Validation.** The field will accept entries that are not in the validation list, or which violate mask or range validation, upon confirmation by the user.

- **User May Update Validation List with Override Value.** Same as above, but the new entry can be added automatically to the validation list. You can select this check box only if the field uses a validation list (other than a thesaurus used as a validation list) and User May Override Content Validation is selected.
While adding or editing a record, the Content Validation Mismatch dialog box opens if either of the following is true:

- The entry is not in the validation list.
- The entry violates a mask or range on a field that allows overrides.

Depending on the validation settings, a user can browse the validation list and paste an acceptable entry, accept the “invalid” entry into the field, or accept it and have it automatically added to the validation list.

**Note:** You can use Field Access or Silent passwords to prohibit unauthorized users from updating validation lists.
Specifying Textbase Options

The textbase options that you select on the Edit Textbase Structure dialog box have an effect on the textbase as a whole. You can specify these options when you create a textbase or change them later by choosing **Maintain>Edit Textbase Structure**.

![Edit Textbase Structure dialog box](image)

Use these buttons to specify textbase options.

Each textbase option is summarized on the following pages. For more detailed information, see the online help.

**Passwords**

You can assign passwords to protect the textbase structure and information by choosing **Maintain>Edit Textbase Structure** and clicking the **Passwords** button. There are three types of passwords:

- Master
- Field Access
- Silent

Passwords can contain up to 15 alphanumeric characters, including spaces and punctuation. Case is not significant (ABC is the same as abc). Although passwords are encrypted against casual view, 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, you should explore additional system security procedures.

60 Chapter 2: Creating a Textbase
By typing in a password, a user can be given the ability to access certain software features, fields in the textbase, and even specific records in the textbase. Fields and/or records can be Hidden, Read-Only (write-protected), or have Full Access. Hidden fields cannot be seen, making them invisible to the user. The only clues to their existence may be forms designed without consideration for the impact of security (that is, text that identifies such a field is not specified in a way that disappears when the field does). Hidden records are never included in sets retrieved by searching. A clue to their existence appears when a search for a word or term having a certain number of hits in the browse list returns fewer than that number of records.

Read-Only fields and records can be seen, but not modified; while fields and records with Full Access can be seen and modified.

If a password controls access to both fields and records, the most restrictive permission applies. A Read-Only field in a record with full access remains Read-Only.

**Master Password**

You can create one Master password to protect the structure of the textbase. Only someone who knows the Master password can edit the textbase structure and perform all operations. If you clear (delete) the Master password, all Field Access and Silent passwords are deleted automatically.

**To assign a Master password to a textbase**

- Type the password you want in the Master Password box on the Master Password tab, then click the Add or Change button to confirm it.
**Field Access Passwords**

You can create one or more Field Access passwords, for one or more users. Each password can provide different rights. For example, a password can hide fields, make some fields read-only, and prohibit editing of validation and substitution lists. If you use an Access Control field type in a textbase to restrict access to particular records, you can use Field Access passwords to provide different levels of access to different users. Tell each user which password to use, depending on what rights you want that person to have.

**To specify a Field Access password**

1. Type the password you want in the **Access Password** box on the Field Access Passwords tab and click **Add**.
2. Specify the options you want for it, then click **OK**.

   ![Textbase Passwords dialog box](image)

   Click the **Help** button for details about each setting.
Silent Password
Define a Silent password if you want to protect a textbase without requiring that every user have a password. When a textbase has a Silent password, anyone can open the textbase, even if the password is not known, 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 of records.

To add a Silent password to a textbase
1. Select the Enable Silent Password check box on the Silent Password tab.
2. Specify the settings you want, then click OK.

Using a Password-Protected Textbase
Choose Tools>Options>General and use the drop-down lists in the Passwords group to set password options for the primary and secondary textbases. The options apply to the current workstation only, and they apply to all textbases opened from that workstation. If a textbase has a Silent password, you can select Always prompt for password to force DB/TextWorks to prompt for a password. This is useful when one workstation requires write access to a textbase, but others do not. If you are not prompted, the Silent password will be used.
To change the passwords that are in use for the primary and secondary textbases, choose **File>Use Different Password>Primary/Secondary Textbase**. Each command is disabled if either of the textbases does not have any passwords, or if the textbase(s) have a Master password but no Field Access or Silent passwords.

To see if a password is in use for the primary textbase, choose **Display>Textbase Information**. To print password information, choose **Maintain>Edit Textbase Structure>Print Structure**.

If a textbase has passwords assigned, certain operations will require the Master password.

**Tip!** Sometimes a form, not a password, is responsible for hiding fields. If a form does not include a field, you cannot see it. Try selecting a different form to see a different view of the records (choose **Display>Select Forms**). The Basic forms show all fields from the primary textbase not hidden by the password in use.

If you are publishing a textbase with passwords on the Web with *WebPublisher PRO*, you can specify that Web query screens and/or edit screens include a password box for users to enter a password. For more information, see the *Inmagic DB/Text WebPublisher PRO User’s Manual*.

**Restricting access to records**

You may have the need to restrict certain classes of users from accessing certain classes of records. For example, library users should not see books that have been ordered but not received, junior staff should not be able to modify the order records, and senior staff should have full access to everything in the textbase.

The class to which a user belongs is governed by the password they type in. The class to which a record belongs is governed by the contents of its Access Control field. The password definition specifies what type of access is granted to each of the record classes that have been defined. A record class definition is an entry in the special validation list for the Access Control field. A record is “assigned” to a class when its Access Control field is populated. Records that have no entry in this field belong to the Default class, and the password definition includes the access to be granted to such records.

**To specify record-level security**

The following steps provide a general overview on specifying record-level security. For more detailed information, see the online help.

1. Specify a field as an Access Control field for the textbase.
2. Decide how many record classes you want, then add the record class names to the Access Control field’s special validation list.
3. Specify password(s) granting the appropriate permissions to the record classes.
4. Classify new and existing records by filling in the Access Control field for each.

**Tip!** You can use Batch Modify to fill in the Access Control field for multiple records.
Sort Order

You can specify the order in which records appear in the Report window and printed reports (if no other sort is specified) by choosing Maintain>Edit Textbase Structure and clicking the Sort Order button. (For example, you may sort alphabetically by name.) The sort method you specify is called the textbase default sort.

There are two sort methods you can specify as the textbase default sort:

- **Sort Order Shown Below.** Uses the sort you specify on the Specify Textbase Sort Order dialog box. For detailed information about this dialog box, see the “Textbase Default Sort” topic in the online help.
- **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. This option is seldom recommended as the default textbase sort because it only applies to word searches.

**Note:** You can sort records at any time after a search by choosing Display>Sort Report, and you can define sorts for forms. See Chapter 3, “Working with Records” for more information on sorting.
Stop Words

You can create a list of words to exclude from the Word indexes by choosing Maintain>Edit Textbase Structure and clicking the Stop Words button. You can use only one stop word list per textbase, but you can apply that list to one or more Word-indexed fields by selecting the Use Stop Word List check box in the Special Filing Options group on the Type and Indexing tab on the Edit Fields dialog box.

Using a stop word list reduces the amount of disk space required for the textbase and enables faster indexing of records. Phrase searches will find phrases that contain stop words (such as Made in the U.S.A.). However, you cannot search for stop words alone because they are not indexed.

If you add, change, or remove words from a stop word list, you should rebuild indexes for any fields that use the list (choose Maintain>Rebuild a Field Index).

Leading Articles

You can specify a list of words to be ignored (if they come at the beginning of an entry in a Term-indexed field) when sorting records by choosing Maintain>Edit Textbase Structure and clicking the Leading Articles button. You can use only one leading article list per textbase, but you can apply that list to one or more Term-indexed fields by selecting the Ignore Leading Articles check box in the Special Filing Options group on the Type and Indexing tab on the Edit Fields dialog box.

Note: Punctuation is significant. For example, L’ is different than L.

By ignoring leading articles, you prevent clumps of records being sorted under unimportant first words, as shown below.

<table>
<thead>
<tr>
<th>Leading articles NOT ignored</th>
<th>Leading articles ignored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catherine the Great</td>
<td>The Big Heat</td>
</tr>
<tr>
<td>Manon of the Spring</td>
<td>Catherine the Great</td>
</tr>
<tr>
<td>The Big Heat</td>
<td>The Last Waltz</td>
</tr>
<tr>
<td>The Last Waltz</td>
<td>Manon of the Spring</td>
</tr>
<tr>
<td>The Matchmaker</td>
<td>The Matchmaker</td>
</tr>
</tbody>
</table>

You can search for leading articles, should you want to, as long as the field is Word indexed and the leading article does not appear in the stop word list.

If you add, change, or remove words from a leading article list, you should rebuild indexes for any fields that use the list (choose Maintain>Rebuild a Field Index).
Log File

A log file is a text file that records textbase activity, including record and structure changes. A log file has the same name and location as its textbase, and uses the extension .LOG. For example, the textbase C:\SALES\TRACK has a log file called C:\SALES\TRACK.LOG. To enable or disable a log file, choose Maintain>Edit Textbase Structure and click the Log File button to open the Textbase Log File dialog box.

You can select one or two fields to identify records. Whenever a record is added, edited, or deleted, the contents of the specified field(s) will be written to the log file. Select field(s) that contain short unique contents, such as a record ID or an Automatic Number field. Here is a log file entry that uses the Borrower Number and Name fields as identifiers:

8/15/2002  10:44:32 AM: Record added
Borrower Number: TORR198
Name: Torres, Suzanne D.

To examine a log file, choose Maintain>View Log File. New information appears at the end of the file.

Log files can grow quite large, so you may want to delete them periodically, after reviewing and/or printing them. To delete a log file, choose Maintain>Delete Log File. DB/TextWorks generates a new log file automatically. If the textbase has passwords, deleting the log file requires the Master password.
Maximum Users

You can specify how many times a textbase can be open simultaneously by choosing **Maintain>Edit Textbase Structure** and clicking the **Maximum Users** button. For example, if you specify 2, then two people can use the textbase at the same time, or one person can open the textbase in two instances of DB/TextWorks. Note that services and programs such as DB/Text® Updater, DB/Text® Checker, and DB/Text® WebPublisher PRO are counted as users.

**Note:** The maximum number of textbase users has nothing to do with the number of licensed software users (determined by your license agreement), which can never be exceeded.

XML Match Fields

**Note:** This textbase option applies only to those who have WebPublisher PRO and plan to edit records over the Web.

When editing or deleting records over the Web, WebPublisher PRO uses match fields to uniquely identify the record it is being asked to modify in the textbase. XML match fields are specified on the Specify XML Match Fields dialog box (choose **Maintain>Edit Textbase Structure** and click the **XML Match Fields** button).

When you are editing or deleting a record via a Web browser and click the **Submit Record** or **Delete** button, the software compares the match field(s) to the records in the textbase to ensure that the correct record is updated/deleted.

You can match on up to five fields; however, in most cases, one field is sufficient. The combination of match fields must contain unique contents, such as an Automatic Number or other unique identifier (for example, employee identification number). If you match on only one field, that field should be present and unique for every record. To be sure, you can use an Automatic Number field, or a field with **Unique Entries Only** and **Field Entry Required** validation applied.

When editing an existing record over the Web, you cannot edit the contents of any of the match fields.

**Note:** If you do not specify any match fields on the Specify XML Match Fields dialog box, WebPublisher PRO uses the first field specified on the Textbase Log File dialog box.

For more information about specifying match fields, see the online help or the Inmagic DB/Text WebPublisher PRO User’s Manual.
Editing the Textbase Structure

Editing the textbase structure is essentially the same as creating a textbase, which is explained in “Creating a Textbase” on page 32. You use the Edit Textbase Structure dialog box (choose Maintain>Edit Textbase Structure) and the Edit Fields dialog box.

Note: If a textbase has passwords assigned, you must use the Master password and have exclusive access to the textbase (that is, no one else can have the textbase open).
You can change Textbase Options at any time by clicking the buttons on the Edit Textbase Structure dialog box. If you edit a stop word or leading article list, rebuild field indexes for any fields that use the list (choose Maintain>Rebuild a Field Index). See “Specifying Textbase Options” on page 60 for more information on the available options.

You can also click the Edit Fields button to open the Edit Fields dialog box. Use the Type and Indexing and Validation tabs to change the field type, indexing, and validation attributes of the selected field.

![Edit Fields Dialog Box]

Depending on the field type chosen, the Edit Fields dialog box may have a third tab with additional options specific to that field type.

Changing the field type or making a non-strict field strict could leave non-conforming information in the textbase. Note that when you change the field type, all validation, indexing, and Special Filing settings for that field revert to the default settings.

You can also change the Indexing Information and Special Filing Options freely. DB/TextWorks will automatically rebuild indexes for the appropriate fields.

You can add, remove, or edit a substitution list at any time.

Validation settings can be changed at any time. Be aware that existing records may not meet the new validation, because validation is not applied retroactively.
Renaming Fields

To rename a field, select the field you want to rename from the Field Name list, type a new name in the Field Name box, and click the Change button.

Computed field definitions, calculations in forms, and the query criteria for saved sets are based on field names. If a renamed 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, or calculation, or search 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.

Forms, query screens, record skeletons, and sets that were exported using Maintain>Manage Textbase Elements contain field names. If you rename fields, you will be able to import elements into the textbase, but the imported elements may contain “undefined” information. You may want to use a text editor to rename fields in the exported file before importing it. For more information, see Chapter 9, “Managing Textbase Elements.”

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.

Renaming fields does not affect linked textbases in any way.

Copying Fields

To copy a field, select a field from the Field Name list, type a new name in the Field Name box, and click the Add button. The new field has the same type information, indexing information, and substitution and validation settings as the selected field. You can change the settings if you want to, then click the Change button.

Re-ordering Fields

Forms, query screens, record skeletons, and Link field definitions are defined internally based on field order. For that reason, there are restrictions on re-ordering fields, described below.

However, field order should not be a concern because you can use forms and query screens to make fields appear in any order.

You cannot re-order fields in a textbase that contains records or textbase elements (forms, query screens, or record skeletons), except for a set of new fields added to the end of an existing structure—and you can re-order the new fields only among themselves.

If a textbase does not contain any records and if you have not saved any elements in the textbase file, you can re-order fields. If you have saved elements in a user file, you can re-order fields, but the elements saved in the user file will have problems because forms, query screens, and record skeletons are based on field order, not field names. For example, when you use a form that was stored in a user file, the Title field may appear in a box labeled Author.

Chapter 2: Creating a Textbase 71
To re-order fields, select a field on the Edit Fields dialog box and use the **Up** and **Down** buttons to move the field in the corresponding direction. If you move the position of an associated field in a secondary textbase, you should then open the primary textbase and redefine the Link fields (because link definitions are stored internally based on field order). If you re-order any fields in a secondary textbase, you may need to fix any forms for the primary textbase that include those secondary textbase fields (choose **Tools>Box Properties** and redefine the box contents).

### Deleting Fields

To delete a field, select it from the Field Name list, click the **Delete** button, and respond to the confirmation message. 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** on the Confirm Textbase Structure Update dialog box. If a textbase does not contain records and textbase elements have not been defined, you can delete fields freely.

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 set so it no longer references the deleted field. Deleting a field may also have an effect on form and screen scripts.

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. This does not cause any problems, but if you want, you can rename the **<Deleted>** field instead of adding a new field. Note that you must close the Edit Textbase Structure dialog box, and then re-open it to rename a **<Deleted>** field.
Rebuilding Field Indexes

In a textbase that contains records, some structural changes may require indexes to be rebuilt so they accurately reflect information in the textbase. In most cases, DB/TextWorks automatically rebuilds indexes when necessary, but sometimes you may need to rebuild indexes yourself. For example, you should rebuild indexes after you add, edit, or remove words from a stop word or leading article list. To save time, rebuild the indexes only for those fields that use the list. If you have a large textbase, re-indexing may require several minutes or longer.

To rebuild an index, choose **Maintain>Rebuild a Field Index.** Select a field from the list and specify whether to rebuild the Term index, Word index, or both.

When rebuilding an index for a Computed field, you can select the **Recompute Field Value** check box to do the following:

- **Populate Computed fields in records where they are empty.** For example, you may have just added a new Computed field, or used **Manage Textbases>Load New Textbase** to import record information that did not include the Computed field.

- **Update records where the Computed fields are populated with outdated values.** For example, you may have just changed the formula or formatting options for the Computed field.
Copying, Renaming, Deleting, and Moving Textbases

All the files that make up a textbase are stored in the same location (drive and directory), and they all have the same file name with different extensions. For example, a textbase called Sales consists of SALES.TBA, SALES.DBR, SALES.ACF, and so forth. For more information about textbase files, see the Appendix.

All of the following operations require exclusive access to a textbase (meaning no one else can have it open), and the Master password, if the textbase has passwords.

Note: Renaming, deleting, or moving textbases may have an effect on Recordset scripts, menu screens, and Link fields.

To copy a textbase

1. If a textbase is open, close it (choose File>Close).
2. Choose Manage Textbases>Copy Textbase to open the Copy Textbase dialog box.
3. Type the full path and name of the textbase you want to copy in the Existing Textbase box, or click the Browse button and navigate to it.
4. Type the full path and name of the textbase you want to create in the New Textbase box, or click the Browse button to navigate to the location where you want to put the new textbase and specify its name.

Note: The Copy Textbase command will not create a new directory for you. If you type the name of a directory 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.

5. Click OK, then respond to the confirmation prompts.

If you gave the textbase a new name, and a user file of that name does not exist, DB/TextWorks copies the user file as well.
To rename a textbase

1. If a textbase is open, close it (choose File>Close).

2. Choose Manage Textbases>Rename Textbase to open the Rename Textbase dialog box.

3. Type the full path name of the textbase you want to rename in the Existing Textbase box, or click the Browse button to navigate to it. For example, to rename a textbase called Old, type: C:\DIR\OLD.

4. Type the new full path name you want for the textbase in the New Textbase box, or click the Browse button to navigate to the location you want and specify its name. For example, to call the new textbase New and keep it in the same location, type: C:\DIR\NEW.

5. Click OK, then respond to the confirmation prompts.

6. 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.

Note: 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 and stores private elements in their user files to rename their corresponding user file, using Windows or DOS commands. User files are stored locally, so each user must rename his/her own user file.

To delete a textbase

1. If a textbase is open, close it (choose File>Close).

2. Choose Manage Textbases>Delete Textbase to open the Delete Textbase dialog box.

3. Type the full path name of the textbase you want to delete in the Textbase to Delete box, or click the Browse button to navigate to it.

4. 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 check box if you want to delete the user file.

     Note: Selecting this check box also deletes the textbase .IDI and .TBS files. For more information about these files, see the Appendix, the “Textbase Files” section.

   - Clear the Delete user file for this textbase check box to preserve the user file. (This is the default.) 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.

5. Click OK, then respond to the prompts.
To move a textbase
Use the following steps to move a textbase to a different drive. If you want to move a textbase to a different directory on the same drive, use Manage Textbases>Rename Textbase.

1. Copy the textbase to its new location, then delete the old textbase, following the procedures explained earlier. Do not delete its user file unless you have given the textbase a new name.

2. If the textbase that you moved is a secondary textbase, open the primary textbase (the one that contains the Link field), and redefine the link definition (by editing the textbase structure), so it points to the moved textbase.

Note: The first time you open the textbase in its new location you may see a message warning you that the textbase is not where the user file expects it to be. You can safely ignore this message (choose Yes to continue).

Displaying and Printing Textbase Information

Open a textbase and choose Display>Textbase Information to see information about its fields, indexing, validation, textbase options, the user file directory, and many other settings. While the window is open, you can print or save the information to a file by choosing File>Print, and using the Print dialog box to select an output type (to printer or file). You can use Edit>Find to search for information.
Setting Textbase Defaults

Open a textbase and choose Maintain>Change Textbase Defaults to specify which forms, query screens, and record skeletons should be used by default when a user opens that textbase for the first time, and there are no initial elements specified in the menu screen (or no menu screen being used).

Note: Initial elements specified in a menu screen override textbase defaults.

When a user returns to the textbase for a subsequent visit, the last-used, user-specified forms will be used, unless there are initial elements specified for the menu screen. The textbase defaults will only be used if this textbase has never been opened by the user on a particular workstation.

Backing Up Files

You invest a great deal of time and effort in creating a textbase. To protect your information against accidental loss or damage, be sure to back it up on a regular basis. If a textbase is of great importance to your organization, consider keeping copies of all files off-site.

Routine Backups

Back up the following files on a regular basis—that means daily if you are adding, editing, and deleting records every day:

- Textbase files
- Image and annotation files

Back up the following files on a less-regular basis, only when they have been changed:

- Textbase user files
- Menu screen files
Textbase Files
Back up all your textbases on a regular basis (all files with a given name, such as SALES.*). You can do this using the Copy Textbase command in DB/TextWorks or using Windows Explorer. When you back up these files, you back up the complete textbase, including all records, structure information, stop word and leading article lists, validation and substitution lists, and 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.

Note: You should back up textbase user files, menu screen files, image files, and annotation files (default extension .ART) separately, as explained below.

Textbase User Files (.TBU)
Use Windows Explorer or DOS commands to back up your user files. User files contain private textbase elements (that is, forms, query screens, record skeletons, and sets) that were not stored in the textbase. Each user file has the same name as its textbase, with the extension .TBU. For example, a textbase called Sales has a user file called SALES.TBU. To see where your user files are stored, open any textbase and choose Display>Textbase Information.

Tip! You may want to consider backing up your entire user file directory. This will save private elements as well as persistent information, such as the last-used import setting.

Menu Screen Files (.TBM)
Menu screen files have the extension .TBM and are located in the directory you specified when you created them. Use Windows Explorer or DOS commands to back up .TBM files. To print a description of a file, open a menu screen in the Menu Screen Designer and choose Menu Operations>Print Menu Screen Definition.

Image Files and Annotation Files
If your textbase includes references to image files, back up the image files as you would any valuable file, using Windows Explorer or DOS commands. If the images are annotated, back up the annotation files, too. Each annotated image has its own annotation file (default extension .ART) stored outside of the textbase. You supply the file name and location when you save the annotations.

78 Chapter 2: Creating a Textbase
Precautionary Measures

Back up the following files from time to time. You may need them if your routine backup files are corrupted or lost.

- Textbase structure backup files (.TBB)
- Records (.DMP)
- Textbase elements (.XPF, .XPQ, .XPS, .XPK)
- Stop word lists
- Leading article lists
- Validation lists
- Substitution lists
- Image annotation list (.IAB)

Textbase Structure Backup Files

To back up a textbase structure, open a textbase and choose Maintain>Edit Textbase Structure. Click the Back Up Structure button and supply a name for the textbase structure backup file (.TBB) when prompted. The .TBB file contains all of the information on the Edit Textbase Structure dialog box and its subdialog boxes. It does not contain records or textbase elements. You can use the .TBB file to create a new, empty textbase by choosing File>New Textbase>Restore from Textbase Structure Backup File.

To print the structure definition

In addition to backing up the textbase structure, it is a good idea to print the structure definition, either by printing it on paper or to a file. Printing the structure provides a description of the fields and settings that make up the textbase. If you print to a file, be aware that the file is only a description of the structure, and cannot be used as the basis of a new textbase.

1. Choose Maintain>Edit Textbase Structure and click the Print Structure button.
2. Use the Print dialog box to print the structure or save it as a file.

Tip! Printing the structure is the only way to print password definitions.
Records and Elements

The operations listed below create text files that can be used to reconstruct the contents of the textbase if necessary:

- Open a textbase and choose **File>Export** to write records to a text file. The resulting files could be loaded into a new textbase, if your textbase was ever seriously damaged.

  **Note:** Use Export to export Deferred updates, not Dump Textbase.

- Open a textbase and 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 replace it by importing it (along with all textbase elements for that textbase) from the exported file using **Maintain>Manage Textbase Elements**.

Stop Word, Leading Article, Validation, and Substitution Lists

These lists are backed up when you back up the textbase files. An extra level of protection is provided if you also print them to text files periodically. Open a textbase and choose **Maintain>Edit Textbase Structure**, click the **Stop Words** or **Leading Articles** button, then click the **Print List** button and select the **Print to file** check box. You can print substitution and validation lists to files from the Edit Fields dialog box or by choosing **Maintain>Edit Lists>Substitution Lists** or **Maintain>Edit Lists>Validation Lists**.

Image Annotation List

The image annotation list maps image files to annotation files. Open a textbase and choose **Maintain>Manage Image Annotations**, then click the **Back Up Annotation List** button. This creates an Image Annotation Backup file (.IAB) which you can restore using the **Merge File into Annotation List** or **Replace Annotation List with File** button on the Manage Image Annotations dialog box.
Other Management Activities

Keep a Log File of the Textbase Activity
A log file is a text file that records changes to the textbase (for example, record additions, deletions). Log files are saved in the same location as the textbase and have the same name, with the extension .LOG. Edit the textbase structure and be sure the log file is enabled. Information is continually appended to the log file. Periodically, after reviewing changes and/or printing the log file, you may want to delete a log file by choosing Maintain>Delete Log File. If the textbase has passwords, you must use the Master password to delete a log file. DB/TextWorks generates a new log file automatically.

Monitor passwords
If you are using passwords to manage different levels of access (for example, allowing some users to edit records, while others can only view records), establish a process to monitor the password assignments (for example, to change them periodically). To see the currently assigned passwords and settings, print the textbase structure (choose Maintain>Edit Textbase Structure>Print Structure). You need to use the Master password in order to do this.

Analyze a textbase
The Analyze Textbase command examines 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.

To analyze a textbase, choose Manage Textbases>Analyze Textbase, select the textbase you want to analyze, specify a name for the resulting report file, then click OK to start the analysis. For more information, see the online help.
Checking a Textbase for Problems

Choose **Manage Textbases>Check Textbase** to check a textbase or a user file and repair certain problems. You can also have DB/TextWorks rebuild indexes found to be damaged. See the online help for more information on checking a textbase.

After you check a textbase, a window displays the results of the check if there are errors. To see those results again at a later time, choose **Manage Textbases>View Check Textbase Report File**.

If a textbase is severely damaged and you are unable to open it, or if the check textbase report file lists serious errors that it could not fix, you may need to use Recover Textbase, or dump and reload the textbase. For instructions on recovering a damaged textbase, see Chapter 3, “Working with Records.”
Chapter 3: Working with Records

Without records, a textbase is just an empty structure. A record is the basic unit of retrievable information—when you search a textbase, you find records. For example, if you search an online catalog for Hemingway, you will find several records, each of which represents a book.

This chapter explains how to add, edit, and delete records on the desktop, including import and export operations. It also explains operations related to displaying and managing records, such as how to sort records after a search.

Note: If you have WebPublisher PRO, you can also add, edit, and delete records over the Web using a browser. For more information, see the Innmagic DB/Text WebPublisher PRO User’s Manual and the DB/TextWorks online help.

Overview

Before users can search your textbase, you must populate it with records. DB/TextWorks provides several ways to add, modify, and manage records.

Once you have created a textbase and defined its fields, as explained in the previous chapter, you are ready to add records. Users cannot search your textbase unless you populate it with records. The following are some of the ways you can add records. Each will be explained later in this chapter.

- To add one record at a time, choose Records> New Record.
- To copy an existing record and then edit it to make it unique, choose Records> Duplicate Record.
- To import records from a text file, choose File> Import.
- To import electronic documents (for example, letters, memos, and EMail), choose File> Import Document.

Adding New Records One at a Time

When you add new records manually, you work in the Edit window. The form used for the Edit window determines which fields appear. To select a different form, choose Display> Select Forms, or use the Select Form for this Window button on the Edit window toolbar. If you have not designed your own Edit forms yet, use the Basic Record form. For more information about designing forms, see Chapter 5, “Working with Forms.”

To add a record, you must have full access to all fields that you will be adding, and to all fields that have Field Entry Required validation.
**To add one record at a time**

1. Choose **File>Open** and open a textbase.

2. Choose **Records>New Record** to open the Edit New Record window.
   
   **Note:** **New Record** is disabled if the textbase is read-only or if any fields that have Field Entry Required validation are hidden or read-only.

3. Click in the box in which you want to enter information and start typing; or, if the field has a validation list, substitution list, or thesaurus, press **F3** and paste an entry from the list. To see if the current field has validation settings, look at the status bar.
   
   **Note:** If you want to add another entry in the box, press **F7**, then type your next entry.

4. Enter information in all applicable fields by moving from box to box. Click in the box, use **Tab** or **Shift+Tab**, or choose **Edit>Go to Box** to move through the boxes. Each editable box represents one field.

5. Choose **Records>Save Record**, press **F5**, or press **Ctrl+S** to save the record.
Working with Record Skeletons

Record skeletons are like templates for new records. Information in a record skeleton is put into each new record when you create it using the New Record command. All you have to do is “flesh out” the record by adding or editing information.

Skeletons are used for new records only, and are intended to reduce repetitive data entry. They are for desktop use only. (If you have WebPublisher PRO and want default information to appear on Web edit forms, see the online help, the “Using Default Values on a Web Edit Screen” topic.)

The record skeleton shown below lists Joe Brown as the Salesperson and Open as the status for each new record.

![Record Skeleton Editor](image)

To create or edit a record skeleton

1. Choose Records>Edit Record Skeleton to open the Open Record Skeleton dialog box.

2. Specify whether you want to edit an existing record skeleton or create a new one by selecting the appropriate option from the Start With list. Click OK.

3. The Record Skeleton Editor displays the selected skeleton or a new record skeleton, using the current edit form. Fill in the boxes so the record information appears the way you want each new record to appear.

Note: You can specify literal text only. Avoid including information in a skeleton that does not comply with a mask, range, or validation list, as this will cause the Content Validation Mismatch dialog box to open each time you save a new record using the skeleton.
4. Save the skeleton by choosing **Record Skeletons>Save Skeleton** or **Record Skeletons>Save Skeleton As**.
   - **Save Skeleton**. Saves a skeleton under its current name, overwriting the previous version. You will see the Save Record Skeleton As dialog box the first time you save the skeleton, but not during subsequent saves. Use this option when you are saving a new skeleton.
   - **Save Skeleton As**. Creates a copy of the skeleton under a new name. Use this if you edit a skeleton, but want to keep the original version.

5. Type a name and description for the skeleton in the appropriate boxes.

6. Depending on how you want the skeleton to be saved, choose:
   - **User File (Private)** if you want the skeleton to be available only for your personal use.
   - **Textbase File (Public)** if you want the skeleton to be available to everyone who uses this textbase. The current password determines whether you have the right to save skeletons in the textbase file.

7. [Optional] To print a description of the current record skeleton, choose **Record Skeletons>Print Skeleton**.

8. [Optional] To load a different record skeleton so you can edit it or to begin creating another record skeleton, choose **Record Skeletons>Open Skeleton**.

9. To close the Record Skeleton Editor, choose **Record Skeletons>Close Skeleton Editor**.

**To select a record skeleton**

If you want a particular record skeleton to be used whenever you create a new record, you have to select it. Choose **Records>Select Record Skeleton** and select a skeleton from the Currently Saved list. If you want to stop using a skeleton, select <none>. If you want to use the skeleton specified as the textbase default, click the **Revert to Default** button.

You cannot select a skeleton if the **Records>New Record** command is disabled.
Editing Records One at a Time

When you edit records manually, you work in the Edit window. The form used for the Edit window determines which fields appear. If you have not designed your own Edit forms yet, use the Basic Record form (choose Display>Select Forms>Record Edit). For more information about designing forms, see Chapter 5, “Working with Forms.”

To edit one record at a time

1. Locate the record that you want to edit by doing a search or loading a set. The Select Search Results Window dialog box opens.

2. Select the Edit window option button and click OK to open the Edit window, which uses the current Record Edit form.

3. Edit or add more information in the boxes, as applicable.

4. To save changes to the current record, choose Records>Save Record, press F5, or press Ctrl+S.

5. Use the arrow buttons on the Edit window toolbar to navigate to the next record to be edited.

Note: If you edit records while the Report window is open, the changes do not appear in the Report window until you refresh that window by choosing Display>Display Report.
Why You Cannot Edit Information in Some Boxes

Every form consists of one or more boxes. You can edit information in any box that contains one field from the record being edited, as long as that field is not protected by the current password. If you try to type information in a non-editable box, a beep sounds. Try changing the form or password.

You cannot add or change information if a box contains:

- **Content items other than fields.** Box content is determined by the current form. Select the Basic Record form if you want to be able to edit every field not protected by passwords.
- **Multiple fields.** The only exception is if all of the fields are hidden except one, and the field that you can see is not marked read-only by the current password.
- **A field from a secondary textbase.** To edit information from a secondary textbase, choose Records> Edit Secondary Record, or open the secondary textbase directly.
- **A Computed Date, Computed Number, Automatic Date, or Automatic Number field.** These fields automatically generate information that cannot be edited.
- **A field specified as read-only by the current password.**

Editing Techniques

Use the techniques described below when you add and edit records in the Edit window.

Working with Multiple Entries

Each field describes a particular property of a record, such as the author of a book. A given property may have multiple values, such as multiple co-authors of a book. In DB/TextWorks, each value is known as an entry in the field. Fields can contain any number of entries.

For example, say you have a textbase that tracks letters, and some letters are sent to more than one person. In a traditional database, you would either have to create separate Recipient1 and Recipient2 fields, or “blob” all of the names into one field without having them be recognizable as separate entities.
With DB/TextWorks, you can enter all of the names in just one field, and have each considered its own entry. Each entry is indexed separately, meaning you can search for and sort the names independently. Multiple entries in a field are preceded by a bullet, as shown in the following illustration. You can delete these bullets to concatenate two entries. The bullets are visual signals indicating the field entries. They are not part of the data.

The ability to include multiple entries in a field, instead of requiring a separate field for each item, is one of the unique features of DB/TextWorks.

Note: Automatic fields, Computed fields, and Link fields cannot hold multiple entries. All other fields can have unlimited entries, as long as the validation is not set to Single Entry Only.

To add multiple entries

1. To add the first entry, type the text in the appropriate box. For example, type Christopher Adams in the box labeled Recipient.

2. To add another entry, press F7, or choose Edit>New Entry, then type the new entry. The cursor’s position determines where the new entry will be added. If the cursor is at the beginning of the existing entry, the new entry will be added before the existing entry. If the cursor is anywhere else, the new entry will be added after the existing entry.

3. Repeat step 2 to add as many entries as you want. A bullet precedes each new entry.

Important! Pressing Enter does not create a new entry and is not equivalent to the F7 key. Pressing Enter simply inserts a line break—the additional information will not be indexed separately.
To split one entry into multiple entries

Use the following steps to split a single entry into two separate entries. This is useful if you have typed a list of entries on one line and want to make them individual entries; or if you typed a list and pressed Enter after each one, instead of F7.

1. Insert the cursor at the point at which you want to split the entry. In the following illustration, two entries have been entered on the same line without a separator. DB/TextWorks interprets this as a single entry and indexes it as such. To split them into two entries, insert the cursor between Davis and Harold.

   **Consultant name**
   - Belinda Davis
   - Harold Windsor

2. Press F11 or choose Edit>Insert Entry Mark. The software splits the names into two entries, each preceded by a bullet. After the record is saved, each name will be indexed individually.

   **Consultant name**
   - Belinda Davis
   - Harold Windsor

*Note:* When the cursor is at the beginning or end of an entry, pressing F11 achieves the same result as pressing F7.

To select an entry

- With the cursor in the entry you want to select, press Ctrl+F7, or choose Edit>Select Entry.

To delete an entry

- With the cursor in the entry you want to delete, press Shift+F7, or choose Edit>Delete Entry.

To paste an entry

You can paste information from the Windows Clipboard to create a new entry.

- Position the cursor, then choose Edit>Paste Entry or press Ctrl+Shift+V. (To paste information without making it a new entry, choose Edit>Paste or press Ctrl+V.)
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 creating or editing it, or you can choose to have your spelling checked as you type. You can check spelling on the desktop in the following windows: Edit Record, Edit Secondary Record, and 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. (For more information about modifying items in the dictionary, click the Dictionary button on the Check Spelling dialog box [which appears when you are checking spelling in the Edit window], then click the Help button on the Dictionaries dialog box.)

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. Automatic and Computed Date and Number fields can never be checked because they are not editable fields (but Automatic ID fields can be).

2. [Optional] Select the Check spelling as you type check box on 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 setting 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 or Edit Secondary Record window, or open a skeleton in the Record Skeleton Editor window. For example, search for a record and then choose Records>Edit Record.

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 the 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 on 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.
- Uneditable boxes (for example, boxes that contain Automatic or Computed Date fields, 
  Automatic or Computer 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 or Edit Secondary Record 
window, or open a skeleton in the Record Skeleton Editor window. As you type, words the 
spell checker considers misspelled will turn red.

2. Choose one of the following methods 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 in a pop-up list, as well 
as 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 personal 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 click the left mouse button 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 pop-up 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 
ned 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.

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 box. 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 on a red 
word, or on the Check Spelling dialog box. If you want to keep records looking uniform, you 
can use black text for editable boxes in edit forms if you are using the **Check spelling as you 
type** option.
Using Find and Replace

Choose **Edit>Find** or press **Ctrl+F** to open the Find dialog box so you can locate information in the active window.

Choose **Edit>Replace** to open the Replace dialog box so you can change information within a record. You can use **Replace** in editable windows only (such as the Edit or Query window).

Using Undo and Redo

While you work in the Edit window, you can select **Edit>Undo** and **Edit>Redo** to undo and redo the most recent edits. You can select **Undo** and **Redo** repeatedly to undo or redo multiple actions. Note that the cursor must be in the box in which you want to undo or redo actions.

Using Cut, Copy, and Paste

To cut, copy, and paste information using the Windows Clipboard, use the Edit menu. You can copy and paste information between fields and records or share information among applications. When you paste within DB/TextWorks, multiple entries are retained.
Inserting the Current Date, Time, or a Series of Dates or Numbers

While adding or editing a record, you can insert the current date or time or an automatically generated series of dates or numbers. Inserting a series can be easier than typing multiple sequential entries, such as several expected issue dates for a periodical. Each item that you insert becomes a separate field entry. The current date or time formats are determined by the Windows Control Panel. In DB/TextWorks, you can use a short or long date format by choosing Tools>Options>General, and selecting or clearing the Insert date using long format check box. Note that Tools>Options>General>Insert date as new entry (which is selected by default) affects the insertion of the current date and current time.

<table>
<thead>
<tr>
<th>To insert…</th>
<th>Do this…</th>
</tr>
</thead>
<tbody>
<tr>
<td>The current date</td>
<td>Put the cursor in a field and choose Edit&gt;Insert&gt;Current Date or press F4.</td>
</tr>
<tr>
<td>The current time</td>
<td>Put the cursor in a field and choose Edit&gt;Insert&gt;Current Time or press Shift+F4.</td>
</tr>
<tr>
<td>A series of dates</td>
<td>Put the cursor in a Date field and choose Edit&gt;Insert&gt;Series. Use the dialog box to determine how the series will be created. You can specify the first entry, the number of entries, and the increment unit (days, weeks, half-months, months, or years).</td>
</tr>
<tr>
<td>A series of numbers</td>
<td>Put the cursor in any non-Date field (for example, Number, Text) and choose Edit&gt;Insert&gt;Series. Use the dialog box to determine how the series will be created. You can specify the first entry, the number of entries, and how to increment (by 1, for example).</td>
</tr>
</tbody>
</table>

Tip! If you include an Automatic Number field in the textbase structure, DB/TextWorks will insert an automatically generated number for each record. For more information, see Chapter 2, “Creating a Textbase,” the “Automatic Number” section.
Validation Checking

When you add and edit records or perform batch modify and import operations, DB/TextWorks checks the validation to see if there are any restrictions. When the Edit window is active, the status bar in the Main window shows the validation of the current field. To see the validation for all fields, choose Display>Textbase Information.

A common validation check is for fields that have Field Entry Required validation. You cannot save a record that leaves this type of field empty, nor can you delete all entries in the field. The current password must give full access to all fields that have Field Entry Required validation if you want to create records. If the form selected for the Edit window omits any fields that have Field Entry Required validation, DB/TextWorks informs you and changes to the Basic Record form.

Another common validation check occurs when you type an entry that is not in a validation list. When you press F7 or move off the field, the Content Validation Mismatch dialog box opens. Depending on the validation settings, you can accept the entry, accept the entry and add it to the validation list, or browse the validation list and paste an acceptable entry from it. The Content Validation Mismatch dialog box also opens if the field entry violates range or mask validation and permits overrides. Read about validation lists below.

![Content Validation Mismatch]

This button is active if users can override content validation.

This button is active if users can update a validation list and the password allows editing of lists.
Using a Validation List

If a field has a validation list or has a thesaurus connected to it, you can browse the list and paste entries from it into the current field while adding or editing a record. This is a convenient way of adding entries to new or existing records, and of seeing what entries are allowed in a field.

1. While adding or editing a record, put the cursor in a box that contains a field that has a validation list. If the Browse Choices toolbar button is enabled when you put the cursor in a box, you can browse and paste entries from a list. To see if a field has a validation list, you can also look at the status bar or choose Display>Textbase Information.

2. Press F3 or choose Edit>Browse Choices to open the Editing Choices Browser dialog box.

3. Select the Validation List option button to show the validation list for the selected field. Notice that if the field has a thesaurus connected to it, and the thesaurus is specified as the validation field for the list, the thesaurus terms will appear as the validation list.

Note: There are other option buttons that may be enabled, depending on the field selected. The Substitution List option button is enabled if the field has a substitution list. The Links option button is enabled if the field is a Link field. The Thesaurus option button is enabled if a thesaurus is connected to the field, but is not specified as the validation list. These options are explained in more detail in the following sections.

To move quickly to an entry, type the first one or more letters in the Find box.

Because the Thesaurus option button is enabled, it means the Skills field has a thesaurus, but it is not used as its validation list.
4. Select an entry and click the Paste button to add the selected entry to the field, or click the Replace button to replace the current field entry with the selected entry. Note that if you are browsing thesaurus entries and you paste a term with a USE reference, the preferred term is pasted.

5. Repeat step 4 for each entry you want to add to the field, then click Close.

To edit a validation list, choose Maintain>Edit Lists>Validation Lists, or use the Edit Textbase Structure dialog box. The latter method requires you have exclusive access to the textbase. While editing a list, you can also print it, print it to a file, or import a text file into the list. For more information, see Chapter 2, “Creating a Textbase.”

Tip! If needed, you can resize this dialog box by using the standard Windows method for resizing. Place your mouse pointer over the right edge until it turns into a two-headed arrow, then click and drag, and release the mouse when appropriate.

Using a Substitution List

A substitution list is a list of codes and replacement values defined for a Text field. Type the code while adding or editing a record. When you press F7, or move the cursor to a different box, the substitution is made. For example, type ri and click in another box to see Rhode Island appear. Substitution lists can reduce keystrokes and typographical errors.

If you cannot remember the code, press F3 or choose Edit>Browse Choices. When the Editing Choices Browser appears, you may have to select the Substitution List option button from the List Shows group, if it is not already selected. You can select and paste an item from the list.

Note: During an import or batch modify, substitutions are made automatically.
To edit a substitution list, choose **Maintain>Edit Lists>Substitution Lists**, or use the Edit Textbase Structure dialog box. The latter method requires you have exclusive access to the textbase. While editing a list, you can also print it, print it to a file, or import a text file into the list. For more information, see Chapter 2, “Creating a Textbase.”

**Tip!** If needed, you can resize this dialog box by using the standard Windows method for resizing. Place your mouse pointer over the right edge until it turns into a two-headed arrow, then click and drag, and release the mouse when appropriate.

### Editing Secondary Records

If the textbase includes a Link field, you can edit information from the secondary textbase from within the primary textbase. Linking is done on a record-by-record basis—a link is established when the Link field in a record in the primary textbase and the associated field in a record in the secondary textbase contain identical information. For example, if a Link field and its associated field contain the entry **John Smith**, the two records are linked. Linking works on a many-to-one relationship. That is, many records in the primary textbase can link to the same record in the secondary textbase, but a record in the primary textbase links to only one record in the secondary.

To ensure a match when adding or editing a record in the primary textbase, you can place the cursor in a Link field and press **F3** or choose **Edit>Browse Choices**. You can select and paste a term from the secondary textbase field index into the current record.

To edit a secondary record from within the primary textbase, choose **Records>Edit Record** or **Records>New Record**, then choose **Records>Edit Secondary Record**. If this menu command is grayed out, you may have more than one Link field. Place the cursor in one of them, then choose the command. If the Link field is filled in, the corresponding record in the secondary textbase opens in the Edit Secondary Record window so you can edit it. If the Link field is empty, a blank Edit form opens so you can create a new record in the secondary textbase.

For more information about linking, see Chapter 8, “Linking Textbases.”

### Using a Thesaurus in the Edit window

When adding or editing records, you can browse and paste entries from a thesaurus textbase attached to a field. A thesaurus lets you maintain a controlled vocabulary of terms.

To browse the thesaurus, place the cursor in a field that has a thesaurus attached to it and press **F3** or choose **Edit>Browse Choices**. When the Editing Choices Browser opens, you may have to select the **Thesaurus** option button from the List Shows group, if it is not already selected. You can select and paste a term from the thesaurus.

**Note:** If the field has a thesaurus attached and it is specified as a validation list, the Thesaurus option button will not be enabled. The thesaurus entries will automatically appear as the validation list, and the Validation List option button will be selected.

For more information about using a thesaurus, see Chapter 4, “Searching a Textbase,” the “About DB/TextWorks Thesaurus” section.
Refreshing Computed and Linked Information

While adding or editing a record, you can update the display of Computed fields and fields from a secondary textbase (linked information) by simply moving the cursor to a different field, choosing **Window>Refresh**, or pressing **F9**. This procedure does not refresh boxes that contain multiple content items (except multiple secondary textbase fields). To refresh a box that contains multiple items, redisplay the window (close and reopen it).

**Tip!** You do not have to refresh in order to update Computed fields. They are re-evaluated whenever you move off one of the fields included in the formula for the Computed field or save the record. Refreshing is intended only as a convenience, to update the display.

Specifying Textbase Access

When you add, edit, or delete records, DB/TextWorks makes changes to the Word and Term indexes to keep them up to date.

You can select an indexing mode to determine when the indexing takes place. There are three indexing modes—Immediate, Shared Immediate, and Deferred—each of which has its own advantages.

**To change the indexing mode or set the default**

**Important!** If you are changing the indexing mode of a textbase with a password(s), you must use the Master password to open the textbase. If you do not, the Change Indexing Mode option will be disabled.

1. Open a textbase and choose **File>Change Indexing Mode**.
2. Select an indexing option. Each option is explained on the following pages.
3. Click **OK**. The option remains in effect only for the current session, unless you select the **Use as Textbase Default Indexing Mode** check box. Only the Master password gives you the right to set or change the default.
*Immediate Indexing*

With Immediate indexing, only one person can open the textbase at a time. Changes are indexed immediately when a new or edited record is saved or when a record is deleted. There is a slight delay (usually only several seconds) each time the indexes are updated. The benefit of using Immediate indexing is that you can always see and search the most recent version of a record, because the indexes are always updated immediately.

Other users of the same textbase are temporarily denied access to operations that involve the indexes, such as searching or saving records.

If you are sharing a textbase in a network situation, no one else will be able to open this textbase until you close it or change the indexing mode. **Before you select Immediate indexing, be sure that no one else needs to use the textbase.** Immediate indexing also prevents a single user from opening the same textbase in multiple instances.

Immediate indexing ensures the fastest imports and posting of deferred updates. If speed is a concern, change to Immediate indexing before performing these operations.

You cannot select Immediate indexing if the current Field Access or Silent password prohibits exclusive access, or if anyone else has the textbase open. To see if any other people are using the textbase, choose **Display>Textbase Information.**

*Shared Immediate Indexing*

Shared Immediate indexing is the same as Immediate indexing, except that multiple people can use the textbase at the same time, and a single user can open a textbase in more than one instance. When information is being indexed, other users of the same textbase are temporarily denied access to operations that involve the indexes, such as searching or saving records.

Shared Immediate indexing is often the best choice when just a few users are sharing a textbase. If you encounter frequent delays while using Shared Immediate, all users sharing the textbase should use Deferred indexing.
Deferred Indexing

With Deferred indexing, many people can use the textbase and make changes to it at the same time. Deferred indexing eliminates the indexing delays that occur with Immediate or Shared Immediate indexing. It is a good choice when many users are sharing a textbase on a network, or for single users who want to eliminate indexing delays.

When more than one person is sharing a textbase, deferred updates may contain not only your changes, but changes that other people have made as well.

The terms “deferred updates,” “unposted changes,” and “pending updates” are used interchangeably. They all refer to changes that were made while Deferred indexing was in effect, and which have not been incorporated into the textbase yet. Deferred indexing affects the options listed in the following table.

<table>
<thead>
<tr>
<th>Operation</th>
<th>Result of Using Deferred Indexing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Searching</td>
<td>Because deferred updates are not indexed, a search will not find new information in records with unposted changes. To find records with unposted changes, choose Maintain&gt;Deferred Updates and select Get Deferred Updates from the Do This list.</td>
</tr>
<tr>
<td>Displaying, printing,</td>
<td>Deferred changes do not appear when you display, print, or sort, unless you choose Tools&gt;Options&gt;General and select the Show deferred changes in reports and display check box.</td>
</tr>
<tr>
<td>and sorting records</td>
<td></td>
</tr>
<tr>
<td>Editing or copying</td>
<td>When you edit or copy a record that has unposted changes, a message tells you that updates are pending and asks if you want to edit the changed version. Click Yes if you want to edit the record, or No to cancel. You can edit only the newest version of a record with deferred changes (in other words, you will see deferred changes even though they have not been indexed yet).</td>
</tr>
<tr>
<td>Importing records</td>
<td>If you import records using Deferred indexing, you will have to post the deferred updates later. For maximum speed, change to Immediate or Shared Immediate indexing before importing records. If you are using matching to modify records already in the textbase, post deferred updates before starting the update.</td>
</tr>
</tbody>
</table>

Chapter 3: Working with Records 101
Finding, Posting, Printing, or Discarding Deferred Updates

To find (get), print, post, or discard deferred updates, choose Maintain>Deferred Updates and specify what you want on the Deferred Updates dialog box.

Each Deferred indexing option is explained below. For more information, see the online help.

- **Get Deferred Updates.** Find records with deferred changes. Although you cannot undo deferred changes selectively, you can make additional changes before posting the updates. When you get deferred updates, you can request new records (added with Deferred indexing), modified records (edited with Deferred indexing), and/or deleted records (deleted with Deferred indexing).

- **Print Deferred Updates.** Print copies of records with deferred changes or save them in a text file. Each record is preceded by a comment showing the type of update (changed fields, deleted records, new records) and the affected fields. To print to a file, select the Print to File check box on the Print dialog box; the file will be a plain text file.

- **Post Deferred Updates to Textbase.** Update the Word and Term indexes to incorporate deferred additions, changes, and deletions. If necessary, you can interrupt the update process by clicking the Stop button while the Post Updates Status message is displayed. If any updates cannot be posted, explanations are written to the textbase log file.

- **Discard Deferred Updates.** Permanently discard all changes made while Deferred indexing was in effect. As a precaution prior to discarding updates, you may want to copy them to a file (using Print Deferred Updates). When you discard deferred updates, all unposted new records are discarded, all unposted changes are discarded, and all unposted deleted records remain in the textbase.
Exporting Deferred Updates

Back up record information on a regular basis is an essential part of textbase maintenance. If you use Deferred indexing, decide whether to include deferred changes when you export record information. You can use the following menu options to achieve the results you want.

<table>
<thead>
<tr>
<th>Menu Option</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>File&gt;Export</td>
<td>Writes copies of updated versions of all records in the current set or textbase to a text file, as if deferred updates had already been posted. This is how you export the most recent version of the textbase—either the entire textbase or the current record set, depending on the export option you select.</td>
</tr>
<tr>
<td>Manage Textbases&gt;Dump Textbase</td>
<td>Writes copies of all records in the textbase to a text file, not including pending updates. Deferred additions, changes, and deletions are ignored. This is a way of backing up a textbase prior to posting deferred updates.</td>
</tr>
<tr>
<td>Maintain&gt;Deferred Updates, select</td>
<td></td>
</tr>
<tr>
<td>Print Deferred Updates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Writes copies of pending updates only. This is a way of retaining a permanent record of deferred changes, and is commonly done prior to posting or discarding deferred updates.</td>
</tr>
</tbody>
</table>
Copying Records

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

**Important!** Only fields included in the Edit form are copied.

1. Select a record and choose **Records>Duplicate Record**.
2. Edit the new record to make it unique.
3. Choose **Records>Save Record**.

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

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

Deleting Records

Follow the instructions below to **permanently delete** records from a textbase. You cannot delete records unless the current password provides full access to all fields. Note that you can also use **File>Import** to delete records.

To delete one record at a time, search for the record you want to delete and select it in the Report window or display it in the Edit or Display window. Choose **Records>Delete Record** and respond to the confirmation message.

To delete a batch of records, perform a search or load a set that contains only the records that you want to delete.

**Tip!** Consider exporting the records to an ASCII file before batch deleting records, in the event you need to restore the information after it is deleted.

To preserve a record in the set, omit it (choose **Sets>Omit Record**). Choose **Records>Batch Delete** and respond to the confirmation message. All records in the set are permanently deleted from the textbase. The records you omitted are no longer part of the set, and are not deleted.

**Tip!** If records were deleted using Deferred indexing, it is possible to recover deleted records as long as the updates have not been posted.
Using Batch Modify

To change information in more than one record at once, you can perform a batch modification on all of the records in the current set. 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, you can choose Maintain>View Log File.

Tip! Consider exporting the set of records to an ASCII file before batch modifying them.

To change more than one record at a time

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 window 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.

4. Select a field to modify from the Field to Modify list. If you select <all fields>, your changes will affect all fields shown in the list. Computed and Automatic Number fields, Computed and Automatic Date fields, and secondary textbase fields do not appear in the list because you cannot change them using Batch Modify. Other fields appear only if the current password provides full access to those fields.

Chapter 3: Working with Records 105
5. Specify how you want to modify records by selecting an option button in the Operation group:
   - **Insert Entry Before.** Add a new entry before an existing entry in the selected field.
   - **Append Entry After.** Add a new entry after an existing entry in the selected field.
   - **Delete Entry.** Delete one or more entries in the selected field.
   - **Substitute Entry.** Delete an entry in the selected field and replace it with a different entry.
   - **Substitute Text.** Change or delete text in the selected field. This is the only option that affects a piece of text, rather than an entry as a whole.

   **Tip!** To delete a piece of text, select the **Substitute Text** option button and the **Matching** option button (from the Affects group). When this combination is selected, the boxes on the bottom of the dialog box change to show the **Find What** box and the **Replace With** box. In the **Find What** box, type the text you want to change. Leave the **Replace With** box empty. You effectively replace the text in the **Find What** box with nothing—in other words, you delete it.

6. Specify what the operation you selected in step 5 affects by selecting an option in the Affects group:
   - **First Entry.** Affects the first entry in the selected field. For example, inserts an entry before the first entry.
   - **Last Entry.** Affects the last entry in the selected field.
   - **All Entries.** Affects all entries in the selected field.
   - **Matching.** Affects the matching entry or text (the value typed in the **Old Entry** or **Find What** box). For matching entries, you must type the entire entry.

   **Note:** Case and punctuation in the **Old Entry** box are not significant unless you are modifying a Code field. Old and new entries are considered a match if their indexing is the same. For example, **Feb 14, 2003** and **2-14-03** are equivalent in a Date field.

7. If the **Choices** button on the Batch Modify Records in Set dialog box is active, click it to see terms that you can paste into the **New Entry** or **Replace With** box. (The box that appears on the dialog box depends on what you selected in step 5.) Depending on the field selected, the dialog box may show a validation list, substitution list, a thesaurus, or linked information from a secondary textbase.

8. When you return to the Batch Modify Records in Set dialog box, click **OK** to confirm your settings.

9. A confirmation message appears. Read it carefully before clicking **Yes**. Clicking **No** returns you to the dialog box so you can make additional changes.
## Importing and Exporting Information

You can copy record information into and out of a textbase by importing and exporting files. Importing and exporting is a way of sharing information among textbases or other applications, and of backing up and restoring record information. The import and export options are summarized below and explained in detail on the following pages.

<table>
<thead>
<tr>
<th>Menu Option</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>File&gt;Export</td>
<td>Writes copies of updated versions of all records in the current set or textbase to a text file. Records are exported as if deferred updates had already been posted.</td>
</tr>
<tr>
<td>File&gt;Import</td>
<td>Loads records from a text file into a textbase. This is how you move records from another source into your textbase.</td>
</tr>
<tr>
<td>File&gt;Import Document</td>
<td>Loads full text from document files into a field.</td>
</tr>
<tr>
<td>Manage Textbases&gt;Dump Textbase</td>
<td>Writes copies of all records in the textbase to a text file, not including pending updates. Deferred additions, changes, and deletions are ignored. This provides an easy way to back up records. Use it as part of your regular maintenance routine.</td>
</tr>
<tr>
<td>Manage Textbases&gt;Load New Textbase</td>
<td>Intended primarily as a recovery mechanism to load records into a new empty textbase. No validation or duplicate record checking is done, and all Automatic and Computed fields remain exactly as they are in the import file. (They are not recomputed.)</td>
</tr>
</tbody>
</table>

**Note:** 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 between DOS and Windows applications, choose **Tools>Options>General** before you import or export, and select or clear the **Read/write extended characters in MS-DOS format** check box. The default is the Windows format.

## Importing Records

Importing records is a fast way of building new and larger textbases. You can import records into a new, empty textbase or into a textbase that already contains records. The import file must be a text file in Inmagic tagged, delimited ASCII, or XML format. During an import, you can add records, replace records, modify fields, or delete records.

Any fields included in the import file must be defined in the DB/TextWorks textbase into which you are importing the file. If a record in the import file contains a field that is not in the textbase structure, that record will be rejected. By default, DB/TextWorks places rejected records in an exception file. If you are copying information between two textbases that have several but not all fields in common, export (from the source textbase) a subset of fields to create an import file that will be accepted by the target textbase.
There are several important issues that you should be aware of before you start importing:

- **Passwords.** If your textbase has passwords, be sure to use a password that provides full access to all of the fields included in the import file. To delete records during an import, you need full access to all fields, meaning no fields can be marked read-only or hidden.

- **Substitutions.** During import, substitutions are made automatically for fields that have substitution lists or a thesaurus with USE entries.

- **Indexing Mode.** You can import using any of the following indexing modes:
  - **Immediate.** This is fastest, but in a network situation no one else can open or use the textbase until the import is done.
  - **Shared Immediate.** Allows other users to have access to the textbase, but they might not be able to search, save records, or perform other operations that require access to the indexes.
  - **Deferred.** Requires you to post deferred updates at a later time. Also, Unique Entries Only validation cannot be checked against other records in the import file until the updates are posted.

  **Note:** Express Import is not available because records are not indexed if you are using Deferred indexing.

- **Computed and Automatic fields.** Automatic and Computed fields are maintained by the software. You cannot change Automatic Numbers or creation dates in existing records, and you cannot dictate what they will be in a new record. During an import, the contents of Automatic and Computed fields in the import file are ignored, except for matching purposes. (The exception is Automatic ID fields. See below.)
  Computed fields are updated when a new or changed record is saved. Automatic fields have new values assigned when appropriate (for example, an Automatic Date field gets updated when a record is created or modified, depending on its field setting). Note that record replacement during an import is considered a modification, so Automatic Numbers and creation dates in the record in the textbase are retained.

- **Automatic ID fields.** Automatic IDs are handled in a special way during import. If the incoming record does not have information in the Automatic ID field, the field will not be populated automatically when the record is imported into the textbase. If there is information in the Automatic ID field in the import file, and that field has Unique Entries Only validation, the value in the record will be incremented until it is unique. This means all the incoming records can contain, for example, IMP-001 and after the import the records will contain IMP-001, IMP-002, and so forth.
To import records

1. Choose File>Open and open the textbase into which you want to import records.

2. Post deferred updates (if any) by choosing Maintain>Deferred Updates>Post Deferred Updates to Textbase. Though not required, this step is recommended, particularly if you will use the Add/Replace Options tab to check for matching records, or you have any fields with Unique Entries Only validation.

3. Choose File>Import to open the Select Import File dialog box.

4. Select the file you want to import, then click Open to open the Import Options dialog box.

5. Use the tabs on the Import Options dialog box to specify how to import the file. The options on each tab are explained on the following pages.

6. Click OK on the Import Options dialog box to start the import.

When the import is complete, you will see a message indicating the import file name and the results of the import. If you specified that an exception file be created and any records were rejected, the message indicates the name and location of the exception file. When you click OK to dismiss the message, the exception file will automatically open in Windows Notepad. You can correct and then import the exception file. To see details about an import, choose Maintain>View Log File. For more information, see “Exception File Tab” on page 118.
File Format Tab

Use the File Format tab to indicate the format of the import file.

**Note:** If you transfer a file from another system, you may need to convert the file to one of the following formats.

- **Inmagic Tagged Format.** The text format for sharing files among Inmagic textbases, as explained on page 111.
- **Delimited ASCII Format.** A text format commonly used to share information with other applications, as explained on page 112. When you select this option, the dialog box expands to show additional settings.
- **XML.** A text format used for structured documents and data on the Web, as explained on page 115. When you select this option, the dialog box expands to show additional settings.
Inmagic Tagged Format

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

```
!Comment lines are ignored during import
THIS is the first record
AUTHOR Radhakrishna, Usha
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 tab.
; Use a semicolon for each additional field entry. This is the fourth entry
in the SUBJECT field.
"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 Tucci, Gabriella
TITLE Boys will be boys
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. Each item is explained in the following table.

<table>
<thead>
<tr>
<th>Item</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>Can 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 a previously named field.</td>
</tr>
<tr>
<td>&gt;</td>
<td>Line break to be retained in the data for a previously named field.</td>
</tr>
<tr>
<td>Space or Tab</td>
<td>Continuation line for a previously named field (permits wrapping). A Tab will be imported as a space.</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 file in the Inmagic tagged format, use any text editor or use DB/TextWorks (the Dump Textbase or Export features). If you create the file yourself, follow these guidelines to ensure that the file is in the proper format:

- Use quotation marks around field names that include spaces. Case is ignored.
- A line cannot exceed 65,534 characters. To force a line wrap that will not be retained in the field data, press Enter and begin the next line with a space or Tab. This is called a continuation line.
- Do not include a space or Tab before a character that represents a multiple entry, paragraph break, comment line, or the end of a record (; > ! $). If you do, that character will be interpreted as text in the field.
- Do not include a field more than once in a record. Use a semicolon (;) at the beginning of a new line to indicate multiple entries.
- Blank lines and comment lines are ignored during an import.
- Records do not have to include every field defined in the structure—just the fields that you want to modify. Fields can appear in any order.
- The file can include any number of records.

To load Inmagic tagged files, use File>Import.

Note: The Load New Textbase feature also accepts files in Inmagic tagged format, but should be used only in special circumstances (such as, when you do not need to match, do not need Automatic and Computed fields updated, and/or want validation or strictness checked). For more information about the Load New Textbase command, see “Loading Records into a New Textbase” on page 128.

Delimited ASCII Format

In a delimited ASCII file, values are separated by commas, tabs, or other characters. If you select this option button on the File Format tab, the Import Options dialog box expands to show additional settings.
**Delimiter Options**

Use the drop-down lists in the Delimiter Options group to specify which characters are used in the import file to indicate where records, fields, and entries end. You can select options from the drop-down lists or type keyboard characters. To indicate a carriage return and line feed, enter `{\text{CR}}\{\text{LF}}`. To indicate a line feed only, enter `{\text{LF}}`. To indicate a Tab, enter `{\text{TAB}}`. To indicate another character, type its ASCII value inside curly braces (for example, `{\text{29}}`). The previous illustration shows the typically used characters. The following table provides a list of delimiter options and their explanations.

<table>
<thead>
<tr>
<th>Option</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record Separator</td>
<td>Indicates where each record ends. The default is <code>{\text{CR}}\{\text{LF}}</code>.</td>
</tr>
<tr>
<td>Entry Separator</td>
<td>Indicates multiple (repeating) entries in a field. The default is a vertical bar. The following example shows three entries separated by a vertical bar:</td>
</tr>
<tr>
<td></td>
<td>Bill Jones</td>
</tr>
<tr>
<td>Quote Character</td>
<td>Encloses field information. A quotation mark (&quot;) is used in this example:</td>
</tr>
<tr>
<td></td>
<td>&quot;Jones&quot;,&quot;5 Elm Street&quot;,&quot;Smalltown&quot;,&quot;CA&quot;</td>
</tr>
<tr>
<td>Field Separator</td>
<td>Appears between fields, to indicate where each field ends. The default is a comma.</td>
</tr>
<tr>
<td>Comment</td>
<td>Lines that begin with the specified comment character will be ignored during the import. An exclamation point (!) is the default.</td>
</tr>
</tbody>
</table>

**Note:** To embed a Quote Character in the data without having it be interpreted as a Quote Character, type it twice.

**Note:** If a field name or any field information includes a delimiter, surround it with the Quote Characters. Putting a field separator, record separator, or comment character inside the specified Quote Characters causes it to be treated as data, not as a separator. Putting an entry separator inside Quote Characters does not change its purpose.
The example below shows a file that contains four records. The record separator is {CR}{LF}, the entry separator is a vertical bar ( | ), the Quote Character is a double quotation mark ("), the field separator is a comma (,), and there is one comment line:

```plaintext
! Sample import file for BOOKS textbase
"Frederickson", "Trout Fishing", "1998"
"Smith, John", "Fly Fishing", "1987"
"Jones, M", "The ""Real"" Story", "1998"
"Jones, M|Smith, J", "Alive and Well", "1997"
```

**Field Names**

Select an option in the Field Names group to determine how to associate information in the delimited ASCII import file with fields in the textbase. If you are not sure about the file’s format, you can use Microsoft Notepad or WordPad, or any text editor to look at the file.

- **Import Fields in Textbase Structure Order.** Select this option button if field names are not in the first row, and the fields in the import file are in the same order as the textbase structure. For example, if the first three fields in the structure are Product, Quantity, Date, this file will import properly:
  
  Widgets, 25, 15-Oct-2001
  Gadgets, 100, 20-Oct-2001

- **First Row Contains Field Names.** Select this option button if the first line of the import file contains field names. The field order does not have to match the structure order.
  
  Product, Quantity, Date
  Widgets, 25, 15-Oct-2001
  Gadgets, 100, 20-Oct-2001

- **Specify Order in which to Import Fields.** Select this option button if field names are not in the first row, and the import file has fields in a different order than the textbase structure. When you select this option button, the Available Fields and Import Fields lists appear on the dialog box. To indicate the proper field order, move fields from the Available Fields list to the Import Fields list. The Import Fields list should reflect the order of fields in the import file. If necessary, use the Up and Down buttons to change the order of the fields. For example, if your import file looks like the following example, move Quantity, Product, and Date, in that order, into the Import Fields list. Now the file will import properly, regardless of the order of fields in your textbase structure.
  
  25, Widgets, 15-Oct-2001
  100, Gadgets, 20-Oct-2001

If a record in the import file contains more fields than the Import Fields list, the record will be rejected. If a record in the import file contains fewer fields than the Import Fields list, the fields not represented will not be modified.

114 Chapter 3: Working with Records
XML Format
Extensible Markup Language (XML) uses tags, like HTML, but offers greater flexibility because it gives you the ability to define custom tags. When you select this option on the File Format tab, the Import Options dialog box expands to show additional settings.

Formatting Style Sheet to Transform XML File to Inmagic Tagged Format
When importing XML files, DB/TextWorks uses an XSL style sheet to transform the XML file into a temporary Inmagic tagged format file.

To specify the style sheet used for the transformation, select an option button from the Formatting Style Sheet to Transform XML File to Inmagic Tagged Format group.

- **Default Formatting Style Sheet.** Transforms the XML file using the standard style sheet, provided by DB/TextWorks. If you want to save a copy of the default style sheet to use again later (for example, to modify it to suit your needs for a future import), click the **Save As** button to open the Save Style Sheet File As dialog box. Specify a name and the location in which you want it saved, then click **Save**. Click **OK** to dismiss the confirmation message.

- **Formatting Style Sheet in File.** Transforms the XML file using a style sheet that you specify. If you select this option, click the **Style Sheet File** button to open the Select Style Sheet File dialog box. Select the style sheet file (.XSL) you want to use, then click **Open**.
Add/Replace Options Tab

Use the Add/Replace Options tab to control how records are added, rejected, changed, or deleted during an import.

Check for Matching Records

Matching is the way you determine which records will be changed during an import. If you select this option, incoming records (in the import file) are compared to existing records (in the textbase) during an import. If they match, the operation you have specified will occur.

When you select the Check for Matching Records check box, you enable all of the Add/Replace matching options. Use the right arrow button (>) to move a field (or multiple fields) from the Term-Indexed Fields list into the Incoming Records Must Match list, then specify what to do if a match is found or not found. Each matching option is explained on the following pages.

For example, say you use the Product Number field for matching. If an incoming record has 123 in the Product Number field and an existing record has 123 in the Product Number field, the records match. Depending on which Add/Replace options you selected, the incoming record will be rejected, or the existing record will be modified, replaced, or deleted.

To be considered a match, every entry in the matching field in the import record must match an entry in a record in the textbase. To ensure that you change only the intended records, it is best to use a non-repeating field that is likely to contain unique information. An Automatic Number field is ideal, because it contains unique numbers. However, any unique field will do. To ensure that the correct record is modified, you can match on more than one field.
If you do not check for matching records (that is, you do not select the **Check for Matching Records** check box), all of the records in the import file will be added to the textbase. This is appropriate if you are adding records to an empty textbase, or you are sure that the records in the import file do not duplicate records in the textbase or import file.

**If Match is Found group**

When checking for matching records, select an option button from this group to specify what happens to a record when a match is found:

- **Reject New Record.** Use this option to avoid duplicating existing records when adding new records to a textbase. If any records are rejected, they will be copied to the exception file. After the import, you can make corrections to the exception file to ensure that the records will be accepted, then import the corrected exception file.

- **Append Field Entries.** Use this option to add information to a record without changing any existing information. This is how you merge fields in duplicate records. If the textbase record contains fields that are not in the import file record, those fields remain unchanged. Look at the following example to see how an existing record is changed. The **ID** field is used for matching.

<table>
<thead>
<tr>
<th>Record before Import</th>
<th>Import File</th>
<th>Record after Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID 15</td>
<td>ID 15</td>
<td>ID 15</td>
</tr>
<tr>
<td>FRUIT Blueberry</td>
<td>FRUIT Apple</td>
<td>FRUIT Blueberry</td>
</tr>
<tr>
<td>DATE 15-Feb-2003</td>
<td>; Orange</td>
<td>; Apple</td>
</tr>
<tr>
<td></td>
<td>$</td>
<td>; Orange</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DATE 15-Feb-2003</td>
</tr>
</tbody>
</table>

- **Replace Fields.** Use this option to change information in the textbase. Fields in the incoming record replace fields in the existing record. Fields that are not in the import file remain unchanged. In the following example, the **ID** field is used for matching.

<table>
<thead>
<tr>
<th>Record before Import</th>
<th>Import File</th>
<th>Record after Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID 15</td>
<td>ID 15</td>
<td>ID 15</td>
</tr>
<tr>
<td>FRUIT Blueberry</td>
<td>FRUIT Apple</td>
<td>FRUIT Apple</td>
</tr>
<tr>
<td>DATE 15-Feb-2003</td>
<td>; Orange</td>
<td>; Orange</td>
</tr>
<tr>
<td>$</td>
<td></td>
<td>DATE 15-Feb-2003</td>
</tr>
</tbody>
</table>

- **Replace Old Record.** Use this option to replace existing records with updated versions of records.

- **Delete Old Record.** Use this option to delete existing records from a textbase. The import file shown below will delete records with IDs 12 and 43:

```
ID 12
$
ID 43
$
```

Chapter 3: Working with Records 117
If Match is Not Found group
Select an option button from this group to specify what happens when a match is not found for a record in the import file.

- **Accept New Record.** Select this option to allow the record into the textbase.
- **Reject New Record.** Select this option to reject the record (and copy it to the exception file, if you are using one).

**Note:** DB/TextWorks disables options to prevent combinations that do not make sense.

**Validation Tab**
Use the Validation tab to specify how to handle incoming records that do not conform to the content validation applied to one or more fields in the textbase structure. Select one of the following option buttons:

- **Reject Overrides.** The record will be rejected.
- **Accept Overrides.** The record will be allowed in, even if it does not meet validation.
- **Accept Overrides & Update Validation Lists.** The record will be allowed in and a new entry will be added to the validation list.

**Important!** The **Accept Overrides** and **Accept Overrides & Update Validation Lists** options require that the field(s) permit overrides and/or updating the list (this is specified in the textbase structure). In addition, the current password must permit the updating of lists. Click the **Help** button on the Validation tab for more information about each option.

**Exception File Tab**
An exception file is a text file that contains records that are rejected during an import. DB/TextWorks copies rejected records, in their entirety, to the file and precedes each record with a comment line that explains why it was rejected. You can correct records in the exception file and then import the corrected exception file into the textbase. For example, you could fix the typographical error in the exception file below and then import the corrected exception file:

```plaintext
!**Entry in field 'Subject' not found in validation list: Computeers
Title Cracking the Code
Author Ortiz, Conrad
Subject Computeers
```

Use the Exception File tab to specify an exception file. The **Write Rejected Records in Exception File** check box is selected by default and is followed by the name and location of the file that will be used. By default, exception files have the same name and location as the import file, and use file extensions starting with .X01 (such as FILE.X01). To change the name or location of the file, click the **Exception File** button to open the Specify Exception File dialog box.
If records are rejected during an import operation, the exception file opens automatically when you click **OK** on the completion message. You can also use any text editor or word processor to open an exception file. You do not have to edit or delete comment lines, because lines preceded by an exclamation point are ignored during an import. Be sure to save the file as a text file after editing it.

You import a corrected exception file the same way you import any file. Choose **Exception Files (*.x*)** from the **Files of type** drop-down list on the Select Import File dialog box to display exception files.

**Strip Leading Spaces Tab**

Use the Strip Leading Spaces tab to specify whether leading spaces appear. Select the **Strip Leading Spaces** check box if you want to remove leading spaces.

Leading spaces are spaces in the import file at the beginning of continuation lines, immediately after a new entry boundary, and after line breaks in the data. Keep leading spaces if you want to retain formatting in the import file, such as margins or indentation created by spaces. Strip leading spaces if you want to remove the excess spaces.

**Import Method Tab**

Use the Import Method tab to determine the speed of the import and whether other users of the textbase can access the indexes while you are doing an import. Specify an import method by selecting one of the following option buttons:

- **Interruptible Import.** This option is the default. Use it in the following situations:
  - To obtain the fastest import when loading small files, or files that contain just one record each.
  - To retain the ability to interrupt the import quickly.
  - To allow others sharing the textbase while you are importing to perform operations that use the indexes (for example, searching and editing) during the import.

- **Express Import.** This option is designed for importing large files of new records during off-peak hours. It is the fastest method to use when importing files that contain many new records, but may make it difficult for others to use the textbase. Do not use Express Import if you are checking for matching records because it can result in slower imports. If you select Express Import, the settings on the Add/Replace Options tab are disabled. Express Import is not available while using Deferred indexing (**File>Change Indexing Mode**).
Express Import does most of its work in memory. Rather than repeatedly writing information to disk, Express Import grabs the indexes once and does not release them until the entire import is done. This means that others sharing the textbase cannot perform record operations, such as searching and saving, until the import is complete. It also means that interrupting an import can be time-consuming—it may take a while before an interrupt request is processed.

Note: Decreasing the size of the Express Import buffer may improve Express Import speed. Typically, Express Import appropriates as much memory as possible to provide maximum speed. However, if you find that Windows is swapping a lot when using Express Import, you can change the size of the buffer by adding `ExpressImportBuffer=` to the INMAGIC.INI file. For example, if you set it equal to 4096, the buffer will be 4096KB, even if there is more memory available (and less if that amount of memory is not available).

Interrupting an Import

There are several reasons why you might want to interrupt an import. You might notice that most of the records are being rejected, which could indicate a problem with validation or the format of the import file. You might decide that you do not want to wait for the import to finish, especially if you are using Express Import, which prevents others from using the textbase. Or you might decide that you selected the wrong options or file to import.

To safely interrupt an import without harming the textbase, click the Stop button on the Import Operation Status dialog box or press Enter. You may notice a slight delay while DB/TextWorks finishes processing information held in memory and writes it to disk. Note that if you are using Express Import, the delay could be more significant.

Important! Never reboot the machine during an import. Rebooting during an import can damage the textbase.

When an import is interrupted by a power failure or reboot, the textbase may be left in a damaged state. DB/TextWorks displays an error message when you open a damaged textbase. Damage can involve bad pointers, missing information, or both. These are serious problems that affect the integrity of your textbase.

You can continue to search a damaged textbase without making any of the problems worse. However, you should avoid performing maintenance activities (adding, editing, and so forth) because of the risk of increasing the damage. The only way to fix the damage is to restore a healthy backup and repeat any maintenance activity that occurred since the backup was created, or use Recover Textbase.

Read about diagnosing and fixing problems in Chapter 2, “Creating a Textbase,” the “Diagnosing and Fixing Problems” section.
Importing Documents

Use **File>Import Document** to place the complete text of a document (such as a letter, memo, fax, or EMail message) in a field. You can import multiple files at one time. Each file is loaded into a separate record, with the complete document text becoming one field entry. Lines can be any length and line breaks are retained.

DB/TextWorks lets you import plain text documents. However, if your workstation operating system supports it, you can also extract and import the text from documents in other formats (such as, Microsoft Word documents). DB/TextWorks uses IFilter technology to extract text from documents. IFilter technology is installed with Microsoft Index Server, which comes with Microsoft Windows 2000/XP operating systems. This technology is also supported on Windows NT 4.0 systems that have the Windows NT 4.0 Option Pack installed.

The software will only extract text from documents in formats other than plain text if the workstation that initiates the import meets the operating system requirements mentioned above and has the appropriate IFilter is installed.

Besides Microsoft, other vendors have created IFilters for their software products and make them available for download. For example, Adobe has an IFilter that lets you import its Portable Document Format (PDF) documents.

If IFilters are installed on the workstation, the **Use Word Processing Import Filter** check box on the Import Method tab (choose **File>Import Document**) is enabled. Select it to use the IFilter that is appropriate for the document(s) you plan to import.

Besides loading document text, you can also load the file name into a separate field, to associate document text with its source file name. If you plan to modify existing records, you must use the file name for matching, to determine which records to add or change. Records that you want to modify must already include a Term-indexed Text field containing the name of the document file. If necessary, edit the textbase structure before importing documents. Then, when you do the import, the file name can be loaded into that field for new records, and used for matching to modify existing records.

During an import, records that do not meet validation requirements are rejected. (It would be very unusual for a field that holds document text to be validated. However, it is common for a field that holds the name of a document to have **Unique Entries Only** validation, and other fields may have **Field Entry Required** validation.) You cannot override validation, and exception files are not used. Rejected documents are noted in the textbase log file.
To import document(s)

1. Choose File>Open and open the textbase into which you want to import one or more documents.

2. Choose File>Import Document to open the Select Document Files dialog box.

3. Select one or more files to import, then click the Save button to open the Import Document Options dialog box.

   **Note:** You may have to navigate to the file(s) you want to select. If you want to select more than one file from the same folder, use Ctrl+Click or Shift+Click to select the files.

4. On the Document Fields tab, specify the Fields for Document File(s):

   - **Field for Text.** Select a Text field from this drop-down list to hold incoming document text.
   
   - **Field for File Name.** Select a Term-indexed Text field from this drop-down list to hold the file name. If you choose to check for matching records (using the Add/Replace Options tab), the file name will be used for matching, to determine which records should be changed. If you do not want to place the file name in a field and you are not adding or replacing documents in existing records, select <none> from the Field for File Name drop-down list.
   
   - **Include Path for Document Name.** Select this check box if you want to include the path as part of the file name (if you selected a field for the file name).
5. On the Add/Replace Options tab, select the **Check for Matching Records** check box to control how records are modified. (If this option is disabled, go to the Document Fields tab and make a selection from the **Field for File Name** drop-down list.) A match is determined by comparing the document file name with information specified in the field selected in **Field for File Name** drop-down list. If a match is found, the document is handled according to the option you select in the **If Match is Found** group.

**Important!** If you do not check for matching records, a new record will be created for each document, even if there is already a matching record.
6. Select the matching option you want from the If Match is Found group:
   - **Reject New Record.** Adds new documents to the textbase, but avoids duplicates.
   - **Append Field Entries.** This option is rarely used, because you would not want to append the new version of a document to the old.
   - **Replace Fields.** Replaces an older version of a document with a newer one. All other fields remain unchanged.
   - **Replace Old Record.** Replaces existing records with updated versions of records.
     Important! This option replaces existing records. If you are trying to update old versions of documents, and you have any information in the record other than the file name and document text, select the **Replace Fields** option button instead, to ensure that you retain the other fields.
   - **Delete Old Record.** This option is rarely used. If an incoming document matches an existing record, the existing record is permanently deleted.

7. Select the option you want from the If Match is Not Found group:
   - **Accept New Record.** Adds the new document to the textbase.
   - **Reject New Record.** Rejects the document if there is not a match in the textbase. Exception files are not used. For details about rejected files, examine the textbase log file after the import.

8. On the Strip Leading Spaces tab, select or clear the **Strip Leading Spaces** check box to specify how to handle spaces at the beginning of lines in the document. Keep leading spaces to retain formatting such as margins or indentation created by spaces. Strip leading spaces to remove excess spaces.

9. On the Import Method tab, select an option button to specify which type of import to use: **Interruptible Import** or **Express Import**. See “Import Method Tab” on page 119 for more information.

10. [Optional] If you plan to import documents in formats other than plain text, and you have the appropriate IFilter installed, select the **Use Word Processing Import Filter** check box. For more information about IFilters, see the “Importing Documents” section prior to these steps.

11. Click **OK** to begin the import. When the import is complete, you will see a message indicating the import file name (if you only imported one document file) or the directory (if you imported multiple document files), and the results of the import.

**Note:** You can safely interrupt an import by clicking the **Stop** button on the Import Operation Status dialog box. Note that one or more complete documents may have been successfully imported before you stopped the import. Never reboot the machine during an import. See “Interrupting an Import” on page 120 for more information.
Exporting Records

Follow the steps below to export records to a text file. Records are exported in the specified format (tagged, delimited ASCII, or XML), and as if deferred updates had already been posted. Only information in the primary textbase is exported. Fields hidden by the current password will not be exported.

To export records

1. Choose File>Open and open the textbase that contains the records you want to export.

2. If you plan to export records in sorted order, search for the records you want to export, then choose Display>Sort Report, and sort the records. For more information, see Chapter 5, “Working with Forms,” the “Sorting Records” section.

3. Choose File>Export to open the Export File As dialog box.

4. Specify a name (default file extension is .DMP) and location for the export file that will be created, then click the Save button to open the Export Options dialog box.

5. On the File Format tab, specify the appropriate file format:
   - **Inmagic Tagged Format.** The text format for sharing files among Inmagic textbases, explained on page 111.
   - **Delimited ASCII Format.** Values are separated by commas, tabs, or other characters. This format is commonly used to share information with other applications. If you select this option button, the dialog box expands so you can specify which characters to use to indicate field separators and other delimiters. The options you select depend on the application into which you plan to import the file. For an explanation of delimiter options see “Delimiter Options” on page 113.
   - **XML.** Used for structured documents and data on the Web. Extensible Markup Language (XML) uses tags, like HTML, but offers greater flexibility because it gives you the ability to define custom tags.

Chapter 3: Working with Records 125
6. If you selected **Delimited ASCII Format** in the previous step, select the **Store Field Names in First Row** check box if you want the first line of the export file to contain field names. If you selected a different export file format in the previous step, go to the next step, as this check box is not enabled.

7. On the Records to Export tab, specify whether you want to export the records found by a search or all the records in the textbase by selecting the appropriate option button: **Export Current Record Set** or **Export Entire Textbase**. Select the **Use Current Sort** check box if you want to export the current set using the current user-specified sort. This check box is unavailable if there is no user-specified sort. If this box is not selected, records will be exported in unsorted order.

8. On the Fields to Export tab, specify the fields you want to export:
   
   - **Export All Fields.** Exports all of the fields in the textbase (except those hidden by a password).
   
   - **Export Subset of Fields.** Exports only the fields you specify. If you select this option button, the remainder of the dialog box becomes enabled. Move the fields you want to export from the Available Fields list to the Fields to be Exported list. Fields will be exported in the specified order.

9. Click **OK** to begin the export.
Dumping Records to a File

Use Manage Textbases>Dump Textbase to copy record information from all fields in all records in the primary textbase to a text file in Inmagic tagged format.

Tip! Dumping a textbase is the easiest way to back up records and should be used as part of your regular maintenance routine. Because pending updates are not included, Dump Textbase provides a way of backing up a textbase prior to posting deferred updates.

Dumping a textbase is also a way of retrieving records if the textbase becomes damaged and you are unable to open it. In many cases, you can dump records even if you cannot open a textbase. Diagnosing and fixing problems is explained in Chapter 2, “Creating a Textbase.”

To dump records
1. Close any open textbase (choose File>Close). All other users must also close the textbase containing the records you want to dump.
2. Choose Manage Textbases>Dump Textbase to open the Dump Inmagic DB/TextWorks Textbase dialog box.
3. Select the textbase containing the records you want to dump and click Open. If the textbase has passwords assigned, you are prompted for the Master password. The Specify Dump File dialog box opens.
4. Specify a name (default file extension is .DMP) and location for the file that will be created and click Save.
   
   Note: When loading a new textbase, the software looks for the extension .DMP by default.
5. Click OK to dismiss the message indicating that the dump operation is complete.
Loading Records into a New Textbase

The Load New Textbase feature 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. For example, if you have to recreate a textbase structure, you can use Manage Textbases>Load New Textbase to move all of the dumped or exported record information into the new, empty textbase. Load New Textbase is commonly used after Dump Textbase.

**Important!** Loading a new textbase does not check for matching records or validation. This operation may result in duplicate records when used on a textbase that already contains records. Loading a new textbase (choose Manage Textbases>Load New Textbase) and importing (choose File>Import) are two very different operations. Do not use them interchangeably.

Load New Textbase automatically adds all of the records to the textbase without checking for matching records, validation, or strict fields. It assumes the file is in Inmagic tagged format, and uses Express Import and Exclusive Textbase Access, locking others out of the textbase during the load. Computed and Automatic fields are treated as text (that is, DB/TextWorks does not change incoming values or create new values for Computed and Automatic fields). Rejected records are copied to an exception file, which has the same name and location as the dump file you loaded, with a file extension such as .X01, .X02, and so forth.

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 into which you want to load records.

2. Choose Manage Textbases>Load New Textbase to open the Load Inmagic DB/TextWorks Textbase dialog box.

3. Select a new, empty textbase and click Open. 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. DB/TextWorks looks for files with the file extension .DMP, but you can specify a different extension, such as .TXT or .ASC.

5. Click Open to start the loading process.
Recovering a Textbase

Recovering a textbase involves dumping its contents to an ASCII file, making an empty copy of the textbase, and loading the ASCII file into the copied textbase. You can perform the necessary steps individually, or, if you have enough disk space, DB/TextWorks can perform them for you.

The Recover Textbase function is most often used when a textbase is damaged.

The Recover Textbase and Dump Textbase commands ignore any Deferred updates. If you can open the textbase, print the Deferred updates to a file (choose Maintain>Deferred Updates) before proceeding with the recover operation.

Tip! Before you attempt to recover a textbase, it is a good idea to back up the textbase or copy it (choose Manage Textbases>Copy Textbase) to a safe place, in the event you need it later.

You can use either the Single-Step Recovery procedure or the Multi-Step Recovery procedure.

To perform a Single-Step Recovery

If you have enough space on your hard disk, you can use Manage Textbases>Recover Textbase to perform a single-step recovery. You will need about three times as much empty space as is currently occupied by the textbase you are recovering, on the same hard disk as the one holding that textbase.

- Close any open textbase, choose Manage Textbases>Recover Textbase, then specify a textbase.

If you cannot free up enough space, follow the procedures described below instead, moving files to other devices between steps as needed.

When the operation is completed, your old textbase will still exist, with a new backup name. (The completion message tells you the new name.) Note that if you dumped the textbase before performing the recovery, you will have two backups (the .DMP file you created prior to the recovery and the one that remains after the recovery).

If the textbase is large and resides on a network drive, copy the textbase to a local hard drive with sufficient space before using Recover Textbase. Then copy the textbase back to the network drive when the operation is complete. This will significantly decrease network traffic and improve performance.

Note: If you can open the damaged textbase and it has unposted deferred updates, use Maintain>Deferred Updates to export New Records and Modified Records to one file, then Deleted Records to another file. After the recovery is complete, import each file with the appropriate matching options (Replace Old Record and Delete Old Record, respectively).
To perform a Multi-Step Recovery
Use the Multi-Step Recovery procedure if:

- 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 importing the records.
- There is not sufficient space available to perform the single-step recovery explained above.

Before performing a dump and reload operation, choose Manage Textbases>Check Textbase and try to repair problems. If the textbase is still damaged, follow the procedure below to recover a damaged textbase.

1. If you have not already done so, copy records from the damaged textbase using Manage Textbases>Dump Textbase.

2. Create a new textbase by copying the structure of the damaged one.
   - Choose File>New Textbase. On the Specify New Textbase dialog box, name the new textbase. You cannot use the same name as the existing damaged textbase, but you can rename the new textbase later. Click Save.
   - On the Create Textbase Structure dialog box, select Copy an Existing Inmagic Textbase Structure or Restore from Textbase Structure Backup File and click OK. Use the next dialog box to select the existing damaged textbase or a .TBB file to use as the basis for the new textbase structure, then click Open. (When prompted, copy the user file, too.)
   - Follow the prompts to specify a Master password (if required) and to copy validation, passwords, elements, and so forth. DB/TextWorks creates a new textbase. The textbase does not have any records in it. If you copied textbase elements, the textbase includes any forms, query screens, sets, and record skeletons that were saved in the textbase file.
   - Close the textbase by choosing File>Close.

3. Load records into the new empty textbase. Choose Manage Textbases>Load New Textbase and load the dumped file from step 1 into the new empty textbase that you just created in step 2. You now have a new textbase, complete with records. See the previous section for more specific details about loading a textbase.

4. Delete the original damaged textbase files by choosing Manage Textbases>Delete Textbase. All of the files for a textbase are in the same directory and have the same name, differentiated by extensions. (Also delete the user file.)

5. Rename the new textbase back to its original name by choosing Manage Textbases>Rename Textbase, if applicable.

6. If you have stored sets in your textbase or user file, open the new textbase and choose Sets>Refresh Sets to rebuild the sets. If others use this textbase and have private sets, ask them to do the same.

Note: Refresh Sets performs the search again; it does not retain any omissions specified using Omit Record.
Chapter 4: Searching a Textbase

Searching in DB/TextWorks is the process of looking for information in a textbase. A search, or query, is a request to find all of the records that match specific requirements. For example, you might search for all biographies of Mark Twain published between 1990 and 1999.

Overview

There are two ways to search a textbase: You can use a query screen, or you can use a simple command language. Both methods are introduced below and explained in detail later in this chapter.

Using a Query Screen

When you open a textbase (choose File>Open) that contains records, the Query window opens and displays a query screen (a form for doing searches that contains query boxes). Each query box on the screen typically represents one or more indexed fields that you can search. The screen may also contain other information, such as fixed text and pictures, as well as script buttons. To find records, type information in the query boxes, then choose Search>Execute Query, or press the Enter key, or click the Execute Query button on the toolbar. The query illustrated below searches for projects about graphics with a budget under $10,000 that are not located in New Hampshire.

You can toggle the Boolean buttons between AND, OR, and NOT.
Using Command Queries

Command queries are an alternative to using a query screen. Use a Command query when you need to specify especially complex criteria, or simply if you prefer typing commands. Just open the Command Query window and type information using the syntax described in this chapter.

For example, here is the command equivalent of the previous search:

For more information about Command queries, see “Performing a Command Query” on page 184.
### Terminology

The following table explains the terminology used in this chapter.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word</td>
<td>A series of characters without spaces or punctuation.</td>
</tr>
<tr>
<td>Phrase</td>
<td>Two or more words separated by spaces (for example, <em>local area networks</em>) or, in some cases, punctuation (for example, <em>MS-DOS</em>).</td>
</tr>
<tr>
<td>Term</td>
<td>A word or phrase that is also a complete entry in a field. Date and Number field types typically are Term indexed, as are fields that hold discrete pieces of information, such as a complete name or the title of a book.</td>
</tr>
<tr>
<td>Search item</td>
<td>A single search component. Every search is made up of one or more search items. An item can be a word, phrase, term, comparison, range, or proximity request. For example, &gt;100 (greater than 100) is a search item. You can specify one or more search items in a query box, or in multiple boxes, or in a Command query. You can connect search items using Boolean symbols (&amp;, /, !).</td>
</tr>
<tr>
<td>Search criteria</td>
<td>All of the information typed or pasted into a Query or Command Query window to find records.</td>
</tr>
<tr>
<td>Set</td>
<td>A list of records found in a search, together with the criteria that were used to perform the search. Sets can be saved, combined, browsed, printed, and re-executed in DB/TextWorks.</td>
</tr>
</tbody>
</table>

Depending on how a field is indexed, you can search for a word, phrase, or term. You cannot search unindexed fields. You can use comparisons, ranges, Boolean logic (AND, OR, NOT), and many other methods to find exactly the records you want. When you start the search, DB/TextWorks looks in the textbase to find records that match. It returns a set of records, which you can display, edit, print, and so forth.
Using a Query Screen to Search for Records

The simplest and most common way to search for records is to use a query screen. You just type or paste information in the query boxes, then execute the query. Each query box searches one or more fields, depending on how the screen was designed. For example, a query box labeled Address could search four fields: Street, City, State, and Country. When searching with a query box that includes multiple fields, an implicit OR is used between the fields (for example, find Elm in the Street OR City OR State OR Country field).

Tip! A common practice is to design a query screen that includes one query box that searches many of the fields in the textbase and to label it something like Type any word or phrase. Use a query box like this when you are not sure which field contains the item you want to find.

Unindexed fields never appear on a query screen because they cannot be searched. Use the examples in the table below to help you construct search criteria for the steps on the following pages.

<table>
<thead>
<tr>
<th>Type this…</th>
<th>To find…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer</td>
<td>The word computer</td>
</tr>
<tr>
<td>comput*</td>
<td>Variations such as computers and computation</td>
</tr>
<tr>
<td>=los angeles</td>
<td>That complete term (exact entry, with no other text)</td>
</tr>
<tr>
<td>sales meeting</td>
<td>That phrase (those words, in that order)</td>
</tr>
<tr>
<td>sales / marketing</td>
<td>Either word (or both)</td>
</tr>
<tr>
<td>sales &amp; marketing</td>
<td>Only records that contain both words (Records that contain just one of the words will be ignored.)</td>
</tr>
<tr>
<td>java ! coffee</td>
<td>Java but not coffee</td>
</tr>
<tr>
<td>sales p5 marketing</td>
<td>Sales preceding marketing by 5 words or fewer</td>
</tr>
<tr>
<td>sales w5 marketing</td>
<td>Sales within 5 words of marketing (before or after)</td>
</tr>
<tr>
<td>=@DATE-7</td>
<td>The date one week ago</td>
</tr>
<tr>
<td>&lt;1998</td>
<td>Dates before January 1, 1998 (You can use the symbols &lt;, &lt;=, &gt;, &gt;= with dates, values, or text.)</td>
</tr>
<tr>
<td>1:99</td>
<td>Values between 1 and 99, inclusive (Use with dates, values, or text.)</td>
</tr>
</tbody>
</table>
To search for records using a query screen

1. Choose Search>Query Screen. (If the window is already open, skip this step.)

2. Type search criteria in a query box (or several query boxes), or, with your cursor in a query box, press F3 to select items from a list. Using F3 eliminates guesswork because you can choose indexed words and terms on a dialog box. For more information, see “Search Techniques” on page 138.

   **Note:** Punctuation and case are not important except when searching a Code or UDC field type.

3. [Optional] Toggle the Boolean buttons (AND, OR, NOT) between boxes to indicate how to combine criteria. Read about Boolean searches beginning on page 141.

4. Choose Search>Execute Query, click the Execute Query button [ ] on the toolbar, or press Enter.

   Most queries take only a few seconds. To interrupt a long search, click the Stop Executing Query button on the Executing Query dialog box or press the Esc key.

   If the query finds records, the Select Search Results Window dialog box opens.

   ![Select Search Results Window](image)

5. Select an option button to choose the window in which you want to display the search results.

   **Tip!** After you select a window on 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 the Always use this option without asking check box. If you later want to choose another window in which to view records, choose Tools>Options>Display to reset your default.

6. Click OK.
The following illustration shows records in the Report window:

Use the navigational buttons to move from record to record.

Search highlighting shows the search items found.

Note: How much information you see and how it is formatted depend on which form is selected. To use a different form, choose Display>Select Forms or click the Select Form for this Window button on the current window’s toolbar. You may want to select Window>Fit Window to Form after changing forms.

The Query window remains open until you close it. To do another search, you can click the Query window (or choose Search>Query, or use the Query Screen toolbar button) and edit the criteria; or clear the criteria by choosing Search>New Query (or using the New Query toolbar button).
Using Records Found by a Search

Records found by a search make up the current set, even if you choose not to display them. The following table shows some of the operations you can perform after a search.

<table>
<thead>
<tr>
<th>To…</th>
<th>Do this…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigate</td>
<td>Use the Display menu options (Next Record, Previous Record, First Record, Last Record) or the navigation 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 to see detailed information for that record. The form selected for the Display window determines how the information appears.</td>
</tr>
<tr>
<td>Edit records</td>
<td>Select a record and choose Records&gt;Edit Record. Or, to make the same change to all of the records in the current set, use Records&gt;Batch Modify. For more information, see Chapter 3, “Working with Records,” the “Using Batch Modify” section.</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. To print just one record, open the Display or Edit window prior to choosing 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 opens 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 EMail address specified in a field in the record. You can also specify attachments. For more information, see Chapter 5, “Working with Forms,” the “Sending a Report as Mail” section.</td>
</tr>
<tr>
<td>Write Report to File</td>
<td>Choose File&gt;Write Report to File to write formatted record information to a file in Plain Text (ASCII), Rich Text Format (RTF), or Hypertext Markup Language (HTML) format.</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>
Search Techniques

This section explains the many techniques you can use to perform a query, including using search operators. For a table summarizing the search operators you can use, see the online help.

Searching for Words, Phrases, and Terms

You can search for a word or phrase if a field has a Word index. You can search for a term if a field has a Term index. You cannot search unindexed fields. To see how a field is indexed, choose Display>Textbase Information.

- To search for a word or phrase, type a word or phrase, such as animation or web design. With your cursor in a query box, you can select words from a list by pressing F3 or choosing Edit>Browse Choices, and selecting the Word List option button.

- To search for a term, type the term preceded by an equal sign, such as =voice recognition. The equal sign tells the software to search the Term index for an exact match, except for punctuation and case. To retrieve entries that begin with the term but also include other text, type an asterisk (*) as the last character of the search item, such as =computer design*. You can also select terms from a list by pressing F3 or choosing Edit>Browse Choices, and selecting the Terms List option button.

Picking Words and Terms from an Index (F3)

Instead of typing words or terms, you can pick them from a list by placing the cursor in a query box and pressing F3. When you press F3, you can see the actual Word and Term indexes for the field(s) searched by the current box, or the thesaurus connected to a field.

In DB/TextWorks, this technique is called browsing. It eliminates guesswork and helps you to do more accurate queries because you can see and paste actual record information. 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.

To browse and paste items from indexes

1. Place the cursor in a query box or the Command Query window and press F3, or choose Edit>Browse Choices. The Query Choices Browser opens.

   Tip! You can resize the Query Choices Browser to see long entries.

2. Select the field you want to search from the Field drop-down list. Note that for query box searches, the Field drop-down list only includes the fields in the selected query box. If the query box only has one field, it will be selected by default. For a Command query, the Field drop-down list includes all indexed fields.

138 Chapter 4: Searching a Textbase
3. In the List Shows group, select one of the following option buttons, depending on the type of information you want to browse:
   - **Terms List.** Shows the selected field’s Term index.
   - **Words List.** Shows the selected field’s Word index.
     
     **Note:** When viewing the Words List for a text-like field (that is, a field that is not a Number or Date field) in the Query Choices Browser, the list automatically scrolls to the start of the A’s if the field contains any numeric words.
   
   - **Thesaurus.** Shows the selected field’s thesaurus, if one is connected to it. A thesaurus lets you maintain a controlled vocabulary of terms and the relationship among terms.
     
     **Note:** You can switch between the indexes and thesaurus, as needed. Note that some fields may not have both types of indexes and a thesaurus, so one or more of the option buttons may be unavailable.

4. Depending on the option button you selected in the previous step, select a word, term, or thesaurus entry from the Choices List and click the Paste button to paste it into the query box on the query screen. (You can also double-click the entry paste it.) You can select and paste as many items as you want.

   **Note:** If a field does not have a Term index (but it does have a Word index), and that field is connected to a thesaurus, the Thesaurus option button will not be enabled when browsing choices on a query screen. This is because a Term index is required to support exact match (=) searches.
5. The item you paste appears in the query box:

Supplier (Company Name)

AND =Ambassador Book Service inc

Now you can execute the query or continue pasting words and terms. The Query Choices Browser remains open (until you close it or execute the query) so you can click in another box to see its indexes. You do not have to close the dialog box first.

Finding Word Stems
To find text that begins with specific characters, type an asterisk at the end of a word. For example, to find words that start with com (such as, computer and commerce), type com*. This type of search is sometimes called a truncation search. You can include an asterisk at the end of more than one word (for example, comput* tech*). The asterisk used alone retrieves all records with any words in the field.

Doing Comparison and Range Searches
You can use the comparison and range operators described below when searching a Term-indexed field.

<table>
<thead>
<tr>
<th>Operator</th>
<th>Example</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>=</td>
<td>=local area networks</td>
<td>Equal to (exact match)</td>
</tr>
<tr>
<td>&gt;</td>
<td>&gt;5500</td>
<td>Greater than</td>
</tr>
<tr>
<td>&gt;=</td>
<td>&gt;=5500</td>
<td>Greater than or equal to</td>
</tr>
<tr>
<td>&lt;</td>
<td>&lt;15-Jan-1998</td>
<td>Less than</td>
</tr>
<tr>
<td>&lt;=</td>
<td>&lt;=TX</td>
<td>Less than or equal to</td>
</tr>
<tr>
<td>:</td>
<td>1995:2002</td>
<td>Within range</td>
</tr>
</tbody>
</table>

An equal sign (=) tells DB/TextWorks to search the Term index for an exact match.

Greater than and less than are typically used with numbers or dates, but you can also use them with text. Greater than (>) means “after” when used with dates and “alphabetically after” when used with text. Less than (<) means “before” when used with dates and “alphabetically before” when used with text. When used with a partial date, these operators search from the beginning of the date item. For example, <2003 means before January 1, 2003 and >2003 means after January 2, 2003.

A range search (:) finds information within a range of dates, numbers, or letters. A range consists of two values, low and high, separated by a colon. If you use partial dates, DB/TextWorks uses the beginning of the low date and the end of the high date. For example, 1995:2002 finds all dates from January 1, 1995 through December 31, 2002, inclusive.
Using Proximity Searches to Find Words Near Each Other

You can use proximity operators in a Word-indexed field to find one word within a certain distance of another word. Entry boundaries are ignored.

You can include asterisks (for example, local* w3 network*). You cannot use proximity operators with phrases (for example, monroe w3 white house).

<table>
<thead>
<tr>
<th>Operator</th>
<th>Example</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>w#</td>
<td>local w3 networks</td>
<td>Find local within 3 words of networks (before or after).</td>
</tr>
<tr>
<td>p#</td>
<td>red p2 car</td>
<td>Find red preceding car by 2 words or fewer.</td>
</tr>
</tbody>
</table>

Doing Boolean Searches

A Boolean search is one that combines criteria using logical AND-OR-NOT statements. You can use Boolean symbols (& / !) to join criteria within a query box, and you can toggle the Boolean buttons in front of query boxes to join multiple statements.

<table>
<thead>
<tr>
<th>Boolean button</th>
<th>Boolean symbol</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AND</td>
<td>&amp;</td>
<td>Finds records only if they meet all of the criteria. AND searches find fewer records, because all conditions must be met.</td>
</tr>
<tr>
<td>OR</td>
<td>/</td>
<td>Finds records that meet any of the criteria. OR searches usually find the most records, because any specified condition can be met.</td>
</tr>
<tr>
<td>NOT</td>
<td>!</td>
<td>Excludes records from the search results.</td>
</tr>
</tbody>
</table>

Using Boolean Symbols in a Query Box

Use the symbols & / ! to represent Boolean AND, OR, NOT. If a query box contains several fields, they will all be searched. You can include or omit spaces around Boolean symbols (read about Boolean and range searches in the “Troubleshooting Searches” section beginning on page 191). You can include an asterisk at the end of any word to ensure that you find all variations of word stems (for example, sport* ! tennis). The following examples will help you get started.

This search finds people only if they speak both languages:

```
Skills

AND

[german & french]
```
This search finds people who speak German or French (or both):

\textbf{Skills}

\textbf{AND} [German / French]

This search finds people who speak German but not French:

\textbf{Skills}

\textbf{AND} [German / French]

To combine Term searches with a Boolean symbol, repeat the equal sign (=) before each term:

\textbf{Title}

\textbf{AND} [presidential views / executive policies]

\textbf{Tip!} New users often make the mistake of using \& (Boolean AND) when they should use / (Boolean OR). For example, if you search for \textit{dogs & cats}, you will find records only if both words are present. Instead, search for \textit{dogs / cats}, to find records about dogs or cats (or both).

\textbf{Toggling Boolean Buttons}

You can type information in two or more query boxes, then toggle the Boolean button (AND, OR, NOT) in front of a query box to determine how the result of the search in that box is combined with boxes already evaluated. To toggle a Boolean button, click it with the mouse, or use the \textbf{Tab} key to navigate to it and then use the \textbf{Spacebar} on the keyboard. The following search will find all books written by Smith that are NOT about baseball AND were published before 1995:

The Boolean button for the Description box is set to NOT.
The person who designs a query screen may hide the Boolean buttons, in which case you cannot change them. If Boolean buttons are hidden, look at the status bar to see if the current box is set to AND, OR, or NOT. You may want to select a different query screen or redesign the screen to show the buttons.

### Query Evaluation Order

Within a query box, criteria are evaluated from left to right. For example, red / white & blue finds items that are either red or white, which are also blue. You can use parentheses to control evaluation order, such as, red & (white / blue), which finds items that are red and white or red and blue.

When you fill in more than one box, evaluation order matters only if OR searches are mixed with AND or NOT searches. In most cases, it makes sense to perform all OR searches before AND or NOT searches. To accomplish this, you can add a temporary query box (Search>Add Query Box), or you could do a Command query and use parentheses to clarify the order.

In addition, if a NOT search is first in the query evaluation order, DB/TextWorks finds all records in the textbase, then performs the NOT exclusion.

Boxes are evaluated based on the Tab order specified for the query screen. To avoid confusion, use the Query Screen Designer to ensure that the Tab order (Tools>Tab Order) matches the visual order of boxes on the screen.
Searching for Numbers

Avoid using truncation (*) searches to find numbers in Number, Computed Number, and Automatic Number field types, or Text fields that file numbers numerically (under Special Filing). Use truncation searches only to find trailing text. Truncation searches will not find numeric values. For example, the search =35* will not find the value 357. In fields that use alphabetic filing, truncation searches work as expected.

In fields where numbers file numerically, the comparison operators (for example, less than, greater than) work as expected. But they may return unexpected results in fields where numbers are filed alphabetically, because negative signs are ignored in alphabetic fields (-20 is the same as 20) and alphabetically filed numbers are interpreted character-by-character (100, 12, 2) not value-by-value (2, 12, 100).

Searching for Dates

DB/TextWorks is flexible when searching for dates and can retrieve a specified date even if the format you use in the query differs from that stored in the textbase.

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 (=).

To include the current date in a calculation that retrieves records based on dates, use @DATE. For example, the following will 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.

This search...                  | Finds...
---                            | ---
1999                          | All full or partial dates in 1999
=1999                         | Entries that consist of the year 1999 alone
August 1999                   | All full or partial dates in August 1999
=August 1999                  | Dates that contain that month and year, but no specific dates (for example, will not find August 10, 1999)
Aug 10 1999                    | That exact date with or without trailing text
=Aug 10 1999                  | That exact date with no trailing text
=@DATE-7                      | The date one week before today
Here are a few strategies to use when searching for dates:

- Avoid using a forward slash to separate date components (such as, 3/4/1999), because the slash is interpreted as a Boolean OR symbol. If you want to use slashes, put quotation marks around the date. Otherwise, use spaces, dashes, or punctuation that cannot be misinterpreted in place of the forward slashes. For example, search for "3/4/99" or 3 4 1999 or 3-4-1999.

  **Note:** To use forward slashes when searching for dates, use the `SpacedRelOps=1` parameter in the INMAGIC.INI file. For more information, see “Boolean and range searches do not find the expected records” on page 192.

- Avoid using word, phrase, proximity, and truncation searches in Date fields, except to find trailing text.

- Comparison and range searches are particularly useful. For example, <June 1999 finds all dates before June 1, 1999 and 1996:1999 finds all dates from the beginning of 1996 to the end of 1999.

- To search for the current date, press **F4**, or choose **Edit>Insert>Current Date**, or type @DATE.
Searching Code and UDC Field Types

When you search a Code or UDC field type, 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 field types are sensitive to punctuation, not case. Code field types are sensitive to both.)

Code and UDC field types often include characters that DB/TextWorks interprets as having special meanings (for example, &, /, !, <, >, =, :, #, @). To search for these characters, place single or double quotation marks around the search item, as shown in the following table. If you are doing a Term search, leave the equal sign outside of the quotation marks (for example, ="A/Z").

If you want an asterisk, backslash, or quotation mark to be interpreted literally, precede it with a backslash. For example, to search for ab* without having the asterisk interpreted as a truncation symbol, type ab\*. Unless an asterisk is preceded by a backslash, it is interpreted as truncation, even inside of quotation marks.

**Tip!** Use F3 and paste items from the indexes. The software adds any necessary quotation marks or backslashes automatically.

The following table provides some examples of how to search Code and UDC field types.

<table>
<thead>
<tr>
<th>To find…</th>
<th>In field type…</th>
<th>Search for…</th>
</tr>
</thead>
<tbody>
<tr>
<td>017:63</td>
<td>UDC</td>
<td>&quot;017:63&quot;</td>
</tr>
<tr>
<td>431.3&quot;2&quot;</td>
<td>UDC</td>
<td>431.3&quot;2&quot;</td>
</tr>
<tr>
<td>339.5(931)</td>
<td>UDC</td>
<td>&quot;339.5(931)&quot;</td>
</tr>
<tr>
<td>629.12(*58)</td>
<td>UDC</td>
<td>&quot;629.12(*58)&quot;</td>
</tr>
<tr>
<td>d52-60</td>
<td>Code</td>
<td>d52-60, or do a truncation search for d5*</td>
</tr>
</tbody>
</table>
Punctuation and Case in Search Criteria

Punctuation and case in query criteria are ignored for searching purposes, except in Code and UDC field types. For example, =Maxwell, Stephen finds all versions of the name, regardless of case or punctuation. If the search item includes characters that might be misinterpreted (for example, & / ! :), surround the item with quotation marks or replace the punctuation with a space. For example, search for "AT&T" or AT T to avoid having the & be interpreted as a Boolean AND.

The SpacedRelOps= parameter 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 parameter, see page 192.

Finding All Records

To find all records in the textbase, click the Find All Records button on the Main window toolbar or choose Search>Find All Records. Note that new, unposted records added using Deferred indexing are not included.

Finding Populated or Empty Fields

To find records that contain any information in a particular field, type =* by itself in a query box (or * if the field has a Word index but no Term index). For example, you may want to find all records that have any entry in the Author field.

To find empty fields, type =* in a query box (or * if the field has a Word index only) and change the Boolean button in front of the box to NOT. For example, you may want to find all records in which the Author field is empty.

Tip! If you frequently need to find empty fields, and you have so many records in your textbase that the above search takes a long time, there is a trick you can use. Assume you periodically want to find records with nothing in the Author field. Define a new Computed field whose formula is FCOUNT(AUTHOR). Populate this field by rebuilding its field index (Maintain menu) and selecting the Recompute Field Value check box. This field will then contain a number indicating the number of entries in the Author field. To find records having no author, search this field for the number 0. (Or, to find all records which do have an author, search this field for numbers >0.)
Searching a Textbase that Contains Link Fields

You can search any indexed field in the primary or secondary textbase. To search a secondary textbase field, use a query screen that includes a box that searches that field. (Using F3 to paste query criteria is a good practice, because it eliminates guesswork when constructing the query.)

A common misconception is that such a search will retrieve records from the secondary textbase. That is not true. **Records retrieved by a search executed from within the primary textbase are always from the primary textbase**, even when you search using a field from a secondary textbase. For example, assume you have a primary textbase that contains orders and a secondary textbase that contains customer information. Search for all orders placed by customer Fred Fripp. No matter which field you search, you are going to retrieve records from the primary textbase only. But when you retrieve Fred’s orders, you can see information from both textbases, if you want. **To see secondary textbase information after you retrieve records, use a form that shows fields from the secondary textbase.** You should design a special form for this purpose.

Linking is a complex topic. For a better understanding of the issues involved, see Chapter 8, “Linking Textbases.”

About DB/TextWorks 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.

Note the following about DB/TextWorks thesaurus textbases:

- **Important!** You must not rename or remove the original fields in a thesaurus textbase. Also, 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 reciprocal relationships are established when necessary (which will not happen if you try to add or modify a thesaurus record by editing the thesaurus textbase directly). For more information about the Maintain Thesaurus window, see its help topic (click the Help button in the window) and the online help.

- You can add more fields to a thesaurus, but keep in mind that they will not appear on any thesaurus window, dialog box, or page.

- 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.

- Only one person at a time can maintain a specific thesaurus textbase.

- You can use a thesaurus as a validation list. For more information, see Chapter 2, “Creating a Textbase,” the “Use Thesaurus as Validation List” section, or the online help.

148 Chapter 4: Searching a Textbase
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 into the thesaurus, or by typing each term into the thesaurus. For more information on importing a file, see Chapter 3, “Working with Records,” the “Importing Records” section.
- 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. For more information about Rebuild Thesaurus, see its help topic (click the Help button in the window) and the online help.
- Access and navigate (browse) a thesaurus from within a non-thesaurus textbase.
- Select terms while browsing and paste them into a Query window or an Edit window.

**Basic Concepts**

A DB/TextWorks thesaurus has the following characteristics:

- It is a monohierarchical thesaurus. (A given term may have only one broader term.)
- DB/TextWorks 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.
- 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 may contain information about other terms that are semantically related. The relationships allowed in a DB/TextWorks thesaurus, and their reciprocal relationships, are:
  - Broader Term (BT) ↔ Narrower Term (NT)
  - Related Term (RT) ↔ Related Term (RT)
  - Use (USE) ↔ Used For (UF)
- 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 in 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. For more information, see “Set Up Thesaurus” on page 151.

• You can connect one or more thesauri to a textbase, up to the number of Text and Code fields listed for that textbase. For example, if you have five Text and Code 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, note that you can connect only one thesaurus per field.

**Thesaurus Construction Rules**

The following rules are applied by the program during thesaurus record creation, editing, or deletion.

**General Rules**

These rules apply to all thesaurus terms in a DB/TextWorks thesaurus:

• 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):
  
  Mercury (planet)
  Mercury (metal)
  Mercury (Roman deity)

• 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

  Term: **Antilock brake system**
  BT: Brakes

  If you remove “Antilock brake system” as an NT of “Brakes,” the program will automatically remove “Brakes” as a 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 (UF) terms.
- 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 and it must refer to a 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 other thesauri.

To connect one or more thesauri to a textbase, choose Maintain>Set Up Thesaurus. You can do this for up to the number of appropriate fields in that textbase. Notice that only Text and Code fields are listed. If you have five such 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.

Once you have connected a thesaurus to a field, when you use the Query window or the Edit window, 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.
To create a thesaurus and connect it to a field

1. Choose Maintain>Set Up Thesaurus.

2. Select a field from the Fields list.

3. Click the Connect to New Thesaurus button to open the Specify New Thesaurus Textbase dialog box.

4. 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, and connects it to the selected field.

   **Note:** If you create your thesauri in the same directory as your textbases you can more easily move all of them to a new location. If thesauri are in a different location than the textbases, you may need to respecify the connections if you move them.

5. Click OK to dismiss the confirmation message.

6. Use the Maintain Thesaurus function to populate your new thesaurus. Note that 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). For more information about the Maintain Thesaurus window, see its help topic (click the Help button in the window) and the online help.

   **Tip!** Once you have created a thesaurus textbase, you can also populate it by importing data (for example, a validation list). For more information on importing a file, see Chapter 3, “Working with Records,” the “Importing Records” section. After importing records, use the Maintain Thesaurus window to build relationships and fill out the thesaurus terms, as applicable.

---

152 Chapter 4: Searching a Textbase
To connect an existing thesaurus to a field

1. Choose Maintain>Set Up Thesaurus.
2. Select a field from the Fields list.
3. Click the Connect to Existing Thesaurus button to open the Select DB/TextWorks Thesaurus Textbase dialog box.
4. 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.
5. Click OK.

To disconnect a thesaurus from a field

1. Choose Maintain>Set Up Thesaurus.
2. From the Fields list, select the field whose thesaurus you want to disconnect.
3. Click the Disconnect Thesaurus button. The name of the thesaurus no longer appears next to the field name in the Fields list. The thesaurus is not deleted.

   **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.
4. Click OK to close the Set Up Thesaurus dialog box.
Maintain Thesaurus

To add, search, modify, or delete a thesaurus term, or to review relationships and notes for it, use the Maintain Thesaurus window (choose Maintain>Maintain Thesaurus). You also use the Maintain Thesaurus window to access other windows that let you add or modify a thesaurus term (including its relationships), and rebuild a thesaurus.

For information on how to accomplish these tasks in the Maintain Thesaurus window, see its help topic (click the Help button on the window) and the online help.

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.

Tip! To see if the textbase you have open is a valid thesaurus textbase, choose Display>Textbase Information. If “Thesaurus textbase” appears under the textbase name, you do.

Select Thesaurus to Maintain

If the textbase you have open is connected to more than one thesaurus, when you choose Maintain>Maintain Thesaurus, the Select Thesaurus to Maintain dialog box opens. To select the thesaurus you want to maintain, highlight the field name/thesaurus name in the Fields with a thesaurus list, then click OK to open the Maintain Thesaurus window.

Rebuild Thesaurus

Use the Rebuild Thesaurus function when you want the software to examine thesaurus entries and establish reciprocal links when 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.

For information on how to use the Rebuild Thesaurus function, see its help topic (click the Help button on the window) and the online help.

**Important!** Do not interrupt a rebuild operation. The status bar shows the progress of the rebuild.

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.

**Tip!** We recommend that you run Rebuild Thesaurus during off-peak hours if there is a large number of records to rebuild. The rebuild process may take a significant amount of time to complete. Anyone trying to use a thesaurus that is being rebuilt may notice a slowdown in response time.
Search Highlighting

If the current form has search highlighting turned on (Tools>Form Properties>General), words and terms retrieved by the search appear in reverse video or a particular color or style (as determined by the settings in Tools>Options>Search), so you can quickly see the items for which you searched. The Basic forms highlight search items unless you use Tools>Options>Search to set display and/or print highlighting to None.

Note: The Edit window does not show search highlighting because DB/TextWorks strips away most formatting so you can more easily see actual record information.

To turn search highlighting on or off for a specific form

1. Choose Display>Design Form and open a form.
2. Choose Tools>Form Properties to open the Form Properties dialog box.
3. On the General tab, select or clear the Highlight search items check box.
4. Click Apply and save the form.

Tip! To turn highlighting off for all forms, choose Tools>Options>Search and select None from the Display highlighting drop-down list. This gives you an easy way to turn highlighting on or off, without having to modify the forms.
To specify how highlighting appears
- Choose Tools>Options and use the Search tab to select options.

To navigate from highlight to highlight
In the Report or Display window, press F6 or choose Display>Next Highlighted Term to move forward. Press Shift+F6 or choose Display>Previous Highlighted Term to move backward.

You can also use the Next and Previous Highlighted Term toolbar buttons.

Customizing a Query Screen

There are two methods of customizing a query screen:

- You can add and delete boxes temporarily. This provides a quick way of being able to search a field that does not appear on the current query screen, or of temporarily removing a query box without having to open the Query Screen Designer.
- You can create and save permanent, customized screens using the Query Screen Designer.

Adding and Deleting Boxes Temporarily
If the current query screen does not include a field that you want to search (such as a field from a secondary textbase), you can add a box without opening the Query Screen Designer. Similarly, if the screen looks cluttered, you can delete boxes temporarily. These changes remain in effect only until you close the Query window, select a different query screen, or close the textbase.
To add a temporary query box

Follow the steps below to add a temporary query box. Once added, you can type or paste query criteria in the new box to do a search. Note that you cannot change the label for a temporary query box.

1. Select the box after which you want the temporary query box to be added.

2. Click the Add Query Box button on the Query window toolbar or choose **Search>Add Query Box**. A new query box appears after the selected box, and the Specify Fields to Search dialog box opens. The new query box inherits the width of the selected box.
3. Use the Specify Fields to Search dialog box to determine which field(s) the new query box searches:
   - Select a field from the Fields list and click the Add button to add it to the Contents list. Each query box can search one or more fields. Repeat if you want the query box to search multiple fields. The query box will search the field(s) you specify, using an implicit OR between the fields. For example, if you add City and State, both fields will be searched when someone types information in the query box. If either field contains the search item, DB/TextWorks will retrieve the record.
   
   **Note:** If the textbase is linked to another textbase, you can add a field from a secondary textbase. Fields from a secondary textbase are designated by the link indicator (@) and are listed after fields in the primary textbase in the Fields list, by default. However, 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.

   - Use the Replace, Delete, and Change Order buttons (Up and Down) to manipulate the contents of the query box. The order of fields does not affect how the search criteria are evaluated, but it does determine which index appears first when you use the Query Choices Browser (F3).

4. Click OK to close the Specify Fields to Search dialog box.

5. The new query box appears on the screen, and its label shows the field(s) it searches.

**To add a temporary sets box**

A sets box is a searchable box in which you can specify set(s) to include in a search. This provides a way to combine a saved search with other criteria. Once a temporary sets box added, you can type or paste the name of a saved set in the new box to do a search. Note that sets and fields cannot be searched in the same box.

- Choose Search>Add Sets Box to add a sets box (labeled Sets) to the query screen.

To learn more about sets, see “Working with Saved Sets” on page 180.

**To remove a box from the screen temporarily**

- Select a box on the query screen and choose Search>Delete Box. The box remains deleted only until you close the Query window, select a different query screen, or close the textbase.

**To create a new query screen starting with the changed query screen**

1. Select Search>Design Query Screen to open the Open Query Screen dialog box.

2. Select Current Query Screen from the Start With list, then click OK. Note that this option appears only if you added or deleted boxes, or changed Boolean buttons (AND, OR, NOT).

3. [Optional] Use any of the editing techniques described in the following sections.

4. Save the query screen by choosing Screen Operations>Save Query Screen. DB/TextWorks saves it as a new query screen.
Using the Query Screen Designer

Use the Query Screen Designer to create, edit, and save query screens that meet various searching needs. You can also use scripts, written in JavaScript or Visual Basic Script, to automate functions within a query screen. The Query Screen Designer operates much like the Form Designer, with a slightly different set of features. You select, move, position, and resize boxes just as you would in the Form Designer. For information about the Form Designer, see Chapter 5, “Working with Forms.”

To use the Query Screen Designer

1. Choose Search>Design Query Screen to open the Open Query Screen dialog box.

2. Select the query screen you want to work on from the Start With list:
   - **Existing Query Screen.** Loads a previously saved screen. (The existing query screens you can choose from appear in the Currently Saved list. The active query screen is selected in the list by default.)
   - **Basic Query Screen.** Loads the Basic screen, which includes one query box for each indexed field in the primary textbase. This is usually the best way to start designing your own query screens.
   - **Blank Query Screen.** Loads a blank screen. Starting with a blank screen can be useful if the textbase includes many fields and you prefer to add a few query boxes instead of having to delete many query boxes.
   - **Existing Record Form.** Copies, converts, and loads a form that was designed for the Edit or Display window so you can use it in the Query window. See “Converting a Form to a Query Screen” on page 173.
   - **Current Query Screen.** Loads the current query screen, if you modified it outside of the Query Screen Designer, to save temporary changes in a new query screen. This option only appears if you have added or deleted a box on the current query screen or changed the state of a Boolean query button.
3. Click **OK**. The selected screen appears in the Query Screen Designer:

4. Modify the screen using the editing techniques described on the following pages. For example, add a query box to search another field, resize it, and change the label text and color.

   **Note:** The Boolean button preceding each query box is attached to the box—it cannot be positioned or formatted separately. Choose **Tools>Screen Properties** to show or hide the buttons. See “Showing or Hiding Boolean Buttons” on page 171.

5. Choose **Screen Operations>Save Query Screen** or **Screen Operations>Save Query Screen As**.
   - **Save Query Screen.** Saves a screen under its current name, overwriting the previous version. You will see the Save Query Screen As dialog box the first time you save the query screen, but not during subsequent saves.
   - **Save Query Screen As.** Lets you create a copy of the screen under a new name. You can also use the Save Query Screen As dialog box to change the screen’s description and/or where it is saved.
6. Type a name of up to 20 characters, including spaces and punctuation, in the Name box.

7. Type an optional query screen description of up to 80 characters, including spaces and punctuation, in the Description box.

8. Query screens are not saved as separate files. They are saved as elements within a textbase or user file. Depending on what you want to do, select:
   - **User File (Private)** if you want the query screen to be available only for your personal use. Others who share the textbase will not see the query screen in selection lists. Only you will be able to use this query screen.
   - **Textbase File (Public)** if you want the query screen to be available to everyone who uses the textbase.

   **Note:** If the textbase has passwords, the current password determines if you have permission to save screens in the textbase file.

9. Click OK.

There are several other operations you can perform next, all of which use the Screen Operations menu:

- To print a description of the query screen or save the description as a file, choose Print Definition. This does not back up the query screen or create a file that you can share. It just describes the screen.
- To use the screen on the Web with a WebPublisher product, choose Export Query Screen to HTML. For more information, see the documentation provided with your WebPublisher product and the online help.
- To create or edit another query screen, choose Open Query Screen.
- To close the Query Screen Designer, choose Close Query Screen Designer.

To use the query screen that you just created, choose Search>Select Query Screen.

**Query Screen Designer Editing Techniques**

The Query Screen Designer operates much like the Form Designer, with a slightly different set of features. The following sections explain the editing operations that you can perform.

162 Chapter 4: Searching a Textbase
General Operations

You select, move, and resize boxes just as you would in the Form Designer. For detailed instructions about the operations listed below, see Chapter 5, “Working with Forms.”

<table>
<thead>
<tr>
<th>To…</th>
<th>Do this…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show or hide box boundaries</td>
<td>Check or uncheck View&gt;Boundaries.</td>
</tr>
<tr>
<td>Select boxes</td>
<td>Click on a box or use Tab, Shift+Tab, or Edit&gt;Go to Box. To select multiple boxes, use Shift+Click, or drag a lasso with the mouse, or choose Edit&gt;Select All&gt;Boxes.</td>
</tr>
<tr>
<td>Select all boxes of a certain type (such as all text boxes or all query boxes)</td>
<td>Choose Edit&gt;Select All, then click the type of box you want to select.</td>
</tr>
<tr>
<td>Move boxes</td>
<td>Drag selected boxes, or use the arrow keys, or choose Tools&gt;Box Properties&gt;Position and change the Coordinates or Offsets values. Use Ctrl+arrow keys to simulate mouse movement.</td>
</tr>
<tr>
<td>Change box height (query, script input, and sets boxes)</td>
<td>Choose Tools&gt;Box Properties&gt;Position and change the Minimum height and Maximum height values.</td>
</tr>
<tr>
<td>Change box width</td>
<td>Choose Tools&gt;Box Properties&gt;Position and change the Width value, or select one box and drag a resizing handle right or left.</td>
</tr>
<tr>
<td>Anchor boxes</td>
<td>Choose Tools&gt;Box Properties&gt;Position and change the Anchoring setting. Note that boxes float by default. You can also anchor boxes by choosing Tools&gt;Align Boxes&gt;Anchor and Top. There is not really any reason to anchor query boxes, except for anchoring side-by-side boxes to each other.</td>
</tr>
<tr>
<td>Add labels, borders, scroll bars (query, script input, and sets boxes)</td>
<td>Choose Tools&gt;Box Properties&gt;Labels.</td>
</tr>
<tr>
<td>Copy a box</td>
<td>Choose Edit&gt;Copy. Then choose Edit&gt;Paste.</td>
</tr>
<tr>
<td>Delete a box</td>
<td>Choose Edit&gt;Delete Box to delete all selected boxes or press the Delete key.</td>
</tr>
<tr>
<td>Specify measurement and grid units</td>
<td>Choose Tools&gt;Screen Properties&gt;General to specify measurement units.</td>
</tr>
<tr>
<td>Prepare a query screen for use on the Web with a WebPublisher product</td>
<td>Choose Tools&gt;Screen Properties&gt;HTML and specify settings. Then choose Screen Operations&gt;Export Query Screen to HTML. See the online help.</td>
</tr>
<tr>
<td>Search multiple textbases with one Web query screen using a WebPublisher product</td>
<td>Choose Tools&gt;WebPublisher Multiple Textbase Query and specify settings. See the online help.</td>
</tr>
</tbody>
</table>

Chapter 4: Searching a Textbase 163
Adding Boxes – Overview

A query screen can include the types of items shown below. When you design a query screen, the status bar indicates the type of the currently selected box.

- **Query box.** A box used for searching one or more fields.
- **Sets box.** A box into which you can type or paste the name of a saved set to be combined with other search criteria.
- **Text box.** A box that contains static text, such as a title or instructions.
- **Picture box.** A box that contains a static image, such as a company logo.
- **Script input box.** A box that lets the user of the query screen type information that will be used during the processing of a script. A script input box can also be used by a script to display information for the user (for example, to provide information on how to use the selected query box).
- **Script button.** A button you add to a query screen to perform additional processing, such as moving information among boxes by executing a script.

Note: The above graphic does not show a script input box. Script input boxes are typically used to provide information to a script that does something with the records found by the search. For example, you could type your EMail address in a script input box and then press a script button to send EMail to each of the borrowers with items overdue.
To add a query box

A query box can search one or more fields from a primary or secondary textbase. You can define which fields a query box searches when you add the box (see instructions below), or you can select an existing query box in the Query Screen Designer and choose **Tools>Box Properties>Fields.**

A query screen should include most or all of the fields that will need to be searched. Place the query boxes in an order that encourages efficient searching. For example, place frequently searched fields near the top of the form. Note that if you select a box on the screen and then add a box of any type, the new box will appear below the selected box.

1. In the Query Screen Designer, click the Add Query Box button on the toolbar or choose **Edit>Add>Query Box** to add a query box and open the Query Box Properties dialog box.
2. On the Fields tab, select a field for the query box:
   - **To add a field from the primary or secondary textbase.** Select a field from the Fields list and click the Add button. Repeat if you want the query box to search multiple fields. The query box will search the field(s) you specify, using an implicit OR between the fields. If the textbase is linked to another textbase, you can add a field from a secondary textbase. Fields from a secondary textbase are designated by the link indicator (@) and are listed after fields in the primary textbase in the Fields list, by default.
     
     \[\text{Note: If you have selected the Sort textbase fields alphabetically check box on the Display tab of the Options dialog box (choose Tools>Options>Display), the secondary textbase fields will be interfiled with the primary fields.}\]
   - **To change a field that the query box searches.** Select the field that you want to replace from the Contents list. Then select the desired field from the Fields list and click the Replace button.
   - **To remove a field from a query box.** Select the field that you want to remove from the Contents list, then click the Delete button.
   - **To re-order fields in a query box.** Select a field from the Contents list and click the Change Order buttons (Up or Down). The order of fields does not affect how the search criteria are evaluated, but it does determine which index appears first when you use the Query Choices Browser (F3).

3. On the Position tab, specify the size and placement of the query box.
4. On the Labels tab, specify label and border formatting and Boolean button state. (You can also change the button state by clicking the actual button on the query screen.)
5. On the Font, Color tab, specify text font and color, as well as background color for the box.
6. [Optional] Use the HTML tab to specify Web options, if you plan to use the query screen on the Web with a WebPublisher product. See the online help for more information.
7. Click Apply, then Close.
For More Information

These tabs contain almost the same options as the tabs on the Form Box Properties dialog box in the Form Designer. For more information about each of these tabs, refer to the following sections in Chapter 5, “Working with Forms.”

- **Fields tab**, see “Form Box Content.”
- **Position tab**, see “Changing form box width” for form and text boxes; “Floating and anchored form boxes;” information about offsets and coordinates in “To move boxes;” and “Changing form box height.”
- **Labels tab**, see “Adding labels, borders, and scroll bars to form boxes.”
- **Font, Color tab**, see “Changing Text Font and Color, and Box Background Color.”

To add a sets box

A sets box is a special box that you use when you want to include a saved set as part of your search criteria. This provides a way of combining saved sets with other search criteria. (Note that you cannot include “regular” search criteria in a sets box.)

Sets boxes are for desktop use only.

To add a sets box, choose **Edit>Add>Sets Box** in the Query Screen Designer. A new sets box is added after the selected box. When you use the query screen, you can type or paste the name of a saved set in the box. For more information about sets, see “Working with Saved Sets” on page 180.

1. In the Query Screen Designer, choose **Edit>Add>Sets Box** to add a sets box to the query screen. To open the Sets Box Properties dialog box, select the sets box and choose **Tools>Box Properties**.

   **Tip!** If you regularly add sets boxes to query screens, consider adding the Add Sets Box button to your toolbar. Choose **Tools>Customize Toolbar** to do so. For information about customizing toolbars, see Chapter 10, “Customizing DB/TextWorks.”

2. On the Position tab, specify the size and placement of the sets box.
3. On the Labels tab, specify label and border formatting and Boolean button state.
4. On the Font, Color tab, specify text font and color, as well as background color for the box.
5. Click **Apply**, then **Close**.
For More Information

These tabs contain almost the same options as tabs on the Form Box Properties dialog box in the Form Designer. For more information about each of these tabs, refer to the online help and the following sections in Chapter 5, “Working with Forms.”

- **Position tab**, see “Changing form box width” for form and text boxes; “Floating and anchored form boxes;” information about offsets and coordinates in “To move boxes;” and “Changing form box height.”
- **Labels tab**, see “Adding labels, borders, and scroll bars to form boxes.”
- **Font, Color tab**, see “Changing Text Font and Color, and Box Background Color.”

**To add a text box**

Add a text box for instructions, titles, and other static information.

1. In the Query Screen Designer, click the Add Text Box button or choose **Edit>Add>Text Box** to add a text box and open the Text Box Properties dialog box.

2. On the Text tab, type the text you want to appear in the **Text** 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 **Text** box on the Text tab automatically.

3. On the Position tab, specify the size and placement of the text box.

4. On the Font, Color tab, specify text alignment, font and color, and border display.

5. [Optional] Use the HTML tab to add links to your query screen, if you plan to export the query screen to HTML for use on the Web with a *WebPublisher* product. For more information, see the online help.

6. Click **Apply**, then **Close**.

For More Information

These tabs contain almost the same options as the tabs on the Text Box Properties dialog box in the Form Designer. For more information about each of these tabs, refer to the online help and the following sections in Chapter 5, “Working with Forms.”

- **Text tab**, see “Text Box Content.”
- **Position tab**, see “Changing form box width” for form and text boxes; “Floating and anchored form boxes;” and information about offsets and coordinates in “To move boxes.”
- **Font, Color tab**, see “Changing Text Font and Color, and Box Background Color.”
- **HTML tab**, see “Using HTML in text boxes.”
To add a picture box

A picture box on a query screen is a box that contains a static image. You can use picture boxes to insert images from any file (for example, company logos).

1. In the Query Screen Designer, choose **Edit>Add>Picture Box** to add a picture box and open the Picture Box Properties dialog box.

   **Tip!** If you regularly add picture boxes to query screens, consider adding the Add Picture Box button to your toolbar. Choose **Tools>Customize Toolbar** to do so. For information about customizing toolbars, see Chapter 10, “Customizing DB/TextWorks.”

2. On the Picture tab, specify the location of the image.

3. On the Position tab, specify the size and placement of the picture box, and the image size. Note that if you plan to export the query screen to HTML for use on the Web, Image size settings are ignored and picture boxes are left-justified.

4. Click **Apply**, then **Close**.

*For More Information*

These tabs contain almost the same options as tabs on the Form Box Properties dialog box in the Form Designer. For more information about each of these tabs, refer to the online help and the following sections in Chapter 5, “Working with Forms.”

- **Picture tab**, see “Picture Box Content” to read more about inserting images from a file.
- **Position tab**, see “Floating and anchored form boxes;” information about offsets and coordinates in “To move boxes;” and information about picture box height in “To change picture box height.”
To add a script input box

Add a script input box when you want users to provide information to be used during the processing of a script or to display information provided by a script (for example, as an alternative to displaying a message dialog box).

For example, you can use a script input box in a query screen so a user can type a percentage in it to increase the numbers in the Price field in all of the records retrieved by a search.

Script input boxes are for desktop use only.

To define a script, you use the Screen Script dialog box, accessed by choosing Tools>Screen Script. For more information about defining scripts, see “Defining Screen Scripts” on page 177.

1. In the Query Screen Designer, choose Edit>Add>Script Input Box to add a script input box and open the Script Input Box Properties dialog box.
2. On the Position tab, specify the size and placement of the script input box.
3. On the Labels tab, specify label and border formatting.
4. On the Font, Color tab, specify text font and color and background color.
5. Click Apply, then Close.

For More Information

These tabs contain almost the same options as the tabs on the Script Input Box Properties dialog box in the Form Designer. For more information about each of these tabs, refer to the online help and the following sections in Chapter 5, “Working with Forms.”

- **Position tab**, see “Specifying script input box height, width, and anchoring” and “To move boxes.”
- **Labels tab**, see “Adding labels, borders, and scroll bars to form boxes.”
- **Font, Color tab**, see “Formatting text in script input boxes.”
To add a script button

You can add script buttons to a query screen to perform additional processing by calling a function you have defined using a scripting language. To define a function, you use the Screen Script dialog box, accessed by choosing Tools>Screen Script. For more information about defining scripts, see “Defining Screen Scripts” on page 177.

Script buttons are for desktop use only.

1. In the Query Screen Designer, choose Edit>Add>Script Button to add a script button and open the Script Button Properties dialog box.

   Tip! If you regularly add script buttons to query screens, consider adding the Add Script Button button to your Query Screen Designer toolbar. Choose Tools>Customize Toolbar to do so. For information about customizing toolbars, see Chapter 10, “Customizing DB/TextWorks.”

2. On the Caption tab, specify the text and font you want on the script button.

3. On the Position tab, specify the size and placement of the script button.

4. Click Apply, then Close.

For More Information

These tabs contain almost the same options as tabs on the Script Button Properties dialog box in the Form Designer. For more information about each of these tabs, refer to the online help and the following sections in Chapter 5, “Working with Forms.”

- Caption tab, see “Script button content.”
- Position tab, see “Floating and anchored form boxes;” information about offsets and coordinates in “To move boxes;” and “Changing form box width” for form and text boxes.

Showing or Hiding Boolean Buttons

You can specify whether the query screen shows or hides Boolean buttons on query screens used on the desktop (and on the Web, if you are using a WebPublisher product).

Boolean buttons on the desktop

In most cases, you should show query buttons so users can toggle between AND, OR, and NOT while constructing a query. However, if you want to force a particular configuration (for example, if you want to “hard wire” an OR between two boxes, or if your intended audience is uncomfortable with Boolean commands), you may choose to hide the buttons. When you use the query screen, the status bar shows the Boolean operator for the current box (AND, OR, NOT), so even if buttons are hidden, users will know what operator is being used.

To show or hide query buttons on the desktop, choose Tools>Screen Properties>General, and select or clear the Show query buttons check box. This affects all the buttons on the screen. You cannot show or hide individual buttons.
Boolean drop-down lists on the Web

Note: This section applies only to textbases published on the Web with a WebPublisher product.

To specify whether a query screen used on the Web shows or hides Boolean drop-down lists, choose Tools>Screen Properties>HTML, and select or clear the Show Boolean operators check boxes. This option is cleared by default.

Changing the State of a Boolean Button

Both query boxes and sets boxes have Boolean buttons. When you save a query screen containing these types of boxes, the state of each Boolean button is retained. To change the state of a button within the Query Screen Designer, click the button, or use the Tab key on the keyboard to navigate to it and then press the Spacebar. Another way of changing the button’s state (for either a query or sets box) is to select a box, choose Tools>Box Properties>Labels, from the Button state drop-down list, select AND, OR, or NOT, then click Apply.

Changing the Tab Order of Boxes

Tab order determines the following behavior:

- The order in which query criteria will be evaluated when you fill in more than one query box. Query evaluation order can be important to know if you are toggling the Boolean buttons to combine ANDs, ORs, and NOTs. For more information, see “Query Evaluation Order” on page 143.
- The order in which the Tab keyboard key moves from box to box for navigational purposes, and which boxes the Tab key will skip.

Note: DB/TextWorks skips text boxes and picture boxes by default.

You can specify that Boolean buttons be excluded from tab order by choosing Tools>Options>Search and clearing the Allow tabbing to Boolean query buttons check box.
To change the Tab order

1. Choose **Tools>Tab Order**. Query and set boxes are identified by their labels. Boxes without labels (such as text boxes and picture boxes) are identified by the first content item, shown in angle brackets.

2. Click the **Reset to Default Tab Order** button to make the Tab order match the order in which boxes are placed on the screen. Another way to re-order boxes is to select a box then use the **Change Order** buttons to move the selected box up or down in the list.

3. To have the **Tab** key skip a box, select the box and select the **Skip this Box** check box. As a general rule, do not skip any query boxes or sets boxes. However, if you do, you will still be able to access the box by clicking in it or using **Edit>Go to Box**. Skipping a query box or sets box has no effect on query evaluation order—the skipped box will still be evaluated if it contains query criteria.

Converting a Form to a Query Screen

You can convert an existing Record form (any form designed for the Display or Edit window) so you can use it as a query screen:

1. In the Query Screen Designer, choose **Screen Operations>Open Query Screen**. (If you are not in the Query Designer, choose **Search>Design Query Screen**.) The Open Query Screen dialog box opens.

2. Choose **Existing Record Form** from the Start With list, then select a form from the Currently Saved list and click **OK**.

The form is copied, converted, and loaded into the Query Screen Designer, where you can edit and save it. Content information and formatting that are not supported in the Query Screen Designer, such as added text, item numbering, calculations, and variables, are removed during the conversion. Boolean query buttons do not appear unless you specify them on the General tab of the Screen Properties dialog box (**Tools>Screen Properties>General**). Depending on the form you started with, you may also want to use the Labels tab (**Tools>Box Properties>Labels**) to show borders, labels, and scroll bars, and to make sure that the labels clearly indicate which fields will be searched.
Setting Query Screen Properties

The query screen properties you select are saved with the query screen and take effect when the query screen is used.

To set query screen properties

1. In the Query Screen Designer, choose Tools>Screen Properties to open the Screen Properties dialog box.

2. Use the General, Logos, and HTML tabs to specify various attributes for the query screen. Note that the settings on the Logos and HTML tabs apply only to query screens used on the Web with a WebPublisher product, and that the Show query buttons option on the General tab applies only to the desktop. Each tab and its settings are described below.

3. Click OK when finished.

General Tab

Options group

- **Show query buttons.** Select or clear this check box to specify whether to display query buttons on query screens used on the desktop.

- **Background color.** Select this option to choose a color to use for the query screen’s background. Click the Select Color button to specify the color (including custom colors).

174 Chapter 4: Searching a Textbase
Measurements group
Use the Measurements settings to specify in which units box position and width, and label width are measured. For example, choose inches from the Horizontal units drop-down list and lines from the Vertical units drop-down list, so a box could be 4 inches wide and ½ line (.5) below the box above it.

- **Horizontal units.** Use this drop-down list to select the type of units (inches, mm, or points) to be used when specifying screen settings such as box positions, box widths, and label widths.
- **Vertical units.** Use this drop-down list to select the type of units (inches, mm, points, or lines) to be used when specifying the distance between boxes (not the information within a box). Note that information within a box is always measured in lines.

Logos Tab
Use the options on this tab when creating query screens for use on the Web with a WebPublisher product. For more information, including important information about image file locations, see the Inmagic DB/Text WebPublisher PRO User’s Manual or the online help.

Logos group
- **Leading Logo.** Use this box to type the file name, including extension, of an image file to display at the top of the screen. For example, type NEWLOGO.JPG.
- **Trailing Logo.** Use this box to type the file name, including extension, of an image file to display at the bottom of the screen. For example, type MYLOGO.GIF.

Note that these logos will only appear on the Web and not on your desktop.

HTML Tab
Use the options on this tab when creating query screens for use on the Web with a WebPublisher product. For more information about publishing textbases on the Web, see the Inmagic DB/Text WebPublisher PRO User’s Manual or the online help.

Query page group
- **Show Boolean operators.** Use this option 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 remembered and 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.
- **Use background image.** Select or clear this check box to specify a static image to use as a background for the query screen. When you select this option, the Image file box is enabled, allowing you to designate the name of the image you want to use.
Form settings group

- **Initial Report Form.** Click this button to open the Select Report Form dialog box and specify which Report form to use when the user retrieves records. This form determines the appearance of multiple-record display.

- **Initial Display Form.** Click this button to open the Select Record Display Form dialog box and 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.** Click this button to open the Select Record Edit Form dialog box and specify which Edit form to use when the user adds, edits, or deletes a record in the Web browser. Note that editing over the Web requires *WebPublisher PRO* version 7.0 or later.

- **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. (This option is disabled if you are using the WebPublisher Multiple Textbase Query feature.)

- **Show form list on display page.** This option determines whether users will be able to change display forms in the Web browser. If you select this check box, the form drop-down list will appear in the Web browser. (This option is disabled if you are using the WebPublisher Multiple Textbase Query feature.)

- **Show form list on edit page.** This option determines whether users will be able to change edit forms in the Web browser. If you select this check box, the form drop-down list will appear in the Web browser. (This option is disabled if you are using the WebPublisher Multiple Textbase Query feature.)

- **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.

- **Navigational controls.** Use this drop-down list to specify where navigational buttons and form drop-down lists appear on reports, expanded display pages, and edit screens and where on the page they are placed.
Defining Screen Scripts

When you are designing a query screen for desktop use, you can use one of two scripting languages (JavaScript or Visual Basic Script) to write programs that automate functions within DB/TextWorks. For more information about screen scripts, refer to the online help.

To define a screen script

1. Choose Tools > Screen Script to open the Screen Script dialog box.

2. On the Script tab, select the scripting language you want to use to write the program from the Script language drop-down list. For more information about scripting languages, see the online help.

3. Type the script in the Script box. You can paste the program into the box, if you constructed it in a different environment.
4. On the Names tab, select the box from the Boxes list to which you want to assign a name. For more information about this tab, see the online help.

5. Type the new name in the Box Name box.

6. Click Change. The assigned name appears next to the box in the Names list.

7. Repeat this process for as many boxes as needed, then click OK.
Selecting a Query Screen

If more than one query screen has been designed for your textbase, you can select the one you want to use.

To specify which query screen to use in the Query window

1. Open a textbase and click the Select Query Screen button on the Query window toolbar, or choose Search>Select Query Screen.

![Select Query Screen dialog box](image)

Only the Basic Query Screen is automatically generated by the software. Use the Query Screen Designer to create your own query screens.

2. Select the query screen you want to use and click OK.

Note that screens are listed alphabetically (Basic screen first, then screens saved in the user file, then screens saved in the textbase file, which are indicated by the word public in parentheses). The Basic Query Screen is generated automatically by the software. It provides one query box for each indexed field in the primary textbase.

3. To quickly resize the window to fit the query screen, choose Window>Fit Window to Form or click the Fit Window to Form toolbar button.

Chapter 4: Searching a Textbase 179
Working with Saved Sets

Records found by a search are called a set. You can save a set to use again later. The ability to save and re-use sets makes it easy to return to different sets of information extracted from a textbase. You can:

- Save sets to keep a permanent record of search criteria and records found.
- Load a set to access records without re-executing the search and retaining omissions.
- Combine sets with other criteria.
- Specify that execution of the query criteria in a saved search is the first action performed when you open a textbase from a menu screen.
- Refresh sets to bring them up-to-date.
- Browse sets by pressing F3 in a sets box on a query screen.
- Rename, delete, export, and import sets using Maintain>Manage Textbase Elements.
- Look at the status bar to see the name and the number of records in the current set.

A saved set is not actually a collection of records. It is a list of records, together with the search criteria that found those records. When you load a saved set, DB/TextWorks simply looks at the list and retrieves the listed records. It does not re-evaluate the query criteria. To update a set, refresh it by choosing Sets>Refresh Sets.

To save a set

1. Perform a search.
2. If you want to remove any records from the set, select a record and choose Sets>Omit Record. This does not delete the record from the textbase. Also, if you refresh the set, the omitted records will reappear.
3. Choose Sets>Save Set or Save Set As to open the Save Set As dialog box.
4. Type a name of up to 20 characters, including spaces and punctuation, in the Name box.
5. Type an optional description of up to 80 characters, including spaces and punctuation, in the Description box.
6. Sets are not saved as separate files. They are saved as elements within a textbase or user file. Depending on what you want to do, select:
   - **User File (Private)** if you want the set to be available only for your personal use. Others who share the textbase will not see the saved set. Only you will be able to use this set.
   - **Textbase File (Public)** if you want the set to be available to everyone who uses the textbase.

   *Note:* If the textbase has passwords, the current password determines if you have permission to save sets in the textbase file.

7. If you want to see a list of previously saved sets, click **Browse**. The number of records in each set appears in square brackets after the set name.

8. Click **OK**.

**To load a set**

Loading a set is a way of accessing records without repeating a query, and can be faster than running the same query again on a large textbase. Loading a set also retains omissions.

1. Choose **Sets>Load Set** to open the Load Set dialog box.

   ![Load Set Dialog Box]

2. Select a set from the Currently Saved list and click **OK**. The Select Search Results Window dialog box opens.

3. Specify the window (if any) in which you want to view the loaded set. Whether you view them or not, those records become the current set. You can print them, edit them, or perform other record operations just as you would after any search.

When you load a set, the search is not repeated, so the records that are loaded may not reflect the most recent changes to the textbase. If you think records may have been added, edited, or deleted since the set was saved, refresh the set instead (choose **Sets>Refresh Sets**). This will re-execute the query before loading the set.

**Tip!** If you load a set, then change the criteria and perform a new query, and choose **Sets>Save Set**, you will overwrite the original set. To retain the original set, use **Sets>Save Set As** to name the new set.
To refresh a set
If you think records may have been added, edited, or deleted since the set was saved, refresh a set instead of loading it. This ensures you have the most recent results. Refreshing the set is especially useful if the query criteria contain @DATE.

1. Choose Sets>Refresh Sets to open the Refresh Sets dialog box.

2. Select the set(s) you want to refresh from the Currently Saved list. Note that the number in square brackets after each set name is the number of records in the set.

3. [Optional] Select the Print Reports for Refreshed Sets check box to print each selected set, after it is refreshed, using the current Report Printing form.

4. A set can include another set as part of the search criteria. Select Refresh Referenced Sets if you want to update any referenced sets. Referenced sets are updated only if they have a date other than today’s date.

5. Click the Refresh button to automatically load, execute, save, and optionally print each selected set.

6. A message indicates how many sets were successfully refreshed. Click OK. The last (or only) selected set becomes the current set, and the query criteria are loaded into the current query screen.

Using the Saved Queries Window

You can use the Saved Queries window as a shortcut to execute a saved query instead of loading
a set in the Query window and then executing it. The Saved Queries window is also a convenient
shortcut for people who run the same query frequently.

1. Choose Search>Saved Queries to open the Saved Queries window.

2. Select a saved set from the list and click the Execute Query button, or double-click the set
name, to load it as a new set and execute the query.

To make this window appear automatically when you open a particular textbase using a menu
screen, specify the Saved Queries window as the initial action for that textbase. In the Menu
Screen Designer, choose Tools>Box Properties>Initial Action. Select the Window option
button, then select Saved Queries from the drop-down list.
Using a Set in a Search

You can use a set as part of your search criteria. For example, search for all invoices sent in May and save it as a set. The next month, combine that set with a search for all invoices sent in June. To include a set as part of a search, type or paste the set name in a sets box. Within a sets box, you can use Boolean symbols (& / !) between set names. Type the other search criteria in the appropriate query box. (To construct more elaborate searches with sets, use a Command query, explained later in this chapter.)

1. Choose Search>Add Sets Box to add a temporary sets box after the selected box on the query screen.
2. Type the name of a saved set. If you cannot remember the name of a set, press F3 or choose Edit>Browse Choices and paste a set name from the list.
3. Construct your query (for example, type search criteria in a query box), then choose Search>Execute Query, press Enter, or use the Execute Query toolbar button.

Performing a Command Query

Command queries are an alternative to using query screens. They allow all of the same operations, but you can build more complex queries by combining multiple search requests and using parentheses to indicate evaluation order.

Tip! A good way to learn the Command query syntax is to type criteria in the Query window then open the Command Query window (Search>Command Query). This converts the criteria to the Command query equivalent.

To perform a Command query

1. Choose Search>Command Query to open the Command Query dialog box.
2. Type a command 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. Press the Enter key on your keyboard, click the Execute Query button, or choose Search>Execute Query.
Command Query Syntax

A typical command specifies a field name, a search relation (which tells how to search the field), and an item to search for. For example, this search finds records where the *Skills* field contains the term *Web design*.

![Command Query Diagram]

- **Field name**: The field name is equivalent to a query box that searches a field.

- **Search relation**: The search relation and search items are equivalent to the information that you would type in a query box (except that you must include `ct`, which means contains, when doing a word, phrase, or proximity search).

- **Search item**: Put quotation marks around field names that include significant words (for example, `and`, `or`, `ct`).

Note: To search for a word, phrase, or proximity search, you must include `ct`, which means contains.
Every Command query includes at least one search relation, which connects a field name and the item you are searching for. A search relation is either ct (contains) or a comparison or range operator ( =,  <,  <=,  >,  >=,  :).

<table>
<thead>
<tr>
<th>Search Relation</th>
<th>Searches</th>
<th>Examples</th>
</tr>
</thead>
</table>
| ct              | Word index | Subject ct fax  
Also used in proximity searches (w# and p#).  
Subject ct fax machine  
Subject ct lewis w3 clark  
Subject ct lewis p3 clark |
| =               | Term index | Title=gone with the wind |
| >               | Term index | Price >500  
Price >=500 |
| >=              | Term index | Price >=500  
"Purchase Date"<31-Jan-1999  
Last Name <=Miller  
Quantity =200:300 |
| <               | Term index | "Purchase Date"<31-Jan-1999  
Last Name <=Miller  
Quantity =200:300 |
| <=              | Term index | Founded =1997:1999  
Quantity =200:300 |

### Comparison and Range Searches

To do a comparison search, type a field name followed by a comparison operator ( =,  <,  <=,  >,  >=) and the search term. For example, Date >2001 finds dates on or after January 1, 2001. To do a range search, type a field name followed by an equal sign and the range (Date =01-June-2002:30-June-2002). A range consists of two values (dates, numbers, text) separated by a colon. See the previous table for more examples of comparisons and ranges.

### Word, Phrase, and Term Searches

To search a Word-indexed field for a word or phrase, use the format field ct word or phrase. For example: subject ct water cooler. To search a Term-indexed field for a term, precede the term with an equal sign: publisher =small town press.

### Word Stems

Use an asterisk at the end of a word (*) to find words, phrases, or terms that start with the specified characters. The asterisk is called a wildcard, and it means “any set of characters.” For example, abstract ct comput* techn* finds phrases such as computer technology and computation techniques. Use an asterisk only at the end of a word, not the beginning or middle.
Proximity Searches (w# and p#)

To find words near each other, use the proximity operators (w# and p#) with ct. For example, subject ct blue w3 bird* searches the Subject field for blue within 3 words of any word starting with bird (before or after). Subject ct blue p2 bird* finds blue preceding any word beginning with bird by 2 words or fewer. You can include an asterisk at the end of any word, as shown in these examples. You cannot use proximity operators with phrases.

Finding All Records

To find all records, type `findall` (all one word). Capitalization does not matter. You can follow the command with a NOT statement to exclude records. For example, type `findall not author ct smith` to find everything not written by Smith.

Finding Empty Fields

To find empty fields, use the format `findall not field =*`. For example, to find all records where the Author field is empty, type `findall not author =*`. If the field is not Term indexed, omit the equal sign and substitute ct to do a word search (`findall not author ct *`).

Finding Populated Fields

To find records that contain any information in a particular field, type `=` (or `ct *` if the field does not have a Term index). For example, type `Image Name =*` to find all records where the Image Name field contains at least one entry.

Finding Deferred Updates

To find records that were added, changed, or deleted using Deferred indexing, type `getDeferred` (all one word) followed by any combination of the words `new`, `modified`, `deleted`. Capitalization does not matter (for example, the “D” in `getDeferred` is capitalized for clarity only). Here are some examples:

- `GetDeferred new` finds records that were added using Deferred indexing.
- `GetDeferred new modified` finds records that were added or edited with Deferred indexing.
- `GetDeferred deleted` finds records that were deleted with Deferred indexing.

Punctuation and Case in Command Queries

Punctuation and case are ignored unless you are searching a Code or UDC field type. For more information, see “Punctuation and Case in Search Criteria” on page 147.
Use quotation marks around words or phrases that include items that might be misinterpreted (<, >, =, :, &, /, !, and, or, not). For example, search for "AT&T" to avoid having the & interpreted as Boolean AND. Also use quotation marks around field names that include any of those items. For example, "date and time" <15-Jan-1998. In Term searches, the equal sign must be outside of the quotes (company = "AT&T"). For linked fields, use quotation marks around individual field names that require quotes, not around the entire linked expression. For example, "date and time"@ID, but not "date and time@ID". Parentheses are optional. They can help clarify evaluation order in complex queries.

**Searching for Numbers and Dates**

To find numbers and dates, you can use the same techniques described earlier. For more information, see “Searching for Numbers” on page 144 and “Searching for Dates” on page 144.

**Using F3 in Command Queries**

You can construct a Command query by picking fields, words, and terms from a list:

1. Press F3 in the Command Query window or click the **Browse Choices** button to open the Query Choices Browser.
2. Select the field you want to search from the Field drop-down list.
3. In the List Shows group, select the Terms List, Words List, or Thesaurus option button, depending on whether you want to see the field’s Term index, Word index, or Thesaurus (if the field has a Term index and a Thesaurus). You can switch between the option buttons, as needed. Note that some fields may not have both indexes and/or a Thesaurus, so one or more of the options may be unavailable.
4. Select a word or term from the Choices List and click the Paste button to copy it into the Command Query window. (You can also double-click the word or term to paste it.)
5. The field name and the item appear in the Command Query window. You can edit the pasted criteria if you want to, then submit the query by clicking the Execute Query button.

**Boolean Searches in Command Queries**

To search a field for multiple items, use the symbols & / ! to represent Boolean AND, OR, NOT. For example:

- Ingredient ct chocolate & nuts: Finds recipes only if they contain both items.
- Ingredient ct chocolate / nuts: Finds recipes that contain either item (or both).
- Ingredient ct chocolate ! nuts: Finds recipes with chocolate but no nuts.

188 Chapter 4: Searching a Textbase
When doing a Term search, repeat the = sign after Boolean operator:

\[
\text{company} = \text{acme products} / =\text{wilson hardware}
\]

To search multiple fields, use a forward slash (/) between field names. The OR symbol (/) is the only one you can use between fields. This search finds letters to or from John Smith:

\[
\text{author} / \text{recipient} =\text{john smith}
\]

To combine multiple search statements, use the words AND, OR, NOT. (You do not have to capitalize them.) For example, the following search finds all letters written or received by Mary Smith that are not about pricing:

\[
\text{type=letter AND author} / \text{recipient} =\text{mary smith NOT description CT pricing}
\]

To make long commands easier to read, press \textit{Ctrl+Enter} on the keyboard to insert line breaks:

\[
\begin{align*}
\text{type=letter} \\
\text{AND author} / \text{recipient} =\text{mary smith} \\
\text{NOT description CT pricing}
\end{align*}
\]

Command searches are evaluated from left to right, top to bottom. Most simple search requests do not require parentheses, but you can include them to clarify evaluation order. For example:

\[
\begin{align*}
\text{flag ct red} / \text{white & blue} & \quad \text{Finds flags that are red and blue or white and blue.} \\
\text{flag ct (red/white) & blue} & \quad \text{Same as above.} \\
\text{flag ct red} / (\text{white & blue}) & \quad \text{Finds flags that are red or flags that are both white and blue.}
\end{align*}
\]

Search criteria that contain parentheses are often referred to as nested Boolean commands. For best results, perform OR searches first and AND or NOT searches last, or use parentheses to group the OR searches together.

You can specify whether spaces are required around a Boolean or range symbol (for example, whether you should search for \textit{ant / bee} or \textit{ant/bee}). This is done by changing a setting in the INMAGIC.INI file. Read about Boolean and range searches in the “Troubleshooting Searches” section at the end of this chapter.

Using Sets in Command Queries

To include a set in a Command query, type the name of the set in curly brackets. For example, this search example combines a set with other criteria to find proposals not authored by Smith:

\[
\{\text{proposals}\} \text{ NOT author ct smith}
\]

You can use Boolean symbols (& / !) to join multiple set names. This search example uses the Boolean NOT symbol between two sets to find all new clients except those located in Canada:

\[
\{\text{new clients}\} ! \{\text{canada}\}
\]
Searching Secondary Textbase Fields with Command Queries

If the textbase contains a Link field, you can search fields from the secondary textbase using the format shown in the illustration below. For more information, see Chapter 8, “Linking Textbases.”

Inclusive and Non-Inclusive Searches

The query illustrated below is the same as the Command query `author/editor ct smith & jones`.

```
This box searches two fields: Author and Editor
AND Smith & Jones
```

Queries such as these can be interpreted in one of the two ways described below. Choose `Tools>Options>Search` to specify how to interpret such searches.

- Select the **Use inclusive search option for multiple fields** check box. `(Author or Editor contains Smith) AND (Author or Editor contains Jones)`
- Clear the **Use inclusive search option for multiple fields** check box. `(Author contains both Smith and Jones) OR (Editor contains both Smith and Jones)`
Troubleshooting Searches

Having trouble with a search? Some common problems and their possible solutions are listed in this section.

**Received the message: “Unable to recognize as a correctly formed query”**

The program cannot understand the search criteria.

- Look for typographical errors, or mismatched quotes or parentheses.
- Omit any extra Boolean symbols (for example, type `car / auto` instead of `car / auto /`).
- Surround a URL or time with quotation marks (for example, search for "http://www.inmagic.com"). Otherwise, the punctuation may be misinterpreted. For more information, see “Boolean and range searches do not find the expected records” later in this section.
- If you cannot determine what caused the error, try a simpler search, such as a single word in a query box, or use F3 to reconstruct the query.

**Too many records retrieved**

- If you used an asterisk, omit it and try an exact search instead (for example, search for `computer` instead of `comp*`).
- If you are doing a Boolean search, try using `&` instead of `/`. For example, `red / blue` finds items that are either red or blue (or both), so it finds more records than `red & blue` (which finds items only if they are both colors). Use `!` to exclude records. For example, to find articles about Hercules but not cartoons, search for `hercules ! cartoon*`.
- If the item you are searching for includes punctuation, substitute spaces for punctuation. When searching for dates, use dashes or spaces instead of slashes, or enclose the date in quotation marks (for example, "10/7/2001"). For more information, see “Boolean and range searches do not find the expected records” later in this section.

**No records retrieved**

- Try using `/` instead of `&` between words. Using `/` means either word can be present (`john / paul` finds John OR Paul). Using `&` means both words must be present (`john & paul` will not find just John or just Paul).
- If you are not sure of the spelling, use an asterisk after the first few characters (for example, `colo*`) or separate several possible spellings with a forward slash (for example, search for `color / colour`).
- If you did a complex search, try simplifying it to eliminate confusion. Press F3 to view and paste items to search for. This eliminates guesswork.
• If your search includes Boolean symbols (& / !) or the range symbol (:), try putting spaces around the symbol (for example, name ct smith / jones instead of name ct smith/jones).

• Remember that range searches involving partial dates start from the beginning of the range. For example, born >1997 finds dates after Jan. 1, 1997.

• Examine the contents of the search screen (especially if it is longer than the visible screen) to verify that you do not have criteria left over from a previous search.

**Boolean and range searches do not find the expected records**

A setting in the INMAGIC.INI file determines whether spaces are required around Boolean symbols (& / !) and the range operator (:). If Boolean and range searches do not seem to be retrieving the expected records, try including spaces around search operators (for example, search for ant / bee instead of ant/bee). If this works, continue to surround these operators with spaces.

To change the behavior, close DB/TextWorks, then open INMAGIC.INI using a text editor (for example, Notepad) and change the following setting in the [Inmagic DB/TextWorks] section:

- If SpacedRelOps=0, spaces are not required around search symbols. The symbols & / ! and : are always treated as search operators unless embedded within a quoted phrase.
- If SpacedRelOps=1, spaces are required around search symbols. The symbols & / ! and : are treated as search operators only if surrounded by spaces. The advantage of SpacedRelOps=1 is that you can search for dates such as 12/31/1998 or URLs such as http://www.inmagic.com without having to use surrounding quotation marks.
Chapter 5: Working with Forms

A textbase contains unformatted text, numbers, and dates. To format the information, you can create your own customized forms. Forms determine how information appears when it is displayed on the screen and printed.

**Note:** Forms are for displaying and printing information, sending EMail, and writing to a file. You do not use forms for queries. To learn how to design query screens, see Chapter 4, “Searching a Textbase.”

Overview

A form is a layout that affects how information appears when you display, edit, or print records, write records to a file, or send a report as EMail. You can design separate forms for the Report window (to see multiple records found by a search), the Display window (to see one record at a time), the Edit window, and for printing.

A form that is designed to display or print multiple records is called a report form. A report form is just like a regular form except that it includes some additional features, such as the sorting and numbering of records, that would not make sense for single-record display.

When you save a form, you decide for which operations it can be used. You can use the same form for more than one operation. For example, you can design one form for both edit and display, and another form for printed reports.

You can create as many forms as you need, and you can select different forms at any time.

By designing customized forms with DB/TextWorks, you can display and use the information in your textbases in a multitude of ways, including to:

- Perform calculations, such as totaling purchase orders.
- Add logos or graphics.
- Send customized EMail to one or many recipients.
- Display, edit, add, and delete records over the Web (with a WebPublisher product).
- Sort records, such as sorting sales data by sales representative, region, or both.
Basic Forms

Until you design your own forms, you can use the Basic forms, which are generated automatically. The Basic forms show every field from the primary textbase in a simple, straightforward format. You do not have to do anything special to use these forms—they are used by default until you create your own. There are two Basic forms:

- The Basic Record form is for single-record display.
- The Basic Report form is for multiple-record display.

Basic forms are generated by the software as needed. They automatically reflect any changes you make to the textbase, such as adding fields.

Basic forms contain one box for each field in the textbase. Fields hidden by passwords and secondary textbase fields do not appear. Default settings (choose Tools>Options>Display) determine font appearance, box background color, and other options. Multiple entries appear on separate lines. You can start designing with a Basic form and save it under a new name, but you cannot overwrite or delete a Basic form.

Customized Forms

Because you may not want to display all the information in your textbase, you can customize forms to show only the fields you want.

You can add logos and graphics to your form, as well as headers and footers. You can also specify that information in a multiple-record report be sorted by particular criteria, or have DB/TextWorks perform calculations on your data and display the results on your form.

The following table lists the various uses for forms. You can design different forms for these uses, and have multiple forms available for each.

<table>
<thead>
<tr>
<th>Design forms for…</th>
<th>To…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report window</td>
<td>Display multiple records after a search. Forms saved for use in the Report window are also available to send a report as EMail and write a report to a file.</td>
</tr>
<tr>
<td>Display window</td>
<td>Display one record at a time.</td>
</tr>
<tr>
<td>Edit window</td>
<td>Add or edit one record at a time.</td>
</tr>
<tr>
<td>Report window</td>
<td>Print records found by a search (for example, financial reports or mailing labels).</td>
</tr>
<tr>
<td>Web</td>
<td>Use on the Internet or an intranet, with a WebPublisher product.</td>
</tr>
</tbody>
</table>
Creating a Form

You have a great deal of flexibility in how you approach form design. You use three menus in the Form Designer to do most of the design work.

<table>
<thead>
<tr>
<th>Edit</th>
<th>Tools</th>
<th>Report Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cut</td>
<td>Box Properties...</td>
<td>Compulsory Sort...</td>
</tr>
<tr>
<td>Copy</td>
<td>Align Boxes</td>
<td>Headers and Footers...</td>
</tr>
<tr>
<td>Paste</td>
<td>Tab Order...</td>
<td>Set Up Page...</td>
</tr>
<tr>
<td>Add</td>
<td>Form Properties...</td>
<td>Hide Margin Area</td>
</tr>
<tr>
<td>Delete Box</td>
<td>Form Script...</td>
<td>Work in Margin Area</td>
</tr>
<tr>
<td>Go to Box...</td>
<td>Options...</td>
<td></td>
</tr>
<tr>
<td>Select All</td>
<td>Customize Toolbar</td>
<td></td>
</tr>
</tbody>
</table>

Use the Edit menu to add and delete boxes.
Use the Tools menu to specify box content and appearance.
Use the Report Options menu when designing report forms.

Use the order shown below as a guide while you experiment. Note that steps 2 and 3 should be performed at the beginning of the design process and steps 9 and 10 should be performed at the end. Some of the steps are optional, and some may be performed in a different order. The form attributes specified in the steps below will be explained in detail later in this chapter.

1. **Search for 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.

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. You can also start with a blank form.

4. **Set form properties.** Choose Tools>Form Properties>General to specify general settings that affect how information will appear when the form is used.

5. **View records.** Periodically switch 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 shows how the form is constructed.

6. **Show or hide box boundaries.** Use View>Boundaries to show or hide dashed lines around boxes and anchoring indicators to help you lay out the form.

Chapter 5: Working with Forms 195
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 boxes and edit box content.** 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, change the field that a box contains.

   - **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.)

   - **Show label, border, and scroll bars.** Show or hide labels, borders, and scroll bars, and specify label text, font, and color.

   - **Format paragraphs.** Specify paragraph breaks, justification, and indentation to apply to all of the content items in the box. For example, make each entry in a field appear on a separate line.

8. **Select Report Options.** If the form will be used for multiple-record reports, you can 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.

   - **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). 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 others to be able to see a form, use **Save Form As** and save it as public.

10. **Select the form.** After designing a form, choose **Display>Select Forms** and select the forms to use for various operations.

**Opening and Closing the Form Designer**

Use the Form Designer to create and edit forms. After you open the Form Designer, the menus at the top of the screen change to provide form-specific options.

**Tip!** New forms use the defaults specified on the Options dialog box (**Tools>Options**) on the Display tab in the Form Defaults group.

**To open the Form Designer**

1. Choose **Display>Design Form** to open the Open Form dialog box.

2. From the Start With list, select a form:

   - **Existing Form.** Select an existing form to edit from the Currently Saved list. After editing the form, you can save it under its existing name or under a new name (a way of copying a form).

   - **Basic Form.** This is often the easiest way to begin designing a form. The Basic form provides one box for each field in the textbase. Select either the Record Form option button (if you are designing a form for single-record display in the Display or Edit windows) or the Report Form option button (if you are designing a form for multiple-record display in the Report window).

   - **Blank Form.** A blank form does not contain any boxes. This can be useful when your textbase contains many fields, but you want the form to include only a few of them.

   - **New Label Form.** Select a label format (for example, Avery, Gaylord, University Products).

   - **New Tabular Form.** A tabular form presents information as a table, in rows and columns. After you click **OK**, you will be prompted to select fields for columns and the table will be created for you. You can add, remove, and re-order columns later.

3. Click **OK**.
To load a different form
- Once the Form Designer is open, you can load a different form by choosing Form Operations>Open Form.

To close the Form Designer
- Choose Form Operations>Close Form Designer.

Changing Display Options
There are several display options that will help you control how a form appears while you are working on it.

Viewing Records or Content Descriptions
Periodically toggle between Display>View Records and Display>View Content to view actual record information and content descriptions. Viewing record information is like previewing the form. Note that you must have done a search first, so you have some records to view. Viewing content descriptions reveals how the form displays data, by showing field names, variables, calculations, and so forth.

Showing or Hiding Box Boundaries
Select or clear View>Boundaries to show or hide dashed lines around boxes. Showing boundaries is especially helpful if the boxes do not have borders. Showing boundaries also displays arrows between any boxes that are anchored to each other. Boundaries appear only in the Form Designer, not in the saved form.

Previewing a Form
To preview a form while you are designing it, do a search that finds at least one record, then choose Display>Preview in the Form Designer. You see one record at a time. To display additional records, use the Display menu options or the arrow buttons on the Preview window toolbar. To finish, choose Display>Close Preview.

Another way to see how the form really looks is to select it for the appropriate window. Save the form, even if it is in a preliminary stage. Then select it for a particular window by choosing Display>Select Forms from the main menu. (If you cannot find the main menu, see “Toggling Windows” below.) Keep that window (for example, the Report window) open while you work in the Form Designer. Each time you save the form, the window will be refreshed using that form, so you have constant visual feedback.

Toggling Windows
While the Form Designer window is selected, you have access to form-specific menu options. To access a different set of options, select another window. For example, to access the main menu options, select the Query window or open the Window menu and select a window from the list.
Saving a Form

As you work, save your form frequently, just as you would when working with any important file. After you save a form, it remains open in the Form Designer so you can continue working on it.

To save a form

1. Choose Form Operations>Save Form or Form Operations>Save Form As.
   - Save Form. Saves a form under its current name, overwriting the previous version. You will see the Save Form As dialog box the first time you save the form, but not during subsequent saves.
   - Save Form As. Creates a copy of the form under a new name that you specify, leaving the original intact. You can also change the information about the form (for example, the operations for which the form can be used) using the Save Form As dialog box.

2. Type a form name of up to 20 characters, including spaces and punctuation, in the Name box. If the form has a compulsory sort, you may want to indicate that in the form name. For example, the name Sales by Region indicates the records are sorted by the Region field.

   Note: You can click the Browse button to see the forms that have already been saved. Forms saved in the current user file are listed first, alphabetically, followed by forms saved in the textbase file, which are identified by the word (public).

3. Type an optional form description of up to 80 characters, including spaces and punctuation, in the Description box. The description appears on dialog boxes when you open, save, and browse forms. It is helpful to indicate the form’s purpose and its compulsory sort, if any. For example, Print or display report of sales by region.
4. Decide where you want to save the form. Depending on what you want to do, select:
   - **User File (Private)** if you want the form to be available only for your personal use. Others who share the textbase will not see the form in selection lists. Only you will be able to use this form. Note that forms saved in a user file cannot be selected as the textbase default or be used with a *WebPublisher* product or menu screens.

   **Tip!** While you are first learning to design forms, you may not want these experimental forms to be used by others. In this case, save the forms in your user file.

   - **Textbase File (Public)** if you want the form to be available to everyone who uses the textbase.

     **Note:** The current password determines if you have permission to save forms in the textbase file.

5. Specify where the form can be used by selecting the appropriate check boxes. For example, if you select the **Report Window** and **Report Printing** check boxes, the form will appear in form selection lists for both operations.

   - **Display Window.** This form can be used for single-record display. (*WebPublisher* users should select this check box to make the form appear in *WebPublisher* form drop-down lists for expanded display.)

   - **Edit Window.** This form can be used for adding records. (*WebPublisher PRO* users should select this check box if the edit form is going to be used to add, edit, and/or delete records over the Web; if the edit form will be exported to HTML; and/or to enable the **Web box treatment** drop-down list on the Form Box Properties dialog box.)

   - **Report Window.** This form can be used for displaying reports, writing to a file, or sending a report as EMail. (*WebPublisher* users should select this check box to make the form appear in *WebPublisher* form drop-down lists for displaying reports.)

   - **Report Printing.** This form can be used for printing reports.

   - **Web.** This option is intended for *WebPublisher* users. It ensures that the form will appear in *WebPublisher* form drop-down lists. Select it for every form you intend to use on the Web.

   - **Web Only.** This option is intended only for *WebPublisher* users. It excludes the form from desktop picklists.

6. Click **OK**.
Creating Forms

Whether it is a Basic form generated automatically, or a customized form complete with your company logo, numbered records, and a compulsory sort, DB/TextWorks gives you a wide range of options for displaying information.

Specifying form use

The following sections provide some helpful hints for designing forms for the Report window, Display window, and Edit window; for report printing; and for forms used with WebPublisher products.

Report Window

Typically, you design at least one form for the Report window to summarize the records found by a search. The following form shows a few fields from each record and numbers each record.

Here are some tips for designing 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 include that field.

- To conserve space, combine multiple content items in one box (for example, Address, City, State or Province, Postal Code). Choose Tools>Box Properties>Paragraphs and choose 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 as ending text after the appropriate content items (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).

• If you start with the Basic Record form, decide whether to turn off borders and scroll bars (choose Tools>Box Properties>Labels). Note that if you start with the Basic Report form they are turned off by default.

• If you start with the Basic Record form, decide whether to increase the height of some boxes from the default 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.

  Note: You can specify the default box height setting before opening the Form Designer by choosing Tools>Options>Display and clicking the More Defaults button.

• Choose Tools>Form Properties>General and set the distance between records.

• Number records by adding a box whose only content is the RECORD NUMBER variable. See “Numbering records” on page 285 for more information.

• The Form Designer shows only one record at a time and does not omit empty boxes. To see how the form really looks, preview it, as explained in “To preview a report” on page 315.
Display Window

The Display window shows one record at a time when you choose Display>Display Record.

Design at least one form for the Display window that shows detailed information for 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.

- Increase the height of some boxes from the default setting by choosing Tools>Box Properties>Position and increasing the Maximum height setting.

  **Note:** You can specify the default box height setting before opening the Form Designer to create a new form by choosing Tools>Options>Display and clicking the More Defaults button.

- Turn scrollbars on for boxes that may contain a large amount 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 (choose Tools>Form Properties>General). Highlighting words in reverse video or color can be a help or a hindrance.

  **Tip!** If you turn search highlighting on, you can selectively turn it off when you use the form by choosing Tools>Options>Search and selecting None from the Display highlighting or Print highlighting drop-down lists.
Edit Window

You use the Edit window to add or edit a record.

Here are some tips for designing a form for the Edit window:

- Start with the Basic Record form. This shows all fields, with all boxes having borders and scrollbars.
- Place fields that you edit most frequently at the top of the form. Move fields that you seldom edit to the bottom. 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 be 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 box’s borders) 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, switch back to the Query window, choose Display>Textbase Information, and then choose Edit>Find to search for the word required.
- 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:
  - Boxes never disappear when empty (unless the box contents are hidden by a password), even if the **Minimum height** is set to zero (0) on the Form Box Properties dialog box (choose **Tools>Box Properties>Position**). This lets you add information to empty fields.
  - All formatting except font and color is removed, so that all you see is the actual field data.
  - 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.

**Note:** If you have WebPublisher PRO, you can also design a form to use on the Web to add, edit, and/or delete records. If that is the case, when saving the editing form, you must select the **Edit Window** and **Web** check boxes on the Save Form As dialog box. For more information about using an edit form on the Web, see the online help.
Printed Reports

Printed reports can include page numbers, titles, calculations, Sort Headers (such as Sales by Territory), and many other sophisticated formatting techniques.

<table>
<thead>
<tr>
<th>Local Consultants</th>
</tr>
</thead>
<tbody>
<tr>
<td>For internal distribution to: D. Ennis, J. Barnett, M. Applegate</td>
</tr>
</tbody>
</table>

1. Almquist, William  
   455 Green Avenue, Woburn, MA 01801 USA  
   Skills: Accounting, C, C++, HTML  
   Currently at: Renaissance Capital Investment, Inc.

2. Bigelow, Daniel  
   12 Spruce Street, Gloucester, MA 01930 USA  
   Skills: Graphic design, Animation, JavaScript, HTML  
   Currently at: CalRecon

3. Davis, Brenda  
   365 Broadway Ave, Swampscott, MA 01907 USA  
   Skills: C++, graphic, QuickTime format  
   Currently at: Unassigned

4. Jones, Christina  
   97 Beechwood Street, Boston, MA 01118 USA  
   Skills: HTML, Technical Writing, Marketing, Writing, Networking  
   Currently at: Northern Robotics

5. Wallace, Mark Alan  
   22 W. Summer Street, Quincy, MA 01310 USA  
   Skills: Abstract Math, Web Design, JavaScript  
   Currently at: Kathy Faeke, Inc.

September 29, 2000

Page 1

Here are some tips for designing a form for printing:

- Read about designing forms for the Report window on page 201. 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 have an effect on 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. 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). All of these issues are explained later in this chapter.
Web Reports

If you have a WebPublisher product, 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 report forms that you designed to change the appearance of the information that was retrieved. If you have WebPublisher PRO, users can also add, edit, and/or delete records over the Web. When designing WebPublisher forms, be sure to choose Tools>Form Properties>HTML and Tools>Box Properties>HTML to specify the options you want. When you save the form, select the Web check box (and the Web Only check box, if applicable) on the Save Form As dialog box to specify that the form can be used on the Web. For more information about designing forms for use with a WebPublisher product, see “Designing Forms for Web Use” on page 328, or the online help.

Adding Boxes

You design a form by adding and editing boxes and script buttons (which can be formatted like boxes). There are several types of boxes you can add: form boxes, text boxes, picture boxes, script input boxes, and script buttons. The following form includes the different types of boxes.

Because all boxes that you add are empty, you must specify the content properties of each box (what is inside the box). The only exception is the script input box, which does not have box content. (Script input boxes are used when you want users to type information into a form to use during the processing of a script.) The content of a box determines what appears in the box when you use the form. Optionally, you can specify position and format settings for each box, as well.
To add a box to a form, choose Edit>Add, then select the type of box you want to add.

- **Form box.** A box that contains field information, variables, and other information. It may or may not have a label, border, and scroll bars. Fields are the most common form box content. However, form boxes can also contain variables (such as the current date), calculations (such as a subtotal), fixed text (such as a report title), and other information. A form box can even contain multiple items, such as two fields, or a field and a variable. You can format form box contents and labels, and you can turn scroll bars and borders on or off. For more information about form boxes, see “Form box content” on page 213.

- **Text box.** A box that contains static, informational text, such as a title or instructions. Usually, you hide text box borders. For more information about text boxes, see “Text Box Content” on page 256.

- **Picture box.** A box that contains an image. Use picture boxes to display images that are either static or referenced in a field in the record. For example, use a picture box to display a company logo on a form. For more information about picture boxes, see “Picture box content” on page 259.

- **Script input box.** A box that users type information into to be used during the processing of a script. In an edit screen, this information does not get saved in the record like other information typed into form boxes. If you use a script input box, you must define a script to use the information a user enters in the box. You can specify position attributes, label information (for example, to tell a user what kind of information to type in the script input box), and font and color attributes for script input boxes. Note that script input boxes do not have box contents because their function is to have the user enter information into them. Note that a script can also put information into a script input box. Script input boxes are for desktop use only; they are not applicable to the Web. For more information about script input boxes, see “Script Input Boxes” on page 303 and “Using Scripts with Forms” on page 298.

- **Script button.** A button you place on a form. A script button allows you to access functions you have written on the Form Script dialog box. You can specify position properties for script buttons, as well as font properties for script button captions. Script buttons are for desktop use only; they are not applicable to the Web. For more information about script buttons, see “Script Buttons” on page 300 and “Using Scripts with Forms” on page 298.

Each form can contain a combination of box types. The boxes in a form determine what information will be displayed when the form is used. After adding a box or script button, you can edit it on the corresponding Box Properties dialog box (which opens automatically), and you can move or resize it by using the mouse. For an existing box or script button, choose Tools>Box Properties to open the corresponding Box Properties dialog box.

Each dialog box contains tabs that display the settings you use to set the properties of that particular box.

You can cut, copy, and paste boxes and script buttons within the same form for easy repositioning (for example, you can copy from the Margin Area and paste in the Record Area). You can cut or copy them from one form and paste them into another form. You can even cut or copy them from forms and paste them into query and menu screens, as long as the box type is common to and supported by all three designers (for example, text boxes, picture boxes, script input boxes, script buttons).
To add a new box to a form

1. If you are adding a box to a form that already has boxes on it, select an existing box. The new box will appear below the selected box. Otherwise, go to step 2.

2. Choose Edit>Add, then select the type of box you want to add. The new, empty box appears and the appropriate Box Properties dialog box opens. Note that you can add only one box at a time using this method.

3. Use the Box Properties dialog box to specify box contents (for example, fields, image file names).

To copy an existing box

1. Select the box you want to copy.

2. Choose Edit>Copy to copy the box.

3. Select the box below which you want the copied box to appear. Note that DB/TextWorks pastes the box below the currently selected box. You can also paste your box into another form, or into the menu or query screen designers (if the box type is supported in that designer).

   **Tip!** If you want to paste a box above all other boxes, use the Paste Here command, which appears only on the shortcut menu (right-click to display it). When using Paste Here, the Top and Left offset settings for the copied box are retained.

4. Choose Edit>Paste to paste your copied box into the form. The copied box retains the same contents and formatting.

5. Choose Tools>Box Properties to change the properties of the new box, if applicable.

   **Note:** You can use this method to copy multiple boxes at one time and still retain their formatting and contents. When you copy multiple boxes, their positions relative to each other are retained. If any of the boxes is anchored to another box, that is retained. For example, if you copy boxes A and B and box B is anchored to box A, box B remains anchored to box A when you paste the boxes. Anchor to form properties are discarded. For more information, see “Floating and anchored form boxes” on page 234.

To delete a box or boxes

1. Select one or more boxes.

2. Choose Edit>Delete Box, or press the keyboard Delete key. Deleting a box does not delete information from the textbase, but prevents information from being displayed when that particular form is used.
To select boxes
Use the techniques described in the following table to select different types of boxes.

<table>
<thead>
<tr>
<th>To…</th>
<th>Do this…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one box</td>
<td>Click on it, press <strong>Tab</strong> or <strong>Shift+Tab</strong> to move to it, or use <strong>Edit&gt;Go to Box</strong>.</td>
</tr>
<tr>
<td>Select several boxes</td>
<td>Hold down the left mouse button and drag the mouse over the boxes you want to select. All boxes at least partially within the selection “lasso” are selected.</td>
</tr>
<tr>
<td>Add or remove boxes from a selection set</td>
<td><strong>Shift+Click</strong> on them.</td>
</tr>
<tr>
<td>Select all boxes</td>
<td>Choose <strong>Edit&gt;Select All&gt;Boxes</strong>.</td>
</tr>
<tr>
<td>Select all boxes of a certain type (such as all text boxes or all form boxes)</td>
<td>Choose <strong>Edit&gt;Select All</strong>, then select the type of box you want to select.</td>
</tr>
</tbody>
</table>

In a form that is not blank, at least one box is selected at all times. Selected boxes are surrounded by a solid outline. When just one box is selected, the outline includes width handles, which you can drag to resize the box. You cannot use the mouse to change the width of multiple boxes at a time—instead, use **Tools>Box Properties>Position** and type a value in the **Width** box.

To move boxes
Use any of the following methods to move boxes when designing a form. When you move a box, other boxes may move as well, depending on their position and anchoring.

- Position the cursor anywhere—except over a width handle—and click and hold the left mouse button while you drag the box. A four-sided arrow appears, along with a ghost image of the selected box. Position the ghost box on the screen and release the mouse and place the box. Note that you can cancel a drag operation by pressing **Esc** before releasing the left mouse button.
- Select a box, then press and hold the **Ctrl** key while you use the arrow keys to move the box. This simulates the mouse method described above. Release the **Ctrl** key to place the box.
- Select a box, then press an arrow key on your keyboard. The arrows move the actual box rather than a ghost image of the box, so you cannot move a box “across” another box, the way you can using the previous two methods. For example, when you move a box up, it will not go any higher than the box above it, unless you move it around and then up.

**Tip!** To specify the distance a box moves for each press of an arrow key when moving boxes, choose **View>Grid Settings** and type values in the **Horizontal grid spacing** and **Vertical grid spacing** boxes. For example, when working in inches, a grid setting of .05 causes the arrow keys to move a box 5/100ths of an inch. The units of measure used for grid values are determined by the Measurements settings in **Tools>Form Properties>General**.
• Select a box and choose **Tools>Box Properties>Position**. In the Coordinates group, change the value in the X box to move a box left or right. Change the value in the Y box to move a box up or down. In the Offsets group, change the values in the Left and Top boxes to specify the relative position of a box to either the form or another box. Change the Left value to move a box left or right. Change the Top value to move a box up or down. For example, to stack all boxes as close to each other as possible, type 0 in the Top box. All boxes must float for this to work.

• Select a box and choose **Edit>Cut** to cut the box. Select the box you want the cut box to be placed under and choose **Edit>Paste** to paste the box in the new location.

**Techniques for Moving Boxes**

- Sometimes moving a box can re-order boxes unintentionally. To avoid problems, save the form frequently. Then if you try to move a box and the boxes are disordered, just choose **Form Operations>Open Form**. When asked if you want to save the form, select No, then reload the form you were working on. The most recent change(s) will be lost, but you will have the most recently saved version to begin working on again.

- Avoid using the plain arrow keys to move a box up or down (especially when moving between two other boxes), or to move a box to the very top of a form. Instead, drag the box with the mouse or use the Ctrl+arrow keys. In some situations, using the plain arrow keys is difficult because the selected box either pushes boxes below it down or bumps into boxes above it.

- To move a box between two horizontal boxes, move at least one of the other boxes to make room. For example, move box B to the right to make room for box C, then move box C up.

- When placing boxes side-by-side, anchor the right-most box to the box immediately to its left (choose **Tools>Box Properties>Position**). You can anchor different type boxes to each other. You can also align boxes by choosing **Tools>Align Boxes** and clicking the alignment you want. For more information about anchoring boxes, see “Floating and anchored form boxes” on page 234.

**Tip!** To anchor and align boxes in one step, choose **Tools>Align Boxes>Anchor and Top**.

- Sometimes, it is more convenient to swap box contents and labels instead of moving the boxes. Select a box and choose **Tools>Box Properties** to change its content. For form and script input boxes, also use the Labels tab to change the box label.
To change the Tab order of boxes
You can change the order in which the Tab key cycles through boxes in forms used in the Edit and Display windows. Be sure the Tab key cycles through boxes in a logical order (from the top of the form to the bottom) and that it skips any uneditable boxes (for efficiency). DB/TextWorks skips picture boxes and text boxes by default. You should also skip uneditable boxes containing information such as computed fields or fields from a secondary textbase.

1. 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.
     \[\text{Note:} \text{ The default order will list boxes in top-to-bottom order. However, there is no guarantee that boxes positioned next to each other will appear in left-to-right order.}\]
   - To manually re-order boxes, select a box from the Current Tab Order list and use the Up and Down buttons to change its order. The Tab key will start at the first box in the list and cycle through boxes in the specified order.
     \[\text{Note:} \text{ The first box in the list is the one the cursor will be in when you display or edit a record using this form.}\]
   - 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 usually skip boxes that hold any content except fields, unless they are script input boxes or script buttons. For example, skip a text box that holds fixed text, such as instructions or a form box that contains a variable.
3. Click OK.
Setting Box Properties

When you add boxes to a form, there are many properties you can specify.

- Content
- Height
- Width
- Anchoring
- Labels
- Borders
- Scroll bars
- Paragraph format
- Text format

Because every attribute listed above is not applicable to all types of boxes, each box type is discussed individually in this section.

Form Boxes

Form boxes are used on a form to display data from one or more fields in a textbase. To add a form box, choose Edit>Add>Form Box, then use the Form Box Properties dialog box (which opens when the box is added) to specify numerous attributes for it. For an existing form box, choose Tools>Box Properties to open the Form Box Properties dialog box.

Form box content

A typical form box contains one or more fields, but you could also include fixed text, variables, calculations, or other content items (one or more per box). You use the Contents tab on the Form Box Properties dialog box to define form box content. Putting multiple items in a box can be especially useful in reports. For example, you may want to put the Street, City, State, and Postal Code fields in one box. Use ending text (choose Tools>Box Properties>Format>Added Text) to insert a comma after each field except State and Postal Code.

Tip! When you design an Edit form, place only one field in each box in order to be able edit it. You can only edit fields from the primary textbase; however, you can place secondary textbase fields in a form for display purposes. Secondary textbase fields do not need to be placed in separate boxes because they cannot be edited from an Edit form designed in the primary textbase. You can place them in a box with no border and show them in a different color or font to distinguish them.
**To specify form box content**

1. Add a form box by choosing **Edit>Add>Form Box.** The Form Box Properties dialog box opens. (If you select an existing box, choose **Tools>Box Properties** to open the Form Box Properties dialog box. Do not select more than one box at a time when specifying box content.)

   Note that the Contents tab, which displays by default, contains two main areas:
   - The Contents list shows the contents of the selected form box. The order of items in this box reflects the order of items in the form box. If the list is empty, the form box has no contents.
   - The five subtabs (Fields, Sort Keys, Variables, Text, and Calculations) contain the settings that you use to specify the form box’s content item type. Each subtab and its settings are described in detail on the following pages.

2. Select a subtab on the Contents tab and use its settings to specify the form box content item. (For example, if you select the Fields subtab, choose a field from the Fields list; if you pick the Variables subtab, choose a variable from the Variables list). Click **Add**.

3. Repeat step 2 as needed, to place multiple content items in the form box. Multiple items in a form box are separated by spaces by default.
4. [Optional] Use the Up and Down buttons to move a selected item if you want it to appear in a different order in the form box. When you add a content item, it is placed at the bottom of the Contents list and positioned last in the form box. The following illustration shows a box labeled Info that contains five items: the Type field (indicates the type of document), the word from (fixed text), the Author field, the word dated (fixed text), and the Date field. Each item appears in the box in the same order as it appears on the Form Box Properties dialog box.

Note: You can use paragraph breaks (choose Tools>Box Properties>Paragraphs) to make multiple content items appear as a single paragraph (as shown above) or as a list (stacked one above another). Also, you can use Tools>Box Properties>Format>Added Text to add commas and other formatting.

5. [Optional] To redefine a content item, select it from the Contents list. Then, use the subtabs on the Contents tab to make the change you want and click the Replace button.
6. [Optional] To remove an item, select it from the Contents list, then click the **Delete** button.

7. Click **Close** when done.

**Fields Subtab**

Because a form box often contains a field, the Fields subtab is selected by default when the Form Box Properties dialog box opens. You can include any field from a primary or linked secondary textbase in a form box.

**To include a field in a form**

1. In the Form Designer, choose **Edit>Add>Form Box** to add a form box and open the Form Box Properties dialog box. (If you select an existing form box, choose **Tools>Box Properties** to open the Form Box Properties dialog box.)

2. On the Fields subtab of the Contents tab (which is selected by default) select a field from the Fields list. For example, if you select the *Title* field, the content of that field (such as, *Myths and Magic*) will appear in the form box when the form is used.

3. Click the **Add** button to move the field into the Contents list.

4. Click **Close**.

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. Linked fields in the textbase are listed after fields in the primary textbase in the Fields list, by default. However, 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 textbase contains at least one Link field. For more information about linking, see Chapter 8, “Linking Textbases.”

Optionally, 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 a field is empty, you might want the word *unknown* to appear. The text you specify will 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 from a query screen.

**Sort Keys Subtab**

A Sort Key is a field by which records are sorted in a report. Sort Keys work like variables. 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 will be Sort Level 1.

**Note:** Sort Keys do not appear when a form is used in the Display or Edit window 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

1. In the Form Designer, choose Edit>Add/Form Box to add a form box and open the Form Box Properties dialog box. (If you select an existing form box, choose Tools>Box Properties to open the Form Box Properties dialog box.)

2. On the Sort Keys subtab of the Contents tab, select the appropriate level from the Sort keys list.

3. Click Add to move your selection to the Contents list.

4. Click Close.

There is no difference between specifying a Sort Key and a field as box contents, if the form has a compulsory sort (so it cannot be sorted in any other way) and the sort field never has more than one entry. If either of these conditions is not true, use a Sort Key instead of a field.
Sort Levels are determined by the current sort order, which may be defined after a search (choose Display>Sort Report), as part of the form (choose Report Options>Compulsory Sort), or as the textbase default (choose Maintain>Edit Textbase Structure, then click the Sort Order button). For example, if the form has a compulsory sort on Date and you add a Sort Key Level 1, that box will display dates.

Note: If you use a form that has a compulsory sort, it is the sort used, regardless of other types of sorts that may be specified. If the form does not have a compulsory sort, the current user-specified sort takes precedence. If neither of those sorts is specified, the textbase default sort is used, if any. Lastly, if no sort of any kind is specified, records appear in the approximate order that they were added to the textbase.

Sort Keys are used primarily in a Sort Header or Sort Footer box in a report (Report Options>Headers and Footers). When you insert a Sort Header or Footer, the Sort Level you select is added to the form box automatically. You do not have to select it on the Form Box Properties dialog box. You can, however, use the Form Box Properties dialog box to change the Sort Key setting, add other information to a box, and so forth.

Each Sort Header will appear before a group of records at that Sort Level. For example, the Sort Header might be Sales Person (Sort Level 1) and the Sort Footer would be a subtotal based on that sales person (again, Sort Level 1). A compulsory form sort would be added to ensure that the report could only be sorted by Sales Person (so Sort Level 1 always equals Sales Person).

<table>
<thead>
<tr>
<th>John Smith</th>
<th>Sort Header Level 1: Sales Person field</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Red Widgets</td>
<td>$200.00</td>
</tr>
<tr>
<td>30 Blue Gadgets</td>
<td>$30.00</td>
</tr>
<tr>
<td>John Smith's Sales</td>
<td>$250.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sue Tibble</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 Green Gizmos</td>
</tr>
<tr>
<td>25 Red Widgets</td>
</tr>
<tr>
<td>Sue Tibble's Sales</td>
</tr>
</tbody>
</table>

Sort Footer Level 1: a calculation

Tip! For more about Sort Keys, see “Sort Headers and Footers” on page 270.

Variables Subtab

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. A variable in the Margin Area of a form is visible only when the report is printed.

To add a variable to a form box

1. In the Form Designer, select a form box and choose Tools>Box Properties to open the Form Box Properties dialog box.
2. On the Variables subtab of the Contents tab, select a variable. Each variable is summarized in the table in this section.
3. Click the **Add** button to move your selection to the Contents list.

4. Click **Close**.
The following table lists the available variables and their uses.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE and TIME</td>
<td>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. To further change the appearance, use <strong>Tools&gt;Box Properties&gt;Format</strong>.</td>
</tr>
<tr>
<td>PAGE NUMBER</td>
<td>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 1 or the number you specify. To change the starting page number, see “Setting Up the Report Page” on page 288. Because the page number appears in the Margin Area, you would not include the PAGE NUMBER variable in a form not used for printing. For more information, see “Numbering Pages” on page 284.</td>
</tr>
<tr>
<td>RECORD NUMBER</td>
<td>The RECORD NUMBER variable numbers each record sequentially in a report. Use this variable in the Record Area of a form, typically in a separate box to the left of the record information. For more information, see “Numbering records” on page 285.</td>
</tr>
<tr>
<td>RECORD COUNT</td>
<td>The RECORD COUNT variable displays the total number of records in the set. For example:</td>
</tr>
<tr>
<td></td>
<td><strong>Total records found: 53</strong></td>
</tr>
<tr>
<td>TEXTBASE NAME</td>
<td>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 in a printed report.</td>
</tr>
<tr>
<td>SEARCH</td>
<td>The SEARCH variable displays the search criteria 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. You may want to precede the SEARCH variable with text (for example, <strong>Search Strategy:</strong>), which you can enter as beginning text.</td>
</tr>
</tbody>
</table>
**Text Subtab**

There are two types of text you can add to a box using the Text subtab: fixed text and prompted text. To add fixed or prompted text, select the Text subtab on the Contents tab and select either the **Fixed text** or **Prompted text** option button. Then type what you want in the **Text** box.

**Fixed Text**

Fixed text is text that will always appear in the form box exactly as you type it on the Form Box Properties dialog box. Fixed text can include and/or combine text, numbers, spaces, line breaks, variables, and extended characters, but not the **Tab** character.

To add fixed text, select the **Fixed text** option button on the Text subtab, then type the text you want in the **Text** 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, what you typed appears in the **Text** box automatically.

**Tip!** A text box also contains information that does not change (for example, report title, company name). Use a text box instead of fixed text when all you need in the box is text and you do not need to combine elements or change the appearance of part of the text (for example, to make one word boldface).

![Form Box Properties]

Click the **Enlarge** button to open a larger, resizable text editor. This can be helpful when typing lengthy fixed text.
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. Be careful if you combine fixed text with field information, because the fixed text will appear even if the field is empty. For example, if you place Written by in front of the Author field, Written by will appear even if the Author field is empty. To avoid this situation, make Written by added text, instead of fixed text, by specifying it on the Added Text subtab on the Format tab of the Form Box Properties dialog box (Tools>Box Properties>Format>Added Text).

Content items are automatically separated by spaces by default, so you do not have to include a space before or after fixed text.

**Tip!** If you do not want these spaces to appear, select the Paragraphs tab and clear the Separate items or entries with spaces check box. If you want to combine punctuation with space separation, use beginning or ending text (Tools>Box Properties>Format>Added Text). To specify punctuation, you should use added text rather than fixed text.

### Adding Text and Punctuation to Field Information

To add text and punctuation to a field in a form, you can define it as fixed text, added text, or as a label. Each method has its own benefits.

<table>
<thead>
<tr>
<th>If you want…</th>
<th>Use:</th>
<th>Fixed text</th>
<th>Added text</th>
<th>Box label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text to disappear if the field is empty</td>
<td><strong>✓</strong></td>
<td><strong>✓</strong></td>
<td></td>
<td><strong>✓</strong></td>
</tr>
<tr>
<td>No space between text and the field</td>
<td>✓**</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Text to be a different font or color than the field</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>The additional text to be visible in an Edit form</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Text and fields for multiple boxes to be aligned</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

* The 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 Paragraph tab of the Box Properties dialog box.

### When to Use Fixed Text

Use fixed text for text that should always appear, such as the title of a printed report or instructions on a form. Also use fixed text when you want the text to be a different font from the other box contents and using a label is not appropriate. In the following example, the fixed text Record ID: is a normal font, while the Record ID field is bold:

**Record ID: 0123**

A box that contains fixed text will never disappear (even if its minimum height is set to zero), because it will never be empty.

To add punctuation, use added text instead.
**When to Use Added Text**

Use added text (Tools>Box Properties>Format>Added Text) to add text or punctuation that appears only when the field contains information. When the field is empty, the added text will not appear. Compare this to fixed text, which always appears. Added text has the same font as the content item it modifies. If this is a problem, use fixed text or a box label instead. Note that added text does not appear in the Edit window. For more information, see “Adding Text and Punctuation and Separating Multiple Entries” on page 249.

**When to Use Labels**

Use labels (choose Tools>Box Properties>Labels) to identify what is in a box. Labels are especially useful for Edit forms when one or more of the following conditions exist:

- The field is the only content item 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 the label text outside the box border, if a border is present.

If you use a box label to add text to a form, and the minimum box height is zero, the label will disappear when the field is empty (except in the Edit window, where empty boxes do not disappear). For more information, see “Adding labels, borders, and scroll bars to form boxes” on page 237.

**Prompted Text**

Prompted text is a question or an instruction that appears when you use the form. The user’s response to the prompt will appear in the report. To add prompted text, select the Prompted text option button on the Text subtab and type the prompt that you want users to see. For example, type Enter the distribution list for this report. Click Add.

Tip! If you want the response to appear on every page of a printed report, use a box in the Margin Area.

When the report is used on the desktop, the Information Needed dialog box will open.

![Information Needed: Display](image)

prompted text

user’s response
The user’s response will be included in the report when it is displayed, printed, written to a file, sent as EMail, and so forth. Note that prompted text is applicable to desktop use only and is not used with *WebPublisher* products.

**Tip!** You can add beginning text (choose **Tools>Box Properties>Format>Added Text**) in front of the prompted text. In the report shown below, the words **Distribute to:** are beginning text.

<table>
<thead>
<tr>
<th>Product List</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Distribute to:</strong> A. Beattie, G. Clinton, D. Julian</td>
</tr>
<tr>
<td>1. <strong>Aluma Streetster 82</strong> (version 1.0A) #2004 1099</td>
</tr>
<tr>
<td>Only 87 Streetsters were ever manufactured, making it the pick of the litter in even the largest collections. Today’s going price exceeds $5,000. For the rear driven, the Streetster is powered by a Cherry 330 cc with iron block and heads. It boasts a U/C electronic engine-control system with post-injection. The final-drive suspension is a twin-axle rear held by 2 trailing links and 1 diagonal tube, red suspension, and east red body. The body has back, simple lines that give the car a sleek, almost pristine look.</td>
</tr>
<tr>
<td><strong>Scale:</strong> 1:32</td>
</tr>
<tr>
<td><strong>Controlled by:</strong> Stick/s with remote</td>
</tr>
<tr>
<td><strong>Colors Available:</strong> Yellow, Yellow with flame, Red, Green, White</td>
</tr>
<tr>
<td>2. <strong>The Desert Storm</strong> (version 2.0A) #2500 1082</td>
</tr>
<tr>
<td>Introduced in Australia, the Desert Storm is part motorcycle, part car, part tank. The popularity of this sport-utility vehicle quickly grew to other parts of the world and became a popular</td>
</tr>
</tbody>
</table>

**Calculations Subtab**

Calculations operate on numeric and date information. You can add, subtract, multiply, divide, compute averages, subtotals, grand totals, and find the highest or lowest value in a field or group of records. To specify a calculation, select the Calculations subtab on the Contents tab and type a formula 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 automatically. Click **Add**. Then, when you use the form, DB/TextWorks performs the calculation and displays the results in the box.

**Tip!** Use calculations in the Record Area. Do not use them in the Margin Area.
A few examples of the many types of calculations you can use with DB/TextWorks appear in the following table. Note that case is not significant when you type a formula. For example, if a field is called *Date*, you can refer to it as *date*. (Capitalization is used in the following examples for clarity only.) Field names that include spaces require quotation marks around them.

<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 (for example, 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 formats selected in the Regional settings of the Windows Control Panel and the options you select for this content item using **Tools>Box Properties>Format>Numbers, Dates**.

**Tip!** 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 or sort computed information, edit the textbase structure to add a Computed Number or Computed Date field.

A calculation can include the following components, which are explained on the following pages:

- Field names, including secondary fields
- Numbers
- The current system date (@DATE)
- Field Functions (FCOUNT, FTOTAL, FMIN, FMAX, FAVG)
- Record Functions (COUNT, TOTAL, MIN, MAX, AVG)

To connect components in a calculation (such as two field names), use the following symbols:

- for addition (*cost+shipping*)
- for subtraction or to represent negative numbers (*gross-net*)
- for multiplication (*cost*.15)
- for division (*cost/12*)

In complex calculations, you can include parentheses for clarity, such as:

* (price-cost)/(number*12)
Using Fields in Calculations

A calculation can include any field from the primary or secondary textbase that contains a number or date. For example, this calculation determines how many units are on backorder by subtracting the number of units shipped from the number of units ordered:

ordered - shipped

Use single or double quotation marks around field names that start with numbers or contain spaces, such as '24' or "date sold".

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 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.

Tip! Only the first entry in a multiple-entry field is used in a calculation. To compute across multiple entries, use a Field Function. For example, use FTOTAL(quantity) to total all the entries in the Quantity field in the current record.

To indicate a secondary textbase field, use the @ symbol field name convention explained in Chapter 8, “Linking Textbases.” The following example computes the customer discount by multiplying a field in the primary textbase (Price) by the discount amount in a secondary textbase:

price*discount@custID

Include quotation marks if the field name includes spaces. Do not include the @ sign inside quotation marks. For example, this is correct:

price*"customer discount"@"customer ID"

Using Numbers in Calculations

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 number. If Sold is a Date field (or an Automatic Date or Computed Date field), the calculation adds 30 days to yield a date.
**Using Dates in Calculations**

To include dates in a calculation, reference a Date, Automatic Date, or Computed Date field ("date sold"+1) or use @DATE to represent the current date. If you subtract two dates, the result is a number of days. If you add or subtract a number of days from a date (bought - 30), the result is a date. Do not include a static date as part of a calculation. For example, "12-10-98"+1 is not a valid calculation.

Type @DATE in the Calculation formula box if you want to show the current system date. Think carefully before 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 that a book is due 14 days after the date borrowed.

**Using Field Functions in Calculations**

Use a Field Function for summary calculations on the entries in a field in the current record. You usually put a Field Function in a Record box. Follow a Field Function by the name of a field in parentheses. For example, FMIN(price) finds the lowest value in the Price field in the current record.

A Field Function computes a value based on the entries in a field in a single record. These functions can be used in a calculation defined in a form, or in the formula for a Computed field in the textbase structure.

<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 can be averaged (not dates).</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.</td>
</tr>
<tr>
<td>FTOTAL(field)</td>
<td>Adds all entries in the specified field in the current record. Only numbers can be totaled (not dates).</td>
</tr>
</tbody>
</table>
Using Record Functions in Calculations

Unless combined with a Field Function, a Record Function uses only the first entry in a particular field across a group of records. Record Functions only make sense when used in a report, because they operate across multiple records in a group. A group means all of the records in the current report or Sort Level. For more information, see “Where to Place a Calculation” on page 230.

Follow a Record Function with a parenthetical expression. For example, MIN(cost) finds the lowest value in the first entry in the Cost field in all records in the group. Unlike Field Functions, parenthetical information is not limited to a field name. Record Functions can be followed by an entire expression, such as AVG(FMAX(price) - FMIN(price)).

Record Functions only use the first entry of a field in each record, unless they are combined with a Field Function. For example, TOTAL(price) only totals the first entry in each record’s Price field, but 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 the specified field across a group of records (numbers only).</td>
</tr>
<tr>
<td>COUNT(field)</td>
<td>Counts the non-zero numbers in the first entry of the specified field, across 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 specified field across a group of records.</td>
</tr>
</tbody>
</table>

Note: All of 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 non-zero numbers only.

Finding the Lowest Value

Use FMIN or MIN to find the lowest number or earliest date, within the guidelines presented in the Field Function and Record Function tables shown previously. Here are some 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.

228 Chapter 5: Working with Forms
Finding the Highest Value

Use FMAX or MAX to find the highest value or most recent date, within the guidelines presented in the Field Function and Record Function tables. Here are some examples:

- $\text{MAX("order date")}$ 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. Notice that a field name that contains a space must be surrounded by quotation marks.
- $\text{FMAX(contact)}$ determines when a customer was most recently contacted.
- $\text{MAX(FMAX(price))}$ finds the highest value in any entry in the Price field in the group of records.

Finding Averages

Use FAVG or AVG to determine averages, within the guidelines presented in the Field Function and Record Function tables shown previously.

**Tip!** The calculation $\text{AVG(field)}$ finds the average value across all records—even those containing no number or the number zero in the specified field. To average only numbers greater than zero, use $\text{TOTAL(field)}/\text{COUNT(field)}$.

<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</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>in a field in a group of records</td>
<td></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 FCOUNT to count the number of entries in a field in the current record. For example, if a record has three entries in the Author field, FCOUNT(author) will return 3.

Use COUNT to count how many records start with a non-zero number in the specified field in a group of records. Fields that do not start with a number will not be counted. To count all records (even if they do not start with a number), use the convention COUNT(1).
Use \texttt{COUNT(1)} in a Sort Footer box to count all records in that Sort Level. Use \texttt{COUNT(1)} in a Report Footer box to count all records in the report.

\textbf{Note:} In an exploded sort, \texttt{COUNT(1)} counts each occurrence of a record (a record may appear more than once in the report), so the number of records counted is almost always greater than the number of records in the set.

Here are some examples:

- \texttt{COUNT(price)} counts the number of records that start with a non-zero number in the first entry of the \textit{Price} field. The result is a number, such as 12. If the \textit{Price} field in a record starts with text or does not contain a number, it is not counted.
- \texttt{COUNT(1)} counts all records.
- \texttt{FCOUNT(author)} counts the number of entries in the \textit{Author} field in the current record.
- \texttt{TOTAL(FCOUNT(author))} counts the number of entries in the \textit{Author} field in all records in the group.
- \texttt{COUNT(FCOUNT(author))} tells you how many records have at least one author.

\textbf{Producing Summary Calculations}

You typically place subtotals in a Sort Footer box and grand totals in a Report Footer box. Here are some examples:

- \texttt{TOTAL("total price")} in a Sort Footer box totals the price of each order in the corresponding Sort Level group. For example, you can calculate the total price of all orders in this region.
- \texttt{TOTAL("total price")} in a Report Footer box totals the price of all orders in the report.
- \texttt{AVG(@DATE-"invoice date")} in a Report Footer box shows the average age of receivables.
- \texttt{COUNT(1)} in a Sort Footer box shows how many records are in that Sort Level group.

For more information about subtotals and grand totals, see “Adding Sort Footers” on page 272 and “Adding Report Footers” on page 274.

\textbf{Where to Place a Calculation}

You typically place a calculation in the Record Area of a form, in one of the three box types: Record box, Sort Footer box, or Report Footer box. For more information about the different box types, see “Areas of a Form” on page 275.

\textit{Record Box}

Use a Record box to calculate information in the current record. For example, \texttt{cost+shipping} will add the first entries in each of those two fields, to display a different value for each record. To use all entries in a particular field in the current record, use a Field Function in a Record box. For more information about Record boxes, see “Areas of a Form” on page 275.
Sort Footer Box
Use a Sort Footer box for subtotals or other summary calculations on records with a particular Sort Key. Record Functions in a Sort Footer box operate within the current sort level (on all records that share the Sort Key at the specified sort level). For example, if \( \text{TOTAL(cost)} \) is placed in a Sort Footer box, and the report is sorted by the \textit{Product} field, the calculation finds subtotals by product. The result might be $300 in the Widgets category and $500 in the Gadgets category. For more information about Sort Footer boxes, see “Adding Sort Footers” on page 272.

Report Footer Box
Use a Report Footer box for grand totals or other summary calculations on all records in the report. When you place a calculation in a Report Footer, it appears only once at the end of the report. Record Functions in a Report Footer box operate across all records in the set. For example, if \( \text{TOTAL(cost)} \) is placed in a Report Footer box, the result is a grand total. For more information about Report Footer boxes, see “Adding Report Footers” on page 274.

Specifying form box height, width, and anchoring
When designing a form, you can decide how much information will be visible in a box, how the boxes look on the form, and how they interact with each other.

Use the Position tab on the Form Box Properties dialog box (choose Tools>Box Properties>Position) to determine the height, width, and anchoring attributes for a form box.

Changing form box height

\textbf{Note:} The following information is also applicable to script input boxes.

An important part of designing a form is deciding the height of each form box. Form box height determines how much content is visible. To accommodate variable amounts of information for each record, a form box can shrink or grow within the minimum and maximum lines you specify. When the minimum and maximum lines are the same, the box remains a fixed height, regardless of how much information it contains. Usually, this is not recommended unless you are trying to copy the look of a pre-printed form.

\textbf{Minimum height}

The \textbf{Minimum height} setting determines how small a form box can shrink. A form box will never be shorter than the value you specify. For example, if you specify two lines, the form box will always be at least two lines high, regardless of how much or how little information the form box contains. If you set \textbf{Minimum height} to zero, the form box will disappear when empty, unless it is an editable box on an Edit form.

\textbf{Maximum height}

The \textbf{Maximum height} setting determines how large a form box can grow. For example, if you specify four lines, the box will never display more than four lines of information.
If you want a box to display all of its information, even if it is several paragraphs or pages long, select **unlimited**. This is especially important in displayed and printed reports, where you cannot scroll to the information that is not visible.

In the Display and Edit windows, a box will never be taller than the window, regardless of the **Maximum height** setting.

**Note:** Label forms limit printed information to the label size, regardless of the **Maximum height** setting.

As you decide on the maximum height of a form box, consider the purpose of the form. A summary report that shows records found by a search should probably keep the default setting. Here are some reasons why you may want to limit form box height:

- To ensure the form will not exceed the page or screen size.
- To limit the amount of information in a summary report.
- To truncate long company names when printing mailing labels.
- To prevent a form box from overlapping a box below it that is anchored to the form. (If boxes float, overlapping is not a concern.)

### Hiding empty form boxes

To hide an empty form box, set **Minimum height** to zero. When the form is used, the form box will disappear when it is empty. You will not see its label, border, or scroll bars. For example, if you place the **Description** field in a form box and that field is empty for a particular record, the form box will disappear completely in that record. Any floating form boxes below it will move up automatically.

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 them.

**Note:** While you are working in the Form Designer, form boxes never disappear. If they did, you could not edit them. To see how a form looks with disappearing form boxes, choose **Display>Preview**, and display a record with an empty field in a box where the **Minimum height** setting is zero.

There are several reasons why a form box may be empty:

- It may contain a field that does not have any entries.
- It may contain a field that is hidden by a password.
- It may contain 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:

- **Forms used in the Display or Report windows.** Hide empty form boxes so the user does not have to look at blank lines.
• **Forms used in a printed report.** Hide empty form boxes to make a printed report shorter and more legible.

   **Note:** In some cases, you may want to show an empty form box to draw attention to the lack of content.

• **Forms used in the Edit window.** Empty form 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 form boxes so users can enter information when creating or editing a record.

• **Any form type.** Hide empty form 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.

**Changing form box width**

**Note:** The information in this section also applies to text and script input boxes.

Make each form box wide enough to display its contents without unintended wrapping. Information wraps to the next line when it reaches the right edge of a box, as shown in the form box below.

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>This Mustang has been rated the most distinctive in looks. Its lower top slims the chunky profile and accents the sculpted lower body. It has a lined</td>
</tr>
</tbody>
</table>

**To change form box width**

Use either of these methods to change form box width:

• Select one box and place the cursor over the left or right box handle. The cursor becomes a double-headed arrow. Drag the box handle to the left or right.

   **Note:** If multiple boxes are selected, you cannot use the mouse to change the width.

• Select one or more boxes, choose **Tools>Box Properties>Position** and change the value in the **Width** box.

   **Note:** Use **Tools>Form Properties>General** to specify the measurement unit for the Width settings on all Box Properties dialog boxes.
Floating and anchored form boxes

Note: The information in this section applies to all box types.

Form boxes in DB/TextWorks can contain variable-length fields, so a field in a form box may be very short in one record and very long in another. For example, a Description field may contain just a few words about John Smith but three paragraphs about Sue Jones. Because text boxes grow with the amount of text they contain, the size of these boxes can vary as well. To accommodate variable information, form, picture, and script input boxes in a form can shrink or grow within the limits that you specify. As the height of a box changes, it can affect the position of the boxes below it. You can specify whether each box should be floating, anchored to the form, or 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.

Floating boxes

A floating box is one whose vertical (up or down) position varies, depending on the height of the box(es) directly above it. Floating boxes move up or down automatically, depending on the amount of information that is displayed in the box above them. As one box grows or shrinks, the floating boxes beneath it automatically float down or up. In most cases, let all boxes in the Record Area float (they do, by default). This ensures that information in one box will never overwrite information in another box.

![Box B floats down when box A grows.](image)

To make a box float

1. In the Form Designer, select one or more boxes.
2. Choose Tools>Box Properties to open the Box Properties dialog box.
3. On the Position tab, select the Floating option button in the Anchoring group.
4. Click Apply.
**Anchoring 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. When you anchor a box to the form, the box never moves. This can be useful when laying out information for a pre-printed form, such as an invoice, or for printed labels on multiple label stock. 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.

**Tip!** Because the position of an anchored box is fixed to the form, information in the box may be obscured if a box above it grows. To avoid this situation, be sure to limit the maximum height of any boxes above the anchored box.

---

If box C is anchored to the form, and box A or B expands, information could be obscured. To avoid this situation, limit the maximum height of boxes A and B.

---

*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 Box Properties dialog box.
3. On the Position tab, select the **Anchor to form** option button in the Anchoring group.
4. Click **Apply**.
Anchoring to another box

You may want a box to be anchored to another box, so the two boxes move together when the form is used. Anchoring a box to another box is useful if you want two or more boxes to float up or down together. This keeps the boxes aligned or in the same relative position, even as the amount of information above or below those boxes shrinks or grows. For example, anchor box C to box B to ensure that both boxes move up and down together. When box A grows, both box B and C move down.

Box C is anchored to box B, so they both move down when box A grows.

Tip! Toggle View>Boundaries to show or hide the anchor-to-box arrows in the Form Designer. Showing the box boundaries will help you visualize the anchor-to-box relationships.

Anchoring a box does not restrict its size. It can still shrink and grow vertically. Also, the box to which you anchor a box can be a floating box, anchored to the form, or anchored to another box. For example, in the above illustration box B is a floating box.

You can anchor a box to another box only if both of the following conditions are met:

- The box you select must be to the right of the box to which you want to anchor it. For example, in the preceding illustration, you could select box C and anchor it to box B, but you could not select box B and anchor it to box C.
- The boxes must be next to each other. The boxes cannot be stacked above one another.

To anchor a box to another box

Tip! You can anchor boxes and align them along their top boundaries in one step by selecting them and choosing Tools>Align Boxes>Anchor and Top instead of using the following steps.

1. In the Form Designer, select the box that you want to anchor.

   Tip! Always select the right-most box and anchor it to the box immediately to its left.

2. Choose Tools>Box Properties to open the Box Properties dialog box.

3. On the Position tab, select the Anchor to box option button in the Anchoring group.

   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.
4. Select the box you to which want to anchor the currently selected box from the drop-down list. Only boxes to the left of the current box appear in the list. Boxes are identified by their labels. Boxes without labels are identified by the first content item, shown in angle brackets, such as <field=Product>.

5. Click Apply.

**Adding labels, borders, and scroll bars to form boxes**

Each form box in a form can have a label, borders, and scroll bars.

To add labels, borders, and scroll bars

**Note:** The information in this section also applies to script input boxes.

1. Select one or more form boxes.
2. Choose **Tools>Box Properties** to open the Form Box Properties dialog box.
3. On the Labels tab, specify whether to show a label, border, or scroll bar by selecting the appropriate check boxes. Each option is explained on the following pages.

**Borders**

A border is a solid box around the contents. You can show or hide the border.

**Scroll bars**

When enabled, a vertical scroll bar appears on the right side of the form box. This lets users scroll easily through the information in a form box, even if the form box height is limited to just a few lines. Note that scroll bars only appear if you select the **Scroll bar** check box and the box height cannot accommodate the information contained in the box.

**Note:** Horizontal scroll bars are not needed, because information always wraps at the right edge of a box.

If you hide scroll bars on a Display or Edit form, users can still click in a box and use keyboard keys to scroll through the information. Scroll bars appear only in the Display and Edit windows, not in the Report window or on printed reports.

**Labels**

**Tip!** Before designing a new form, set the default font attributes for labels by choosing **Tools>Options>Display** and clicking the **Set Label Font** button. Saved forms are not affected.

Labels identify form boxes. As you decide whether to label form boxes, consider the purpose of the form. In forms used for the Edit window, labels can provide instructions, such as **Type last name only**. Note that such a label would not make sense if you used the form for another purpose, such as record display.

If you will not be using labels, it is most efficient to remove them early in the form design. When you turn off labels, form box positions are adjusted automatically. For example, if a label is at the left of a form box and you remove the label, the form box moves to the left.
When you select the **Label** check box on the Labels tab, the label text is automatically set to the first field name in the box. You can accept the default label, or change it by typing what you want in the **Label** box.

**Note:** You cannot change label text using the **Label** box if multiple boxes are selected or if the **Label** check box is not selected.

Specify where a label appears relative to the box by selecting an option (Top Left, Top Center, Top Right, or Left) from the **Label position** drop-down list.

**Setting Label Justification and Width**

If you select **Left** from the **Label position** drop-down list, you can set label justification and width. There are three options for justification: **Automatic**, **Left** and **Right**.

Select **Left** from the **Label position** drop-down list to enable the **Label justification** drop-down list.
Automatic
This is the default setting for label justification. The form box begins immediately after the label, and the label width varies to accommodate the label text. If you do not like the “ragged” look, select Right or Left from the Label justification drop-down list and specify the same label width for all boxes.

<table>
<thead>
<tr>
<th>Book Title</th>
<th>Trout Fishing in America</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author</td>
<td>Richard Brautigan</td>
</tr>
</tbody>
</table>

Label position setting is **Left** and Label justification setting is **Automatic**.

Left
This justifies a label to the left. Type a value in the **Label width** box to specify the width of the label.

<table>
<thead>
<tr>
<th>Book Title</th>
<th>Trout Fishing in America</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author</td>
<td>Richard Brautigan</td>
</tr>
</tbody>
</table>

Label position setting is **Left** and Label justification setting is **Left**.

Right
This justifies a label to the right. Type a value in the **Label width** box to specify the width of the label.

<table>
<thead>
<tr>
<th>Book Title</th>
<th>Trout Fishing in America</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author</td>
<td>Richard Brautigan</td>
</tr>
</tbody>
</table>

Label position setting is **Left** and Label justification setting is **Right**.

**Tip!** When justifying labels to the **Right** or **Left**, be sure to type a value large enough to accommodate the longest label. If you specify an inadequate width for a long label, the label text will be cut off.

**Setting Label Font and Color**
Choose **Tools>Box Properties>Labels** and click the **Set Font** button to specify a font, style, size, and color for the label text. The fonts that appear in the selection list depend on the currently selected printer. Printer fonts are shown in the Font list preceded by a printer icon. If you choose a printer font and then use the form to print to a different printer that does not support that font, the report may not appear as you expect. To change your printer selection, choose **File>Print Setup**.
Formatting paragraphs in form boxes

A paragraph is a body of text ending in a line break. An entry always consists of at least one paragraph. A long entry may contain several paragraphs. The line break that defines a paragraph may be:

- Part of the data (inserted using the Enter key)
- Text formatting (choose Tools>Box Properties>Format>Added Text)
- Paragraph formatting (choose Tools>Box Properties>Paragraphs)

Before you start formatting paragraphs, you may find it helpful to:

- Define box contents (choose Tools>Box Properties>Contents).
- View actual record information. On the Display menu, if there is a View Records option, select it. If it is present, but unavailable, you have to perform a search first. If the menu has a View Content option, you are already viewing records.

To apply paragraph formatting to a form box

1. Select a form box and choose Tools>Box Properties>Paragraphs.
2. Select an option from the Paragraph breaks drop-down list to control how multiple field entries or multiple content items appear in a box.
   - No added paragraph breaks. Ensures that no breaks are added between items in a form box or entries in a field.
   - Make each item or entry a paragraph. Adds a break after each entry and item in the form box.
   - Make each word a paragraph. Places each word on a separate line.

   *Note:* The options in the Paragraph breaks drop-down list are explained in more detail on the following pages.

3. Select an option (Left, Center, or Right) from the Justification drop-down list to specify paragraph justification.

   *Note:* The options in the Justification drop-down list are explained in more detail on the following pages.

4. Type a value in the Indent first line by box.
5. Click Apply.

   *Note:* All options specified above will affect all of the paragraphs in the selected box.
**Paragraph Breaks**

Use the options in the **Paragraph breaks** drop-down list (paragraph breaks are also known as line breaks or carriage returns) to control how multiple field entries or multiple content items appear in a 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 line break, which looks like a blank line after the text.

---

**No Added Paragraph Breaks**

Choose **No added paragraph breaks** to ensure that no breaks are added between items in a form box or entries in a field. For example, three entries in a field would appear like this:

*Concrete* *Stucco* *Brick*

To add a comma or some other text between entries when using **No added paragraph breaks**, choose **Tools>Box Properties>Format>Added Text** and specify separator text. For example, a comma and space were used below:

*Concrete, Stucco, Brick*
Separate items or entries with spaces

When you choose **No added paragraph breaks** from the **Paragraph breaks** drop-down list, this option becomes enabled. Select the **Separate items or entries with spaces** check box to specify whether items in a paragraph should be separated with spaces. This is the default choice. If separator text is specified as added text between entries, this option is ignored. (For more information about added text, see “Adding Text and Punctuation and Separating Multiple Entries” on page 249.) When this option 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 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 and a space to the **Subtitle** field as beginning text (Format>Added Text).

School Reform: What It Means to You and Your Child

The colon is placed before the **Subtitle** field as beginning text and the **Separate items or entries with spaces** check box is cleared.

**Tip!** This option is also very 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

Choose **Make each item or entry a paragraph** to add a break after each entry and item in the form box. This can be useful for generating a list, such as the example below:

Concrete
Stucco
Brick

Make Each Word a Paragraph

Choose **Make each word a paragraph** to place each word on a separate line. This is useful for printing information such as Library of Congress classification numbers in a columnar format. To keep words together on a line (such as Copy 2, below), connect the words with a non-breaking space character by pressing **Alt+0160** (on the numeric keypad).

| QA | AN EXAMINATION OF THE FUTURE |
| 25 | OF TELECOMPUTING Prepared by James, |
| J65 | Harold C.; Smith, Charles K. |
| E96 | Johnson, Mary |
| Copy 2 | [Rept. 91119] |

Justifying Paragraphs

The justification that you select is applied to all paragraphs in the form box.

- **Left justification** is probably the most common.
- **Right** is often used for page numbers and columns of numeric data.
- **Center** is often used for titles and headings.

**Note:** You can justify text in text boxes by selecting the text box, choosing **Tools>Box Properties>Font, Color**, and selecting an option from the **Justify text** drop-down list.

Indenting Paragraphs

To indent the first line of each paragraph, type a positive value in the **Indent first line by** box. Blocks of text (such as long paragraphs with no added paragraph breaks) often look best this way. To outdent the first line (that is, to use hanging indentation), type a negative value.

This example shows regular indentation. To get this effect, type a **positive** value for indentation.

This example shows hanging indentation. To get this effect, type a **negative** value for indentation.
Hanging indentation is often used for lists (each item or entry is a paragraph), especially numbered lists (choose Tools>Box Properties>Format>Numbering).

1. This numbered list does not have any indentation.
2. This numbered list does not have any indentation.

1. This numbered list uses a negative value for indentation.
2. This numbered list uses a negative value for indentation.

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 make each of them a different font and color. However, form box text formatting is not just about fonts and colors. You can add text, such as the words Written by in front of the Author field, and punctuation, such as parentheses, around the Date field.

Note: When you use a form in the Edit window, formatting (except for font) disappears, so that the record information and entry boundaries are easy to identify.

Text formatting is dependent on the box contents. When the contents disappear (for example, if a field is empty), the formatting disappears too. This means you will not have unwanted formatting around an empty field:

The parentheses are formatting around a Date field. When the Date field is empty, its formatting disappears—just what you want!

Compare this to fixed text (box contents), which always appears, even if the field is empty. (For example, you would have an empty set of parentheses in the above illustration.) See “Fixed Text” on page 221 for more information.

To format form box text

1. In the Form Designer, select one or more form boxes.

2. Choose Tools>Box Properties>Format.

3. Select a content item from the Contents list. For example, to format the Date field, select it from the list. To affect all items in the box, select <all>.

4. Use the subtabs to specify the formatting options you want:
   - Numbering. Number multiple entries or box content items.
   - Font, Color. Select font, including size, color, and case. Select box background color.
   - Numbers, Dates. Format numbers, currency, and dates.
   - Added Text. Add text, punctuation, and entry separators.

5. Click Apply.

The following sections describe how to use the formatting options on these subtabs.
Numbering items within a form box (Item numbering)

Use the options on the Numbering subtab to number entries and/or items in a form box.

Use the Item numbering drop-down list (choose Tools>Box Properties>Format>Numbering) to number the contents within a form box. (Do not confuse this with the RECORD NUMBER variable on the Variables subtab on the Contents tab, which numbers the records in a report.) Item numbering always starts with 1 if numbered numerically, or with A if numbered alphabetically. The number/letter is followed by a period and a space. Here is an example of numbering on a box that contains two entries in the Name field:

1. Chris Budd  
2. Sue Jones

Numbers appear even if there is only one entry or item:

1. John Smith

You can specify the following numbering options:

- None (entries are not numbered)
- Arabic numbers (1, 2, 3)
- Upper or lower case Roman numerals (I, II, III; or i, ii, iii)
- Upper or lower case letters of the alphabet (A, B, C; or a, b, c)

Continuous Numbering Across Content Items

The Continuous numbering across content items check box is enabled if you specify something other than None in the Item numbering drop-down list.

If a form box contains multiple content items (for example, two or more fields), you may want to consider continuous numbering across content items (see examples below).

Example 1

A form box contains two fields, Cats and Dogs, each of which has multiple entries. The Cats field is numbered, the Dogs field is numbered, and the Continuous numbering across content items option is selected for the Dogs field. Make each item or entry a paragraph (to create a list) is selected from the Paragraph breaks drop-down list on the Paragraphs tab.

1. Siamese
2. Tabby
3. Tiger
4. German Shepherd
5. Great Dane
Example 2
Same as Example 1, except the Continuous numbering across content items check box is cleared:

1. Siamese
2. Tabby
3. Tiger
1. German Shepherd
2. Great Dane

Changing Text Font and Color, and Box Background Color
Use the options on the Font, Color subtab to change text attributes and the background color of form boxes.

- **Set Font.** Click the Set Font button to access the Font dialog box to specify the font, style, size, and color you want. TrueType fonts are indicated by a double-T icon. Printer fonts are shown with a printer icon. OpenType fonts are indicated by an O icon.

  **Note:** The fonts that appear in the Font selection list depend on the selected printer. Printer fonts are preceded by a printer icon in the Font list. If you choose a printer font and then use the form to print to a different printer that does not support that font, the report may not appear as expected. To change your printer selection, choose File > Print Setup.

- **Upper case.** Select the Upper case check box to make the selected content item appear in all capital letters.

- **Background color.** Select the Background color check box and click the Select Color button to specify the background color, including custom colors, you want for the form box.

Formatting Numbers, Currency, and Dates
Use the options on the Numbers, Dates subtab to determine how numbers, currency, and dates appear in a form.

The formatting options for numbers are enabled only if the selected content item is not a date (for example, Date field, DATE variable, Date calculation). The options affect how all numbers will appear in that field or content item.

**Note:** The characters used for the decimal and thousand separators are determined by the number format specified in the Regional settings of the Windows Control Panel.
Number format

Use the **Number format** drop-down list to specify the following formatting options:

- **None.** Numbers appear exactly as they were entered in the textbase.
- **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. (See below for more information about this check box.)

- **Number.** Numbers appear according to the options you specify:
  
  - **# of decimal places.** Type a number to indicate how many decimal places to display after the decimal point. For example, type 2 to cause the number 35.5 to appear as 35.50. Numbers will be rounded when necessary. For example, if you type 0 in the **# of decimal places** box, 25.4 becomes 25. The default value is zero.
  
  - **Negative numbers use.** Select an option from the drop-down list to indicate how you want negative numbers to appear: with a leading minus sign, a trailing minus sign, or enclosed in parentheses.
  
  - **Thousand separators.** Select this check box if you want numbers to include a thousand separator, such as a comma, in the appropriate place. For example: 1,523. Note that the character used as the thousand separator is specified in the Regional settings of the Windows Control Panel.
  
  - **Leading zero in decimal.** Select this check box if you want a zero to appear before a number with only decimal digits, for example .75 appears as 0.75.
  
  - **Omit text.** Select this check box to hide trailing text (text that follows the number). If there is no number in the field—only text—a zero appears in the form box. For example, if the field contains the word **None**, a zero appears in the form box instead of the text. If you omit text when using **Currency** formatting and the field contains text only, zero currency ($0.00) appears in the form box.
**Date format**

The date format options are enabled only if the selected content item is a Date field, a Computed Date field, an Automatic Date field, the DATE variable, or a calculation that results in a date. If you select any other content item type, or if you select multiple boxes or <all> from the Contents list, number formatting options appear. You can format only one date item at a time.

Use the **Date format** drop-down list to specify the following options:

- **None.** Dates appear exactly as they were entered into the textbase. The DATE variable uses the short date format (for example, 7/8/2003).
- **Short.** Dates appear in numeric format (for example, 7/8/2003).
- **Long.** Dates appear in the long date format (for example, Tuesday, July 08, 2003).
- **Long without day.** Same as above, but omits the weekday (for example, July 08, 2003).

Another **Omit text** check box (located next to the **Date format** drop-down list) is enabled when an option other than **None** is selected from the **Date format** drop-down list. Select this check box to hide trailing text. If there is no recognizable date at the beginning of the field—only text—an asterisk will appear in the form box.

An example below the **Date format** drop-down list shows you how dates will appear. Note that the formats are based on the format selected in the 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 Wednesday, 21 March 2003) and the **Short** date format would display numerically (such as 21/03/2003). Use the Windows Control Panel to specify exactly how you want long- and short-format dates to appear.

248 Chapter 5: Working with Forms
Adding Text and Punctuation and Separating Multiple Entries

Use the options on the Added Text subtab to add text or punctuation to the beginning or end of a content item, and to add punctuation or text between multiple entries. Added text appears before or after the box contents when the form is used. In the following example, the words *Written by* are beginning text in front of the *Author* field:

![Image of Form Designer interface showing Added Text properties]

Added text has 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 the *Author* field is empty, the words *Written by* will not appear.
Beginning text
Select an item from the Contents list to which you want to add beginning text. Type the text or punctuation you want to appear before the content item in the **Beginning text** 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 **Beginning text** box automatically. Include a space at the end of the beginning text if you want a space before the information that follows.

Beginning text has the same font attributes as its content item. For example, if the **Author** field is *Helvetica Italic*, the beginning text is also *Helvetica Italic*.

If a field contains multiple entries, beginning text precedes only the first entry. If beginning text is added to an item that is numbered, the numbering starts after the beginning text. (To align numbered items in a list in this situation, press **Enter** at the end of the beginning text.)

**Tip!** You can use beginning text to add a left parenthesis in front of an item, and ending text to add the right parenthesis after the item.

Ending text
Select an item from the Contents list to which you want to add ending text. Type the text or punctuation you want to appear after the content item in the **Ending text** 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 **Ending text** box automatically.

Use ending text to add text or punctuation immediately after a content item. Ending text is typically 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 text has the same font attributes as its content item.

Ending punctuation
Select an item from the Contents list to which you want to add punctuation. Type the text or punctuation you want to appear after the last entry in the **Ending punctuation** box.

Ending punctuation is text or punctuation that appears after the last (or only) entry. A period is most typically used. Ending punctuation appears only if the content item lacks its own punctuation. If the content item already has punctuation, ending punctuation is not added. This behavior ensures that you will not get duplicate punctuation, and is what distinguishes ending punctuation from ending text (which always appears if the field is not empty).

As with any formatting item, ending punctuation takes on the same font attributes as its content item and does not appear if the content item is missing (such as an empty field).

Ending punctuation always appears before ending text.
**Separator text**

Select a field from the Contents list to which you want to add separator text. Type the text or punctuation you want as the separator text in the **Separator text** 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 **Separator text** box automatically.

Use separator text to visually distinguish between multiple entries in a field. The text you specify will follow each entry except the last. If there is only one entry, the separator text will not appear. Separator text appears only for fields, not for other content items.

**Note:** In the Edit window, multiple entries are separated by the field entry delimiter specified on the Display tab (choose **Tools>Options**).

A comma or semi-colon is typically used to separate entries when paragraph breaks are set to **No added paragraph breaks**. For example, say 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 the paragraph breaks setting. For example, if the paragraph breaks setting is **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 another space looks like this:

| Red and Yellow and Blue |

To add blank lines between entries, use a line break as the separator text (press **Enter**). If you are using **No added paragraph breaks**, press **Enter** twice. To add a line before each entry (to create a checklist), select **No added paragraph breaks**, specify an underbar (_) as beginning text, and specify a line break (press **Enter**) and an underbar (_) as the separator text.

| __ Red |
| __ Yellow |
| __ Blue |

**Note:** Leave the **Separator text** box empty if you do not want any separator between entries. A single space will appear between entries if you selected **No added paragraph breaks** from the **Paragraph breaks** drop-down list (**Tools>Box Properties>Paragraphs**) and accepted the default setting of one space between content items.

Chapter 5: Working with Forms 251
Examples of Combined Formatting

Beginning text, ending text, ending punctuation, entry separators, and paragraph breaks are often combined to format the contents of a box. Examples of combined text formatting appear below.

Example 1

The only content item is the Company field. All other information is added text (choose Tools>Box Properties>Format>Added Text). The period after the company name is ending punctuation. Note that ending text always comes after ending punctuation.

<table>
<thead>
<tr>
<th>Field</th>
<th>Beginning text</th>
<th>Ending text</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Subsidized by The Antron Group, Inc.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example 2

This form for printing labels consists of one form box that contains five fields: Name, Address, City, State or Province, and Postal Code. The Address field contains multiple entries. The box has No added paragraph breaks (choose Tools>Box Properties>Paragraphs) selected for its paragraph formatting. The breaks are created by using Enter for ending text and separator text, as shown below. Note that one space automatically occurs between the content items City, State or Province, and Postal Code. To add an extra space before the Postal Code, use beginning text. (Note that the paragraph markers shown below are for illustration purposes only and do not appear on the label or on the Form Box Properties dialog box.)

Ending text [¶] forces a line break after name.

<table>
<thead>
<tr>
<th>Field</th>
<th>Beginning text</th>
<th>Ending text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emily Roquemore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>155 Corey Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural Route 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Towson, MD 12345</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Separator text [¶] forces each entry in the Address field onto a new line.

Example 3

To present record information in the Inmagic tagged format, use a form with the following formatting:

- Use Beginning text to specify the field name.
- Use No added paragraph breaks.
- Use an Indentation of -.10 inches for each paragraph.
- Use a line break, semicolon, and space as the Separator text.
• Use a line break as **Ending text** for each field.
• Enter the dollar sign end-of-record indicator as **Fixed text** for the box contents.

**Using HTML in form boxes**

When designing a form for use on the Web with a *WebPublisher* product, you can specify how a Web browser will treat the content in form boxes.

**To select HTML settings for form boxes**

1. In the Form Designer, select a form box.
2. Choose **Tools>Box Properties** to open the Form Box Properties dialog box.
3. On the **HTML** tab, select the content item from the Contents list to which you want to apply HTML.
4. Select the appropriate option from the **Treat content item as** drop-down list:
   - **Do not alter.** Leaves the content item alone. Use this option for items 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 as it appears in the form box. The Web browser will not attempt to interpret any characters as HTML.
   - **Raw HTML.** Causes the content item, including formatting, to be passed through to the Web browser. When the form is used on the Web, the browser will attempt to interpret the content item as HTML. For this option to work, the content item must be in HTML format. For example:

     ```html
     <a href="searchform.html" target="_blank">Click here to search.</a>
     ```

     appears on the report as a hypertext link:

     **Click here to search.**

     Clicking the link will open the specified search form (**SEARCHFORM.HTML**) in a new browser window.

     The purpose of Raw HTML is to correctly interpret HTML that cannot otherwise be specified in the DB/TextWorks designers. For example, in the example above, if you did not want to open the form in a new window (that is, you remove `target="_blank"`), you do not need to use Raw HTML. Instead, treat the fixed text as a URL and specify alternate link text, as explained in the online help.
– **URL.** Turns URL entries (for example, http://www.inmagic.com) in the selected content item into hypertext jumps by adding the necessary HTML tags. The URL address entries appear as the text, as well as the target of the link, by default. For example:

http://www.inmagic.com

becomes:

```html
```

If you want to use different text for the link, use alternate link text, as explained in the online help.

– **EMail link.** Turns EMail address entries in the selected content item into “mailto” links. The EMail address appears as the text as well as the target of the link, by default. For example:

joe@mydomain.com

will be treated as:

```html
<a href="mailto:joe@mydomain.com">joe@mydomain.com</a>
```

If you want to use different text for the link, use alternate link text, as explained in the online help.

– **HTML file reference.** Enables users to launch applications on a suitably configured intranet. A content item that contains one or more file names will have its content displayed in the Web browser as a hypertext link.

If you want to use different text for the link, use alternate link text, as explained in the online help.

For more information about using HTML file references to launch applications on the Web, see the *Inmagic DB/Text WebPublisher PRO User’s Manual.*

– **Expand record link.** Designates a hypertext link from a report to a single-record display page. After a Web search, records are displayed in the Web browser as a report (multiple records that met the search criteria). For users to display just one record at a time, they need to click on a link. It is that link that you are defining. The link you specify opens a new page (a Display page, which shows detailed information about one record at a time). For best results, choose a content item that is present in each record, such as a field that holds the title of a publication. The selected item will appear as a hypertext link when the report is used. Clicking the link in the report will display an expanded version of the record.

The Display form selected in the browser determines how the expanded record appears. Be sure to design a Display form that will give users more information about a record. If you do not supply a Display form, the textbase default or Basic form is used. If you do not define an expand record link, the ability to expand a record is unavailable.
— **“See Also” search link.** Treats each entry in the field as a search term. The entry is then submitted back to WebPublisher PRO to find other records containing the same term in that field and produce the results in a formatted report. For example, turn the *Author* field into a “See Also” link that, when clicked, finds all other books by the same author. If this option is used and a book has multiple authors, each author becomes a link to his/her other works.

— **Inline image and Image link.**

  ◆ **Inline image.** Displays images as part of the page. If you choose this option, be sure the image dimensions are an appropriate size. You may have to use a graphics or conversion application to reduce the dimensions for images. You can also display images using a picture box. For more information, see “Using picture boxes on the Web” on page 263.

  ◆ **Image link.** Displays image names as hypertext links. By clicking on the link, a user jumps to that image. This option may be preferable to inline display if the dimensions of your images are too large to fit well on a page, or if you want users to be able to decide whether or not they want to see each image. (If you want to use different text for the link, use alternate link text, as explained in the online help.)

    ◆ Select the **Use file:// reference for image** check box to control where WebPublisher PRO looks for textbase image files when displaying records in the Web browser. This check box is for intranet use only. If you do not select this box, the software will expect to find the image files in the location specified for this textbase in DBTWPUB.INI. If you do select this check box, image files can be in any directory that is accessible to the Web users by means of a network file system. When the check box is selected, the software interprets the image name as a file URL. To ensure that everyone has access to the images, the image file names in the textbase records should specify the image path as a UNC path (with the server name replacing the drive letter).

— **New record link.** This option functions differently depending on the type of Web form you are designing:

  ◆ **On Report and Display forms:** Makes the content appear as a link that, when clicked, opens an empty edit screen from which you can add a new record.

  ◆ **On Edit forms:** Makes the content appear as a link that, when clicked, creates a copy of the current record and displays it in an edit screen. You can edit the copy as needed, and save it as a new record.

— **Edit record link.** Makes the content appear as a link that, when clicked, opens the current record in an edit screen. This type of link is only applicable to Report forms and Display forms used on the Web. Edit record links will not appear on Edit forms used on the Web.

— **Delete record link.** Makes the content appear as a link that, when clicked, opens the current record in an edit screen from which you can delete the record. This type of link is only applicable to Report forms and Display forms used on the Web. Delete record links will not appear on Edit forms used on the Web.

5. Click **Apply**, then **Close**.
Text Boxes

A text box used on a form acts as a special kind of form box, different in that it contains only text. A text box contains a single text item that retains its font and color attributes. Compare that to a form box, which can contain multiple items, each with its own font and color.

To add a text box, choose Edit>Add>Text Box, then use the Text Box Properties dialog box (which opens when the box is added) to specify numerous attributes for it. For an existing text box, choose Tools>Box Properties to open the Text Box Properties dialog box.

Text Box Content

A text box is a box that contains static informational or instructional text, such as the form’s title or an explanation of how to use the form. When formatting a text box, note that you generally hide the box borders.

By default, DB/TextWorks excludes text boxes from the tab order (choose Tools>Tab Order).

Use the Text tab on the Text Box Properties dialog box to type the text you want to appear on the form.

To specify text box contents

1. Add a text box, or select an existing text box and choose Tools>Box Properties. (You cannot specify text box contents if you select more than one text box at a time). The Text Box Properties dialog box opens, with the Text tab displayed by default.

2. On the Text tab, type the text you want in the Text 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 Text box on the Text tab automatically.

3. Click Apply, then Close.
Specifying text box width and anchoring
You can specify the width of a text box and you can assign the box anchoring attributes by using the options on the Position tab (choose Tools>Box Properties>Position). However, you cannot designate the height of a text box. The number of lines of text in the text box and the font size determine its height.

You specify text box width and anchoring attributes the same way as for form boxes. For more information, see “Changing form box width” on page 233 and “Floating and anchored form boxes” on page 234.

Adding borders to text boxes
A text box can have borders. A border is a visible solid box around the contents. To add borders to a text box, choose Tools>Box Properties>Font, Color. Select or clear the Show border check box, depending on your choice. You cannot add a label or scroll bar to a text box.

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 (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 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 saved forms.
To format text box text

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 options you want for your form:
   - **Set Font.** Click this button to open the Font dialog box and specify a font. For more information about changing text box formatting, see “Changing Text Font and Color, and Box Background Color” on page 246.
   - **Show border.** Select this check box if you want the text box to have a border. Clear the Show border check box if you do not want the text box to have a border.
   - **Background color.** Select this check box and click the Select Color button to specify the box background color, including custom colors, you want. Note that custom colors are retained per workstation from session to session.
   - **Justify text.** Select an option (Left, Right, or Center) from this 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.

   ![Text justification examples](image)

   **Tip!** To center a title on a form, select the text box containing the title, choose Tools>Align Boxes>Center, then justify the text within the box.

4. Click Apply, then Close.

Using HTML in text boxes

**Note:** HTML options for text boxes work the same as for form boxes, except there are fewer choices available.

1. In the Form Designer, select a text box.

2. Choose Tools>Box Properties to open the Text Box Properties dialog box.

3. On the HTML tab, select the appropriate option from the Treat text as drop-down list: Do not alter, Raw HTML, URL, EMail link, HTML file reference, Expand record link, New record link, Edit record link, or Delete record link. These options are explained in “Using HTML in form boxes” on page 253. Note that the “See Also” search link, Inline image, and Image link options do not apply to text boxes. Also, note that URL and EMail link options are appropriate only if the text box contains a single URL or EMail address.

4. Click Apply, then Close.

Chapter 5: Working with Forms
Picture Boxes

A picture box is a box that contains an image. Use a picture box to display a static image or an image referenced by an image file name 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.

To add a picture box, choose Edit>Add>Picture Box. A square, gray box appears on the form and the Picture Box Properties dialog box opens. For an existing picture box, choose Tools>Box Properties to open the Picture Box Properties dialog box. Use the Picture tab to specify the type of image you want to appear on the form (fixed image or record image).

Picture box content

The content of a picture box can be a static image or a record image. You can use picture boxes to insert images from any file or from an Image field referenced in the current record.

Keep in mind that different image types work on the desktop, the Web, and/or both environments. For example, GIF is not supported on the desktop, but JPEG files are supported in both places. See the online help for more information.

To specify picture box content

1. Add a picture box, or select an existing picture box and choose Tools>Box Properties. (You cannot specify picture box content if you select more than one picture box at a time.) The Picture Box Properties dialog box opens, with the Picture tab displayed by default.

![Picture Box Properties dialog box](image)

Different image file types work on the desktop, on the Web, or in both environments. For instance, .jpg files work in both. See the online Help for more details.
2. Select the option button for the type of image file you want to appear in the picture box:
   - **Image from file.** Places a static image from a file in the picture box, such as a company logo. Use the **Browse** button to locate the file and place it in the **Image file** box.
   - **Image from field.** Places an image from an Image field in records in the currently open textbase into a picture box. Use the **Image field** drop-down list to specify the Image field to place in the picture box. Select this option when you want to include record images in a form. If the field selected contains multiple image references (file names), only the first image will appear in the form.

3. Click **Apply**, then **Close**.

**Specifying picture box height, width, and anchoring**

When you place an image in a picture box, you can resize the box and image to suit your needs in the form. You can resize it manually by dragging box handles, or you can resize it precisely using settings on the Position tab.

You can either fit the image to the box size, or fit the box to the original image size.

- **Use best fit of image to box.** Select this option button to fit the image to the size you specify for the box. The aspect ratio is preserved.
- **Resize box to match image size.** Select this option button if you want to retain the size of the original image.

The aspect ratio of an image is locked in DB/TextWorks. If the original image you place in a picture box is a rectangle, it will remain a rectangle when you change the width or height. You will not be able to change a rectangular image into a square image. The width will change proportionately as the height changes, and the height will change proportionately as the width changes. The image on the screen reflects how the picture will look in the report, not the size of the picture box as specified using the **Width** and **Height** settings on the Position tab.
To change picture box height

If you select the **Use best fit of image to box** option button (choose **Tools>Box Properties>Position**), use either of these methods to change the height of a picture box:

- Select one picture box and place the cursor over the box handle in the lower right corner. The cursor becomes a double-headed arrow. Drag the box handle diagonally up or down to resize the picture box proportionately.
- Select one or more boxes and choose **Tools>Box Properties>Position**. Change the value in the **Height** box to the size you want.

To specify the height of a picture box, type a value in the **Height** box.
To change picture box width
Use either of these methods to change the width of a picture box:

- Select one picture box and place the cursor over the left or right box handle. The cursor becomes a double-headed arrow. Drag the box handle to the left or right. If you place the arrow over the box handle in the lower right corner and drag the box, you change not only the width, but also the height proportionately.

- Select one or more boxes and choose Tools>Box Properties>Position. Change the value in the Width box to the size you want.

Specifying picture box anchoring
Picture box anchoring attributes are specified the same way as for form boxes. For more information, see “Floating and anchored form boxes” on page 234.
Using picture boxes on the Web

Note: This section applies only if you are using a WebPublisher product to publish textbases on the Web.

By default, WebPublisher products use CSS to display reports. If you use a picture box on a form that is used on the Web, the software must determine the size of the image in order to preserve the aspect ratio or prevent text from overlapping the image.

The software uses HTTP access to create the image reference in the report, and file access to determine the image size. Because of this, you must specify the image location in two ways. This ensures the software can find the image so it can then determine the image size.

- **HTTP access.** WebPublisher looks in the DBTWPUB.INI file to find the HTTP image path to construct the URL for the image reference in the report. If this location is not specified, a broken image icon appears on the page when it is viewed on the Web.

- **File access.** WebPublisher uses file access to determine the image size. This location can be specified either in the record itself or by selecting the Image from file option button and entering the location in the Image file box. (You can use the Browse button to navigate to the location.)

**Script Buttons and Script Input Boxes**

Script buttons and script input boxes can be very helpful on a form. Script buttons are used to launch a script, while script input boxes are used to provide information to be used during the processing of a script. For more information, see “Using Script Buttons and Script Input Boxes” on page 300.
Setting Form Properties

The form properties you select are saved with the form and take effect when the form is used.

**To set form properties**

1. In the Form Designer, choose **Tools>Form Properties** to open the Form Properties dialog box.

2. Specify the form properties you want by using the tabs on the dialog box. Each tab is explained on the following pages.
   - **General tab.** Specify general properties, such as whether search items are highlighted and the distance between records. (See the following pages for more details on this tab.)
   - **Logos tab.** Specify an image to appear at the top and/or bottom of the page when the form is used on the Web with a WebPublisher product. The settings on this tab also apply to Write Report to File in HTML format. For more information, see “Designing Forms for Web Use” on page 328.
   - **HTML tab.** Specify whether to use record separators, a background image, and other attributes for a form that will be used on the Web (with a WebPublisher product). The settings on this tab also apply to Write Report to File in HTML format and Send Report as Mail in HTML format. (Note that the **Use background image** option does not apply to Send Report as Mail in HTML format.) For more information, see “Designing Forms for Web Use” on page 328.

3. Click **OK** when done.
General Tab

The settings on the General tab (choose Tools>Form Properties>General) apply to forms used on the desktop and on the Web.

Options group

- **Highlight search items.** Select this check box to highlight words or terms found by a search. Search highlighting never appears in the Edit window.
  
  **Note:** To determine how search highlighting appears (for example, its color), choose Tools>Options>Search.

- **Show underbars as spaces.** Select this check box to show underbars (_) as spaces on the screen and in printed reports. Underbars may have been included to prevent words from breaking across lines, in which case you would want to hide them. If they were included to simulate a check list (for example, Yes __ No __), you would not want to hide them.
  
  **Note:** Underbars may have been included as record data or as part of the form (for example, fixed text). You can also use a non-breaking space (Alt+0160) to prevent words from breaking across lines.

- **Background color.** Select this check box to specify a color for the background of the form. When selected, the Select Color button is enabled. Click the Select Color button and choose a color (including custom colors) on the Color dialog box.

Measurements group

Use the Measurements settings to specify the units for box position and width, and label width. For example, choose inches from the Horizontal units drop-down list and lines from the Vertical units drop-down list, so a box could be 4 inches wide and ½ line (.5) below the box above it.

- **Horizontal units.** Select a type of units (inches, mm, or points) from this drop-down list to use when specifying form settings, such as indentation, box position, and label width.

- **Vertical units.** Select a type of units (inches, mm, points, or lines) from this drop-down list to use when specifying the vertical distance between boxes or records, and grid settings. Vertical units do not affect the information within a box. Information within a box is always measured in lines (except for picture boxes).

- **Distance between records.** Type a value in this box to specify the vertical space between records in a report. The unit of measure (for example, inches, lines) is determined by the Vertical units setting above. If a box has a Top Offset (choose Tools>Box Properties>Position), that value is added to the record spacing amount. The Form Designer only shows one record at a time. To see how the spacing looks, save the form, then select it for the Report window.

  **Tip!** To design a report to show summary information only, make each box a Sort Footer or Report Footer. To avoid large gaps in such a report, set the distance between records to zero.

Chapter 5: Working with Forms  265
Logos Tab

The settings on the Logos tab (choose **Tools > Form Properties > Logos**) let you specify images to appear at the top and/or bottom of a page. The logos you specify only appear when forms are used on the Web with a *WebPublisher* product; they do not appear in DB/TextWorks windows.

Use this tab when you want to place a picture at the top of a page, above the navigation buttons. If you want the picture to appear at the top of the report, but below the navigation buttons, add a picture box and change it to a report header.

To add an image to the top and/or bottom of a form

1. Choose **Tools > Form Properties** to open the Form Properties dialog box.
2. On the Logos tab, type the file name (including extension) of the image file you want to appear on the form in the appropriate box:
   - **Leading Logo.** Displays an image at the top of the page. For example, type **NEWLOGO.JPG**.
   - **Trailing Logo.** Displays an image at the bottom of the page. For example, type **MYLOGO.GIF**.

   **Note:** You can also click the **Browse** button next to the appropriate box to locate the image file you want to use.

3. Click **Apply**, then **Close**.

For more information on image file locations, see the *Inmagic DB/Text WebPublisher PRO User’s Manual.*
HTML Tab

Use this tab when designing a form for use on the Web a WebPublisher product, when writing a report to HTML, or when sending a report as mail in HTML format. This tab is not applicable to forms used on the desktop.

The following are options you can specify on the HTML tab.

Options group

• Use record separators. Select this check box if you want a horizontal rule to appear between records in the HTML report. Then specify the alignment, height, and width. (Note that this option does not appear for tabular forms, as records are separated by table borders.)

  Note: The Web browser software controls the final appearance of the record separator.

  – Alignment. Use this drop-down list to specify how to align the record separator.
  – Height/Width. Use these controls to specify the dimensions of the record separator, in pixels.

• Use background image. Select this check box to specify an image file to use as the page background for an HTML page when viewed in a Web browser. Most Web browsers handle GIF and JPEG files only. For more information about image locations, see the online help or the Inmagic DB/Text WebPublisher PRO User’s Manual.

  Note: To use a background color instead of (or in addition to) an image, choose Tools>Form Properties>General, select the Background color check box, click the Select Color button, and choose a color.

• Table settings. (This option appears for tabular forms only.) Add a table border by specifying a value in the Border width box. Use zero (0) if you do not want to show a border.

Advanced Options group

Advanced Options. Click the Advanced Options button to specify information you want included in the <head> section of the HTML report. The information (<script, <style>, or other HTML elements) is inserted after the information added by the software, such as the page title.
Designing Report Forms

Before you begin designing a report form, it may help to review the definition of a report form. A report form is a form that is designed to display and/or print multiple records. The records appear one after the other on the page, sorted and formatted per your specifications. You can print reports, display them in the Report window, write them to a file in a variety of formats, send them as EMail, or display them on the Web with a WebPublisher product.

Designing a report form is similar to designing a form for single-record display (in the Display or Edit window). However, a report form can include some additional components that would not make sense for single-record display, such as page numbers, special sorting (if required), sort headings, subtotals, grand totals, and other options.

One of the distinguishing features of a printed report is that it can include a Margin Area for information that will print on every page. For more information, see “Working in the Margin Area” on page 283.
Task Overview

Designing a report can be complicated, as there are many possible features. This list summarizes the tasks involved. Some tasks are optional, and can be performed in a different order.

<table>
<thead>
<tr>
<th>To…</th>
<th>Do this…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a report form</td>
<td>Choose <strong>Display&gt;Design Form</strong> and select a form to start with—an existing form, the Basic Report form, a blank form, a label form, or a tabular form.</td>
</tr>
<tr>
<td>Change the page size and margins</td>
<td>Choose <strong>Report Options&gt;Set Up Page</strong> and select the page size, margins, starting page number, and page breaks.</td>
</tr>
<tr>
<td>Add record information</td>
<td>With the Record Area active, choose <strong>Edit&gt;Add&gt;Form Box</strong> to add a Record box. Define and format the box contents using <strong>Tools&gt;Box Properties</strong>. 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>If a report includes columns of information, set up the boxes for the column headings after adding and sizing the boxes for the record information, so the boxes can be aligned vertically. With a tabular report, the box labels function as column headings.</td>
</tr>
<tr>
<td>Specify a compulsory sort</td>
<td>If you want information to be grouped and subtotaled by specific fields, such as <strong>Region</strong> and <strong>Customer</strong>, choose <strong>Report Options&gt;Compulsory Sort</strong>. If a compulsory sort is not specified, users can sort records by any field they want. If your report 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 Headers at the beginning of the report</td>
<td>If you want to print information once at the beginning of the report (for example, a report title, the textbase name, search criteria, or prompted text), choose <strong>Report Options&gt;Headers and Footers</strong>, add a Report Header box, and specify its contents.</td>
</tr>
<tr>
<td>Add grand totals at the end of the report</td>
<td>Choose <strong>Report Options&gt;Headers and Footers</strong>, add a Report Footer box, and specify its contents as a calculation.</td>
</tr>
<tr>
<td>Add headers before each group of records</td>
<td>Choose <strong>Report Options&gt;Headers and Footers</strong>, select <strong>Sort Header</strong>, select a Sort Level, add the box, and specify its content as a Sort Key and/or text.</td>
</tr>
<tr>
<td>Add subtotals after each group of records</td>
<td>Choose <strong>Report Options&gt;Headers and Footers</strong>, select Sort Footer, select a Sort Level, add the box, and specify its content as a calculation.</td>
</tr>
<tr>
<td>Print information in the margin of every page</td>
<td>With the Margin Area active, choose <strong>Edit&gt;Add&gt;Form Box</strong> to add a Margin box. Define the box contents using the subtab options on the Contents tab (<strong>Tools&gt;Box Properties&gt;Contents</strong>). For example, add the <strong>TEXTBASE NAME</strong> variable to show the textbase name on every printed page.</td>
</tr>
</tbody>
</table>

You can add the record information (boxes with fields in them) before or after you add the report-specific components, such as headers and footers.
Sorting with Headers and Footers

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).

**Note:** You do not have to use all five levels. It is usually sufficient to specify one, two, or three levels.

You can specify the order in which records appear in reports. For example, you might sort alphabetically by Name or chronologically by Date. DB/TextWorks provides three methods for sorting records: a compulsory sort (hard wired in the form), a user-specified sort (users can choose Display>Sort Report after doing a search), or a textbase default sort (specified in the textbase structure, to be used if no other sort is specified). Each method has its advantages and disadvantages. To determine which sorting method is best for the report you are designing, see “Sorting Records” on page 304.

**Note:** If you do a Relevance-Ranked Order sort, Sort Keys do not exist, and Sort Header and Sort Footer boxes do not appear.

Sort Headers and Footers

Sort Headers and Footers are used at the beginning and end of a group of records sharing a Sort Key at the specified Sort Level.

Typically, you pair a Sort Header with a Sort Footer, 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. To see how each box is defined, see the illustration on page 280.

**Tip!** 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.
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.

The following report is sorted by Region (Sort Level 1), Customer (Sort Level 2), and Invoice date (Sort Level 3). The first Sort Header box contains Sort Level 1, so it shows the contents of the Region field (Northeast). The second Sort Header box contains Sort Level 2, so it shows the contents of the Customer field (for example, Concord Miniatures, Kullen’s Crafts). The third Sort Level (Invoice date) is not used in a Sort Header box; it just ensures that invoices are listed by date.

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. Sort Header boxes are added above normal record boxes, but you can move them if you wish.

5. Format the box label and contents using the Form Box Properties dialog box. For example, use the Labels tab to hide the box label, borders, 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. When the Form Box Properties dialog box opens, specify a calculation for the box contents, such as \( \text{TOTAL(quantity*"price per unit")} \).

**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. Footer boxes are added below all Record boxes, but you can move them anywhere within the Record Area.

5. On the Calculations subtab on the Contents tab, type the calculation you want 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 automatically. Click **Add**.

6. Format the box label and contents using the Form Box Properties dialog box. For example, use the Labels tab to hide the box label, borders, and scroll bars.
The form pictured on page 271 also includes a form box that shows the Region (Northeast) followed by the word SUBTOTAL as ending text (Tools>Box Properties>Format>Added Text).

Here is what the boxes look like in the Form Designer:

And here is what the boxes look like in the report:

Northeast SUBTOTAL $2,130.00

Report Headers and Footers

Report Headers and Footers are used when you want your report to have information appear at the top and bottom of the report information.

Adding Report Headers

Use a Report Header box for information that you want to appear once at the beginning of the report, in the Record Area. You might use a Report Header box for:

- A report title (text box or fixed text in a form box)
- A company logo (picture box)
- The current date, time, textbase name, or search criteria (variables)
- Prompted text entered by the user, such as the name of the person who is printing the report

To add a Report 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 Report Header from the Header/Footer list, then click the Insert Header/Footer button. A form box is added to the Record Area, and the Form Box Properties dialog box opens. You can also use text boxes, picture boxes, script input boxes, and script buttons as headers/footers. For more information, see “Changing Box Types” on page 274. Note that Report Header boxes are added above all Record boxes, but you can move them if you want.
4. Specify a content item using the subtabs on the Contents tab. Click Add.

5. Format the box label and contents using the other tabs on the Form Box Properties dialog box.

**Adding Report Footer**

Use a Report Footer box for information you want to appear once at the end of a report. Report Footer boxes typically show final results, such as:

- A grand total of a numeric field (calculation)
- An average of a field (calculation)
- The total number of records (RECORD COUNT variable or COUNT(1) if sort is exploded)
- The current date, time, textbase name, or search criteria (variables) or fixed text

For more information, see “Where to Place a Calculation” on page 230.

**To add a Report 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 **Report Footer** from the Header/Footer list, then click the **Insert Header/Footer** button. A form box is added to the Record Area, and the Form Box Properties dialog box opens. You can also use text boxes, picture boxes, script input boxes, and script buttons as headers/footers. For more information, see the next section, “Changing Box Types.” Note that Report Footer boxes are added below all Record boxes, but you can move them if you want.

4. Specify a content item using the subtabs on the Contents tab, such as a calculation for a grand total. Click Add.

5. Format the box label and contents using the other tabs on the Form Box Properties dialog box.

**Changing Box Types**

In order to have a text box, picture box, script input box, or script button be a Header or Footer box, you must first add it (choose **Edit>Add**), then choose **Report Options>Headers and Footers** to change the box to the appropriate type of header or footer.

Also, if you inadvertently specify the wrong box type, you can change a Header or Footer box to a Record box, and vice versa, rather than having to delete the box and start over.
To change a box type

1. While working in the Record Area, select the box to be changed, then choose Report Options>Headers and Footers. The Headers and Footers dialog box opens.

2. Do the following, depending on the change you want to make to the box:
   - To change 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.

Printed Reports

A report form designed for printing can include page numbers, titles, calculations, Sort Headers (such as Sales by Territory), and many other sophisticated formatting techniques.

A form designed for printing can use the Margin Area to display additional information, such as a report title, page numbers, or a company logo that prints on every page of the report. The Margin Area is ignored for desktop and Web display. For more information on using this area, see “Working in the Margin Area” on page 283.

When creating a Report Printing form, you may also want to use Report Header and Report Footer boxes to display information in the Record Area.

Areas of a Form

Each form has two areas in which you can add boxes to display information:

- **Margin Area.** Information in this area appears only in printed reports—and it appears on every page. Use the Margin Area for information that you want repeated on every page, such as page numbers and the current date.

- **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, for example, a title on the first page, Sort Headers, and a grand total on the last page.
When you are working in the Form Designer, you can toggle between the areas as needed. When you are showing the Margin Area, all form and box background colors are ignored, since background colors are ignored when printing a report. The active area is white. The inactive area is gray. You can add boxes only to the active area.

To toggle between the areas
1. The Record Area is active by default. To make the Margin Area visible, choose **Report Options>Show Margin Area**.
2. Choose **Report Options>Work in Margin Area** or **Report Options>Work in Record Area**; or you can click in the inactive area to make it active.
3. To hide the Margin Area, choose **Report Options>Hide Margin Area**.

Using Boxes in the Margin and Record Areas
When you work in the Margin Area, you can add a Margin box. When you work in the Record Area, you can add a Record box or a header/footer box. To summarize:

- A Margin box is a box that you add in the Margin Area by choosing **Edit>Add** and clicking **Form Box, Text Box, or Picture Box**. Script input boxes and script buttons are not available in the Margin Area.
- A Record box is a box that you add in the Record Area by choosing **Edit>Add** and clicking **Form Box, Text Box, Picture Box, Script Input Box, or Script Button**.

  **Note:** You can look at the status bar at the bottom of the Main window to see the type of box that is currently selected (for example, form, text, picture) and the box’s function within the form (for example, Record box, Margin box).

- A header or footer box is a box that you add in the Record Area by choosing **Report Options>Headers and Footers**. When you insert a new header or footer box, a form box is added. You can also use the Headers and Footers dialog box to change other types of boxes (for example, a picture box) to header or footer boxes. For more information, see “Changing Box Types” on page 274.
The following table lists some typical uses for the box types, and specifies in which form area they are applicable.

<table>
<thead>
<tr>
<th>Box Type</th>
<th>Form Area</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Margin box</td>
<td>Margin</td>
<td>Report title, current date and time, page numbers, column headings, company logo. (They appear on every page of a printed report.)</td>
</tr>
<tr>
<td>Record box</td>
<td>Record</td>
<td>Record information, calculations, record images. (They appear once for each record in the report.)</td>
</tr>
<tr>
<td>Report Header box</td>
<td>Record</td>
<td>Search criteria, prompted text, report title, column headings. (They appear once, at the beginning of the report.)</td>
</tr>
<tr>
<td>Sort Header box</td>
<td>Record</td>
<td>Sort field contents. (They appear whenever a new group of records begins. A Sort Header box typically has a Sort Key as its content, but can have other content items, such as fixed text.)</td>
</tr>
<tr>
<td>Sort Footer box</td>
<td>Record</td>
<td>Sort field subtotals. (They appear whenever a group of records ends. Typically, a Sort Footer box contains a subtotal or other computed value for the current group.)</td>
</tr>
<tr>
<td>Report Footer box</td>
<td>Record</td>
<td>Grand totals, averages, or counts. (They appear once, at the end of the report.)</td>
</tr>
</tbody>
</table>
The following illustration shows how the box types are used in a printed report:

<table>
<thead>
<tr>
<th>Margin box</th>
<th>appears on every page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Header box</td>
<td>appears once at the beginning of the report</td>
</tr>
<tr>
<td>Sort Header box (Level n)</td>
<td>appears at the beginning of each specified Sort Level Group</td>
</tr>
<tr>
<td>Record box</td>
<td>appears once for each record in this sort group</td>
</tr>
<tr>
<td>Record box</td>
<td>appears once for each record in this sort group</td>
</tr>
<tr>
<td>Sort Footer box (Level n)</td>
<td>appears at the end of each specified Sort Level Group</td>
</tr>
<tr>
<td>Report Footer box</td>
<td>appears once at the end of the report</td>
</tr>
<tr>
<td>Margin box</td>
<td>appears on every page</td>
</tr>
</tbody>
</table>
This printed report shows quarterly sales, subtotaled for each customer and region, with a grand total for the entire report. The Region field is Sort Level 1 (for example, Northeast, Northwest). The Customer field is Sort Level 2 (for example, Concord Miniatures).

<table>
<thead>
<tr>
<th>Region</th>
<th>Customer</th>
<th>Invoice Date</th>
<th>ID#</th>
<th>Quantity</th>
<th>Price per Unit</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>Concord Miniatures</td>
<td>1/23/01</td>
<td>22161038</td>
<td>42</td>
<td>$147.50</td>
<td>$6,666.70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3/26/01</td>
<td>22161012</td>
<td>1</td>
<td>$125.00</td>
<td>125.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3/5/01</td>
<td>22161099</td>
<td>2</td>
<td>$122.50</td>
<td>245.00</td>
</tr>
<tr>
<td></td>
<td>Kellen's Crafts</td>
<td>2/3/01</td>
<td>22161059</td>
<td>2</td>
<td>$75.00</td>
<td>150.00</td>
</tr>
<tr>
<td></td>
<td>Thompson Toys &amp; Games</td>
<td>2/5/01</td>
<td>22161012</td>
<td>3</td>
<td>$125.00</td>
<td>375.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northwest</td>
<td>Model Mania</td>
<td>1/25/01</td>
<td>74471001</td>
<td>1</td>
<td>$275.00</td>
<td>275.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3/15/01</td>
<td>23361038</td>
<td>5</td>
<td>$147.50</td>
<td>737.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southwest</td>
<td>Mini Sculptures</td>
<td>1/9/01</td>
<td>74471091</td>
<td>36</td>
<td>$275.00</td>
<td>9,900.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Customer</th>
<th>Invoice Date</th>
<th>ID#</th>
<th>Quantity</th>
<th>Price per Unit</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GRAND TOTAL** $14,174.20

Chapter 5: Working with Forms 279
Here is what the form looks like in the Form Designer:

<table>
<thead>
<tr>
<th>Quarterly Dealer Sales Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>{Variable DATE}</td>
</tr>
<tr>
<td>{Variable TIME}</td>
</tr>
<tr>
<td>Page {Variable PAGE NUMBER}</td>
</tr>
</tbody>
</table>

- **Quarterly Dealer Sales Report.** Place a text box in the margin. You may need to choose Report Options>Show Margin Area>Work in Margin Area first. Choose Tools>Box Properties>Font, Color to change the font.
- **Date and Time.** Use a Margin box with variables. Use Tools>Box Properties>Paragraphs to make each item a separate paragraph.
- **Page number.** Use a Margin box with variable. Add the word Page as fixed text.
- **Horizontal rule.** Place a text box in the margin (containing a line composed of underbar characters __), set to maximum height =1.
- **Column headings.** Add text boxes, then choose Report Options>Headers and Footers and change the text boxes to Header boxes. Move the boxes next to each other, select them all, then choose Tools>Align Boxes>Anchor and Top to align the boxes.
- **Sort Headers.** Define a compulsory sort (choose Report Options>Compulsory Sort) on Region (Sort Level 1) and Customer (Sort Level 2). Add a form box and change it to a Level 1 Sort Header box whose content is Sort Key Level 1 (choose Report Options>Header and Footers). Then add another form box and change it to a Level 2 Sort Header box whose content is Sort Key Level 2.
- **Fields.** Add boxes and anchor them to each other for each field you want to display (Invoice Date, ID, Quantity, Price per Unit). To anchor boxes, position them next to each other using the mouse, select them all, then choose Tools>Align Boxes>Anchor and Top. The last box in this row contains a calculation, not a field. The calculation is: quantity*"price per unit". This multiplies two fields together (Quantity and Price per Unit).

Here is how to create each box:

- **Quarterly Dealer Sales Report.** Place a text box in the margin. You may need to choose Report Options>Show Margin Area>Work in Margin Area first. Choose Tools>Box Properties>Font, Color to change the font.
- **Date and Time.** Use a Margin box with variables. Use Tools>Box Properties>Paragraphs to make each item a separate paragraph.
- **Page number.** Use a Margin box with variable. Add the word Page as fixed text.
- **Horizontal rule.** Place a text box in the margin (containing a line composed of underbar characters __), set to maximum height =1.
- **Column headings.** Add text boxes, then choose Report Options>Headers and Footers and change the text boxes to Header boxes. Move the boxes next to each other, select them all, then choose Tools>Align Boxes>Anchor and Top to align the boxes.
- **Sort Headers.** Define a compulsory sort (choose Report Options>Compulsory Sort) on Region (Sort Level 1) and Customer (Sort Level 2). Add a form box and change it to a Level 1 Sort Header box whose content is Sort Key Level 1 (choose Report Options>Header and Footers). Then add another form box and change it to a Level 2 Sort Header box whose content is Sort Key Level 2.
- **Fields.** Add boxes and anchor them to each other for each field you want to display (Invoice Date, ID, Quantity, Price per Unit). To anchor boxes, position them next to each other using the mouse, select them all, then choose Tools>Align Boxes>Anchor and Top. The last box in this row contains a calculation, not a field. The calculation is: quantity*"price per unit". This multiplies two fields together (Quantity and Price per Unit).
• **Sort Footer Level 2.** Add a form box and change it to a Level 2 Sort Footer box whose content is Sort Key Level 2. Use ending text to add a space and the word SUBTOTAL (choose Tools>Box Properties>Format>Added Text). Add another form box and change it to another Level 2 Sort Footer box whose content is a calculation: TOTAL(quantity*"price per unit"), then choose Tools>Box Properties>Format>Numbers, Dates to set the number format to currency.

• **Sort Footer Level 1.** Add a form box and change it to a Level 1 Sort Footer box whose content is the Region field. Use added text (Format tab) to add a space and the word SUBTOTAL as ending text. Add another form box and change it to another Level 1 Sort Footer box whose content is a calculation: TOTAL(quantity*"price per unit"), then choose Tools>Box Properties>Format>Numbers, Dates to set the number format to currency.

• **Grand total.** Add a form box and change it to a Report Footer box whose content is a calculation: TOTAL(quantity*"price per unit"). Choose Tools>Box Properties>Format>Numbers, Dates to set the number format to Currency. Add a text box, type the words GRAND TOTAL, and change it to be a Report Footer box (choose Report Options>Headers and Footers).
Not all reports include Sort Headers and Footers. For example, the report shown below simply lists record information. The title (Consultant Assignment List) is a Report Header text box. The distribution list is a Report Header box containing prompted text. Each record in the report is numbered using the RECORD NUMBER variable.

### Consultant Assignment List

Distribute to: A. Burke, O. Clinton, D. Juliano

1. **Bobbi Dask**  
   Current Assignment: Unassigned  
   Skills: Visual BASIC, COBOL, C++, Java, Year 2000 compliance testing.  
   Home address: 345 Bowdoin Way, Sunnyn, NH 03782

2. **Christopher James**  
   Current Assignment: Northern Robotics (NorthRob)  
   Skills: HTML, Technical writing, Marketing communication, Networks, Visual BASIC.  
   Home address: 67 Bentwood Street, Woburn, MA 01801

3. **Coughlin E. Bean**  
   Current Assignment: Acme Alarm Systems, Inc. (Acme)  
   Skills: XML, Marketing communication, Web design, HTML.  
   Home address: 93 Mayflower Ave, Plymouth, MA 02360

4. **Donna Carter**  
   Current Assignment: Labelle Financial Services (Labelle)  
   Skills: XML, Image design, User interface design, Usability, Web design.  
   Home address: 57 Surrey Lane, Lincoln, MA 01773

5. **Dorothee Johnson**  
   Current Assignment: Pete’s Petroleum (PetesPetro)  
   Skills: Perl scripting, HTML, Java, CGI.  
   Home address: 56 Beachside Lane, Oldburyport, VT 05253

6. **Harold Westover**  
   Current Assignment: Knotty Pine Lumber (Knotty)  
   Skills: Web design, Networks, Java, Perl scripting, Visual BASIC.  
   Home address: 52 W. Summer Street, Wintertree, VT 05255

7. **Jillian Perry**  
   Current Assignment: Unassigned  
   Skills: Project management, COBOL, Fortran, C, TCP/IP, Year 2000 engineering, Java.  
   Home address: 401 X Street, Medford, MA 01752
Working in the Margin Area

The Margin Area contains information that repeats on every page of a printed report. Information in the Margin Area is ignored except when the form is used for printing. The purpose of the Margin Area is to print information on every page, such as a company logo, page numbers, and the report title. Although this type of information typically is placed at the top and bottom of the page, you can place boxes on all four sides of the Margin Area. This provides the flexibility to design a variety of reports.

Note: To change the size of the Margin Area, use Report Options>Set Up Page.

Some typical items that you might place in the Margin Area include:

- The report title
- The current date and time
- Column headings
- Page numbers
- Company logo

Tip! Do not put a count or total calculation in the Margin Area—keep it in the Record Area.

To add boxes in the Margin Area

1. Open a form in the Form Designer.
2. If the Margin Area is not visible, choose Report Options>Show Margin Area.
3. Choose Report Options>Work in Margin Area or click on the gray area with the mouse to enable it. The Form Designer window below shows the Margin Area enabled.
4. Choose Edit>Add and select the type of box you want to use to specify information on every page. For example, if you want the current date to appear at the top of every page, add a form box and define its content as the DATE variable. If you want a company logo to appear at the top of every page, add a picture box and define its content with the appropriate image file name. Use the Box Properties dialog box to format the box. Note that script buttons and script input boxes are not available for use in the Margin Area.

Note: If you place a box too close to the outside edge of the Margin Area, you will get a warning message when you save the form telling you the box is in a 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 print. On a laser printer, this area is usually \( \frac{1}{4} \) inch or less.

Specifying a Report Title

A report title can consist of a text box in the Margin Area. If you open the Basic Report form, a form box for the report title appears, containing the fixed text <Report Title Goes Here>. You can either change this title to correspond to the report you are designing (choose Tools>Box Properties>Contents) 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 the Report window, Write Report to File, Send Report as Mail, or for use on the Web and you want a report title to appear, place the title in a Report Header box in the Record Area. For more information, see “Report Headers and Footers” on page 273.

Numbering Pages

You can number pages in a printed report by adding a box anywhere in the Margin Area and specifying its contents as the PAGE NUMBER variable. (For information about adding boxes in the Margin Area, see page 283). Each page is numbered with Arabic numerals, starting with 1. To change the starting page number, choose Report Options>Set Up Page.

If you open the Basic Report form, a box for the page number appears automatically in the bottom of the page’s Margin Area.

To change the appearance of a page number, such as its font, choose Tools>Box Properties>Format>Font, Color. To add the word Page before the page number, select the box containing the page number, choose Tools>Box Properties>Format>Added Text and type the word Page followed by a space as beginning text. To surround the page number with dashes (for example, -1-), enter the preceding dash as beginning text and the ending dash as ending text. Include spaces, if you want them.

To remove the page number box, select it and press the Delete key on the keyboard or choose Edit>Delete Box.
Working in the Record Area

The Record Area contains information from records, along with report information, such as calculations. It is where the body of the report appears. Header and footer boxes also appear, but only in reports. They do not appear in the Edit and Display windows.

Adding record information

You add record information to a form by adding Record boxes, then choosing Tools>Box Properties to specify attributes such as content, size, position, labels, borders, paragraph formatting, and text formatting, as explained earlier in this chapter.

Numbering records

You can number each record in a report by adding the RECORD NUMBER variable to a form box in the Record Area of a form.

Note: In an exploded sort, each occurrence of a record, not just each record, is numbered.
To number records in a report

1. Choose **Report Options>Work in Record Area**. If you do not see that option, you are already working in the Record Area.

2. Add a form box by choosing **Edit>Add/Form Box**. The Form Box Properties dialog box opens.

3. On the Variables subtab of the Contents tab, select **RECORD NUMBER** from the Variables list and click **Add**.

4. On the Labels tab, make sure the **Label** and **Border** check boxes are cleared.

5. On the Added Text subtab of the Format tab, type a period (.) in the **Ending text** box.

6. On the Paragraphs tab, select **Right** from the **Justification** drop-down list.

7. Click **Apply**, then **Close** on the Form Box Properties dialog box to confirm all the settings you specified.

8. Make the box as narrow as possible by resizing it with the mouse.

9. Select the box containing the item you want to number (such as the **Product Name** field) and drag it to the right of the box that contains the **RECORD NUMBER** variable. You will probably have to reduce the width of box first.

10. Align the two boxes by selecting them and choosing **Tools>Align Boxes>Anchor and Top**.

11. Choose **Tools>Box Properties>Position** and change the Left Offset to zero by typing 0 in the **Left** box. Click **Apply**, then **Close**.

12. Re-arrange other boxes as needed.

**Note:** If you put the **RECORD NUMBER** variable in the same box as the record information, the text that follows the number will not be aligned vertically from record to record. If this is acceptable, specify the variable and the field as content items in the same box.

---

**Controlling the distance between records**

To specify the vertical space between records in a report, choose **Tools/Form Properties>General**, and type a value in the **Distance between records** box. 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.

Note that the Form Designer only shows one record at a time. To see how the spacing looks, save the form, then select it for the Report window.

**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.
Creating Column Headings
You can add column headings to any report. Column headings are typically text boxes or form boxes containing text. The design of your report 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>Add a text box in the...</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the top of every printed page</td>
<td>Margin Area</td>
</tr>
<tr>
<td>At the top of the first printed page only or at the beginning of a displayed report</td>
<td>Record Area, then change it to a Report Header box</td>
</tr>
</tbody>
</table>

If you place a column heading in a Margin box in the Margin Area, it will appear on every page of a printed report. If you place a column heading in a Report Header box, it will appear once at the beginning of the Report window or printed report.

**Tip!** In a tabular form, the box labels are the column headings. They print on every page.

To create column headings on every page
1. The Margin Area must be active. If it is not, choose Report Options>Show Margin Area, then choose Report Options>Work in Margin 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 and 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 Position and Font, Color tabs on the Box Properties dialog box.
7. Click Apply, then Close.

To create column headings on the first page only
1. The Record Area must be active. If it is not, 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 and click Apply.
4. Choose Report Options>Headers and Footers to open the Headers and Footers dialog box.
5. Select Report Header from the Header/Footer list.
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 Position and Font, Color tabs on the Box Properties dialog box.

10. Click Apply, then Close.

**Tip!** To help align boxes for column headings, select the boxes at the top of all the columns in the Record Area, copy them (choose Edit>Copy), switch to the Margin Area, and paste the boxes. Then change the contents of each box.

---

**Underlining Text**

You may want to underline text, especially when creating column headings.

1. Select a box and choose Tools>Box Properties to open the Form Box Properties dialog box.

2. On the Font, Color subtab of the Format tab, click the Set Font button to open the Font dialog box.

3. Select the Underline check box in the Effects group and click OK.

4. Click Apply, then Close on the Form Box Properties dialog box.

By default, an underline is the length of the text only. To extend the underline beyond the text (in either direction), type spaces around the text that you are underlining. For example, if you added column headings as fixed text, press the Spacebar when defining the fixed text. When you apply the underline, it will extend to include the spaces you added.

**Tip!** To avoid having to count the exact spaces to the edge of the box, choose Tools>Box Properties>Position and set the Maximum height to 1, and then type more spaces than you need to reach the edge of the box. This setting will cause any spaces that wrap to the next line to be truncated.

---

**Setting Up the Report Page**

When you design a form for printing, use the Set Up Page dialog box before you begin adding boxes. There are also printer-specific settings that control the report output, such as which fonts are available and whether landscape orientation is an option. For more information, see “Printing a Report” on page 316.
To set up the page


2. Specify the following settings:
   - **Size.** Type values in the **Width** and **Height** boxes to correspond to the dimensions of the paper on which you will print. In the United States, the default is 8.5 inches by 11 inches.
     
     **Note:** To change the unit of measure, such as inches, choose Tools>Form Properties>General.
   
   - **Margins.** Create the Margin Area for printed reports by typing values in the **Left**, **Right**, **Top**, and **Bottom** boxes.
   
   - **Orientation.** Select either **Portrait** or **Landscape** from this drop-down list. **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 across the wider dimension of a rectangular sheet of paper.
   
   - **Starting page number.** Change the value in this box if you want to start numbering pages at a number greater than one. To format the page number, see “Numbering Pages” on page 284.
   
   - **Page Breaks.** Specify page breaks by selecting the appropriate check boxes:
     - **Break after Each Record.** Starts 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.** Starts a new page when the contents of a record cannot fit on the current page.
Break before Sort Header Level 1. Starts a new page when the contents of the Sort Header Level 1 changes. For example, if the Sort Header Level 1 box contains the Dept field, each time the information in the Dept field changes (for example, Sales, Reference, Research), the Sort Header Level 1 and the first record in the new group will start on a new page.

Note: If you do not select a check box, pages break 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.

Special Report Templates
While you can use the Form Designer to create original and unique customized forms, DB/TextWorks also provides some special types of forms to make designing some common kinds of forms easier.

DB/TextWorks provides separate options for tabular forms and label forms. That means you can easily create a form that shows information in rows and columns, or design a form to print mailing labels, library book labels, and other labels.

Tabular Forms
Use a tabular form to present information in rows and columns. Tabular forms are especially useful for displaying a summary of records found by a search. Each row represents a record. Each column, by default, represents a field. Each cell contains field content from records.

<table>
<thead>
<tr>
<th>Name</th>
<th>Item #</th>
<th>Price</th>
<th>Available As</th>
<th>Colors</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Porsche</td>
<td>AP1045</td>
<td>$435.00</td>
<td>Assembled Painted</td>
<td>White</td>
<td>In Stock</td>
</tr>
<tr>
<td>Porsche</td>
<td>KP1045</td>
<td>$297.00</td>
<td>Kit Painted</td>
<td>White</td>
<td>In Stock</td>
</tr>
<tr>
<td>Supra</td>
<td>EU1045</td>
<td>$190.00</td>
<td>Kit Unpainted</td>
<td>White</td>
<td>In Stock</td>
</tr>
<tr>
<td>Supra</td>
<td>EU1087</td>
<td>$212.00</td>
<td>Kit Unpainted</td>
<td>Red, Blue</td>
<td>In Stock</td>
</tr>
<tr>
<td>Winger</td>
<td>AP2001</td>
<td>$434.00</td>
<td>Assembled Painted</td>
<td>Red, Yellow, Blue, Hot Pink</td>
<td>In Stock</td>
</tr>
<tr>
<td>Winger</td>
<td>EU2001</td>
<td>$189.00</td>
<td>Kit Unpainted</td>
<td>Red, Yellow, Blue, Hot Pink</td>
<td>In Stock</td>
</tr>
</tbody>
</table>

To design a tabular form
1. Open a textbase.
2. Choose Display>Design Form (or, in the Form Designer, choose Form Operations>Open Form) to open the Open Form dialog box.
3. Select New Tabular Form from the Start With list and click OK.
4. On the Choose Initial Tabular Form Fields dialog box, select the fields you want to make up columns in the table. Do this by selecting a field from the Available Fields list and clicking the > button to move it to the Initial Fields list. Do this for each field you want in the table. The fields in the list will appear left to right on the tabular form.

5. Click OK. The illustration below shows how the form above looks in the Form Designer.

6. To customize the tabular report to meet your needs, select a box and choose Tools>Box Properties to open the Form Box Properties dialog box. Use the tabs and subtabs on this dialog box to specify content, position, label, formatting, and—if you plan to use the form on the Web—HTML attributes, as applicable.

7. Save the form.

The following are some examples of what you can do to customize a tabular form:

- To change the content of a column (for example, to show the contents of the Features field—which is not pictured in this form—instead of the Price field), select that column then use the Contents tab to specify the contents you want. You can also specify other content besides fields, such as variables or calculations.
- To add column headings, use the Labels tab to add box labels. You can change many attributes, including what each heading (label) says, its font, and its justification. Column headings appear on each page of printed and Web reports.
- To reorganize columns, select a column, then drag it right or left with the mouse. Be sure the cursor is not over a box handle or you will resize the column. Cell height is the same for each row, determined by the box size that you set (choose Tools>Box Properties>Position).
Designing Labels and Cards

You can create address labels and labels for file folders, rotary cards, library catalog cards, and library book label sets. DB/TextWorks includes many blank label formats reflecting the dimensions for various stock numbers from numerous companies, including Avery, Gaylord, Demco, and University Products.

Because DB/TextWorks fields are unlimited in length and can include multiple entries, designing a label 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 and can create customized labels.
- Whether to use one box or multiple boxes for the label information.
- Whether to set a maximum height for each box.

If you are sure that the information in your label will not exceed the label height, you can place all textbase fields in one form box, as shown in the following example.
Use options to format text and pictures found on the corresponding Box Properties dialog box as explained in "Examples of Combined Formatting" on page 252.

If any of the fields are likely to contain multiple lines of information that are not crucial (such as the Company field), put those fields in separate boxes and set a small maximum height for each box, such as 1 line. This will truncate the information to allow room for the more important address information to follow. Set the minimum height of all the boxes to zero (0) lines, so that empty boxes will not appear. Also set the Top Offset of all boxes except the first to zero (0), to fit the maximum amount of information on the label. (To set box height and position, choose Tools>Box Properties>Position.)

To create a standard label or card

Note: This section uses predefined label formats provided by DB/TextWorks.

1. Search for records containing the information you want to include on the label or card.
2. Choose Display>Design Form to open the Form Designer. The Open Form dialog box opens. (If you are already in the Form Designer, choose Form Operations>Open Form.)
3. From the Start With list, select New Label Form.

4. From the Stock Number list, select the label format you want to use and click OK. The Form Designer window opens.

5. Add one or more boxes, and define and format the box content.

6. Choose Display>View Records to verify that the boxes accommodate your actual data.

7. Choose Display>Next Record or use the Next Record toolbar button to look at several different records.

8. Choose Form Operations>Save Form As to open the Save Form As dialog box. Type a form name and description that clearly identifies the label form’s purpose.
9. Preview the labels by closing the Form Designer (choose **Form Operations>Close Form Designer**), selecting the form you just saved as your Report Printing form (choose **Display>Select Forms**), and choosing **File>Print Preview**. For more information, see “Previewing a Printed Report” on page 315.

**Note:** When you choose **File>Print Preview**, the Specify Starting Label dialog box opens. Click **OK**.

10. Print one or two pages on plain paper and check their layout against the actual label or card stock. If necessary, make adjustments prior to printing on actual label stock. The procedures for printing labels or cards are the same as the procedures for printing reports. For more information, see “Printing a Report” on page 316.

**To design your own customized label or card**

Use the following steps to design a label or card that does not match the dimensions of any of the label formats listed in the Stock Number list on the Open Form dialog box.

1. Choose **Display>Design Form** to open the Form Designer. The Open Form dialog box opens. (If you are already in the Form Designer, choose **Form Operations>Open Form**.)
2. From the Start With list, select **New Label Form**.
3. From the Stock Number list, select the label format you want to use as a basis for your custom design and click **OK**. The label format chosen should be the one that most closely matches the dimensions of your label stock.
5. Change the dimensions to correspond to your custom label stock:
   - **Page Width and Page Height.** Specify the dimensions of the label or card stock.
   - **Left Margin.** Specify the distance from the left edge of the page to the left edge of the first label or card.
   - **Top Margin.** Specify the distance from the top edge of the page to the top edge of the first label or card.
   - **Page Orientation.** Decide how you want the labels or cards to be placed, 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 across the wider dimension of a rectangular sheet of paper.
   - **Label Width.** Specify 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 stock has one label per row, this value is the width of one label.
   - **Label Height.** Specify 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.** Set the number of labels, cards, or label sets across the page.
   - **Number Down.** Set the number of labels, cards, or label sets that appear down the page.

6. Click **OK**.

7. Add one or more form boxes, and define and format the box content.

8. Choose **Form Operations>Save Form As** to open the Save Form As dialog box. Type a form name and description that correspond to your custom label or card stock.

9. Preview and then print the labels.

**Note:** When you choose **File>Print Preview**, the Specify Starting Label dialog box opens. Click **OK**.
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. In the following example, the label set consists of three labels.

The inner lines only appear when you open a new label, so it is important to position boxes during your first session in the Form Designer.

This label set contains three labels for each record.

Chapter 5: Working with Forms 297
Unlike a standard label, a label set typically contains fields that appear more than once. In this sample label set form, the Classification number (Class) is repeated in three boxes, and the Author and Title fields are repeated in two boxes. To guarantee that the bottom label prints in the correct position, determine how many lines will fit on the top label and set Minimum height and Maximum height to that value.

![Form Designer: Book Label Set 1](image)

**Using Scripts with Forms**

When you are designing a form, you can also design a script for use with that form. The script can perform certain operations when the form is opened or closed, when buttons on the form are pressed, when you leave a box, or in other situations. For example, a script can fill in a box automatically 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 the form. Form scripts can be written in either JavaScript (JScript) or Visual Basic Scripting Edition (VBScript).

**Important!** Scripts are applicable to forms used on the desktop only; they are not applicable to those used on the Web with a WebPublisher product.

Use the Names tab (choose Tools>Form Script>Names) to assign a name to each box in the form that you will use in your scripting program. The script cannot access boxes that have no script names assigned to them. The script is able to read the contents of the box (and, if permitted, modify it and write it back). If you have added script buttons or script input boxes to the form, each needs to be assigned a name.

For detailed information about the functions you can use in a script, including examples, see the online help.

298 Chapter 5: Working with Forms
To define a script

1. Choose **Tools/Form Script** to open the Form Script dialog box.

2. On the Script tab, select the scripting language (**JScript** or **VBScript**) you want to use from the **Script language** drop-down list.

3. Type the script in the **Script** box. You can paste the program into the box, if you constructed it in a different environment.
4. On the Names tab, select the box from the Boxes list to which you want to assign a name.

5. Type the new name in the **Box Name** box.

6. Click the **Change** button. The assigned name appears next to the box in the Names list.

7. Repeat this process for as many boxes as needed.

8. Click **OK** when done.

**Using Script Buttons and Script Input Boxes**

You can use a script button in a form to trigger a script function, and you can use a script input box to get information from the user to be used during the processing of a script.

Script buttons and script input boxes are designed for use in the Record Area of a form.

**Script Buttons**

A script button is a button you place on a form. A script button allows you to call a function you have written on the Form Script dialog box (choose **Tools>Form Script**). A function allows you to perform additional processing, such as moving information among boxes or launching other applications. You can specify font and position properties for script buttons.

Script buttons are not boxes, but you can add them to a form the same way you add a box.
Like boxes, script buttons have content, positioning, and formatting properties, and you use the Script Button Properties dialog box (choose Tools>Box Properties) to specify these properties. Script buttons are included in the tab order for navigational ease.

**Note:** Depending upon their function, script buttons may only be appropriate for certain windows. For example, a script button that calls a script that moves text around is appropriate on an edit form in the Edit window, but not on a display form in the Display window.

**Script button content**

Because a script button is not a box, its content appears as a caption on the button.

**To specify script button caption**

1. Add a script button by choosing Edit>Add>Script Button. The Script Button Properties dialog box opens. (If you select an existing script button, choose Tools>Box Properties. You cannot specify button captions if you select more than one script button at a time.)

![Script Button Properties dialog box](image)

2. On the Caption tab, type the wording you want to appear on the script button in the Caption box. The caption can be up to a maximum of 50 characters.

3. Click Apply, then Close.

**Specifying script button anchoring and width**

You can specify the anchoring properties for a script button. Script button anchoring properties are specified the same way as for form boxes. For more information, see “Floating and anchored form boxes” on page 234.

You can specify the width of a script button, but you cannot specify or change its height. You can set the button width to fit the caption or change the width of script buttons by dragging box handles or typing a value in the Width box on the Position tab on the Script Button Properties dialog box.
To change script button width
Select one or more script buttons and choose Tools>Box Properties. On the Position tab, clear the Size button to fit caption check box, then use either of these methods to change script button width:

- Select one script button and place the cursor over the left or right box handle. The cursor becomes a double-headed arrow. Drag the box handle to the left or right.
- On the Position tab, type a value in the Width box, then click Apply.

The button resizes, and the caption retains its font attributes and is centered within the button.

Tip! Select the Size button to fit caption check box to automatically make the width of the script button the same as the caption it contains.

Formatting text on script buttons
You can type any text you want, up to 50 characters, on script buttons, as well as format the text.

To format script button text
1. In the Form Designer, select one or more script buttons.
2. Choose Tools>Box Properties to open the Script Button Properties dialog box.
3. On the Caption tab, click the Set Font button to specify the font, style, and size you want to use for the button text. Note that script button captions are always black; you cannot specify font color. Click OK to close the Font dialog box.
4. Click Apply, then Close.
**Script Input Boxes**

Use a script input box on a form if you want users to provide information to be used during the processing of a script.

For example, you can use a script input box on an edit screen so information can be typed in it (such as, volume and issue information) to be used by a script to modify the other fields (for example, to generate a series such as, Vol. 2, Issue 1, Vol. 2, Issue 2, and so forth).

The information typed into a script input box by a user is available as the contents of the box to any script. To access the contents, the script input box must be given a name in the Form Script dialog box (choose Tools>Form Script), which is where the script is defined.

Script input boxes can also be used to provide a way for scripts to give information to the user. For example, a script could use a script input box to display instructions specific to the edit box that currently has focus.

You can specify position attributes, label information, and font and color attributes for script input boxes. However, because users provide the information, script input boxes do not have box content.

**Specifying script input box height, width, and anchoring**

The height, width, and anchoring properties of script input boxes are specified the same way as for form boxes. For more information, see “Specifying form box height, width, and anchoring” on page 231 or the online help.

**Note:** When specifying script input box height, the maximum height applies in all windows, except the Report window.

**Adding labels, borders, and scroll bars to script input boxes**

You add labels, borders, and scroll bars to script input boxes the same way as form boxes. For more information, see “Adding labels, borders, and scroll bars to form boxes” on page 237 or the online help.

**Formatting text in script input boxes**

You can apply different formatting to script input box text, 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 (choose Tools>Box Properties) to specify font attributes and background color.
To format text in script input boxes

1. Select one or more script input boxes.
2. Choose Tools>Box Properties to open the Script Input Box Properties dialog box.
3. On the Font, Color tab, specify the applicable text formatting attributes:
   - **Set Font.** Click the Set Font button to specify the font, style, size, and color you want to use 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.
   - **Background color.** Select this option 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.
4. Click Apply.

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 can sort records alphabetically by name, then subsort by region, then by date in reverse chronological order. You can also sort records by their relevance, with the most relevant record appearing first.

There are three ways to apply a sort: after a search, as part of a form, and as the textbase default. Each type of sort is summarized below. For more detailed information, see the online help.

**Note:** If you use a form that has a compulsory sort, it is the sort used, regardless of other types of sorts that may be specified. If the form does not have a compulsory sort, the current user-specified sort takes precedence. If neither of those sorts is specified, the textbase default sort is used, if any. Lastly, if no sort of any kind is specified, records appear in the approximate order that they were added to the textbase.

User-Specified Sort

A user-specified sort is one that is done after a search (or after a set is loaded). To sort the records found, choose Display>Sort Report, then use the Specify Sort Order dialog box to specify how you want them sorted. For more information on the options available on the Specify Sort Order dialog box, see “To specify a sort” on page 307 and “Sort Options” on page 308.

You can change the sort options at any time, to sort the records in a different order. (This is the only sort that can affect exports.) The sort remains in effect until you close the textbase or sort again.

For more information, see the online help.
Compulsory Form Sort

If you want records to be sorted in a specific way when a particular form is used for a report, you can define a sort to do that. This is called a compulsory form sort. Avoid compulsory form sorts except when necessary, because they prevent records from being sorted in any other order.

On the Web, a compulsory form sort is the only way to specify sort order other than the textbase default sort. A Relevance-Ranked Order sort is particularly appropriate for the Web, as it sorts records in descending order of their relevance, with the most relevant records appearing first.

To specify a compulsory form sort, open the form you want to use in the Form Designer. Choose Report Options>Compulsory Sort, then use the options on the Specify Compulsory Sort Order dialog box to specify how you want records sorted. This dialog box is identical to the Specify Sort Order dialog box, which is used for a user-specified sort. The difference is, sorts specified on the Specify Compulsory Sort Order dialog box will be used each time the form is used in the Report window. For more information on the options available on the Specify Compulsory Sort Order dialog box, see “To specify a sort” on page 307 and “Sort Options” on page 308.

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.

For more information, see the online help.

Textbase Default Sort

A textbase default sort specifies the order in which records should appear in reports if no other sort is specified. For example, you might sort alphabetically by last name or chronologically by date. If you specify a textbase default sort order, you are not limited to it—you will still be able to sort records after a search (user-specified sort) by choosing Display>Sort Report, and you can still define sorts for forms (compulsory form sort).

To specify a textbase default sort, open the textbase for which you want to specify the sort and choose Maintain>Edit Textbase Structure to open the Edit Textbase Structure dialog box. Click the Sort Order button to open the Specify Textbase Sort Order dialog box, then specify the sort options you want. For more information on the options available on the Specify Textbase Sort Order dialog box, see “To specify a sort” on page 307 and “Sort Options” on page 308.

For more information, see the online help.
Using the Specify Sort Order dialog boxes

Once you decide the type of sort you want, you must specify the sort method. Use the applicable Specify Sort Order dialog box to specify how you want records sorted.

This dialog box opens when you choose Display>Sort Report after doing a search.

The dialog box may look a little different (for example, some options may be unavailable) and have a different name in its title bar (Specify Sort Order, Specify Compulsory Sort Order, or Specify Textbase Sort Order) based on the type of sort you are specifying (user-specified, compulsory form, or textbase default sort).

The following table shows which sort methods are applicable to each type of sort.

<table>
<thead>
<tr>
<th>Type of Sort</th>
<th>Sort Methods Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>User-Specified Sort</td>
<td>Sort Order Shown Below, Relevance-Ranked Order, Textbase Sort Order, Unsorted Order</td>
</tr>
<tr>
<td>Compulsory Form Sort</td>
<td>Sort Order Shown Below, Relevance-Ranked Order, Textbase Sort Order, Unsorted Order</td>
</tr>
<tr>
<td>Textbase Default Sort</td>
<td>Sort Order Shown Below, Relevance-Ranked Order</td>
</tr>
</tbody>
</table>

306 Chapter 5: Working with Forms
To specify a sort

1. In the applicable Specify Sort Order dialog box, select the sort method you want to use from the Use group. Note that some of the options may not appear, or may not be enabled, depending on the type of sort you are specifying. See the table above for a list of which sort methods can be used with the three types of sorts.
   - **Sort Order Shown Below.** Uses the sort you are now defining. This option is the default.
   - **Relevance-Ranked Order.** Sorts records in descending order of their relevance, with the most relevant records appearing first. This option can be used with word, phrase, and proximity searches. If a query involves term searches only, no relevance sort is attempted.
   - **Textbase Sort Order.** Reverts to the default sort order.
   - **Unsorted Order.** Causes records to appear in unsorted order (in the approximate order in which they were added to the textbase). Use this option if you want to speed up a report or produce a report with records in unsorted order.

2. Do the following, depending on the sort method you selected:
   - If you selected **Relevance-Ranked Order**, **Textbase Sort Order**, or **Unsorted Order**, the remaining selections on the Specify Sort Order dialog box are disabled. Click **OK** to confirm your sort order selection.
   - If you selected **Sort Order Shown Below**, define your sort by choosing options from the Sort Specification group:
     a. Select a field from the Available Fields list 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 called the primary sort field (Sort Level 1). You can subsort by up to four more fields by moving them into the Sort Fields list. This is a way of doing more refined sorts, such as alphabetically by region, then by name. The additional sort fields are known as Sort Level 2 through Sort Level 5.

     **Note:** If you do sort on several fields, you can use the **Up** and **Down** buttons to change the order of the fields in the Sort Fields list. If you change your mind and want to remove a field from the Sort Fields list, select the field in that list and click the left arrow button (<). To remove all fields from the Sort Fields list, click the double left arrow button (<<).

     b. [Optional] Specify the sort options you want. For more information, see the following section, “Sort Options.”

     c. Click **OK**.
Sort Options

If you want to define your own sort order for a user-specified, compulsory form, or textbase default sort, select the Sort Order Shown Below option button from the Use group. This enables the settings in the Sort Specification group.

This dialog box is used when you specify sort options for a compulsory form sort.

When you define a sort, you can select one or more of the sort options explained below.

Doing subsorts

When you sort records, you can select a primary sort field and up to four subsort fields. For example, you could sort records by Region (primary sort field) then Company (subsort field). Multiple sort levels enable you to do more refined sorts. The field that you place at the top of the Sort Fields list is the primary sort field. Any fields you place below it are subsort fields.

You can select any primary or subsort field and specify that it should be sorted in reverse order and/or exploded. You can also interfile fields with the primary sort field and specify what to do if the primary sort field is empty. All of those options are explained below.

308 Chapter 5: Working with Forms
The primary sort field is referred to as Sort Level 1 on the Form Designer dialog boxes, and any subsort fields are referred to as Sort Level 2 through Sort Level 5. For more information, see “Sort Keys Subtab” on page 216.

![Form Designer dialog boxes with Sort Levels 1-5]

In the Form Designer, Level 1 refers to the primary sort field, and Levels 2-5 refer to the fields selected for subsorts.

**Sorting in reverse order**

Each field in the Sort Fields list can be sorted in normal (ascending) or reverse (descending) order. To sort a field in reverse order, select it in the Sort Fields list, then select the **Sort in Reverse Order** check box in the Settings for this Field group. The selected field will be sorted in reverse alphabetic order (Z to A), reverse numeric order (highest to lowest), or reverse date order (most recent to oldest). If you reverse-sort the primary sort field, any alternate primary sort fields or interfiled fields will also be sorted in reverse order.

**Doing an exploded sort**

By default, records are sorted by the first entry in the selected sort field. If a field has multiple entries, you can do an exploded sort. To do an exploded sort, select a field in the Sort Fields list, then select the **Exploded Sort** check box in the Settings for This Field group.

**Note:** This option is not available when defining a textbase default sort, and it is ignored for a form used on the Web (with a DB/Text WebPublisher product), because it can change the perceived number of records retrieved.

In an exploded sort, the record appears in the report multiple times—once for each entry in the exploded sort field. For example, if you do an exploded sort on the *Subjects* field, and a record contains two entries in that field (*Television* and *Comedy*), the record will appear twice—once under “C” for Comedy and again under “T” for Television. Without an exploded sort, each record would appear only once, sorted by the first entry in the field (in this case, *Television*).

For more information about sorting, see “Sort Keys Subtab” on page 216.
For example, exploded sorts are appropriate when printing mailing labels from records containing multiple contact names. Say you want to print a label for each contact shown below (Mr. Tom Jones and Ms. Victoria Russo):

An unexploded sort would print a label only for Tom Jones, because his name is the first entry in the field. To print a label for each entry, use an exploded sort for the Contacts field (Sort Level 2) and make the box content the Sort Key. Do this in the form, as a compulsory sort. The Company field is the primary sort, and the Contacts field is a subsort.

Label form with Sort Key Level 2 (Contacts) in first box.

Specify Compulsory Sort Order dialog box with Exploded Sort selected for the subsort field, Contacts (Sort Level 2).
Now you can use the form to print mailing labels for each entry in the Contacts field:

This exploded sort makes sure that each person (entry) at a company gets a separate label.

Selecting primary sort field options

You can select up to four fields to be used as alternate primary sort fields, in case the primary sort field in a record is empty. The software will substitute the first field in the list of alternates that contains an entry. For example, say Author is the primary sort field and Corporate Author is the alternate. A record with an empty Author field will be sorted by its Corporate Author field.

To specify what happens if the primary sort field is empty

If you specify a primary sort field for a user-specified, compulsory, or textbase default sort, you can also specify what happens if the primary sort field is empty. This option is not available if you sort records by order of their relevance (by selecting the Relevance-Ranked Order option button in the Use group).

1. On the applicable Specify Sort Order dialog box, click the Primary Sort Field Options button to open the Primary Sort Field Options dialog box. (The button is unavailable until there is at least one field in the Sort Fields list.)
2. Select an option in the Option If Primary Sort Field is Empty group:
   - **Sort Those Records First.** Any records whose primary sort field and all alternate primary sort fields are empty will be placed at the beginning of the sorted records. Affected records will appear in the approximate order in which they were added to the textbase unless you have defined one or more subsort fields.
   - **Omit Those Records.** Any records whose primary sort field and all alternate primary sort fields are empty will be omitted from the report. This option is referred to in the Summary section on the Specify Sort Order dialog box as “omitting empties.”

   **Note:** This option is not available when defining a textbase default sort, and it is ignored for a form used on the Web (with a DB/Text *WebPublisher* product), because it can change the perceived number of records retrieved.

---

**To specify alternate primary sort fields**

If you want to specify alternate primary sort fields, use the Primary Sort Field Options dialog box. To open this dialog box, click the **Primary Sort Field Options** button on the applicable Specify Sort Order dialog box.

1. In the Alternate Primary Sort Fields group, select a field from the Available Fields list and click the right arrow button (>) to move the field into the Alternate Fields list.

2. Repeat the previous step for each field you want to specify—up to four fields—in descending order of preference. If the primary sort field is empty in a particular record, DB/TextWorks will substitute the first field in the list of alternates that is found to be non-empty. If all are empty, the behavior specified in the previous section occurs.

3. To sort on each entry in an alternate primary sort field, highlight the field in the Alternate Fields list, then select the **Exploded Sort** check box. The record will appear in the report once for each entry in the alternate primary sort field.

   **Note:** Exploded sorts are not available for textbase default sorts or *WebPublisher* reports.

4. Click **OK** to save your selections.

---

**Interfiling**

Use interfiling to merge and sort up to five fields. For example, if you have two fields, *Corporate Author* and *Personal Author*, you can merge the information in both fields and sort the combined information alphabetically. Interfiling is for reporting purposes only. Records are not actually merged in the textbase.

**Note:** This option is not available when defining a textbase default sort, and it is ignored for a form used on the Web (with a DB/Text *WebPublisher* product), because it can change the perceived number of records retrieved.
The following example was done as a compulsory form sort. The primary sort field is *Corporate Author*, the interfiled field is *Personal Author*, and the box content is the primary Sort Key (Level 1). If either of the interfiled fields have multiple entries, you should use an exploded sort to ensure that all the entries are included in the sort. If a record has information in both interfiled fields, it will appear twice, as shown below.

![The following example was done as a compulsory form sort. The primary sort field is Corporate Author, the interfiled field is Personal Author, and the box content is the primary Sort Key (Level 1). If either of the interfiled fields have multiple entries, you should use an exploded sort to ensure that all the entries are included in the sort. If a record has information in both interfiled fields, it will appear twice, as shown below.](image)

**To interfile fields**

1. On the applicable Specify Sort Order dialog box, move at least one field into the Sort Fields list. The field at the top of the list is the primary sort field (the one that will be interfiled with other fields).

2. Click the **Interfile** button to open the Sort Order – Interfile Fields dialog box.

   ![The following example was done as a compulsory form sort. The primary sort field is Corporate Author, the interfiled field is Personal Author, and the box content is the primary Sort Key (Level 1). If either of the interfiled fields have multiple entries, you should use an exploded sort to ensure that all the entries are included in the sort. If a record has information in both interfiled fields, it will appear twice, as shown below.](image)

3. Select a field from the Available Fields list and click the right arrow button (>) to move the field to the Interfiled Fields list.
4. Repeat step 3 for each field you want to interfile—up to four fields. The fields you select will be merged and sorted with the primary sort field. In the previous illustration, the contents of the Personal Author field will be interfiled with the Corporate Author field (primary sort field, not shown on this dialog box).

5. To sort on each entry in an interfiled field, highlight the field in the Interfiled Fields list and select the Exploded Sort check box. In the previous illustration, if the Personal Author field contains multiple authors, every author will be interfiled with the Corporate Author field. If you do not do an exploded sort, only the first entry in the interfiled field will be considered in the sort.

6. Click OK to save your selections.

How Field Types and Indexing Affect Sort Order

To determine how to sort records, DB/TextWorks uses the sort options you specify, together with the field type and special filing options defined for each field in the textbase structure. For example, Number fields are always sorted numerically, but numbers in a Text field could be sorted alphabetically if the Numbers File Numerically check box is not selected in the Special Filing Options group. Leading articles (such as A, An, The) might be ignored, and terms could be sorted word-by-word or letter-by-letter. Field types and special filing options are explained in Chapter 2, “Creating a Textbase.”

Note that if you interfile sort fields or specify alternate primary sort fields that use radically different filing rules, the report could be very difficult to navigate. An example would be if you interfiled a Number field with a Date field.

How to Determine if a Sort Exists

To see if a textbase default sort or user-specified sort exists, choose Display>Textbase Information. The Textbase Defaults and Currently in Use sections on the Textbase Information window indicate if a textbase default sort or user-specified sort is in use. To find these sections, either scroll down or choose Edit>Find and search for the word sort.

To see if a form has a compulsory sort, you can open it in the Form Designer, then choose Report Options>Compulsory Sort and see what options are defined.

You can also print the form definition by choosing Maintain>Manage Textbase Elements, selecting a form from the Currently Saved list, and clicking Print. The sort fields, if any, are listed in the Compulsory Form Sort Order section near the end of the form definition. If the form does not have a sort, the words <none specified> appear.

Notes about Sorting

- The purpose of a sort is to group information and 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.
- If you use an exploded sort, alternate primary sort fields, or interfiled fields, you should use Sort Keys as content items because they extract the appropriate field or field entry.
• If a form has more Sort Header/Footer levels than there are represented in the sort specification (that is, the primary plus the number of subsort fields), the additional Sort Header/Footer levels do not appear in the report.

• The records in a set are not actually sorted until the report is generated. 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 the first 250 characters of the combined primary sort field and subsort fields. For example, if you sort by a long text field, subsort by a long research report title, and subsort again by volume number, the combined sort fields may exceed the character limit before the sort reaches the volume number.

Printing Reports

Reports generated using DB/TextWorks can be previewed to see how they will look printed, before you actually print them.

Previewing a Printed Report

Use the Print Preview window to see how a form will look when printed. The print preview shows the Margin Area, headers and footers, page breaks, and other report components.

To preview a report

1. Select the form you want to preview (choose 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. If any form box has prompted text specified as a content item, the Information Needed dialog box opens. Enter the information needed, then click OK to open the Preview window.
5. The preview window opens. To navigate through the pages, use the toolbar options or press the PgUp and PgDn keys on your keyboard.
6. To exit from Print Preview, click the Close button on the toolbar.

Note: If you choose to view records after a search (instead of pressing the Cancel button) the Form Used to Print Report dialog box may open when you choose File>Print Preview. Select the appropriate options, then click OK.
Printing a Report

You can print a report on regular paper or labels or card stock. You can print all pages or selected pages.

**Note:** You can also print to file. Printing reports or images to a file retains printer codes, but most other print-to-file instances (for example, printing a textbase structure definition) create plain text files without printer codes.

**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.
4. [Optional] Choose **Display>Sort Report** to sort records in a particular order. Note that 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. Choose **File>Print**. The Form Used to Print Report dialog box opens if you chose to display records after the search and the form used in the window is not the form currently selected for printing. Select the form printing options you want and click **OK**.

![Form Used to Print Report](image)

- **Report printing form.** Uses the Report printing form selected on the Select Forms dialog box.
- **Form for current window.** Uses the form displayed in the current window. For example, if you are in the Report window, DB/TextWorks will use the Report Window form.
- **Always use this option without asking.** Sets your selection as the current default form for printing. If you select this check box, this dialog box will not appear again. (To access it, choose **Tools>Options>General** and clear the check box in the Report options group.)

6. When the Print dialog box opens, notice that the name of the print form appears on the status bar. Select the print options you want and click **OK** to begin printing.

There are printer-specific options that have an effect on the report output, such as the page orientation (portrait or landscape), and paper size. You can check these settings using either the **Setup** button on the Print dialog box or **File>Print Setup**.

**To print just one record**

1. Search for the record you want to print.
2. In the Select Search Results Window dialog box, specify where the record displays by choosing the **Display window** or **Edit window** option button. Click **OK**.
3. Choose **File>Print** to open the Form Used to Print Report dialog box. Select the form printing option(s) you want and click **OK**.
4. When the Print dialog box opens, notice that the name of the current print form appears on the status bar. Select the print options you want and click **OK** to begin printing.
To print labels
You print labels the same way you print a report (see above), except you must use a label form and specify the label on which to start printing. Being able to specify the starting label is helpful because you can print on a partially used label sheet.

The Specify Starting Label dialog box opens when you choose **File>Print** and press **OK** on the Print dialog box. Note that if you decide to preview the labels before printing (choose **File>Print Preview**), this dialog box also opens.

1. On the Specify Starting Label dialog box, 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 on the Specify Starting Label dialog box.

2. Click **OK**.

   **Note:** The Specify Starting Label dialog box will only let you specify a starting label number up to the maximum available for the selected form (that is, the number across multiplied by the number down). 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.

Troubleshooting
When you try to print a report, you may receive a message box that 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.

Click **Yes** to print the report, or **No** to cancel the report printing.

Here are some ways you can correct the problem:

- **Move the Margin 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**.

318 Chapter 5: Working with Forms
Sending a Report as Mail

You can send out a report as an electronic mail attachment in Plain Text (ASCII), Rich Text Format (RTF), or HTML format if you have access to mail services. Depending on your EMail program, the HTML attachment may appear in the body of the message. You also can send a report in Plain Text format in the body of the message, and you can attach other files (for example, document, HTML, image, and text) to the EMail.

Use the settings on the EMail tab (choose **Tools>Options>EMail**) 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 EMail from within Windows programs) uses the EMail 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 EMail program as their default simple MAPI client. To do so, you must consult the documentation provided with your EMail program, as each one is different.

- **SMTP (Simple Mail Transfer Protocol)**. SMTP accesses mail services directly, without the need to use an EMail program. To use this option, you must provide the name or IP address of your mail server. Use SMTP if your EMail program does not support MAPI or you have difficulty using MAPI.

  **Note:** If you use SMTP, the maximum amount of text that you can place in the body of an EMail is 32,000 characters.

The currently selected Report window form is used by default, so the output mimics the appearance of information displayed in the Report window. You can select another form. The resulting file is not paginated and information in the Margin Area of the form is ignored. Note that after you send a report as mail for the first time, your form selection is subsequently remembered.

Images in picture boxes or inline images (for example, leading/trailing logos) are not included in reports sent via EMail.
To send 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 one of these message format choices from the drop-down list:
   - **Plain text in message body.** Inserts the report as text into the Message area of your EMail program. Retains as much formatting as possible, including some approximation of side-by-side boxes. Does not retain font or color. Plain text reports work best with certain form characteristics. For details, see the explanation of plain text on page 323.
   - **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. The report can be up to a maximum of 32K. Plain text reports work best with certain form characteristics. For details, see the explanation of plain text on page 323.
   - **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.

3. Make sure the **Mail each record to a different address** 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 EMail Report Form dialog box, click **OK**.

5. Do the following, depending on how you access mail services:
   - If you use **MAPI**:
     a. Click **OK** on the Send Report as Mail dialog box. A new message window for your default EMail program appears with the report in the message body or attachment field.
     b. Specify who should receive the report and fill in the other fields your EMail program may have.
     c. [Optional] Specify file attachments using your EMail program.
     d. Click your EMail program’s Send button.
If you use SMTP:
  a. Fill in mailing information on the Send Report as Mail dialog box. Note that you must enter a valid EMail address (for example, name@domain.com) in the From box.
  b. [Optional] Click the Select File Attachment button to specify a file to attach to the EMail, 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 attached. 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.

---

c. Click OK on the Send Report as Mail dialog box to send the EMail.

d. 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.

To send each record as mail to recipients identified within the record
1. Open the textbase and retrieve one or more records.
2. Choose File>Send Report as Mail.
3. Select an option from the Message format drop-down list, as described in the previous procedure.
4. Select the Mail each record to a different address check box.
5. Select a field name from the Field containing EMail ‘To:’ address drop-down list that contains EMail addresses in the correct address format (for example, tjones@crafts.com, tmallory@carriers.com).

---

Note: If a record has multiple EMail 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 EMail 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 EMail Report Form dialog box, click OK.
8. [Optional] Click the Select File Attachment button to specify a file to attach to the EMail, then click Open. Do this for each file you want to attach.

**Note:** Because all file attachments are recorded in your textbase .IDI file, the attachments from your previous Send Report as Mail session are automatically attached. 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 EMail.

10. Click OK to dismiss the confirmation message that appears.
You can write formatted record information to a file in Plain Text (ASCII), Rich Text Format (RTF), or HTML format. The currently selected Report window form is used, so the output mimics the appearance of information displayed in the Report window. The resulting file is not paginated and information in the Margin Area of the form is ignored.

To write a report to a file
1. Open a textbase and retrieve one or more records. All of the records in the current set will be included.
2. Select a Report window form (Display>Select Forms).
3. Choose File>Write Report to File, then select one of these options:
   - **Plain Text (ASCII).** Retains as much formatting as possible, including some approximation of side-by-side boxes. Does not retain font or color. Plain text reports work best with the following form characteristics:
     - Courier New 10 point font for labels and text font (choose Tools>Box Properties>Labels and Tools>Box Properties>Formats>Font, Color).
     - Vertical units set to Lines (choose Tools>Form Properties>General).
     - Top Offset for boxes set to whole increments of lines, such as 1 or 2, not .5 (choose Tools>Box Properties>Position).
   - **Rich Text Format (RTF).** Saves as much formatting as possible by converting it to instructions that most word processing and layout packages can read/interpret. Most word processors use tables to emulate side-by-side paragraphs, and this may change alignment from the way it appears in DB/TextWorks. Also, avoid the Anchor to Form option except at the top of a report. The only box you can anchor to the form (and have it work well under RTF) is the top one. If boxes are next to each other, anchor them together.
   - **HTML.** Writes formatted record information to a file in Hypertext Markup Language (HTML), the document formatting language used by Web browsers. This provides a way of producing pages in HTML that you can publish on your Web site. The entire report becomes one HTML page. To generate multiple, smaller pages, do searches that generate fewer records and write each report to a separate file. (If you do not have a WebPublisher product, this option provides a way of publishing information on the Web. Unlike WebPublisher, which produces dynamic reports, writing to HTML produces a static report.) When prompted, specify a name and location for the file. This is the only option that retains images. It uses “simple” HTML (that is, all boxes are left-justified, labels are on top of boxes, and font face is ignored) instead of Cascading Style Sheets (CSS).
Managing Forms

Follow the instructions below to back up, delete, rename, and perform other operations on forms.

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 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 their proper places, 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.

Printing a Form Definition

You can print a form description, or save it in a text file that you can view or print using a text editor or word processor. Definitions provide a way of saving information about a form and are especially useful for analyzing problems.

To print a definition from within the Form Designer, choose Form Operations>Print Definition. You can also print a definition using the Print button on the Manage Textbase Elements dialog box (Maintain>Manage Textbase Elements).

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 the Export and Import buttons on the Manage Textbase Elements dialog box (Maintain>Manage Textbase Elements).
Selecting Forms

To use a form, you have to select it. You can select forms for most operations at once using the Select Forms dialog box, or you can select a form for the current operation using a toolbar button.

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.
     
     **Note:** For information about changing the textbase default forms, see the “Default forms” topic in the online help.

   - 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 on the dialog box.

![Select Report Form dialog box](image)

**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 now. If you do not see a form you want to use in the Currently Saved 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 the Select Report Printing Form button on the Main window toolbar.

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 Forms for Web Use

If you have a *WebPublisher* product, you can design forms to use with textbases you publish on the Internet or an intranet.

You can design forms for your users to view search results. Using a Web browser, users can search your textbase and have their results returned in dynamically generated HTML reports. *WebPublisher* gives you the flexibility to offer users the option to choose their own form from a list of Web forms (created by you), or you can specify one form be used with a particular textbase or saved query. *WebPublisher PRO* offers everything that *WebPublisher* does, but adds the ability to add, edit, and/or delete records from a Web browser and the ability to submit and return XML.

Overview

You design forms for Web use the same way you design forms for the desktop, using the Form Designer. (If you have *WebPublisher PRO*, you can also design an interface using a third-party tool, such as Microsoft FrontPage. For more information, see the *Inmagic DB/Text WebPublisher PRO User’s Manual*.)

**Important!** When designing a form to display records on the Web, be sure the **Web** check box and the **Textbase File (Public)** option button are selected on the Save Form As dialog box when you save the form. This makes the form available for Web use, and includes it in *WebPublisher* form drop-down lists on the Web. For more information, see “Saving a Form” on page 199.

For each textbase that you will publish on the Web, 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.

- **Report forms.** Summarize multiple records found by a search. Tabular forms (described on page 290) are ideal for this purpose. Report forms often include a hypertext link (called an expand record link) to a display form.
- **Display forms.** Show detailed information about one record at a time. Used when a user clicks on an expand record link.
- **Edit forms.** Used to add, edit, and/or delete records over the Web. If you want to provide your users with direct HTTP access to an edit screen to add records (for example, to submit a registration form) you can design an edit form and export it to HTML. For more information about editing over the Web, see the *Inmagic DB/Text WebPublisher PRO User’s Manual* or the online help.

Forms used with *WebPublisher* products to display records are saved with the textbase, just like with DB/TextWorks. However, Web editing forms you plan to have users directly access via HTTP must be exported to HTML, like query and menu screens. An exported editing form is used only to add records via a browser. For more information about exporting editing forms to HTML, see “Adding Records Over the Web” on page 330 or the online help.
HTML Properties for Forms

There are many HTML attributes that can be applied to a form as a whole, as well as to the individual text and form boxes within it. For example, you can add a background image to a form, or create a hypertext link to another location.

**Note:** HTML properties only have an effect on forms used on the Web. They are ignored for forms used in DB/TextWorks windows.

When you design a form for the Web, you can select Web-specific options from the tabs listed below:

- **Tools>Form Properties>Logos.** Use the Logos tab on the Form Properties dialog box to add images to the top and/or bottom of a page. For more information, see “Logos Tab” on page 266.

- **Tools>Form Properties>HTML.** Use the HTML tab on the Form Properties dialog box to add record separators and/or a background image to the form. For more information, see “HTML Tab” on page 267.

- **Tools>Box Properties>HTML.** Use the HTML tab on the Box Properties dialog boxes for form and text boxes when designing forms for the Web. The settings let you specify whether and how information will be interpreted as HTML. For form boxes, you must specify the content item in the Contents list to which you want to apply HTML. This is because a form box can contain several content items (for example, two fields, a variable, and fixed text). You also have the option to choose `<all>` to apply HTML formatting to all content items in the form box. For more information, see “Using HTML in form boxes” on page 253 and “Using HTML in text boxes” on page 258.

**Tip!** You can also use HTML as added text in a form box to wrap around the data in the field specified as the box contents. For more information, see the “Added text” topic in the online help, or the *Inmagic DB/Text WebPublisher PRO User’s Manual.*
Adding Records Over the Web

If you have DB/Text WebPublisher PRO, you can design an edit form with 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 exported 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 on the Form Operations menu 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.

For more information about exporting an edit form to HTML, see the Inmagic DB/Text WebPublisher PRO User’s Manual or the online help.
Menu screens provide an easy way of opening your most commonly used textbases, as well as setting up a starting environment for DB/TextWorks. A menu screen may appear when you start the software, or you can select a menu screen after starting DB/TextWorks but before opening a textbase.

A menu screen can control which initial elements (that is, forms, query screen, and/or record skeleton) are selected and what initial action occurs when a textbase is opened.

You can design menu screens that access other menu screens. For example, you can design a menu screen that appears when you first open DB/TextWorks. This menu screen can contain menu screen boxes, with each menu screen box providing the ability to open an additional menu screen accessing multiple textbases.

If you have a WebPublisher product, you can also use a menu screen on the Web to provide a list of hypertext links that launch predefined queries.
Opening and Closing the Menu Screen Designer

Use the Menu Screen Designer to create and edit menu screens. After you open the Menu Screen Designer, the menus at the top of the screen change to provide menu-specific options.

To open the Menu Screen Designer
1. Start the software, but do not open a textbase. (If a textbase is open, choose File>Close.)
2. Choose Menu Screens>Design and select an option on the Open Menu Screen dialog box:
   - Open Current Menu Screen File. Open the currently selected menu screen.
   - Create a New Menu Screen File. Open a blank menu screen (no boxes). When prompted, specify a name and location for the new menu screen file. The file extension .TBM is added automatically.
   - Open an Existing Menu Screen File. Select a previously saved menu screen. (Menu screen files have a file extension of .TBM.)
3. Click OK.

To close the Menu Screen Designer
- Choose Menu Operations>Close Menu Screen Designer.

Adding Boxes to a Menu Screen

Using the Menu Screen Designer, you can add a variety of boxes to create the effect you want.

<table>
<thead>
<tr>
<th>Type of box</th>
<th>Common uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textbase box</td>
<td>Specify textbase to open; select forms and screens for initial use.</td>
</tr>
<tr>
<td>Menu screen box</td>
<td>Specify another menu screen to open without dismissing the current one.</td>
</tr>
<tr>
<td>Text box</td>
<td>Provide informational text; provide headings for groups of textbase boxes.</td>
</tr>
<tr>
<td>Picture box</td>
<td>Add a company logo.</td>
</tr>
<tr>
<td>Script input box</td>
<td>Receive information from the user to be used during the processing of a script. (Note that though a script input box can be added to a menu screen, it is not commonly used.)</td>
</tr>
<tr>
<td>Script button</td>
<td>Launch a script that opens another menu screen and dismisses the current one; open a disk file or launch another application.</td>
</tr>
</tbody>
</table>
To add a textbase box to a menu screen

1. Choose Edit>Add>Textbase Box to add a textbase box and open the Textbase Box Properties dialog box.

![Textbase Box Properties dialog box]

**Note:** If you want to access the Textbase Box Properties dialog box later to change box properties, select the box, then choose Tools>Box Properties.

2. Use the tabs on the Textbase Box Properties dialog box to specify the options you want for the box:

   - **Contents.** Select a textbase to add to the menu and type descriptive text to identify the item on the menu. Users can click on the text to open the textbase.
   
   - **Position.** Optionally position the box by designating width, coordinates, and offsets. Width indicates the width of the box. Coordinates indicate the absolute position of the box on the menu screen. Offsets indicate the relative position of a box to either the screen or another box. Specifying values for these settings allow you to accurately position a box on the menu screen.
   
   - **Font, Color.** Optionally choose text-formatting attributes for the box. You can choose font, font style, size, effects, and font color. You can also choose background colors (including custom colors) for the textbase box itself. This flexibility allows you to create eye-catching, easy-to-read menu screens.
   
   - **Icon.** Optionally select an icon to appear in front of the menu item or remove an existing icon from the menu screen. Users can click on the icon to open the textbase. Icons will not appear unless the Show menu icons check box is selected on the General tab of the Menu Screen Properties dialog box (choose Tools>Screen Properties>General).
– **Initial Elements.** Optionally select forms, a query screen, and a record skeleton. DB/TextWorks loads your selections when the user performs the appropriate action. For example, when someone opens a record in the Edit window, DB/TextWorks uses the Record Edit form selected here.

– **Initial Action.** Optionally specify what will occur when a user clicks on this menu item. You can specify no initial action, or what type of window to open, or to open a simple HTML window and load a specified HTML page, or to execute the query criteria in a saved query set. Running a saved query is convenient if you often perform the same query (for example, at the beginning of every day). For more information, see the online help.

**Tip!** If you are designing a menu screen for use on the Web with a WebPublisher product, you should specify a saved query to launch a predefined search.

3. Click **Close** when done.

### To add a menu screen box to a menu screen

1. Choose **Edit>Add>Menu Screen Box** to add a menu screen box and open the Menu Screen Box Properties dialog box.

![Menu Screen Box Properties](image)

2. Use the Contents tab to select a menu screen and type descriptive text to identify it.

3. Use the other tabs on the Menu Screen Box Properties dialog box to specify the options you want for the menu screen. See the previous section for an explanation of each tab. Notice that there are fewer tabs on this dialog box.
To add a text box to a menu screen

1. Choose Edit>Add>Text Box to add a text box and open the Text Box Properties dialog box.

2. Type the text you want in the Text 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 Text box automatically.

3. Use the tabs on the Text Box Properties dialog box to specify other attributes, including HTML properties, for text boxes used on menu screens on the Web with a WebPublisher product. For information about adding content, formatting, and HTML properties to text boxes, see Chapter 5, “Working with Forms,” the “Text Boxes” section, and the online help.

Note: A text box used on a Web menu screen can have the following options selected from the Treat text as drop-down list on the HTML tab: Do not alter, Raw HTML, URL, EMail link, HTML file reference. These options are explained in Chapter 5, “Working with Forms,” the “To select HTML settings for form boxes” section, and the online help.
To add a picture box to a menu screen

1. Choose **Edit>Add>Picture Box** to add a picture box and open the Picture Box Properties dialog box.

2. Use the tabs on the Picture Box Properties dialog box to specify the location of fixed images and settings for the picture box. For information about picture boxes, see Chapter 5, “Working with Forms,” the “Picture Boxes” section, and the online help.
To add a script input box to a menu screen

1. Choose Edit>Add>Script Input Box to add a script input box and open the Script Input Box Properties dialog box.

2. Use the tabs on the Script Input Box Properties dialog box to specify the position attributes, label information, and font and color attributes for the script input box. For information about script input boxes, see Chapter 5, “Working with Forms,” the “Script Input Boxes” section, and the online help.
To add a script button to a menu screen

1. Choose **Edit>Add>Script Button** to add a script button and open the Script Button Properties dialog box.

![Script Button Properties dialog box](image)

2. Use the tabs on the Script Button Properties dialog box to specify options and settings for the script button. For information about script buttons, see Chapter 5, “Working with Forms,” the “Script Buttons” section, and the online help.
**To perform other operations**

Use the options listed below to edit the menu screen and perform other operations in the Menu Screen Designer. Note that you must select a box (click on it) to change its size, position, or other attributes. Also note that you can use the mouse to move one or more boxes at a time or change the width of one box at a time.

<table>
<thead>
<tr>
<th>Menu</th>
<th>Commands</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Menu Operations</strong></td>
<td>Open or save a menu screen; print a definition of a menu screen; export a menu screen to HTML (for use with a WebPublisher product); or close the designer.</td>
</tr>
<tr>
<td><strong>Edit</strong></td>
<td>Cut, copy, paste boxes; add boxes; delete boxes; go to a box; select all boxes. Note that when selecting all boxes, you can choose to select all boxes on the menu screen, or you can select all boxes of a certain type only (for example, only all textbase boxes).</td>
</tr>
<tr>
<td><strong>Tools</strong></td>
<td>Change box properties, including size and position; show or hide box borders (for text boxes or script input boxes only); specify a background color for boxes; align boxes; change tab order; set menu screen properties, including HTML options (for use with a WebPublisher product); specify script code for the menu screen. Note that if you plan to move the textbase(s) referenced by the menu screen, be sure to choose Tools&gt;Screen Properties&gt;General. Select Do not retain path from the Path setting drop-down list. See the online help for more information.</td>
</tr>
<tr>
<td><strong>View</strong></td>
<td>Toggle box boundaries on and off; specify the units to use for horizontal and vertical movement when using arrow keys to move a box.</td>
</tr>
</tbody>
</table>
Setting Menu Screen Properties

The menu properties you select are saved with the menu screen and take effect when the menu is used.

To set menu screen properties
1. In the Menu Screen Designer, choose Tools>Screen Properties to open the Menu Screen Properties dialog box.
2. Use the General, Logos, and HTML tabs to specify various attributes for the menu screen. Note that the settings on the Logos and HTML tabs apply only to menu screens used on the Web with a WebPublisher product. Each tab and its settings are described below.
3. Click OK when finished.

General Tab
Note: If you plan to publish your menu screen on the Web with a WebPublisher product, the only option on this tab that applies is Background Color.

Options group
• Screen title. Type the name you want to use as the title for the screen. This title will be displayed in the menu screen title bar. If you do not specify a title, DB/TextWorks uses the menu screen file name.
• Show menu icons. Select this check box if you specified icons for textbase or menu screen boxes. If you select it when no icons are specified, there will be extra space at the left of each textbase or menu screen box. Clear the check box to remove the extra space.
• Background Color. Select this check box to choose a color to use for the menu screen’s background. This option applies to both desktop menu screens and those used on the Web. Click the Select Color button to specify the color (including custom colors). Use this option if you always want the menu screen to use the specified color, regardless of any colors specified using Tools>Options>Display>More Defaults>Colors.
• Path setting. Use this drop-down list to specify where the menu screen will look for files referenced in the menu screen (for example, textbases and images). See the online help for more information.

Note: The Path setting option does not apply to WebPublisher products. Menu screens used on the Web use the textbase path specified in the DBTW/WEB.INI file.
Measurements group

- **Horizontal units.** Use this drop-down list to specify the units to be used when specifying box position and width.
- **Vertical units.** Use this drop-down list to specify the units to be used when specifying box position and width. Vertical units affect the distance between boxes, not the information within a box.

**Note:** Units are shown in inches, millimeters, points, or lines (lines are available only for vertical distances).

Logos Tab

Use the Logos tab to add images to the top and/or bottom of a menu screen that will be used on the Web. (Note that settings you specify on this tab do not display on the desktop.)

Most Web browsers support only .JPG 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.

Logos group

- **Leading Logo.** In this box, enter the file name, including extension, of the image file to display at the top of the menu screen. For example, type NEWLOGO.JPG or click the Browse button and navigate to the image.
- **Trailing Logo.** In this box, enter the file name, including extension, of the image file to display at the bottom of the menu screen. For example, type MYLOGO.GIF or click the Browse button and navigate to the image.

For more information, including important information about image file locations, see the *DB/Text WebPublisher PRO User’s Manual* or the online help.

HTML Tab

Use the options on this tab to add the following HTML-related properties to a menu screen that will be used on the Web with a *WebPublisher* product. (Note that settings you specify on this tab do not display on the desktop.)

Menu page group

- **Use background image.** Select this check box to specify an image file for the page background. If you select this check box, the Image file box is enabled so you can enter the image file you want displayed. For more information, see the *Inmagic DB/Text WebPublisher PRO User’s Manual*.  

**Note:** To specify a color for the menu screen background, choose Tools>Screen Properties>General.
Form settings group

- **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.** This option determines whether users will be able to change display 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 edit page.** This option determines whether users will be able to change edit forms in the Web browser. If you select this check box, the form drop-down list will appear in the Web browser.

- **Records per page.** Type the number of records you want displayed on one report page after a search, or select **unlimited** from the **Records per page** drop-down list. Limiting the number of records displayed on a page lets users view the records matching their search criteria in batches.

- **Navigational buttons.** Specify whether you want navigational 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.
Saving a Menu Screen

After using the Menu Screen Designer to create or modify a menu screen, save it by choosing an option from the Menu Operations menu:

- **Save Menu Screen.** Save changes to the current menu screen.
- **Save Menu Screen As.** Save an existing menu screen under a new name and/or in a different location. Specify a name and location for the menu file on the Save Inmagic Menu Screen File As dialog box. You do not have to include a file extension because the software adds extension .TBM automatically (for example, `SALES.TBM`).

Selecting a Menu Screen

After saving the menu screen and closing the Menu Screen Designer, you need to select it. The menu screen you select will appear when you start the software.

**To select a menu screen**

1. Start the software but do not open a textbase. (If a textbase is open, choose **File>Close**.)
2. Choose **Menu Screens>Select**.
3. Select an option on the Select Menu Screen dialog box:
   - **Use No Personal Menu Screen.** Select this option if you **do not** want a personal menu screen to appear when you start the software. Then click **OK** to close the dialog box. Note that selecting this option does not necessarily mean that you will not see any menu screen when you start the software.
   
   **Note:** Even if you select the option above, if there is a menu screen called **DBTEXT.TBM** in the Start In directory or the software installation directory, **DBTEXT.TBM** will be used as the menu screen. This special feature enables people who share **DB/TextWorks** on a network to share one menu screen file.

   - **Use the Menu Screen in a File.** Select this option if you want to use a personal menu screen when you start the software. When you click **OK**, you will be prompted to select the menu screen file (.TBM) that you want to use.

Redisplaying a Menu Screen

After you open a textbase, the menu screen is no longer visible. To redisplay the menu screen, close the textbase.

If you inadvertently close the menu screen, choose **Menu Screens>Display Current**.
You can save menu screens anywhere your computer can access them. You can freely rename, move, and copy menu screen files (.TBM) just as you would any other file (for example, by using Windows Explorer).

Some people use just one menu screen, which contains the names of all of their textbases. However, you may want to create several different menu screens. To switch between the various menu screens, choose **Menu Screens > Select**. You can also create one menu screen that contains menu screen boxes or script buttons that open different menu screens. For more information about adding menu screen boxes and script buttons, see “Adding Boxes to a Menu Screen” on page 332.

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 SAMPLE, use this command:

```
C:\DBTEXT\DBTEXT32.EXE /M SAMPLE
```

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 directory 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 directory associated with the program icon or shortcut.
In addition to text, numbers, and dates, your textbases can include images. You can include color, grayscale, and black-and-white images in over 30 of the most common image file formats, including TIFF, PCX, JPEG, BMP, and EPS. You can search for, display, and print these images, and annotate them using text, graphics, and even sound.

You can store images in any locations that DB/TextWorks can access. Only the image file names are stored in the textbase. The actual image files are stored in external locations, such as network servers, CD-ROMs, or your local hard drive.

To associate images with records, you add an Image field type to the textbase structure and then populate that field with image file names. For example, the following record has multiple images associated with it.

You can display one image at a time or multiple images in a thumbnail view.

Note: To control certain aspects of image appearance and printing, choose Tools>Options>Imaging and set the image options. For more information, see Chapter 10, “Customizing DB/TextWorks,” the “Imaging Tab” section.
Difference Between Images Window and Picture Box

There are distinct differences between picture boxes, which were described in Chapter 5, “Working with Forms,” and image windows.

A picture box lets you include an image in a form or report. It can be used to show static images, such as corporate logos, or thumbnail pictures specific to each record. For more information on picture boxes, see Chapter 5, “Working with Forms.”

An image window lets you manipulate an image (for example, zoom and rotate it), annotate an image, and show all images associated with a record. This chapter describes all these functions.

Defining an Image Field

The first step in associating images with records is to define an Image field. A textbase can include more than one Image field. Image fields are Term indexed by default, which means you can search them just like any other field. You cannot apply validation to an Image field.

To define an Image field
1. Open a textbase, choose Maintain> Edit Textbase Structure, and click the Edit Fields button to open the Edit Fields dialog box.
2. Add a field by typing its name in the Field Name box and clicking the Add button.
3. On the Type and Indexing tab, select Image from the Field Type drop-down list, then click the Change button.
4. Click Close on the Edit Fields dialog box and OK on the subsequent dialog boxes to save your changes.
Adding Image File Names to Records

Once you have created an Image field, use one of the following methods to populate it:

- Edit a record and type the image file name(s) directly in the Image field.
- Import a text file. See “Importing Image File Names from a Text File” on page 349.
- Scan images directly. See “Scanning Images” on page 351.

Image File Names and Locations

Images can have any standard Windows file name (long or short). DB/TextWorks does not require a particular extension to recognize images. This gives you more freedom in naming your image files.

An Image field in a record can contain one or more image file names. Use the F7 key to make each file name a separate field entry. For example:

<table>
<thead>
<tr>
<th>Image Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>FILE1.JPG</td>
</tr>
<tr>
<td>FILE2.JPG</td>
</tr>
</tbody>
</table>

If you have several consecutively named files, you can use just one entry, followed by a counter. For example:

```
FILE1.JPG 3
```

For more information about this shortcut naming convention, see the following section.

A general guideline when adding image file names to a field is to include the directory path, starting with a backslash, but not the drive letter. For example, an Image field might include this entry:

```
\MEMOS\LETTER1.JPG
```

If you omit the backslash at the beginning of the path, DB/TextWorks looks for the image in the subdirectory of the current directory (not the textbase directory). For example:

```
MEMOS\LETTER1.JPG
```

If you prefer, you can specify just the image file name (no path), and the software will look for the image in the textbase directory, or the current directory on the drive(s) specified in the Imaging options (choose Tools>Options>Imaging). For example:

```
LETTER1.JPG
```

Note: As a general rule, if the images are located on a CD-ROM or mapped network drive, do not include the drive letter as part of the image file name. To specify which drives DB/TextWorks should look on, choose Tools>Options>Imaging and specify up to 12 drive letters in the Image drive(s) box. For more information on Imaging options, see Chapter 10, “Customizing DB/TextWorks,” the “Imaging Tab” section.
Shortcut Naming Convention

To indicate multiple sequentially named images, you can use an image file name followed by a counter. This shorthand naming convention lets you reference a number of images without having to list each file name separately. For example, instead of using three entries:

MEMO1.TIF
MEMO2.TIF
MEMO3.TIF

you could use just one:

MEMO1.TIF 3

If you prefer, you can enclose the counter in parentheses:

MEMO1.TIF (3)

For the shortcut method to work, the file extension or file name must include a number. DB/TextWorks increments the last number in the file name or extension. For example, CAR.001 2 represents two images: CAR.001 and CAR.002.

Important! Do not use this shortcut if you plan to use the images with a WebPublisher product, or in picture boxes in DB/TextWorks.

To specify several ranges of images, use multiple entries. For example, the illustration below references 16 images (JAY.001 through JAY.012 and SAMP.006 through SAMP.009).

**Scanned Memos**

| #MEMO01JAY.0012 |
| #MEMO05SAMP.0064 |

You can use the shortcut naming convention when editing records individually, or when specifying image file names in a text file that you plan to import.
Importing Image File Names from a Text File

If you are adding a large number of image file names to a textbase, you do not have to edit each record individually. Instead, you can create a text file that contains the image file names. Image service bureaus commonly do this by scanning multiple images for import. To create the import file, you can use a word processor or text editor. The import file should be in the Inmagic tagged, delimited ASCII, or XML format described in Chapter 3, “Working with Records,” the “Importing Records” section.

If you will be adding new records to a textbase, each record in the import file should contain all of the information that you want to include. If you will be modifying existing records (for example, adding image file names to an empty Image field), each record in the import file should contain unique field matching information, such as an ID field (to determine which records to modify), and Image field information (to add or change image file names). See the example following the steps below.

**Important!** To add image file names to existing records, your textbase must contain a field or combination of fields that will uniquely identify each record. Match on that field (or those fields) during the import, as explained in the following steps. This is how the software determines which image file names should be added to which existing records.

The steps below summarize the import process. For more information, see Chapter 3, “Working with Records,” the “Importing Records” section.

**To import image file names from a text file**

1. Open the textbase into which you plan to import image file names.
2. Choose **File>Import** to open the Select Import File dialog box.
3. Select a file to import and click **Open**.
4. On the Import Options dialog box, select the File Format, Validation, Exception File, Strip Leading Spaces, and Import Method tabs and specify the settings you want, as appropriate.
5. On the Add/Replace Options tab, do the following, as applicable:

– If you want to add new records that contain image file names, and you want to avoid duplicating or changing existing records, select the **Check for Matching Records** check box, then select the **Reject New Record** option button from the If Match is Found group. If you are sure that the records in the import file do not duplicate existing records, or if it does not matter whether records are duplicated, you can leave **Check for Matching Records** cleared.

– If you want to add image file names to existing records, select the **Check for Matching Records** check box, then select the **Append Field Entries** option button from the If Match is Found group.

– If you want to change image file names in existing records, select the **Check for Matching Records** check box, then select the **Replace Fields** option button from the If Match is Found group.

6. If you selected the **Check for Matching Records** check box, use the arrow buttons to move one or more fields from the Term-Indexed Fields list to the Incoming Records Must Match list. The field(s) you select indicate which field information DB/TextWorks should compare during the import to determine whether a record in the import file matches a record in the textbase. Only Term-indexed fields can be used for matching purposes.
7. If you selected the **Append Field Entries** or **Replace Fields** option button, select one of the If Match is Not Found options to determine what to do if a match is not found.

8. Click **OK** to begin the import.

The following example describes a typical import of image file names into existing records.

**Example**

Your textbase includes an Image field called *Schematics*. The field was recently added to the textbase and is empty for most records. You want to add image file names to it. To indicate which image(s) go with which records, you will match on a field called *Product Number*, which contains a unique product number for each record in the textbase. On the Add/Replace Options tab of the Import Options dialog box, you select the **Append Field Entries** option button from the If Match is Found group.

Your import file contains just a few lines for each record. The first line specifies the matching information. The next line(s) specify the entries (image file names) to place in the *Schematics* field. The dollar sign ($) indicates the end of each record. For example:

```plaintext
"Product Number" 286  
Schematics \autos\engines\chevy.001 3  
$  
"Product Number" 287  
Schematics \autos\engines\mustg.001 2  
; \autos\schema\mustassm.001 4  
; \autos\schema\memomfr.pcx  
$  
"Product Number" 288  
Schematics \ships\ladyblue.001 5  
$
```

When you import this file, DB/TextWorks will add the image file names to each specified record. For example, the record for Product Number 286 will have the entry `\ autos\engines\chevy.001 3` added to the *Schematics* field.

The numbers following the image file names in the example above indicate multiple sequentially named images. This shortcut naming method was explained on page 348.

**Scanning Images**

If you have a TWAIN-compliant scanner, you can scan an image to a file while editing a record and DB/TextWorks will insert the file name in the Image field.

From the Edit window, with the cursor in an Image field, choose **Records>Scan Image**, and follow the prompts to scan the image and name the file. 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. There is no support for automatic document feeders or compressing a series of image file names using the shortcut representation, such as `IMAGE001.TIF (3)`.
Finding and Displaying Images

You can search an indexed Image field for a particular image file name, just as you would search any other field. For example, you could search for memo* to find the images discussed in “Shortcut Naming Convention” on page 348. A more common way to locate images is to search for a particular record or set of records, some or all of which happen to include image references. For example, you might search for all widgets manufactured in 2002.

Tip! To find all records with a populated Image field, search for =* in a box that searches that field. To find empty Image fields, do the same search but toggle the Boolean button in front of the box to NOT.

When you retrieve records, you can display one image at a time in the Images window, and use the image options to zoom, rotate, display thumbnails, and perform other display operations.

Note: The Images window is for desktop use only; it is not used on the Web with WebPublisher products.

To display images

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

2. [Edit or Display window only] If you have more than one Image field, put the cursor in the Image field whose images you want to see. You will see images from that field only. Put the cursor in any other field to see images from all Image fields. (You will not see the images until you perform step 3.)

3. Click the Show Record Images button on the toolbar, or choose Display>Show Record Images.

4. Use the toolbar buttons to perform image operations.

The Images window shows one image at a time.
The title bar indicates the number of images referenced in the record and the image currently shown (for example, Image 1 of 5). The status bar indicates the field that includes the image reference, and name of the image file that is currently displayed.

**Tip!** Use Window>Synchronize Windows to turn window synchronization on or off. When the command has a check mark next to it, all open windows will show the same record and/or image. When the command is not selected, you can display a different record and/or image in every window.

### Image Display and Navigation

When an image is displayed in the Images window, you can use the toolbar buttons and the Images menu to navigate among images and change how images are displayed. To access the Images menu, select the Images window. The following illustration shows the default Images window toolbar buttons.

![Image Display and Navigation Toolbar](image)

To show or hide the toolbar on the Images window, use the View menu.
The following table explains the various ways of navigating among and displaying images. Some of the options listed are available only from the Images menu; others can be accessed from other menus or the toolbar. Except where noted on the following pages, the display options do not have an effect on printing, and they never change the image file stored on disk.

<table>
<thead>
<tr>
<th>Option</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous Record</td>
<td>Show the first image in the previous record.</td>
</tr>
<tr>
<td>Next Record</td>
<td>Show the first image in the next record.</td>
</tr>
<tr>
<td>Previous Image</td>
<td>Show the previous image in the current record.</td>
</tr>
<tr>
<td>Next Image</td>
<td>Show the next image in the current record.</td>
</tr>
<tr>
<td>Jump to Image</td>
<td>Go to a specific image in the current record.</td>
</tr>
<tr>
<td>Zoom In or Out</td>
<td>Enlarge or reduce the image.</td>
</tr>
<tr>
<td>Fit to Window</td>
<td>Scale the image to fit the window’s dimensions.</td>
</tr>
<tr>
<td>Rotate Left or Right</td>
<td>Change the image orientation in 90-degree increments.</td>
</tr>
<tr>
<td>Invert Colors</td>
<td>Make a negative image by inverting colors or reversing black and white.</td>
</tr>
<tr>
<td>Scale to Gray</td>
<td>Improve the appearance of black-and-white images.</td>
</tr>
<tr>
<td>Despeckle</td>
<td>Remove unwanted specks and other “litter” from an image.</td>
</tr>
<tr>
<td>Deskew</td>
<td>Straighten a misaligned image (for example, when a page was scanned crooked).</td>
</tr>
<tr>
<td>Thumbnail</td>
<td>Display all images in the current record, at a reduced size.</td>
</tr>
<tr>
<td>Show/Hide Annotations</td>
<td>Show or hide annotations.</td>
</tr>
<tr>
<td>Annotate Current Image</td>
<td>Add or edit annotations.</td>
</tr>
<tr>
<td>Remove All Annotations</td>
<td>Remove annotations from the current image.</td>
</tr>
</tbody>
</table>

**Navigating**

To navigate among images, use the toolbar buttons described above or the equivalent options on the Images menu.

**Scaling Images to Fit the Window**

To size the image to fit the window (for example, after zooming in or out), click the Fit to Window toolbar button or choose **Images>Fit to Window**. This is also useful if an image is cut off or is too small because you have resized the Images window. The **Fit image to window** drop-down list (choose **Tools>Options>Imaging**) lets you specify if and how an image is resized when you choose Fit to Window.
**Zooming In and Out**

To zoom in or out, click the Zoom buttons on the Images window toolbar or choose **Images>Zoom In** or **Images>Zoom Out**. Repeat to continue zooming in or out. Zooming affects display only, not printing.

To zoom in around a particular point, position the cursor over the portion of the image you want to see and click. Repeat to continue zooming in. This is called focused zooming. You cannot zoom out using this method.

To redisplay an image at its original size after zooming in or out, click the Fit to Window toolbar button or choose **Images>Fit to Window**.

**Rotating Images**

You can rotate images right or left in 90-degree increments. This can be useful if an image was scanned at the wrong orientation. The currently displayed image as well as all other images that you view will appear rotated as long as the Images window remains open or until you change the rotation again. Rotation affects printing as well as display.

To rotate an image, click the Rotate Right or Rotate Left button on the Images window toolbar or select one of the following options from the Images menu: **Rotate 0** (original orientation), **Rotate 90** (once clockwise), **Rotate 180** (twice clockwise), **Rotate 270** (three times clockwise—equivalent to once counter-clockwise).

**Inverting Colors**

To create a “negative” of the current image, click the Invert Colors button or choose **Images>Invert Colors**. Inverting colors is especially useful if black-and-white images were inadvertently scanned in reverse. The Invert Colors option affects display only, not printing. Colors remain inverted only until you display another image or close the window.

**Note:** Some print drivers may support a “Print as negative image” property. Click the Properties button on the Print dialog box.

**Scaling to Gray**

To improve the appearance of black-and-white images, click the Scale to Gray toolbar button or choose **Images>Scale to Gray**. Select it again to turn it off. This option affects display only, and black-and-white images only. Scale to Gray uses an effect called anti-aliasing, which is especially useful on line drawings or scanned documents and can appear to eliminate specks in an image. This option remains in effect until you change it.
Displaying Multiple Images in a Thumbnail View

You can use a thumbnail view to see multiple images simultaneously at a reduced size. With the Images window active, click the Thumbnail button on the Images window toolbar or choose Images>Thumbnail.

The Thumbnail window displays all images in the current record (or in the current field, if there are multiple Image fields and the cursor was positioned in an Image field in a Display or Edit window). While the Thumbnail window is open, you can use the Thumbnail menu and the toolbar buttons to perform the operations listed below. To access the Thumbnail menu, make sure the Thumbnail window is selected.

<table>
<thead>
<tr>
<th>To…</th>
<th>Do this…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display an image at full size</td>
<td>Double-click a thumbnail. Or select a thumbnail, then click the Show Selected Image button or choose Thumbnail&gt;Show Selected Image.</td>
</tr>
<tr>
<td>Sharpen black-and-white images</td>
<td>Click the Scale to Gray button or choose Thumbnail&gt;Scale to Gray.</td>
</tr>
<tr>
<td>Change the number of rows and columns for the window</td>
<td>Click the Set Rows and Columns button or choose Thumbnail&gt;Set Rows and Columns. When prompted, type the number of rows and columns you want.</td>
</tr>
<tr>
<td>See images from other records</td>
<td>Click the Next Record/Previous Record toolbar button.</td>
</tr>
<tr>
<td>Annotate images</td>
<td>Choose Thumbnail&gt;Annotate Current Image.</td>
</tr>
<tr>
<td>Show or hide annotations</td>
<td>Choose Thumbnail&gt;Show Annotations or Thumbnail&gt;Hide Annotations.</td>
</tr>
</tbody>
</table>
Printing Images

The options used while displaying an image do not affect printing (except for rotation). During printing, images are scaled to fit the paper size selected from the Size drop-down list on the Print Setup dialog box.

To print images

1. With the Images or Thumbnail window active, choose File>Print.
2. On the Select Images to Print dialog box, select an option button from the Print Range group.

3. If you selected the Print Images in the Current Record or Print Images in the Current Set option button, select one or more Image fields from the Select Image Fields list. If the textbase structure includes only one Image field, that field is the only one that appears in the list, and it is automatically selected.
4. Click OK.
5. Use the standard Print dialog box to specify print options, such as number of copies, then click OK to begin printing.

Tip! Images print significantly faster if you use a non-Postscript printer driver.
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 can even add sound, by referencing a .WAV file. You can display and print images with or without annotations. Annotations do not change the image file itself, as they are stored as separate files with the default extension .ART. The annotation layer sits on top of the image when you display or print it, such as in the following illustration.

You can add text, graphics, and even sound to any image, such as this image of a page of text.

The following pages explain the basics of how to annotate images. For details, see the online help.

To annotate an image
1. Search for records that have images you want to annotate.
2. Choose Display>Show Record Images and navigate to the image you want to annotate.
3. With the Images window selected, choose Images>Annotate Current Image.
   Note: To annotate an image from the Thumbnail window, choose Thumbnail>Annotate Current Image.
4. Use the drawing tools in the floating toolbox or on the Annotations menu to mark up the image. See below for more information about the toolbox.
5. To save the annotations, choose Annotations>Save Annotation.
Using the Annotation toolbox

The tools on the floating toolbox are simple to use. Just click a tool button, then use your mouse to draw the object where you want it.

For example, draw a black rectangle or other opaque object to redact (black out) a signature on a legal document. Annotations do not alter the image file, so the information is not permanently hidden. Anyone who opens the textbase can turn off annotations, so areas that you have hidden can be seen. Redaction is useful mainly for printing hard copies of images.

To show or hide the annotations toolbox

- With the Image Annotation window selected, choose Annotations>Show Annotations Toolbox or Annotations>Hide Annotations Toolbox.

To set default properties for the tools

1. With the Image Annotation window selected, choose Annotations>Annotation Properties to open the Annotation Properties dialog box.

2. Select the font, line style, line thickness, arrow style, foreground and background colors, background mode, and fill pattern you want. The attributes specified here become the default properties for the tools and affect any currently selected objects and new annotation objects you add. For more information, see the online help.

3. Click OK.

To edit text separately

- Double-click a piece of text to activate editing mode (indicated by a blinking cursor), then click the right mouse button to display the shortcut menu. The menu options depend on whether you are editing regular text or sticky note text. Possible options include: Choose Font, Adjust Angle, Set Background Color, Set Background Mode (transparent, opaque, or tinted). Using this method to change text properties affects only the text you currently have selected and does not have an effect on any new text annotations you add later.
To use the shortcut editing menu

Select an annotation and click the right mouse button to open a shortcut menu that includes the following options: Undo, Cut, Copy, Paste, Delete, Send to Back, Bring to Front.

To show or hide annotations during display and printing

Search for records that contain image references. Choose Display>Show Record Images, then choose Images>Show Annotations or Images>Hide Annotations.

To prevent users from adding, editing, or deleting annotations

1. Select a non-image window and choose Maintain>Edit Textbase Structure to open the Edit Textbase Structure dialog box.
2. Click the Passwords button to open the Textbase Passwords dialog box.
3. Select the Enable Silent Password check box, and clear the User May Annotate Images check box. You can also assign Field Access passwords that prevent users from editing annotations. Users will still be able to show or hide annotations.

To remove annotations from an image

Display the image in the Images window and 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 file extension .ART).

To remove annotations from all images in the textbase

Select a non-image window, choose Maintain>Manage Image Annotations and click the Clear Annotation List button.

Working with Annotation Files

Each time you annotate an image, you save its annotations to a file (default file extension .ART). Annotations for different images are in different files. You supply the file name when you save the annotations. Be sure to back up the ART files when you back up your other important information. 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 (for example, arrows, rectangles, text). It is a list of “pointers” connecting images to their annotations. To print, back up, clear, merge, or replace lists, select a non-image window and choose Maintain>Manage Image Annotations.

Note: Each entry in the annotation list is limited to 250 characters. An annotation list entry contains both the image file name and the image annotation file name, including paths (unless the files are in the same directory as the textbase).
### 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.

<table>
<thead>
<tr>
<th>Format</th>
<th>Format</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amiga IFF</td>
<td>HALO Cut</td>
<td>Pixmap (XPM)</td>
</tr>
<tr>
<td>ATT (G4)</td>
<td>ICO</td>
<td>RLE</td>
</tr>
<tr>
<td>BMP</td>
<td>IOCA</td>
<td>Showpartner GX2</td>
</tr>
<tr>
<td>Brooktrout</td>
<td>JPEG</td>
<td>Sun Raster</td>
</tr>
<tr>
<td>CALS</td>
<td>Kodak Photo CD (read only)</td>
<td>TARGA</td>
</tr>
<tr>
<td>CLP</td>
<td>Kofax</td>
<td>TIFF</td>
</tr>
<tr>
<td>DCX</td>
<td>LaserData (LV)</td>
<td>WMF (raster only)</td>
</tr>
<tr>
<td>DIB</td>
<td>MAC Paint</td>
<td>WPG (raster only)</td>
</tr>
<tr>
<td>EPS (screen preview only)</td>
<td>Microsoft Paint MSP</td>
<td>Xbitmap (XBM)</td>
</tr>
<tr>
<td>G3</td>
<td>PCX</td>
<td>XWD</td>
</tr>
<tr>
<td>G4</td>
<td>Photoshop</td>
<td></td>
</tr>
<tr>
<td>GEM IMG</td>
<td>PICT (raster only)</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 8: Linking Textbases

You can link a textbase to one or more other textbases to access the combination of information that you need. For example, to print overdue book notices, a library could link a textbase that contains book titles to a textbase that contains the names and addresses of patrons. Linking is a way of combining and sharing information among textbases. By linking textbases, you can reduce or eliminate duplication of effort and conserve disk space.

Overview

By storing common information in one textbase, you can reference it from other textbases. Typically, you use linking to model a many-to-one relationship between different types of records. For example:

- A legal firm may have many tasks related to one trial.
- A library may have multiple books on loan to one patron.
- A manufacturer may have several products that are provided by one supplier.

For each situation, you would create two textbases. For example, the manufacturer would create one textbase that contains product information and another textbase that contains supplier names and addresses. By linking Products to Suppliers, you can see, search, sort, edit, and print supplier information from within the Products textbase. Now when you search the Products textbase for red widgets, you can see product information from the current textbase (for example, size, color, description), plus supplier information from the secondary textbase (for example, name and address of the company that makes red widgets).

Linking is done on a record-by-record basis. In other words, to access secondary textbase information, two records need to match. The match is established by comparing terms in the Link field in the primary textbase with terms in an associated field in the secondary textbase. For example, in the situation explained above:

- The primary textbase—Products—contains a Link field called Company Name.
- The secondary textbase—Suppliers—contains an associated field called Company Name.

When a record in each textbase contains an identical term in the Company Name field (For example, Widgets R Us), a match is made between those two records. Note that the field names do not have to be identical; just the information in the fields.

Links are one-way only, and only the primary textbase “knows” that a link exists. For example, if Products is the primary textbase and Suppliers is the secondary textbase, you can open Products and see supplier information. But if you open Suppliers, you will not see product information.
Terminology

The following table explains the terminology used in this chapter.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary textbase</td>
<td>A textbase that contains a Link field.</td>
</tr>
<tr>
<td>Link field</td>
<td>A field defined in the primary textbase that is used to identify and link to a field in a secondary textbase.</td>
</tr>
<tr>
<td>Secondary textbase</td>
<td>A textbase that is linked to the primary textbase by means of an associated field.</td>
</tr>
<tr>
<td>Associated field</td>
<td>A field in a secondary textbase whose contents are matched against the contents of the Link field in the primary textbase in order to connect the records. The term “associated field” is just a convenient way of referring to the field that is the target of a Link field. The associated field can be any type (for example, Text, 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. However, we recommend making the associated field unique or an Automatic Number field.</td>
</tr>
</tbody>
</table>

Frequently Asked Questions

Why should I link textbases?

The main reason to link textbases is to avoid replicating 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.

How do I decide which textbase is primary and which is secondary?

The secondary textbase should be the one containing information to be shared, such as names and addresses that you want to be able to access from other textbases. A record in the primary textbase can link to only one record in the secondary textbase using a single Link field, whereas a record in the secondary textbase can be associated with any number of records in the primary textbase.

Also, the primary textbase should be the one that you will be working in most frequently. The secondary textbase should be the one that contains information that does not need to be revised very often, such as names and addresses.

You always link from the child (for example, the legal task) to the parent (for example, the trial), or from the detail level (for example, the book) to the group level (for example, the borrower).
What tasks are involved in setting up a link?

There are three main tasks involved in linking textbases, after you have created both the primary and secondary textbases:

1. **Define a Link field in the primary textbase.** When you define a Link field, you specify the secondary textbase and an associated field in that textbase to which you will link. The Link field in the primary textbase and the associated field in the secondary textbase should hold identical information, such as company names or employee ID numbers.

2. **Add or edit records.** This ensures that you have matching terms in the Link field and its associated secondary textbase field. For example, in primary textbase, *Products*, one record or more should have *Widgets R Us* in the Link field. In the secondary textbase, *Supplier*, only one record should have *Widgets R Us* in the associated field. (This is a many-to-one relationship.)

3. **Create forms for the primary textbase.** Create forms that display fields from the secondary textbase. For example, design a form for the primary textbase that shows address information about suppliers from the secondary textbase. You can also design query screens that allow you to search fields from the secondary textbase.

How does DB/TextWorks determine a link?

Links are done on a record-by-record basis. To determine a link, DB/TextWorks compares Term index entries in the Link (primary textbase) and associated (secondary textbase) fields. When terms match, a link is made for that record, and you have access to record information for that record in the secondary textbase.

For example, assume that your telesales department wants to track phone calls. You could log each call as an entry in a single field. However, this approach does not allow you to track the date of the call, the person who made the call, a summary of the call, and other details separately. A better approach would be to have two textbases:

- The primary textbase—*Calls*—where each record represents a phone call.
- The secondary textbase—*Customers*—where each record represents a customer.

Each time a call is made or received, you create a record in the *Calls* textbase. Within both textbases, you would have a *Customer ID* field (or some other unique field) to link the two textbases. Now it is easy to track how many calls were made in a particular week, how many were made by a particular staff member, and which customers were involved.

How do I find records in a linked textbase?

Just open the primary textbase and search for records. You can search any primary or secondary field. (To search a secondary field, design a special query screen or choose **Edit>Add>Query Box**, and add a secondary textbase field as the box content.) However, you never retrieve records from a secondary textbase. You can only retrieve records in the primary textbase. To understand why this is so, read the next question and answer.
I know there are records that match my criteria because I saw them when I pressed F3. But the search said "No records found." What is going on?

A common misconception is that a search will retrieve records from the secondary textbase. That is not true. Remember that you never retrieve records from a secondary textbase; you can only retrieve records from the primary textbase. Here is what can happen: You press F3 in a box that searches a field from a secondary textbase. You see the entry blue widgets, so you paste it into the query box and search for it. DB/TextWorks finds the record in the secondary textbase containing blue widgets. Next, it picks up the content of the associated field in that record and uses it to perform a search back in the primary textbase for records which link to the record containing blue widgets. There may be many such records, or there may be none.

Why don’t I see any fields from the secondary textbase?

Perhaps you did a search that found 10 records. You displayed them in the Report window, but all you see is information from the primary textbase. Why? Because you need to design a form that shows secondary textbase information. Open the Form Designer (choose Display>Design Form) and add some boxes whose contents are secondary textbase fields. Save the form, then select it for the appropriate window. Now try your search again.

Can I link to more than one textbase?

Yes. See “Characteristics of Link Fields” on page 370.

How can I tell if two textbases are linked?

A primary textbase contains a Link field. To see if the current textbase contains a Link field, and to see the name of the associated field and textbase, choose Display>Textbase Information and look at the Field Summary. A secondary textbase provides no indication about whether it is the target of a link.

When I design a form, should it include both the associated field and Link field?

No. When you design a form, there is no need to include both the secondary textbase field and the Link field, because they contain the same information. A form that includes both fields will show redundant information, which will be confusing. Generally, just show the secondary textbase field. The reason for this is because the Link field will not necessarily show punctuation if Browse Choices was used to help populate that field.

What happens if no match occurs?

Fields from a secondary textbase appear only when a match exists between the Link and associated fields (and when the form you have designed includes fields from the secondary textbase). If a match does not exist for a particular record, that record will not show the secondary textbase information. Boxes that you added for secondary fields will either be empty or will disappear altogether, depending on their Minimum height setting (choose Tools>Box Properties>Position).
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).

- The *Books* textbase tracks information about titles, authors, publishers, and ISBN numbers. Each record represents one book.
- The *Patrons* 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? Sometimes, the most efficient solution is to set up a third, or intermediate, textbase. 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. Also, the history of the loan transactions can be maintained.
How to Link Textbases

You link two textbases by means of a Link field that is defined in the primary textbase.

To define a Link field

1. Open the primary textbase.
2. Choose Maintain>Edit Textbase Structure>Edit Fields to open the Edit Fields dialog box.
3. You can add a new field or select an existing one. Do one of the following, depending on your situation:
   - If you are adding a new field. Add a field and select Link from the Field Type drop-down list. The Link Definition tab appears on the Edit Fields dialog box.
   - If you are selecting an existing field. Select an existing field, then select Link from the Field Type drop-down list.

4. On the Link Definition tab, click the Specify Textbase button to open the Link to Inmagic DB/TextWorks Textbase dialog box.
5. Select the secondary textbase to which you want to link, then click Open.
6. Select a field from the Associated Field list. The fields listed are those with Term indexes from the secondary textbase. The one you select, which becomes the associated field, should contain the same information as the Link field in the primary textbase (it does not have to have the same field name). For best results, the associated field should be unique and non-repeating.

7. Depending on what you did in step 3, click Add if you are adding a new field or click Change if you are editing a field.

8. Click Close, then OK to save your changes.
Characteristics of Link Fields

A Link field can have the following characteristics, all of which you define on the Edit Fields dialog box when editing the textbase structure. Each tab on the dialog box is listed below with the characteristics that can be defined on it.

Type and Indexing Tab

You can specify the following characteristics on the Type and Indexing tab:

- You can make a Link field strict by selecting the **Require Strictly Correct Type** check box. The field will accept information only if it matches information that already exists in the associated field. This is a way to ensure that every record has a match. A strict Link field will 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* or the DB/Text® *ODBC Driver*. These products do not open secondary textbases.

- A non-strict Link field will accept information even if there is no matching information in the associated field. This introduces the risk of having a primary record without a match in the secondary textbase. However, you can always create a matching record in the secondary textbase at a later time.

  **Tip!** When editing a primary record, you can press F3 in the Link field to browse and paste entries from the Term index of the associated field into the Link field. This is like a validation list for the Link field, and it ensures a match between records.

- A Link field is Term indexed, but you can select the **Word Indexed** check box, if you want to also be able to do word, phrase, or proximity searches.

- 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.

- A Link field cannot have trailing text.
Validation Tab
A Link field has Single Entry Only validation, 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. You
can add Field Entry Required and Unique Entries Only validation by selecting the appropriate
check boxes.

Link Definition tab
Every Link field has one associated field. A textbase can have more than one Link field. More
than one Link field can point to the same secondary textbase, and even to the same associated
field. For example, a book record in a library may have one field linking to the patron who has
the book, and another linking to the patron waiting for it. A textbase cannot link to more than
four different secondary textbases.

Characteristics of Associated Fields
To determine a match, DB/TextWorks compares Term-indexed entries in the associated and
Link fields. Fields that are not Term indexed do not appear in the list of fields on the Link
Definition tab (on the Edit Fields dialog box). In this way, DB/TextWorks 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 be unique and non-repeating
or should be an Automatic Number field.

<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 (recommended).</td>
</tr>
<tr>
<td>Repeating</td>
<td>Link to a record if any one of the entries in the associated field matches the entry in the Link field.</td>
</tr>
<tr>
<td>Not unique</td>
<td>Link to the first matching record that is found (which may not be the one you want).</td>
</tr>
</tbody>
</table>
Searching Linked Textbases

You search linked textbases the way you would search any other textbase—just open the primary textbase and search for records. Use F3 (or choose Edit>Browse Choices) to eliminate guesswork when constructing a query.

To find linked records, you can search any primary or secondary textbase field as long as the query screen you are using contains boxes that search secondary fields.

When you add a query box, the list of fields you can select appears on the Specify Fields to Search dialog box (when you use Add Query Box outside the designer), and on the Query Box Properties dialog box (inside the designers). 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. If you have not, secondary textbase fields are listed following the primary textbase fields. Secondary textbase fields appear with an @ symbol in the middle of the field name (for example, Telephone@Supplier).

Records retrieved by a search are always from the primary textbase, even when you search a field from a secondary textbase. If a record in the secondary textbase does not match any records in the primary textbase, no records are retrieved. This behavior explains why you sometimes retrieve more or fewer records than expected, or no records at all. For a detailed explanation, see “I know there are records that match my criteria because I saw them when I pressed F3. But the search said "No records found." What is going on?” on page 366.

To add a secondary textbase field box in the Query Screen Designer
1. Open the primary textbase.
2. Choose Search>Design Query Screen and open a query screen.
3. Choose Edit>Add>Query Box to add a query box and open the Query Box Properties dialog box.
4. On the Fields tab, select the secondary textbase field you want from the Fields list.
5. Click the **Add** button to add the field to the Contents list. Repeat if you want the box to search multiple fields.

![Query Box Properties dialog box](image)

6. [Optional] Specify position, label, and other attributes, as applicable, for the query box by using the tabs on the Query Box Properties dialog box. Then click **Apply**. For example, if you added the **Customer**, **Street Address**, **City**, and **State** fields to a box, you could change the label text to **Customer Information**. Note that if you closed the Query Box Properties dialog box during a prior step, select the query box and choose **Tools > Box Properties** to open it.

7. Click **Close**.

8. Save the query screen, close the Query Screen Designer, then select the new query screen for the Query window.
To add a secondary textbase field box outside the Query Screen Designer

You can add a query box while outside the Query Screen Designer so that you can do a quick and impromptu search. For more information, see Chapter 4, “Searching a Textbase,” the “Adding and Deleting Boxes Temporarily” section.

1. With the Query window selected, choose Search>Add Query Box to add a query box and open the Specify Fields to Search dialog box.

2. Select the secondary textbase field you want from the Fields list.

3. Click the Add button to add it to the Contents list. Repeat if you want the box to search multiple fields.

4. Click OK.

5. Execute a query by typing or pasting criteria in the box, then press Enter. If a matching record is found (a match is determined by comparing information in the Link and associated fields), then you will be able to see information from both the primary and secondary textbases. Remember, to see information from a secondary textbase, you must use a form designed to include secondary textbase fields.

Searching with Command Queries

You can also use Command queries to search fields from the secondary textbase, using the format shown below.

```
Link field in primary textbase
Link indicator
Field in secondary textbase
```

If either part of the field name (Description@Product Name) includes a character or word that might be misinterpreted as part of the search syntax, surround that part of the field name with single or double quotation marks. The @ symbol must be outside of the quotation marks. In the following example, quotation marks around the field name Yes or No prevent the word or from being interpreted by the query parser as a Boolean command:

```
"yes or no"@customer number =Yes
```

For more information, see Chapter 4, “Searching a Textbase,” the “Using Command Queries” section.
Displaying Fields from a Secondary Textbase

To see secondary textbase information from within the primary textbase, design a form for the primary textbase that includes fields from the secondary textbase. Use the Form Designer tools to add and position boxes whose contents are secondary textbase fields.

The following example shows a form that includes all of the fields in the primary textbase and three fields from the secondary textbase:

A secondary textbase field is referenced by a combination of the secondary textbase field name, an @ symbol, and the Link field name. For example, a field called City@Customer means “City field from a secondary textbase, accessed by a Link field called Customer in the primary textbase.” Whenever you see a field represented this way, you know that it is from a secondary textbase.
To add secondary textbase fields to a form

1. Open the primary textbase.

2. Choose Display>Design Form and open a form.

3. Choose Edit>Add>Form Box to add a form box and open the Form Box Properties dialog box.

4. Select the secondary textbase field you want from the Fields list.

5. Click the Add button to add it to the Contents list. Repeat if you want the box to display multiple fields.

6. [Optional] Specify position, label, HTML and other attributes, as applicable, for the form box by using the tabs on the Form Box Properties dialog box, then click Apply. For example, if you added the Customer, Street Address, City, and State fields to a box, you could change the label text to Customer Information. Note that if you closed the Form Box Properties dialog box during a prior step, select the form box and choose Tools>Box Properties to open it.

7. Click Close.

8. Save the form, close the Form Designer, then select the new form for the appropriate window(s).

376 Chapter 8: Linking Textbases
Editing Primary Records

When you add or edit records in the primary textbase, you nearly always want to establish a match between the Link field and the secondary textbase associated field. Otherwise, records will not be linked.

You could type information in the Link field and hope it matches information in the associated field. However, to guarantee a match, you can position the cursor in a Link field and press F3 or choose Edit>Browse Choices. The Editing Choices Browser dialog box appears. It shows terms from the associated field in the secondary textbase. Now you can paste a term from the list into the Link field, ensuring an exact match between the two records.

Editing Secondary Records

You can edit records in a secondary textbase from within the primary textbase. For example, if you are using the primary textbase and you notice an incorrect address in a secondary textbase record, you can change it. This feature is not intended for large-scale data entry or editing. If you have many records to change, open the secondary textbase directly.

To create or edit a secondary textbase record

1. Open the primary textbase and select an Edit form that includes the Link field (choose Display>Select Forms).

2. You can add a new secondary textbase record, or edit an existing one. Do one of the following, depending on what you want to do:
   - If you are editing an existing record. Find a record in the primary textbase that links to that record and choose Records>Edit Record.
   - If you are adding a new record. Choose Records>New Record, or find a record in the primary textbase that you want to link to a new secondary textbase record (the secondary textbase record has not yet been created).
3. Choose **Records>Edit Secondary Record** to open the Edit Secondary Record window. The record will appear in the edit form you last used when editing records directly in the secondary textbase. (If you have never opened that textbase, the textbase default edit form is used.) The window will appear one of two ways:

- **With information in it.** If the Link field (primary record) is filled in, the corresponding record in the secondary textbase appears so you can edit it.

- **Blank.** If the Link field is blank, a blank Edit form appears so you can create a new record in the secondary textbase. (However, some fields may contain information if a record skeleton is specified in the secondary textbase.) The record you create should correspond to the one you are editing in the primary textbase. For example, if you are editing the Red Widgets record, add a secondary record that identifies the widget supplier’s name and address.

**Note:** The **Edit Secondary Record** command 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, then choose **Record>Edit Secondary Record**.

4. Add or edit record information, then choose **Records>Save Record**. If you created a record (because the Link field was blank when you chose **Edit Secondary Record**), or you modified the contents of the associated field, the information 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 can be edited.
Refreshed Linked Information while Editing a Record

While adding or editing a record, you can update the display of fields from a secondary textbase (linked information) by pressing **F9** or choosing **Window>Refresh**. This does not refresh boxes that contain multiple content items (except multiple secondary textbase fields). To refresh a box with multiple items, redisplay the window (for example, close and re-open it).

Renaming or Rearranging Fields

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 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).
You can assign passwords to both the primary and secondary textbases. You can even protect a secondary textbase by defining passwords in the primary textbase. This gives you a great deal of flexibility, and you will need to give some thought to what you want to accomplish.

From the primary textbase, you can protect primary textbase fields as you normally would. This includes making the Link field read-only or hidden. You can also hide **all** secondary fields. You cannot hide them individually. To protect secondary fields individually, assign passwords in the secondary textbase.

**To assign passwords in the primary textbase**

1. Choose **Maintain>Edit Textbase Structure** to open the Edit Textbase Structure dialog box.
2. Click the **Passwords** button to open the Textbase Passwords dialog box.
3. Define a Master password. For more information, see Chapter 2, “Creating a Textbase,” the “Passwords” section.
4. On the Field Access Passwords tab (or Silent Password tab), select the Link field from the Field Settings for This Password list, then select an option from the Field Security group. To protect the Link field, select either the Read-Only or Hidden option button. Hiding a Link field also hides all secondary fields, so users of that password will never see or have access to the secondary textbase from within the primary textbase. Making a Link field read-only prevents users from changing information that could affect links.

**Tip!** To hide secondary textbase fields, select `<Linked Information>` from the list and select the Hidden option button. The `<Linked Information>` item represents all of the information in the secondary textbase accessed through the Link field. When you are viewing secondary textbase information from the primary textbase, it is read-only. That means your only options are to see it, or not see it (that is, hide it).

![Textbase Passwords dialog box](image)

Customer is a Link field. The `<Linked Information>` item represents information in the secondary textbase.

5. Click **OK** to close all dialog boxes. For more information about passwords, see the online help.
To use a different password

- While using the primary textbase, you can switch to a different password (a password defined in the secondary textbase) by choosing File>Use Different Password>Secondary Textbase. Note that Secondary Textbase is disabled if the current textbase does not contain a Link field or if none of the secondary textbases have passwords.

To control whether you are prompted for passwords when a textbase is opened

- If any of the secondary textbases has a Silent password, choose Tools>Options>General and select a setting.
Forms, query screens, sets, and record skeletons are called “textbase elements.” This chapter explains how to perform management operations on textbase elements.

Choose Maintaining>Manage Textbase Elements to open a dialog box that lets you rename, delete, export, import, and print textbase elements. The Now Managing drop-down list determines whether you are working with forms, query screens, sets, or record skeletons.

Renaming Elements

You can rename one form, query screen, set, or skeleton at a time.

Note: The current password controls whether you are allowed to rename elements saved in the textbase file.

To rename an element

1. Choose Maintaining>Manage Textbase Elements to open the Manage Textbase Elements dialog box.

2. Select an element type from the Now Managing drop-down list. The names of the applicable elements (forms, query screens, sets, or record skeletons) appear in the Currently Saved list.
3. Select the item you want to rename from the Currently Saved list, and click the Rename button. Depending on the element type chosen, the applicable Rename dialog box opens.

![Rename Query Screen Dialog Box]

4. Type the new name you want, then click OK.

**Note:** If you reference a renamed element from a menu screen, you should modify the menu screen in the Menu Screen Designer to reflect it.

### Deleting Elements

If you are sharing a textbase on a network, be aware that if you delete a public element (one saved in the textbase), anyone else who shares the textbase will not be able to use that element again. The current password controls whether you are allowed to delete elements saved in the textbase. Note that deleting a set does not delete records in the textbase.

**To delete an element**

1. Choose **Maintain > Manage Textbase Elements** to open the Manage Textbase Elements dialog box.

2. Select an element type from the **Now Managing** drop-down list. The names of the applicable elements (forms, query screens, sets, or record skeletons) appear in the Currently Saved list.

3. Select the item you want to delete from the Currently Saved list, and click the **Delete** button. If you want to delete more than one item at once, use **Ctrl+Click** or **Shift+Click** to select multiple items.

4. Click **Yes** when prompted to confirm deleting the element(s).
Exporting and Importing Elements

You can export and import elements to share them with other users or to use with another DB/TextWorks textbase that has the same fields. Exporting elements is a good way to back them up. The default file extensions used during the export and import operations are listed in the following table.

<table>
<thead>
<tr>
<th>Element</th>
<th>Default Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms</td>
<td>.XPF</td>
</tr>
<tr>
<td>Query screens</td>
<td>.XPQ</td>
</tr>
<tr>
<td>Sets</td>
<td>.XPS</td>
</tr>
<tr>
<td>Record skeletons</td>
<td>.XPK</td>
</tr>
</tbody>
</table>

Each export or import file can contain multiple items of the same type. For example, a file called FORMS.XPF could contain forms called Summary and Daily Report. However, a file cannot contain different types of elements (for example, forms and query screens).

If duplicate names are detected during an import, DB/TextWorks adds a numeric suffix to differentiate the items. For example, if a textbase contains a form called Summary, an incoming form of the same name will be renamed Summary_1. Elements of a given type can have the same name only if one is stored in the textbase and the other in the user file. For example, Summary can reside in the user file and Summary (public) in the textbase file.

The current password controls whether you are allowed to save elements in the textbase file. If the password prohibits this ability, elements that you import will be placed in your user file.

**Important!** Export or import elements saved in the user file and textbase file separately. For example, export all forms saved in the user file to one file, and export all forms saved in the textbase file to another file. If you need to restore them, you can import them to the place from which they originated (user or textbase file).

**To export elements**

1. Choose **Maintain>Manage Textbase Elements** to open the Manage Textbase Elements dialog box.
2. Select an element type from the **Now Managing** drop-down list. The names of the applicable elements (forms, query screens, sets, or record skeletons) appear in the Currently Saved list.
3. Select one or more items from the Currently Saved list, then click the **Export** button.
4. On the Export dialog box, specify a destination drive, directory, and file name. Click **OK**.
To import elements

1. Choose Maintain>Manage Textbase Elements to open the Manage Textbase Elements dialog box.

2. Select an element type from the Now Managing drop-down list, then click the Import button.

3. On the Import dialog box, select a file to import and click Open.

4. On the Save Imported Elements In dialog box, indicate whether you want to save the imported element(s) in the user file (so they are available only to you) or in the textbase file (so they are available to everyone using the textbase). Then click OK.

Note: This dialog box does not appear if the current password prohibits saving elements in the textbase file. In that case, elements are saved in the user file.

5. After importing sets, choose Sets>Refresh Sets to refresh them.

Printing Element Definitions

You can print a description of an element 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 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 a way of backing up or sharing elements. To back up or share elements, use the Export and Import buttons on the Manage Textbase Elements dialog box, as explained on page 385.

To print a definition

1. Choose Maintain>Manage Textbase Elements to open the Manage Textbase Elements dialog box.

2. Select an element type from the Now Managing drop-down list. The names of the applicable elements (forms, query screens, sets, or record skeletons) appear in the Currently Saved list.

3. Select one or more items from the Currently Saved list and click the Print button.
4. On the Print dialog box, select the options you want and click **OK**.

**Note:** To save the definition(s) in a text file, select the **Print to file** check box, click **OK**, and, on the Save File As dialog box, specify the full path name. The file extension .TXT is used by default.

**Alternative Method**
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>

**Copying and Changing Elements**
To copy an element, use the appropriate Save As dialog box to specify a new name. You can also use the Save As dialog box to make certain changes to an element then save it under its original name. For example, you can change the description line, or the operations for which a form can be used (for example, editing or printing).

**To copy a form**
1. Choose **Display>Design Form** and open the form that you want to copy.
2. Choose **Form Operations>Save Form As**.
3. Respond to the Save Form As dialog box as detailed in “Using the Save As dialog box” on page 388.

**To copy a query screen**
1. Choose **Search>Design Query Screen** and open the screen that you want to copy.
2. Choose **Screen Operations>Save Query Screen As**.
3. Respond to the Save Query Screen As dialog box as detailed in “Using the Save As dialog box” on page 388.

**To copy a set**
1. Choose **Sets>Load Set**, select the set that you want to copy and click **OK**. You do not have to view the set in the Report window.
2. Choose **Sets>Save Set As**.
3. Respond to the Save Set As dialog box as detailed in “Using the Save As dialog box” on page 388.
To copy a record skeleton
1. Choose Records>Edit Record Skeleton and open the skeleton that you want to copy.
2. Choose Record Skeletons>Save Skeleton As.
3. Respond to the Save Record Skeleton As dialog box as detailed in “Using the Save As dialog box” below.

Using the Save As dialog box
The Save As dialog box that you see depends on which type of element you are copying. You can specify the following information:

- **Name.** A name can include up to 20 characters, including spaces and punctuation. Click the Browse button to see the names of elements that have already been saved. Assigning a new name makes a copy of the element.

- **Description.** Specify an optional description of up to 80 characters, including spaces and punctuation. The description appears on dialog boxes when you open, save, and browse.

- **Save In.** Elements are saved within the textbase file or a user file. To make an element available to everyone who uses this textbase, select **Textbase File (Public).** To make the element available for your use only, select **User File (Private).** If you change the Save In setting for an existing form, you create a copy.

- **Use For.** This option appears for forms only, to let you specify the places where the form can be used. The **Web** and **Web Only** check boxes are for use with **WebPublisher** products, to control whether the forms appear in **WebPublisher** form lists on the Web.
Chapter 10: Customizing DB/TextWorks

Use the techniques described in this chapter to customize DB/TextWorks.

Setting Options

Options are maintained separately for each user. Most options are saved in the INMAGIC.INI file and persist across sessions. The options you choose are not textbase specific; rather they are specific to DB/TextWorks. The options you choose will apply to any textbase you open in DB/TextWorks, until you change the options settings.

To set options, choose **Tools>Options**. Click each tab to specify the settings and options you want.

![Options dialog box]

The options are summarized in this section. For more detailed information, see the online help.
General Tab

Options group

- **Insert date using long format.** Select or clear this check box to specify how dates appear in the Edit window when they are inserted using Edit>Insert>Current Date or Edit>Insert>Series.

- **Insert date as new entry.** Select or clear this check box to specify how dates and times will be added to records in the Edit window when they are inserted using Edit>Insert>Current Date (or by pressing F4) and Edit>Insert>Current Time (or by pressing Shift+F4.) When selected (default), DB/TextWorks adds dates as a new entry. When cleared, the date is added at the cursor position without creating a new entry.

- **Recently used file list.** Select or clear this check box to control whether DB/TextWorks 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 10 entries.

- **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 warned when you open an empty textbase and 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.** Select this check box if you are importing from or exporting to an MS-DOS application. This option indicates how to interpret extended characters (for example, codes above ASCII 127, such as é, £, and ¥).

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

- **Print using.** Use this drop-down list to choose the source of the form you want to use when printing a report. Select **Report Printing Form** to use the printing form you specify in Display>Choose Forms, or select **Form for current window** to use the form for the selected window at printing time. Select the **Always use this option without asking** check box to use the selected form type without being prompted.

Deferred Indexing group

- **Show deferred changes in reports and display.** Select or clear this check box to specify whether to see new or old versions of records with deferred changes when you print reports, display records or reports, or sort records.
- **If indexes are busy.** Use this drop-down list to specify what to do when using Shared Immediate indexing if the indexes are temporarily unavailable when you try to save a record (when sharing a textbase on a network). The indexing mode will still be Shared Immediate. If you select **Do not save record**, you will have to wait for the indexes to become available before you can try saving your changes again, or change to Deferred indexing (choose File>Change Indexing Mode).

Passwords group

- **Primary textbase.** Select an option from this drop-down list to determine what happens when you open a primary textbase that has a Silent password.
- **Secondary textbase.** Select an option from this drop-down list to determine what happens when the primary textbase is linked to a secondary textbase that has a Silent password.
Search Tab

Options group

- **Display highlighting/Print highlighting.** Use these drop-down lists to specify how search highlighting should appear for reports during display and printing. If applicable, click the *Set Highlight Color* button to specify a color for the highlighting. For *WebPublisher* products, *Display highlighting* options affect expanded display on the Web and *Print highlighting* options affect *WebPublisher* reports. Note that reverse video appears as bold in Web browsers.

  **Note:** The current form specifies whether search highlighting is used. However, you can override the setting for a form that has search highlighting on by choosing *None* for the options.

- **Use inclusive search option for multiple fields.** Select or clear this check box to indicate how to interpret Boolean searches, such as *Author/Title CT Smith & Jones*. For more information, see Chapter 4, “Searching a Textbase,” the “Inclusive and Non-Inclusive Searches” section.

- **Ignore accents on extended characters.** Select this check box if you want to search for extended characters without having to type the accent. For example, a search for *mañana* will find *mañana*. Equivalence is based on the region selected in the Windows Control Panel and applies only to single characters. If you clear this option, you cannot find *mañana* by searching for *manana*.

- **Allow tabbing to Boolean query buttons.** Select this check box if you want the *Tab* key to go to Boolean buttons (as well as query boxes) on a query screen.
Display Tab

Options group

- **3-D box borders.** Select this check box if you want boxes with borders to appear with a three-dimensional effect in the Query, Display, and Edit windows.

- **Field entry delimiter.** Use this drop-down list to specify the character used to designate multiple (repeating) entries in a field in Edit windows. The default is a bullet character. Select a character that will never appear in your data.

- **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 appears 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. Select the **Always use this option without asking** check box to prevent the Select Search Results Window dialog box from appearing when you know you will always want to view search results in a particular window.

- **Detect URLs, EMail links, etc. and convert to hypertext links.** Select this check box to detect a recognizable URL, EMail 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, EMail program, or appropriate file application. For example, http://www.inmagic.com launches your Web browser, mailto:janedoe@inmagic.com launches your EMail 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.

- **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 several field lists. For a complete list of the exceptions, search the online help for “Sort textbase field lists alphabetically.”
Form defaults group

- **Set Text Font.** Click this button to specify which font and font properties DB/TextWorks will use by default for box contents in new and Basic forms and query screens. It also determines which font is used in the Textbase Information window.

- **Set Label Font.** Click this button to specify the font and font properties DB/TextWorks will use by default for labels in new and Basic forms and query screens.

- **More Defaults.** Click this button to specify defaults for new and Basic forms and query screens. When you click the More Defaults button, the Form Defaults dialog box opens.

This dialog box contains the following subtabs:

---

**Note:** These default options only apply to new and Basic forms and screens. DB/TextWorks does not apply these defaults to previously saved forms. However, options on the Colors tab can affect how existing forms appear.

- **General.** Use the Horizontal and Vertical units drop-down lists to specify the default unit of measure DB/TextWorks uses for settings and position values (inches, millimeters, points, or [vertical units only] lines). Also, select (default) or clear the Highlight search items check box to specify whether DB/TextWorks will highlight search items when displaying search results using Basic forms and whether new forms will have this check box selected by default. Use the Left and Top offset boxes to specify default box position, use the Minimum height box to specify default minimum box height, and use the Width box to specify the default box width.
– **Record.** These settings apply to the Basic Record form, or if you start your form design with the Basic Record form. Use the **Maximum height** box to specify the maximum height of boxes. Select (default) or clear the **Label**, **Border**, and/or **Scroll bar** check boxes to specify the appearance of boxes. Use the **Label position** drop-down list to place and justify labels relative to boxes.

– **Report.** These settings apply to the Basic Report form, or if you start your form design with a blank form or the Basic Report form. Refer to the Record tab settings for more information. Note the default setting for **Maximum height** is different from the Record tab default setting.

– **Query.** These settings apply only to query screens. The setting you choose from the **Vertical unit** drop-down list appears as the unit of measure for the **Top offset**. Use the **Maximum height** box to specify the maximum height of query screen boxes (note the default differs from Record and Report default). Select or clear the **Label**, **Border**, **Scroll bar**, and/or **Query buttons** check boxes to specify the appearance of boxes. Use the **Label position** drop-down list to place and justify labels relative to boxes.

– **Colors.** Select or clear (default) the **Background color** check box to specify what color, if any, will appear as the background color of the whole form, excluding the boxes. (You separately specify box color by selecting or clearing [default] the **Text background color** check box.) If you specify either form or text background color, use the Color options group to specify whether to apply color to saved or new forms. If you specify that it affects saved forms, it will only affect forms not saved with a specific background color already selected. If you apply color to saved forms and design most forms without a background color, users can choose their favorite background color.

– **Set Up Page.** Use these settings to specify page **Width** and **Height** for printing purposes. (Note that the units of measure are the same as the ones you specify on the General tab.) Also use these settings to specify the **Left**, **Right**, **Top**, and **Bottom** margins and page orientation (**Portrait** or **Landscape**).

**Tip!** To reset default settings on all tabs, click the **Reset to Defaults** button.

For more information about these defaults, see the online help.
Imaging Tab

*Options group*

- **Image drive(s).** In this box, type up to 12 drive letters to indicate where you want DB/TextWorks to look for image files referenced in records. For example, to look on the C:, D:, E: and X: drives, type `CDEX`. List drives in the order that you want DB/TextWorks to look. If you leave this box blank, DB/TextWorks will look for images on the default drive (if the image name includes a path) or in the textbase directory (if no path is specified).

- **Support multiple page TIFF images.** Clear this check box to enhance image display performance, if you do not have any multi-image TIFF files.

- **Support only short filenames for images.** Select 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. Consider selecting this check box if you added comments to image file names with a version of DB/TextWorks prior to version 1.2.

- **Fit image to window.** Use this drop-down list to specify if and how images are scaled in the Images window. You can scale images proportionally, stretch them horizontally or vertically, or not scale at all. Select the **Leave small images original size** check box to allow small images to be scaled down but not up when you choose **Fit to Window**. A small image is one that is smaller than the Images window, such as a business card.
**EMail Tab**

*Options group*

- **MAPI (Messaging Application Program Interface).** MAPI (which is a program interface that lets you send EMail from within Windows programs) uses the EMail 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 EMail program as their default simple MAPI client. To do so, you must consult the documentation provided with your EMail program, as each one is different.

- **SMTP (Simple Mail Transfer Protocol).** SMTP accesses mail services directly, without the need to use an EMail program. To use this option, you must provide the name or IP address of your mail server in the boxes provided. The boxes for this information become active when you select the SMTP option.
Customizing the Toolbars

A toolbar is a row of buttons displayed across the top of a window. The buttons provide a quick way to access commonly used menu options with the click of a mouse. You can customize and reposition the toolbars for each window.

**Note:** The following toolbar buttons provide access to choices not available on any menu: Select Form for this Window, Help on this Window, Center Text, Right Justify Text, Left Justify Text, and Catalog Current Web Page.

Toolbar customizations are user-specific and apply for all textbases opened by that user. Your custom toolbar settings are stored in the Windows registry.

The following illustration shows the default toolbar for the Edit window. Note that buttons are grouped together by relative function and separated by spaces (called separators). You can customize the toolbars with buttons and separators any way you want. To see what a button does, rest the cursor over it (do not click), and “Tool Tips” will appear (with a longer explanation in the status bar).

The following illustration shows the Edit window toolbar after being customized. Two additional buttons have been added: Go to Box and Insert Current Date. Notice that the user chose to group the Go to Box button with the navigational buttons and the Insert Current Date button with the Spell Check button.
To customize the toolbar of the current window

1. Open the window whose toolbar you want to customize.

2. Choose Tools>Customize Toolbar>Current Window to open the Customize Toolbar dialog box.

   **Tip!** Position the Customize Toolbar dialog box over the window whose toolbar you are customizing so that you can see the toolbar. As you perform an action (for example, add a button), you can see it happen on the toolbar.

3. Perform the following operations on the Customize Toolbar dialog box, as applicable:
   - **Add a button to the toolbar.** Select the button from the Available Toolbar Buttons list, then click the Add button. The new button is added above the currently selected button in the Current Toolbar Buttons list.
   - **Move a button to where you want it to appear on a toolbar.** Select the button from the Current Toolbar Buttons list and use the Move Up or Move Down buttons, as applicable, to position the button.
     **Tip!** You can also reposition a button on the toolbar with the Customize Toolbar dialog box closed by holding down the Shift key and using the mouse to drag the button to where you want it on the toolbar.
   - **Add a separator to the toolbar.** Select the Separator button from the top of the Available Toolbar Buttons list and click the Add button. Then position the separator to where you want it on the Current Toolbar Buttons list, using the Move Up or Move Down buttons, as applicable.
   - **Remove a button from the toolbar.** Select the button from the Current Toolbar Buttons list, then click the Remove button.
     **Tip!** You can remove a button on the toolbar even when the Customize Toolbar dialog box is closed. Hold down the Shift key and use the mouse to drag the button off the toolbar entirely.
   - **Undo custom changes and revert back to the original DB/TextWorks toolbar settings.** Click the Reset button.

4. Click Close.
To customize the toolbar of the Main window

1. With any window open, select **Tools>Customize Toolbar>**Main to open the Customize Toolbar dialog box.
2. Follow steps 3 and 4 in the previous set of instructions.

Providing Textbase-Specific Online Help

For each textbase that you create, you can supply a compiled Windows help file that describes any topics you want. For example, you might include guidelines for how your organization wants reports printed. 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. Create a compiled Windows help file, using software from eHelp (RoboHelp), ComponentOne (Doc-To-Help), or another program.
2. Place the compiled help file in the same directory as the textbase or in the location specified in the textbase .INI file.

By default, DB/TextWorks expects the help file to be located in the same directory as the textbase and have the same name as the textbase. For example, the help file for a textbase named *Loans* would 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 directory 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
Menu=&Catalog Help
```

For the **HelpFileName=** line, an extension of .HLP is assumed. Do not type the .HLP extension. If the help file is located in the same directory as the textbase, you can omit the **HelpFilePath=** line.
The menu line is optional. The text specified replaces **Textbase-Specific Help** on the Help menu. The ampersand (&) appears before the letter used as the new shortcut key.

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 or location than its associated textbase.

**To use textbase-specific help**

- Open a textbase and choose **Help>Textbase-Specific Help**. The command is enabled only if that textbase has a help file associated with it (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). Note that **Textbase-Specific Help** may have been replaced by a string that is more appropriate for your particular application.

**Configuring DB/TextWorks**

To reconfigure DB/TextWorks, click the DB/TextWorks Setup icon in the Inmagic Applications folder or program group. You can also use the Windows Run command. For example, if the software is installed in

```
C:\PROGRAM FILES\INMAGIC\DBTEXTWORKS
```

type

```
"C:\PROGRAM FILES\INMAGIC\DBTEXTWORKS\SETUP"
```

**Note:** If the installation path includes spaces, such as in the previous example, you must surround the path with quotation marks.

When Setup starts, select the **Install or Configure DB/TextWorks** option button, then click **Next** until the Choose Installation Option dialog box opens. Click the **Configure** button, then follow the on-screen instructions. Configuration settings are saved in the DBTEXT.INI file in the installation directory. By running Setup, you can change the languages for month and day names, default Stop Word and Leading Article lists, the interpretation of two-digit years, and specify whether the software tracks the machine name and login name of each user who has a textbase open.

**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, when you choose **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.

Year 2000 Compliance

Four-digit years (1998, 2001) are always interpreted correctly. For two-digit years (for example, 4-12-01), DB/TextWorks is set, by default, to be Year 2000 compliant up to the year 2039.

Note: This applies to new installations of DB/TextWorks, version 5.0 and later. If you have upgraded to version 5.0 or later through an InmagicADVANTAGE maintenance download and have not changed the setting, dates will be interpreted by default as being prior to the year 2000.

To extend beyond that date, you can set an option to specify a starting year to indicate a 100-year range into which two-digit years will be mapped. For example, if you specify 1960, the range is 1960-2059, so “96” means 1996 but “55” means 2055. The default is 1940 (1940-2039).

Important! Before changing this setting, search for all dates prior to the new starting year and edit them to ensure that the years are represented by four digits. In other words, open a textbase, search each Date field to find dates prior to the new starting year (press F3), and retrieve those records. Display each record in the Edit window. If any of the records have two-digit years, changed them to four-digit years (for example, change 5-6-20 to 5-6-1920) and save the records.

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 directory 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. Alternatively, you can leave this option unselected, and turn on tracking in any specific textbase by adding a line to the textbase .INI file. For more information, see the DB/TextWorks online help.
Appendix: Reference Information

This appendix provides information that will help you get the most out of DB/TextWorks. See the online help for more information.

Navigating in DB/TextWorks

DB/TextWorks is a Windows program that uses generally accepted Microsoft Windows conventions. If you are not familiar with the Windows Graphical User Interface (GUI), see your Windows documentation. When you start the software, you see the DB/TextWorks Main window. It typically appears with the DB/TextWorks menu bar, toolbar, and status bar, as illustrated below.
Title Bar
The title bar contains the program name and version. After you open a textbase, the title bar indicates the textbase name and shows the indexing mode in angle brackets.

Menu Bar
The menu bar shows the menu for the active window. The menu changes depending on whether a textbase is open or closed, and which window is selected. The uses for each menu are detailed in the appropriate chapters of this manual, and in the online help.

The View menu is common to all the available menus, and it always has the command to let you toggle on and off the toolbar for the active window (choose View>Toolbar). This menu also has the command that lets you toggle on and off the status bar for the Main window (choose View>Status Bar). Note that in some of the designer windows (for example, the Query Screen Designer window), there may be more commands on the View menu. They are mentioned where appropriate.

Note that the File, Window, and Help menus are also common menu names. The commands on the File menu can vary depending on the window that you have selected; therefore, they are explained elsewhere in this manual where appropriate. The commands on the Window and Help menus, when appropriate, are also explained elsewhere in this manual.

Tip! If you cannot find a particular menu mentioned in this book, try opening or closing a textbase (choose File>Close), and try selecting a different window using the DB/TextWorks Window menu, if possible.

Similar to other Windows programs, commands appear dimmed on a menu until they become available. For example, the Paste command does not become available on the Edit menu until after you have cut or copied text.

Also, similar to other Windows applications, when you select something (for example, a piece of text, a textbase box) and click the right mouse button, a shortcut menu appears with several common commands for what you are doing. For example, when you are editing text, the shortcut menu appears with the Cut, Copy, and Paste commands. Other commands may appear when appropriate.

Toolbars
The toolbar contains buttons for frequently performed activities. Besides the main DB/TextWorks toolbar, each window that opens within the Main DB/TextWorks window has its own toolbar. This manual details the uses for each toolbar in the appropriate chapters. Note that you can customize toolbars. For more information, see Chapter 10, “Customizing DB/TextWorks,” the “Customizing the Toolbars” section.
Workspace

The workspace is where all of the DB/TextWorks windows, dialog boxes, and messages appear. The following illustration shows other windows opened in the Main window.

Windows in the Main Window

The windows that appear in the Main window appear with their own toolbars, and the menu bar on the standard DB/TextWorks window changes to show the menus available for the active window. DB/TextWorks windows exhibit the following behavior:

- **Resizable.** You can resize any of the windows in DB/TextWorks (for example, Query window, Form Designer window). Several dialog boxes can also be resized. For example, you can make the Editing and Query Choices Browser dialog boxes (choose Edit>Browse Choices) wider so you can see more of longer entries, when applicable.

- **Scroll bars.** When data inside a window exceeds the size of the window, scroll bars appear on the window.
Status Bar
The status bar at the bottom of the Main window provides helpful information as you work. For example, after you perform a search or load a set, the status bar shows the number of records in the current set. The View menu lets you toggle on and off the status bar (choose View> Status Bar).

Synchronizing Multiple Windows
You can open the Edit, Display, Report, Images, and Thumbnail windows at the same time and show different records—or the same record—in each window. To turn window synchronization on or off, choose Window> Synchronize Windows. When the option has a check mark next to it, all open windows will show information from the same record. Synchronizing windows is especially useful when displaying images.

Fitting a Window to a Form
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.

406 Appendix: Reference Information
Using Go to Box

The Edit>Go to Box option can be a quick way to navigate to a box, and is particularly useful in long forms or query screens as an alternative to scrolling through the window or repeatedly pressing the Tab key. On the Go to Box dialog box, boxes are identified by their labels or the first content item, such as <field=Customer Number>. To move to a box on the current screen, double-click a box in the list or select a box and click OK.

Tip! Type the first letter of a box label to select that item. Press the Home or End key to go to the first or last box on the list.
Keyboard Shortcuts

Many of the menu commands in DB/TextWorks can be accessed using keyboard keys, called quick keys. The following table lists the quick keys.

<table>
<thead>
<tr>
<th>Menu</th>
<th>Command</th>
<th>Quick Keys</th>
</tr>
</thead>
<tbody>
<tr>
<td>File</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</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>Edit</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>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>
</tbody>
</table>
Menu | Command | Quick Keys
--- | --- | ---
Delete Entry |  | Shift+F7
Select Entry |  | Ctrl+F7
Insert Current Date |  | F4
Insert Current Time |  | Shift+F4

Records | New Record | Ctrl+F2
Edit Record |  | F2
Edit Secondary Record |  | Alt+F2
Save Record |  | F5 (or Ctrl+S)
Duplicate Record |  | Shift+F2

Display | Next Record | Ctrl+R
Previous Record |  | Ctrl+Shift+R
Next Highlighted Term |  | F6
Previous Highlighted Term |  | Shift+F6

Search | New Query | Ctrl+Q
Sets | Omit Record | Alt+O
Inmagic.net | Place Order | Shift+F8

Tools | Spell Check | F8
Window | Refresh | F9
Help | Help Topics | F1
Context Help |  | Shift+F1

**Tip!** Pressing **Ctrl+S** saves the contents of the active window. For example, with the Edit window active, pressing **Ctrl+S** saves the record; with the Form Designer window active, pressing **Ctrl+S** saves the form.
## Textbase Files

A textbase consists of a number of files, all of which have the same name as the textbase, but with different extensions. For example, a textbase called *Sales* consists of SALES.TBA, SALES.ACF, and so forth.

<table>
<thead>
<tr>
<th>Extension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<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>.ACF</td>
<td>Access control file; controls simultaneous access to the textbase by multiple users or software instances, or applications (for example, DB/Text <em>PowerPack Lite</em>).</td>
</tr>
<tr>
<td>.DBS</td>
<td>Textbase structure file; contains field definitions and other information about the structure of the textbase.</td>
</tr>
<tr>
<td>.IXL</td>
<td>Indexed list file; contains the validation and substitution lists, and the leading article and stop word lists.</td>
</tr>
<tr>
<td>.DBR</td>
<td>Contains the records (including deferred new, deleted, or changed records).</td>
</tr>
<tr>
<td>.DBO</td>
<td>Contains a directory to the records in the .DBR file.</td>
</tr>
<tr>
<td>.SDO</td>
<td>Contains a directory to records with deferred updates in the .DBR file.</td>
</tr>
<tr>
<td>.BTX</td>
<td>Contains the Term and Word indexes.</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>.LOG</td>
<td>Optional textbase log file; lists changes to the textbase structure and records.</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>
<tr>
<td>.HLP</td>
<td>Optional textbase-specific help file.</td>
</tr>
<tr>
<td>.INI</td>
<td>Optional file used with Copy Special applications, Textbase-Specific Help, the DB/Text <em>ODBC Driver</em>, and the Applications menu.</td>
</tr>
<tr>
<td>.SLT</td>
<td>Optional file that is created when <em>EnableSlotlog=1</em> appears in the [Advanced] section of the DBTEXT.INI or textbase .INI file. This option can be set in DBTEXT.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 closes the textbase.</td>
</tr>
</tbody>
</table>
User Files

A user file is a file maintained on the user’s local hard drive or in their private directory on a network drive, serving as a storage place for private elements (for example, forms, query screens, sets, and record skeletons). Elements stored in your user files are not accessible to users on different computers. A user is defined as a computer. It is not typically related to your login name or password.

**Note:** In addition to private elements, there are some files that are both textbase-specific and user-specific that are located in the user file directory. These include the .TBS file, which stores persistent scripting information, and the .IDI file, which stores last-used settings (for example, window size, position, batch modification settings).

To understand user files, remember that textbase elements are never saved as separate files. Instead, they are saved either in the textbase file or in a user file. For example, when you save a query screen, you see the dialog box shown below.

Elements saved in the user file are available only to that particular user (or to anyone using that computer). When someone else opens the textbase from another PC, those elements will not appear in selection lists.
Elements saved in the textbase file are available to all users, and are identified by the notation (public) when they appear on dialog boxes. The notation (public) is an identifier; it is not part of the name.

User files are intended for convenience, not security, and are most useful when sharing textbases on a network. 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.

**Name and Location of User Files**

Each textbase has its own textbase user file. For example, a textbase called Sales has a user file called SALES.TBU. If you open 10 different textbases, you have 10 separate user files. All of your user files are saved in the same location on your local hard drive. To see your user file path, open any textbase and choose Display>Textbase Information.

**Important!** You should not rename or move user files.

The user file location is determined the first time you start DB/TextWorks, when you are asked to specify a user file path. You can accept the suggested path or specify a different one. The user file path is recorded in your registry.

**Note:** On Windows systems before Windows 2000 (for example, Windows 95/98/NT), the user file path may be specified in your INMAGIC.INI file.

Here is a typical example of how one textbase can have multiple user files:

There is 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\USERFILES\SALES.TBU. Richard has a diskless workstation, so his user file is on a shared network drive: \SERVER\VOL1\USERS\RICH\SALES.TBU.
User File Collisions

When specifying a user file path on a network drive, be sure to specify a directory that no one else uses for his or her 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 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 DB/TextWorks detects a potential collision, it displays this message:

If you click Yes to continue, the user file will be changed to reference the new path. Elements stored in the user file may be inappropriate for the current textbase.

If you click No, the textbase will not be opened. To avoid future user file collisions, you should decide which textbase the user file belongs to and rename the other textbase, so you do not have two textbases with the same name.

Note: The software also maintains corresponding .IDI files where .TBU files are stored. These files contain textbase-specific information about the location of various windows (for example, Display, Edit, Report windows), and preserve the most recent Import, Export, and Batch Modify settings.
Using Copy Special

Use the options on the Copy Special menu (choose **Edit>Copy Special**) to pass record-specific information to the Windows Clipboard.

Record and Report Options

You can copy information to the Windows Clipboard so you can paste it into another application. The copied information uses plain text format; form layout is retained, but fonts, color, picture boxes, and so forth are ignored. You can only copy the first 64K (approximately 64,000) characters. Only the information that is displayed by the form is copied. If you plan to copy records and reports to the 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 font for labels and text font (choose **Tools>Box Properties>Labels** and **Tools>Box Properties>Formats>Font, Color**).
- Vertical units set to **Lines** (choose **Tools>Form Properties>General**).
- Top Offset for boxes set to whole increments of lines, such as 1 or 2, not .5 (choose **Tools>Box Properties>Position**).

**To copy a record**

1. Do a search or load a set.
2. Select a record in the Report window, or display a record in the Display or Edit window.
3. Choose **Edit>Copy Special>Record**. The form selected for the active window is used.

**To copy a report**

1. Do a search or load a set.
2. Choose **Edit>Copy Special>Report**. The form selected for the Report window is used.
Application Options

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

To enable Copy Special

1. If the DBTEXT.INI file does not already include a signature text for the target application you intend to use, use a text editor (for example, Windows Notepad) to add the necessary information. If necessary, edit the software initialization file, DBTEXT.INI, describing the signature text that each target application will use for recognition.

2. Create or edit a textbase .INI file, specifying which field in the textbase will be the source of the information, and which application from step 1 to use. Each textbase can have up to two target applications.

3. [Optional] Use Tools>Customize Toolbar>Main to add the Copy Special button(s) to the Main DB/TextWorks toolbar. For more information, search the online help for “Application Options (Copy Special).”
Initialization Files

Initialization (.INI) files are text files that you can edit.

DB/TextWorks uses these initialization files: INMAGIC.INI, DBTEXT.INI, and an optional <textbase>.INI file.

WebPublisher products use these initialization files: INMAGIC.INI, DBTEXT.INI, and <textbase>.INI (all of which are optional), plus an additional file called DBTWPUB.INI. Note that if you are using WebPublisher PRO version 7.0 or later to edit over the Web, the <textbase>.INI is required, as it contains XML match field information.

INMAGIC.INI File

The INMAGIC.INI file is stored in the user file path specified in the registry, if the user has full rights to the Windows directory. If the user does not have full rights to this directory, or if DB/TextWorks is installed on an older operating system (for example, Windows NT), the INMAGIC.INI file is stored in the Windows directory.

To find your INMAGIC.INI file, use the Find function in Windows My Computer or Windows Explorer, or look at the Textbase Information window for any open textbase.

INMAGIC.INI contains personal customizations that affect the current user, including but not limited to:

- Options.
- The currently selected menu screen (.TBM file).
- A setting for the Express Import Buffer (ExpressImportBuffer=) controls the maximum permitted size of the memory buffer used for express imports. Normally, Express Import appropriates as much memory as possible 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. If you type 4096, then the buffer will be 4096 KB even if there is more memory available (and less if that much memory is not available). For more information, see the DB/TextWorks online help.
- A setting that 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, see Chapter 4, “Searching a Textbase,” the “Troubleshooting Searches” section that covers Boolean and range searches.
- Settings specific to DB/Text WebPublisher.
- Other settings described in the DB/TextWorks online help file.

416 Appendix: Reference Information
Entries are listed by section. Some entries can be set using DB/TextWorks menu options, others by editing the INMAGIC.INI file (when DB/TextWorks is not open).

**Dual-boot machines:** If you have a dual-boot machine (for example, if you can run both Windows NT and Windows 95), make sure the INMAGIC.INI file in both Windows directories (or in the location specified in the registry on Windows 2000/XP machines) has the same user file directory, and other settings you want to share across platforms (for example, SpacedRelOps=).

**DBTEXT.INI File**

The DBTEXT.INI file is located in the DB/TextWorks installation directory.

The DBTEXT.INI file contains information about the software configuration settings, including but not limited to:

- Language(s) used for month and day names.
- Default leading article and stop word lists.
- Setting for interpreting two-digit years.
- Settings for tracking textbase activity.
- Information about the Copy Special menu Application options.

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 will need to edit the DBTEXT.INI file directly using a text editor, such as Windows Notepad. For related information, see Chapter 10, “Customizing DB/TextWorks.”

DBTEXT.INI is not required for the software to run. If it is absent, default settings are used (that is, English month/day names, leading articles, and stop words; two-digit years interpreted as being prior to 2040).

**Note:** The date settings chosen when DB/TextWorks is installed are shared with WebPublisher.

For more information about DBTEXT.INI, see the DB/TextWorks online help.

**Run-time version:** If you are distributing textbases to Run-time users and you want to pass along the DBTEXT.INI settings, supply a copy of the DBTEXT.INI file to each user. (If both DB/TextWorks and Run-time are installed in the same directory, they share the DBTEXT.INI file.) See the online help for more information on distributing textbases with Run-time version software.
Textbase .INI File

The textbase .INI file is an optional text file with the same name and location as the textbase. For example, a textbase named Loans can have a LOANS.INI file. You can create or edit this file yourself using a text editor. The textbase .INI file is used with the Applications menu, Copy Special menu commands, XML match fields, Textbase-Specific Help menu command, the DB/Text® ODBC Driver, and other options. It has several sections, including [SpecialVendor], which controls the Copy Special function, and [Help], which controls the Textbase-Specific Help function. For more information, see the DB/TextWorks online help.

DBTWPUB.INI

DBTWPUB.INI contains settings used only by WebPublisher products, not shared with DB/TextWorks.

DBTWPUB.INI contains many settings, including, but not limited to:

- The location in which WebPublisher looks for textbase and image files.
- The maximum number of records displayed after a search.
- Americans with Disabilities Act (ADA) compliance settings.
- WebSetMax= and WebCSSOpt= settings.
- Whether a New Search button appears on report pages.
- Whether expanded displays appear in a separate browser window.

DBTWPUB.INI is created by the WebPublisher installation program. It may also be updated by the software when a client submits a query (the textbase location may be written to the file). To make further changes, you can edit DBTWPUB.INI directly using a text editor.

For more information about textbase and image file locations, see the Inmagic DB/Text WebPublisher PRO User's Manual. Information about the other settings controlled by the DBTWPUB.INI file is explained in the DB/TextWorks online help.
## Extensions for Text Files

The extensions listed below are recommended but not required for text files used with DB/TextWorks. For example, when you export records, the file extension .DMP is assigned by default, but you can change this extension on the Export File As dialog box.

<table>
<thead>
<tr>
<th>Extension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.TBB</td>
<td>Textbase structure backup file</td>
</tr>
<tr>
<td>.DMP</td>
<td>Exported records</td>
</tr>
<tr>
<td>.ADD or .DMP</td>
<td>Records to be imported</td>
</tr>
<tr>
<td>.TXT</td>
<td>Text files to be imported using Import Document</td>
</tr>
<tr>
<td>.TXT</td>
<td>Validation, substitution, stop word, and leading</td>
</tr>
<tr>
<td></td>
<td>article lists printed to a file</td>
</tr>
<tr>
<td>.TXT</td>
<td>Textbase elements and menu screen definitions</td>
</tr>
<tr>
<td></td>
<td>printed to a file</td>
</tr>
<tr>
<td>.X01, .X02, and so forth</td>
<td>Exception files</td>
</tr>
<tr>
<td>.XPF</td>
<td>Exported form definitions</td>
</tr>
<tr>
<td>.XPQ</td>
<td>Exported query screen definitions</td>
</tr>
<tr>
<td>.XPS</td>
<td>Exported set definitions</td>
</tr>
<tr>
<td>.XPK</td>
<td>Exported record skeleton definitions</td>
</tr>
</tbody>
</table>

### Unregistered File Extensions

If you notice unusual file names (for example, MYFILE.DMP.TXT), the extension you specified when saving a file is not listed in the Windows Registry. You can avoid this problem by accepting the default extension shown on the dialog box when you save the file or by using double quotation marks when you name the file (for example, "MYFILE .DMP").
Glossary

abort
To halt a software program abnormally and abruptly (for example, by rebooting).

abort flag
An internal indicator that warns the user that the textbase may have been damaged because it was interrupted during a maintenance activity (for example, by a reboot during an import).

abstract
A brief text summary of a longer document.

accelerator key
See function key.

Access Control field
A field type that provides record-level security by letting you restrict access to classes of records. The record class is specified by the content of this field. See also record-level security; MS-DOS character translation.

active window
The window that has focus or is currently selected.

alphabetic filing
A Special Filing option (when the Numbers File Numerically check box is cleared), in which numbers are indexed and sorted as if they were words instead of values.

alternate primary sort field
Field by which a record is sorted if the primary sort field is absent in that record. You can designate up to four alternates.

Analyze Textbase
A command on the Manage Textbases menu that analyzes each record in the specified textbase and generates a tabular report listing the following information about each field: maximum number of entries in a single record; maximum length of a single entry; and maximum length of this field in a single record.

anchored box
Box on a form whose position is fixed on the form or is dependent on the position of another box.

annotations
Image overlays created by the user to draw attention to, comment upon, or hide areas of an image.
ANSI character set
American National Standards Institute character set, consisting of 256 characters represented by 8-bit numbers. Microsoft Windows uses the ANSI character set. See also ASCII character set; MS-DOS character translation.

anti-aliasing
Process which smooths the jagged appearance of lines and curves in a scanned image.

Application window
See DB/TextWorks Application window.

arithmetic operators
Symbols that can be incorporated in a calculation formula to denote arithmetic operations: addition (+), subtraction (-), multiplication (*) and division (/).

ASCII character set
American Standard Code for Information Interchange character set, consisting of characters represented by 8-bit numbers. See also ANSI character set; MS-DOS character translation.

ASCII file
A file containing ASCII characters, in a format that can be printed, typed, or edited using system editors, and can be used by other software. DB/TextWorks can import or export data files in ASCII format. Sometimes called a sequential file or text file.

associated field
A field in a secondary textbase whose contents are matched against the contents of the Link field in the primary textbase in order to “connect” or link the records.

associative relationship
See related term.

authority list
See validation list; controlled vocabulary.

Automatic Date
Field that DB/TextWorks adds to and maintains in every record created or edited. There are two kinds of automatic dates: creation dates (added to a record when it is created), and modification dates (refreshed every time a record is changed). Automatic Date fields can include the time as well.

automatic field
A field for which DB/TextWorks generates values.

Automatic ID
Field that contains values generated by DB/TextWorks by adding 1 to the last value. Unlike other Automatic fields, you can edit Automatic ID fields, and can include text, punctuation, spaces, numbers, and leading zeros.

Automatic Number
Field that DB/TextWorks adds to every new record, containing a unique number in an ascending series. The starting number and increment value can be set in the textbase structure definition.
average
In a form calculation or computed field formula, a function that computes the average (mean) of a set of values. The AVG function computes the mean value of a field or expression in a set of records. The FAVG function computes the mean value of the entries in a field in a single record.

backups
Copies of important files, kept elsewhere on the computer system as well as away from the computer, to protect against data loss from system failure, user error, and catastrophic events.

Basic form
Simple form, generated by the software, containing a box for each field in the primary textbase. Fields appear in the order in which they are defined in the textbase structure. Select the Basic form (choose Display>Select Forms) when you want to see all fields in the primary textbase. Can also be used as a starting point in the Form Designer.

Basic form fonts
A user option that determines which fonts will be used by default for Basic and new forms and query screens, as well as the Textbase Information window, and printed textual information (for example, form definitions and validation lists).

Basic Query Screen
Simple search screen, generated by the software, containing a box for each indexed field in the primary textbase. Select the Basic Query Screen (choose Search>Select Query Screen) when you want one searchable box for each indexed field in the primary textbase. Can also be used as a starting point in the Query Screen Designer.

batch deletion
Process by which records, retrieved by a search, are deleted from the textbase with a single command.

batch modification
Process by which multiple records are changed in the same way, by the addition, deletion, or modification of a field or field entry, or substitution of text.

beginning text
Text inserted before the contents of a field in a form. In a multiple entry field, the text only precedes the first entry. If the field is empty in a record, beginning text does not appear.

binary file
Data file containing binary information (as opposed to strictly character information as may be found in an ASCII file). In general, binary files cannot be printed or edited.

Boolean commands
Commands (AND, OR, NOT) used to combine search expressions in order to produce a desired result. Boolean commands can be controlled by query buttons on a query screen or typed in a Command Query window.

Boolean operators
Symbols (& / !) used to combine search terms: & represents AND, / represents OR, ! represents NOT.
**Boolean query buttons**
Buttons associated with searchable boxes on a query screen, allowing the Boolean command associated with that box (AND, OR, NOT) to be changed by the person performing the query.

**borders**
Lines drawn around the four sides of a box. When designing a form, you can choose whether or not to show the borders for any specified box when the form or screen is used.

**boundaries**
Dashed lines that you can choose to see while designing a form, query screen, or menu screen indicating the location and dimensions of each box. It is especially useful to turn on boundaries (check **Boundaries** on the View menu) if the boxes on the form do not have visible borders. Boundaries are a design tool only. They do not appear in the saved form or screen. See also entry boundary.

**box name**
Name assigned to a form box, enabling a script to read or write the contents of that box.

**broader term (BT)**
A descriptor that has one or more other descriptors that are subordinate to it in a hierarchy. Subordination may mean “more specific” (for example, Cats BT Pets) or “part of” (for example, Chicago BT Illinois). The relationship of a term and its narrower term (NT) is sometimes called “parent-child.” In the examples, Pets and Illinois are, by definition, broader terms. The relationship indicator for this type of term is BT. Its reciprocal is NT. Every BT will have a reciprocal NT and vice versa. Example: Fishes BT Aquatic Animals; and Aquatic Animals NT Fishes.

**browse**
To peruse a list of terms that you can paste while searching or editing records.

**Browse Choices key**
Key (**F3**) that displays a list of items that you may want to type or paste in a box. The content of the list depends on context. For example, you may see a validation or substitution list while you are editing records, or a list of indexed words or terms while you are searching.

**browser**
A program used to view material prepared for the Web. Browsers can interpret URLs and HTML, and can understand several Internet protocols, such as HTTP, FTP, and Gopher. Examples of browsers are Microsoft Internet Explorer and Netscape Navigator.

**BT**
See broader term.
buttons
See Boolean query buttons; script button.

calculations
Arithmetic expressions that are defined in a form to perform computations involving fields in the records. The results of the calculations appear when the form is used.

carriage return
ASCII character that can be included in the information typed or imported into a record. See also line breaks.

Cascading Style Sheet
A Web page (for example, WEBSTYLE.CSS) that you create to define styles (for example, fonts, colors, spacing) for your Web documents (for example, HELP.HTM). Having a cascading style sheet (CSS) gives the Web page creator more control over the appearance of a Web page (rather than to the Web browser). Netscape and Internet Explorer version 4.0 or later usually support Cascading Style Sheets.

By default, WebPublisher uses CSS properties to improve absolute positioning, so report and display forms look as much as possible as they would look in DB/TextWorks.

CGI
Common Gateway Interface. A specification for how an HTTP server communicates with external programs. A CGI executable file provides the connection between browser software and an application. Most HTTP servers support CGI.

character translation
See MS-DOS character translation.

Check Textbase
A DB/TextWorks feature that checks a textbase to detect and repair problems in a textbase and user file.

child term
See narrower term.

choices drop-down list
An option that you can select for a field on an HTML query screen, to show a list of indexed terms when viewed on the Web. To add a drop-down list in the Query Screen Designer, select a box and choose Tools>Box Properties>HTML, then export the screen to HTML. When the HTML page is viewed in a Web browser, users can open the drop-down list and select an item for which to search.

Choices key
See Browse Choices key.

Clipboard
A memory resource maintained by Windows to store a copy of the last information that was copied or cut. Useful for transferring information between windows or applications.
**Code field**
A field type that treats case and punctuation as significant for filing purposes.

**Command Query window**
Window in which complex search queries can be typed; an alternative to a query screen.

**Comment lines**
Lines in an ASCII file that are ignored when the file is imported into a textbase. Usually, these lines begin with an exclamation point (!).

**Comparison search**
A search of the Term index, seeking to satisfy an expression such as equals (=), greater than (>), less than (<), between (50:100), and so forth.

**Compulsory form sort**
Sort description defined for a form, specifying the only way in which records can be sorted when that form is used.

**Computed field**
Field whose value is derived from a formula, to compute due dates, sales tax, and so forth.

**Concept**
A unit of thought, formed by mentally combining some or all of the characteristics of a concrete or abstract, real, or imaginary object. Concepts exist in the mind as abstract entities independent of terms used to express them.

**Configuration**
Collection of settings that govern the behavior of DB/TextWorks on your system, including month names, default stop words and leading articles. Can be changed by running DB/TextWorks Setup.

**Content validation**
Validation rules governing what can be placed in a field entry, including mask validation, minimum and maximum values, or a list of valid terms.
context display
See search highlighting.

continuation line
A line break used to force a line wrap when creating a text file in Inmagic tagged format using a text editor or word processor. A continuation line is made by pressing Enter and starting the next line with a space or Tab.

controlled vocabulary
A subset of the lexicon of a natural language in a certain domain. For example, the Engineering field (domain) has a language and, within the “natural language” of Engineering, a subset of preferred and non-preferred terms is used to index and search for documents. May also be called an indexing language. Its purposes are to enable indexers to represent the subject matter of documents in a consistent way and to bring the vocabulary used by the searcher into coincidence with the vocabulary used by the indexer. To facilitate this, a controlled vocabulary is developed, usually by experts in a field. A thesaurus is the tool used to construct, maintain, store, and display the controlled vocabulary.

coordinates
Absolute position of a form box on the form. You can change the location of a box by changing its coordinates or its position offsets.

copy
To place information on the Windows Clipboard without removing it from the record. You can also copy the boxes in the designers.

count
In a form calculation, the COUNT function determines how many records in the set contain a non-zero number in the specified field (or expression). In a form calculation or computed field formula, the FCOUNT function yields the number of entries (numeric or otherwise) in the specified field in a single record.

cousin
See related term.

creation date
Date when a textbase was defined or a textbase element (form, screen, set, and/or skeleton) was last saved. Also, records in a textbase can have creation dates. See also Automatic Date.

criteria
See search criteria.
cross-reference
A pointer (or referral) from one term to another term in a thesaurus. Cross-references always occur in pairs—the pointer and its reciprocal—and are of three types:

- Hierarchical relationship, which represents generic-specific relationships, or whole-part relationships, in the context of the thesaurus. These references are labeled broader term and narrower term, respectively.
- Equivalence relationship, meaning the term pairs are synonym, near synonyms, or quasi-synonyms in the context of the thesaurus. These types of cross-references are designated by the USE and USED FOR references.
- Associative relationship, which leads from one descriptor to other descriptors that are related to or associated with it in the context of the thesaurus. These types of cross-references are labeled the related term references.

CSS
See Cascading Style Sheet.

CSV format
See delimited ASCII format.

currency symbol
Character(s) used to identify numbers as currency. The character(s) are specified in the Windows Regional settings (for example, whether to use $ or £).

cursor
A display indicator on the screen, such as a blinking vertical bar, that shows the insertion point where the next keystroke will appear when typed or where the contents of the Windows Clipboard will be pasted in.

cut
To copy highlighted information to the Windows Clipboard and then delete it from the record. You can also cut the boxes in the designers.

DB/Text Import Filter
As of 2003, DB/Text® Import Filter is a retired Inmagic product. It was an add-on to DB/TextWorks that allowed you to import files in formats other than plain text. DB/TextWorks now uses IFilter technology to extract text from documents. See IFilter technology.

DB/Text PowerPack Lite
A set of two utilities that you can use on DB/TextWorks textbases, to help automate management and maintenance tasks. The two utilities are DB/Text® Updater, which posts deferred updates automatically and continuously using background processing, and DB/Text® Checker, which analyzes textbase integrity and can fix some types of problems.
**DB/Text WebPublisher**
A Web-based application that enables you to publish textbases on the Internet or an intranet, so Web users can search them. The software returns results in dynamically generated HTML reports or XML. It is used together with DB/TextWorks, which is the “buildware” for creating searchable textbases. Compare DB/Text WebPublisher PRO.

**DB/Text WebPublisher PRO**
A Web-based application that enables you to publish textbases on the Internet or an intranet, so Web users can search and edit them. WebPublisher PRO accepts queries from standard Web browsers, such as Microsoft Internet Explorer, and accepts XML input. The software returns results in dynamically generated HTML reports or XML. WebPublisher PRO is used together with DB/TextWorks, which is the “buildware” for creating searchable and editable textbases. WebPublisher PRO also lets you integrate your DB/TextWorks textbases with other applications using standard third-party tools (for example, Microsoft FrontPage). Compare DB/Text WebPublisher.

**DB/TextWorks Application window**
An HTML browser window activated by choosing one of the options on the optional Applications menu. The options on this menu are specified in the textbase .INI file.

**decimal separator**
Character used to separate the whole and fractional parts of a number, such as a period (for example, 98.6). The character depends on the Windows Regional settings.

**default**
Value or condition assumed by DB/TextWorks if no alternative is specified.

**Deferred indexing**
DB/TextWorks indexing mode setting that keeps changes and additions to the textbase in an update queue, so they can be incorporated into the indexes at a later time. Compare Immediate indexing; Shared Immediate indexing.

**deferred updates**
Changes made to records under Deferred indexing. These changes can be posted (indexed), printed (with a list of changed fields), retrieved, or discarded.

**delete**
To remove an item from a textbase. Deletion is a permanent activity. Deleted field entries, fields, records, forms, and so forth cannot be recovered.

**delimited ASCII format**
One of the available export/import file formats. By default, fields are separated by commas and records are separated by line breaks.

**delimiter**
A character, such as a comma, used to separate items of information. Can be specified in DB/TextWorks when preparing to import or export ASCII text files.
descending sort
   See reverse sort.

description
   A line of text that can be saved with a textbase or textbase element, generally used to describe
   its purpose.

descriptor
   The term chosen from a group of synonyms (or near synonyms) as the preferred expression of
   a concept. For example, Street, Road, Lane, and Drive may be considered nearly
   synonymous; while Avenue, Boulevard, and Expressway each express a similar
   concept (an item on which vehicles are driven). The thesaurus expert might choose Street to
   represent all of them, making it the preferred term or descriptor. Or, the expert might invent a
   totally different, more generic, compound term, such as Streets and Highways, to
   represent the closely related concepts. The other terms become non-preferred terms, would not
   be used in indexing or searching, and would not be considered descriptors. See also preferred
   term.

deskew
   Straighten a misaligned image (for example, if a page is scanned crooked).

desktop
   “Desktop use” means running DB/TextWorks under Windows to access a textbase, as opposed
   to running a Web browser and using DB/Text WebPublisher to access a textbase.

despeckle
   Remove unwanted specks and other “litter” from an image.

diagnose
   To determine whether problems exist, and how they can be repaired.

dialog box
   A box in which the user is asked for input or decisions. Contains controls such as text boxes,
   selection lists, check boxes, option buttons, and command buttons.

discard deferred updates
   To undo all of the record changes made under Deferred indexing. Only unposted updates can
   be discarded.

Display form
   A form used for the Display window in DB/TextWorks, or for expanded display on the Web
   (with DB/Text WebPublisher).

Display window
   Window in which you can see, but not edit, a single record.

documents
   Text files containing information to be imported into one field in one record, and which may
   be many paragraphs or pages in length.

DOS character translation
   See MS-DOS character translation.
**drop-down list**
A list of items that appears when you click the drop-down arrow at the end of a box. You can click an item on the list to select it. *Compare picklist.*

**dump textbase**
To copy all of the records in a textbase to a text file, using the Dump Textbase command. Deferred updates are ignored. *See also load; export.*

**Edit form**
A form used for the Edit window in DB/TextWorks that can be exported to HTML for use on the Web (with DB/Text *WebPublisher*).

**Edit window**
Window in which you can edit records, one at a time.

**editable box**
A box on an Edit form in which you can add or change information. The box can contain only one field, which cannot be protected by the current password.

**elements**
See textbase elements.

**ending punctuation**
Punctuation appended after the contents of a field in a form if there is no punctuation already there. Omitted if the field is empty.

**ending text**
Text appended after the contents of a field in a form. In a multiple entry field, the text only follows the last entry. If the field is empty in a record, the ending text does not appear.

**entry**
See field entry.

**entry boundary**
The boundary where one entry ends and another begins. The entry boundary is indicated by an entry separator.

**entry separator**
(1) Text specified in a form to separate the entries in a field.
(2) Text or character that separates the entries in a file exported using delimited ASCII format.
(3) Bullet character selected to separate entries in an Edit box.
(4) Internal character used to separate field entries in a field in the textbase; accessible to scripts.

**entry term**
A non-preferred term in a cross-reference that leads to a descriptor in a thesaurus. Also known as a “lead-in term.” The relationship indicator for this type of term is USE; its reciprocal is USED FOR. Example: Cats USE Felines, in which Cats is the non-preferred term.
entry validation
Validation rules governing field entries, such as whether they must be unique across all records in the textbase, whether they can repeat within a record, and whether at least one is required in a record.

equivalence relationship
See USE; USED FOR.

event
An event triggers a script to do something. Example of events: clicking on a script button, opening a window, moving cursor out of a form box.

exception file
A text file that contains copies of records rejected during an import.

expanded display (WebPublisher products)
Display of a single record at a time in a Web browser, when a user clicks on a hypertext link in a Report page.

exploded sort
An exploded sort makes a record appear under each entry in the sort field, rather than just the first. For example, if the Employees field contains the names of three people, an exploded sort makes the record appear three times (once for each employee).

export
To copy information to a text file, as a way of backing up or sharing that information. See also dump textbase.

Express Import
Import option specifying that records be imported as fast as possible, using index caching techniques to provide maximum speed. This method grabs more than its “fair share” of system resources in the interests of speed. This option should be used only if speed is important, others are not sharing the textbase, you do not need to run other applications while the records are loading, and you can accept a long delay if you need to interrupt the import for any reason. Compare Interruptible Import.

extended characters
Characters in the higher ASCII table, used in languages other than English. These characters can be typed into a DB/TextWorks textbase using the Alt key and the numeric keypad. For example, type 0233 while holding down the Alt key to create the character é. Extended characters may be found on some keyboards. See also filing order.

extension
Part of a file name that is commonly used to signal the file’s purpose, such as log files (.LOG) and exported forms (.XPF).

field
Part of a record containing a specific category of information, such as an author’s name or a publication date. DB/TextWorks accepts up to 250 fields per record, with no limit on the number of field entries or the size of each field entry.
Field Access password
Password with an associated set of permissions, granting or denying read or read-write access to particular fields or records, or to the textbase itself (including textbase elements).

field entry
An item of information in a field. A record can contain more than one entry in a field, such as a Subject field having multiple subject terms.

field entry delimiter
Character used in the Edit Record window to indicate where one entry ends and another begins (default is bullet). See also entry separator.

Field Functions
Functions (FAVG, FCOUNT, FMAX, FMIN, FTOTAL) that compute a value based upon the entries in a field in a single record. These functions can be used in a calculation defined in a form or in the formula for a computed field in the textbase definition.

field name
Text identifier for a field in a textbase. A name can be up to 20 characters and can contain letters, digits, spaces, hyphens, and underbars.

field type
Property of a field that governs how its contents are treated. A Date field, for example, is expected to contain dates, and will file dates chronologically.

file
A collection of related information treated as a unit.

file URL
An addressing scheme that does not specify a protocol (such as HTTP) for accessing files. File URLs are specific to a local system, such as an intranet. Example: file://server1/docs/myfile.htm. See also URL.

filing order
The rules governing the order in which items are indexed and sorted, determined by the field type and Special Filing options defined in the textbase structure, as well as the Windows Regional settings

fixed text
Text added to the contents of a box in a form definition. Fixed text always appears when the form is used.

floating box
Box on a form whose vertical location “floats” depending upon the position and size of boxes located above it in the form.

focus
A state where an object is currently active and will respond to an action. For example, when a button on a dialog box (for example, OK) has focus, pressing Enter will make the button do something (for example, close the dialog box). Or, when a box on an edit form has focus, whatever you type will appear in that box.
footer
Information that follows a group of records in a report. Report Footers appear once only, at the end of the report. Sort Footers appear at the end of a group of records that share a Sort Key at the specified Sort Level. Footers are commonly used to display summary calculations, such as subtotals and grand totals or counts.

form
A layout for presentation of some or all of the information in a record.

form box
A box on a form containing field information, variables, or other information.

Form Designer
The DB/TextWorks tool that you use to create a form, to change the appearance of record information (single-record or multiple-record display).

format
Style in which information appears. For example, you can specify that numbers appear as currency.

FTP
File Transfer Protocol used for sending data from one system to another on TCP/IP networks, including the Internet.

function
An activity that can be initiated by choosing an item from a menu. Also, an operation that can be performed inside a calculation, such as a TOTAL or COUNT function, or a component of a script that performs a task.

function key
Special key on the keyboard that initiates a particular activity in the software. For example, F1 displays online help.

grid
Form parameter, specifying the distance a box moves in the Form Designer, Query Screen Designer, or Menu Screen Designer each time an arrow key is pressed on the keyboard.

<head> section
The top-most part of an HTML page, often including <title>, <script>, and <style> elements.

header
Information that precedes a group of records in a report. Report Headers appear once only, at the beginning of the report. Sort Headers appear at the beginning of a group of records sharing a Sort Key at the specified Sort Level.

heading
A preferred name or term. Types of headings include proper names, subjects, descriptors, trade names, product names, and so forth. “Heading” usually refers to descriptors that have actually been used to index a document. See also preferred term.
help
Online reference information, available as a general resource or in a particular context. See also textbase-specific help.

hidden field
Field to which all access is denied by the current password.

hierarchical relationship
The relationship of a pair of terms in which one is generic (or broader) and the other specific (or narrower). The relationship indicators for this pair are BT and NT, respectively. Example: Cats BT Pets, Pets NT Cats.

hierarchy
Generic (broad)-specific (narrower) or whole-part relationships, which are generally indicated in a thesaurus through codes or indentation. See also broader term; narrower term.

highlight
(1) The action of using keyboard keys or the mouse to indicate a menu option, selection list entry, or area of text that you want to select.
(2) In a report/display/printout, items found by a search can be highlighted (shown in an enhanced way, such as reverse video, color, boldface, and so forth).

HTML
Hypertext Markup Language, a standardized format for hypertext documents. HTML is a document formatting language used by Web browsers. Also, an option when writing reports to a file, sending EMail, and exporting query or menu screens for use with WebPublisher.

HTML search page
See query screen.

HTTP
Hypertext Transfer Protocol, which is used for distributing hypertext documents on the Internet. HTTP is layered on top of TCP/IP.

hypertext link
The connection between one hypertext document and another. When a user clicks on a hypertext link, a jump is made to another help topic or HTML page. Hypertext links can be enabled in a DB/TextWorks report or display.

icon
A picture or bitmap image representing an available choice.

IFilter technology
The technology DB/TextWorks uses to extract text from documents. IFilter technology is installed with Microsoft Index Server, which comes with Microsoft Windows 2000/XP operating systems. This technology is also supported on Windows NT 4.0 systems that have the Windows NT 4.0 Option Pack installed. (DB/TextWorks will only extract text from documents in formats other than plain text if the workstation that initiates the import meets these operating system requirements and has the appropriate IFilter installed.)
image
A file containing a picture, diagram, or scanned document that can be referenced in a textbase record and displayed or printed from within DB/TextWorks.

Images window
Application window in which the image(s) associated with a record are displayed.

Immediate indexing
DB/TextWorks indexing mode setting that provides for all record changes and additions to be indexed immediately. Immediate indexing requires exclusive access to the textbase—no one else can have the textbase open. Compare Shared Immediate indexing; Deferred indexing.

import
To add records to a textbase from a text file. You can also import validation and substitution lists, form definitions, and other textbase elements. See also load.

import filters
See IFilter technology.

inclusive search option
Option, specifying that a search for an intersection of terms in a combination of fields be satisfied as if the fields were one field.

indentation
Form box property, specifying amount of space to appear before information started on a new line; can be a hanging indentation, in which case the space is inserted before wrapped information instead.

index
A collection of keys (words or terms) derived from field values within the records, and used by DB/TextWorks to provide fast access to information.

indexing language
See controlled vocabulary.

index streaming
Technology that downloads only the portion of information needed, to minimize load on the server. The Word Wheel uses index-streaming technology.

INI file
Initialization file, which a software application uses to store various settings. DB/TextWorks uses several different INI files. For example, DBTEXT.INI, stored with the software, contains configuration information. INMAGIC.INI, stored in user file path, contains option settings. The textbase .INI file, which has the same name and location as the textbase, contains textbase-specific settings.

initial action
The action that occurs when a textbase is opened using a particular menu screen option. Menu screens exported to HTML for use with WebPublisher ignore all textbase boxes except those with an initial action of Saved Query.
initial elements
The forms, query screen, and/or record skeleton that are loaded when a textbase is opened using a particular menu screen option. For menu screens, the initial elements control the default forms used by WebPublisher.

initial form/display form (DB/Text WebPublisher)
The form that is first used in the Web browser. The initial Report form is applied when the user retrieves records. The initial Display form is applied when the user expands a record by clicking a hypertext link.

Inline image
An image that is displayed as part of a Web page, instead of as a separate page. Compare picture box.

InmagicADVANTAGE
The software maintenance program of Inmagic, Inc. through which new features are made available to customers throughout the year as they are implemented, rather than as a once-a-year upgrade. New product releases are downloaded directly from the Inmagic Web site (www.inmagic.com). For more information, contact Inmagic, Inc. or your authorized Inmagic dealer.

Inmagic.net
An evolving DB/TextWorks feature that gives you the ability to connect to the Inmagic server from within a DB/TextWorks session to accomplish various tasks relating to cataloging, indexing, and disseminating information throughout an organization.

Inmagic tagged format
Import/export format for sharing text files of records among DB/TextWorks textbases.

instance
A copy of the software run by a particular user. A single user may have one or more instances of DB/TextWorks running at the same time.

interfile
Merge and sort up to five fields for reporting purposes. In a report containing interfiled authors and subjects, for example, a record appears once for each author and once for each subject within the specified Sort Level.

Internet
A collection of computer networks connecting users around the world.

Interruptible Import
Import option specifying that records be indexed, one at a time, as they are imported. This method consumes less system resources than Express Import, and permits others to share the textbase, or you want to run other applications at the same time, (Express Import requires exclusive access) or you want to be able to interrupt the import without undue delays. Compare Express Import.

intranet
A LAN (Local Area Network) or WAN (Wide Area Network) that is used in a manner similar to the Internet, using TCP/IP, Web browsers, HTML pages, and so forth.
ISAPI
Internet Server Application Program Interface specification. A high-performance alternative to Common Gateway Interface (CGI) executable files. Internet Information Services, the free Web server software provided by Microsoft, supports the ISAPI protocol.

Java
A platform-independent programming language that is typically used on the World Wide Web. Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

JavaScript (JScript)
A scripting language created by Netscape that can be embedded into HTML documents for use on the Web. It can also be used in form scripts in DB/TextWorks. It is unrelated to Java. Compare VBScript.

jump
See hypertext link.

justification
Alignment of information in a box in a form (for example, left, center, or right).

key
Index entry. Consists of a single word in the Word index for a field, or the first 250 significant characters of a field entry in the Term index. See also Sort Key.

labels (box)
Optional identifying text associated with a box on a form or query screen.

labels (printing)
A type of form, used to print multiple mailing labels, file folder labels, rotary cards, library catalog cards, book label sets, and so forth.

landscape orientation
A horizontal page orientation in which text and/or images are printed “sideways” across the wider dimension of a rectangular sheet of paper. Compare portrait orientation.

last-saved value
The value most recently entered in an Automatic ID field when a new record was created and saved.

lead textbase
The textbase containing the query screen for use with DB/Text WebPublisher to search multiple textbases. The lead textbase contains the query screen definition and all of the pertinent information about the other textbases to be searched.

leading article
Article or part of speech occurring at the beginning of a field entry. You can ignore leading articles when sorting, to prevent clusters of records sorted under words such as “A” or “The.”

leading spaces
Spaces appearing at the beginning of a line in a document, at the beginning of a field entry in a delimited text file, or at the beginning of a field entry or continuation line or after a carriage return indicator in an Inmagic tagged file.
letter-by-letter filing
The opposite of word-by-word filing, specified by clearing the Word by Word Special Filing check box when editing the textbase structure. Letter-by-letter filing sorts entries from left to right, ignoring all spaces and punctuation (Newbury precedes New Zealand).

licensed number of users
The maximum number of users who may use a particular installed copy of the software simultaneously, according to the licensing agreement.

line breaks
Characters in text or formatting instructions that dictate that additional information be displayed on a new line. Line breaks can be incorporated into the data in a record, added as text in a form definition, or specified by a Paragraph Formatting option for a form box.

link (hypertext)
See hypertext link.

Link field
Field in a primary textbase used to identify and link to a record in a secondary textbase.

linked textbases
Textbases that are associated by means of a Link field in the primary textbase and an associated field in the secondary textbase. This relational-like linking enables you to access record information from the secondary textbase while working in the primary textbase.

load
To import records from a text file into a DB/TextWorks textbase. Typically used to recover a damaged textbase. See also dump textbase; import.

log file
Text file containing a description of changes made to records in a textbase. It also records certain changes made to the textbase structure.

maintenance (textbase)
See textbase maintenance.

maintenance (software)
See InmagicADVANTAGE.

MAPI
Messaging Application Program Interface. A program interface that lets you send EMail from within Windows programs.

Margin Area
The section of a form where you specify information to be printed on every page of the printed report, such as page numbers. Information in this area appears only for printed reports. Compare Record Area.

Margin box
A Margin box is a box that you add in the Margin Area by choosing Edit>Add and clicking Form Box, Text Box, or Picture Box. Script input boxes and script buttons are not available in the Margin Area.
mask
A character pattern that governs how information can be entered in a field. See also validation.

Master password
A textbase-level password that must be defined before any other passwords are created. The Master password grants full access to all operations.

matching records
Import option specifying that incoming records be matched against records already in the textbase based upon the contents of one or more specified fields. If a match is found, that record in the textbase may be edited, replaced, or deleted (depending on the selected import options).

maximum (calculation function)
A function that yields the highest value found. The MAX function yields the highest number (or date) found in a set of records. The FMAX function yields the highest number (or date) found in the entries of a field in a single record.

maximum (field validation)
The highest value that will be accepted in a field. For example, if 99 is the maximum value for a Number field, 100 will not be accepted into that field.

maximum height
The greatest number of lines that will be displayed or printed in a form box. Also, the greatest number of lines to which a query box will expand as query criteria are typed or pasted into it. If content exceeds box height, scroll bars may appear.

maximum textbase users
A parameter associated with a textbase, specifying the maximum number of times a textbase can be opened simultaneously.

menu
A list from which you can select an activity to perform.

menu screen
For DB/TextWorks - A list of items that may appear when you start DB/TextWorks. Clicking an item opens a textbase. For DB/Text WebPublisher - Provides a way to run prespecified queries.

Menu Screen Designer
The DB/TextWorks tool used to create menu screens.

merge
To combine information. You can merge the terms in a text file with the terms already in a list inside a textbase, such as a stop word or validation list. You can use the matching records option during import to merge the fields in the records in a text file with the records already in the textbase. You can merge sorts using the interfile option on the applicable Specify Sort Order dialog box.

message box
A message that informs you about error conditions, requests confirmation, displays warnings, and so forth.

440 Glossary
minimum (calculation function)
A function that yields the lowest value found. The MIN function yields the lowest value found in a set of records. The FMIN function yields the lowest number (or date) found in the entries of a field in a single record.

minimum (field validation)
The lowest value that will be accepted in a field. For example, if 10 is the minimum value specified as validation for a Number field, 9 will not be accepted into that field.

minimum height
The fewest number of lines that will be displayed in a form box, regardless of the amount of information available for display. Unless the minimum number of lines is set to zero, the box will appear, even if it contains a field absent in a particular record.

modification date
Date when a record was last changed. Can be added to the textbase structure as an Automatic Date field. Also, the date a textbase definition was last changed.

monohierarchical thesaurus
A thesaurus in which a term may belong to only one conceptual category and, thus, have only one broader term. Its counterpart is a polyhierarchical thesaurus. DB/TextWorks thesauri are monohierarchical.

MS-DOS character translation
Option specifying that extended characters will be translated between MS-DOS representation and Windows when files are imported or written. Before moving text between DOS and Windows applications, choose Tools>Options and specify the desired Read/Write extended characters in MS-DOS Format setting.

multiple entries
See field entry.

multi-user
Property of software, enabling more than one person to use the software simultaneously. DB/TextWorks permits up to the licensed number of users to work with the software simultaneously. Multiple users can work in the same textbase at the same time, provided they use Shared Immediate or Deferred indexing.

narrower term (NT)
A descriptor that is subordinate to, either in a generic-specific or whole-part manner, another descriptor in a hierarchy. The relationship indicator for this type of term is NT. Example: Aquatic Animals NT Fishes. Its reciprocal is broader term (BT). The relationship of a term and its broader term is sometimes called “child-parent.” Every NT will have a reciprocal BT and vice versa. The BT-NT relationship does not have to be generic-specific. In some thesauri, the relationship is more correctly defined as a “whole-part” relationship. Example: Illinois NT Chicago.

nested Boolean
The use of two or more Boolean commands to construct a search request, possibly with parentheses to control the order of operation. See also Boolean commands.
network counter
Counter built into the software that governs simultaneous use of the software by no more than the licensed number of users.

Network Upgrade Password
The password required to increase the licensed number of users. The password is supplied on a separate piece of paper when you purchase DB/TextWorks or additional licensing rights.

non-preferred term
One of two or more synonyms or lexical variants that serves as an entry term to the thesaurus. Non-preferred terms are not used in indexing, cataloging, or searching of the descriptor field.

non-printable area
The area around the edges of a sheet of paper in which the printer cannot write. On a laser printer, this area is usually 1/4 inch or less.

non-repeating field
A field that is not allowed to have more than one entry in any record, as defined by its validation.

NT
See narrower term.

numeric filing
A Special Filing option governing how numbers in a field are filed for sorting purposes. With numeric filing, volume 2 precedes volume 10. With alphabetic filing of numbers, volume 10 precedes volume 2.

object
A programming term describing a logical structure available for manipulation by a program or script. An object may have properties (attributes) and methods (functions). DB/TextWorks includes a number of objects that a script can use to manipulate information in a form or textbase. For example, a Box object represents a box on the form. One of its properties is content (the text within the box). It also has a setFocus() method.

ODBC
Open Data Base Connectivity is a programming interface that enables you to extract data from databases using third-party tools. The DB/Text® ODBC Driver provides open access to Inmagic textbases.

offset
See position offset.

omit (records)
To remove a record from a set of records retrieved by a search. Omitting a record from a set does not remove the record from the textbase.

omit (empties)
To omit from a sorted report all records having no information in the field by which the report is sorted. This is a property you can set in the sort specification.
OpenType fonts
Cross-platform fonts that work on both Windows and Macintosh systems. The OpenType font file format was developed jointly by Adobe and Microsoft.

orientation
See page orientation.

orphan term
In a DB/TextWorks thesaurus, a term that has no relationships. Terms with no relationships in a hierarchically constructed thesaurus should be investigated periodically to determine whether they are legitimate terms or orphans that have become inadvertently unlinked from other terms. To find orphan terms, on the Maintain Thesaurus window, type @orphan, then click Search. See also preferred term.

override
Option available with certain types of field validation, enabling the user to accept non-conforming information into the textbase after a confirmation message.

page breaks
Where one page ends and another one begins.

page orientation
Parameter specifying whether a report is designed to be printed in portrait orientation (long dimension vertically) or landscape orientation (long dimension horizontally).

paragraph
A body of text ending in a paragraph break. The break may be part of the data, or it may have been added using Added Text or Paragraphs formatting.

paragraph breaks
See line breaks.

paragraph formatting
In the Form Designer, an option that specifies whether paragraph breaks are added to the information placed in a form box.

parent
See broader term.

password
A series of characters that you may be asked to type when you open a textbase. Passwords control what activities you may perform.

paste
To insert text from the Windows Clipboard into an editable window or insert boxes in the designers, or to copy a term from the Editing/Query Choices Browser dialog boxes into a query or edit box.
PDF
Portable Document Format. PDF is considered the standard for electronic document
distribution. If you have or download and install the appropriate IFilter from Adobe Systems
Incorporated (www.adobe.com) and your operating system has support for IFilter technology,
you can import the text of a PDF document using File>Import Document.

pending updates
See deferred updates.

persistence
Means by which parameters or information can be remembered for later use.

phrase
Two or more words separated by spaces or, in some cases, punctuation, such as local area
networks or MS-DOS.

picklist
A list of items on a dialog box from which you can make a selection. Compare drop-down list.

picture box
Box on a form containing a fixed image or logo, or an image referenced in the current record.
Compare inline image.

portrait orientation
A vertical page orientation in which text and/or images are printed across the narrower
dimension of a rectangular sheet of paper. This is the page orientation typical of most
documents. Compare landscape orientation.

position offset
The horizontal and vertical distance between a form box and either the edge of the form or
another box. Offsets can be measured in inches, millimeters, points, or (in the case of vertical
measurements only) lines.

post deferred updates
Process by which indexes are updated to reflect changes made to records under Deferred
indexing.

preferred term
The term that is selected from a class of synonyms, near synonyms, and quasi-synonyms to
designate unequivocally a concept. Usually considered to be synonymous with descriptor. The
thesaurus compiler (or Authoritarian) chooses one term from among several possible terms,
and directs the user, by means of references from synonyms and other alternative forms, to
employ this one in indexing and/or searching. A preferred term in a DB/TextWorks thesaurus
is one that has any or all of the following relationships: BT, NT, RT, or UF; or, which has no
relationships. See also orphan term.

preview
To see what a form will look like in actual use.
**primary sort field**
Field used to sort records within a common Sort Level. *See also* alternate primary sort field.

**primary textbase**
Textbase you open explicitly, and which contains at least one Link field. A primary textbase can be linked to one or more secondary textbases, which are opened implicitly when you open the primary textbase.

**printer fonts**
Fonts or character styles that are appropriate for selected printers only. To see the available printer fonts when designing a form, choose *File* > *Print Setup* and select the target printer before opening the Form Designer.

**Private**
Denotes that textbase elements (forms, query screens, sets, record skeletons) are stored in the user file rather than in a textbase file. Private elements are not available to other users.

**prompted text**
Questions or prompts defined in a form, to be asked whenever the report is run. The user’s typed response is inserted in the report.

**proximity search**
A search for two words in a field, specifying how near each other they must be (number of words).

**Public**
Denotes textbase elements (forms, query screens, sets, record skeletons) stored in a textbase file rather than in the user file. Public elements are available to all users. Forms must be saved as public to be used on the Web as textbase default elements or as initial elements in menu screens.

**punctuation**
Character that is not a letter, digit, space, or control character. Punctuation characters serve to separate words in DB/TextWorks (thus, *by-law* is considered two words).

**query**
Search criteria intended to retrieve records.

**query box**
Box on a query screen, which searches one or more fields. In a query box, you can type words, terms, or comparison expressions in order to search for records.

**query buttons**
*See* Boolean query buttons.

**query screen**
The query screen contains boxes into which you type words, terms, or comparison expressions. It can also contain sets boxes and script buttons (both desktop only), text boxes containing instructions and other informational text, picture boxes, and so forth. Each box represents one or more fields to be searched. Also called a search screen.
Query Screen Designer
The DB/TextWorks tool used to create query screens for searching a textbase.

range search
Search that looks for records that have information in a field that falls within a specified range of values, such as dates. For example, \texttt{2001:2002} searches for records from 2001 through 2002.

read-only field
Field to which write-access is denied by the textbase password in use or because of the field type (Automatic Date, Automatic Number, and Computed fields). The field can be seen but not changed, deleted, or added by the user in any record.

rebuild a field index
Recreate an index for a field by examining all of the records in the textbase.

record
Retrievable unit of information in a textbase, generally associated with some kind of item (for example, book, document, customer) or event (for example, sales order, problem report, task).

Record Area
The body of a form, consisting mainly of record information. Information in the Record Area appears in displayed and printed reports, and in individual record display. \textit{Compare Margin Area}.

Record box
A Record box is a box that you add in the Record Area by choosing Edit/Add and clicking Form Box, Text Box, Picture Box, Script Input Box, or Script Button.

record class
A designation given to a group of records for the purposes of restricting access. The record class (for example, the designation \texttt{Librarian Only}) is stored in an Access Control field and in a special validation list. Users are given access to records of various classes by way of a Field Access or Silent password.

record-level security
The ability to restrict access (read/write, read, or none) to classes of records within a textbase. Classes are defined with the Access Control field. See also Access Control field.

record skeleton
Set of field values to appear in a new record in the Edit window. Record skeletons can be named, saved in the textbase or user file, exported, and imported.

Recover Textbase
A DB/TextWorks feature that involves dumping the contents of a textbase to an ASCII file, making an empty copy of the textbase, and loading the ASCII file into the new textbase.

446 Glossary
ixo
To undo an Undo operation.

refresh sets
Re-execute the search strategy for saved sets, in order to update the list of records retrieved to reflect changes in the textbase since the searches were last performed.

refresh window
In the Edit window, to cause Computed field values and linked record information to be updated on the screen while you are editing a record, if you have changed information that affects the computed value or the link. This enables you to see the new information without leaving the field. In all other windows, choosing Window>Refresh redisplays the window contents (for example redisplays a report).

related term (RT)
A descriptor that is associatively but not hierarchically linked to another descriptor in a thesaurus, also referred to as an associative relationship. Related terms link together descriptors that are semantically related in ways other than the formal genus-species or whole-part relationships; these descriptors, in relationship to one another, are neither broader nor narrower, but are obviously related in some unspecified way. You might think of these pairs of terms as “cousins;” that is, not as closely related as “parent-child.” The related term cuts across the hierarchy of the thesaurus. The relationship indicator for this type of relationship is RT. The RT indicator says to the indexer and searcher “you may be interested in these terms, as well.” Example: Animals RT Wildlife sanctuaries.

relationship indicator
A word, phrase, abbreviation, or symbol identifying a semantic relationship between terms. Examples of relationship indicators used in a DB/TextWorks thesaurus record are BT, NT, RT, USE, and UF. Relationship indicators lead indexers and searchers to the most appropriate term they should use in their activity. They also facilitate “housekeeping” in that, if a term is deleted from a controlled vocabulary, all references to it must also be deleted.

relevance-ranked sort
A sort that displays records in descending order of their relevance, with the most relevant records appearing first. It can be used with word, phrase, and proximity searches. If a query involves term searches only, no relevance sort is attempted.

repeating field
Field that contains more than one entry, such as an Author field with two author names. Most editable fields can repeat (unless validation prohibits it).

report
Layout for presentation of multiple records; may include headers, footers, and (for printed reports) pagination information. A report can be displayed in the Report window or sent to a printer, or written to a file or sent as EMail in a variety of formats (for example, RTF, HTML, plain text).
report footer
See footer.

Report form
A form for displaying multiple records at a time, one after another (for example, as a table).
Compare Display form.

report header
See header.

Report window
Window in which multiple records retrieved by a search are displayed one after the other, as one continuous report.

required field
Field that must exist in every record added to the textbase. This is an optional validation setting specified for a field when the textbase structure is defined.

resolution
The number of dots used to represent information within a given area on a screen or printer. Higher resolution generally produces better visual quality.

reverse sort
Sort option that specifies that information appears in descending order, such as Z to A, or most-recent-date first.

rotate
To turn a displayed image in 90-degree increments. Useful if an image was scanned upside-down.

RT
See related term.

RTF
Rich text format, an option when writing a report to a file or sending EMail. Many word processors can read RTF files.

run-time literals
See prompted text.

Run-time version
A standalone, search-only version of DB/TextWorks, which allows users to perform read-only operations on textbases (search, sort, print, but not edit). You can copy and distribute the Run-time software according to your license agreement, to allow others to search your textbases.

scale to gray
Process that smoothes the color transitions in a black-and-white image, improving readability.
scaling
The expansion or contraction of an image to fit a particular window. Initial scaling of images can be set as a user option.

scope note
For a thesaurus term, a note explaining a descriptor’s coverage, history, specialized usage, or rules for assigning it in indexing.

screen
See query screen; menu screen.

script
Program you write for a form or screen, which can perform prespecified actions when events occur.

script button
Button you can place on a form or screen, which will initiate a prespecified action when clicked.

script input box
Box you can place on a query screen, menu screen, or form that lets the user type in information to be used during the processing of a script. Script input boxes do not appear on WebPublisher forms, query screens, or menu screens.

scroll bar
The bar on the edge of a window or form box, containing arrow buttons and a box you can move to navigate quickly through the contents of the window. The also appear for picklists and drop-down lists on dialog boxes and the Word Wheel.

search criteria
All of the information typed or pasted in a Query or Command Query window to find records.

search screen
See query screen.

search highlighting
The use of font or color in a report to emphasize the words and terms that satisfied the query. For example, reverse video may be used. You can turn highlighting on or off for a particular form.

search item
A single word, phrase, or term that you want to find, or a single comparison, range, or proximity search request (for example, >100 or 2001:2002 or red p3 dog).

search relation
Symbol that specifies a condition to be satisfied when a field in a record is matched against a particular term or value during a search (for example, <= >= ct).

secondary textbase
A textbase that is accessed indirectly through a Link field in a primary textbase. See also linked textbases.
selection list
See picklist.

separator
See decimal separator; entry separator.

sequential file
See ASCII file.

serial number
Unique number associated with each licensed copy of DB/TextWorks. Your serial number is visible on the About dialog box and the Textbase Information window.

series
Multiple entries, usually in a Date or Number field, automatically generated by the software when the **Insert Series** command is used. The entries are incremented in numerically or chronologically ascending order.

session
The time during which a program is running. For example, a DB/TextWorks session starts when you begin running the software and ends when you choose **File>Exit**.

set
A list of records found by a search, together with the criteria that were used to perform the search. Sets can be saved, combined, browsed, printed, and re-executed in DB/TextWorks.

sets box
Box added to a query screen for the purpose of combining the records in one or more previously saved sets with the current search.

Setup
Program included with most software, including DB/TextWorks, to install the software or update configuration settings.

Shared Immediate indexing
Indexing mode setting that specifies that changes and additions to records in a textbase be indexed immediately, but permits multiple users to open the textbase at the same time. Compare Immediate indexing; Deferred indexing.

sibling
A descriptor that shares the same broader term (one level higher) as other descriptors in a thesaurus.

significant characters
Characters in a field that are retained in the index and that affect the filing order. For example, punctuation characters are significant in Code and UDC fields but not in other field types. Alphanumeric characters are significant in all field types. The following are also significant characters when searching: = & / ! : < > ( )

Silent password
Set of permissions granted to a user who does not supply a password when opening a password-protected textbase.
skeleton
See record skeleton.

SMTP
Simple Mail Transfer Protocol. A program interface that accesses EMail services directly, without the need to use an EMail program.

sort
To arrange records in a report in a particular order, such as alphabetically by last name.

sort footer
See footer.

sort header
See header.

Sort Key
The specific entry in the sort field by which a copy of a record is filed in a report. The Sort Key can be isolated from other entries in the field and, for example, displayed in a Sort Header before a group of records filed under that key.

Sort Level
Number referencing the position of a field in the sort hierarchy. For example, if a report is sorted by Region, then subsorted by Type, the Region field is Sort Level 1 and the Type field is Sort Level 2. Sort Levels are used to identify Sort Headers and Sort Keys within a form definition. The use of Sort Levels rather than explicit sort field names means the same report can be sorted in different ways on different occasions, and the headers and footers will behave as you want.

special characters
Characters having special meaning to the system or to DB/TextWorks when searching. For example, an asterisk (*) signals truncation in a search, and an ampersand (&) indicates a Boolean AND. See also significant characters.

Special Filing
Option available when defining fields for a textbase, permitting the filing rules to be modified for a particular field. For example, you can specify whether stop words should be ignored. See also filing order.

spell checker
Checks a record to eliminate possible typographical errors by comparing words to a dictionary of words, which can be edited. You can run a spell check on a record after creating or editing it on the desktop, or have spelling checked as you type in the record. You can check spelling in the following windows: Edit Record, Edit Secondary Record, Record Skeleton Editor.

status bar
Area near the bottom of the screen, containing useful information, such as a description of the highlighted menu selection or the number of records in the current search.

stem
Letters at the beginning of a word, which can be used to find the word if truncation (*) is used during a search.
stop words
Words that are not added to the Word index for fields using the **Use Stop Word List** Special Filing option. You can choose your own stop words for each textbase structure.

**strict**
Option available for certain field types, specifying that non-conforming information not be accepted in a field. *See also* trailing text.

**structure**
*See* textbase structure.

**style sheet**
Used to describe how the data in an XML file is to be presented. An XSL style sheet specifies where information should appear on a page, as well as which fonts, styles, and other formatting attributes should be used. XSL style sheets are used by DB/TextWorks to transform XML files into Inmagic tagged format for the purpose of importing XML files.

**subfield**
*See* field entry.

**subsort field**
Field used to sort the records within a common Sort Level. Up to four subsort fields can be defined under the primary sort field.

**substitution list**
List of abbreviations and expanded terms that can be associated with a field in a textbase. The format of an entry in the list is abbreviation-colon-expansion (for example, `MA:Massachusetts`). If the abbreviation is typed during data entry or encountered in a record being imported, the expanded term is substituted in the record.

**subtab**
A secondary tab on a primary tab. For example, on the Form Box Properties dialog box there are six primary tabs (Contents, Position, Labels, Paragraphs, Format, and HTML). When you click the Contents tab, five subtabs appear (Fields, Sort Keys, Variables, Text, and Calculations).

**Synchronize Windows**
Command on the DB/TextWorks Window menu, specifying that all open windows that are displaying records be synchronized to show the same record.

**synonyms**
Terms that are considered sufficiently equivalent to make a distinction unnecessary; one is chosen as a descriptor, and a USE reference made from the other(s). The synonyms in a thesaurus are synonyms only in this special context, and not “universal” synonyms. Thus, in a thesaurus the word “synonym” is used to mean true synonym, near synonym, and quasi-synonym. Consider *Street*, *Road*, *Lane*, *Avenue*, *Parkway*, *Highway*, *Beltway*, and so forth, which, in the context of a Transportation Engineering thesaurus, would most likely be considered synonymous. One would be chosen as the preferred term, or another, new preferred term would be invented to cover the concepts. The other terms would become non-preferred.
syntax
A formal description of the arrangement of elements so that they can be recognized by the software. For example, the syntax of a Command Query expects the field list to precede the search relation and term(s).

Tab key
Keyboard key used to navigate among controls on a dialog box, boxes in a form, and so forth. Tabs cannot be embedded in a record. If encountered during an import operation, tabs are changed to spaces.

tab order
The order in which the Tab key moves from box to box for navigational purposes on a form, query screen, or menu screen.

tabular form
A tabular form presents information as a table, in rows and columns. Each row represents a record. Each cell represents a field or other content item (for example, variable, calculation). Tabular forms are especially useful when publishing on the Web.

TCP/IP
Transmission Control Protocol/Internet Protocol. The basic communication protocols that are the foundation of the Internet. TCP/IP allows your computer to talk to the Internet or an intranet. All other protocols (for example, HTTP, FTP, Gopher) are layered on top of TCP/IP.

temporary files
Files created by the software for sorting and formatting reports and other purposes, and deleted automatically after use.

term
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.

term (glossary)
One or more words designating a concept. See also descriptor; entry term.

Term index
Index that contains the field values (the first 250 significant characters of a field entry) used for comparison and range searches, such as equals, greater than, and so forth.

term record
A set of fields of information about a descriptor in a thesaurus, including its relationship to other terms. The fields in a term record are: Term, BT, NT, RT, Use, UF, ScopeNote, OtherNotes, and Status.

text box
Box on a form or screen containing static text.

text file
See ASCII file.

textbase
A collection of records containing related information. See also record; textbase structure.
textbase default sort
A sort that is defined as part of the textbase structure. You can temporarily change the sort order by doing a user-specified sort (choose Display>Sort Report).

textbase elements
Forms, query screens, record skeletons, and sets.

textbase file
The main textbase definition file (.TBA), which contains public textbase elements (sets, forms, query screens, and record skeletons).

textbase maintenance
The process of keeping a textbase updated (through edits, imports, and so forth) and backed up. Routine integrity checks (choose Manage Textbases>Check Textbase) are also advised.

textbase-specific help
A compiled Windows help file supplied by the user, appropriate for a particular textbase.

textbase structure
List of fields and settings that define a textbase.

thesaurus
A controlled vocabulary arranged in a known order in which equivalence, homographic, hierarchical, and associative relationships among terms are clearly displayed and identified by standardized relationship indicators, which must be employed reciprocally. Its purpose is to promote consistency in the indexing or cataloging of documents and to facilitate searching by linking entry terms with descriptors. The thesaurus usually lists descriptors alphabetically, endeavors to control synonyms and homographs, and displays generic-specific and other relationships between terms.

thousand separator
Character used to group digits into thousands in a formatted number. The character is specified in the Regional settings of the Windows Control Panel. For example, in the U. S., the thousand separator character is a comma (35,000).

thumbnail display
The display of multiple images from a single record at one time, scaled down to fit. Useful for selecting a particular image to then view at a larger size.

toolbar
Area at the top of a window, containing buttons that initiate actions.

top term
In a DB/TextWorks thesaurus designed to be hierarchical, a term that has no broader term. These are usually terms that represent the top of a “tree” of concepts.

trailing text
Text that can appear after a strict date or number in a field. See also strict.

TrueType fonts
Scalable fonts included with Microsoft Windows. TrueType fonts print as they appear on the screen, and can be scaled to any size.
**truncate**
To shorten by cutting off the end. In a report, information that does not fit in a form box or on a printed label is truncated. In a search, you can use truncation to search for the first few characters of a word or term. The asterisk character (*) indicates truncation. For example, a search for com* finds computer, commute, and any other words that start with com.

**UDC**
Universal Decimal Classification, an international numbering system used for classification of technical documents. DB/TextWorks supports a UDC field type, which files UDC numbers correctly.

**UNC**
Universal Naming Convention. The actual name of a drive (for example, \SERVER\VOL2), rather than the drive letter (C:\). Recommended on networks and in other situations where drives might be remapped.
Example: \server\vol1\database\catalog.tba

**underbar**
The underline character (_), which may be used to hold two words together to prevent them from being separated in a report.

**undo**
To cancel the last edit operation(s) performed.

**unindexed field**
Field in the textbase structure to which no index (Term or Word) has been assigned. Unindexed fields cannot be searched and do not appear on the query screen.

**unique validation**
Validation option for a field, specifying that no two records can have the same term in this field. Terms are considered equivalent if they file the same. For example, June 15, 2002 and 15-Jun-02 are equivalent in a Date field.

**units of measure**
Form specification dictating the units by which distances (box position offsets and coordinates) are measured. Possibilities include inches (to the nearest .01 inch), millimeters (to the nearest .1 mm), and points. Vertical measurements can also be given in lines (to the nearest .1 line), where the height of a line is font-dependent.

**unposted changes**
Deferred updates (changes that have been made but not indexed).

**updates**
Changes made to records. Deferred updates are changes that have been made but not yet indexed.

**URL**
Uniform (or Universal) Resource Locator. The addressing scheme used to locate a site on the Web, and to indicate the target of hypertext links. Example: http://www.inmagic.com. See also file URL.
USE
An equivalence relationship indicator identifying a synonymous semantic relationship between an entry term and the preferred term. Its reciprocal is USED FOR. Example: Cats USE Felines.

The USE reference directs a person away from a term that is not permitted in indexing or searching to a term that may and should be used. The USE reference may also be employed to direct users from specific terms not used in indexing or searching to more appropriate generic terms. Example: Electrical De-icing USE De-icing Systems.

If, from the Query/Editing Choices Browser, you try to paste a term that has a USE relationship, the USE term is pasted instead. In this way, USE terms behave like substitution lists.

USED FOR (UF)
An equivalence relationship indicator identifying a synonymous relationship, in the context of the thesaurus, between a preferred term and a non-preferred term. Example: Felines USED FOR Cats.

The thesaurus compiler (or Authoritarian) chooses one term from among several possible terms, and directs the user to employ this term by means of references from synonyms and other alternative forms. The terms not chosen are labeled “non-preferred” and are placed in the thesaurus as synonyms. The relationship indicator for equivalence is USE; its reciprocal is USED FOR.

user file
A private file that contains forms, query screens, sets, and record skeletons, as an alternative to storing them in the textbase file. Elements stored in your user file are not accessible by other users.

user options
A set of parameters maintained separately for each user in the INMAGIC.INI file.

user-specified sort
A sort specified by choosing Display>Sort Report after finding records or loading a set. This sort remains in effect until you close the textbase or sort again. If the current Report window or printing form specifies a compulsory sort, the user-specified sort is ignored.

validation
The process that checks the correctness of something. For example, DB/TextWorks checks the validity of field names in an import file and the validity of field content if a field has validation rules applied in the textbase structure definition.

validation list
A list of terms that will be accepted in a field.

variable-length field
Field that occupies only as much space in a database or textbase as the information it contains, rather than being padded out to some predetermined length. All DB/TextWorks fields are variable-length with no size limitation.
variables
Information provided by the software that can be incorporated into a form, such as current
date, current time, page number, or textbase name.

VBScript
A scripting language created by Microsoft that can be embedded into HTML documents for
use on the Web. It can also be used in form scripts in DB/TextWorks. It is a subset of
Microsoft’s Visual Basic programming language. Compare JavaScript.

Web (WWW)
World Wide Web. A network document delivery system that uses HTML as the authoring
language and HTTP as the transport protocol. Developed at CERN in Switzerland, the
European laboratory for particle physics.

WebPublisher
See DB/Text WebPublisher.

WebPublisher PRO
See DB/Text WebPublisher PRO.

wildcard
Character that matches any other character or set of characters. In a search, an asterisk (*) is a
wildcard character that can be used at the end of a word or term. In a mask used for validation
purposes, a question mark (?) is a wildcard representing any character.

word
A group of characters that does not contain spaces or punctuation (except a decimal separator
in a number).

Word index
Index containing words found in a particular field, enabling fast word-level retrieval. You
specify in the textbase structure whether or not a field should use a Word index.

word-by-word filing
Special Filing option specified in the textbase structure, to sort items from left to right, one
word at a time, ignoring spaces and punctuation (but treating them as word delimiters). When

Word Wheel
A Java applet that shows indexed words or terms in the current field. DB/Text WebPublisher
users can include a Word Wheel as part of a query screen by using Tools>Box
Properties>Browse Choices, then exporting the query screen to HTML. Internet/intranet
users call the applet by clicking the Word Wheel button next to a query box, while viewing an
HTML query screen in a Web browser. They can then paste items as search criteria.

write-protected
Accessible for reading only. A write-protected file, field, or record cannot be edited or deleted.
XML
Extensible Markup Language. Used for structured documents and data on the Web. XML uses tags, like HTML, but offers greater flexibility because it gives you the ability to define custom tags. DB/TextWorks can import or export data files in XML format. WebPublisher can accept queries in XML and return results in XML.

XSL
Extensible Stylesheet Language. Used to create a style sheet to describe the formatting of XML data when it is displayed via a Web browser. XSL style sheets are also used to convert XML files to Inmagic tagged format when importing. See also style sheet.

zoom
To expand or reduce the magnification of an image or portion of an image being displayed. It is also available in Print Preview.
Index

- Subtraction
  in Computed field formulas, 42
  in form calculations, 225

! Exclamation point
  Boolean NOT, 141, 188
  comment line indicator, 111, 113
  mask validation upper-case letter, 56

# Mask validation digit, 56

$ End-of-record indicator, 111

& Boolean AND, 141, 188, 191

() Parentheses
  in Command queries, 188
  in form calculations, 225

* Asterisk
  mask validation series of characters, 56
  multiplication, 42, 225
  truncation, 140, 186

/ Slash
  Boolean OR, 141, 188
  division, 42, 225

: Range, 140, 186

; Multiple entry indicator, 111

? Mask validation single character, 56

@ Link indicator, 375

@DATE, 144, 225, 227, 230

^ Mask validation lower-case letter, 56

{} Set indicator, 189

+ Addition
  in Computed field formulas, 42
  in form calculations, 225

< Less than, 140, 186

<= Less than or equal to, 140, 186

= Term search, exact match, 138, 140, 186

> Greater than, 140, 186

>= Greater than or equal to, 140, 186

2000, 402

21st century, 402

2-digit years, 402

3-D box borders, 393

A

About DB/TextWorks command, x

Accept New Record, 118

Accept validation overrides, 59, 118

Access Control fields, 47, 64

Action bar. See Toolbars

Add Box command, 158, 165, 169, 207, 333

Add/Replace options during import, 116

Added text, 223, 249

Adding records over the Web, 328, 330

Addition
  in Computed field formulas, 41, 43
  in form calculations, 225

Address labels. See Labels

Align Boxes command, 236

Aligning
  box tops in forms, 236
  boxes (left, center, right), 258
  form box labels, 238
  form paragraphs, 243
  record separators, 267

Allow
  tabbing to Boolean buttons, 392
  trailing text, 48

Alphabetic
  filing of numbers, 52, 144
  numbering, 245

Alternate primary sort fields, 311

Arabic numbers, 245

Analyzing textbases, 81

Anchored boxes, 163, 234

AND searches, 141, 188, 191

Annotating images, 358

Annotation files, 360

Anti-aliasing, 355

Appending field entries during import, 117

Application options (Copy Special), 415

Arabic numbers, 245

Arithmetic calculations
  in Computed field formulas, 41, 43
  in form calculations, 225

Ascending sort order, 309
ASCII files. See Text files
Associated field
@ link indicator, 375
browsing, 372
characteristics of, 371
defined, 364
how indicated, 375
specifying, 46, 368
viewing information from, 366
Asterisk
mask validation wildcard, 56
searching for all records, 146
Asterisk multiplication symbol (*)
in Computed field formulas, 42
in form calculations, 225
Asterisk truncation symbol (*). See Truncation searches
Attaching files to EMail, 321, 322
Automatic Date Definition tab, 34
Automatic Date fields
defining, 40
what happens during import, 108
what happens when copying records, 104
Automatic ID fields
defining, 41
what happens during import, 108
what happens when copying records, 104
Automatic Number Definition tab, 34
Automatic Number fields
defining, 40
linking to, 369
what happens during import, 108
what happens when copying records, 104
Averages
in Computed Number fields, 42
in form calculations, 229
AVG Record Function, 228, 229

B
Background color
boxes in forms, 244, 246, 258
boxes in menu screens, 333, 334, 335, 339
boxes in query screens, 166, 168, 170
default form and box settings, 395
forms background, 265
query screen background, 174
Background images
for forms, 264, 267
for menu screens, 341
for query screens, 175
Backing up files, 77, 103, 127
Backslash
in mask validation, 56
in searches, 146
Basic forms
Basic Record form, 194
Basic Report form, 194
opening, 197
selecting, 326
setting defaults, 394
Basic Query Screen, 160, 179
Batch operations
batch delete records, 104
batch modify records, 105
Bates numbers, 54
Beginning text, 250
Black and white images, 355
Blank form, opening, 197
Blank line between multiple entries, 243, 251
Blank query screen, opening, 160
Book label sets, 292
Boolean query buttons, 142, 172
Boolean searches
changing Boolean query buttons, 142, 172
inclusive search option for multiple fields, 190, 392
nested Boolean commands, 189
query evaluation order, 143, 189
with Command queries, 188
with Query window searches, 141
Borders, 163, 202, 237, 258
3-D, 393
Boundaries
field entry, 141
in Form Designer, 198
in Query Screen Designer, 161, 163
showing or hiding, 195, 198, 236
Boxes. See Form boxes, Menu screen boxes,
Picture boxes, Query boxes, Script buttons,
Script input boxes, Sets boxes, Text boxes
Brackets around set names, 189
Browsing
Browse Choices key (F3), 9
during batch modify, 106
during editing, 84
during searching, 138
indexes, 49, 138, 188
links, 372, 377
sets (list of), 184
substitution lists, 97
thesaurus, 96, 98
validation lists, 96
Buttons. See Boolean query buttons, Script buttons, Toolbars

C

Calculations
  @DATE, 225, 227
  in Computed fields, 41, 43, 99
  in forms, 224
  in query screens, 144
Caption (tab), 301, 302
Caret (^) in mask validation, 56
Carriage returns. See Line breaks
Cascading menus. See Menu screen boxes
Case
  during batch modify operation, 106
  for form box text, 246
  in Code fields, 47
  in Command queries, 187
  in Query window searches, 138, 147
Catalog cards, 292
Centering paragraphs in form and text boxes, 243
Century, 21st, 402
Character translation, 265, 390, 392
Check for matching records, 116
Checking information. See Validation
Checking spelling, 91
Checking textbases, 82, 130
Choices key. See Browsing
Clipboard, 415
Code fields
  defining, 47
  searching, 146
Colon, range indicator, 140
Color
  background for form boxes, 244, 246, 257, 258
  background for menu screen boxes, 333, 334, 335, 339
  background for query screen boxes, 166, 168
  background for script input boxes, 170
  box background default settings, 395
  box label in forms, 239
  form background, 265
  inverting colors in images, 355
  query screen background, 174
  search item highlighting, 156, 157
Columns
  adding column headings in forms, 287
  in reports, 290
  setting in Thumbnail window, 356
  Combining searches, 184, 189
  Comma-delimited text files, 113, 125
  Command queries
    performing, 132, 184
    using with linked textbases, 374
  Comment lines, 111, 113
  Comparison searches, 140, 186
  Compulsory form sort, 196, 305, 306, 314
  Computations. See Calculations
  Computed Date Definition tab, 34, 44
  Computed Date fields
    defining, 43
    refreshing, 99, 379
    using Field Functions in, 44
    what happens during imports, 108
    what happens when copying records, 104
  Computed Number Definition tab, 34, 42
  Computed Number fields
    defining, 41
    refreshing, 99, 379
    using Field Functions in, 42
    what happens during imports, 108
    what happens when copying records, 104
  Configuration, 12, 401
  Content descriptions, 198
  Content validation, 54, 58
  Contents
    of boxes in forms, 213, 256, 259, 300
    of boxes in query screens, 159, 165, 169, 171
    of menu screen boxes, 333, 338
  Contents tab
    Form Designer, 214
    Menu Screen Designer, 333
  Context display. See Highlight search items
  Context-sensitive help, ix
  Continuation line, 112
  Convenience password. See Silent password
  Conventions, vii
  Converting a form to a query screen, 324
  Coordinates
    of boxes in forms, 211
    of boxes in menu screens, 333
    of boxes in query screens, 163, 168
  Copy command, 93, 209
  Copy Special, 414, 415
  Copy Textbase command, 74, 78
  Copyright, 39
  COUNT Record Function, 228, 229

Index  461
Counting
  entries in a field, 42, 227, 229
  number of records in a set, 228
  records, 229
  records in a report, 228
Creation date
  of records, 40, 108
  of textbase, 76
Criteria. See Search criteria
CSV format. See Delimited ASCII format
CT (contains), 186
Curly brackets around set name, 189
Currency
  formatting, 42, 247, 248
  symbols in number fields, 39
Current date
  formatting, 220
  in search criteria calculations, 134, 145
  inserting as a new entry, 94, 390
  inserting in a record, 94, 390
  pasting in a search, 145
  setting, 220
  using in a calculation, 227
  using in a form, 220
Current time
  formatting, 220
  inserting in a record, 94, 390
  setting, 220
  using in a form, 220
Customer support, x
Customize Toolbar command, 399
Customizing DB/TextWorks, 389, 416
Customizing forms, 194
Cut command, 93, 209

D
Damaged textbases, 127, 130
Data entry, 4
Databases. See Textbases
Dates. See also Current date
  Automatic Date fields, 40
calculating in a form, 227
calculations in search criteria, 134, 144
Computed Date fields, 43
copyright, 39
Date fields, 39, 48
  finding the earliest (forms), 228
  finding the most recent (forms), 229
  formatting in a form, 196, 225, 248
  inserting, 94
  inserting as a new entry, 390
  international formats, 401
  languages for month and day names, 401
  long or short date format, 248, 390
  searching for, 144, 191
  strict Date fields, 39, 48
  year 2000, 39, 402
DB/Text Checker, 12
DB/Text PowerPack Lite, 12
DB/Text Updater, 12
DB/Text WebPublisher. See DB/Text WebPublisher PRO
DB/Text WebPublisher PRO, 328
  Boolean and range searches, 192
defined, 1
designing forms for Web use, 200, 207, 267
exporting query screens to HTML, 163
logos, 175, 266
reports, 200, 207
saving forms for, 200
searching multiple textbases, 163
textbase user count, 68
XML match fields, 68
DB/TextWorks
  configuring, 12, 401
  connecting with other applications, 415
defined, 1
  installing, 12
  navigating in, 403
  serial number, x, 14
  setting options, 389
  starting, 13
DBTEXT.INI file, 401, 417
DBTEXT.TBM file, 343
DBTMSG (error messages textbase), ix
Decimal places, specifying number of, 246, 247
Decimal separator, 246
Default
  Basic form and query screen fonts, 394
  Basic Report and Record forms, 389, 394
  file extensions, 419
  forms, 77, 326
  indexing mode, 99
  label font, 394
  leading article and stop word lists, 401
  menu screen settings, 394
  query screen settings, 394
  record skeleton, 86
  sort order, 65, 314
  tab order, 212
textbase settings, 77
Deferred indexing mode, 101, 391
Deferred updates
and Find All Records command, 147
defered indexing options, 391
defined, 101
files, 410
getting, 102, 187
posting, 102
printing, 102
searching for, 187
show deferred changes in reports and display, 391
what happens when copying records, 101
working with, 102
Delete Box command, 159, 163, 209
Delete button, textbase elements, 384
Delete Entry command, 90, 408
Delete Log File command, 67
Delete Record command, 104
Delete record link (WebPublisher PRO), 255
Delete Textbase command, 75
Delete user file option, 75
Delete versus Omit, 105
Deleting records over the Web, 328
Delimited ASCII format
exporting, 126
importing, 113
Delimiter, 113, 393, See also Field entry delimiter
Descending sort order, 308, 309
Description line
for a form, 199
for a query screen, 162
for a record skeleton, 86
for a set, 180
for textbase elements, 388
Design Form command, 197
Design Menu Screen command, 332
Design Query Screen command, 160
Deskew, 354
Despeckle, 354
Detect URLs, 393
Dewey Decimal classification, 47
Diacritics, 107, 390, 392
Diagnosing and fixing problems, 120, 130
discarding deferred updates, 102
Display Current command, 343
Display options
for images, 354
Form Properties, 264
Query Screen Properties, 163, 171
Display Record command, 137
Display Report command, 87
Display window
defined and illustrated, 203
designing forms for, 203
effect of sorting on the, 315
search item highlighting, 156
Distance between records, 202, 265, 286
Division
in Computed field formulas, 42
in form calculations, 225
Document import, 107, 121
Dollar amounts, formatting in a form, 247, 248
Dollar sign ($)
end-of-record indicator, 111
in strict Number fields, 39
DOS, extended characters, 107, 390
Dump Textbase command, 107, 127, 130
E
Edit Lists command, 38
Edit record link (WebPublisher PRO), 255
Edit Record Skeleton command, 85
Edit Secondary Record command, 377
Edit Secondary Record window, 378
Edit substitution lists, 38
Edit Textbase Structure command, 60
Edit validation lists, 57
Edit window
defined and illustrated, 204
designing forms for, 203
effect of sorting on the, 315
refreshing, 99
Editing
substitution lists, 98
validation lists, 97
Editing Choices Browser, 96, 97
Editing records
adding one at a time, 83
browsing links, 372
browsing substitution lists, 97
browsing thesaurus, 98
browsing validation lists, 96
choosing an indexing mode, 99
in secondary textbases, 377
inserting dates, 94
inserting times, 94
over the Web, 193, 200, 207, 328
replacing records during an import, 117
spelling check, 91
undo and redo, 93
why some boxes are not editable, 88
Editing records over the Web, 328
Index
Elements. See Textbase elements
EMail
importing. See Importing documents
links, 254
sending a report as, 193
sending records as, 321
Empty fields, finding, 147, 187
Empty form boxes, showing or hiding, 232
Empty password. See Silent password
Empty sort fields, 312
Empty textbase, 390
Enable or Upgrade Network command, 14
Ending punctuation, 222, 250
Ending text, 222, 250
End-of-record indicator ($), 111
Entries. See Field entries
Entry delimiter. See Field entry delimiter
Entry separator
format for imports, 113
specifying in a form, 240, 241, 251
Entry validation, 54
Equal sign (=), 138, 140, 186
Error messages, ix
Evaluation order of queries, 143, 172, 189
Exact match, 138, 140, 186
Exception file, 107, 118, 419
Exclamation point (!)
Boolean NOT, 141, 188
comment line indicator, 111, 113
Execute Query command, 135
Existing form, opening, 197
Existing menu screen, opening, 343
Existing query screen, opening, 160
Existing Record Form, 160
Existing record skeleton, opening, 85
Expand record link (WebPublisher products),
254
Exploded Sort option, 309, 312
Exporting
deferred updates, 103
query screens to HTML, 163
records, 107, 125
textbase elements, 385
Exporting edit form to HTML, 330
Express Import option, 119
Extended characters, 107, 390, 392

FAVG Field Function
in Computed Number field formulas, 42
in form calculations, 227, 229
FCOUNT Field Function
in Computed Number field formulas, 42
in form calculations, 227, 229
Field Access passwords, 62
Field entries
blank line between, 243, 251
calculating, 41, 227
creating multiple, 88
defined, 27, 88
deleting, 90
table separator, 113, 125, 240, 241, 251
Exploded Sort option, 309
for image file names, 348
formatting, 241
inserting a series of dates or numbers, 94
inserting current date or time, 94
multiple, 25, 27, 88
pasting information to create a new entry, 90
prohibiting multiple, 54
repeating, 25, 27, 88
selecting, 90
separating with spaces in the same box, 242
specifications, 28
splitting, 90
Field entry delimiter, 393
Field Entry Required validation, 54
Field Functions
in Computed field formulas, 42, 44
in form calculations, 227
Field separator
during export, 125
during import, 113
Field Types
Access Control, 47, 64
adding or changing, 37, 70
Automatic Date, 40
Automatic ID, 41
Automatic Number, 40
Code, 47
Computed Date, 43
Computed Number, 41
Date, 39
Image, 45, 346
Link, 46
Number, 39
Text, 38
UDC, 47
Fields
changing settings for, 69
copying, 71
creating, 32
defined, 27
deleting, 72
editing in textbase structure, 69
finding empty, 147, 187
finding populated, 147, 187
hidden, 104, 232
maximum number of, 28
non-repeating, 54
read-only, 62
rebuilding indexes, 66, 73
renaming, 71
reordering, 71
specifications, 28
unindexed, 49, 134
unique, 54
using in a calculation, 226
using in a form, 216
FMAX Field Function
in Computed field formulas, 41, 44
in form calculations, 227
FMIN Field Function
in Computed field formulas, 42, 44
in form calculations, 227
Focused zooming, 355
Font
box label in forms, 239, 394
box label in query screens, 394
box text in forms, 244, 257, 302, 394
box text in menu screens, 334, 335
box text in query screens, 165, 394
default for Basic forms and query screens, 394
Footers. See Report Headers and Footers, Sort Headers and Footers
Form box types
aligning, 236
changing, 274
Margin box, 277, 283, 287
offsets, 211
Record box, 230, 277
Report Footer box, 274, 277
Report Header box, 273, 277, 287
Sort Footer box, 272, 277
Sort Header box, 271, 276, 277
Form boxes
adding, 207
anchoring, 234
borders, 202, 237
boundaries, 198
changing height, 231
changing the box type, 274
changing width, 233
content description, viewing, 195, 198
contents, 208, 213, 232
coordinates, 211
default text and label font, 394
defined and illustrated, 208
deleting, 209
empty, 232
floating, 234
height, 231
including text and punctuation, 222
labels, 202, 222, 237, 394
maximum height, 231
minimum height, 231
moving, 210
multiple entries, 201
paragraph formatting, 240
positioning, 211, 286
Index 465
scroll bars, 202, 237
selecting, 210
showing or hiding empty boxes, 232
sizing, 231
text formatting, 222, 244
using Cut, Copy, Paste, 209
width, 233
Form Designer, 197
Form name and description, 325
Form Properties, 264
Form Scripts. See Scripts
Formatting. See Paragraph formatting, Text formatting
Forms. See also Reports
backing up, 324
Basic forms, 327
box types, 276
converting to query screens, 173, 324
creating, 195, 268
customizing, 194
default, 77, 326
defined, 193
deleting, 324, 384
description line, 199, 388
designing for printing, 206, 268
designing for the Display window, 203
designing for the Edit window, 83, 204
designing for the Report window, 201, 268
designing for the Web (WebPublisher PRO), 207
drop-down list in Web browser, 342
exporting, 324, 385
fitting a window to a form, 406
for linked textbases, 366, 375
importing, 386
managing, 383
Margin Area, 283
opening, 197
page set-up, 288
previewing, 198, 315
printing a definition, 386
properties, 264
Record Area, 285
renaming, 324, 383
saving, 199
search item highlighting, 156, 265
selecting, 326
stubular, 197, 290
troubleshooting, 318
Formulas. See Calculations, Computed Date fields, Computed Number fields, @DATE

FTOTAL Field Function
in Computed Number field formulas, 42
in form calculations, 227
Full text imports, 121
Function keys, 408

G
GetDeferred command, 187
Getting deferred updates, 102, 187
Global edits. See Batch operations
Go to Box command, 210, 407
Grand totals in reports. See Totals
Graphical User Interface (GUI), 403
Greater than (>, 140, 186
Greater than or equal to (>=), 140, 186
Grid, horizontal and vertical
in forms, 210
in query screens, 163
Group footers in reports. See Sort Headers and Footers
Grouping information in a report, 271, See also Sorting records

H
Hanging indentation, 243
Headers. See Report Headers and Footers, Sort Headers and Footers
Headers and Footers command, 273
Height
boxes in forms, 257
boxes on a query screen, 163
boxes on forms, 231
labels and cards, 296
page, 289, 395
picture boxes, 261
record separators, 267
Help, ix, 400
Hidden fields
how to hide fields with passwords, 62
in forms, 232
what happens when copying records, 104
Highest value, finding the, 42, 44, 229
Highlight search items
moving from highlight to highlight, 157, 203
specifying appearance of, 157
turning on or off, 156, 265
Horizontal and vertical grid
in forms, 210
in query screens, 163
Immediate indexing mode, 100
Import fields in textbase structure order, 114
Import filter. See IFilter technology
Importing
   documents, 107, 121
   image file names into records, 349
   records, 107, 419
   textbase elements, 385
Importing records, 107
Inclusive search option, 190, 392
Indentation, paragraph, 243
Indexes
   browsing and pasting from, 49, 138, 188
   defined, 49
   indexing fields, 49, 70
   leading zeros missing in Term indexes, 52
   rebuilding, 73
   Special Filing options, 50
   Term and Word indexing, 49
   unindexed fields, 49, 134
Indexing mode, 99, 108
INI files, 416
Initial action, 331, 334
Initial elements, 331, 334
Initial password handling, 391
Initialization files, 416
   DBTEXT.INI, 401, 417
   DBTWPUB.INI, 418
   INMAGIC.INI, 389, 416
   textbase .INI, 418
Inmagic tagged format, 110, 111, 125
Inmagic, Inc., ix
INMAGIC.INI, 389, 416
Inmagic.net, 5
Insert Entry Mark command, 90
Inserting
   carriage returns, 89, 113, 241
   current date or time, 94, 390
   date as a new entry, 390
   entry mark, 90
   series of dates or numbers, 94, 390
Installation notes, ix
Installing DB/TextWorks, 12
Interfile Fields sort option, 312
Intermediate textbase, 367
International
   character sets, 390, 392
   currency format, 246
   current date and time settings, 94, 220
   date formats, 248
   separator characters, 246
Internet, ix
Interruptible Import option, 119
Intersection. See AND searches
Inverting colors in images, 355
Issue numbers, 52
Item numbering, 245

J
JavaScript, 177, 298
JScript, 177, 298
Jump to Image command, 354
Justifying
boxes, 211, 258
form box labels, 238
form paragraphs, 243
text box paragraphs, 168, 243

K
Keyboard actions, viii
Keyboard keys, 408
Knowledgebase, ix

L
Labels
box, 163, 202, 223, 237
label sets, 297
mailing, 197, 292, 310
printing, 318
Landscape orientation, 289, 395
Languages, month and day names, 401
Lasso boxes, 210
Launching applications on the Web, 254
Launching other applications, 298, 415
Leading article list
backing up, 80, 419
creating or editing, 66
default, 402
Ignore Leading Articles option, 51, 66
printing, 80
using, 51
Leading logo, 175, 266
Leading spaces, 119, 124
Leading zeros
in form calculations, 247
missing in term indexes, 38, 52
Leave Small Images Original Size option, 396
Less than (<), 140, 186
Less than or equal to (<=), 140, 186
Letter-by-letter filing, 51
Library book label sets, 292
Library catalog cards, 292
Library of Congress classification, 47, 51
Licensing of software, 14
Line break indicator, 111
Line breaks, inserting, 89, 113, 241, See also
Paragraph formatting
Link Definition tab, 34
Link fields
characteristics, 370
editing secondary textbase information, 98
renaming, 379
re-ordering, 379
specifying, 46, 368
Linking textbases, 363
assigning passwords, 380
associated fields, 371
editing secondary textbase records, 377
intermediate textbases, 367
refreshing linked information, 379
renaming fields, 379
reordering fields, 379
searching, 372
searching with Command queries, 374
viewing secondary textbase information, 375
Links, hypertext, 393
Lists. See also Leading article list, Stop word list, Substitution lists, Validation lists
bulleted, viii
fonts used when printing, 394
formatting information as, 243
indexes, 138, 188
numbered, viii
printing, 394
printing to a file, 80, 97
recently used files, 390
Load New Textbase command, 107, 128, 130
Load Set command, 181
Loading records. See Importing records, Load New Textbase command
Log files, 67, 81, 410
Logos, 175, 266
forms, 266
leading, 266
trailing, 266
Long date format
for inserted dates or series, 390
in forms, 248
Look-up files. See Validation lists
Lower case. See Case
Lowest value, finding the, 42, 228
Mail. See EMail
Mailing labels. See Labels
Main window, 403
Maintain Thesaurus, 154
Maintenance procedures, 77
Manage Textbase Elements command, 383
Manage Textbases menu, 103, 127, 130
Many-to-one relationship, 363
MAPI, 319, 397
Margin Area, 276, 283, 289
Margin boxes
adding, 283
defined, 276
illustrated, 279
uses for, 284, 287
Margins, page, 289, 296, 395
Mask validation, 55, 95
Master password, 61
Match fields, 68
Matching
case and punctuation during searches, 138, 147
during batch modify, 106
during import, 116, 124
for linking purposes, 48, 365, 366, 370
MAX Record Function, 228
Maximum
number of fields in a textbase, 28
number of users, 14, 68, 76
value specified by range validation, 55
Maximum height
designing labels, 293
of a box, 163, 202, 204, 231
Maximum value, calculating
across records in a form, 228
in a Computed field definition, 42, 44
in a field in a form, 227
Measurement units
in forms, 175, 265
in query screens, 163, 175
Menu actions, viii
Menu bar, 403, 404
Menu screen boxes, 334
Menu Screen Designer, 331, 333
Menu screens, 331
backing up, 78
designing, 332
form drop-down list in Web browser, 342
properties, 340
properties, 340
saving, 343
Merging fields, 117, See also Interfile Fields
sort option
Messages textbase (DBTMSG). See DBTMSG
(error messages textbase)
Microsoft Windows, 40, 107, 246, 392
MIN Record Function, 228
Minimum height
designing labels, 293
of a box, 163, 231, 395
Minimum value, calculating
across records in a form, 228
in a Computed field definition, 42, 44
in a field in a form, 227
Minimum value, specified by range validation, 55
Modification date, 40, 108
Money, formatting in a form, 247, 248
Month names, default, 401
More defaults, 394
Mouse actions, viii
MS-DOS
character translation, 390
extended characters, 107, 390
Multiple entries, 25, 27, 54, 89, 201, 240, 241, 393, See also Field entries
Multiple textbase query (WebPublisher products), 163
Multiplication
in Computed field formulas, 42
in form calculations, 225
Multi-user
environments, 10
indexing settings, 100, 101
license agreement, 14
Navigating
- between boxes, 407
- between records, 137
- between windows, 403
  - in a box, 237, 315
  - in the Images window, 353
  - in the Print Preview window, 315
  - in the Report window, 137
- synchronizing multiple windows, 406

Navigational buttons, 342

Negative indentation, 243

Negative numbers
  - filing order, 52
  - formatting in a form, 247
  - in Computed field formulas, 44
  - in Number fields, 39
  - indexing, 39
  - order when sorting, 144

Nested Boolean commands, 189

Networks
  - maximum number of users permitted, 68
  - sharing textbases on, 60, 68, 101
  - specifying number of licensed users, 14
  - user file location, 412

New Entry command, 89
New Label Form. See Labels
New Query command, 136
New Record command, 83, 84
New record link (WebPublisher PRO), 255
New Search button, 418
New Textbase command, 32, 36, 72, 79
New version of records, 391
Next button, 342
Next Highlighted Term command, 157
Non-inclusive search option, 190, 392
Non-preferred terms, 151
Non-printable area of a page, 284, 318
Non-repeating fields, 54
NOT searches, 141, 187, 188
Notify when opening empty textbase, 13
Number of records, 342
Numbering
  - entries and items in a form box, 245
  - pages in a report, 220, 279, 282, 284, 289
  - records in a report, 220, 285
  - records in a textbase, 40

Numbers
  - Automatic Number fields, 40
  - Computed Number fields, 41
decimal separator, 246, 247
dollar amounts, 39
  - filing alphabetically or numerically, 38, 52, 144
  - formatting in a form, 246
  - including leading zero in decimal, 247
  - inserting a series of, 94
  - international formats, 225, 246
  - negative, 39, 247

Number fields, 39
postal (ZIP) codes, 38

Searching for
  - Social Security numbers, 38
  - strict Number fields, 48

Telephone numbers, 38, 39, 52

Thousand separator, 52, 246, 247

Indexing, 39

Numeric filing, 52

Old version of records, 391

Omit (trailing) Text option, 247, 248

Omit Empty Records sort option, 312

Omitting records
  - after getting deferred updates, 105
  - from a set, 137, 180
  - omit versus delete, 105
  - when sorting, 312

Online help, ix
Open (textbase) command, 13
Open Form command, 198
Open Query Screen command, 162, 173
Open Skeleton command, 86
Operating systems, 107, 417
Options, 163, 198, 389, 414
OR searches, 141, 188

Overriding
  - allowing content validation overrides, 58, 118
  - textbase defaults, 326
  - validation, 118
Page breaks, 289
Page margins, 289, 296, 395
Page numbers
   including in a form, 220, 284
   selecting a starting, 289
Page orientation, 296
Paragraph breaks. See Line breaks
Paragraph formatting, 240, 251, 265
Paragraph indentation, 243
Paragraph justification, 258
Parentheses
   in Computed field formulas, 42, 44
   in form calculations, 225
   in searches, 143, 189
Passwords, 60
   default settings, 391
   effect on deleting records, 104
   effect on importing records, 108
Field Access, 62
Master, 61
network upgrade, 14
 printing, 81
protecting image annotations, 360
secondary textbase fields, assigning to, 380
Silent, 63
Paste. See also Browsing, Inserting
   Paste command, 93, 209
   Paste Entry command, 90
   Paste Here command, 209
Pending updates, 101, See also Deferred updates
Phone numbers. See Telephone numbers
Phrases
   defined, 133
   searching for, 138, 186
Picklist. See Browsing
Picture boxes
   adding to a form, 207
   adding to a menu screen, 336
   adding to a query screen, 169
   anchoring, 169, 234
   changing height, 169, 261
   changing width, 169, 262
   contents, 169, 259
   coordinates, 169, 211
   defined and illustrated, 164, 208
   deleting, 163, 209
   difference from Image window, 346
   floating, 234
   moving, 163, 210
   selecting, 163, 210
   types, 277
Picture tab, 259
Placement of navigational buttons, 342
Plain Text, 319
Pop-up menu, 404
Portrait orientation, 289, 395
Position offsets
   designing labels, 293
   form box, 211, 238, 286
   query box, 166
   sets box, 168
   text box, 211
Posting deferred updates, 102
Precedence
   arithmetic operators, 42, 225
   in Boolean queries, 143, 172, 189
   in Code fields, 47
   in UDC fields, 47
Preceding by number of words (p#), 141, 187
Preferences. See Options
Preferred terms, 151
Preview
   Preview command (form), 198
   Print Preview command (report), 315
Previous button, 342
Previously Highlighted Term command, 157
Primary sort field, 307, 308, 312
Primary textbase, 364, 377
Print command, 316
Print Deferred Updates command, 102
Print Definition command, 325, 386
Print Preview command, 315
Print Setup command, 316
Print Skeleton command, 86, 387
Printed reports
   form for, 206, 268, 317
   printing, 316
   search item highlighting, 265
   sorting, 305
Printing
   an element definition to a text file, 387
   deferred updates, 102
designing forms for, 206, 268
form definitions, 325
images, 357
indexes, 391
labels, 318
lists, 80, 97
menu screen definitions, 78
query screen definitions, 385
Index  471
records, 317
reports, 316
skeletons, 86
textbase information, 76, 314, 387
Private vs. Public
elements, 412
files, 386
Product Support, x
Prompted text, 223
Properties
form, 264
menu screens, 340
query screen, 174
Proximity searches, 141, 187
Public vs. Private
elements, 412
files, 386
Publishing textbases, 1, 200, 207
Punctuation
during batch modify, 106
in Code fields, 47
in Command queries, 187
in forms, 222, 250
in searches, 147, 187
in UDC fields, 112
Query. See Query window search
Query boxes
adding fields from a secondary textbase, 159
adding to a query screen, 158, 165
borders, labels, scroll bars, 163
default text and label font, 394
defined, 164
deleting, 159, 163
determining which fields a box searches, 159, 165
text and label color, 167, 168
Query buttons
changing Boolean state of, 142, 172
default tabbing, 392
show or hide, 171
Query by Example. See Query window search
Query Choices Browser, 138, 184, 188
Query evaluation order, 143, 172, 189
Query Screen Designer, 160
Query Screen Properties, 161, 163, 171
Query screens
adding a temporary query box, 158
adding a temporary sets box, 184
adding boxes, 165
adding picture boxes, 169
adding script buttons, 171
adding script input boxes, 170
adding sets boxes, 167
background color, 168, 170
Basic Query Screen, 160, 179, 394
boxes that search multiple fields, 134, 140, 141, 159, 165
changing Boolean query buttons, 142
creating, 157
default text and label fonts, 394
exporting to HTML, 163
illustrated, 131
managing, 383
Open Query Screen command, 162, 173
properties, 174
query evaluation order, 143
Query Screen Designer, 160
saving, 161
searching multiple textbases, 163
selecting, 179
setting default label font, 394
Query window search. See also Searching
boxes that search multiple fields, 134, 140, 141, 159, 165
converting to Command queries, 184
customizing query screens, 157
how to perform, 134
query evaluation order, 143, 172
viewing records after a search, 135
Quick keys, 408
Quotation marks
around field names in form calculations, 226
around field names in formulas, 42, 44
around field names in Inmagic tagged files, 112
around search items, 147, 188
Range searches, 140, 186
Range validation, 55, 95
README file, ix
Read-only
copying read-only fields, 104
password access, 62
Rebuild Thesaurus, 154
Rebuilding field indexes, 66, 73
Recently used file list, 390
Recompute Field Value, 73
Record and report options (Copy Special), 414
Record Area, 276, 285
Reports. See also Forms, Printed reports
column headings, 287
copying to Clipboard, 414
creating, 290
defined, 193, 268
displaying, 87, 135, 265
Margin and Record Areas, 276
numbering pages, 284
numbering records, 285
overview, 269
previewing, 315
printing, 316
printing to a file, 323
sending as mail in HTML, RTF, or text
format, 319
sorting, 304, 305
tabular, 290
title, 284
writing to HTML, RTF, or text, 323
Require Strictly Correct Type option
changing from non-strict to strict, 48, 70
for Date fields, 39
for Link fields, 48, 370
for Number fields, 39
making a field strict, 48
Required field, 54
Reset to Default Tab Order, 173, 212
Reset to Defaults, 395
Resizing
boxes, 97, 98
windows, 406
Reverse the sort order, 309
Reversing colors in images, 355
Revert to Default, 86, 326
Rich Text Format, 319, 323
Roman numerals, 245
Rotary cards, 292
Rotating images, 355
Rows and columns in Thumbnail window, 356
RTF, 319, 323
Run-time variable. See Prompted text
Run-time version, 15, 417

Sample textbases, 14
Saved Queries window, 183
Saving
annotation files, 78
deferred updates to a file, 103
forms, 199, 325, 387
image files, 78
menu screens, 78, 343
query screens, 159, 161, 387
record skeletons, 86, 388
records, 78, 84
searches, 180
sets, 180, 387
textbase elements, 78, 80
textbases, 78
user files, 78
Scale to Gray option, 355
Scanning images, 351
Screen Designer. See Menu Screen Designer,
Query Screen Designer
Screen Preferences. See Screen Properties
command
Screen Properties command, 163, 171
Screen Scripts. See Scripts
Script buttons
adding, 207
anchoring, 234
caption, 301
changing width, 301
content, 301
coordinates, 211
defined and illustrated, 208
defined in query screens, 164
deleting, 209
floating, 234
moving, 210
selecting, 210
Script input boxes
adding, 170, 207, 337
anchoring, 234
coordinates, 211
defined and illustrated, 208
floating, 234
moving, 210
selecting, 210
text and label font, 170
Search criteria
  combining, 184
  defined, 133
  including in a form, 220, 273
Search highlighting. See Highlight search items
Search item, defined, 133
Search relation, defined, 186
Search sets. See Sets
Searching. See also Command queries, Query
window search
  adding predefined search links, 331
  Boolean searches (and-or-not), 141, 188
  browsing and pasting from indexes, 138, 188
  Code fields, 146
  combining saved searches, 184
  comparison searches, 140, 186
  DB/Text WebPublisher products, 163, 192
defined, 131
  for all records, 147, 187
  for comparison values, 140, 186
  for dates, 144
  for deferred updates, 102
  for empty fields, 147, 187
  for linked information, 372
  for multiple items, 141, 188
  for numbers, 52, 144
  for populated fields, 147, 187
  for time, 191
  for URLs, 191
  for values within a range, 140, 186
  for word stems, 140, 186, 191
  for words near each other, 141, 187
  for words, phrases, and terms, 138, 186
  inclusive search option, 190, 392
  interrupting a query, 135
  linked (secondary) textbases, 372
  multiple fields, 140, 141, 159, 165
  multiple textbases (WebPublisher products), 163
  non-inclusive search option, 190, 392
  proximity searches, 141, 187
  punctuation and case, 138, 147
  query evaluation order, 143, 172, 189
  quotation marks, using, 191
  search item highlighting, 156
  secondary textbase fields, 372
  selecting window to view records, 135, 393
  techniques explained, 138
troubleshooting, 191
truncation searches, 140, 186, 191
UDC fields, 146
unindexed fields, 134
Secondary records, editing, 98
Secondary textbases, 367
  @ link indicator, 375
  browsing field indexes while searching, 372
  defined, 364
  displaying information from, 365, 375
  editing information in, 98, 377
  how indicated, 375
  refreshing field information, 99, 379
  searching, 372, 374
  specifying, 46, 368
  spell check, 91
  viewing information from, 375
Security. See also Passwords
  Security, record-level, 47, 64
“See Also” search link (WebPublisher products), 255
Select All command, 163, 210
Select command, 343
Select Entry command, 90
Select Images to Print dialog box, 357
Select Search Results Window dialog box, 135
Select thesaurus, 154
Selecting
  all boxes of a particular type, 163, 210, 339
  an entry, 90
  forms, 326
  menu screens, 343
  query screens, 179
  record skeletons, 86
Selection list. See Browsing
Send Report as Mail command, 319
Sending each record as mail, 321
Separate items or entries with spaces, 242
Separator text, 251
Sequential files. See Text files
Serial number, x, 14
Series, inserting dates or numbers, 94, 390
Set Rows and Columns command, 356
Set Up Page command, 289, 295
Set Up Thesaurus command, 151
Sets
  combining with search criteria, 184, 189
  creating and using, 180
  managing, 383
  refreshing, 182
  using the Saved Queries window, 183

Index 475
Tab order of boxes, 143, 172, 212
Tables (tabular forms), 197, 290
TBB file, 79, 419
TBS file, 411
TBU file, 78, 413
Technical support, x
Telephone numbers
Inmagic, Inc., x
suggested indexing settings for, 38, 52
Terms
browsing Term indexes, 138, 188
defined, 49, 133
effect of Special Filing options on, 50
leading zeros missing in Term indexes, 38, 52
searching for, 138, 186
Term indexing a field, 49
Text. See Added text, Beginning text, Ending text, Fixed text, Prompted text, Separator text
Text background color, applying, 395
Text boxes
adding, 168, 207, 335
anchoring, 234
borders, 257, 258
changing width, 233, 335
contents, 256, 335
coordinates, 211
defined and illustrated, 164, 208
deleting, 163, 209
floating, 163, 234
font, 246
HTML options, 168, 258, 335
justifying text in, 243
moving, 163, 210
selecting, 163, 210
types, 277
Text fields, 38
Text files
delimited ASCII format, 110, 126
exporting records to, 107, 125
extended characters, 107, 390
extensions used, 419
importing, 107
Inmagic tagged format, 110
printing element definitions to, 387
XML, 110
Text formatting
for forms, 222, 223, 244
for menu screens, 333, 334, 338
for query screens, 167, 168, 170
Text Options tab, 34
Text tab, 256
Textbase backup files (.TBB), 79, 419
Textbase boxes, 332, 333
Textbase default sort, 65, 305, 306, 314
Textbase elements
backing up, 78, 80
file extension when printed to a file, 419
managing, 383
Textbase File (Public), 386, 412
Textbase Information, 76, 314, 333
Textbase name
assigning, 32, 36
changing, 75
including in a form, 220
Textbase statistics, 81
Textbase structure
backing up, 79
copying, 36, 72
creating, 32
editing, 69
printing the structure definition, 79
protecting with Master password, 61
textbase structure file, 410
Textbase structure backup files (.TBB), 79
Textbase user files (.TBU), 411
Textbases
analyzing, 81
backing up, 77
copying, 74
creating, 28
damaged, 127, 130
DBTMSG (error messages), ix
defaults, 77
defined, 1
deleting, 75
dumping and reloading, 127
editing structure, 69
files, 410
information, 67, 76
intermediate, 367
linking multiple, 28, 363, 367
maximum number of users, 68
opening, 13
passwords, 60, 391
planning and creating, 32
publishing, 1, 200
recovering, 129
renaming, 75
samples, 14
saving forms in, 199, 386
saving query screens in, 162, 386
saving record skeletons in, 86, 386
saving sets in, 386
secondary, 367
sharing, 10, 15, 68
technical specifications, 28
textbase options, 60
user file conflicts, 413
Textbase-Specific Help, 400
Textbase-user identification, 402
Thesaurus, 148
as a validation list, 58, 96
browsing, 96
browsing and pasting from, 98
connect an existing one to a field, 153
create and connect one to a field, 152
disconnect one from a field, 153
Maintain Thesaurus, 154
non-preferred terms, 151
preferred terms, 151
Rebuild Thesaurus, 154
select, 154
Set Up Thesaurus, 151
Thousand separators, 52, 246, 247
Thumbnail window, 356
TIFF images, 345, 361, 396
Time. See Current time, Automatic Date fields
Title bar, 403, 404
Titles
adding to a form, 273, 283, 284
adding to a query screen, 168
Toolbars, 398, 403, 404
Tools menu, 14
Customize Toolbar, 399
forms, 196
menu screens, 339
Options, 389
query screens, 163
TOTAL Record Function, 228, 274
Totals
calculating in a report, 230, 272, 274
calculating within a field, 41
grand, 274
illustrated, 279
subtotals, 230
Tracking textbase access, 402
Trailing logo, 175, 266
Trailing text
allowing, 48
defined, 48, 247
searching for, 144, 145
using a form to omit, 247, 248
Transaction log. See Log files
Troubleshooting
forms, 318
looking up error messages, ix
searches, 191
Truncation searches
finding empty fields, 147, 187
how to perform, 140, 186
in Code and UDC fields, 146
not finding intended record, 52
on Term indexed fields, 138
TWAIN scanners, 351
Two-digit years, 402
Typeface, vii
U
UDC fields, 47, 146
Underbars (_)
in ASCII import files, 111
show as spaces in forms, 265
Underlining, 288
Undo command, 93
Uneditable boxes, 88, 91
Unindexed fields, 49, 134
Union. See OR searches
Unique Entries Only validation
applying to a field, 54
recommended for an associated field, 369
Units of measure
in forms, 175, 265
in query screens, 163, 175
Universal Decimal Classification. See UDC fields
Unposted changes. See Deferred updates
Update. See also Deferred updates
Automatic Date field, 108
posting deferred updates, 102
validation lists, 58, 118
Upper case. See Case
URLs
DB/Text WebPublisher products, 192, 254
detecting, 393
recommended field type, 47
searching for, 146
Use Current Sort, 126
Use inclusive search option, 392
Use record separators, 267
Use Stop Word List option, 52
User File (Private), 386, 411

478    Index
User files, 411
   backing up, 78
   copying, 74
   deleting, 75
   renaming, 75
   saving forms in, 200
   saving imported elements in, 386
   saving query screens in, 162
   saving record skeletons in, 86
   saving sets in, 181, 386
   technical information about, 411
User interface (UI), 403
User May Override Content Validation
   defining validation options, 58
   effect on data entry, 95
   effect on imports, 118
User May Update Validation List with Override
   defining validation options, 58
   effect on data entry, 95
   effect on imports, 118
User Preferences. See Options
Users, maximum number of, 68
User-specified sort, 304, 306, 314

V
Validation
   changing, 70
   content validation mismatch, 95
during imports, 118
   specifying, 53
types of, 54
   validation choices browser, 106
   violating, 95, 118
   when editing records, 95
Validation lists
   backing up, 80, 419
   content validation mismatch, 59
   creating and editing, 57, 97
   entry not found in list, 59, 118
   overriding, 58, 118
   printing, 80
   updating while editing records, 118
   using, 96
Values, computing, 42, 44, 227
Variables, 218, 284, 285
VBScript, 177, 298
Vertical and horizontal grid
   in forms, 210
   in query screens, 163
View Check Textbase Report File command, 82
View Content command, 195
View Log File command, 67
View menu, 404
View Records command, 195, 198
Volume numbers, 52

W
Warn when opening an empty textbase, 390
Warning messages. See DBTMSG (error
   messages textbase)
Web browsers
   tables, 290
Web edit form, exporting to HTML, 330
Web site, ix
WebPublisher. See DB/Text WebPublisher PRO
WebPublisher PRO, 328, 330, See DB/Text
WebPublisher PRO
Width
   changing for boxes, 233, 257
   labels and cards, 296
   page, 289, 395
   record separators, 267
   reports, 289
Wildcards
   for mask validation, 56
   for truncation searches, 140, 186, 191
Window help, ix
Windows Clipboard, 415
Windows, Inmagic DB/TextWorks
   Command Query window, 185
   Display window, 203
   Edit window, 204
   fitting to a form, 406
   Form Designer window, 193, 198
   Images window, 352, 396
   Main window, 403
   Menu Screen Designer window, 334
   Menu Screen window, 331
   navigating between, 403
   Preview window, 198
   Print Preview window, 315
   Query Screen Designer window, 161
   Query window, 131, 134
   Report window, 135, 201
   Saved Queries window, 183
   synchronizing, 406
   Thumbnail window, 356
   Within number of words (w#), 141, 187
   Within range (·), 140, 186
   Word-by-word filing, 51
Words
breaking after each, 243, 265
browsing Word indexes, 49, 138, 188
defined, 49, 133
effect of Special Filing options on, 50
searching for, 138, 186
stop words, 52, 66
Word indexing a field, 49
World Wide Web, 1, 163, 200, 207
Write Report to File, 323
Write-protected. See Read-only

X
XML, 110, 125
XML match fields, 68

Y
Year 2000, 39, 402

Z
Zeros
including leading zero in decimals, 247
missing in Term indexes, 38, 52
Zooming in and out, 355