



# Library Server: Getting Started





# Library Server: Getting Started

**Note:**

Before using this information and the product it supports, read the information in Appendix H, "Notices," on page 157.

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This edition applies to Version 2 Release 1 of z/OS (5650-ZOS) and to all subsequent releases and modifications until otherwise indicated in new editions.

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## Chapter 1. Introduction to Library Server

This chapter describes Library Server, how it relates to BookManager BookServer and how it is used. You will see the advantages over traditional methods of storing and serving documentation over the Internet and Intranets. Also in this chapter is:

- An introduction to LibraryCenters – a new way of viewing a softcopy Bookcase with a customizable interface
- Information Center (InfoCenter) support
- PDF and Extended Shelf support
- Enhanced table support
- Hand-held device support

The Library Server is a specialized World Wide Web server that lets information providers make softcopy libraries available on the Internet and Intranets. Library Server is the next generation of IBM BookManager web-based softcopy technology based on the IBM BookManager BookServer product. Via the traditional BookServer Library administrative interface, the Library Server administrator defines a complete softcopy library (BookServer Library). The Library Server administrator can set up a softcopy library in numerous ways, and with any or all of the following items:

- **Books** – IBM BookManager softcopy documents
- **PDFs** – Adobe Acrobat PDF (Portable Document Format) documents
- **Indexed PDFs** – An Adobe Acrobat PDF that has been modified by a BookManager application to contain a search index.
- **InfoCenters** – A set of one or more Eclipse Document Plug-ins, authored and packaged by IBM. An Eclipse Document Plug-in typically consists of the published content for a Primary Topic, or for a subset of it's associated subtopics.
- **Shelves** of Books and/or PDFs
- **Bookcases** of shelves, InfoCenters and/or other Bookcases.
- **LibraryCenters** – your own customized view of a Library Server Bookcase

You can read and search for information in the Library Server libraries using a Web browser. Through hypertext links within softcopy documents you can link to any Internet resource.

The softcopy documents can be served online to your users via:

- **Intranet**—Area networks, where users throughout your business can access and use your online libraries
- **Internet**—Web delivery, where users around the world can access and use your online libraries using any qualified Web browser on any operating system.

### Library Server and IBM BookServer - how do they relate?

With Library Server, the traditional IBM BookServer user interface, which provides access to all the Bookcases, shelves and documents defined in the BookServer Library, is still available. As before, this interface is available in both framed and unframed views, the latter of which is the preferred interface for vision-impaired users.

Library Server extends the functionality of BookServer, and has a new end user interface based on one or more configured LibraryCenters. A LibraryCenter is a

customizable template-based view of a Bookcase, which also provides access to the traditional BookServer Library interface. For more information, see “LibraryCenters” on page 4.

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## Softcopy Libraries on the Web

You can take the document you created on your PC– or host–based word-processing program and convert it to a BookManager softcopy Book file, or to a PDF file and make it available on the Web via Library Server.

InfoCenters consisting of Eclipse Document Plug-ins authored and packaged by IBM can also be made available on the web via Library Server.

## Publish on the Web

### BookManager Books

Library Server converts BookManager Book text into HTML and serves it (along with any imbedded pictures) to a Web browser when requested. Library Server also allows a Web client to download BookManager Books to the client workstation.

### PDF Files

Library Server lets you take PDF files distilled with Adobe Acrobat or exported from a word processor, and serve them over the Web, or download them to any Web-client workstation.

### InfoCenters

Library Server extracts the underlying HTML from the associated Eclipse Document Plug-ins of an InfoCenter, and serves it (along with any imbedded pictures) to a Web Browser when requested.

For information on creating and maintaining a library of softcopy Books, PDFs and InfoCenters on a Web server, see Chapter 5, “Managing Your Library Server,” on page 69.

## Read Softcopy Documents on the Web

You can use one of the qualified Web browsers listed in “Client Product Prerequisites” on page 11 to access libraries of Bookcases, shelves, BookManager Books, PDF files and InfoCenters on the Web. Once accessed, you can take full advantage of Library Server’s powerful search capabilities and easy navigation.

To find out more about how to use Library Server to access a BookManager BookServer Library of BookManager, PDF, or Eclipse-based softcopy documents, see Chapter 4, “Using the Library Server’s Traditional BookServer Interface,” on page 29.

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## The Library Server Advantage

Library Server offers significant advantages over the traditional methods for storing and serving World Wide Web documents as HTML and GIF files. Library Server provides for the organization of BookManager Books and PDF files into shelf structures, which along with InfoCenters may be organized into Bookcase structures.

The advantages to the information provider and the reader are shown here.

### **Advantages for the information provider:**

#### **Creating BookManager Books**

- You can store up to 10 times more content on the same amount of server disk space.
- You can create your BookManager Books using BookManager Build products from a variety of document source formats, such as many PC word processors and BookMaster on a host-based system.
- Library Server supports all BookManager Book elements, including those not directly supported in HTML, such as complex tables.
- Table of contents, list of figures, and list of tables are automatically generated when the Book is built, unless specified differently by the author.

#### **Creating PDF files**

You can create PDF files from many word processing programs.

#### **Creating InfoCenters**

InfoCenters are typically created by IBM using Dita xml markup and many are available for customer download.

#### **Distributing BookManager Books**

- You can distribute the same BookManager Book files unchanged across media types (diskette, CD-ROM and WWW) and across operating systems (Linux, Windows, AIX, z/OS, VM and CICS).
- Each softcopy Book is a single, readily portable and self-contained file, rather than a large number of separate HTML and GIF files.
- Your readers have remote access to Library Servers from any platform that supports Web browsers.
- A single Library Server can serve Books, shelves, and Bookcases from its own or remotely attached file systems. Their actual location is not part of the URL of a document and is transparent to readers.

#### **Distributing PDF files**

You can distribute the same PDF files unchanged across media types, (diskette, CD-ROM and WWW) and across operating systems, (Windows, AIX, Linux and z/OS). It is now easier to manage and serve PDFs with the new Extended Shelf Support in Library Server. See “Extended Shelf Support” on page 7 for more information.

#### **Distributing InfoCenters**

You can distribute the same InfoCenters unchanged across media types, (DVD, CD-ROM and WWW) and across operating systems, (Windows, AIX, Linux and z/OS). New management functions in Library Server make it possible to integrate InfoCenters into your library

### **Advantages for the reader:**

#### **BookManager Books**

- You can read a BookManager Book on any Web platform using one of the Web browsers listed on “Client Product Prerequisites” on page 11
- Library Server supports fuzzy (morphological) full-text searching across entire Books, shelves and Bookcases, not just the currently loaded HTML.

- You can easily navigate within a LibraryCenter by using the Navigation Pane as well as the intuitive toolbar icons. In addition, a Book's table of contents, list of figures, list of tables, glossary and an index are available, if enabled by the author.

### PDF files

You can read a PDF file in several ways:

- By downloading the PDF file to your workstation and viewing it with Adobe Acrobat Reader or Adobe Acrobat.
- Directly from your Web browser if you have the Adobe Reader plug-in installed on your Web browser.
- By viewing a high-fidelity printed copy of the PDF from either of the above.

Library Server supports fuzzy (morphological) full-text searching across entire PDFs, shelves, and Bookcases, not just the currently loaded HTML. For PDFs that have been enabled with the IBM Advanced Linguistic Search Index, this searching is accomplished by using the IBM Advanced Linguistic Search Plug-in for Adobe.

### InfoCenters

- You can view an InfoCenter on any Web platform using one of the Web browsers listed on the "Client Product Prerequisites" on page 11.
- Library Server supports fuzzy (morphologized) full-text searching across entire InfoCenters, not just the currently loaded HTML.
- You can easily navigate within a LibraryCenter using the Navigation Pane as well as the intuitive toolbar icons.

For information on how to use Library Server, see Chapter 4, "Using the Library Server's Traditional BookServer Interface," on page 29..


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## LibraryCenters

Library Server has a new feature not available with BookServer - it's called a LibraryCenter. A LibraryCenter is built around a single Bookcase as shown in Figure 1 on page 5. Your Library Server library can contain numerous LibraryCenters, each one having it's own look, beginning with its own home page.

Library Server provides you with your choice of three templates on which to base customized end user interfaces for LibraryCenters. The templates can be used to create LibraryCenters, which provide a powerful set of search options, filtering mechanisms, customized links and navigation aids, some of which extend beyond the bounds of the LibraryCenter or the Library Server library itself.

A LibraryCenter "view" (using Template 2) of any Bookcase can now be dynamically displayed by the end user without having to create and configure an actual LibraryCenter. This can be accomplished by simply clicking the LibraryCenter

Template icon  that appears for each Bookcase listed on the **Bookcases** page, or by clicking that same icon which appears in the toolbar when displaying an individual Bookcase on the **Bookcase** page.



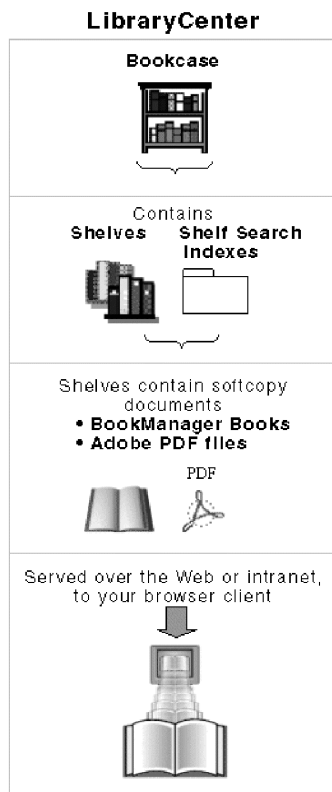


Figure 1. Components of a LibraryCenter

You can read and search for information in LibraryCenters using one of the qualified Web browsers listed in “Client Product Prerequisites” on page 11. Through hypertext links within the softcopy documents you can link to any Internet resource.

For more information about LibraryCenters, see:

- Chapter 3, “Using a LibraryCenter,” on page 13
- “Creating a LibraryCenter” on page 88
- Appendix A, “Configuring a LibraryCenter – Using LibraryCenter Templates 1-3,” on page 121.

---

## InfoCenter Support

In addition to supporting BookManager Book and Adobe PDF document types within Shelf containers, Library Server has been extended to optionally integrate support for Eclipse Document Plug-ins that are contained within InfoCenters.

InfoCenters are a pre-packaged collection of Eclipse Document Plug-ins for which Library Server now provides a special administrative interface (Manage InfoCenters) to configure, catalog and index them. The standard administrative functions now support adding InfoCenters, as well as shelves, to a case.

From a general user perspective, similar to support for shelves and Books/PDFs, InfoCenters and Eclipse Document Plug-ins can now be found, viewed, navigated and searched within the context of the LibraryCenter interface, or within the context of the framed or unframed traditional Library Server interface. Also, similar to existing support for Shelves, the traditional interface now provides a List of

InfoCenters function (i.e. Browse InfoCenters) and a Case Contents function (i.e. Display Case) from which InfoCenters may be selected for subsequent viewing, navigating and searching.

As most InfoCenter-related functions are implemented in Java components, Library Server now employs a new component called the Java Bridge Java Server (JBJS) whose responsibility it is to maintain a persistent JVM for most Library Server InfoCenter-related functions. Please refer to Appendix G, "Java Bridge Java Server (JBJS) Considerations," on page 155 for information about starting, stopping, and maintaining the JBJS.


Starting with Library Server V4.0 for z/OS V2R1, InfoCenter support within Library Server has been redesigned to improve indexing, search and navigation performance. The ability to configure and manage previously prepared (i.e.pre-indexed) Eclipse Document Plug-ins for an InfoCenter is newly supported in Library Server V4.0.

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## PDF Support

Library Server supports PDF files as follows:

- If a Book has a matching PDF file, the PDF icon will be displayed to the right of

the Book icon.  This applies to the Book toolbar, and for all Book lists.





If a PDF file is contained in an Extended Shelf, (see "Extended Shelf Support" on page 7) without a matching Book, the PDF icon will appear on a line by itself, when the Extended Shelf is displayed.

- PDF icons  , when clicked, will launch PDF files for viewing or download, based on your Web browser's settings.
- You can "Find" PDF files in the Library Server catalog – by their names, titles or document numbers.
- Using the IBM Advanced Linguistic Search (ALS) Plug-in for Adobe, you can do a morphological full text search against PDFs that have been indexed (i.e. those containing an IBM ALS index)
  - When searching an extended shelf (whether having an associated "BKI" shelf index, or not) of indexed PDFs, clicking a PDF in the resultant hit list, can optionally launch the IBM ALS Plug-in for Adobe to automatically perform the same morphological full text search against the selected PDF after it has been loaded by the Adobe browser plug-in
  - Starting with Library Server V4.0 for z/OS V2R1, when searching a loose collection (as opposed to an extended shelf) of indexed PDFs on a configured Collection Directory, clicking a PDF in the resultant hit list, can optionally launch the IBM ALS Plug-in for Adobe to automatically perform the same morphological full text search against the selected PDF after it has been loaded by the Adobe browser plug-in. Also, the Search Collection Page now has an option to scope the search to "PDFs Only", "Books Only" or "PDFs and Books" on the indicated Collection Directory.

## PDF Icons

The following chart lists and describes the different icons used by Library Server, for PDFs in Shelves and Collections.

Table 1. PDF Icons

PDF icon	Description
	PDF is not searchable by the IBM Advanced Linguistics Search (ALS) Plug-in, May appear when displaying Bookshelves, Extended Shelves or Collections.
	PDF is searchable by the IBM ALS Plug-in. May appear when displaying Extended Shelves or Collections.
	PDF is not searchable by the IBM ALS Plug-in, and is contained in Shelf Index (BKI). May appear when displaying Extended Shelves only.
	PDF is searchable by the IBM ALS Plug-in, and is contained in Shelf Index (BKI). May appear when displaying Extended Shelves only.

---

## Extended Shelf Support

Library Server support for Extended Shelves (XKS). Extended Shelves provides enhanced organization and access to PDFs and BookManager Books. With Extended Shelves, you can:

- Organize and access PDFs, no corresponding BookManager Book required
- Organize and access BookManager Books
- Organize and access a mixture of PDFs and BookManager Books including, but not limited to, equivalent PDFs and Books.
- Find, filter and sort PDFs and BookManager Books by: name, title or document number
- Search BookManager Books and indexed PDFs.

For more information on creating and modifying shelves, see “Creating a Shelf (Bookshelf or Extended Shelf)” on page 81.

---

## Enhanced Table Support

With Library Server, tables with revision bars will be rendered as true HTML tables with a revision character in each cell rather than a pre-formatted character-graphic representation of the table. The format of the rendered table has been enhanced to more closely represent the author’s intent. Other table enhancements have been made, including improved rendering of border less tables and non-standard tables.

Figure 2 on page 8 shows the new enhancements available for tables.

Table Cells can now contain Vertical Bars	A single   vertical bar
	A number       of vertical bars
Table Cells can now contain Underscores	A single _ underscore
	A number ____ of underscores
Bookmanager marks revised   text with a   Revision Bar on the line containing the revised text	Therefore each cell of the row that   contains REVISED   TEXT will contain a revision bar

Figure 2. Example of the new enhancements available for tables

---

## Enhanced Syntax Diagram Support

Library Server makes syntax diagrams optionally available in dotted decimal format in any BookManager Book that has been enabled for dotted decimal format syntax diagrams. This greatly enhances compatibility with screen readers, such as JAWS, Bobby and IBM Home Page Reader.


Within any BookManager Book built by the Build product on a VM system having 2H2005 BookMaster service applied, each syntax diagram will be encoded in both the traditional 'Railroad Track' format and now in the 'Dotted Decimal' format, the latter of which is accessible to vision-impaired users. For such Books, when rendering a topic containing one or more syntax diagrams, Library Server provides a link that enables the user to toggle between 'Accessible' mode (in which syntax diagrams are rendered in dotted decimal format) and 'Pictorial' mode (in which syntax diagrams are rendered in railroad track format). Each time the user performs a mode switch, Library Server remembers the new mode as that end user's preference and then displays subsequent pages using that preference as the default display mode.

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## Hand-Held Device Support

Library Server supports hand-held devices, such as Palm OS devices and Windows CE devices as described in Appendix B, "Support for Handheld Devices," on page 139.

Many of the Library Server pages can be displayed in a compact format more suitable for display on devices with smaller screens and limited functions. To access

these alternative format pages, click on one of the handheld icons  displayed in the ToolBar, or top right side, of the Library Server or LibraryCenter page.

**Note:** The handheld icons will be displayed only if the Library Server Administrator enabled the "Clipping for Handhelds" feature.

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## Java-based Administrative Interface

A Java applet-based administrative interface is now available as an alternative to the traditional HTML-based administrative interface. This interface has an object-based design, provides smoother navigation between functions, and offers an Explorer-like method for listing files and directories.

This Java-based administrative interface is available for Library Server starting with z/OS V1R10. The end user can toggle between this new interface and the old interface by selecting a checkbox that is provided on both the HTML-based and the Java-based interfaces.

The Java-based administrative interface requires a minimum of Java 6 running on the host and enabled in the client's browser. It also requires that the end user accept an IBM-signed Verisign digital security certificate the first time the interface is accessed by the user.

If the administrator has enabled the Java-based administrative interface and the Library Page won't load, it may be necessary to switch from using a 64-bit browser to a 32-bit browser.

For more information on the Java-based administrative Interface, see "The Administration Pages (using the Java-based user interface)" on page 98.


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## Personal Bookcase Support

A function that allows end users to create, use, and share a personalized subset of documents from the Library Server catalog, called a Personal Bookcase, is now available. This function allows end users the ability to configure and quickly access a Personal Bookcase that includes shelves and documents, as well as InfoCenters, routinely used as personal reference materials.

The Personal Bookcase function includes an optional email password reminder function for use by Personal Bookcase owners.

Availability of the Personal Bookcase function for end users is optional, and is controlled by the Library Server Administrator through the Library Server administrative interface.

Personal Bookcase icons  , when clicked, trigger the Personal Bookcase function.



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## Chapter 2. Product Prerequisites

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### Server Product Prerequisites – Library Server for z/OS

#### Software

z/OS V2R1 or higher including:

- Language Environment
- SMP/E
- IBM HTTP Server
- GDDM (required for displaying GDF graphics)
- XML Toolkit 1.10 (5655-J51) - Required for displaying, searching and managing Extended Shelves, as well as for all shelf and InfoCenter indexing and plug-in preparation.
- IBM 31-bit SDK for z/OS, Java Technology Edition, V6 (5655-R31) or IBM 31-bit SDK for z/OS, Java Technology Edition, V7 (5655-W43). - Required for displaying, searching, managing, preparing and indexing InfoCenters, as well as for using the Java applet-based Library Server administrative interface instead of the original HTML-based administrative interface. Note that in order for the client to use the Java applet-based administrative interface, the level of Java running at the client must equal or exceed the version running at the host.

#### Hardware

Hardware prerequisites for the Library Server:

- Any processor that supports your z/OS operating system
- An IBM 3390 Direct Access Storage or equivalent that supports your z/OS operating system
- 100 cylinders of disk space on the IBM 3390 Direct Access Storage or equivalent
- A tape drive or other device for which z/OS installation media is available from IBM.

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### Client Product Prerequisites

#### Software

Software prerequisites for Library Server clients.

##### Web Browsers

- All Library Server functions not initiated from the command line interface require an HTML World Wide Web browser product and related Internet connectivity software.
- The **Library Server's traditional unframed** interface has no additional pre-requisites, unless the client wishes to use the Personal Bookcase function, or desires to display syntax diagrams in 'Accessible' mode (i.e. in dotted decimal format) by default, in which case the web browser must include enabled support for Javascript and cookies.

Notwithstanding the Personal Bookcase and syntax diagram options above, this interface continues to be supported for use with nearly any browser.

- For using **Library Server's traditional framed interface** or **LibraryCenter interface**, or using the Java applet-based administrative interface, the Web browser must include enabled support for:

- Java, Javascript, cookies, and style sheets (support of HTML 4.0 is required for using the traditional framed interface or LibraryCenter interface)
- Specifically, Library Server supports the following browsers:
  - Internet Explorer 7 and above, with the Java plug-in
  - Mozilla Firefox 3.6.15 and above, with Java plug-in
  - Opera 10 and above ("Identify as Opera" must be selected in Opera's "Quick Preferences" settings), with Java plug-in

**Notes:**

1. **If you use a Java plug-in** - We recommend using Sun's JRE V1.6, or later, Java plug-in for the best results. The required minimum level for using the Java applet-based administrative interface is V1.6, however must equal or exceed the level of Java running at the server.
2. **If you use Microsoft Internet Explorer** - A Java plug-in is not required if the Microsoft JVM 1.1.4 is enabled (but the Sun JRE V1.6, or later, plug-in must be enabled to use the Java applet-based administrative interface).
3. **If you use Mozilla Firefox** - Using Sun's JRE V1.6.0\_10, or later, Java plug-in is recommended
4. **If a Java authentication dialog is presented** - Under certain circumstances the first time you attempt to load a Library Server page which runs a Java applet (e.g. Library page, framed book page, Java-based administration) you may be presented with a Java authentication dialog from the server before the page fully loads. If this occurs, you should provide the same server credentials you did when authenticating with the web server.

The supported release of a particular browser is subject to change without notice.

**Other Client Software**

The software required for Library Server clients varies with the Library Server functions the user wishes to use:

- IBM Advanced Linguistic Search (ALS) Plug-in for Adobe (for performing morphological searches on PDF documents with ranked results, and search highlighting, all from within Adobe Reader, or Adobe Acrobat). This plug-in, as well as usage instructions, can be downloaded, free of charge, from <http://www-01.ibm.com/support/docview.wss?rs=4&uid=swg27018852>
- If using Adobe Reader V10 or V11, or Adobe Acrobat V10 or V11, the latest available IBM ALS Plug-in for Adobe V1.5x should be used to perform advanced linguistic searching in PDFs. If using Adobe Reader V9 or Adobe Acrobat V9, the IBM ALS Plug-in for Adobe V1.4.1 should be used to perform advanced linguistic searching in PDFs. If using Adobe Reader V8 or Adobe Acrobat V8, the IBM ALS Plug-in for Adobe V1.4 should be used to perform advanced linguistic searching in PDFs. If using Adobe Reader V7, or Adobe Acrobat V7, the IBM ALS Plug-in for Adobe V1.3 should be used to perform advanced linguistic searching in PDFs. If **not** using the IBM ALS Plug-in for Adobe, Adobe Reader V3, or later, or Adobe Acrobat V3, or later, can be used for simply viewing PDFs. Regardless, Adobe Reader should be installed as a plug-in to a 32-bit browser when using Library Server to display or search PDFs. Using 64-bit browsers should be avoided since the Adobe Reader browser plug-in supports 32-bit addressing only.

**Note:** For best results viewing PDFs, we recommend editing the internet preferences in your Adobe Reader or Adobe Acrobat to "*Display PDF in Browser.*"



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## Chapter 3. Using a LibraryCenter

Library Server provides you with three new front-end templates, which were not available in IBM BookManager BookServer. Administrators can use these templates to create LibraryCenters. Once created, Administrators can customize the LibraryCenter with navigation and search aids to meet the needs of their softcopy library users. These templates are shipped with the Library Server product. The use of the template-based user interface is optional. In its place, the traditional BookServer interface (unframed or framed) may be used.

This chapter contains the following information:

- Comparison: LibraryCenter and traditional interfaces
- LibraryCenter Templates for Creating LibraryCenters
- Navigation in a LibraryCenter
- Searching in a LibraryCenter

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### Comparison: LibraryCenter and Traditional Interfaces

This section shows you a comparison between the LibraryCenter, with its customizable user interfaces and features, and the traditional interface.

*Table 2. Comparison between LibraryCenter and Traditional Interfaces*

Features	LibraryCenter Interface	Traditional Interface
<b>Home Page</b> - look and feel	The Administrator has a choice of three customizable templates to get the look and style desired. The end user also has the choice of selecting the traditional BookManager Framed and Unframed interfaces instead.	The library page is limited in how it can be customized. You can customize the header and footer
<b>Searches</b> - from the home page	Directly from the LibraryCenter home page, you can: <ul style="list-style-type: none"><li>• Search across all the objects, or search within individual objects, defined in the LibraryCenter</li><li>• Do advanced searches to further refine the search</li><li>• Search a list of documents that may not be on the same shelf (searching search results or find results)</li><li>• Configurable external search engines.</li></ul>	You can not do a search until you have opened a document, a shelf, or an InfoCenter.

Table 2. Comparison between LibraryCenter and Traditional Interfaces (continued)

Features	LibraryCenter Interface	Traditional Interface
<b>Navigation</b>	<p>View objects in the LibraryCenter hierarchy with fewer links (mouse clicks)</p> <p>The Navigation frame is always displayed with a tree-based Table of Contents, starting at the Bookcase level, in this order:</p> <ol style="list-style-type: none"> <li>1. Bookcase               <ol style="list-style-type: none"> <li>a. Shelves                   <ol style="list-style-type: none"> <li>1) Books (and Topic/Subtopic tree for each)</li> <li>2) PDFs</li> </ol> </li> <li>b. InfoCenters                   <ol style="list-style-type: none"> <li>1) InfoCenter Primary Topics (and Subtopic tree for each)</li> </ol> </li> </ol> </li> </ol> <p>You can expand the titles in the Contents tab, to view long titles, by using the sliding frame button (Internet Explorer only)</p> <p>LibraryCenters created from Templates 1-3 use the "frames" format, so the LibraryCenter home page has more visible information frames with numerous links, such as:</p> <ul style="list-style-type: none"> <li>• Search</li> <li>• Navigation</li> <li>• Contents</li> <li>• Masthead</li> <li>• NavBar</li> <li>• ToolBar</li> <li>• Related links</li> </ul> <p>A new browser window is launched when you select an external link.</p> <p>The LibraryCenter TOC (i.e. navigation pane) is a Java Applet-based implementation designed to perform well with a large number of documents.</p>	<p>In the traditional Framed interface, the navigation frame is displayed only when you open a document, and for only the contents of that document.</p> <p>The traditional Unframed interface does not use a navigation frame. Instead, it uses a button to display the document table of contents, if provided.</p>

Table 2. Comparison between LibraryCenter and Traditional Interfaces (continued)

Features	LibraryCenter Interface	Traditional Interface
<b>Scope</b>	A LibraryCenter is customized to support a particular Bookcase, with extra information such as a unique Welcome page. A Collection cannot be part of a LibraryCenter.	Supports many Bookcases, but cannot give customized information about them. Supports Collections, see "What are Shelves and Collections?" on page 43.
<b>PDF support</b>	<p>For PDF:</p> <ul style="list-style-type: none"> <li>• You can manage and use PDF documents that do not necessarily have a corresponding BookManager Book file.</li> <li>• PDF "Ultralite" is still supported (such as, providing access to a corresponding PDF, if any, alongside its companion Book during Book navigation and with lists of Books).</li> <li>• The <b>Find Feature</b> allows you to find a specific PDF document.</li> </ul>	<p>For PDF:</p> <ul style="list-style-type: none"> <li>• You can manage and use PDF documents that do not necessarily have a corresponding BookManager Book file.</li> <li>• PDF "Ultralite" is still supported (such as, providing access to a corresponding PDF, if any, alongside its companion Book during Book navigation and with lists of Books).</li> <li>• The <b>Find Feature</b> allows you to find a specific PDF document.</li> </ul>
<b>PDF Search</b>	<p>For Indexed PDFs:</p> <ul style="list-style-type: none"> <li>• You can search Indexed PDFs.</li> <li>• PDFs which have not had an index added by BookManager Utilities are not searchable and will not be listed in shelf search results.</li> <li>• For PDFs in the Shelf Search results list, clicking on the PDF icon, will result in the IBM Advanced Linguistic Search Plug-in or Find Function being launched in the Adobe Reader, depending on whether or not the PDF is searchable, and whether or not the client has installed the IBM Advanced Linguistic Search Plug-in.</li> </ul>	<ul style="list-style-type: none"> <li>• For PDFs in the Shelf Search results list, clicking on the PDF icon, will result in the IBM Advanced Linguistic Search Plug-in or Find Function being launched in the Adobe Reader, depending on whether or not the PDF is searchable, and whether or not the client has installed the IBM Advanced Linguistic Search Plug-in.</li> </ul>
<b>Enhanced table support</b>	Tables are displayed as HTML tables in most cases.	Tables are displayed as HTML tables in most cases.
<b>Syntax diagram support</b>	When displaying Books that have been so enabled, syntax diagrams can be displayed in either "Railroad Track" or "Dotted Decimal" format.	When displaying Books that have been so enabled, syntax diagrams can be displayed in either "Railroad Track" or "Dotted Decimal" format.

## LibraryCenter Templates 1-3 Used to Create LibraryCenters

This section shows you the three LibraryCenter templates (user interfaces) available to the Library Server Administrator to create customized LibraryCenters. The traditional BookServer interfaces are also shown.

The three templates have the same features and functions, the differences are the layout and colors. Each Template is made up of a number of frames which contain fill-in-the-blank areas for searching, links to other places, and numerous navigation aids.

- Figure 3 shows Template 1
- Figure 4 shows Template 2
- Figure 5 on page 17 shows Template 3

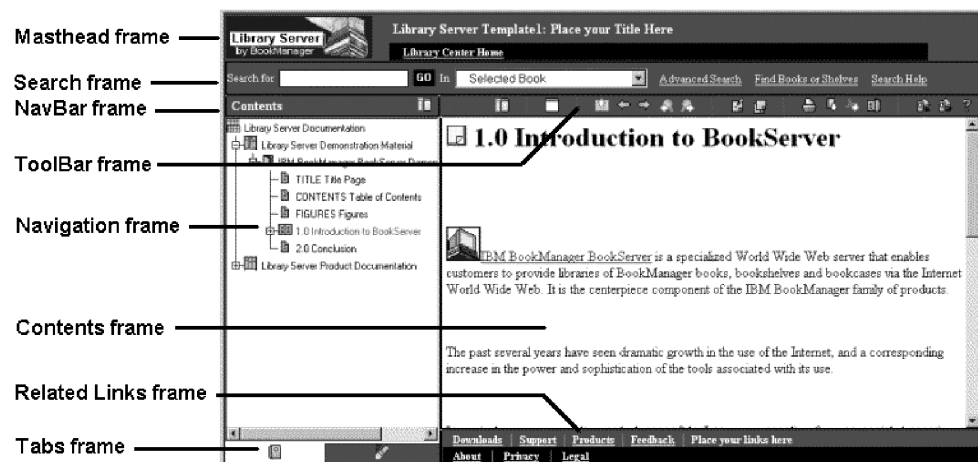


Figure 3. LibraryCenter created from LibraryCenter Template 1

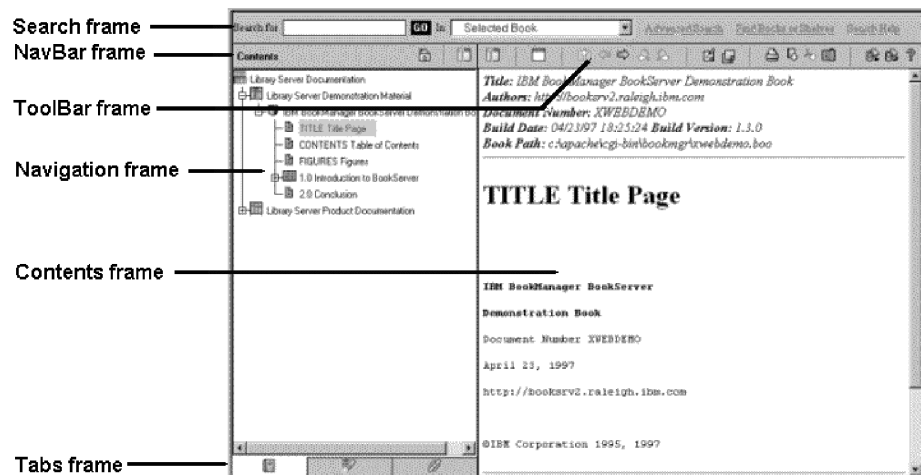


Figure 4. LibraryCenter created from LibraryCenter Template 2

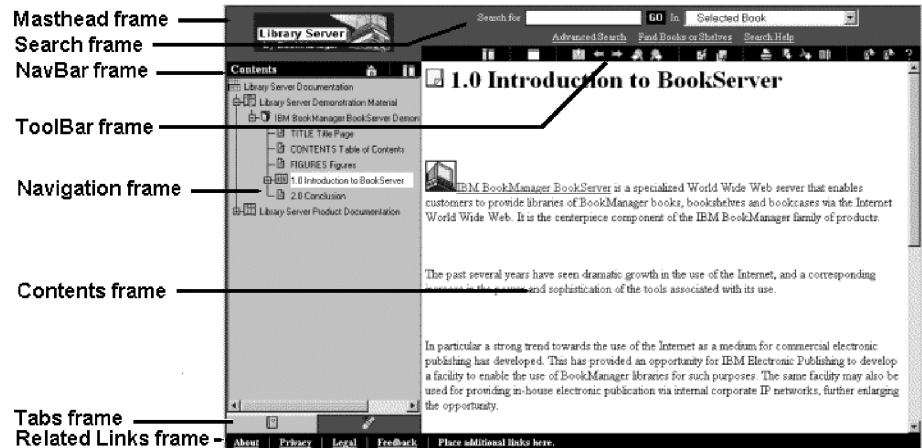


Figure 5. LibraryCenter created from LibraryCenter Template 3

### Advantages of the LibraryCenter

A LibraryCenter provides you with these advantages:

- Interface configurable by the Library Server Administrator, which allows the administrator to adopt a suitable "corporate" look and feel, if desired. As an option, the end user can select the traditional BookServer interface.
- Home pages of LibraryCenters have a new look and expanded functionality
- Enhanced searching and navigation, including classifications, filtering, unique searches and external searching
- One-stop information shopping

## LibraryCenter Description

Following is a description of the different frames that make up the three LibraryCenters.

### Masthead Frame (Templates 1 and 3 only)

The Masthead frame contains the following links:

#### Masthead logo

Can contain a link to a corporate home page or some other location.

#### LibraryCenter Home (Template 1 only)

Clicking on this link takes you back to the Welcome page of your LibraryCenter.

### Search Frame

The Search frame contains the search-data entry areas and tools to allow you to do searches and advanced searches.

#### Search for [entry field]

This is an entry field for you to enter a search word or phrase.

#### In [drop-down listbox]

This drop down list box lists the scope of the search (exactly where you are going to search). This list box will contain one or more of the following items:

- LibraryCenter
- If a shelf is selected:

- LibraryCenter
- Selected shelf
- If an InfoCenter is selected:
  - LibraryCenter
  - Selected InfoCenter
- If a Book or PDF is selected:
  - LibraryCenter
  - Parent shelf
  - Selected Book or PDF
- If an InfoCenter Primary Topic is selected:
  - LibraryCenter
  - Parent InfoCenter
  - Selected Primary Topic
- If a subtopic of an InfoCenter Primary Topic is selected:
  - LibraryCenter
  - Parent InfoCenter
  - InfoCenter parent Primary Topic
  - Selected subtopic
- If a search has been performed – Shelves, InfoCenters, InfoCenter Primary Topics, or Documents in search results
- If a "Find" has been performed – Shelves, InfoCenters, InfoCenter Primary Topics, or Documents in find results
- Additional "Search Scope" items designated by the Library Server Administrator, such as Google.

#### **Filters [drop-down listbox] (BookManager Books)**

Selecting an item from this drop-down menu will limit the Scope of the Search to enabled documents/topics that have been classified as task, reference, etc., or have been tagged with unique identifiers such as message IDs or command names. The items in the Filters drop-down list is configurable by the administrator. By default, <none> is selected. For information on enabling documents with classifications or unique identifiers see, "Tips for Authors - Enabling BookManager Books for Search Filters" on page 27.

#### **Advanced Search**

Clicking on this link brings up the Advanced Search window.

#### **Find Documents, Shelves, or InfoCenters**

Clicking on this link brings up the **Find Documents, Shelves, or InfoCenters** window, which allows you to find documents (Books, PDFs or InfoCenter Eclipse Document Plug-ins), shelves, or InfoCenters with titles or names that match the contents of the "Find" field.

#### **Search Help**

Clicking on this link brings up help on how to do searches.

#### **NavBar Frame**

The NavBar frame will contain the following icons/links:

#### **Expand/Contract the Navigation Frame**

This will expand the width of the navigation frame to a width necessary to

view the longest item in the list or table of contents. Selecting the icon again will return the navigation frame to its original size (Internet Explorer browser only).

### **LibraryCenter Home (Template 2 and 3)**

Clicking on this link takes you back to the Welcome page of your LibraryCenter.

### **ToolBar Frame**

The ToolBar frame, when a Book or InfoCenter topic is open, will contain all or a subset of the following icons/links:



### **Hide/Show Navigation Frame**

Clicking on this icon will show or hide (open and close) the Navigation frame (Internet Explorer browser only).

### **Unframed View**

Clicking on this icon takes you to the Unframed view, see “Library Server – Traditional BookServer Interface” on page 21. This will open an unframed view of whatever topic is currently being displayed. The Unframed View provides an accessible interface for vision-impaired users.

### **Revised Topics**

This will display a list of all revised topics, see “Revised Topics List (BookManager Book Only)” on page 56.

### **Next/Previous Topic**

These will navigate you to the next or previous sequential topic.

### **Next/Previous Search Hit**

If the topic was displayed as a result of a search, you can use these buttons to navigate to the next or previous search hit.

### **Create Note (BookManager Books Only)**

This will allow you to create a note for this topic. See “Creating Notes in Book Topics (BookManager Books Only)” on page 63. (This feature may be disabled by the Library Server Administrator.)

### **List Notes (BookManager Books Only)**

This will display a list of all notes for the current Book.

### **Print Topic(s) (BookManager Books Only)**

This will open a print dialog that will allow you to preview and print the current topic or any other topics in the Book. See “Printing Book Topics (BookManager Books Only)” on page 65.

### **Download Book (BookManager Books Only)**

This will download the Book for use with a workstation Book reader such as Softcopy Reader, which is available for free download from the BookManager Web site.

### **Download PDF (BookManager Books Only)**

Depending on your browser settings this will either open or download the PDF version of the current Book.

### **Bookmark Topic (Internet Explorer only)**

This will add a Favorite to your Browser that can be used to return to this topic inside of Library Server. Please use only this link when trying to Bookmark a topic inside of the LibraryCenter interface.

**Bookmark Topic (all except Internet Explorer)**

After clicking the Bookmark icon, this will display a URL in your browser's location field. You can then use your browser's Bookmark capability to create a Bookmark for the current topic.

**Handheld Disconnected (BookManager Books Only)**

This will display a handheld enabled version of the topic for use when your handheld is not connected to a network. This will be displayed only if the Library Server Administrator has enabled the "Clipping for Handhelds" feature.

**Handheld Connected (BookManager Books Only)**

This will display a handheld enabled version of the topic for use when your handheld is connected to a network. This will be displayed only if the Library Server Administrator has enabled the "Clipping for Handhelds" feature.


**Info** For BookManager Books, this will display a window with the Book title, document number, date and time, security, copyright and current topic id.

**Help** This will open up the Library Server User's Guide to a location relevant to what is currently being viewed or displayed.

**Navigation Frame**

This frame displays either the:

- Contents pane (Default) – displays hierarchical contents of Bookcases, shelves, InfoCenters and Books
- Search Results pane – displays results of the most recently performed search or find.
- Related Links pane (Template 2 only) – This frame contains a number of links. Links in this frame generally go to a URL that is external to the current LibraryCenter. When you click on one of these external links, a new browser window will be opened and the corresponding Web page will be displayed.

You can display long titles by expanding the width of the Navigation frame. This is done by clicking on the "Expand/Contract Navigation Frame" icon  on the NavBar frame (Internet Explorer browser only). Titles will also be displayed in the Browser's Status window.

**Contents Frame**

This frame displays text and pictures. This frame can also include "Home Page" information or, Book, shelf, InfoCenter, or Bookcase information, etc. For BookManager Books, it can also contain "Notes" information, which is displayed when the user selects the "Notes" icon in the ToolBar frame.

**Contents Pane**

This pane displays the Table of Contents tree for the LibraryCenter. You may expand and contract the tree by clicking the + and - icons respectively. Clicking on a topic in the tree displays that topic in the Contents Frame.

**Search Results Pane**

This pane displays the results of the most recently performed search or find operation as a set of links. Clicking any of these links drills down to display another set of links representing the next level in the hierarchy for that hit. At any point, the results in this pane can be specified as the scope of a subsequent search operation.



## Related Links Pane

In Templates 1 and 3, this is a separate frame located below the Contents Frame. In Template 2, this is a pane within the Navigation Frame.

This pane contains a number of links. Links in this frame generally go to a URL that is external to the current LibraryCenter. When you click on one of these external links, a new browser window will be opened and the corresponding Web page will be displayed.

## Tabs Frame

This frame contains the "Contents" tab, "Search Results" tab and "Related Links" Tab (Template 2 only). By clicking on the tabs, you can switch the view of the Navigation frame between the Contents, Search Results and Related Links (Template 2 only) panes.


## Library Server – Traditional BookServer Interface

The **Unframed** view, shown in Figure 6 on page 22, is one of the views provided by the traditional BookServer interface. This will be the default interface if:

- Administrators don't want to use one of the customizable LibraryCenter Templates 1-3
- The Administrator created a LibraryCenter from Template 1-3, but your user has a browser that doesn't support it. To use a LibraryCenter, users must be using one of the browsers shown in "Client Product Prerequisites" on page 11.

The Unframed view can be switched to a Framed view as described later in this section.

The **Unframed** view can be used when:

- Your browser doesn't support the LibraryCenter browser requirements, see "Client Product Prerequisites" on page 11. A non-supported browser is automatically detected by Library Server and a message is displayed advising you of this and how to go to the Unframed view.
- You can select the "Unframed view" icon  from the LibraryCenter ToolBar.

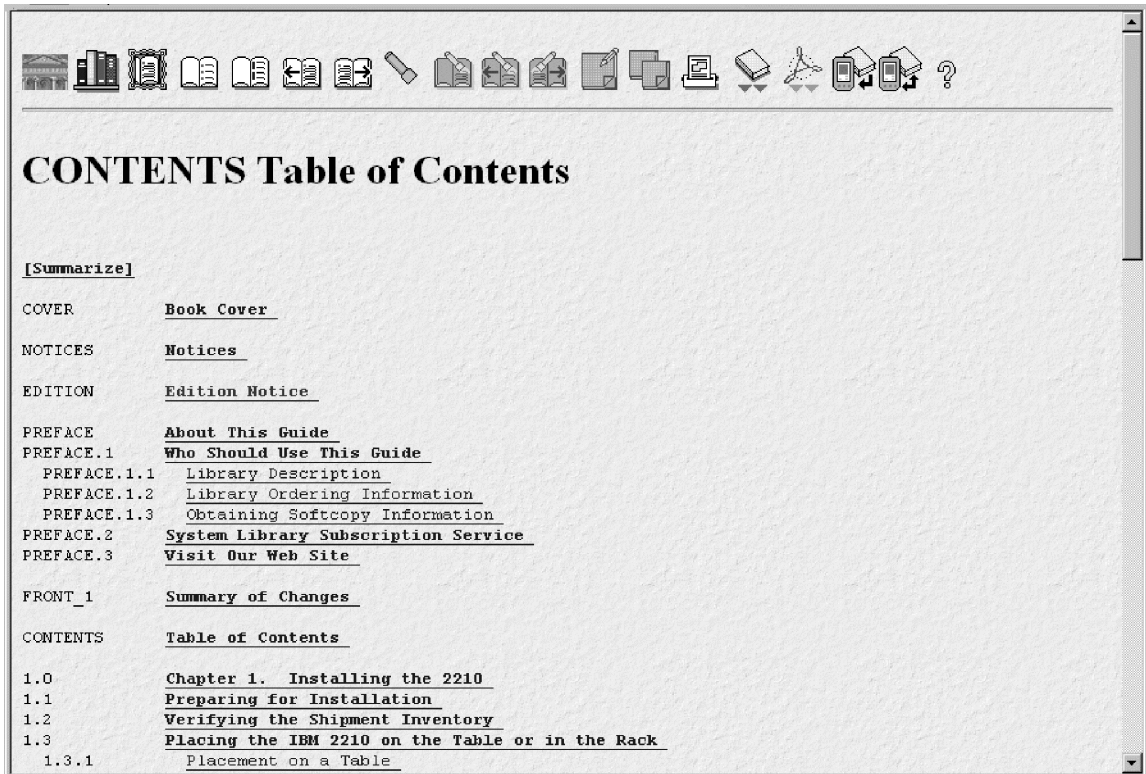


Figure 6. Unframed View – Traditional BookServer Interface

When in the **Unframed** view:

- No Navigation frame is displayed
- The InfoCenter topic toolbar is not frozen in place – it scrolls with the data.
- You must click through a series of screens to get to the Bookcases, shelves, InfoCenters, and Books in your softcopy library
- The search dialog and search results overlay the current window
- No Java, Javascript, cookies, frames, or style sheets are required. (unless the end user wishes to display syntax diagrams in accessible format, by default, in which case Javascript and Cookies support is required.)


**Framed view**

The Framed View requires Java Script, Java and cookie support to be enabled in the browser.

While in **Unframed** view, you can go to the **Framed** view shown in Figure 7 on

page 23 by clicking on the "Framed" icon  in the ToolBar.

Once you select the **Framed** view, you can toggle back to the **Unframed** view and toggle back-and-forth between these views. You can go back to the LibraryCenter by selecting the "Browse LibraryCenters" link on the main Library Server Library page, or by selecting the browser's **Back** button to return to the LibraryCenter view. The following icons on the Framed and Unframed view ToolBars allow you to toggle back-and-forth.

While in the **Unframed** view, click on the Framed icon  to go to the Framed view.

While in the **Framed** view, click on the Unframed icon  to go to the Unframed view.

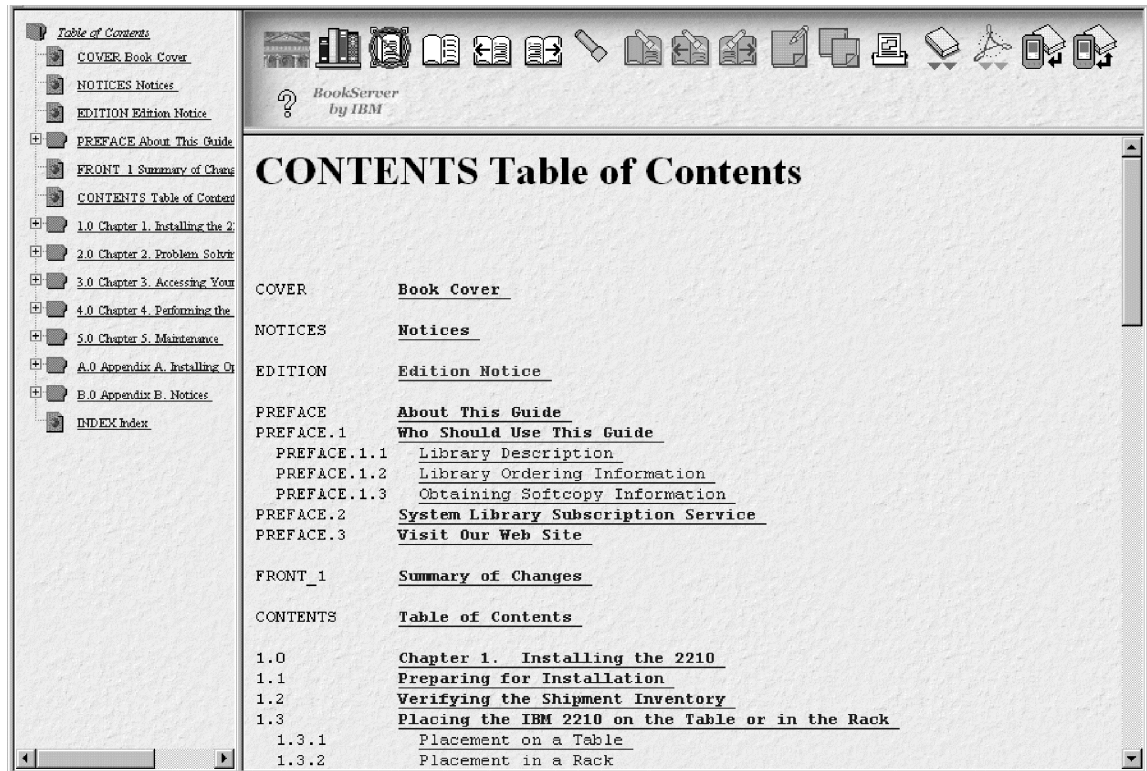


Figure 7. Framed View – Default Interface

## Navigation in LibraryCenters

You can navigate in the LibraryCenters from the:

- Contents frame
- Navigation frame
- Search frame
- NavBar frame
- Toolbar frame (when a document is open)
- Related links page – can contain links to other Web sites
- Masthead frame – can contain a link to a corporate Web site or other Web sites

### Contents Frame

The Contents frame displays the document content, which contain links to other sections of the document, other documents, and Web sites.

### Navigation Frame

The Navigation frame contains lists of shelves, InfoCenters and documents that are active links which take you directly to the shelf, InfoCenter, or document. When you

open a document or InfoCenter the table of contents is displayed in the Navigation frame. You can click on topic and subtopic titles and go directly to them. You can use the arrow keys on your keyboard (up, down, left and right) to move within the Navigation frame. The selected Bookcase, shelf, InfoCenter, Book, PDF or topic will be displayed.

## Search Frame

The Search frame allows you to enter a Search argument or arguments and refine the type of search, see “Searching in LibraryCenters” on page 25.

## NavBar Frame

The NavBar frame contains the following:

### LibraryCenter Home (Template 2 and 3 only)

Clicking on this icon takes you back to the *Welcome* page of your LibraryCenter.

### Expand/Contract the Navigation Frame

This will expand the width of the navigation frame to a width necessary to view the longest item in the list or table of contents. Selecting the icon again will return the navigation frame to its original size. (Internet Explorer Web browser only.)

## Toolbar Frame

The Toolbar frame, when a BookManager Book, or InfoCenter topic is open, displays the icons shown in Figure 8. Which icons are displayed depends on how the administrator configures the LibraryCenter.



Figure 8. Toolbar frame

Description of the Icons on the Toolbar:

### Hide/Show Navigation Frame

This will Hide the Navigation Frame, allowing the topic to be viewed in a larger size for increased readability. Selecting the icon again will return the topic to its original size and will show the Navigation Frame.

### Unframed View

This will open an unframed view of whatever Bookcase, shelf, Book or topic is currently being displayed. The Unframed View provides an accessible interface for vision-impaired users.

### Revised Topics

This will display a list of all revised topics.

### Next/Previous Topic

These will navigate you to the next or previous sequential topic.

### Next/Previous Search Hit

If the topic was displayed as a result of a search, you can use these buttons to navigate to the next or previous search hit.

### Create Note (BookManager Books Only)

This will allow you to create a note for this topic. For more information, see “Creating Notes in Book Topics (BookManager Books Only)” on page 63.

**List Notes (BookManager Books Only)**

This will display a list of all notes for the current Book.

**Print Topic(s) (BookManager Books Only)**

This will open a print dialog that will allow you to do a print preview of the current topic or any other topics in the Book. For more information, see "Printing Book Topics (BookManager Books Only)" on page 65.

**Download Book (BookManager Books Only)**

This will download the Book for use with a workstation Book reader such as Softcopy Reader, which is available for free download from the BookManager Web site.

**Download PDF (BookManager Books Only)**

Depending on your browser settings this will either open or download the PDF version of the current Book.

**Bookmark Topic (Internet Explorer only)**

This will add a Favorite to your Browser that can be used to return to this topic inside of Library Server. Please use only this link when trying to Bookmark a topic inside of the LibraryCenter interface.

**Bookmark Topic (all except Internet Explorer)**

After clicking the Bookmark icon, this will display a URL in the browser's location field. You can then use the browser's Bookmark capability to create a Bookmark for the current topic.

**Handheld Disconnected (BookManager Books Only)**

This will display a handheld enabled version of the topic for use when your handheld is not connected to a network. This will be displayed only if the Library Server Administrator has enabled the "Clipping for Handhelds" feature.

**Handheld Connected (BookManager Books Only)**

This will display a handheld enabled version of the topic for use when your handheld is connected to a network. This will be displayed only if the Library Server Administrator has enabled the "Clipping for Handhelds" feature.

**Info** For BookManager Books, this will display a window with the Book title, document number, date and time, security, copyright and current topic information.

**Help** This will open up the Library Server User's Guide to a location relevant to what is currently being viewed or displayed.

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## Searching in LibraryCenters

The search is performed at the server and the results are displayed in the Search Results List, from which you can select a hit to view the matches.

This section shows you how to do the following types of searches and advanced searches:

- Find any Shelves or InfoCenters on the Library Server
- Find any Documents on the Library Server
- Word or phrase search
- Launch external searches with repositories outside the Library Server, such as Google on the Web.
- Search by shelf or InfoCenter

- Search within a document

### Advanced Searches

These searches are for only BookManager Books

- Advanced Searches classified by:
  - Task
  - Concept
  - Reference
  - Command
  - Example
- Advanced search for messages
- Advanced search for commands

### How to Find a Document, Shelf, or InfoCenter

To perform a "find action" for a Book, PDF, shelf, or InfoCenter select the Find Documents, Shelves, or InfoCenters link from the Search Frame. PDFs and Books can be found based on title, file name or document number. Shelves and InfoCenters can be found based on title and file name. InfoCenters may be found by the title of their Eclipse Document Plug-ins. For examples and guidelines, see "Using the Find Field" on page 41. Unlike the other search types, this can find any Books, PDFs, shelves, or InfoCenters in the Library Server's catalog, even if they are not part of the LibraryCenter.

## Search

To do searches, you will use a Search Bar similar to that shown in Figure 9.



Figure 9. Search Bar

#### To search the entire LibraryCenter

Make sure LibraryCenter is selected in the **In** pull-down, type your search argument into the **Search for** field, and click **GO**.

#### To search the LibraryCenter's shelves, InfoCenters (or its Primary Topics/subtopics), or Books in the LibraryCenter Bookcase

Set the **In** pull-down by selecting the shelf, InfoCenter (or its Primary Topics/subtopics), or Book in the table of contents, type your search argument into the **Search for** field, and click **GO**. For more information, see "Search Request" on page 58

#### To launch a custom search engine such as Google

Select the desired search engine from the **In** pull-down menu, type your search argument into the **Search for** field and click **GO**. An external browser window will be opened using your search argument and the target search engine.

## Advanced Search

For advanced search features, select the **Advanced Search** link from the Search Frame.

Figure 10. Advanced Search Panel

### Topic Filters

The "Topic Filters" column displays when the administrator has chosen not to remove the search\_filters.txt file from the LibraryCenter's directory. The contents of the column can also vary, reflecting the administrator's customization of search\_filters.txt. "Topic Filters" should be allowed to remain enabled when the BookManager Books within the LibraryCenter have been enabled by their authors for filtering. For example, the Books for z/OS V1R10 library have been enabled for filtering. Otherwise, as is the case for most libraries of Books published to date, "Topic Filters" should be disabled by removing the search\_filters.txt file from the LibraryCenter's directory.

When the "Topic Filters" column is enabled and a topic classification is selected in the "Display or Search Topics Classified As" section, a search argument is allowed, but not necessary. In all other cases, you must enter a search argument. Press the "GO" button to perform the search.

### Search Options

For more information on Search Options, see "Searching a Document" on page 58.

## Tips for Authors - Enabling BookManager Books for Search Filters

To enable the topics of a Book for search filters, authors would use BookMaster index tags such as the following examples:

```
:i1 include=SEARCH.ISearchByKeyCmd$d prt
:i1 include=SEARCH.ISearchByKeyCmdhrecall
:i1 include=SEARCH.ISearchByKeyMsgISR0001
:i1 include=SEARCH.ISearchByClassTask
:i1 include=SEARCH.ISearchByClassReference
:i1 include=SEARCH.ISearchByClassConcept
:i1 include=SEARCH.ISearchByClassExample
```

When the index value is prefixed by 'ISearchByKey', the expectation is that the occurrence of that index tag will be unique within a search scope. There are exceptions, as when a command is ambiguous because different products have chosen to use overlapping vocabularies. For the most part, message numbers and command names are presumed to be unique. Whenever a search for a message number or command name in a LibraryCenter results in one shelf containing a hit, the scope of the search will be automatically narrowed to that shelf and repeated. Similarly, when a search for a message number or command name within a shelf results in one Book containing a hit, the scope of the search will be automatically narrowed to that Book and repeated. Within the Book search results, the first topic having a match is automatically opened in the topic frame.

When the index value is prefixed by 'ISearchByClass', the expectation is that the occurrence of that index tag will not be unique within a search scope. The search will not be automatically repeated with narrower scopes. The 'ISearchByClass' prefixed index terms provide a mechanism whereby the indexed topics can be presented as being the same type.

Support of this search filtering mechanism only exists in BookManager Books.



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## Chapter 4. Using the Library Server's Traditional BookServer Interface

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### The BookServer Library

**Description:** The BookServer Library is all the electronic Books, PDFs, shelves, InfoCenters and Bookcases made available over the World Wide Web by an IBM Library Server. Using the traditional BookServer interface, you can access a Book or PDF by finding it in the "Catalog of All Documents", in a shelf, or in a Bookcase by starting with the Library Page. You can also access an InfoCenter from aBookcase, or via the Browse InfoCenter button on the Library Page. The Library page is displayed when you select the library icon from any page in the traditional BookServer interface. You can choose the following items on the Library page:

#### Find field

Allows you to find any cataloged PDF, Book or InfoCenter plug-in, in the Library. Type all or part of a title or name (for example, EPHM2M00), or document number, and choose the **Find** push button. The documents that are found are displayed on the **Catalog of all Documents Page**, see "The Catalog of all Documents Page." To display all cataloged documents in the Library, leave the Find field blank and choose the Find push button. Note, that uncataloged documents are not listed via the Find function.

#### Browse LibraryCenters

This link will display a list of configured LibraryCenters. See "Configuring and Customizing Your LibraryCenter" on page 134 for information on configuring LibraryCenters and updating this list. For more information on the Browse LibraryCenter link, see "Creating a LibraryCenter" on page 88.

#### Browse InfoCenters

Lists InfoCenters, each of which consists of primary topics and subtopics defined by a set of Eclipse Document Plug-ins.

#### Browse Bookcases

Lists Bookcases, which contain shelves and other Bookcases.

#### Browse Shelves (Bookshelves and/or Extended Shelves)

Lists shelves, which contain PDFs and/or Books that have been grouped by special interest.

#### Administration

Displays the Administration page, which is used to manage a Library.

**Help** Provides help for the Library page.

#### Getting Started push button

Links to the online Getting Started document (the document you are reading now), where you can read about Library Server and how to use its features.

#### Product Information push button

Displays product and service level information about Library Server.

### The Catalog of all Documents Page

**Description:** The Catalog of all Documents page lists all cataloged documents in the Library whose titles, names, or document numbers match the information you typed in the Find field on the Library page.

For any catalog list, if both a Book and a corresponding PDF file are present, they will be displayed side by side.

**What is the Catalog of all Documents?** The Catalog of all Documents contains every cataloged Book, PDF, or InfoCenter plug-in in the Library that meets the Find field specification.

**Using the Catalog of all Documents Page:** On the Catalog of all Documents page, you can:

- Open a Book by clicking on its title or icon.
- Display or download a PDF with Adobe Reader or Adobe Acrobat, by clicking on the PDF icon.
- Open an InfoCenter plug-in in the context of a traditional Library Server frameset.
- Look for specific Books, PDFs, or InfoCenter plug-ins in the Catalog. Type all or part of a title, name, or document number in the Find field and choose the Find push button (or press Enter). Library Server looks through the entire catalog, not just the list of documents currently displayed on the Catalog of All Documents page.
- List every document in the Catalog by choosing the Refresh push button.

**Note:** If the library is large (thousands of documents) this may take a few minutes.

#### **Navigation buttons:**

**Library** – Returns you to the Library page

**Shelves** – Takes you to the Shelves page

**Help** – Provides help for the page you are on

**Handheld (connected or disconnected)** – at the administrator's option, takes you to a version of the "Catalog of All Documents" page that is appropriate for clipping for a handheld device. For more information, see Appendix B, "Support for Handheld Devices," on page 139.

#### **Push buttons:**

- **Find** — Displays a list of all documents in the Catalog whose titles, names, or document numbers match the information entered in the Find field
- **Refresh** — Lists every document in the Catalog, grouped by Collection

#### **Columns:**

- **ICONS** — For Book, PDF and InfoCenter plug-in
- **Document Title** — Title of the document
- **Name** — File name of the document or an InfoCenter plug-in identifier
- **Date/Version** — For, InfoCenter plug-ins, the plug-in version. Otherwise, the date the document was created or last updated
- **Document Number** — For InfoCenter plug-ins, the metadata identifier. Otherwise, the document number of the document, if available

**Rows:** Each document meeting the Find criteria is listed. If there is a PDF having a name similar to that of the Book, a PDF icon will be displayed along side the Book icon.

For z/OS, if Books or PDFs are stored in datasets and the dataset is migrated, icons indicating the migrated status will display and allow the datasets to be recalled. Once the recall request is issued, reloading or refreshing the shelf display will poll the completion of the recall request.

**Additional Information:**

- “Using the Find Field” on page 41

## The Bookcases Page

**Description:** The Bookcases page lists the Bookcases available to you through Library Server. A **Bookcase** contains shelves (Bookshelves and/or Extended Shelves), InfoCenters, other Bookcases, or a mix of these. You access the Bookcases page by choosing the *Browse Bookcases* icon on the Library page.

**Using the Bookcases Page:** On the Bookcases page, you can:

- Choose a specific Bookcase to display the shelves, InfoCenters and Bookcases it contains.
- Look for specific Bookcases, InfoCenters and shelves. Type all or part of a Bookcase, InfoCenter, or shelf title or name in the Find field and choose the Find push button (or press Enter). Library Server looks at the titles and names of all the Bookcases in the library and all shelves, and InfoCenters contained within Bookcases. It ignores shelves and InfoCenters not contained within Bookcases. The Bookcases page is redisplayed, presenting the matches found. To restore the original list of Bookcases, choose the Refresh push button.
- Sort the list of Bookcases by title, name, or date. Choose the Sort push button.

**Navigation buttons:**

**Library**—Returns you to the Library page

**Push buttons:**

- **Find**—Displays a list of all Bookcases, InfoCenters and shelves within Bookcases whose titles or names match the information entered in the Find field
- **Sort**—Lets you sort the Bookcases by title, name, or date
- **Refresh**—Restores the original list of Bookcases that appeared before you used the Find field

**Columns:**

- **LibraryCenter Template Icon**—Displays a LibraryCenter “view” of the Bookcase when clicked
- **Bookcase Title**—Title of the Bookcase
- **Name**—File name of the Bookcase
- **Date**—Date the Bookcase was created or last updated

**Additional Information:**

- “Using the Find Field” on page 41

### Sorting the Bookcases

**Description:** You can temporarily rearrange the order in which Bookcases are listed by choosing the Sort push button on the Bookcases page. A form titled *Sort the Bookcases* is displayed to allow you to change the order of the Bookcases.

**How to sort the list of Bookcases:** In the *Sort the Bookcases* form, you can change the order in which the Bookcases are listed according to following elements:

- Title (the default)

- Name
- Date

Choose an element from the list and then choose the Sort push button. The list of Bookcases is redisplayed with the Bookcases sorted by the element you chose.

**Push buttons:**

- **Sort**—Sorts the Bookcases as specified
- **Reset**—Resets the sort order to the default
- **Help**—Provides help for sorting a list of Bookcases

## The Bookcase Page

**Description:** The Bookcase page lists the contents of a specific Bookcase. A **Bookcase** contains shelves (Bookshelves and/or Extended Shelves), InfoCenters, other Bookcases, or a mix of these. You access the Bookcase page by choosing a specific Bookcase from the Bookcases page. (To create a Bookcase, see “Creating a Bookcase” on page 85.)

**Using the Bookcase Page:** On the Bookcase page, you can:

- View a shelf , InfoCenter, or Bookcase by clicking on its title or icon.
- Look for specific shelves, InfoCenters and Bookcases contained within this Bookcase. Type all or part of a Bookcase, InfoCenter, or shelf title or name in the Find field and choose the Find push button (or press Enter). The Bookcase page is redisplayed, presenting the matches found. To restore the original list, choose the Refresh push button.
- Sort the list of shelves, InfoCenters and Bookcases by title, name, or date. Choose the Sort push button.
- Search the shelves and InfoCenters of the selected Bookcase. Search will not search nested Bookcases.

**Navigation buttons:**

**Library** – Returns you to the Library page

**Bookcases** – Returns you to the Bookcases page

**Shelves** – Takes you to the Shelves page

**LibraryCenter Template**—Displays a LibraryCenter "view" of the Bookcase when clicked

**Help** – Provides help for the page you are on

**Handheld (connected or disconnected)** – Takes you to a version of the Bookcase page that is appropriate for clipping for a handheld device. This will be displayed only if the Library Server Administrator has enabled the "Clipping for Handhelds" feature. For more information, see Appendix B, “Support for Handheld Devices,” on page 139.

**Push buttons:**

- **Find** – Displays a list of all the shelves, InfoCenters and Bookcases within this Bookcase whose titles or names match the information entered in the Find field
- **Search** – search the list of shelves and InfoCenters in the Bookcase

- **Sort** – Lets you sort the shelves, InfoCenters and Bookcases within this Bookcase by title, name, or date
- **Refresh** – Restores the original list of shelves, InfoCenters and Bookcases that appeared before you used the Find field

**Columns:**

- **Title**—Title of the shelf, InfoCenter, or Bookcase
- **Name**—File name of the shelf, InfoCenter, or Bookcase

**Bookcase Description:** This information appears at the bottom of the Bookcase page:

- **Name**—File name of the Bookcase
- **Path**—Directory path and filename of the Bookcase
- **Date**—Date when the Bookcase was created or last updated

**Additional Information:**

- “Creating a Bookcase” on page 85
- “Using the Find Field” on page 41

**Sorting a Bookcase**

**Description:** You can temporarily rearrange the order in which items are listed in the Bookcase you are viewing by choosing the Sort push button on the Bookcase page. A form titled *Sort a Bookcase* is displayed to allow you to change the order of the shelves, InfoCenters and nested Bookcases.

**How to Sort the Bookcase:** In the *Sort a Bookcase* form, you can sort the Bookcase by:

- Title (default)
- Name
- Unsorted (Physical order)

Select **Sort by Name**, **Unsorted** or **Sort by Title** and then choose the **Sort** push button. The Bookcase is redisplayed with the items sorted by the element you chose. The default sort order can be changed by the Library Server Administrator.

**Push buttons:**

- **Sort**—Sorts the Bookcase as specified
- **Reset**—Resets the sort order to the default
- **Help**—Provides help for sorting a Bookcase

**Searching a Bookcase**

**Description:** You can do fuzzy (morphological) full text searching across all shelves and InfoCenters in a Bookcase.

**How to Search a Bookcase:**

1. Choose the **Search** push button on a Bookcase page to display the Search case form.
2. Type your search requests in the list box.
3. Choose the **Search** push button to begin the search. The results are displayed in the Bookcase Search Results List.
4. Choose the Shelf or InfoCenter whose title comes closest to the subject in which you are interested. Click on the title or the Shelf or InfoCenter icon to display the Search Results List for that shelf or InfoCenter.

5. The Shelf Search Results List shows a list of documents that have a match for the word or phrase you entered in the "Search term" list box.
  - To view search matches within a Book, select a Book from the Shelf Search Results List by clicking either the Book icon or Book title. A new Search Results List is displayed that shows Book topics that contain your search term. You can now select a topic to view the search matches within the topic. For more information about the "Shelf Search Results List", see the "Shelf Search Results List (Bookshelf and/or Extended Shelf)" on page 39
  - To view search matches within a PDF, select a PDF from the Shelf Search Results list by clicking the PDF icon. Doing so will launch the IBM Advanced Linguistic Search Plug-in, in Adobe Reader, if the PDF is searchable. Otherwise, the PDF will be launched in with the Adobe Reader Find Function.
6. From the InfoCenter Search Results List, select the Primary Topic in which you want to view Search matches by clicking its title. A Search Result List of matching subtopics is displayed, from which a subtopic can be selected to view the matches.

**Push buttons:**

- **Search**—Begins the search
- **Reset**—Clears the search request list box

**Search Request Examples:** For examples of Search Requests that you can specify, see "Search Request Examples" on page 59.

**Additional Information:**

"Shelf Search Results List (Bookshelf and/or Extended Shelf)" on page 39  
"Shelf Search Index" on page 39

**Bookcase Search Results List**

The Bookcase Search Results List is a list of all shelves containing matches from the last Bookcase search you performed.

To view a shelf containing search matches, select the shelf from the list. The selected shelf is opened and a list of the matching Books is displayed in the Shelf Search Results List.

## The Shelves Page

**Description:**The Shelves page lists the shelves (Bookshelves and/or Extended Shelves) and Collections available to you through Library Server. You access the Shelves page by choosing the *Browse Shelves* icon on the Library page.

**Using the Shelves Page:** On the Shelves page, you can:

- Choose a specific shelf to display a list of the documents it contains.
- Look for specific shelves. Type all or part of a shelf title or name in the Find field and choose the Find push button (or press Enter). The Shelves page is redisplayed, presenting the matches found. To restore the original list, choose the Refresh push button.
- Sort the list of shelves and Collections by title, name, or date. Choose the Sort push button.
- View all shelves only, all Collections only, or all shelves and Collections. Choose the View push button.

**Navigation buttons:**

**Library** – Returns you to the Library page

**Handheld (connected or disconnected)** – Takes you to a version of the list of shelves page that is appropriate for clipping for a handheld device. This will be displayed only if the Library Server Administrator has enabled the "Clipping for Handhelds" feature. For more information, see Appendix B, "Support for Handheld Devices," on page 139.

**Help** – Provides help for the page you are on

**Push buttons:**

- **Find**—Displays a list of all shelves whose titles or names match the information entered in the Find field
- **View**—Lets you view all shelves only, all Collections only, or all shelves and Collections
- **Sort**—Lets you sort the shelves by title, name, or date.
- **Refresh**—Restores the original list of shelves that appeared before you used the Find field

**Columns:**

- **Shelf Title**—Title of a shelf or Collection
- **Name**—File name of a shelf or a system assigned name (for example, 4-COLLECTION) for a Collection
- **Date**—Date the shelf was created or last updated.

**Additional Information:**

- "Using the Find Field" on page 41

## Viewing the Shelves

You can decide whether you want the Shelves page to display a list of all shelves only, all Collections only, or all shelves and Collections. Choosing one or the other may shorten the list.

After you select a view, the Shelves page displays *all* shelves or Collections or both, that exist in the library. This happens even if, prior to setting the view, you used the Find field to display a subset of library items.

The view you select only temporarily overrides the default view set by the administrator on the Administration page. The view returns to the administrator defaults the next time you load the Shelves page.

Regardless of the view you select, the Find function operates according to the view set by the administrator. For example, if the administrative setting is Shelves only, and you set the view to both shelves and Collections before using the Find field, the Find function looks for matches only among shelves.

**Changing Your Shelves View:** To select a view:

1. Choose the **View** push button on the Shelves page.
2. On the page titled *Viewing the Shelves*, make a choice in the list box and choose the **View** push button.

**Additional Information:**

- "Using the Find Field" on page 41

## Sorting the Shelves

**Description:** You can temporarily rearrange the order in which shelves are listed by choosing the Sort push button on the Shelves page. A form titled *Sort the Shelves* is displayed to allow you to change the order of the shelves.

**How to sort the Shelves:** In the *Sort the Shelves* form, you can change the order in which the shelves are listed according to following elements:

- Title (the default)
- Name
- Date

Choose an element from the list and then choose the Sort push button. The list of shelves is redisplayed with the shelves sorted by the element you chose.

**Push buttons:**

- **Sort**—Sorts the Shelves as specified
- **Reset**—Resets the sort order to the default
- **Help**—Provides help for sorting a list of shelves

## The Shelf Page (Bookshelf and/or Extended Shelf)

**Description:** The Shelf page displays a list of Books and/or PDFs contained in a shelf or Collection (cataloged or uncataloged). You access the Shelf page by choosing a specific shelf or Collection from the Shelf page. (To create a shelf, see “Creating a Shelf (Bookshelf or Extended Shelf)” on page 81.)

For any shelf, if a companion PDF file is present for any Book on the shelf, a PDF icon is displayed alongside the corresponding Book icon.

**Using the Shelf Page:** On the Shelf page, you can:

- Open a document by clicking on its title. If the document is available in Book format, then the Book is opened. If it is not, then the PDF is opened.
- Open a Book by clicking on the Book icon.
- Open a PDF by clicking on the PDF icon.
- Look for specific Books and/or PDFs. Type all or part of a Book title, name, or document number in the Find field and choose the Find push button (or press Enter). The Shelf page is redisplayed, presenting the matches found. To restore the original list, choose the Refresh push button.
- Sort the list of Books and/or PDFs by title, name, date, or document number. Choose the Sort push button.
- Search all of the documents in the shelf or Collection for specific information.

**Note:** PDFs without either an index or a companion Book are not full text searchable.

- To search these **PDFs**, launch the PDF and use your PDF viewer’s Search/Find facility.

**Navigation buttons:**

**Library** – Returns you to the Library page

**Shelves** – Returns you to the Shelves page

**Handheld (connected and disconnected)** – Takes you to a version of the Shelf page that is appropriate for a handheld device. This will be displayed only if the



Library Server Administrator has enabled the "Clipping for Handhelds" feature. For more information, see Appendix B, "Support for Handheld Devices," on page 139.

**Help** – Provides help for the page you are on

**Push buttons:**

- **Find** – Displays a list of all Books and/or PDFs within this shelf whose titles, names, or document numbers match the information entered in the Find field
- **Search Books** – Allows you to search all of the Books in the shelf for specific information

**Note:** PDFs without a companion Book are not searchable.

- To search a **PDF**, launch the PDF and use your PDF Viewer's Search/Find facility.
- **Sort** – Allows you to sort the list of Books and/or PDFs by title, name, date or document number
- **Refresh** – Restores the original list of Books and/or PDFs that appeared before you used the Find field

**Columns:**

- **ICONS** — For Book, and/or PDFs
- **Book Title** — Title of the document
- **Name** — File name of the document
- **Date** — Date the document was created or updated
- **Document Number** — Document number of the document

**Rows:**

Each Book and/or PDF (cataloged or uncataloged) on the shelf is listed. If there is a PDF with a name similar to that of the Book, the Adobe PDF Icon will appear next to the Book icon.

For z/OS, if the Books or PDFs are stored in MVS datasets and the dataset is migrated, icons indicating the migrated status will display and allow the datasets to be recalled. Once the recall request is issued, reloading or refreshing the shelf display will poll the completion of the recall request.

**Shelf description:** This information appears at the bottom of the Shelf page (if displaying the contents of a shelf, not a Collection):

- **Name**—Name of the shelf
- **Shelf Date**—When the shelf was created or last updated
- **Search Index**—File name of the shelf search index (if any). Books contained in the search index are listed with the indexed Book icon.
- **Index Date**—Date when the shelf search index file (if any) was created
- **Shelf Path**—Directory path and filename of the shelf

**Additional Information:**

- "Creating a Shelf (Bookshelf or Extended Shelf)" on page 81
- "Using the Find Field" on page 41
- "Reading a Document" on page 48

## Sorting a Shelf

**Description:** You can temporarily rearrange the order in which documents are listed in the shelf you are viewing by choosing the Sort push button on the Shelf page. A form titled *Sort a Shelf* is displayed.

**How to sort the Shelf:** In the *Sort a Shelf* form, you can change the order in which the Books and/or PDFs in the shelf are listed according to the following elements:

- Title (the default)
- Name
- Date
- Document Number

Choose a document element from the list and then choose the Sort push button. The shelf is redisplayed with the documents sorted by the element you chose.

**Push buttons:**

- **Sort**—Sorts the shelf as specified
- **Reset**—Resets the sort order to the default
- **Help**—Provides help for sorting a shelf

**Searching a Shelf (Bookshelf and/or Extended Shelf)**

**Description:** You can do fuzzy (morphological) searching across all documents in a Shelf in the Library. PDFs without either an index or a companion Book are not searchable. To search an individual PDF, launch the PDF and use either the IBM Advanced Linguistic Search Plug-in, or the find function, of Adobe Reader, depending upon whether or not the PDF is enabled for the IBM Advanced Linguistic Search Plug-in .

**How to Search a Shelf:**

1. Choose the **Search Documents** push button in a shelf to display the Search shelf form.
2. When searching an Extended Shelf, check or uncheck the check box to indicate whether the search results links for PDF files should be formed to invoke the IBM Advanced Linguistics Search Plug-in. Click on the "Install the Plug-in" link to download and install the Plug-in.
3. Type your search requests in the list box.
4. Choose the **Search** push button to begin the search. The results are displayed in the Shelf Search Results List. If a companion PDF file is present for any Book in the list, a PDF icon is displayed along side the corresponding Book icon.
5. The Shelf Search Results List shows a list of documents that have a match for the word or phrase you entered in the "Search term" list box.
  - To view search matches within a Book, select a Book from the Shelf Search Results List by clicking either the Book icon or corresponding document title. A new Search Results List is displayed that shows Book topics that contain your search term. You can now select a topic to view the search matches within the topic. For more information about the "Shelf Search Results List", see the "**Shelf Search Results List (Bookshelf and/or Extended Shelf)**" on page 39
  - To view search matches within a PDF, select a PDF from the Shelf Search Results list by clicking the PDF icon. Doing so will launch the IBM Advanced Linguistic Search Plug-in, in Adobe Reader, if the PDF is searchable, and the checkbox indicates that the IBM Advanced Linguistics Search Plug-in should be used. Otherwise, the PDF will be launched in with the Adobe Reader Find Function.

**Push buttons:**

- **Search**—Begins the search
- **Reset**—Clears the search request list box

**Check Box:** Use the IBM Advanced Linguistics Search Plug-in for viewing PDF search results. Checking this box causes IBM Advanced Linguistics Search Plug-in to launch when you click on a link to a PDF on the shelf search results page.

**Search Request Examples:** For examples of Search Requests that you can specify, see “Search Request Examples” on page 59.

**Additional Information:**

“Shelf Search Results List (Bookshelf and/or Extended Shelf)”

“Shelf Search Index”

## **Shelf Search Index**

**Description:** A shelf index increases the speed with which you can perform a search across the documents in a shelf. The shelf index is associated with one or more shelves and contains all the words in all the documents that are in those shelves at the time the shelf index is created. (Collections do not have shelf indexes.)

**How a shelf index is created:** To create a shelf index use Library Server V3.1 (or higher, BookManager BUILD/MVS, BookManager BUILD/VM, BookManager READ/MVS, BookManager READ/VM, or BookManager Index Utility for Windows V2.2. Prebuilt shelves acquired from IBM on Collection Kits usually come with shelf indexes.

**Identifying whether a document is in the search index:** Since shelves can be modified after their search index is built, and since some PDFs aren't indexed, shelves can include a combination of documents that are in the search index and others that are not. You can search all Books and indexed PDFs in a shelf, regardless of whether they are contained in the shelf index. If they are contained in the shelf index, however, the search is faster.

When you display a list of documents in a shelf, the document icon for a document contained in the shelf index shows a list, represented by a sheet of paper, behind the document. The icon for a document not contained in the shelf index does not show a list behind the document. Please see PDF icons on page 5 for a complete list of icons used for PDF documents.

Note that PDFs can be contained in the Shelf Search Index, whether enabled for the IBM Advanced Linguistic Search Plug-in or not. Clicking a PDF in the Shelf Search Results list, will launch either the IBM Advanced Linguistics Search Plug-in or the find function for that PDF in Adobe Reader, respectively. Unsearchable PDFs that are not contained in the shelf search index, do not participate in the shelf search function, and are identified as such in the Shelf Search Results List.

## **Shelf Search Results List (Bookshelf and/or Extended Shelf)**

The Shelf Search Results List is a list of all documents containing matches from the last shelf search you performed.

Documents are always displayed in ranked order of importance in the Shelf Search Results List. To view a document containing search matches, select the document from the list. If the document is a Book or searchable PDF, the selected document is opened (via Adobe Reader for PDFs) and a list of the matching topics is displayed in the document Search Results List. If the document is an unsearchable PDF, the find function of the Adobe Reader is launched.

## Searching a Collection

**Description:** You can do exact and fuzzy (morphological) full-text searching of the contents of a Collection.

**How to search a Collection:** Choose the Search Documents button above the title of the first Book in the Collection to display the Collection Search form. In the form, modify one or more of the following:

- Your search request
- Type of Search
- Where to Search
- What to Search (i.e. "PDFs only", "Books only", or the default of "PDFs and Books" on the Collection)

Be sure to indicate in the check box, whether or not you wish to use the IBM Advanced Linguistic Search (ALS) Plug-in for Adobe to automatically display search results within a PDF when it is selected from the Collection Search results list.

**Search Collection of PDFs and BookManager Books** ?

Use the IBM Advanced Linguistics Search (ALS) Plug-in for Adobe to view search results within PDFs. [Install the Plug-in.](#)

Search Collection: *BookManager*

Search term:  
e..der

Type of search: Exact  
Exact, any case  
Fuzzy

Where to search:  
 Topic titles  
 Topic text  
 Indexed words

How to show results: List Topics by Importance  
List Topics in Sequence

What to search:  
 PDFs only  
 BOOKs only  
 PDF and BOOKs

---


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Figure 11. Collection Search Page

Then press the Search push button in the form to begin the search. The search is performed at the server and the results are displayed in the Search Results List, from which you can select any PDF or Book to search for topic matches. Note that for a Collection Search, Library Server can only search PDFs that have been enabled with an IBM ALS search index. All PDFs that are not so enabled are identified as such beneath the Collection Search results list.

**Push buttons:**

- **Search**—Begins the search
- **Reset**—Restores the default values on the Search Document form

**Examples:** For examples of Search Requests that can be specified, see “Search Request Examples” on page 59.

**Additional Information:**

- “Searching a Shelf (Bookshelf and/or Extended Shelf)” on page 38
- “Searching a Document” on page 58

## InfoCenters Page

**Description:** The InfoCenters Page lists the InfoCenters available to you through Library Server. You access the InfoCenters Page by choosing the Browse InfoCenters icon on the Library Page, which is available when the Library Server Administrator has enabled InfoCenter support as described in “Enable Extended Shelf and InfoCenter Support plus Shelf Indexing” on page 96.

**Using the InfoCenters Page:** On the InfoCenters Page, you can:

- Choose a specific InfoCenter to display the Primary Topics it contains.
- Look for specific InfoCenters. Type all or part of a InfoCenter's title, identifier or path in the Filter field and choose the Filter push button. The InfoCenters Page is redisplayed, presenting the matches found. To restore the original list, choose the Reset push button.
- Sort the list of InfoCenters by title, identifier or path. Choose the appropriate column button. When initially displayed the list of InfoCenters is sorted in the order that the InfoCenters are configured on the Manage InfoCenters Page.

**Navigation buttons:**

- Library – Returns you to the Library Page.
- Help – Provides help for the InfoCenters Page.

**Push buttons:**

- Filter – Displays a list of all InfoCenters whose titles, identifiers or paths match the information entered in the Filter field.
- Column buttons – Lets you sort the InfoCenters by title, identifier or path.
- Reset – Restores the original list of InfoCenters that appeared before you used the Filter field. Refreshes the page based on the currently configured InfoCenters.

**Columns:**

- Identifier – Configured Identifiers of the InfoCenters
- InfoCenter Title – Configured Titles of the InfoCenters
- Path – Configured Paths of the InfoCenters

Additional Information: – “Using the Find Field.”

## Using the Find Field

**Description:** A Find field appears on the Library page, Catalog of All Documents page, Bookcases page, Bookcase page, Shelves page and Shelf page. In LibraryCenters, a Find field can be displayed by clicking the Find Documents or Shelves link in the Search Frame. Use the Find field to produce a filtered list of

Book, Shelf or Bookcase titles. For example, on the Shelf page you can look for specific Book and/or PDF titles contained within that shelf. The Find field is useful when there is a long list of items on the page or when the items are not displayed (for example, documents on the Library page).

**How to Use the Find Field:** Type all or part of a title or name (or document number on some pages) and click the Find button (or press Enter). Capitalization is ignored. The Find is done on a combination of the title, file name and document number in that order (where applicable).

**Example and Guidelines:** Suppose you are on the Shelves page with fifty shelves displayed. You wish to find a shelf with this title and name:

**Title:** PSF/MVS & "AFP Viewer" Shelf

**File name:**  
APSBKA02

You remember only part of the title or name. What can you type in the Find field that will provide a list of titles containing the desired shelf?

- Type any single word or part of a word. For example, if you type any of the following, Library Server will display the above shelf and all other shelves that contain these words or word parts:

- **Match:**
  - 02
  - "AF
  - mvs
  - viewer

- Use the question mark (?)—the single-character wildcard—to substitute for a single character anywhere in a word.

- **Match:**
  - A?P
- **Not a Match:**
  - A??P

- Use the asterisk (\*)—the multiple-character wildcard—to substitute for one or more characters anywhere in a word or series of words.

- **Match:**
  - v\*r \*shelf
  - APS\*2

**Note:** When using a wildcard character (\*) to do a find, the results may sometimes be unexpected. For example, if you do a find on M\*K, the above shelf (PSF/MVS & "AFP Viewer" Shelf) would be listed since the "M" appears in the title of the shelf and the "K" appears in the file name of the shelf.

- If you type more than one word of a title, they must be in the correct order. Use the asterisk (\*) to substitute for intervening words.

- **Match:**
  - AFP viewer
  - mvs\* viewer
- **Not a Match:**
  - viewer AFP (words not in correct order)
  - mvs viewer (asterisk not used for intervening words)

**Using Find a Second Time:** You cannot use the Find function to look through a list of items previously found. If you use the Find function a second time, it looks through the entire original set of items.

**Using Find with View:** On the traditional view of the Shelves page, you can choose the View push button to display a list of all shelves only, all Collections only, or all shelves and Collections. The view you select temporarily overrides the default view set by the administrator.

The Find function operates independently of the view you select:

- After you select a view, the Shelves page displays *all* shelves or Collections or both, that exist in the library. This happens even if, prior to setting the view, you used the Find field to display a subset of library items.
- Regardless of the view you select, the Find function operates according to the view set by the administrator. For example, if the administrative setting is shelves only, and you set the view to both shelves and Collections before using the Find field, the Find function looks for matches only among shelves.


## What are Shelves and Collections?

Related documents may be grouped in either a physical shelf or a Collection. (A Collection consists of all the Books or PDFs in a directory.) You can tell a Collection from a shelf by looking at the Name field on the Shelves page. Collections have names like 4-COLLECTION. When a Collection is opened, both cataloged and uncataloged documents are listed; and when selected, uncataloged BookManager Books are automatically cataloged.

A **Collection** is a set of documents located in a single directory. A **shelf** may contain Books and/or PDFs located in several directory paths. Unless you are a Library Server Administrator, these differences are not important. As a user, you can think of a Collection as a kind of shelf (except that Collections are never included in Bookcases). You can view, sort, and search a Collection just as you would a shelf, however a Collection will never have an associated shelf search index. Where the distinction is not important, we will use the term *shelf* to mean both shelf and Collection.

## Personal Bookcases

A Personal Bookcase is a personalized subset of documents from the Library Server catalog. If the Library Server administrator enables the Personal Bookcase function through the Library Server administrative interface, end users have the ability to configure, access and share a Personal Bookcase that includes shelves and documents, as well as InfoCenters, routinely used as personal reference materials.

Personal Bookcase icons  , when clicked, trigger the Personal Bookcase function

If the Personal Bookcase function has been enabled by the Library Server administrator, any end user may trigger the Personal Bookcase function by clicking the Personal Bookcase icon on the **Shelves** page:

## Shelves

Find shelves with titles or names containing:

---

Shelf Title	Name	Date
<a href="#">_Bookshelf containing all BOOKMGR books online at KLM</a>	JIMOD.PMR80510.ALLBOOKS.BKSHELF	
<a href="#">_Bookshelf containing all BOOKMGR books online at KLM</a>	JIMOD.MVSDATA.BOOKMGR.ALLBOOKS.BKSHELF	
<a href="#">Addenda books for PDF testing and BookManager Build 1.3 books.</a>	JIMOD.ALLGOOD.BKSHELF	
<a href="#">Addenda books for PDF testing and BookManager Build 1.3 books.</a>	JIMOD.PDFTTEST.FLAGP.BKSHELF	
<a href="#">Addenda books for PDF testing and BookManager Build 1.3 books.</a>	JIMOD.PDFTTEST.INDEXED.BKSHELF	
<a href="#">Addenda books for PDF testing and BookManager Build 1.3 books.</a>	JIMOD.INDEXED.BKSHELF	
<a href="#">Addenda books for PDF testing and BookManager Build 1.3 books.</a>	JIMOD.PDFTTEST2.BKSHELF	
<a href="#">Addenda books for PDF testing and BookManager Build 1.3 books.</a>	JIMOD.PDFTTEST.BKSHELF	

or by clicking the Personal Bookcase icon on the **Bookcases** page:

## Bookcases

Find shelves or bookcases with titles or names containing:

---

Bookcase Title	Name	Date
<a href="#">Personal Bookcase</a>		
<a href="#">Library Server Documentation</a>	UPPERCASE	03/03/04 11:37:59
<a href="#">Library Server Documentation</a>	lsvcase	03/03/04 11:37:59

Total bookcases = 2

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If the end user has already created a Personal Bookcase, and the associated Personal Bookcase Owner ID is remembered in the user's browser cookies, that user's Personal Bookcase is displayed. If not, the following form is displayed to prompt the end user for the Personal Bookcase Owner ID. It is recommended that the owner's email address be used as the Owner ID when creating a Personal Bookcase. Note that this information is remembered only for as long as the browser cookie in which it is stored persists. If the browser's cookies are manually deleted, or the cookie's persistence is otherwise terminated (some browsers are better than others with respect to cookie persistence) the following form will be re-displayed




and the Personal Bookcase Owner ID will need to be resubmitted.

### Enter Personal Bookcase Owner ID

---

Personal Bookcase Owner ID:  (e.g.,  
user@domain.name)

---

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If the end user has already created a Personal Bookcase, that user's Personal Bookcase is then displayed. If not, the following page is displayed to allow the end user to create a Personal Bookcase:

### Create Personal Bookcase

---


Personal Bookcase Owner ID:

Bookcase Title:  (e.g., Susan's Personal  
Library )

New password:



Confirm new password:

---

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After clicking the Create button, the following **Modify Bookcase** page is displayed for the Personal Bookcase. Note that the list of Shelves or Infocenters from which selections can be made may be filtered on some substring of the shelf or InfoCenter title. In the following example, one shelf has already been added to the Personal Bookcase by the end user:



 **Bookcase: *Someone's Personal Bookcase*** 

Find shelves or bookcases with titles or names containing:

---


Title	Name
 <a href="#">Library Server Demonstration Material</a>	lsrldemo
 <a href="#">Library Server Product Documentation</a>	XKSSAMP


Total shelves and bookcases = 2


Bookcase Description:

Name = someone@us.ibm.com  
 Path = /etc/booksvw/7080/frames/personal/someone@us.ibm.com.bkc  
 Date = 07/13/10 11:49:02

---


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On the example Personal Bookcase page above, note the LibraryCenter Template icon  appearing in the toolbar. By clicking that icon, a LibraryCenter view of the Personal Bookcase is displayed as follows:

Search for:   In:  Filters:  

[Advanced Search](#) [Find Documents or Shelves](#)




Contents	Bookcase Description:
<ul style="list-style-type: none"> <li>Someone's Personal Bookcase</li> <li>Library Server Demonstration Material</li> <li>Library Server Product Documentation</li> </ul>	<p><b>Title:</b> <i>Someone's Personal Bookcase</i></p> <p><b>Name:</b> someone@us.ibm.com</p> <p><b>Path:</b> /etc/booksvw/7080/frames/personal/someone@us.ibm.com.bkc</p> <p><b>Date:</b> 07/13/10 12:16:41</p> <p><b>Number of Shelves:</b> 2</p> <hr/> <p>IBM Library Server Copyright 1989, 2010 IBM Corporation. All rights reserved.</p>

A LibraryCenter view of the end user's Personal Bookcase may also be displayed by clicking the LibraryCenter Template icon  positioned immediately to the left of the newly created Personal Bookcase title which appears atop the list of all other configured Bookcases on the **Bookcases** page as seen below:

 **Bookcases**  


Find shelves or bookcases with titles or names containing:

---

	<u>Bookcase Title</u>	<u>Name</u>	<u>Date</u>
	Someone's Personal Bookcase ( Personal Bookcase )	someone@us.ibm.com	07/13/10 11:49:02
	Library Server Documentation	UPPERCASE	03/03/04 11:37:59
	Library Server Documentation	lsvcase	03/03/04 11:37:59

Total bookcases = 2

---

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End users may share their Personal Bookcase with other users by providing them the URL that underlies the title of the Personal Bookcase in the **Bookcases** page above. However, any update functions for a Personal Bookcase require authentication using the password that has been configured by the owner of that Personal Bookcase. Should the owner forget this password, a Retrieve Password button is available to assist the owner in recovering it.

## Reading a Document

**Description:** BookManager Books and IBM InfoCenters are precompiled electronic documents containing one or more topics, which are similar to chapters in a hardcopy document. In a BookManager Book, and in an IBM InfoCenter authored with character set 8859-1, you can conduct complex searches, navigate throughout the entire document using hypertext links, and links to other documents and external resources.

Library Server looks for documents based on directory paths defined by your server administrator. When you request a document topic, it is served in a Document page to your World Wide Web browser.

Based on a combination of end user preference and administrative setting, the HTML that is served to the browser for a document topic may be frames-based.

If so, each topic is presented within a page consisting of the following frames:

- A topic frame
- A table of contents frame for the document
- A toolbar frame

**Using the Document page:** On the Document page, you will find:

- A toolbar for viewing, navigating, searching, and obtaining help in the document
- Optional document description information
- The content of the current document topic

- Icons at the bottom of the Document page to take you to the previous or next topics (in a framed page, these icons appear only within the toolbar frame which is always frozen in place).
- The security classification of the document. (guaranteed for BookManager Books only).

You can access the document page by choosing a document from:

- A catalog of documents
- A Shelf (BookManager Books only)
- Search or find results
- A hypertext link defined in another HTML document
- The URL address of the document

**What you see when you open a document:** When you open a document without specifying a particular topic, the document's table of contents topic is displayed in the Document page. If a document does not contain a table of contents, or if the table of contents is displayed in its own frame (as is the case for a framed-page), the first topic in the document is displayed.

To navigate within a topic displayed in your World Wide Web browser, use the browser functions available for scrolling. To navigate to other topics in the document, choose a topic from the document's table of contents, take a hypertext link from within a topic, or use the Previous Topic and Next Topic Library Server toolbar icons.

## Book Versions

When more than one copy of a BookManager Book has been placed in the library, Library Server may not be able to accurately identify which copy would satisfy the user's request. More than one copy of a Book (i.e. when the same filename is in more than one directory or dataset) may represent multiple versions of the Book. Different versions of a Book will have different document numbers or build dates.

When Library Server can not uniquely identify which version of a Book is being requested, a list of the versions in the library is presented, from which the user may choose the desired version.

## Navigating through a Document

You can move through a document sequentially or randomly, going directly to a topic or illustration that most interests you.

There are several methods for moving through a document:

### By Topic

Moving through a document topic by topic is the softcopy equivalent of going through a hardcopy document page by page, chapter by chapter. By scrolling through each topic sequentially, you are assured of seeing all the information within the document. Use the Previous Topic and Next Topic toolbar icons to move backwards or forwards through the document sequentially.

### Using the Toolbar

If a table of contents is not already displayed, the toolbar lets you access the table of contents quickly, from which you can pick any topic to read. You can also display a list of revised topics (BookManager Books only), to which you can link. In addition, you can perform searches and request Help directly from the toolbar.

## Linking

Hypertext linking offers you a quick way to get to related information while reading a topic. Link targets can be other locations within the same document, links to other Internet resources, or links to another document. When you link to information by selecting highlighted text or images, you can then return to your place to continue reading by choosing the *Back* button of your World Wide Web browser.

Note that when performing a link to another document from a framed page, a new browser window is launched for the target document.

## Searching

You can search a document for a specific word or phrase. When the list of search results is displayed, you can go directly to the topics containing your word or phrase.

## Linking to Internet Resources

**Description:** Using Library Server's traditional BookServer interface, you can link to Internet resources, display an image from the Internet, or display an Internet image and link from it to an Internet resource in a document.

**Using Internet Resources:** Internet resources that are coded in a document are interpreted by Library Server and translated into HTML when the document topic is displayed. The emphasized text, unlinked image or emphasized image appears in the document topic as defined by the author. You choose the emphasized text or images to link to the Internet resources.

### Examples:

#### Linking to an Internet resource from text

Choose the hot text, which is emphasized, to link to the Internet resource defined by the author. For example, to link to the IBM Home page on the World Wide Web, "click here".

#### Displaying an image inline from the Internet

Images from the Internet can be displayed inline with the document text as defined by the author.

For example, the IBM e-cat "thumbnail" is displayed here.



#### Linking to an Internet resource from an Internet image

Choose the hot image, which is emphasized, to link to the Internet resource defined by the author. The Internet image is displayed in line with the document text. Text around the image can also be hot.

For example,



click on the IBM logo to link to the IBM Home page on the World Wide Web.

**BKMGRURL Special Application Launch Definition (BookManager Books only)** A special application launch object, BKMGRURL, provides portable links to the World Wide Web across BookManager READ platforms. On non-World Wide Web BookManager READ platforms, a program named BKMGRURL must be supplied that starts the World Wide Web browser and passes it the URL from the DATA= parameter.

This special application launch definition, BKMGRURL, is detected in a BookManager Book and automatically converted into a link to the URL specified.

**For Authors: Creating links to Internet resources (BookManager Books Only):**

**Description:** Authors can create links in a BookManager Book to link to Internet resources, display an image from the Internet, or display an Internet image and create a link from it to an Internet resource.

**Using BookMaster tags to create links:** If you are the author of a BookManager Book, you can define links to Internet resources by using the IBM BookMaster tag set and then build the Book with BookManager Build 1.3. When an Internet link is encountered, the link is converted into HTML.

You can use the :LDESC and :DOCDESC BookMaster tags to identify the Internet link object and its target URL address. The URL that represents the address of the object to link to will be specified as the document number in the NUM field of the :DOCDESC tag. The URL that represents the address of the image is specified in the DATA field of the :LDESC tag.

**Example link definitions:**

1. Link from text to an Internet resource

**Link Definition:**

```
:ldesc id=lnk001 docid=lnk001 object=INTERNET objtype=OTHER.  
:docdesc ID=lnk001 num='http://www.ibm.com/'  
:
```

To link to the IBM Home page  
on the World Wide Web, :l lid=lnk001.click here:e1..

**Example link:** To link to the IBM Home page on the World Wide Web, "click here".

2. Link to display an image from the Internet inline with text

**Link Definition:**

```
:ldesc id=lnk002 object=INTERNET objtype=IMAGE  
:docdesc id=lnk002.  
num="http://www.pc.ibm.com/us/images/ecat_thumb2.gif".  
:
```

The IBM e-cat "thumbnail"  
is displayed here :l lid=lnk002. - :e1..

**Example link:** The IBM e-cat "thumbnail" is displayed here.



### 3. Link to an Internet resource from an Internet image

#### Link Definition:

```
:l desc id=lnk003 docid=lnk003 object=INTERNET objtype=IMAGE
data='http://www.ibm.com/i/v11/m/en/lanim.gif'.
:docdesc ID=lnk003 num='http://www.ibm.com/'.
:
```

For example, :l lid=lnk003. click on the IBM logo:el.  
to link to the IBM Home page on the World Wide Web.

**Example link:** For example,



click on the IBM logo to link to the IBM Home page on the World Wide Web.

### 4. BKMGRURL Special Application Launch Definition

#### BKMGRURL Link Definition:

```
:l desc id=lnk004 object=BKMGRURL objtype=PROGRAM data='http://www.ibm.com/'.
:
```

For example, link to the IBM Home page using the  
special application launch **BKMGRURL**  
definition :l lid=lnk004. here:el..

## Linking Between Documents (Cross-Document Linking)

**Description:** Cross-document links look like any other hypertext link, but take you to a different document rather than to a different part of the document you are already in. The mechanisms that enable you to link between documents are provided by the author.

**How the cross-document links work:** For BookManager Books, the author of the Book defines the cross-document link using the target Book's document number to identify that Book as the link target. For InfoCenters, the author defines the cross-document link using the plug-in ID and topic in the target Eclipse Document Plug-in within another InfoCenter.

When you activate a cross-document link, the Catalog of All Books is searched for a matching document number or Plug-in ID. The associated document name is looked up and that document is opened for you. The cross-document link might take you to a topic header, figure, table, question, answer, list item, or series of steps in the other document. Authors can also create links to spot IDs and component items.

**Special note about document numbers in BookManager Books:** Note that an ambiguous cross-document link may result when multiple versions of a document have been placed in the library (see "Book Versions" on page 49) and the document author specifies the link to the document either without a dash level or at a minimum level. When Library Server can not uniquely identify which document is



referred to by the cross-document link, a list of the document numbers in the library is presented from which the user may choose.

**Books you can link to:** Because the Catalog of All Books is searched for document numbers, it is possible to link to any document in the Library, once that document has been cataloged. A document is cataloged when the administrator rebuilds the catalog. An uncataloged BookManager Book is automatically cataloged the first time it is selected from a Collection list.

***For Authors: Creating Cross-Book Links (BookManager Books Only):***

**Description:** Authors of BookManager Books can create cross-Book links using the Book's document number to identify another Book as the link target. These cross-Book links can be made to the entire Book, to a particular topic in the Book, or to specific locations within the Book, such as figures, tables, list items and spots.

**Using BookMaster tags to create cross-Book links:** If you are the author of a BookManager Book, you can create a cross-Book link by using the :LDESC and :DOCDESC BookMaster tags to identify the document number and location in the target Book. The document number of the target Book is specified in the NUM field of the :DOCDESC tag. The location in the target Book to link to is specified on the OBJECT and OBJTYPE field of the :LDESC tag.

**Example cross-Book link definitions:** The following example shows the necessary BookMaster tagging to create a cross-Book link definition to a target Book and samples of how to link to different sections within the Book.

**DOCDESC tag definition:** Use the :DOCDESC tag to specify the document number of the target Book. The ID= attribute identifies this :DOCDESC definition tag when invoking the link in the text of your Book.

```
:docdesc id=xb2 num='SC34-5009'.
```

**LDESC tag definition:** Use the :LDESC tag to specify the location in the target Book to link to. The OBJTYPE= attribute identifies the element in the target Book you are linking to, and the OBJECT= attribute identifies the ID of the element you are linking to. The elements of a Book you can link to include the following:

1. BOOK—Links to Book.
2. HEAD—Links to a topic heading in the Book.
3. FIG—Links to a figure in the Book.
4. TABLE—Links to a table in the Book.
5. LI—Links to a list item in the Book.
6. SPOT—Links to a spot in the Book.
7. QUES—Links to a question in the Book.
8. ANS—Links to an answer in the Book.
9. STEP—Links to a step in the Book.
10. CI—Links to a component item in the Book.

Following is the :LDESC tag coding for each of the previous example elements. In the following tags, the OBJECT= attribute is shown with sample element IDs. You must use the target Books' real element IDs in place of these sample ones:

1. :ldesc id=1k1book docid=xb2 objtype=book.
2. :ldesc id=1k1head docid=xb2 object=head1 objtype=head.
3. :ldesc id=1k1fig docid=xb2 object=fig1 objtype=fig.
4. :ldesc id=1k1tab docid=xb2 object=tab1 objtype=table.
5. :ldesc id=1k1li docid=xb2 object=li1 objtype=li.
6. :ldesc id=1k1spot docid=xb2 object=spot1 objtype=spot.
7. :ldesc id=1k1ques docid=xb2 object=ques1 objtype=ques.

8. :ldesc id=1klans docid=xb2 object=ans1 objtype=ans.
9. :ldesc id=1klstep docid=xb2 object=step1 objtype=step.
10. :ldesc id=1klci docid=xb2 object=ci1 objtype=ci.

**Sample cross-Book link tagging:** To create the cross-Book link in the text of the source Book, you can use the :L tag and specify the ID of the :LDESC tag on the LID= attribute.

The following shows sample tagging to link to the target Book defined in the previous examples:

1. Link to book :l lid=1klbook. here:e1..
2. Link to head1 :l lid=1klhead. here:e1..
3. Link to fig1 :l lid=1klfig. here:e1..
4. Link to tab1 :l lid=1kltab. here:e1..
5. Link to li1 :l lid=1kli. here:e1..
6. Link to spot1 :l lid=1klspot. here:e1..
7. Link to ques1 :l lid=1klques. here:e1..
8. Link to ans1 :l lid=1klans. here:e1..
9. Link to step1 :l lid=1klstep. here:e1..
10. Link to ci1 :l lid=1klci. here:e1..

### Linking to a BookManager Book using a URL (BookManager Books Only)

To link to a BookManager Book in the Library, specify one of the following URLs from your browser or Web document:

```
http://server-addr/bookmgr-cgi/EPHBOOKS/books/bookname/CCONTENTS
http://server-addr/bookmgr-cgi/EPHBOOKS/books/bookname
http://server-addr/bookmgr-cgi/EPHBOOKS/books/bookname/2.0
```

In the above examples, *server-addr* is the name and address of Library Server, for example: *w3.pok.ibm.com*

The first URL opens the Book, specified by *Bookname*, to its table of contents topic. This is designated by the special topic name **/CCONTENTS** at the end of the URL. If left off, as shown in the second URL, the Book opens to the table of contents by default, or to the first topic found, if no table of contents exists, or if the table of contents is displayed in it's own frame (as is the case for a framed-page).

The third URL opens the Book to a specific topic ID, designated by the topic ID at the end of the URL. For example, if you want to open the Book to topic 2.0, you would specify */2.0* for the topic ID at the end of the URL.

#### Additional Information:

- "Linking to Library Server from a Web Document" on page 110

## Using the Toolbar

The toolbar on the Document page contains icon push buttons for viewing, navigating and searching the document. If a function is not available at a particular time, the corresponding icon will not be selectable. The toolbar includes the following buttons:

#### Library Page

Returns you to the Library page.

#### Shelf Page

Returns you to the Shelf page (present for a BookManager Book if it was opened from a Shelf page).

**Frame Mode**

Provides ability to switch between framed and unframed mode for document topics. Initially, the user's default mode is the default mode established by the Library Server administrator. If the mode is switched by the user, the preference is remembered and becomes the user's new default.

**Table of Contents**

Displays the document's Table of Contents topic (present only for unframed document pages).

**Revised Topics List**

Displays a list of topics that have been revised in a BookManager Book.

**Previous Topic**

Takes you to the previous sequential topic from the topic currently displayed.

**Next Topic**

Takes you to the next sequential topic from the topic currently displayed.

**Search**

Starts the Search facility to perform a full text morphological search for information anywhere within the document.

**Search Results List**

Displays the Search Results List from the last search performed.

**Previous Matching Search Topic**

Takes you to the previous topic that contains search matches listed in the Search Results List.

**Next Matching Search Topic**

Takes you to the next topic that contains search matches listed in the Search Results List.

**Create Notes**

Allows you to create a note for a BookManager Book topic (this may be disabled by the Library Server Administrator)

**List Notes**

Lists the notes that are in the BookManager Book.

**Print** Allows you to preview and print BookManager Book topics.

**Download Book**

Allows you to download an entire BookManager Book being viewed to your workstation.

**Download PDF**

Allows you to download or launch an entire PDF depending on your Browser's settings. (If the presence of a companion PDF for the current BookManager Book being viewed is recorded in the Library Server catalog.)

**Handheld Disconnected (BookManager Book Only)**

This will display a handheld enabled version of the topic for use when your handheld is not connected to a network. This will be displayed only if the Library Server Administrator has enabled the "Clipping for Handhelds" feature.

**Handheld Connected (BookManager Book Only)**

This will display a handheld enabled version of the topic for use when your

handheld is connected to a network. This will be displayed only if the Library Server Administrator has enabled the "Clipping for Handhelds" feature.

**Help** Provides Help for reading a document.

### **Revised Topics List (BookManager Book Only)**

**Description:** The Revised Topics List is a list of topics whose content has been flagged as revised by the author. In order for a topic to appear in the Revised Topics list, the author must identify its revised topics with revision symbols.

**Using the Revised Topics List:** Choose the Revised Topics icon on the toolbar to display the Revised Topics List. It is not a topic contained in the Book, but a list that is built when revisions exist in the Book.

**Example:** An author can attach a revision symbol to a topic title or to one or more lines of Book text. Below is an example of a set of text that has been revised. The author has placed a vertical bar (|) revision symbol next to the revised text.

This paragraph is an example of text that contains revisions. The revision character is displayed to the left of this text. In addition, the Revised Topics List button on the toolbar is selectable and this topic appears in the Revised Topics List.

## **Document Topics**

**Description:** Document topics contain elements such as plain text, hypertext links, and imbedded graphics. Topics have headings, like chapters in a hardcopy document. When displayed in the Document page, the topic heading ID (name or number, for BookManager Books only) and the topic title are shown.

The following elements are found in document topics:

### **Table of Contents**

A list of topics contained in a document.

### **Tables**

Data rendered using HTML markup, usually arranged in rows and columns, such as a grid or a spreadsheet layout. If the author specified a table list and there are tables in the document, a Tables topic will exist in the Table of Contents. Certain tables within BookManager Books can not be rendered with HTML markup. These tables are rendered as preformatted data, thus can be larger than the viewing area and require scrolling.

### **Figures**

Preformatted drawings or other illustrations, built into the document. If the author specified a figure list and there are figures in the document, a Figures topic will exist in the Table of Contents. Since figures are preformatted they can be larger than the viewing area and require scrolling.

### **Pictures**

BookManager Books can contain graphics that are compiled into the Book at build time. These are portable across platforms and converted or extracted, as necessary, when the Book topic is displayed. See "Displaying BookManager Pictures (BookManager Books Only)" on page 67 for more information.

### **Internet Images**

You can view Internet images on the Document page. See "Linking to Internet Resources" on page 50 for more information.

## Hypertext Links

Documents can contain hypertext links within topics, between topics, between documents, and to Internet resources.

**Text** Topic text can be either preformatted or be formatted when displayed at the browser. Books built with BookManager Build 1.2 contain preformatted text. Books built with BookManager Build 1.3 and BookManager Build 2.x allow many text elements to be formatted when displayed at the browser, such as tables, paragraphs and lists.

**Notes** For BookManager Books, any comments you make in Book topics are displayed in a list of notes at the bottom of the topic.

## Table of Contents Topic

**Description:** The Table of Contents topic lists the topics defined by the author. In an InfoCenter, a table of contents for the entire InfoCenter is generated by Library Server when the InfoCenter is indexed. The topic identifier is typically *Contents*. If the table of contents exists, you can reach it by choosing the *Table of Contents* icon on the toolbar of the Book page. From a framed Book page, if the table of contents exists, you can display it in a topic frame by choosing the Table of Contents link from the Table of Contents frame. Note that if the administration setting for frames-based document pages as the default is in effect, selecting this link causes the cached copy of the document's table of contents file to be refreshed.

**Using the Table of Contents:** Use the table of contents to view the document's contents and link to other topics in the document. When you choose the Table of Contents icon, available for unframed Document pages, the Table of Contents is positioned to the topic you last viewed, or to the beginning of the Table of Contents if the topic level is not included in the Table of Contents.

For a Table of Contents appearing in an unframed document page of a BookManager Book, you can expand or summarize the table of contents to view subtopics or only main topics. By default, the table of contents is expanded, listing all the subtopics that the author allows. To view only the main topics, click on the word [Summarize] at the top of the table of contents. To switch back to the expanded table of contents, click on the word [Expand].

For framed document pages, the table of contents, if one exists, is always present in it's own frame and appears in tree form with each of the individual topic nodes being independently expandable and collapsible.

Authors can elect to include only a certain level of topics in the Table of Contents. In this case, topic levels not included can be reached by the previous topic and next topic icons, and by hypertext links from the subtopics list at the end of other topics.

**BookManager Book Description:** When a Book is opened to the first topic (usually its cover page), the following Book description information is displayed at the top of the Document Page:

- Title
- Author
- Document number
- Date and time the Book was built
- Build version
- Directory path and filename of the Book

## Searching a Document

**Description:** You can do exact and fuzzy (morphological) full-text searching of the entire contents of a BookManager Book, an IBM InfoCenter authored with character set 8859-1, or an Adobe PDF that has been enabled for the IBM Advanced Linguistic Search Plug-in. To search a PDF that has been so enabled, please visit [http://www.ibm.com/support/entry/portal/Overview/Software/Other\\_Software/BookManager\\_Product\\_Family](http://www.ibm.com/support/entry/portal/Overview/Software/Other_Software/BookManager_Product_Family) to download the IBM Advanced Linguistic Search Plug-in and usage instructions.

**How to search a Book:** From the traditional interface, choose the Search icon on the toolbar of a Book topic to display the Search Book form. In the form, modify one or more of the following:

- Your search request
- Type of Search
- Where to Search
- How to Show Results

Then choose the Search push button in the form to begin the search. The search is performed at the server and the results are displayed in the Search Results List, from which you can select a Book topic to view the matches.

For information on how to search a shelf, see “Searching a Shelf (Bookshelf and/or Extended Shelf)” on page 38

**How to search an InfoCenter:** From the traditional interface, while viewing an InfoCenter, choose the Search icon on the toolbar of any document topic page to display the Search InfoCenter form. In the form, modify one or more of the following:

- Your search request (i.e. the search string)
- Search Scope radio button [i.e. Search Current topic and subtopics or Search (entire) InfoCenter]
- Type of Search (i.e. fuzzy, exact or exact without case sensitivity)
- Where to Search (i.e. topic title, topic contents and/or indexed terms within topic)
- How to Show Results (i.e. ranked by importance or sequentially)

Then choose the Search push button in the form to begin the search. If a search of the current InfoCenter topic and its subtopics is requested, the search is performed at the server and the results are displayed in the Search Results Topic List, any one of which can be selected to view the matches. If a search of the entire InfoCenter is requested, the search is performed at the server and the results are displayed in the Search Results Primary Topic List, any one of which can be then be selected to display the Search Results Topic List for the selected Primary Topic, and its subtopics.

**Push buttons for searching a Book or InfoCenter:**

- **Search**—Begins the search
- **Reset**—Restores the default values on the Search Document form

**Examples for searching a Book or InfoCenter:** For examples of Search Requests that can be specified, see “Search Request Examples” on page 59.

### Search Request

A search request contains the words or expressions you want to find.

You can enter a single word, a phrase, or a combination of words and phrases. In addition, you can include wildcards, and search operators to create Boolean expressions, to group expressions together, or to treat search operators as literal characters.

When searching an InfoCenter, the scope of the search can be narrowed to the current topic and subtopics, in addition to topic title, topic text and indexed words.

When fuzzy searching, morphology is performed on the search term as well as the document content to ensure that all forms of the search term appearing in the specified document scope are highlighted. This means, for example, that for search term "elder," any occurrences of "old" and "oldest" appearing in the Book will be highlighted, even if the word "elder" itself does not appear in the Book.

### Search Request Examples

The following examples illustrate the different types of Search Requests you can specify:

#### **animal**

Search for the existence of the single word *animal* in any topic.

#### **my animal farm**

Search for the existence of the phrase *my animal farm* in any topic.

#### **my animal farm, dog**

Search for the existence of the phrase *my animal farm* or the word *dog* in any same topic, using a comma to separate one or more words or phrases from each other.

#### **\*dog\***

Search for words that contain the letters *dog* using the asterisk (\*)—the multiple-character wildcard—to substitute for one or more characters anywhere in a word. In this example, *\*dog\** would find matches such as *doghouse*, *dogcatcher*, *dogma* or *Reddog* if any one of them existed in any topic.

#### **c?t**

Search for three-letter words that begin with the letter *c* and end with the letter *t* using the question mark (?)—the single-character wildcard—to substitute for a single character anywhere in a word. In this example, *c?t* would cause search to find matches on such words as *cat*, *cot*, or *cut* if any one of them existed in any topic.

#### **lion & tigers**

Search for the existence of both the word *lion* **and** the word *tigers* in any same topic.

#### **cat | dog**

Search for the existence of either the word *cat* **or** the word *dog* in any same topic.

#### **opossum ! sleep**

Search for the existence of only the word *opossum* **but not** the word *sleep* in any same topic.

#### **(cat | dog) ! tigers**

Search for the existence of either the word *cat* **or** *dog*, **but not** *tigers* in any same topic using parentheses—grouping operators—to group together words or phrases to change the order of precedence of the search. In this example, a match will occur if either *cat* exists without *tigers* or if *dog* exists without *tigers*, in any same topic.

### cat '&' mouse | kitten's fur

Search for the phrase *cat & mouse* or the phrase *kitten's fur* using single quotes—the AS IS operator—to prevent special characters from being treated as search operators. In this example, the ampersand (&) and the apostrophe (') are treated as regular characters.

**Exception:** When a single-quote (or apostrophe) character is part of a search request, as in *kitten's fur*, it is only necessary to add one single quote to treat it as an apostrophe.

## InfoCenter Search Scope

This scope is unique to searching an InfoCenter document. It is indicated by selecting one of two radio buttons. The first is the default selection which indicates that the current topic and its subtopics are to be searched. Selecting the second radio button indicates that the entire InfoCenter is to be searched.

## Type of Search

The **Type of Search** options determine how closely a word or phrase in the Book text must correspond to your search request. This allows you to narrow or broaden the number of matches you can receive from your search request.

The following types of searches are offered:

- Exact
- Exact, any case
- Fuzzy (the default)

**Exact** An exact-match search finds exactly the words you type in your search request, including capitalization. The word order must be the same and no additional words can intervene. Spaces typed between words in the search request are not significant, however.

**Examples:** The following shows which Book text matches the search request phrase *my forest cottage*:

- **Match:**
  - *my forest cottage*
- **Not a Match:**
  - *My forest cottage*
  - *my enchanted-forest cottage*
  - *my enchanting cottage in the forest*
  - *my cute new enchanting little three-bedroom yellow forest cottage*

### Exact, any case

This is treated the same as the Exact option, except the search ignores capitalization, treating uppercase and lowercase letters identically.

**Examples:** The following shows which Book text matches the search request phrase *my forest cottage*:

- **Match:**
  - *my forest cottage*
  - *My forest cottage*
- **Not a Match:**
  - *my enchanted-forest cottage*
  - *my enchanting cottage in the forest*
  - *my cute new enchanting little three-bedroom yellow forest cottage*

**Fuzzy** A fuzzy-match search (the default) will find the following types of matches for your search request:

- Exact matches, regardless of case



- Different morphological forms of the search request words and document content (different endings, tenses, capitalization, punctuation, singular versus plural)
- Resequenced words in your search request
- Up to five intervening words between the individual words of a phrase in your search request.

**Examples:** The following shows which Book text matches the search request phrase my forest cottage:

- **Match:**

- *my forest cottage*
- *My forest cottage*
- *my enchanted-forest cottage*
- *my enchanting cottage in the forest*

- **Not a Match:**

- *my cute new enchanting little three-bedroom yellow forest cottage*

**Examples:** The following shows how morphology is used for fuzzy-matching :

- **As applied to search argument:**

- *if the words 'old' and 'oldest' appear in the document they will be listed as search hits for search term 'elder'.*

- **As applied to document content:**

- *if the words 'elder' and 'oldest' appear in the document they will be listed as search hits for search term 'old'*

## Where to Search

The **Where to Search** options determine what areas of a Book will be searched for matches when performing a search. The different areas of a Book that can be searched are:

### Topic titles

Searches the text of all topic titles

### Topic text

Searches the text in all topics

### Indexed words

Searches the list of indexed entries

You can select these options in any combination, but at least one area must be selected. All areas are selected by default. Select the areas of the Book you want searched and choose the Search push button.

## How to Show Results

The **How to Show Results** option determines the order in which topics containing search matches will be sorted when listed in the Search Results List. The options available are:

### List Topics by Importance

Lists topics in ranked order of probable importance. Topics most likely to contain the information you are looking for are listed first. This is the default option.

### List Topics in Sequence

Lists topics sequentially as they occur in the Book, with no attempt to rank them. This option is faster because the topics are not ranked and sorted.

You can select only one **How to Show Results** option. Select the way you want topics sorted and choose the Search push button.

## Search Results List

**Description:** The Search Results List is a navigator listing all the topics containing matches from the last search you performed.

The order in which topics are sorted when displayed in the Search Results List is determined by the **How to Show Results** option on the Search form. If you selected **List Topics by Importance** on this form, topics are ranked by the probable importance of the matches. Otherwise, topics are listed sequentially as they appear in the Book.

**Viewing Search Matches:** To view a topic containing search matches, select the topic from the Search Results list. The selected topic is displayed, the matching search words in the topic text are emphasized, and you are positioned to the first matching word in the topic. You can navigate between topics with search matches by choosing the Previous Matching Search Topic and Next Matching Search Topic toolbar icons. To return to the Search Results list, choose the Search Results List toolbar icon.

**Note:** If searching an entire InfoCenter, selecting a Primary Topic from the initial Search Results List displays a secondary list of search results that contains the topic hits within the selected Primary Topic.

### **Ranking Search Results:**

The probable importance of search matches and ranks topics is determined based on the following factors, listed in order of decreasing importance:

#### **Location**

Matches are likely to be of greater value if they occur in certain parts of the Book. For example, matches found in Indexed words rank highest, followed by matches in Topic titles, and then matches in the Topic text.

#### **Frequency**

Topics with the most matches rank highest. When the request contains more than one search word or phrase, frequency also depends on how many words or phrases match.

#### **Exactness**

Exact matches, including exact capitalization of letters, rank highest. Matches that differ only in capitalization rank next, followed by matches that share the same root.

#### **Distinctness**

Matches for words or phrases that occur in only a few topics rank higher than matches that occur frequently throughout the Book. For example, if you search for the word *cats* and the phrase *Siamese cats*, matches for *Siamese cats* rank higher than matches for *cats*. In this example, the added qualifier *Siamese* to *cats* makes the phrase more distinct than the word.

Also, when two or more topics contain the same number of matches, shorter topics, topics with less text, rank higher than longer topics.

#### **Sequence similarity**

Search matches on phrases are ranked according to their similarity to the search phrase. For example, matches on a search for the forest cottage might rank as follows:

1. *The forest cottage* (identical sequence)
2. *the enchanting forest cottage* (identical sequence, with one insertion; contains three search-phrase words)

3. *forest cottage* (identical sequence, with one deletion; contains only two search-phrase words)
4. *cottage in this forest* (reverse sequence, with one deletion; contains only two search-phrase words)

### Order of Precedence

The order of precedence of search operators defines the order in which the search operators are processed.

Search operators are listed below from highest to lowest order of precedence. Those of equal order are listed together and are processed from left to right.

1. Wildcard characters: \*, ?; phrase separator: ,
2. **AS IS** operator: ' ' (two single quotes)
3. Grouping operators: ( )
4. Boolean BUT NOT: !
5. Boolean AND: &
6. Boolean OR: |

For example, to change the default order of precedence of the Boolean search request *A & B ! C*, so that A and B are processed first, put the parentheses around A & B as follows: *(A & B) ! C*.

## Creating Notes in Book Topics (BookManager Books Only)

**Description:** If the Administrator has enabled the *Permit Note Creation* option, you can make comments in Book topics by creating notes that are appended to the end of each topic. The notes you create are not private. They are shared with anyone else who reads the Book.

You can tell if a topic contains notes if the topic title has a note icon next to it. You click on the note icon to read the notes listed in a table at the end of the topic.

### How to Create a Note

To create a note in a Book:

- For Library Server Traditional view – on the Tool Bar, click on the **Notes** icon.
- For a LibraryCenter – on the Tool Bar, click on **Create Note for This Topic**.

The Notes form appears.

1. Type your note in the text window.
2. Enter your name (optional)
3. Enter your e-mail address (optional)
4. Choose the **Add** push button.

You are returned to the topic you added the note to. The note icon now appears next to the topic title. Click the note icon to view your note (and notes of other users) appended at the end of the topic. You can also scroll to the bottom of the topic to view the notes.

### To add more notes to the topic:

1. Either click **Add Notes** link at the bottom of the notes table, or:
  - For Library Server Traditional view – on the Tool Bar, click on the **Notes** icon.
  - For a LibraryCenter – on the Tool Bar, click on **Create Note for This Topic**.

2. On the **Notes** form, enter your next note as before. (Name and e-mail address are optional.)
3. Choose **Add** and your new note is appended to the previous note at the end of the topic.

## Viewing All the Notes in a Book (BookManager Books Only)

To view a list of all the notes contained in a Book, choose the List of Notes icon from the toolbar. The *Notes for Book* page appears, listing all the notes by topic that have been created for the Book.

To go to a topic, click the hot topic title.

## Deleting Notes (BookManager Books Only)

### Description:

Using an administration password, you can delete the notes in a specific topic, in an entire Book, and in all Books in your library. You cannot delete individual notes.

### Deleting notes within a topic:

1. To delete the notes for a topic, choose **Delete These Notes** at the bottom of the topic, following the notes.  
A confirmation message appears, asking you to confirm that you want to delete all the notes in the topic.
2. Enter your administration password and click the **Delete Notes** push button. The notes are deleted and you are returned to the topic.
3. If you decide not to delete the notes, click your browser back button to return to the topic.

### Deleting all notes in a Book:

You can delete all the notes for a Book from the *Notes for Book* page.

1. To delete all the notes for a Book, choose the List of Notes icon to list the notes that are in the Book.
2. At the bottom of the list, click the **Delete These Notes** push button.  
A confirmation message appears, asking you to confirm that you want to delete all the notes in the Book.
3. Enter your administration password and click the **Delete All Notes** push button. All the notes in the Book are deleted, and you are returned to the topic from which you started.
4. If you decide not to delete the notes, click your browser back button to return to the topic.

### Deleting all notes in all Books:

You can delete all the notes in every Book of the library from the Administration page.

To delete all the notes for every Book in the library,

1. On the Administration page, enter your administration password and choose the **Delete All Notes** push button at the bottom of the page.  
A confirmation message appears, asking you to confirm that you want to delete all the notes in every Book in the library.

2. Click **Yes**, to delete all the notes. You are returned to the Administration page.
3. If you decide not to delete the notes, click **No**.

### **Deleting Notes—Confirmation**

Confirm that you want to delete all notes in the topic or Book by entering your password and pressing the push button to delete the notes.

If you decide not to delete the notes, click your browser back button to return to the notes.

## **Printing Book Topics (BookManager Books Only)**

**Description:** The Print Preview facility allows you to format one or more selected topics of the Book you are reading for previewing in your browser. You can then use the print facility of your browser to produce a hardcopy document of the selected topics.

Alternatively, if the Book has a companion PDF, the PDF can be downloaded and viewed with Adobe Reader or Adobe Acrobat, or printed using the Adobe print function.

**How to use Print Preview:** While viewing any topic in a Book, choose the Print icon in the toolbar to preview one topic or several topics. The **Library Server Print Preview** page appears, on which you can specify the topics you want to preview and print. For a framed page the print dialog is launched in a new browser window. For a non-framed page, the current window is used.

### **To preview and print one or more topics in a Book:**

1. Select the topic or topics you want to preview and print from the **Select topics** list.

**Note:** Some browsers may preselect the first item in the list. If you do not want that item selected, click it to deselect it. Also, with some browsers, you need to press and hold the Ctrl key in order to select non-consecutive items.

2. To preview and print any notes contained in the topics, check **Include Book notes**.
3. Choose the **Selected topics** push button.  
The topics you selected are displayed for you to preview. If you included notes, you will see a note icon next to the topic titles that have notes. These notes will be printed.  
If you decide that you don't want to print a topic after previewing it, use your browser back button to return to the Print Preview page, deselect the topic in the list, and choose the **Selected topics** push button as before.
4. To print, select the print option on your browser.

All subtopics within a topic are included in the output, even subtopics that do not appear in the table of contents. For example, the Book's author may have chosen not to display fourth-level subtopics (such as 3.1.4.2) in the table of contents, but those subtopics will be included in the print preview and printed copy.

### **To preview and print current topic:**

1. To preview and print any notes contained in the topic, check **Include Book notes**.

2. Choose the **Current topics** only push button.  
The current topic is displayed for you to preview.
3. To print, select the print option on your browser.

**To preview and print all topics in a Book:**

1. To preview and print any notes contained in the Book, check **Include Book notes**.
2. Choose the **All topics** push button.  
All topics in the Book are displayed for you to preview. If you included notes, a note icon appears next to topics that contain notes.
3. To print, select the print option on your browser.

**Push buttons:**

**Current topic only**

Displays the topic you were viewing at the time you selected the print icon.

**Selected topics**

Displays the topics that you select in the list box for you to preview before printing them.

**All topics**

Displays all the topics in the Book for you to preview before printing them.

**Reset** Deselects topics previously selected in the list box.

**Check box:**

**Include Book notes**

When checked, includes any notes that the Book contains when you print it.

**About your printout:** What you see when you preview your printout is what you see when it is printed. The following information is included at the top of your printout:

**DOCNUM**

The document number of your Book

**DATETIME**

The date and time the Book was created

**BLDVERS**

The version of the BUILD product used to create the softcopy Book

**TITLE** The title of the Book

**AUTHOR**

The author of the Book

**COPYR**

The Book's copyright information

The printed output is very close to the author's original intent, but it is not an exact reproduction. Any pictures in your Book appear inline with the text. The toolbar, footer, and copyright statement displayed at the bottom of each topic in the online Book are not included in your printout.

## Displaying BookManager Pictures (BookManager Books Only)

**Description:** Pictures are graphics that are built into a BookManager Book by an author using a BookManager BUILD product. They are portable across platforms and converted, if necessary, when the Book topic is displayed. Pictures may exist in a BookManager Book as vector, bitmap or mixed types. Newer BookManager Books (V1.3.1 Build) also contain pictures in Web-ready format (for example JPEG, GIF or PNG).

Library Server for z/OS supports pictures in both the newer and older versions BookManager Books.

**Viewing BookManager Pictures:** When you display a topic, the BookManager pictures are converted, if necessary, into the GIF format and displayed inline within the topic text, scaled as needed. You can view a non-scaled version of a picture in its own separate page by clicking on the inline picture.

Pictures in newer BookManager Books are extracted directly from the Book, without conversion, and integrated into the topic text.

To improve performance, as a picture is displayed, it is cached at the server in its Web-ready format in a special folder called the "picture cache."





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## Chapter 5. Managing Your Library Server

As an administrator, you can organize your library in a way that makes it easy for your users to get quickly to the information they need. Library Server provides the elements you need to organize any library, small or large. In this section of the document, we describe in detail what these elements are and how to use them effectively.

Once you have decided on a plan of organization, you can proceed to create your library. Most of the work of creating and maintaining a library can be done via the Library Server administrative functions. We show you how to use the Administration page to create and modify shelves and Bookcases, create LibraryCenters, manage InfoCenters, build/rebuild the library catalog, log Book access requests, generate diagnostic output, and perform other administrative tasks.

Finally, we explain how you can customize the product headers and footers, and—for administrators or others who manage a Web site or own a Web document—how to create links from a Web document to the Library Server.

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### Organizing Your Library

The elements of Library organization include Collections of Books, PDFs, shelves, InfoCenters, search indexes, Bookcases and LibraryCenters. As a user, you are familiar with at least some of these. In this section, we discuss them in the context of helping you as an administrator decide how to organize your library most effectively.

### Shelves, Bookcases and LibraryCenters

**Shelves** are a means for grouping related Books and/or PDFs so that users can find information quickly. For example, documents on employee benefits can be grouped on a shelf called "Benefits." An employee interested in medical coverage can choose the "Benefits" shelf from a list of shelves on various topics. This is a faster way of finding the information than having to browse through a long list of unrelated documents. There are two types of shelves, Bookshelves and Extended Shelves. Both may contain Books, but only Extended Shelves can be used to manage PDFs that do not have a companion Book.

Related shelves and InfoCenters can be grouped into a **Bookcase**. For example, all the shelves with employee information (benefits, personnel policies, legal regulations, and so on) could be grouped into one Bookcase, separate from a Bookcase that contains, say, shelves of product manuals. Bookcases can also include other Bookcases.

For very large libraries, this technique of hierarchical organization aids not only the search for information but also helps prevent delays caused by displaying long lists of Books or shelves.

For example, you could organize 3000 documents into 300 shelves, each containing 10 documents on average. However, a list of 300 shelves may be overwhelming to a user. So you might organize the 300 shelves into 20 Bookcases. Now, if you choose one Bookcase from a list of 20, you might see a list of 15 shelves. When you choose one of the shelves, you may see a list of 10 documents. Starting at the top of the hierarchy ensures smaller lists and, therefore, optimum performance.

Internally, a shelf is a single file (with extension .bks or .xks) containing a list of Book file names, locations, and descriptions. A Bookcase is a text file (\*.bkc), but instead of containing a list of Books or PDFs, it contains a list of shelves, InfoCenters (see “InfoCenters” on page 71), and/or other Bookcases.

**Note:** A LibraryCenter displays shelves and InfoCenters within a single Bookcase, but does not display any Bookcases within the LibraryCenter Bookcase. You may organize your library to display Bookcases in a list (see “The Bookcases Page” on page 31), or as a separate LibraryCenter for each Bookcase, or any combination thereof. Bookcases associated with LibraryCenters are included in the list of Bookcases.

Additional information:

- “Creating a Shelf (Bookshelf or Extended Shelf)” on page 81
- “Creating a Bookcase” on page 85
- “Creating a LibraryCenter” on page 88

## Collections and Shelves

When you create or update a Library, you copy the Books and PDF (binary files) into one or more directories and then identify those directories to Library Server so it knows where to find these documents. Each set of Books and PDFs in a directory is called a **Collection**. In contrast to a shelf, which is a single file describing one or more binary Books and/or PDF files which may reside in any number of different directories. A Collection is a single directory and all of the binary Book files and PDFs it contains.

It is possible to put all of the Books and PDFs in your Library into a single large Collection. However, like shelves, Collections can be used as a means of grouping related documents. For example, a collection of employee benefits publications could be grouped in the /usr/lpp/booksrv/books/benefits directory. A collection of legal documents might reside in the /usr/lpp/booksrv/books/legal directory.

To a user, the difference between a Collection and a shelf may not be apparent. On the Shelves page, both Collection descriptions and shelf titles are listed in the Shelf Title column. You can click on the description or title to display a list of documents in the Collection or shelf. You can sort or search both shelves and Collections. But shelves offer some advantages that impact the user and are important in helping you as an administrator decide how to organize your library.

- A shelf may contain Books and/or PDFs that physically reside in several directory paths. For example, if the manuals for various products reside in separate Collection directories, you could create a shelf that logically groups all of the user guides, taking one from each directory.
- The same Book or PDF can be included in more than one shelf. Since there need be only one physical copy of the Book or PDF, this assures that both shelves include the same copy.
- Shelves can make use of shelf search indexes to provide high performance searching.
- Shelves make your library organization easily portable to other BookManager platforms. Some BookManager platforms do not recognize Collections as a way of organizing a library.
- Extended Shelves may include PDFs, as well as Books.
- Extended Shelves containing PDFs can make use of search indexes to provide high performance searching.

## Shelf Search Indexes

One of the special advantages of shelves is that you can create a shelf search index to provide fast searching through an entire shelf. (You cannot create a search index for a Collection.) The shelf search index file contains all the words in all the documents on a shelf. The name of the index file is included in the shelf file.

Library Server can search the documents on a shelf without using a shelf search index, but the search is slower. Without a shelf search index, Library Server opens and searches each document separately, rather than searching a single index file. This method is satisfactory for occasional searching. However, if you expect your users to search a shelf often, you should consider building a shelf search index.

Shelf search indexes are shipped with Collection Kits for IBM products. To create your own search indexes, use the Library Server Administration Window or BookManager Shelf Indexer, which you can download from our Web site at [http://www.ibm.com/support/entry/portal/Overview/Software/Other\\_Software/BookManager\\_Product\\_Family](http://www.ibm.com/support/entry/portal/Overview/Software/Other_Software/BookManager_Product_Family).

### Additional Information:

- “Searching a Shelf (Bookshelf and/or Extended Shelf)” on page 38
- “Shelf Search Index” on page 39

## InfoCenters

An InfoCenter is a Collection of one or more Eclipse Document Plug-ins packaged in a way that represents one or more major document topics and associated subtopics. Typically, each Primary Topic in an InfoCenter is implemented by an Eclipse Document Plug-in which may, or may not, incorporate other Eclipse Document Plug-ins.

Eclipse Document Plug-ins are authored and packaged into an InfoCenter by IBM. In many cases, an Eclipse Document Plug-in is built to represent the content that is typically contained in a Shelf, however, the plug-in may be built to represent a smaller unit of content (e.g. a BookManager Book).

InfoCenter support in Library Server is optional, but requires 31-bit Java 6 (5655-R31) or 31-bit Java 7 (5655-W43) be installed at the server. To enable it, the "Enable Extended Shelf and InfoCenter Support, plus Shelf Indexing" Library Server administrative checkbox must be checked. Doing so requires that XML Toolkit 1.10 (5655-J51) be installed.

Library Server does not provide administrative functions to create or modify InfoCenters, as it does for Shelves and Cases.

Eclipse Document Plug-ins consist primarily of Dita XML and zipped or loose HTML components. An InfoCenter consists of one or more Eclipse Document Plug-ins, each packaged as a directory containing the XML and HTML parts, or as a .jar file containing the XML and HTML parts. For example, a DB2 InfoCenter of directory-based Eclipse Document Plug-ins might look like the following on HFS:

```
/u/libraryserver/infocenters/db2/com.ibm.db2.doc.inst_8.1.3/plugin.xml, insttoc.xml, doc.zip,...  
...../com.ibm.db2.doc.admin_8.1.2/plugin.xml, admintoc.xml, doc.zip,...  
...../com.ibm.db2.doc.java_8.1.2/plugin.xml, javatoc.xml, doc.zip,...  
...../com.ibm.db2.doc.mc_8.1.3/plugin.xml, mctoc.xml, doc.zip,...  
:  
:  
etc.
```

A DB2 InfoCenter of jar-based Eclipse Document Plug-ins might look like the following on HFS:

```
/u/libraryserver/infocenters/db2/com.ibm.db2.doc.inst_8.1.3.jar
...../com.ibm.db2.doc.admin_8.1.2.jar
...../com.ibm.db2.doc.java_8.1.2.jar
...../com.ibm.db2.doc.mc_8.1.3.jar
:
:
etc.
```

When configuring an InfoCenter via the Manage InfoCenters page (see “Managing InfoCenters” on page 91), the Location field should be the fully qualified plug-in directory or jar file for the "root" plug-in of that InfoCenter. Typically the "root" plug-in is the one which contains the plugin\_customization.ini file. So in the case of the DB2 InfoCenter above, if the plugin\_customization.ini file resides in the com.ibm.db2.doc.inst\_8.1.3 plug-in, its Location field should be configured as /u/libraryserver/infocenters/db2/com.ibm.db2.doc.inst\_8.1.3 or /u/libraryserver/infocenters/db2/com.ibm.db2.doc.inst\_8.1.3.jar depending on whether the DB2 InfoCenter is directory-based or jar-based

Note that when copying an InfoCenter to z/OS, it must be transferred to the HFS file system in binary mode (e.g. when you FTP the contents of an InfoCenter from a Collection DVD to z/OS, everything must be FTP'd as binary, even the HTML files).

## InfoCenter Search Indexes

Similar to that for Shelves, Library Server provides an administrative function to index InfoCenters (see “Managing InfoCenters” on page 91). Unlike for previous releases, the InfoCenter indexing function now consists of the following three distinct steps, each associated with a button on the Manage InfoCenters administration page:

1. **Prepare InfoCenter Eclipse Document Plug-ins.** This function creates an index for each of the InfoCenter's individual Plug-ins. It also creates a cached table of contents (TOC) and catalog entries for the InfoCenter and its plug-ins. After having been received, these cached TOC and catalog entries allow the InfoCenter to be found, viewed and navigated.
2. **Receive InfoCenter Eclipse Document Plug-ins.** This function copies and tailors the catalog entries and cached TOCs, produced in the prepare step, into the Library Server catalog and into configured Frames directory, respectively.
3. **Create InfoCenter Index.** This function creates a single InfoCenter-wide search index and ancillary files necessary to enable searching of the InfoCenter.

Separating these steps enables Library Server to support InfoCenters whose plug-ins are previously prepared (i.e. pre-indexed). If so, it is not necessary to run the Prepare step after having configured such an InfoCenter. Since the Rebuild Catalog administrative function automatically runs the Receive step for all configured InfoCenters, it is not necessary to run the Receive step for an InfoCenter's plug-ins if the catalog has been rebuilt after the InfoCenter has been configured and its plug-ins prepared. However, in order to enable InfoCenter searching, a valid InfoCenter search Index **must** be built by the administrator via the Create InfoCenter Index function, since an InfoCenter index is never pre-packaged with an InfoCenter.

Running the InfoCenter indexing-related processes on the Manage InfoCenters page (see “Managing InfoCenters” on page 91) creates an indices/ subdirectory in the parent directory of the root plug-in that is configured as the Location of the InfoCenter. The Create InfoCenter Index process aggregates the indexes associated with the InfoCenter's individual Eclipse Document Plug-ins into a single

InfoCenter-wide (.bki) index file, which contains all the words appearing in all the Eclipse Document Plug-ins for the InfoCenter.

## Scenarios for Library Organization

Now that you understand more about the elements of library organization (Collections, shelves, InfoCenters, Bookcases, and LibraryCenters), here are some possible scenarios for organizing your Library. Here, we focus on Collections and shelves. Of course, if you have shelves and InfoCenters, you can also create Bookcases. If you have Bookcases, you can also create LibraryCenters.

### One Collection, Multiple Shelves

One way to organize a Library is to place all documents (Books and/or PDFs) into a single Collection directory and then use shelves to group them. This is especially convenient if you have prebuilt shelves for an IBM product. Other advantages to this organization:

- By maintaining a single directory, you avoid the problem that sometimes occurs in large libraries managed by several people, of duplicate out-of-date documents appearing in some of the directories.
- Shelves are easily portable to other BookManager platforms. Some BookManager products do not recognize Collections as a method of library organization.

**Note:** Extended Shelves are not supported by all BookManager products.

- You retain the other advantages of shelves—the ability to create shelf search indexes and to have the same documents on more than one shelf.

Performance delays can result when a user displays a single large Collection. If you organize your library this way, you can eliminate Collections from the default user view by choosing the **Shelves only** option under **Settings** on the Administration page. Then choose the Save Settings push button.

### Multiple Collections, No Shelves

Another way to organize your library is to distribute documents among several Collection directories and not use shelves at all. You can easily modify a Collection by adding or removing documents from the directory path. However, you lose the advantages of shelves, Bookcases, and LibraryCenters.

### Multiple Collections and Shelves

You can use both methods in combination. For example, you could put the documents for several products into a single large Collection directory, and then create a shelf for each product. But for other Collections, such as a small collection of documents of personal interest, you might decide not to create shelves at all.

---

## Creating a Library

Once you have decided how you want to organize your Library, you can create the necessary directory paths, copy files to them, set the appropriate security authorizations, identify the directory paths to Library Server, and then create shelves and Bookcases and manage InfoCenters.

### 1. Create Directories

Create directory paths for your Collections, shelves, InfoCenters, and Bookcases. You do this *outside* of Library Server.

*Examples:*

Path name	Library Server Access
/u/test/books	read, search
/u/test/shelves	read, search
/u/test/cases	read, search
/u/test/InfoCenters	read, search

## 2. Copy Files to Directories

Copy your Book and/or PDF files into the directory you created for Collections. Be sure that each Book file has the .boo extension. If you wish to include equivalent PDFs for Book files on your Library, see “Special Considerations for Supporting Equivalent Book and PDF Documents in Your Library” on page 75.

If you have prebuilt shelves (\*.bks and/or \*.xks) and shelf search indexes (\*.bki) shipped with an IBM product, copy those files into your shelves directory. Copy prebuilt Bookcases (\*.bkc) into your Bookcases directory. You can also copy shelf search indexes (\*.bki), into the Collections directory.

Copy your Eclipse Document Plug-ins into the appropriate InfoCenter directories.

You can copy files in one of several ways:

- Use Softcopy Librarian (Softcopy Librarian does not support InfoCenters)
- Load the file directly onto the Library Server server machine.
- Use your host emulator file transfer system.
- Use a file transfer program (FTP).

Upload Bookshelves (\*.bks) and Bookcases (\*.bkc) as ASCII files. Upload Books (\*.boo), PDFs (\*.pdf), Extended Shelves (\*.xks), and shelf search index (\*.bki) files as binary. For InfoCenters, upload all Eclipse Document Plug-in components as binary files.

For z/OS, for information about copying documents stored in datasets, see “Using Library Server with MVS Data Sets (on z/OS)” on page 77.

## 3. Set Security Authorizations

The security authorization for documents, shelves, InfoCenters, Bookcases, and search indexes must allow all clients to read the files or data sets. Otherwise, security alerts will be generated when users try to reference files or datasets that they are not allowed to see.

In addition, shelves and Bookcases must be set to write mode in order for you to modify them.

**Note:** For z/OS, in order to use Library Server to modify shelves located in MVS data sets, you must first copy them to HFS files. See “Using Library Server with MVS Data Sets (on z/OS)” on page 77.

Whenever you create shelves or Bookcases, the appropriate mode settings are automatically set. However, whenever you copy files to a directory, make sure that the mode settings are sufficient to satisfy the security authorization requirements. Use the following settings:

<b>File</b>	<b>Library Server Access</b>
PDF (*.PDF)	read
book (*.boo)	read
shelf (*.bks or *.xks)	read, write
shelf search index (*.bki)	read
bookcase (*.bkc)	read, write
Eclipse Doc Plug-in Components	read

#### **4. Identify Directories to Library Server**

Use the Administration page to identify the directories you created to Library Server, and to include in the library catalog the Books and PDFs that you copied to Collection directories. To get to the Administration page, choose the Administration push button on the Library page.

Follow all of the steps listed under “Settings, Paths and Names” on page 93. Be sure to save settings and then rebuild the catalog.

#### **5. Create Shelves and Bookcases**

Now that you have catalogued all of your Books and PDFs copied to Collection directories, you can create shelves and Bookcases for them at any time. You create shelves and Bookcases from the Administration page. Choose the Create Shelf, or Create Bookcase push button. Once shelves and Bookcases are created, you can update them in the future by choosing the Manage Shelves or Modify/Delete Bookcases push buttons respectively.

#### **6. Create PDF Search Indexes**

PDFs can be enabled with a search index used by the IBM Advanced Linguistic Search Plug-in for Adobe. To create such searchable PDFs, use the "Manage Document Indexes" button on the Administration Page .

#### **7. Create Search Indexes for a Shelf**

When creating a new shelf or managing an existing shelf, after you have finished adding documents to the shelf, you may create or replace its index by pressing the "Index" button.

For more information on how to create or modify shelves and Bookcases, see “The Administration Pages (using the traditional HTML-based user interface)” on page 79.

#### **8. Manage InfoCenters**

Assuming InfoCenters can be accessed by the Server, and each has its own unique root directory, they can be identified to the Library Server via the Manage InfoCenters administrative function. Using the same function, InfoCenters Plug-ins can be prepared and received, and a full InfoCenter search index can be created.

---

## **Special Considerations for Supporting Equivalent Book and PDF Documents in Your Library**

There are several ways to manage PDFs in your library.

- Place all your PDF files in directories you specified as "Directories for Book Collections," or in a corresponding peer directory called PDF. Create Extended Shelves (\*.xks) containing the PDFs and be sure the Extended Shelves are located in directories you specified as "Directories for Shelves." When you build the Library Catalog, these PDFs will be cataloged and will be handled in similar fashion as Books.
- The Library Server administrator can indicate an equivalence between a BookManager Book version of a document and an Adobe PDF version of a document. The administrator indicates this equivalence by doing two things. First, the administrator names the PDF file similarly to the Book file. In the case of documents distributed by IBM, this means preserving the similarity in the names shipped by IBM.

Second, the administrator places the PDF file near the Book file. When the Book is stored in an HFS file, this means that the PDF can be stored in the same directory as the Book or in a peer directory named "pdf."

For z/OS, when the Books are stored in an MVS dataset, this means that the PDF file can be stored in an MVS dataset or in the first directory in the Library Server "Document Collections" directory list configuration value which is specified on the administration page.

For example, when a Book is stored in /u/os390/r10/books/docname.boe, the PDF can be stored in either /u/os390/r10/books/docname.pdf, or in /u/os390/r10/pdf/docname.pdf.

Alternatively, for z/OS, if the Book is stored in an MVS dataset named OS390.R10.DOCNAME.BOOK, the PDF can be stored in either OS390.R10.DOCNAME.PDF, or in /u/books/docname.pdf where "/u/books" is the first directory in the "Document Collections" configuration value.

Support for PDF documents without a corresponding Book..

- Library Server V3.1 introduces Catalog support for PDFs without a corresponding BookManager Book. PDF architecture provides for the inclusion of information about the document in the PDF. Title and author, for example, are standard fields within all PDFs. IBM will also include and use an "Identifier" field. The value of this field represents the document number or part number of the IBM publication. These metadata fields are extracted from the PDF and used in the Library Server Catalog. Unfortunately, since these fields have not been used in the past, by document management systems such as Library Server, many publishers, including IBM have not been careful to correctly enter the values of these fields. Library Server provides a command line tool to update these fields within the PDF so that a Library Administrator can correct the values. PDFs of architecture Version 1.2 through 1.6 are supported.
- Library Server V3.1 introduces Search support for PDFs that don't have a corresponding BookManager Book. The Document Indexer function of Library Server V3.1 provides the mechanism to create and insert document Search indexes into PDFs. PDFs without corresponding BookManager Books must contain a document search index to enable the Search function for them.

---

## Updating Your Library

You update your Library in much the same way that you created it. You can add Books and/or PDFs to new or existing Collection directories, add new shelf, InfoCenter and Bookcase directories, and create or modify shelves and Bookcases as your library expands. Here are some important points to keep in mind:

- Whenever you create, rename, or delete directories for Collections, shelves, InfoCenters, or Bookcases, you must update the Administration page, or the



Manage InfoCenters page. Make your changes in the appropriate list boxes and then choose the Save Settings push button.

- If you update the list settings on the Administration page or if you add, delete, or replace objects within one of the existing directories in a list, you will then need to rebuild the catalog by choosing the Rebuild Catalog push button on the Administration page. (See “Building the Catalog (BookManager Books, PDFs and Shelves)” on page 97.) New or changed InfoCenters should have their plug-ins prepared and received before creating a full search Index for the InfoCenter. Plug-in preparation is accomplished by using the "Prepare" button on the Manage InfoCenters page. Receiving plug-ins is accomplished by either using the "Receive" button on the Manage InfoCenters page or by rebuilding the catalog (which automatically receives prepared plug-ins for all configured InfoCenters). Note that rebuilding the catalog also clears all cached picture files, table of contents files which may have become invalid, and other cached files.

---

## Using Library Server with MVS Data Sets (on z/OS)

Books, shelves and shelf search indexes created with the BookManager BUILD/MVS or READ/MVS products are stored in MVS data sets.

### Keeping BookManager Objects in MVS Data Sets

If you have many BookManager data objects (documents, shelves, and shelf search indexes) stored in MVS data sets, you may prefer not to copy them to HFS files. It is possible to use Library Server with MVS data sets, but you lose some administrative capability.

#### What you can still do

- Users can still use Library Server to access documents and shelves stored in MVS data sets.
- You can also create Bookcases and add shelves to them by manually editing the Bookcase files.
- You can continue to use READ/MVS to manage Books that users access through MVS data sets.
- You can catalog Books and/or PDFs contained in MVS data sets. While not mandatory, cataloging MVS data set Books and PDFs enables you to access them through the "Catalog of All Documents" page and to use the "find documents in the catalog" function to locate the Books and PDFs using titles, names or document numbers. In the context of a LibraryCenter, when Books and PDFs stored in MVS data sets are cataloged, they can be accessed via the "Find Books or Shelves" function.
- You can not support InfoCenters having components in MVS data sets.

#### What you can't do

- You can't use Library Server to add or remove Books or PDFs from shelves that reside in MVS data sets.
- You can't use Library Server to create or replace indexes for shelves that reside in MVS data sets.

## Copying MVS data sets to HFS

When adding MVS data sets to your library, follow the same basic procedure described under “Creating a Library” on page 73: create your HFS directories (or use existing ones), copy the MVS data sets to HFS, verify security authorizations, and identify your directory paths to Library Server.

To copy MVS data sets to HFS files, use the OPUT or OCOPY commands. Be sure to specify the *binary* parameter when copying Books, PDFs, and shelf search indexes.

**Example:** The following command copies a Book from an MVS data set named EOX.EOX01MST.BOOK to an HFS file named *eox01mst.boo*:

```
oput 'EOY.EOX01MST.BOOK' '/usr/lpp/booksrv/books/eox01mst.boo' binary
```

For more information about the OPUT and OCOPY commands, type `tso help oput` or `tso help ocopy`, at an ISPF command line and press ENTER. To get help from a TSO/E READY prompt, type the same commands without the preceding `tso`.

## Adding Shelf Data Sets to a Bookcase

You can create Bookcases and then manually edit them to include shelves, (but not InfoCenters), that are stored in MVS sequential datasets:

1. Create a directory path for the Bookcase. You do this *outside* of Library Server.
2. Identify the Bookcase directory path on the Administration page. (See “Settings, Paths and Names” on page 93) To get to the Administration page, choose the Administration push button on the Library page.
3. Create the Bookcase from the Administration page. Remember the directory path in which the Bookcase was created.
4. Manually edit the Bookcase. For each shelf that you are adding to the Bookcase, insert a line in the following format:

```
SHELF DataSetName Title
```

where *DataSetName* is the fully qualified data set name of a BookManager BkShelf or:

```
XKS DataSetName Title
```

where *DataSetName* is the fully qualified data set name of an Extended Shelf.

5. Save the file.

It is possible for the same Bookcase to list both HFS files and sequential data sets. You can use the Administrator page to add or remove HFS shelves (Choose the Modify/Delete push button on the Administration page). You can also use the Administrator page to remove (but not add) shelves stored in data sets.

**Example of Edited Bookcase File:** In this example, the Bookcase file lists both a data set name, and an HFS file name.

```
BKCASE=novels  
BKCTITLE=Project Gutenberg - Classic Novels  
BKCDATETIME=01/30/97 10:12:43  
SHELF IBMBOOKS.SK2T1237.EDCCC002.BKSHELF C/C++ for MVS/ESA V3R2.0 Shelf  
SHELF gutnbrg2 Classic Novels Shelf 1
```

or:

```
BKCASE=novels  
BKCTITLE=Project Gutenberg - Classic Novels  
BKCDATETIME=01/30/97 10:12:43  
XKS IBMBOOKS.SK2T1237.EDCCC002.BKSHELF C/C++ for MVS/ESA V3R2.0 Shelf  
XKS gutnbrg2 Classic Novels Shelf 1
```

---

## The Administration Pages (using the traditional HTML-based user interface)

**Description:** The Administration page presents all of the administrative functions and settings needed to manage a Library. To use administrative functions and update settings you must enter an administration password. The settings apply to all clients.

**Using the Administration Page:** Following is a list of administrative functions and settings presented on the traditional HTML-based Administration page. For more detail, link to the section you are interested in. For information on the newer Java-based administrative pages, see “The Administration Pages (using the Java-based user interface)” on page 98.

### **Shelf, InfoCenter, Bookcase, LibraryCenter, and Document Index Management**

The Administration Password entry field on this panel is only for the other functions on this panel. An Administration Password entry field will be provided on a subsequent panel for the Shelf, InfoCenter, Bookcase, LibraryCenter, and Document Index Management functions.

#### **Create Shelf (Bookshelf or Extended Shelf)**

Lets you create a new shelf.

#### **Manage Shelves (Bookshelf or Extended Shelf)**

Lets you add Books and/or PDFs to, or remove Books and/or PDFs from a shelf, build a shelf index, or delete a shelf.

#### **Create Bookcase**

Lets you create a new Bookcase.

#### **Modify/Delete Bookcase**

Lets you add or remove shelves or nested Bookcases from a Bookcase, or delete a Bookcase.

#### **Create a LibraryCenter**

Lets you create a new LibraryCenter with one of three templates and a Bookcase.

#### **Manage Document Indexes**

Lets you introduce and refresh IBM Advanced Linguistic Search capability in PDF documents.

#### **Manage InfoCenters**

Lets you configure (i.e. add) InfoCenters, delete InfoCenters, prepare InfoCenter plug-ins, receive InfoCenter plug-ins and create full search indexes for InfoCenters

#### **Administration Password**

The password required to perform administrative functions or update administrative settings below.

#### **Push Buttons**

#### **Save Settings**

Saves changes you made in any of the boxes on the Administration page.

#### **Rebuild Catalog**

Updates the library catalog, and clears all BookManager caches.

**Clear Cache**

Removes cached picture files from the picture cache, and cached table of contents files from the frames cache and any other Library Server cached files.

**Delete All Notes**

Deletes all notes from every Book in the library.

**Reset** Displays settings as they appeared when the Administration page was last loaded.

**Settings, Paths and Names****Enter directories for document Collections**

The directories in which the product looks for Books and PDFs, and shelf search index files. Any Book or PDF, whether accessed as part of a Collection or a shelf, must be in one of the directories listed here. Unless they reside in MVS datasets, see “Using Library Server with MVS Data Sets (on z/OS)” on page 77.

**Enter descriptive document Collection names**

Enter a descriptive name for each Collection of Books and/or PDFs. Descriptive Collection names are displayed on the Shelves page.

**Enter directories for shelves**

The directories in which the product looks for shelves to serve to the client.

**Enter directories for Bookcases**

The directories in which the product looks for Bookcases to serve to the client.

**Shelf View**

You can set one of the following as the default view on the Shelves page. Users can temporarily override the default by choosing the View push button on the Shelves page.

**Collections only**

When selected, displays only Collections as the default view on the Shelves page.

**Shelves only**

When selected, displays only shelves as the default view on the Shelves page.

**Collections and Shelves (default)**

When selected, displays both Collections and shelves as the default view on the Shelves page. (Default after install.)

**Bookcase Display**

Changing the Bookcase Display changes the default ordering of a Bookcase’s contents. These options are available:

- Unsorted, in physical order
- Sort by name
- Sort by title (default)

**Options****Permit note creation**

When checked, allows users to create notes in any Book.

**Log Book access requests**

When checked, requests for Book access are logged.

**Generate diagnostic output**

When checked, diagnostic output is generated in the [ ].dbg file.

**Present frames-based EUI for documents as default**

When checked, the traditional BookServer interface generates Book pages in frames mode as the default, which can be overridden by client preference. This has no effect on the LibraryCenter interface.

**Produce running IBM footer**

When checked, generates running IBM footer on most pages in traditional BookServer interface and the LibraryCenter interface.

**Permit clipping for handheld**

When checked, allows the user to do clipping for a handheld device.

**Enable Extended Shelf and InfoCenter Support plus Shelf Indexing**

When checked, Extended Shelf functions and InfoCenter functions are available to all clients, as well as Bookshelf Indexing.

**Display Java-based Administrative Interface**

When checked, every time the Library Server Administration function is run, the Java-based administrative interface described in “The Administration Pages (using the Java-based user interface)” on page 98 is displayed instead of the traditional HTML-based user interface.

**Permit Personal Bookcases for End Users**

When checked, the Personal Bookcase functions described in “Personal Bookcases” on page 43 are enabled for end users.

**Password****New password**

To change your administrator password, enter your new password.

**Confirm new password**

Retype your new password to confirm the change.

## Creating a Shelf (Bookshelf or Extended Shelf)

**Description:** Use the Create a Shelf page to make a new shelf. The new shelf is initially empty when you create it.

**To create a shelf:**

1. If Extended Shelf Support is enabled, you will need to select the type of shelf to create:
  - Extended Shelf (Books and PDFs)
  - Bookshelf (Books only)By default, Extended Shelf is selected.
2. Choose the **Create Shelf** push button. Then, on the Shelf and Bookcase Management page, enter the administration password.
3. In the Shelf Name field, enter a name for your shelf.
4. Select a path in which to create your shelf from the > Shelf Path list.
5. In the Shelf Title field, enter a descriptive title for your shelf.
6. If you are working with a shelf search index to speed searching, indicate the file name of the search index in the shelf Index field.

The shelf search index file must be located in the shelf or Collection path that you specified.

The security authorization for this file must be set to read. For all but the Windows platform, this is done by setting the mode to 644. (For z/OS, see also “Using Library Server with MVS Data Sets (on z/OS)” on page 77.)

7. Press **Create**. The Modify Shelf page appears so you can add documents to your new shelf.

**Fields:**

**Shelf Type**

Select the type of shelf to create — Extended Shelf (default), or Bookshelf. If Enable Extended Shelf Support is not checked on the Administration Page, the Extended Shelf choice will be disabled.

**Shelf Name**

Enter the name for the shelf you are about to create.

**Shelf Path**

Select the path in which your shelf will reside. The path selection list corresponds to the paths already entered on the Administration page.

**Shelf Title**

Enter a descriptive title for your shelf.

**Shelf Index**

Optional. Enter the file name of the shelf search index.

**Push buttons:**

**Create**

Creates your shelf and takes you to the Modify Shelf page where you can add Books and/or PDFs to it

**Reset** Clears the entry fields

## Managing Existing Shelves (Bookshelf or Extended Shelf)

**Description:**

Use the Manage Existing Shelves page to modify a shelf or to delete shelves. When modifying a shelf, you can add or remove Books and/or PDFs and you can build an index for the shelf.

In order to modify a shelf, the security authorization for the shelf file must be set to write. In addition, all clients must be able to read any of the shelves found in the shelf path on all but the Windows platform. These requirements are satisfied by setting the mode to 666. The appropriate mode is set automatically when you create a shelf. You should verify the mode setting for any shelf files that were copied to a directory.

For z/OS, Library Server can only modify shelves located in HFS files. In order to use Library Server to modify a shelf stored in an MVS data set you must first copy it to an HFS file. As an alternative, you can use READ/MVS to maintain Bookshelves (not Extended Shelves) located in MVS data sets. (See “Using Library Server with MVS Data Sets (on z/OS)” on page 77.)

**To modify, delete or index shelves:**

1. On the Administration page, choose the **Manage Shelves** push button. Then, on the Shelf and Bookcase Management page, enter the administration password.
2. On the Manage Existing Shelves page, select the single shelf you want to modify or index, or select one or more shelves you want to delete.
3. To delete the selected shelves, choose the **Delete** push button. The selected shelves are deleted, but the documents contained in the shelf are not removed from your system.
4. To modify the shelf, choose the **Modify** push button.

## Modifying a Shelf

### Notes:

1. For the remainder of this section, if you are modifying an Extended Shelf, "document" refers to Books and PDFs. If you are modifying a Bookshelf, then "document" refers to only Books.
2. If you have selected multiple shelves in the shelf list box and then you press the **Modify** push button, only the first selected shelf will be processed.

### Description:

You can add or remove documents from your shelf. Removing documents from a shelf does not erase them from your system. The document files still exist in their directory paths.

The security authorization for document files must allow all clients to read all documents found in a Collection path. Also, allow read and search access to the Collection directory.

For z/OS, you can only add documents located in HFS files. In order to add documents stored in MVS data sets, you must first copy them to HFS files. (See "Using Library Server with MVS Data Sets (on z/OS)" on page 77.)

### To remove documents:

Select one or more documents from the list box on the Modify Shelf or Modify Extended Shelf page and press the **Remove** push button.

**Note:** Some browsers may preselect the first item in the list. If you do not want that item selected, click it to deselect it. Also, with some browsers, you need to press and hold the Ctrl key in order to select non-consecutive items.

### To add documents to a shelf:

In the drop down selection box, select the directory path containing the documents you want to add, (the eligible paths are specified in the **Enter directories for Collections** box on the Administration page) and press the **Add** push button.

### Push Buttons:

#### Remove

Removes the selected document from the shelf but does not erase it from your system

#### Add Documents

Takes you to a page containing a selectable list of documents from the

selected path to add to your shelf. On the "Modify Extended Shelf page" this button takes you to a list of documents from Library Server's Catalog of All Documents. Select one or more formats (PDF or Book) of the documents on this page.

**Index** Starts the index building process to create or replace an index for this shelf. A shelf index can be used to reduce response time for searches of shelves with a large number of documents especially when a relatively small number of matches are found.

**Modify (Modify Extended Shelf Page only)**

Takes you to a page where you can change the shelf's description of the document and/or change which formats of the document are present on the shelf, if you have the same document installed in more than one format (e.g. Book and PDF).

**Adding Documents to a Shelf**

To add documents to your shelf, select one or more documents from the list and press the **Add Documents** push button.

**Note:** Some browsers may preselect the first item in the list. If you do not want that item selected, click it to deselect it. Also, with some browsers, you need to press and hold the Ctrl key in order to select non-consecutive items.

**Push Buttons:**

**Add Documents**

Adds to your shelf the documents you select in the list.

**Cancel**

Returns you to the Modify Shelf page without adding any selected documents to your shelf.

**Indexing a Shelf**

To create or replace the index file for the shelf you have selected to modify, press the index button on the Modify Shelf or Modify Extended Shelf page which creates a new shelf index in the directory where the shelf is located. Replacing a shelf index file will overwrite the existing index in the directory where it is found. Indexing a shelf with a large number of documents can be a long running process that may cause the web page response to time out.

**Note:** The ShelfIndexer.README documents the use of ShelfIndexer.cmd. This shell script can be used to avoid problems with web page timeouts and to index or re-index Bookshelves stored in MVS datasets.

**Deleting Shelves—Confirmation Page**

Deleting a shelf erases the shelf but not the documents that were placed in the shelf. They still exist in their directory paths.

Choose **Yes** to confirm that you want to delete the listed shelves.

Choose **No** if you decide not to delete the listed shelves. You are returned to the Manage Existing Shelves page.

## Creating and Indexing Shelves via the Command Line Interface

**Description:**



Please refer to the Shelf Indexer Readme file (default location is /usr/lpp/booksrv/cgi-bin directory) for instructions on how to create and index shelves using the Shelf Indexer via the command line interface.

## Creating a Bookcase

### Description:

Use the Create a Bookcase page to make a new Bookcase. The new Bookcase is empty when you create it.

To create a Bookcase:

1. On the Administration page, choose the **Create Bookcase** push button. Then, on the Shelf and Bookcase Management page, enter the administration password.
2. In the Bookcase Name field, enter a name for your Bookcase.
3. Select a path in which to create your Bookcase from the Bookcase Pathlist.
4. In the Bookcase Title field, enter a descriptive title for your Bookcase.
5. Press **Create**. The Modify Bookcase page appears so you can add shelves and nested Bookcases to your new Bookcase.

### Fields:

#### Bookcase Name

Enter a name for the Bookcase you are about to create.

#### Bookcase Path

Select the path in which your Bookcase will reside. The path selection list corresponds to the paths already entered on the Administration page.

#### Bookcase Title

Enter a descriptive title for your Bookcase.

### Push buttons:

#### Create

Creates your Bookcase and takes you to the Modify Bookcase page where you can add shelves, InfoCenters and nested Bookcases

**Reset** Clears the entry fields so you can enter new information

## Modifying or Deleting a Bookcase

### Description:

On the Modify or Delete a Bookcase page, you can modify a Bookcase by adding or removing shelves (Bookshelves and/or Extended Shelves), InfoCenters and nested Bookcases, or you can delete a Bookcase.

In order to modify a Bookcase, the security authorization for the Bookcase file must be set to write. In addition, all clients must be able to read any of the Bookcases found in the Bookcase path. For all platforms except Windows, these requirements are satisfied by setting the mode to 666. The appropriate mode is set automatically when you create a Bookcase through Library Server. You should verify the mode setting for any Bookcase files however, that were copied to a directory.

For z/OS, only shelves, InfoCenters, and Bookcases located in an HFS file can be added to a Bookcase through Library Server. To add a shelf or Bookcase stored in

an MVS data set, you must manually edit the parent Bookcase file. (See “Adding Shelf Data Sets to a Bookcase” on page 78.) InfoCenters are always located in an HFS file system.

**To modify or delete a Bookcase:**

1. On the Administration page, choose the Modify/Delete Bookcase push button. Then, on the Shelf and Bookcase Management page, enter the administration password.
2. On the Modify or Delete Bookcase page, select the parent Bookcase you want to delete or modify.
3. To delete the Bookcase, select it and then choose the **Delete** push button. The Bookcase is deleted, but the shelves, InfoCenters and nested Bookcases contained within the Bookcase are not removed from your system.
4. To modify the Bookcase, choose the **Modify** push button.

**Modifying a Bookcase**

**Description:**

You can add shelves, InfoCenters and nested Bookcases to a Bookcase, and you can remove them. Removing shelves, InfoCenters and nested Bookcases takes them out of the Bookcase but does not erase them from your system.

**To remove shelves, InfoCenters and nested Bookcases:**

Select the shelves, InfoCenters or Bookcases you want to remove from the list box on the Modify Bookcase page and press the **Remove** push button.

**Note:** Some browsers may preselect the first item in the list. If you do not want that item selected, click it to deselect it. Also, with some browsers, you need to press and hold the Ctrl key in order to select non-consecutive items.

**To add shelves, InfoCenters and nested Bookcases:**

1. For shelves and Bookcases, in the entry field type the directory paths containing the shelves, and Bookcases you want to add. The eligible paths should be specified in the list boxes titled Enter directories for shelves and Enter directories for Bookcases on the Administration page. Use a semicolon to separate these items.
2. To add shelves, choose the **List Shelves on Path** push button. A list of shelves that reside on the specified path list appears.
3. To add Bookcases, choose the **Add Bookcases** push button. A list of Bookcases that reside on the specified path list appears.
4. To add InfoCenters, choose the **List Configured InfoCenters** push button. A list of InfoCenters that have already been configured to Library Servers via the Manage InfoCenters administrative function are listed. It is not necessary to enter any directory paths for Listing Configured InfoCenters via this dialog.

**Adding Shelves to Your Bookcase**

Select one or more shelves from the list and press the **Add** push button.

**Note:** Some browsers may preselect the first item in the list. If you do not want that item selected, click it to deselect it. Also, with some browsers, you need to press and hold the Ctrl key in order to select non-consecutive items.

You are returned to the Modify Bookcase page, which now lists the shelves you have selected as being in your Bookcase.

**Push buttons:**

**Add** Adds the selected shelves to your Bookcase and returns you to the Modify Bookcase page

**Cancel**

Returns you to the Modify Bookcase page without adding shelves to your Bookcase

**Adding Nested Bookcases to Your Bookcase**

Select one or more Bookcases from the list and press the **Add** push button.

**Attention:** Nested Bookcases are ignored when the Bookcase is used in a LibraryCenter.

**Note:** Some browsers may preselect the first item in the list. If you do not want that item selected, click it to deselect it. Also, with some browsers, you need to press and hold the Ctrl key in order to select non-consecutive items.

You are returned to the Modify Bookcase page, which now lists the Bookcases you have selected to nest as being in your Bookcase.

**Push buttons:**

**Add** Adds the selected Bookcases to your Bookcase and returns you to the Modify Bookcase page

**Cancel**

Returns you to the Modify Bookcase page without adding Bookcases to your Bookcase

**Adding InfoCenters to your Bookcase**

Select one or more InfoCenters from the list and press the **Add** push button.

**Note:** Some browsers may preselect the first item in the list. If you do not want that item selected, click it to deselect it. Also, with some browsers, you need to press and hold the Ctrl key in order to select non-consecutive items.

You are returned to the Modify Bookcase page, which now lists the InfoCenters you have selected as being in the Bookcase.

**Push buttons:**

**Add** Adds the selected InfoCenters to your Bookcase and returns you to the Modify Bookcase page

**Cancel**

Returns you to the Modify Bookcase page without adding any InfoCenters to your Bookcase

**Deleting a Bookcase—Confirmation**

When you choose to delete a Bookcase, a confirmation message appears and asks you to confirm that you want to delete the Bookcase. Deleting a Bookcase erases the Bookcase but not the items that were placed in the Bookcase. They still exist in their directory paths.

Choose the **Yes** push button to confirm that you want to delete the Bookcase.

## Creating a LibraryCenter

This section shows you how to quickly and easily produce a LibraryCenter using one of the LibraryCenter templates 1-3, as shown in “Description of LibraryCenter Templates 1-3” on page 121.

### Templates and sample LibraryCenters shipped with Library Server

Sample Templates 1-3 are shipped with the Library Server product. The sample LibraryCenters are displayed in English. When a LibraryCenter is created however, it is created in the Library Server’s configured language, which is either English or one of the 13 supported languages listed in Table 3 on page 122.

Sample LibraryCenters (one for each template) are shipped with Library Server. Each sample contains a Bookcase, shelves, and a small number of Books and PDFs. These samples are located in the following directory:

*/customer name/bookmgr/templates/template1 [2 and 3], where customer name is the Library Server product installation directory.*

### Before you begin:

You must have installed the Library Server product and configured paths to a Bookcase, shelves, Collections and Books via the Administration panel and have rebuilt the Library catalog.

You must have created the Bookcase for which you are creating this LibraryCenter. See “Creating a Bookcase” on page 85.

To enable the "Browse LibraryCenters" function from the library page, an *index.html* file must exist in the default */"customer name"/public/bookmgr/libraryserver/* directory, (where */"customer name"/* is the Library Server product installation directory), or in the directory specified by the LIBCENTERDIR= keyword of the bookmrt.port# file. This Browse LibraryCenters HTML file (index.html) is not an installed product file. It can be created or updated either automatically (see configuration step #7 below) or manually. To manually create the Browse LibraryCenters HTML file, the easiest way to do this is to copy the *indexsamp.html* file (that is shipped in this directory) to *index.html*, and edit it.

### Configuration steps

To configure a LibraryCenter, you will use the **Create a LibraryCenter** window, shown in Figure 12 on page 90, to identify the LibraryCenter and select Template 1, 2 or 3. You can see what each template looks like in Chapter 3, “Using a LibraryCenter,” on page 13, or Appendix A, “Configuring a LibraryCenter – Using LibraryCenter Templates 1-3,” on page 121.

1. Go to the Library Server Administration window and select **Create a LibraryCenter**. The **Create a LibraryCenter** window, shown in Figure 12 on page 90, will open.
2. Enter a **name** for your LibraryCenter file directory. This is a unique name that will be used to create a directory with the files for your LibraryCenter. The name must be a filename that is valid on your platform:
  - It does **not** have an 8.3 filename restriction

- It **does** have character restrictions. It can contain the letters A-Z (uppercase), a-z (lowercase), 0-9, underscore (\_), or dash (-).
  - It must not contain spaces, tabs, or control characters
  - It is **not** a path name
3. Enter a **title** for your LibraryCenter.
  4. Select a **Top Level Bookcase**.
    - Select an existing Bookcase from the drop-down list. This list will contain the names and titles of existing Bookcases located in the "Directories of All Bookcases" on your system.
    - To create a new Bookcase, go back to the Administration Panel and select **Create Bookcase**.
  5. Enter a **Feedback URL** (Web address) that either:
    - Contains information on how users can contact the Library Server administrator
    - Sends an E-mail to the Library Server Administrator. Examples:  
 http://www.support.123.com  
 mailto: Johndoe@123.com

You can change the name "Feedback" to another name, such as "LibraryCenter Administrator", later during customization.
  6. Select Template 1, 2 or 3
  7. To create an initial, or add to an existing, Browse LibraryCenters HTML file, check the 'Add this LibraryCenter to the Browse LibraryCenter's HTML file' checkbox. If unchecked, the Browse LibraryCenters HTML file (index.html) must be created or updated manually. (note: if a LibraryCenter entry in the Browse LibraryCenters HTML file needs to be deleted or modified, the only way to do so is manually).
  8. Click on one of the buttons. **Create** creates the LibraryCenter as follows:
    - The selected template's configuration files are created in a new directory whose name is the same as the one you specified in the LibraryCenter Name field.
    - The files will be in the language that is specified in the Language Parameter of the BookManager Configuration file that was created when you installed the Library Server product.
    - The LibraryCenter files will be created in the following directory on your system:  

```
/"customer name"/bookmgr/libraryserver/"your chosen LibraryCenter name"
```

 If the 'Add this LibraryCenter checkbox' is checked as described in step 7 above, the Browse LibraryCenter's HTML file (index.html) will be created or updated in the following directory on your system:  

```
/"customer name"/bookmgr/libraryserver/
```

 Where *customer name* is the Library Server product's installation directory. On z/OS only, you can change the directory where LibraryCenters are created and stored. You can do this by specifying a different directory with the optional *LIBCENTERDIR=* parameter in your BookManager configuration file. Refer to the z/OS Program Directory for information about BookManager Configuration files on z/OS, and required directory permissions.
    - If Library Server is configured correctly, the new LibraryCenter should be accessible by the following URL:  

```
http://Yourhostname/libraryserver/your_chosen_LibraryCenter_name
```

**Cancel** – dismisses the **Create a LibraryCenter** window.

**? (Help)** – opens a new browser window with contextual help information

9. If you did not check the box in step 7 above, you must manually create or modify the *index.html* file in the */customername/bookmgr/libraryserver/* directory to include a link to your new LibraryCenter. On z/OS, the *index.html* file can be located in the directory specified by the optional *LIBCENTERDIR=* configuration parameter. Adding a link to your new LibraryCenter in your LibraryCenter's *index.html* file will ensure that when a user selects the **Browse LibraryCenter** button, your new LibraryCenter will be displayed.
10. Customize the frames in the LibraryCenter you created, refer to “Configuring and Customizing Your LibraryCenter” on page 134.

Figure 12. Create a LibraryCenter Window

## Managing Document Indexes

### Description:

Use the Manage Document Indexes page to introduce and refresh IBM Advanced Linguistics Search Capability in PDF documents .

A library may contain four types of PDF documents:

1. Documents which can be made capable of being searched with the IBM Advanced Linguistics Search functions.
2. Documents which have been modified subsequent to having been made capable of being searched with the IBM Advanced Linguistics Search functions.
3. Documents which are currently capable of being searched with the IBM Advanced Linguistics Search function.
4. Documents which can not be made capable of being searched with the IBM Advanced Linguistics Search function. .

Introduce IBM Advanced Linguistics Search capability to the first type of document by selecting documents in the first multiple selection list box and submitting the form for processing by clicking the index button or pressing enter. Refresh the index

which supports the IBM Advanced Linguistics Search capability by selecting documents in the second multiple selection list box and submitting the form for processing by clicking the index button or pressing enter. The third and fourth types of documents should not be processed for supporting IBM Advanced Linguistics Search capability and thus are not presented for selection and processing on this page.

Note: To enable PDFs for Advanced Linguistic Searching, via Library Server, they must be contained in an HFS directory to which write access is permitted, and the resultant messages are logged to a file called "logwrt.dbg" in the directory specified by the **LOGDIR=** keyword in the bookmgr.port# file. To make PDFs in MVS datasets searchable, the command line PDF Indexer tool may be used. Please refer to Appendix D for details on command line usage of the PDF Indexer tool.

**Fields:**

**Select Path Single Selection Dropdown**

- one of the directories configured on the administration page as "directories for document Collections" can be selected here. The PDFs in the named directory will be scanned and presented for indexing or refreshing as appropriate.

**Eligible Documents for advanced linguistics search capability**

When any un-indexed PDFs are found in the directory selected in the select path field, they will be presented for selection in this list.

**Documents modified subsequent to last adding advanced linguistics search capability**

When indexed PDFs modified subsequent to the last index creation and insertion are found in the directory selected in the select path field, they will be presented for selection in this list.

**Push buttons:**

**Index** When documents are selected within one of the two document selection fields, the appropriate index button is enabled. Clicking on one of these buttons will submit the selected documents for indexing. The "Advanced Linguistics Search Document Index results" page will display to report the success or failure of the indexing process.

**Reset** Clears the entry fields so you can enter new information

## Managing InfoCenters

**Description:**

Use the Manage InfoCenters page to add, delete or index InfoCenter(s) in the Library Server configuration, and to prepare or receive an InfoCenter's plug-ins. This function is available only if InfoCenter support has been enabled as described in "Enable Extended Shelf and InfoCenter Support plus Shelf Indexing" on page 96.

Infocenter support via the Manage InfoCenters Library Server administrative function is optional, but requires 31-bit Java 6 (5655-R31) or 31-bit Java 7 (5655-W43) be installed. To enable it, the "Enable Extended Shelf and InfoCenter Support, plus Shelf Indexing" Library Server administrative checkbox must be checked. Doing so requires that XML Toolkit 1.10 (5655-J51) be installed.

Adding an InfoCenter creates a new entry in the booksrv.port# file for that InfoCenter, including its name, location and unique identifier. Preparing an

InfoCenter's plug-ins creates an index, a catalog entry and cached table of contents (TOC) file for each plug-in. Receiving an InfoCenter's plug-ins loads the prepared catalog entries and cached table of contents (TOC) files into the Library Server library. Indexing an InfoCenter creates the search index needed to search the InfoCenter. Deleting an InfoCenter removes its entry from booksrv.port#.

**To Add a new InfoCenter:**

Click the **Add InfoCenter** link to display a new set of ID, Location and Name fields. Specify unique ID, Location and Name values for the new InfoCenter, and press the **Save Settings** push button to add it to the booksrv.port# Library Server configuration file, or press the **Cancel Changes** push button to cancel the change.

**To Prepare an InfoCenter's Eclipse Document Plug-ins:**

Select the InfoCenter from the configured InfoCenters list, and press the **Prepare** push button. An `indices/` subdirectory under the parent directory of the configured InfoCenter Location is created, having a subdirectories named for each InfoCenter Plug-in. Also an index, catalog entry and a cached Table of Contents (TOC) file is created within each of these plug-in subdirectories

**To Receive an InfoCenter's Eclipse Document Plug-ins:**

Select the InfoCenter from the configured InfoCenters list, and press the **Receive** push button. For each plug-in contained in the selected InfoCenter, the catalog entry and cached Table of Contents (TOC) file created when the InfoCenter plug-ins were prepared, are tailored and loaded into the Library Server Catalog and Frames directory, respectively.

**To Index an InfoCenter:**

Select the InfoCenter from the configured InfoCenters list, and press the **Index** push button. This results in the creation of a single search index for the full selected InfoCenter. This index file is written to the `indices/` subdirectory of the parent directory of the configured InfoCenter location.

Please refer to Appendix F, "Command Line InfoCenter Indexing and Message/Status Viewing," on page 151 for information about InfoCenter Indexing messages and for information on how to run the InfoCenter Indexing function from the command line.

Note that since the InfoCenter Indexing function is resource intensive, it does not use the same Java Bridge Java Server on which all other InfoCenter related functions depend. Rather, the Indexing function uses its own dedicated JVM referred to as the Indexing Java Server.

For performance considerations, it is strongly recommended that the file system (HFS or zFS) that contains an InfoCenter, not be shared when indexing that InfoCenter

**To Delete an InfoCenter:**

Select the InfoCenter from the configured InfoCenters list, and press the **Delete InfoCenters** push button. This results in the selected InfoCenter being removed from the booksrv.port# Library Server configuration file.

**Input Fields on Manage InfoCenters Page:**

*ID* – Unique identifier for InfoCenter (for example, "DB2IC")

*Location* – Fully qualified path to location of root plug-in subdirectory or .jar file (typically the one that contains the `plugin_customization.ini` file) for



InfoCenter in HFS (for example, /u/libraryserver/infocenters/db2/com.ibm.db2.doc.inst\_8.1.3 or /u/libraryserver/infocenters/db2/com.ibm.db2.doc.inst\_8.1.3.jar)

*Name* – Descriptive title of InfoCenter (for example, "DB2 InfoCenter")

**Push buttons on Manage InfoCenters Page:**

**Add InfoCenter (link)** – Adds a new empty entry to the list of configured InfoCenters

**Save Settings** – Updates the Library Server configuration (booksrv.port#) to include any new InfoCenter(s) added via the Add InfoCenter link

**Cancel Changes** – Removes any new, unsaved InfoCenter entries in the list created via the Add InfoCenter link

**Prepare** – Prepares the plug-ins for the selected InfoCenter as described above

**Receive** – Receives the plug-ins for the selected InfoCenter, as described above

**Index** – Indexes the selected InfoCenter, as described above

**Delete InfoCenters** – Removes the selected InfoCenter that had been saved in the Library Server configuration (booksrv.port#)

## Administration Password

**Description:** An administration password is required for using administrative functions and saving any changes that you make on the Administration page.

Note: The product is shipped with a default password 'BOOKMGR' (in uppercase).

**How to use the Administration Password:**

**To change the administration password**

First, enter your administration password in the Administration Password field. Next, enter a new password in the New Password and the Confirm new password fields. Choose the Save Settings push button.

**To make other changes on the Administration page**

Enter the administration password in the **Administration Password** field. Make your changes on the page, and then choose the Save Settings push button.

**Note:** Before you save settings, make sure that the New Password and Confirm new password fields are blank.

## Settings, Paths and Names

**Description:** To serve shelves, Bookcases, documents (from a Collection) and PDFs, Library Server searches directory paths that you specify.

**Setting Directory Paths:**

1. Enter your administration password in the Administration Password field.
2. In the **Enter directories for document Collections** box, type a directory path for each Collection, one path per line. Do not add trailing slashes. Type a name for each path in the **Enter descriptive document Collection names** box. For z/OS, you can number the names that correspond to the specified paths.

3. In the appropriate list box, type a directory path or paths for Bookcases and shelves. Type one path per line. Do not add trailing slashes.
4. Choose the Save Settings push button.
5. Rebuild the catalog if you have added, deleted, or replaced documents in a Collection directory, or added or removed a Collection, in the **Enter directories for Book Collections** box, or if you have added, deleted, replaced or modified shelves, or added or removed a shelf directory.

When Extended shelves are used in your library and an Extended Shelf is added to the library, the catalog should be rebuilt to record information about PDFs on the Extended Shelf in the catalog.

**Sample Directory Path Specifications:** Below are sample directory path specifications:

Non-Windows applications:

```
/usr/lpp/booksrv/legal/PDF
/usr/lpp/booksrv/legal/books
/usr/lpp/booksrv/shelves
/usr/lpp/booksrv/cases
```

Windows applications:

```
C:\legal\books
C:\legal\PDF
C:\shelves
C:\cases
```

**Note:** *Do not add trailing slashes, or back slashes to any of the directory paths that you specify on the Administration page.* Please provide fully qualified paths rather than relative paths.

**Additional Information:**

- “Creating a Library” on page 73
- “Updating Your Library” on page 76

## Defining Catalog Collection Names

Catalog Collection names are names given to each directory path listed in the **Enter directories for document Collections** list box. The Collection names you specify here are displayed in the Title column on the Shelves page.

**Specifying Collection Names:** Enter each descriptive Collection name in the **Enter descriptive document Collection names** list box, one per line. Each line corresponds to the directory path listed on the same line of the **Enter directories for document Collections** list box. For z/OS, you can number the Collection names to correspond to numbered Collection paths. Avoid using quotation characters in these names

**Sample Collection Names:** Below are sample Collection names:

```
Host (NFS) Procedure Books
MVS Programming Library
OS/2 Reference Library
Legal Regulations
```

**Additional Information:**

- “Creating a Library” on page 73
- “Updating Your Library” on page 76

## Numbering Collection Paths and Names





The **Enter directories for document Collections** list box and the **Enter descriptive document Collection names** list box on the Administration page are independently scrollable. For z/OS, when you have long lists of Collection paths and Collection names, you can number them in order to keep track of which name goes with which path.

**How to Number Paths and Names:** Preceding each path or name, type a number followed by a period and then a space. Numbering in both boxes must be sequential.

### Example:

Book Collection Path	Book Collection Name
1. /usr/lpp/booksrv/books/nfs	1. NFS Procedure Books
2. /usr/lpp/booksrv/books/mvs	2. MVS Programming Library
3. /usr/lpp/booksrv/books/os2	3. OS/2 Reference Library
4. /usr/lpp/booksrv/books/legal	4. Legal Regulations

## Permit Note Creation

**Description:** While viewing a Book topic, the end user may create notes (i.e. annotations) for that topic on the server via the Create Note toolbar icon  (traditional BookServer Interface), or  (Library Server interface). These notes may then be viewed by all users via the List Notes toolbar icon  (traditional BookServer Interface), or  (Library Server interface). The "Permit note creation" check-box on the administrator page must be checked in order to enable the Create Note function on the toolbar.

## Logging Book access requests

**Description:** You can log requests made to read Books. Each topic request is logged, as well as requests to search Books.

**How to use Logging:** Select the **Log Book access requests** check box to turn Book logging on or off. When this check box is checked, logging is performed. Choose the **Save Settings** push button to activate the changes.

Library Server logs the requests in a log file named *bookmgr.log*, located in the /cgi-bin/ subdirectory, or for z/OS, the directory specified on the *LOGDIR=keyword...*

Each log entry contains the date, time, Book path and file name, followed by the topic, search, Book description, or cross-Book link request.

## Diagnostics

**Description:** Diagnostic output can be generated to help debug any problems you may experience. A set of diagnostic information will be displayed for each page served.

**How to use Diagnostics:** Select the **Generate diagnostic output** check box to turn diagnostics on or off. Diagnostics will be generated when the check box is checked. Choose the **Save Settings** push button to activate the changes. Library Server logs diagnostic information in a file named *bookmgr.dbg* located in the CGI-BIN directory.

For z/OS, the *LOGDIR* keyword of the *bookmgr<port>* file may be used to specify a different directory for *bookmgr.dbg*.

## Frames-based EUI

**Description:** In the traditional BookServer interface, Book pages can be generated using frames-based HTML. If so, Book pages are presented with each of the topic, toolbar, and table of contents in a separate frame on the same page.

**How to generate frames-based EUI:** Check the 'Present frames-based EUI for Books as default' check box to enable or uncheck to disable this feature as the default made for all clients. Clients may override the administrative default, choosing a framed or unframed presentation, by selecting their preference on the toolbar. When frames are generated, table of contents files are cached under the *../frames* directory (for z/OS, *keyword...*).


## Running IBM Footer

**Description:** You can disable generation of the running IBM footer, which contains a link to the Library Page and the IBM Corporate web site. When checked, this footer is generated for all generated pages, with the exception of the Print Preview results page.

**How to disable the running IBM Footer:** Uncheck the 'Produce running IBM footer' check box to disable this feature. Unlike other administrative settings, this setting is pre-checked.

## How to Permit Clipping for Handhelds

Many Library Server pages can be presented in an alternative format that is more suitable for display on smaller screens and on devices with reduced functionality. To

enable access to the alternative format pages via the  icons, check the 'Permit clipping for handhelds' check box. To disable access to the alternative format pages, uncheck the 'Permit clipping for handhelds' check box.

## Enable Extended Shelf and InfoCenter Support plus Shelf Indexing

All functions related to Extended Shelf support and InfoCenter support require XML Toolkit 1.10 (5655-J51) to be installed on the z/OS system running Library Server. This checkbox should only be checked if XML Toolkit is installed. When unchecked, Extended Shelves and InfoCenters cannot be displayed, indexed, searched, or managed, nor can Search indexes be built for Bookshelves.

## Display Java-based Administrative Interface

This checkbox allows the end user to switch from the traditional HTML-based Library Server administrative interface to the Java-based administrative interface described in “The Administration Pages (using the Java-based user interface)” on page 98. The Java-based administrative interface has a corresponding checkbox which, when unchecked, causes the traditional HTML-based administrative interface to be displayed. If for any reason, the Java-based administrative interface can not be loaded, the traditional HTML-based administrative interface is used, by default.

## Permit Personal Bookcases for End Users

This checkbox, when checked, enables end users to exploit Personal Bookcases and related functions as described in “Personal Bookcases” on page 43.

## Save Settings

**Description:** Save Settings saves any changes you made in the Settings, Paths and Names list boxes, the Settings check boxes, or the Password fields on the Administration page. Once saved, the changes become permanent.

**How to Save Settings:** On the Administration page, enter the Administration password in the Administration Password field and choose the **Save Settings** push button.

## Building the Catalog (BookManager Books, PDFs and Shelves)

**Description:** The Catalog of All Documents contains descriptive information about each Book, PDF and InfoCenter plug-in within the library. The documents and plug-ins may reside on any drive or any machine available to Library Server. You should rebuild the catalog whenever you add, delete or replace Books and/or PDFs in a Collection directory, or when you add/remove a Collection to/from the Collection directories listed in the '**Enter directories for Book Collections:**' box on the Administration page. You should also rebuild the catalog when you add/delete/replace/modify a shelf, add/remove a shelf directory or add/delete an InfoCenter configuration.

A document or plug-in must be cataloged in order to locate it by using the Find field on the Library page and Catalog of All Documents page. Documents must also be cataloged to be able to index the shelves that contain the documents via the Manage Existing Shelves page. Cataloging also enables cross-Book links to any other Book in the catalog. Rebuilding the catalog also clears all cached pictures, table of contents files, or other Library Server cached files.

Documents stored in MVS data sets will be cataloged in the Library Server catalog (along with the documents stored in HFS files) when the administrator performs the rebuild catalog function using the push button on the Administration page.

The catalog is absolutely necessary to enable access to Books and PDFs stored in HFS files, including this User's Guide, which stores the help topics for Library Server's pages. If the administrator chooses not to catalog the Books and PDFs stored in MVS datasets, the Books and PDFs stored in HFS files must still be cataloged. See Appendix C, "Rebuild Catalog from the Command Line," on page 141 for instructions on cataloging only the Books and PDFs stored in HFS files. When the administrator chooses not to catalog Books and PDFs stored in MVS data sets, most Library Server functions will continue to work.

**How to Build the Catalog:** Choose the **Rebuild Catalog** push button on the Administration page.

See Appendix C, "Rebuild Catalog from the Command Line," on page 141 for additional catalog build procedures and options, including complete catalog rebuild via the command line interface, catalog HFS documents only, and incremental cataloging.

## The Catalog and Eclipse Document Plug-ins

Descriptive information for each InfoCenter plug-in is collected in the catalog. The title, location information, primary html identifier and InfoCenter ID(s) for the plug-in is stored in the catalog. This occurs as part of the Receive InfoCenter Plug-ins process which is initiated by clicking on the Receive push button on the Manage

InfoCenters Page. Also, the Rebuild Catalog function automatically performs the Receive InfoCenter Plug-ins function for each configured InfoCenter.

An InfoCenter's plug-ins must be prepared and subsequently received to cause the catalog entries to be created after configuring an InfoCenter to LibraryServer. It is also necessary to do this in order to refresh these catalog entries whenever a configured InfoCenter's content has been changed (i.e. its Eclipse Document Plug-ins have been refreshed, added or removed).

When an entire InfoCenter is to be made inaccessible through LibraryServer, the Delete function of the Manage InfoCenters Page should be used to remove the catalog entries for the Eclipse Document Plug-ins for that InfoCenter.

**How to Add or Refresh Catalog Entries for Eclipse Document Plug-ins:**

Choose the Receive push button on the Manage InfoCenters Page, or run the Rebuild Catalog function from the primary Administration Page.

**How to remove Catalog Entries for Eclipse Document Plug-ins:** Choose the Delete push button on the Manage InfoCenters Page.

## Picture Cache

**Description:** The pictures stored in BookManager Books are stored in a special subdirectory (called the "picture cache") to improve performance. The cached pictures are stored in Web format.

**How to use the Picture Cache:** When the catalog is rebuilt, all the cached pictures are erased from the picture cache.

To clear the picture cache at any other time, choose the **Clear Cache** push button on the Administration page. Clearing the picture cache also clears all cached table of contents files as well as other cached files.

The default directory for picture cache is `/usr/lpp/booksrv/public/bookmgr/pictures`, where `/usr/lpp/booksrv` is the Library Server's install directory.

## Delete All Notes

**Description:** The Delete All Notes function removes all notes (i.e. annotations) from all Books in the Library by erasing all files in the Library Server notes folder. Once erased, these notes are not recoverable via the Library Server application.

**How to Delete All Notes:** On the Administration page, enter the administration password in the Administration Password field and choose the Delete All Notes push button. Doing so will result in a confirmation message to which a Yes or No response is required.

---

## The Administration Pages (using the Java-based user interface)

Starting with z/OS V1R10, Library Server provides a Java-based administrative interface as an alternative to its traditional HTML-based administrative interface described in "The Administration Pages (using the traditional HTML-based user interface)" on page 79. Although the same underlying administrative functions are available in both administrative interfaces, the Java-based interface exploits an object oriented design, provides smoother navigation between functions, and offers an Explorer-like method for listing files and directories.

In order to use the Java-based administrative interface, a minimum of Java 6 or Java 7 must be running on the server and the version of Java running on the browser client should equal or exceed the version running on the server. Also, when attempting to run the Java-based administrative interface for the first time, each end user must accept an IBM-signed Verisign digital security certificate prompt before the applet containing the administrative client code can be run in their browser. Unlike in the traditional HTML-based administrative interface, Library Server administrative password authentication is not required for individual administrative functions. In the Java-based administrative interface, administrative password authentication occurs only at the time the administrative Java Applet is launched from the Library Server Library Page or from a bookmarked URL.

Both the HTML-based administrative pages and the Java-based administrative pages contain a checkbox that indicates whether or not the Java-based administrative interface should be used. If this box is not checked, the HTML-based administrative interface is used when the Administration icon is selected on the Library Server Library Page. If this box is checked, the Java-based administrative interface is used when the Administration icon is selected on the Library Server Library Page, unless it can't be run for some reason (e.g. Java 6 or Java 7 is not running on the server, or version of Java running in the end user's browser is less than the version running on the server), in which case the HTML-based administrative interface will be launched as an alternative.

Each main Explorer dialog in the Java-based administrative interface consists of two panes; an object pane on the left, and a data pane on the right. The content of the data pane depends on which object in the left pane is selected (i.e. being "Explored"). The object pane contains the following objects:

- "Explore General Settings"
- "Explore LibraryCenters" on page 101
- "Explore Bookcases" on page 102
- "Explore InfoCenters" on page 103
- "Explore Shelves" on page 105
- "Explore Collections" on page 107.

Library Server administrative functions associated with Exploring these objects and their associated data, are available to the end user via push-button and/or via context menu (available by right-clicking an item) in the resulting dialog. The following six **Explore** topics in this document address the administrative functionality that corresponds to Exploring each of the objects above, respectively.

## Explore General Settings

When the Java-based administrative interface is enabled in Library Server, the main Explorer dialog for Exploring General Settings is displayed after the end user selects the Administration icon on the Library Server Library Page. When launched in this manner, or when the General Settings object is selected from the object pane, Exploring General Settings allows the end user to specify most of the administrative settings, and run some of the administrative functions, that appear on the traditional Library Server HTML-based Administration Page. Configuring Collection, Shelf and Bookcase Path information, however, is only available when Exploring the objects associated with that path (i.e. Collections, Shelves and Bookcases). Following is a sample depiction of an Explore General Settings dialog, and a brief explanation of the settings and functions it supports.

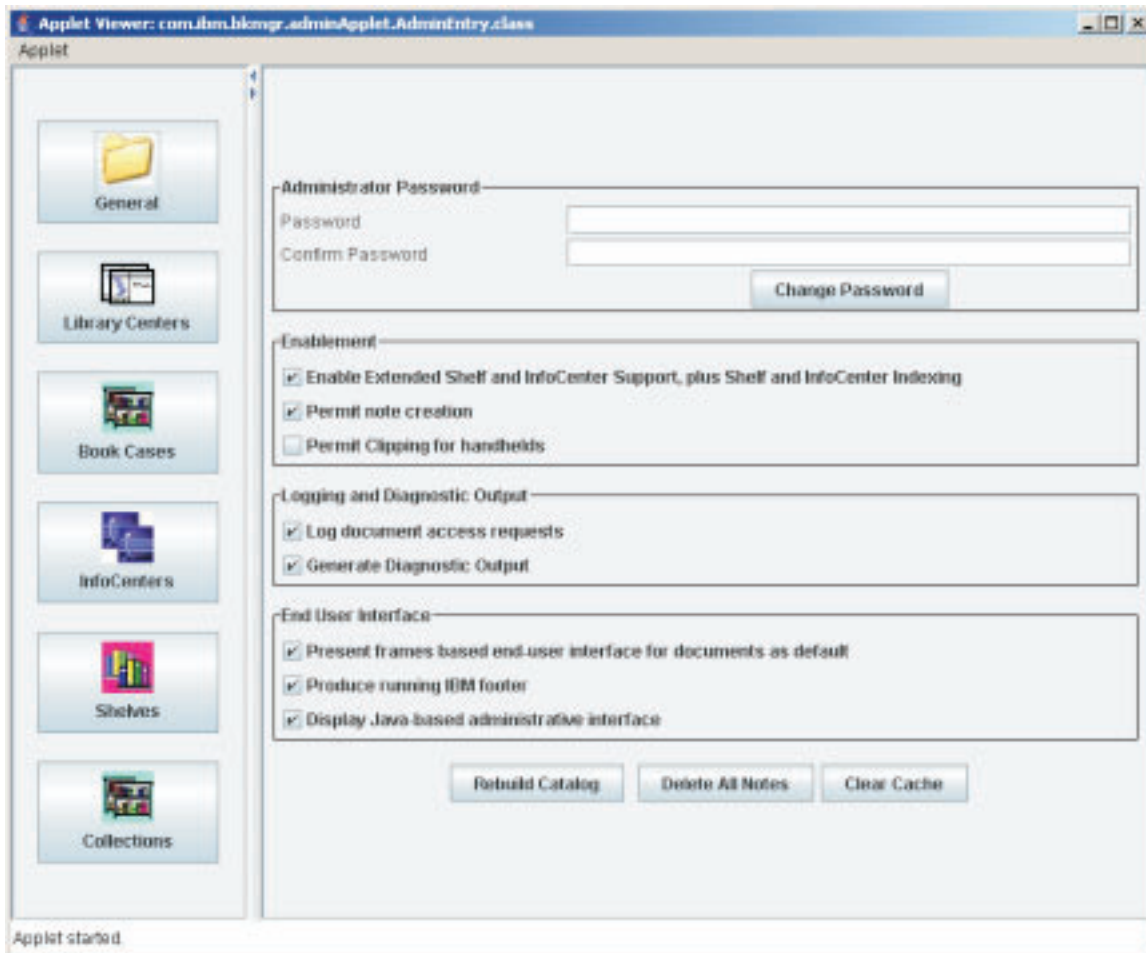


Figure 13. The Java-based user interface Administrative home page

### Functions available using the Explore General dialog

Using the Explore General dialog you can perform the following functions:

- Modify Library Server administrative password
- Control the following enablement settings:
  - Provide InfoCenter and Extended Shelf support plus administrative indexing of InfoCenters and shelves
  - Permit end user creation of document notes
  - Permit end user clipping for handheld devices
- Control the following logging options:
  - Logging document access requests
  - Logging diagnostic output
- Control the following user interface characteristics for end users:
  - Whether or not documents are presented within a frameset by default
  - Whether or not the IBM running footer should be produced on each page
  - Whether or not the Java-based administrative interface (described in this topic) should be used instead of the traditional HTML-based end user interface
  - Whether or not Personal Bookcases are enabled



- Rebuild the Library Server Catalog
- Clear Library Server cache files
- Delete all document notes files produced by Library Server users

## Explore LibraryCenters

When using the Java-based Library Server administrative interface, the end user can Explore LibraryCenters by selecting the LibraryCenters object from the object pane in the administrative dialog. Exploring LibraryCenters allows the end user to perform all the functions available via the Create a LibraryCenter button on the traditional HTML-based Library Server Administration Page. Like in the traditional interface, the Explore LibraryCenters dialog allows an existing Bookcase to be assigned to the LibraryCenter, however, the Explore LibraryCenters dialog also provides the ability to create the LibraryCenter's Bookcase on the fly. Following is a sample depiction of an Explore LibraryCenters dialog, and a brief explanation of the settings and functions it supports.

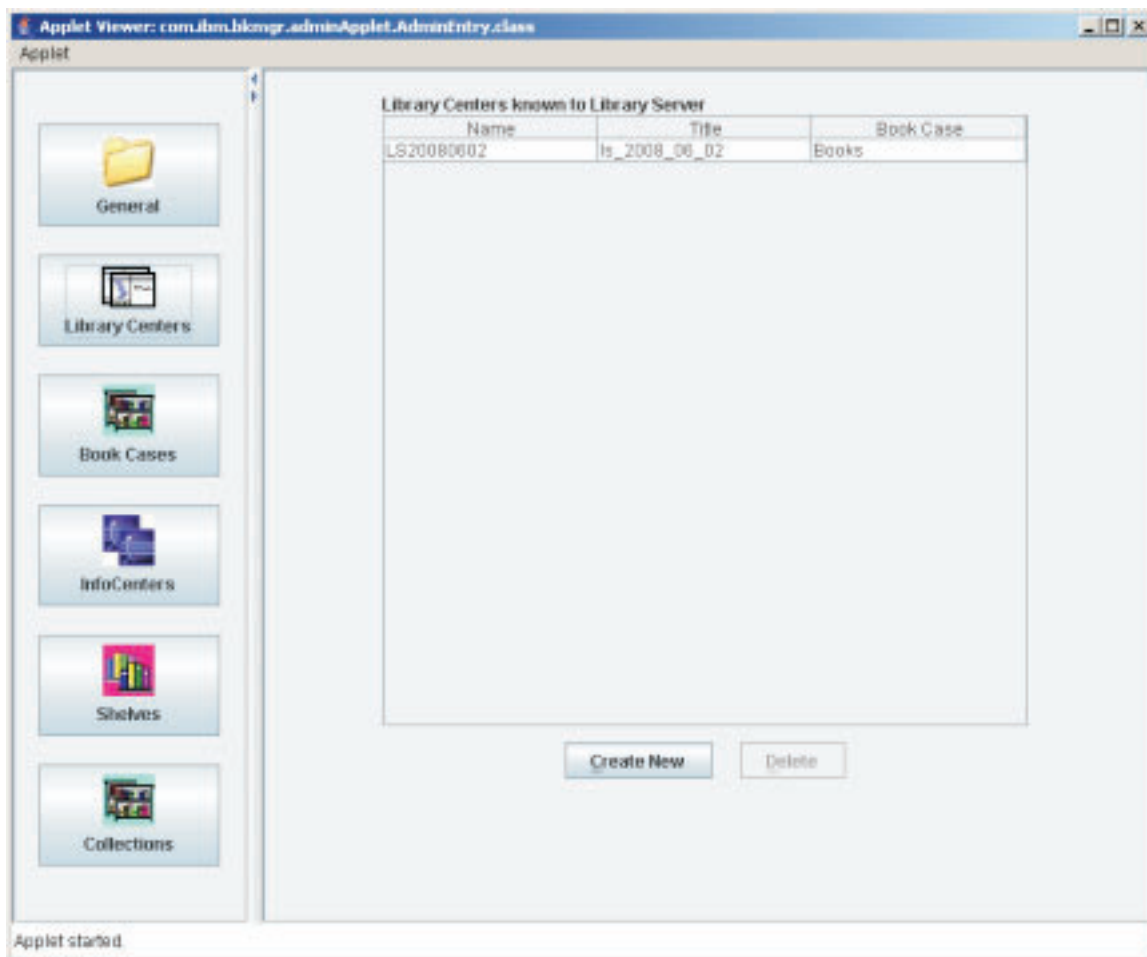


Figure 14. Explore LibraryCenters Dialog

### Functions available using the Explore LibraryCenters Dialog

Using the Explore LibraryCenters dialog, you can perform the following functions:

- Create a LibraryCenter, which involves the following:
  - Providing a LibraryCenter Name and Title

- Selecting the template on which to base it
- Assigning an existing Bookcase or creating a new Bookcase which defines the LibraryCenter's content.

## Explore Bookcases

When using the Java-based Library Server administrative interface, the end user can Explore Bookcases by selecting the Bookcases object from the object pane in the administrative dialog. The Exploring Bookcases dialog is the place where Bookcase Paths are configured when using the Java-based administrative interface. Exploring Bookcases allows the end user to perform all the functions available via the Create Bookcase button and the Modify/Delete Bookcase button on the traditional HTML-based Library Server Administration Page. In addition, it allows the end user to modify the Name and Title of an existing Bookcase. Following is a sample depiction of an Explore Bookcases dialog, and a brief explanation of the settings and functions it supports.

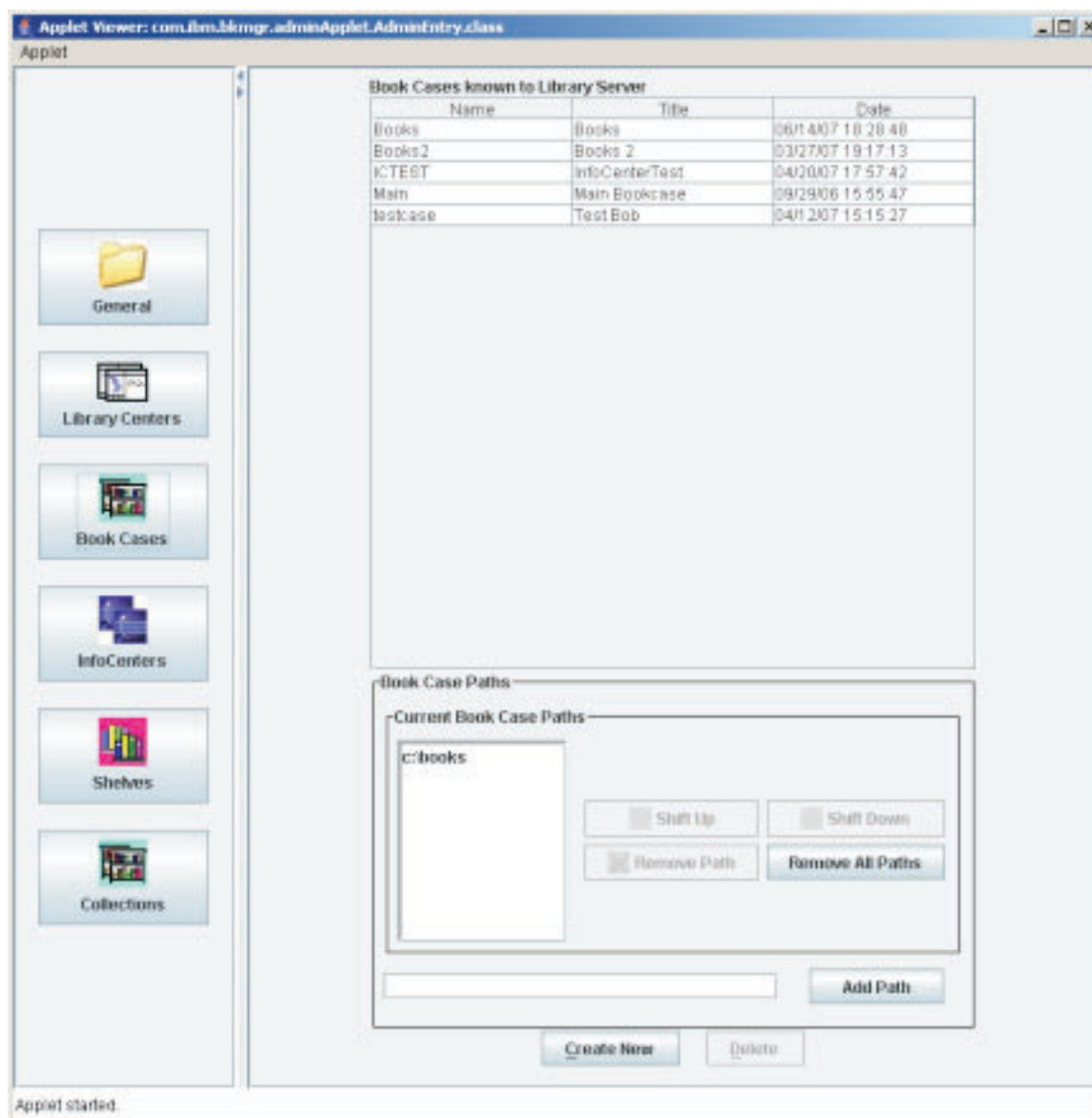


Figure 15. Explore Bookcases dialog

### Functions available using the Explore Bookcases Dialog

Using the Explore Bookcases dialog, you can perform the following functions:

- Configure Bookcase Paths (i.e. the directories in which Bookcase (\*.BKC) files are located)
- Create a Bookcase
- Modify Bookcase metadata (Bookcase Name or Title)
- Modify Bookcase content (add/remove shelves, InfoCenters or other Bookcases)
- Delete a Bookcase
- Remove configured Bookcase Paths.

### Explore InfoCenters

When using the Java-based Library Server administrative interface, the end user can Explore InfoCenters by selecting the InfoCenters object from the object pane in

the administrative dialog. Exploring InfoCenters allows the end user to perform most of the functions available via the Manage InfoCenters button on the traditional HTML-based Library Server Administration Page. In addition, it allows the end user to modify the Title and Location of an existing InfoCenter. Following is a sample depiction of an Explore InfoCenters dialog, and a brief explanation of the settings and functions it supports.

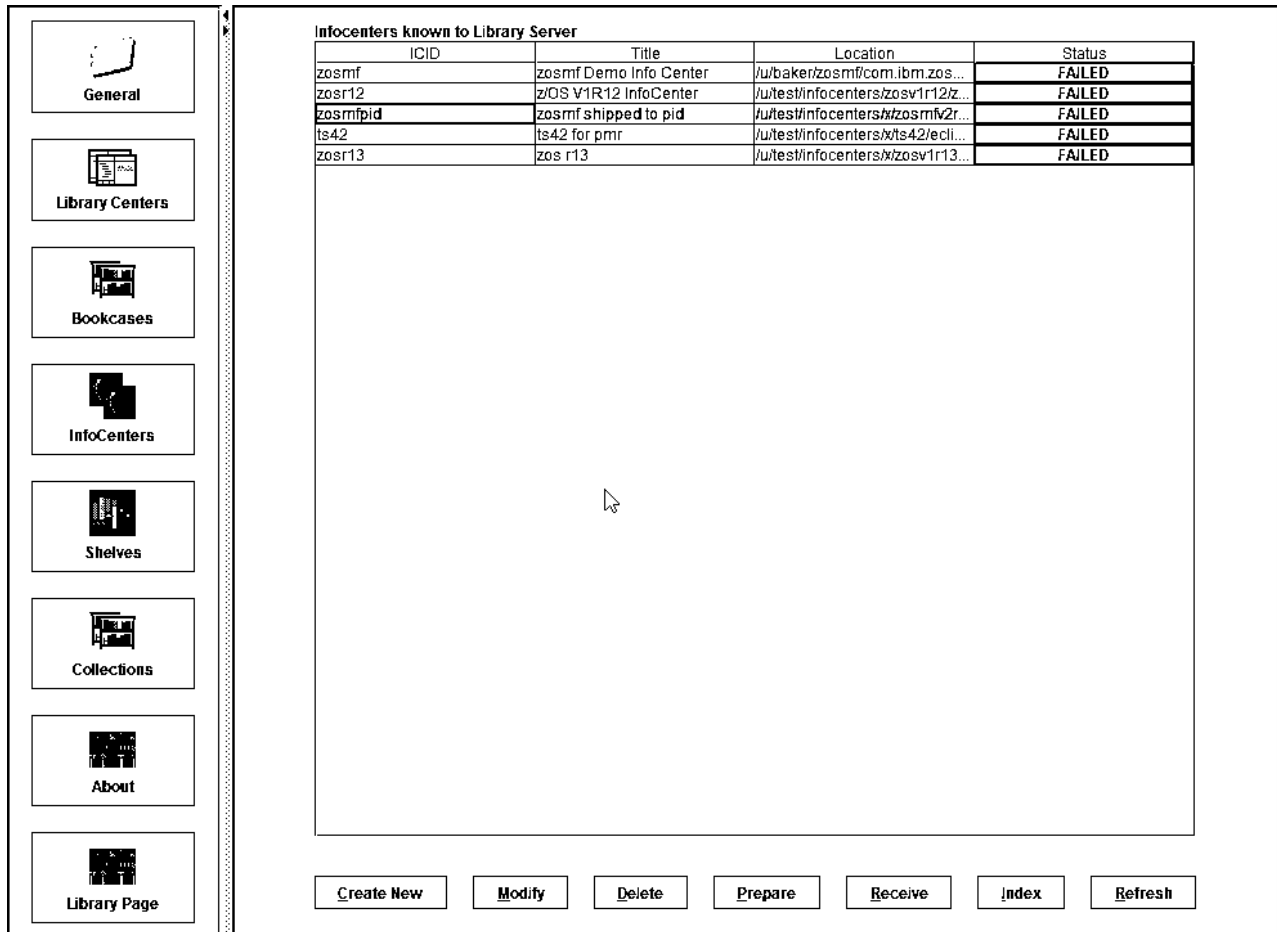


Figure 16. Explore InfoCenters dialog

### Functions available using the Explore InfoCenters Dialog

Using the Explore InfoCenters dialog, you can perform the following functions:

- Configure (i.e. "create") InfoCenters. After configuring an InfoCenter, you must Prepare its plug-ins (if not already Prepared), and Receive the resulting catalog entries and cached Table of Contents (TOC) files, to make it available for display and navigation. In order to make the InfoCenter available for searching, you must create a full InfoCenter index file (You may do so by using either the Index button in this dialog, or the command line interface described in Appendix F, "Command Line InfoCenter Indexing and Message/Status Viewing," on page 151).
- Modify configured InfoCenter metadata (Title and Location). Note that if the configured Location information for an InfoCenter is changed, the InfoCenter data, itself, must be present at the parent directory of the configured Location. This may involve manually copying or moving the InfoCenter data from a previous Location parent.

- Prepare Eclipse Document Plug-ins for the selected configured InfoCenter, which does the following needed by the Receive Plug-ins and Index InfoCenter functions:

**Note:** If the InfoCenter plug-ins have already been prepared prior to installing them on the filesystem, this step is not necessary unless the InfoCenter content is subsequently changed.

- Creates cached TOC files for each InfoCenter plug-in
  - Creates a preliminary Library Server catalog entry file for each InfoCenter plug-in
  - Creates an index file for each InfoCenter plug-in.
- Receive plug-in catalog entries and cached TOC files produced in the Prepare function for the selected configured InfoCenter, which does the following:

**Note:** This step is automatically run by the Rebuild Catalog administration function for each configured InfoCenter, so if the Rebuild Catalog function was run subsequent to this InfoCenter's configuration and preparation, this step is not necessary.

- Copies cached TOC files created by the Prepare function to the configured Library Server Frames directory. This is needed for InfoCenter display and navigation and other related functions.
  - Tailors the catalog entry files created by the Prepare function, and copies them to the Library Server Catalog. This is needed for Library Server catalog searches and other related functions.
- Create the full search Index for the selected configured InfoCenter, which does the following:

**Note:** This function is needed to make the InfoCenter searchable, and requires that the InfoCenter's plug-ins have been Prepared and Received.

- Creates TOC tree table from the cached TOC files created by the Prepare step and loaded by the Receive step
  - Manipulates the plug-in index files created in the Prepare step, and creates the control file needed to build the full InfoCenter search index
  - Builds the full InfoCenter search index file
- Delete (i.e. remove) the selected configured InfoCenter, and remove its associated Library Server data. This does not delete any files which were not created by Library Server. In particular, it does not delete the Eclipse Document Plug-ins contained in the InfoCenter.

## Explore Shelves

When using the Java-based Library Server administrative interface, the end user can Explore Shelves by selecting the Shelves object from the object pane in the administrative dialog. The Exploring Shelves dialog is the place where shelf Paths are configured when using the Java-based administrative interface. Exploring Shelves allows the end user to perform all the functions available via the Create Shelf button and the Manage Shelves button on the traditional HTML-based Library Server Administration Page. In addition, it allows the end user to modify the Name and Title of an existing shelf. Both Bookshelves (\*.BKS files) and Extended Shelves (\*.XKS files) are supported in the Explore Shelves dialog. Following is a sample depiction of an Explore Shelves dialog, and a brief explanation of the settings and functions it supports.

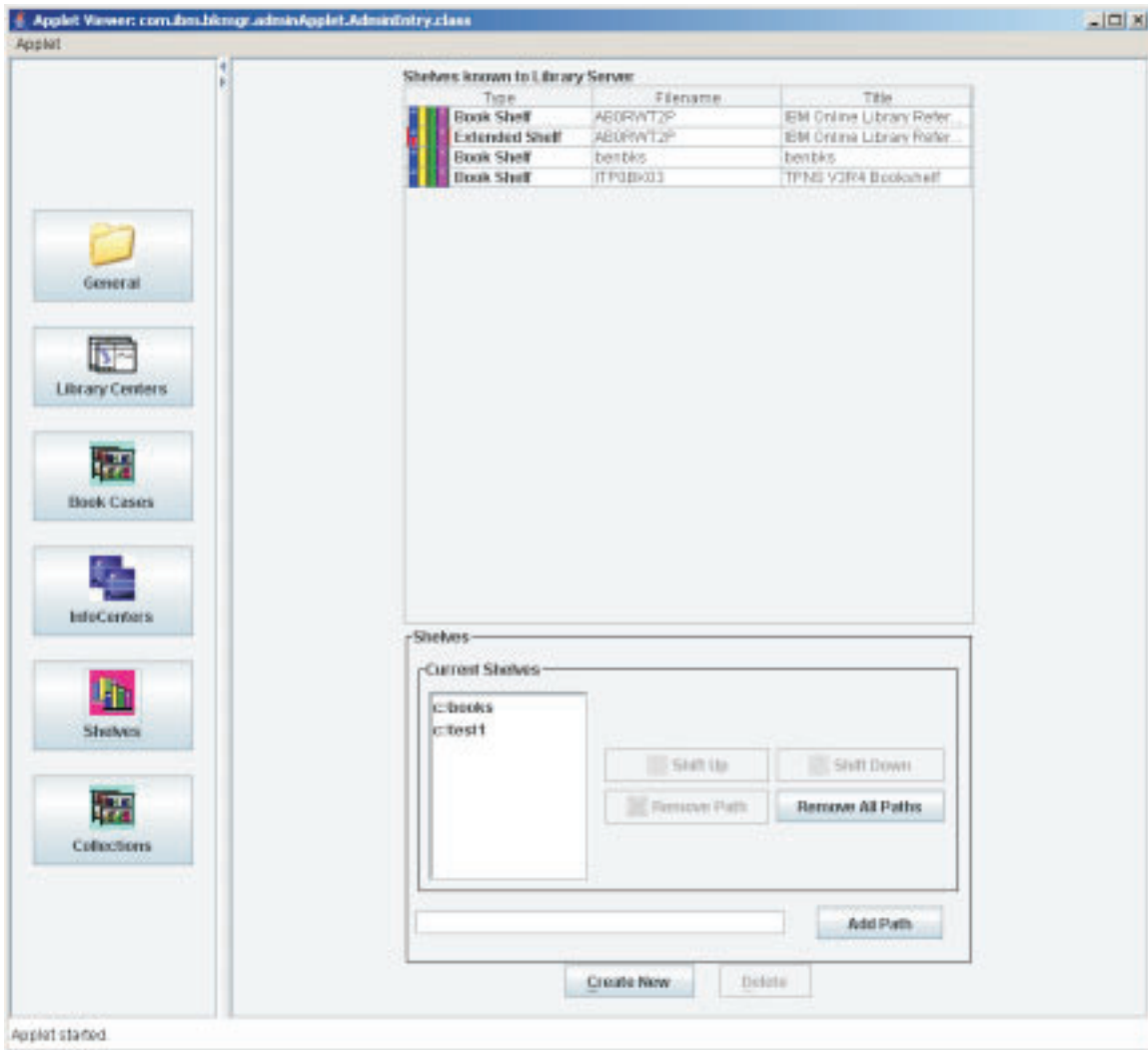


Figure 17. Explore Shelves Dialog

### Functions available using the Explore Shelves Dialog

Using the Explore Shelves dialog, you can perform the following functions:

- Configure shelf Paths (i.e. the directories in which Bookshelf (\*.BKS) and Extended Shelf (\*.XKS) files are located)
- Create a shelf
- Modify a shelf's metadata (shelf Title or Author)
- Modify a shelf's content (add documents, remove documents or modify document information)
- Index a shelf
- Delete a shelf
- Remove configured shelf Paths.

**Note:** If you perform any of the above functions, then you must run the Rebuild Catalog function under the "Explore General Settings" on page 99 dialog.

### Creating and Indexing Shelves via the Command Line Interface

As an alternative to creating and indexing shelves using the Library Server Java-based Explore Shelves dialog, the command line interface may be used. Please refer to the Shelf Indexer Readme file (default location is /usr/lpp/booksrv/cgi-bin/ShelfIndexer.README) for instructions on how to use the Shelf Indexer component of Library Server, via the command line interface, to create and index shelves.

**Note:** After indexing shelves with the command line interface, you must run the Rebuild Catalog function under the “Explore General Settings” on page 99 dialog.

## Explore Collections

When using the Java-based Library Server administrative interface, the end user can Explore Collections by selecting the Collections object from the object pane in the administrative dialog. The Exploring Collections dialog is the place where Collection Paths (i.e. the directories in which Book and PDF document files are located) are configured when using the Java-based administrative interface. Exploring Collections also allows the end user to perform all the functions available via the Manage Document Indexes button on the traditional HTML-based Library Server Administration Page. Following is a sample depiction of an Explore Collections dialog, and a brief explanation of the settings and functions it supports.

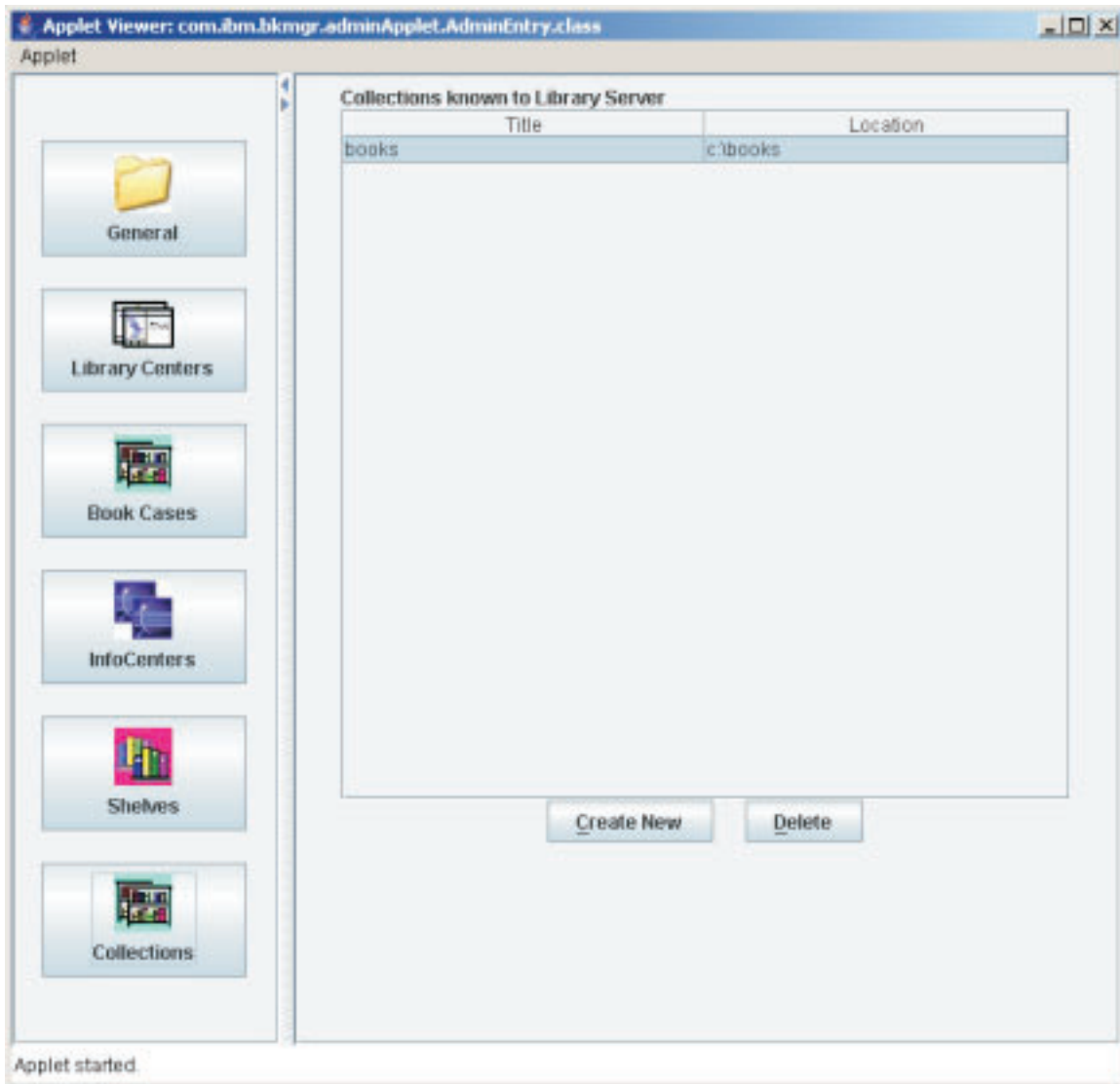


Figure 18. Explore Collections Dialog

### Functions available using the Explore Collections Dialog

Using the Explore Collections dialog, you can perform the following functions:

- Configure Collection Names and Paths (i.e. the directories in which Book and PDF document files are located)
- Modify Collection Name and Path (Note that if the Path for a Collection is changed, its Book and PDF document files must be present at that path. This may involve manually copying or moving the Collection's document files from a previous path)
- Manage document indexes for PDFs in a Collection
- Remove configured Collection Paths

**Note:** If you add, remove, or modify Collection Paths, then you must run the Rebuild Catalog function under the “Explore General Settings” on page 99 dialog.



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## Customizing the Site Header and Footer, and other Customizations

**Description:** You can replace the IBM product name that appears in the title bar and heading of the Library page with your own text (such as the name of your organization), and you can add text below that heading on the Library page. You can also create your own running header or footer to appear on most Library Server product pages, or you can choose to display no custom header or footer at all.

When a custom header is rendered, it appears at the very top of the page being displayed by Library Server. The one exception to this is for BookManager Book topic pages, when displayed with the traditional framed end user interface. In that circumstance, the custom header appears at the very top of the Content frame (which is located below the toolbar frame).

### To customize the Library page header:

Copy file *library.samp*, from its location below the Library Server install directory to a new file called *library.htm* in the same directory; or for z/OS, to the directory specified by the *LOGDIR=* parameter in the *bookmgr.nn* configuration file. Edit *library.htm* and modify its contents as desired.

Do not remove any `<TITLE>`, `</TITLE>`, `</HEAD>` or `<BODY>` tags. Be sure to use correct HTML coding; otherwise, the Library page may fail to display.

### To create your own running headers or footers:

Copy files *custhead.htm* and/or *custfoot.htm*, from their location below the Library Server install directory, to new files called *bmheader.htm* and/or *bmfooter.htm*, respectively, in the same directory; or for z/OS, to the directory specified by the *LOGDIR=* parameter in the *bookmgr.nn* configuration file. Edit *bmheader.htm* and/or *bmfooter.htm*, respectively, and modify their contents as desired. You can either replace the default text or you can add your own text below the default.

Do not include `<HTML>`, `<HEAD>`, `</HEAD>`, `<BODY>`, `</BODY>` or `</HTML>` tags in this file. The first four tags are already included in the HTML product pages to which the header and footer are added. The `</BODY>` and `</HTML>` tags will automatically be added following the header and footer.

### To display no custom headers or footers:

If you no longer wish to display a custom header that you previously created, rename the *bmheader.htm* file to *noheader.htm*. If you no longer wish to display a custom footer that you previously created, rename the *bmfooter.htm* file to *nofooter.htm*.


### To disable the link to the IBM Corporate web site:

As mentioned in “Running IBM Footer” on page 96, the IBM running footer contains a link to the IBM Corporate web site. This link can be overridden by renaming the *custROUT.htm* file located in the */usr/lpp/booksrv/public/bookmgr* subdirectory to *bmrouter.htm* where */usr/lpp/booksrv* is the Library Server’s install directory. Doing so will cause the *bmrouter.htm* page to be served in place of taking the link to the IBM Corporate web site, when selected. The *bmrouter.htm* file can be customized as needed.

### To eliminate the IBM logo from the toolbar when viewing BookManager Books:

When viewing pages of BookManager Books using the traditional framed or unframed interface, the IBM logo appears as part of the backdrop in the toolbar at the top of the page. If it is desired to eliminate this logo, the existing backdrop image file named *tooldrop.gif* located in the `/usr/lpp/booksrv/public/bookmgr` subdirectory of Library Server's install tree may be replaced with some other backdrop image file. To use an "empty" backdrop, the simplest way to accomplish this is to copy the file named *backdrop.gif*, from the same subdirectory, to *tooldrop.gif* after having saved a copy of *tooldrop.gif* under a different name. Of course any properly customized backdrop image file could be used to replace *tooldrop.gif* in a similar manner.

### To eliminate the icon displayed for creating a dynamic LibraryCenter view of a Bookcase:

For each entry in the list of Bookcases page, and within the toolbar of an individual Bookcase page, a LibraryCenter icon  for LibraryCenter Template 2 is displayed. Clicking this icon dynamically displays a LibraryCenter view of the associated Bookcase using LibraryCenter Template 2. If it is desired to eliminate this icon from these pages, and LibraryCenter Template 2 is not being used for any statically configured LibraryCenters, the existing Template 2 image file named *lcenter2.gif* located in the `/usr/lpp/booksrv/public/bookmgr` subdirectory of Library Server's install tree may be replaced with an "empty" icon image. The simplest way to accomplish this is to copy the file named *odot.gif*, from the same subdirectory, to *lcenter2.gif* after having saved a copy of *lcenter2.gif* under a different name.

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## Linking to Library Server from a Web Document

**Description:** If you own and maintain a Web document (Web page), you can create links within the document that give readers direct access to your Library. You can link to the Library page, to a list of shelves or Bookcases, to a specific Bookcase or shelf, to a section of a Book, and so on.

You can create links to the Library Server by specifying the appropriate URL with HTML tags.

In general, to obtain the URL of a specific page, navigate to that page and copy the URL from the browser's address or Location Field. Following are two examples of how you can obtain URLs to specific places in your Library Server:

- **Within the traditional Framed view of a Book**, you can obtain the link to a specific page:
  1. Navigate to the desired topic
  2. Copy the URL
  3. Overlay the topic id portion of the URL with the topic id of the desired topic page.

Example: To form a link to Topic 3.2 of the Book with filename A2278346,

- a. Start by navigating to the following URL:

```
http://librarycenter.raleigh.ibm.com/cgi-bin/  
bookmgr/bookmgr.exe/FRAMESET/A2278346/  
CCONTENTS?DT=20020923153209
```

- b. Then, replace **ccontents** with **3.2**, as follows:

[http://librarycenter.raleigh.ibm.com/cgi-bin/  
bookmgr/bookmgr.exe/FRAMESET/A2278346/  
3.2?DT=20020923153209](http://librarycenter.raleigh.ibm.com/cgi-bin/bookmgr/bookmgr.exe/FRAMESET/A2278346/3.2?DT=20020923153209)

- **Within a LibraryCenter**, you can obtain the link to a specific page:
  1. Using Internet Explorer, whenever the Bookmark icon is present in the right hand side of the tool bar, click the Bookmark icon to add the URL to your "Favorites"
  2. Use the Context menu (right click) to open the properties of the "Favorite" that you have created and copy the URL from the "Web Document" page.
- **Within an InfoCenter**
  1. To form a link to the InfoCenter in a framed interface use a URL similar to this one to a db2 InfoCenter: [http://librarycenter.raleigh.ibm.com/  
bookmgr-cgi/EPHBOOKS/infocenters/db2?FS=TRUE](http://librarycenter.raleigh.ibm.com/bookmgr-cgi/EPHBOOKS/infocenters/db2?FS=TRUE)
  2. To form a link to a particular topic in the InfoCenter, insert the topic identifier after the InfoCenter Identifier as in this link to topic 1.3 in the db2 InfoCenter. [http://librarycenter.raleigh.ibm.com/bookmgr-cgi/  
infocenters/db2/1.3?FS=TRUE](http://librarycenter.raleigh.ibm.com/bookmgr-cgi/EPHBOOKS/infocenters/db2/1.3?FS=TRUE)
  3. To form a link to an unframed InfoCenter topic, navigate to the topic and copy the URL from the browser's location field, similar to this link to topic 1.3 in the db2 InfoCenter: [http://librarycenter.raleigh.ibm.com/bookmgr-cgi/  
ephjbcgi.exe/infocenters?icid=db2&TOPICID=1.3](http://librarycenter.raleigh.ibm.com/bookmgr-cgi/ephjbcgi.exe/infocenters?icid=db2&TOPICID=1.3)

Note that the script name in the URL of the third example above is different than that of the first two examples.



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## Chapter 6. Help

**Description:** Help is accessible from any Library Server page and from several dialog forms (such as the *Search Book* and *Sort Shelf* forms).

**Using Help:** Choose the Help icon or push button on the page or form to get help. On a Book page, choose the Help icon on the toolbar. The Help button links to the relevant topic in the *Getting Started* document (this document).

Once you are in the *Getting Started* document, you can navigate around by following the hypertext links or by reading one topic at a time.

If you are using a LibraryCenter or a framed traditional BookServer interface, then the Table of Contents of the *Getting Started* document is displayed, and you may use that for navigation as well.

Note that when requesting help from a framed Book page or a LibraryCenter, that the Help pages are launched in a new browser window which uses the framed traditional BookServer interface. When requesting help from a non-framed Book page, the current browser window is used.



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## Chapter 7. BookRead API (for z/OS)

This chapter contains Programming Interface information. BookRead is an API which supports the 'man' command for OS/390 UNIX System Services. Although provided with Library Server, BookRead is not used by Library Server. The following information explains how to use the BookRead API.

BookRead is an API that provides access to the textual information in BookManager Books. Books are binary files built from word processor or BookMaster source files. Given a Book file name and topic name within the Book, BookRead returns the text of the topic and of any sub-topics contained within the topic.

### To use the BookRead API

1. An application programmer or developer must code and compile statements to invoke the BookRead entry point in the EPHBOOKR load module.
2. The MVS systems programmer must place the EPHBOOKR load module in the system search order. (The default installation will place EPHBOOKR in SYS1.LINKLIB which is in the system search order. The MVS system programmer must also customize SYS1.PARMLIB(EPHWPO0) to contain the prefix of the SEPHTAB suffixed dataset.
3. Code an OS linkage subroutine call in the programming language choice. The file SEPHSAMP (EPHSAMPC) contains an example of how to code a call to BookRead in the C or C++ languages.
4. Set the parameters to, and check the return codes from BookRead. The parameters are descriptively named in the declaration file: EPHSAMPH which is also shipped as a sample in the SEPHSAMP dataset. This information is repeated and elaborated upon below.

PARAMETERS to bookread ( ):

```
long bookread(char * szBuffer,  
              long   lBufLen,  
              long * p1BytesWritten,  
              long   lCodePage,  
              char * szBookName,  
              char * szTopicName ) ;
```

#### **szBuffer**

is a pointer to a null terminated array of characters where the topic contents will be written.

#### **lBufLen**

is the four byte length of szBuffer, including space for null terminator.

#### **p1BytesWritten**

is a pointer to a long integer (4 bytes) where the number of bytes written in the buffer will be returned. This count will not include the null terminator written at the end of the topic.

#### **lCodePage**

Is a four-byte integer. The display code page legal values are:

```
1047 -- OE latin1  
500  -- MVS latin1  
933  -- Korean  
935  -- Simplified Chinese  
937  -- Traditional Chinese  
939  -- Japanese
```

**szBookName**

is a pointer to a null terminated string which is the fully qualified name of the Book file. To indicate a dataset name, enclose the dataset name in single quotes.

**szTopicName**

is a pointer to the null terminated string with the topic id.

## C/C++ Example: Calling BookRead

### SEPHSAMP(EPHSAMPC)

Return code	BASE value	most likely cause
Success	0	-- you did it right
Topic Not found	1	-- book didn't contain the requested topic Double check the topics in a book by calling bookread with the "contents" topic.
Buffer overrun	-1	-- the length of the output buffer is not great enough to hold the entire topic
SOPEN_ERRORS	100000	-- Tab file open failed -- Prefix in EPHWPO not set.
BOPEN_ERRORS	200000	-- Book file open failed
XINCPY_ERRORS	300000	-- Translation failed, tab file bad?
SETTPCID_ERRORS	400000	-- Topic id errors other than not found.
GETLN_ERRORS	500000	-- Reading book line failed. Bad Book.
XOUTCPY_ERRORS	600000	-- Translation failed, tab file bad?
BCLOSE_ERRORS	700000	-- Closing book failed. ABEND
SCLOSE_ERRORS	800000	-- Closing session failed. ABEND
LOCTOP_ERRORS	900000	-- Position to top of book failed, bad book
GETCTL_ERRORS	1000000	-- Interpreting book control words failed,
CONFIG_ERRORS	1100000	-- Config file open failed--- EPHWPO not in SYS1.PARMLIB.

```

*/
// START of SAMPLE BOOKREAD C/C++ calling code.
/* ***** */
/* This test harness will drive the bookread API. */
/*
/* A test case file is read from stdin. */
/* The format of the testcase file is as follows: */
/* Line 1 word 1 is a codepage keyword: */
/*      ) Ja_JP  -- japanese */
/*      ) Zh_CN  -- simplified chinese */
/*      ) Zh_TW  -- trad. chinese */
/*      ) Ko_KR  -- korean */
/*      ) anything else -- latin1 */
/* Lines 2 - n) */
/*      word 1 is the book name */
/*      word 2 is the topic name */
/*
/* Output from the test harness is the textual contents of the */
/* topics of the books listed in the test case file. */
/*
/* example test case file

Ja_JP Japan
/u/booksrv/dev/cgi-bin/ephm2JPN.boo CONTENTS
/u/booksrv/dev/cgi-bin/ephm2JPN.boo 1.0
/u/booksrv/dev/cgi-bin/ephm2JPN.boo 3.0
/u/booksrv/dev/cgi-bin/ephm2JPN.boo 4.0
/u/booksrv/dev/cgi-bin/ephm2JPN.boo GLOSSARY
/u/booksrv/dev/cgi-bin/ephm2JPN.boo INDEX

```



```

*/
/* ***** */
#pragma csect (code,"TSTBKR@")
#pragma csect (static,"TSTBKR$")

#if defined DEBUG
#define VDEBUG
#pragma options (test(all))
#pragma runopts (test(,checkc,;,*) )
#pragma runopts (execops)
#include
#endif

#define OS MVSTSO

#include
#include
#include
#include
// #include "ephcdef.h"
#include "ephbookr.h"
#define MAX_CHAR 1024
#define MAX_CHAR_BUFFER MAX_CHAR * 16
#define MAX_PARAMS 25

int main(int argc,char * argv [ ],char * envp [ ]) {

char          in_string [MAX_CHAR+1] = "";
int           in_length ;

    int scanfrc = 0;

char * pTopicBuffer;
long  lBufLen = MAX_CHAR_BUFFER;
long  lBytesWritten ;
long  sCodePage ;
long * plBytesWritten = &lBytesWritten; ;
char  szBookName [MAX_CHAR+1] = "" ;
char  szTopicName [MAX_CHAR+1] = "" ;
char  szCountryName[MAX_CHAR+1] = "" ;
long  lRC = 0 ;
char  cString[MAX_CHAR];
char * token;
bookread_T * pfbbookread;
FILE * ConfigFile ;

#ifdef VDEBUG
printf("argc=%i\n",argc);
#endif
printf("\nStart BOOKREAD() Test Harness \n");
pfbbookread = (bookread_T * ) fetch("EPHBOOKR");
if ((long int) pfbbookread == 0) {
    printf("fetch error\n");
    return(12);
}
if ( ( pTopicBuffer = (char *) calloc((int)lBufLen,1)) == NULL )
{
    fprintf(stderr,"no memory for topic buffer");
    return((int)NULL);
}

/* open and read sys1.parmlib(ephwp00)
----- */
ConfigFile = fopen("//SYS1.PARMLIB(EPHWP00)", "r") ;
fgetc(cString, MAX_CHAR, ConfigFile) ;

```

```

fprintf(stdout,">>>>>> Tab File Prefix :%s: \n", cString );

/* test case file line one has country name
----- */
fgetc(cString, MAX_CHAR, stdin) ;
token = strtok(cString, " ");
strcpy(szCountryName,token);
fprintf(stdout,">>>>>> SetLocale to :%s: \n",
          szCountryName );
setlocale(LC_ALL, szCountryName);
setenv("LANG", szCountryName,1);
/* get the language, set the codepage
----- */

if (!strcmp(szCountryName,"Ja_JP")) sCodePage = 939; /* japanese */
else if (!strcmp(szCountryName,"Zh_CN"))sCodePage = 935 ;/* simpl. chinese */
else if (!strcmp(szCountryName,"Zh_TW"))sCodePage = 937 ;/* tradi. chinese */
else if (!strcmp(szCountryName,"Ko_KR"))sCodePage = 933 ;/* korean */
else sCodePage = 1047 ;
/* latin1, production everyone else.
   latin1, prototype everyone else.
----- */
printf("sCodePage = %d \n",sCodePage);

/* test case file lines two-n have book and topic
----- */
while (( fgetc(cString, MAX_CHAR, stdin)) != NULL)
{
/* test case file lines two - n have book and topic
----- */
token = strtok(cString, " ");
strcpy(szBookName,token);
token = strtok(NULL, " ");
strcpy(szTopicName,token);
szTopicName[strlen(szTopicName)-1] = 0 ;

fprintf(stdout,">>>>>> Book: %s : Topic :%s : Buflen %i \n",
fprintf(stdout,">>>>>> Book: %s : Topic :%s : Buflen %i \n",
          szBookName, szTopicName,lBufLen );

memset(pTopicBuffer,lBufLen,0) ; /* zero out prev contents
----- */
lRC = pfbookread(pTopicBuffer,
                lBufLen,
                plBytesWritten,
                sCodePage,
                szBookName,
                szTopicName ) ;

fprintf(stdout,"%s",pTopicBuffer);
fprintf(stdout,"\n>>>>>>> END Book: bytesWrit:%li:strlen:%li:\n",
          lBytesWritten,strlen(pTopicBuffer));
fprintf(stdout,"\n>>>>>>> END Book: %s : Topic :%s: lRC %li \n",
          szBookName, szTopicName,lRC);

}

printf("\nEND of Test Harness \n");

exit(0);

}

```

**The following is a sample header for use with BookRead:**

```

/*-----*/
/*                      IBM                      */
/*-----*/
/*                      */
/* Product Name:   BookServer                    */
/*                      */
/* Component Name: Bookread                      */
/*                      */
/* Module Name:    EPHBOOKR.H                   */
/*                      */
/* Date Written:   03/14/98                      */
/*                      */
/* Copyright:      IBM 1999                      */
/*                      */
/*                      Operating Environment: MVS */
/*                      */
/*                      */
/* MODULE DESCRIPTION:                          */
/* This header file provides a sample prototype header for */
/* using the Bookread API in a C or C++ program.          */
/* In addition, defines for the base values of bad return codes are */
/* listed.                                                */
/*                      */
/* DEPENDENCIES:                                    */
/* LE 1.5 or above                                    */
/*                      */
/*                      */
/* MODULE FUNCTIONS:                                */
/*                      */
/* Name          Description                        */
/* -----      -----                            */
/* Bookread      external entry point              */
/* -----      -----                            */
/*-----*/

/* Change History:                                  */
/* Rel   Programmer   Date   Description           */
/* ----  - - - - -   - - -   - - - - -           */
/* 1.0   Jim O'Donnell 03/14/98 Original module    */

/*****
#define SOPEN_ERRORS    100000
#define BOPEN_ERRORS    200000
#define XINCPY_ERRORS   300000
#define SETTPCID_ERRORS 400000
#define GETLN_ERRORS    500000
#define XOUTCPY_ERRORS  600000
#define BCLOSE_ERRORS   700000
#define SCLOSE_ERRORS   800000
#define LOCTOP_ERRORS   900000
#define GETCTL_ERRORS  1000000
#define CONFIG_ERRORS  1100000
/* ----- */
#ifndef __cplusplus
    #pragma linkage(bookread_T,OS) /* OS linkage since bookread is */
                                  /* extern "OS" */
#else
extern "OS" {
#endif

    typedef long bookread_T(char * szBuffer,
                            long lBufLen,
                            long * p1BytesWritten,
                            long lCodePage,
                            char * szBookName,
                            char * szTopicName ) ;

```

```
long bookread(char * szBuffer,  
             long  lBufLen,  
             long * p1BytesWritten,  
             long  lCodePage,  
             char * szBookName,  
             char * szTopicName ) ;  
  
#ifdef __cplusplus  
}  
#endif
```

---

## Appendix A. Configuring a LibraryCenter – Using LibraryCenter Templates 1-3

Appendix A is primarily for the Library Server Administrator. It describes the LibraryCenter Templates in detail and shows how to configure and customize a LibraryCenter. To customize the LibraryCenters, you should have knowledge of HTML, Javascript and style sheets.

**Note:** A LibraryCenter is built around a single Bookcase, as shown in Figure 1 on page 5. If you have nested Bookcases (Bookcases within Bookcases), only the top level Bookcase will be displayed or searched in the LibraryCenter interfaces (Templates 1 - 3).

Depending on your needs and the users of your Library Server Library, you can use one or more of the templates provided to create different LibraryCenters. You can create as many LibraryCenters as you want to use as part of your Library Server library. Each LibraryCenter consists of a single Bookcase, under which you can have numerous shelves and softcopy Books (BookManager Books and PDF files). This Appendix contains the following:

- Description of LibraryCenter Templates 1- 3
- How to configure and customize your LibraryCenter
- Copying an Existing LibraryCenter

Figure 19 shows you an example of the Template 1 frames that you can customize (Templates 2 and 3 have similar frames that you can customize).

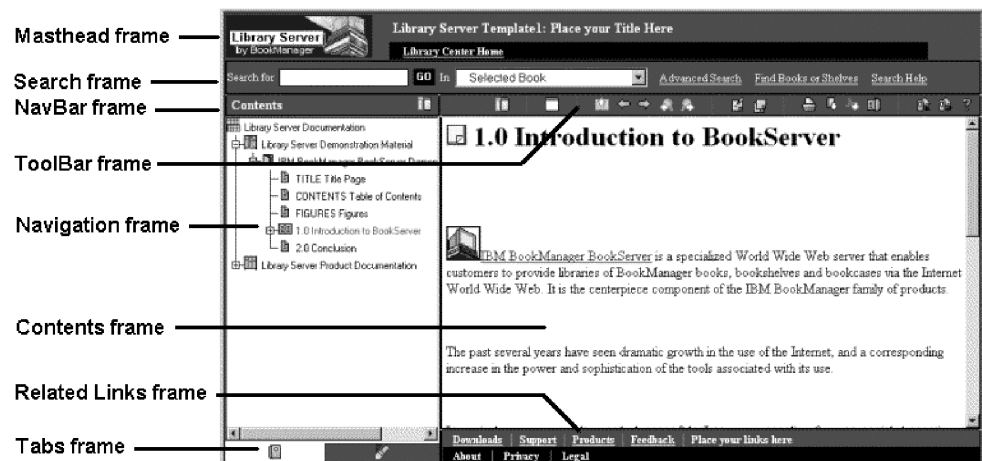


Figure 19. Example of customizable frames in a LibraryCenter (Template 1 LibraryCenter is shown)

---

### Description of LibraryCenter Templates 1-3

This section shows you the three LibraryCenter Templates available to you (the administrator) to configure your LibraryCenters.

The three templates have the same features and functions, the difference is the layout and colors. The templates are displayed in English. To create a LibraryCenter, you will use the **Create a LibraryCenter Window**, shown in Figure 12 on page 90, to select one of the templates and then click on the "Create"

button. The result will be a new LibraryCenter, which will be in the language specified in your Web server's version of the Library Server's *BookManager* configuration file. Table 3 shows which languages the Library Server supports. After you create a LibraryCenter, you can customize it for your specific needs.

*Table 3. Languages in which the LibraryCenters can be created*

<b>Language</b>
Brazilian Portuguese
Danish
English
French
German
Italian
Japanese*
Korean*
Netherlands Dutch
Norwegian
Simplified Chinese*
Spanish
Swedish
Traditional Chinese*

\* Library Server for z/OS only

## **LibraryCenter – Template 1**

Figure 20 on page 123 shows a LibraryCenter interface (home page) created by using Template 1.

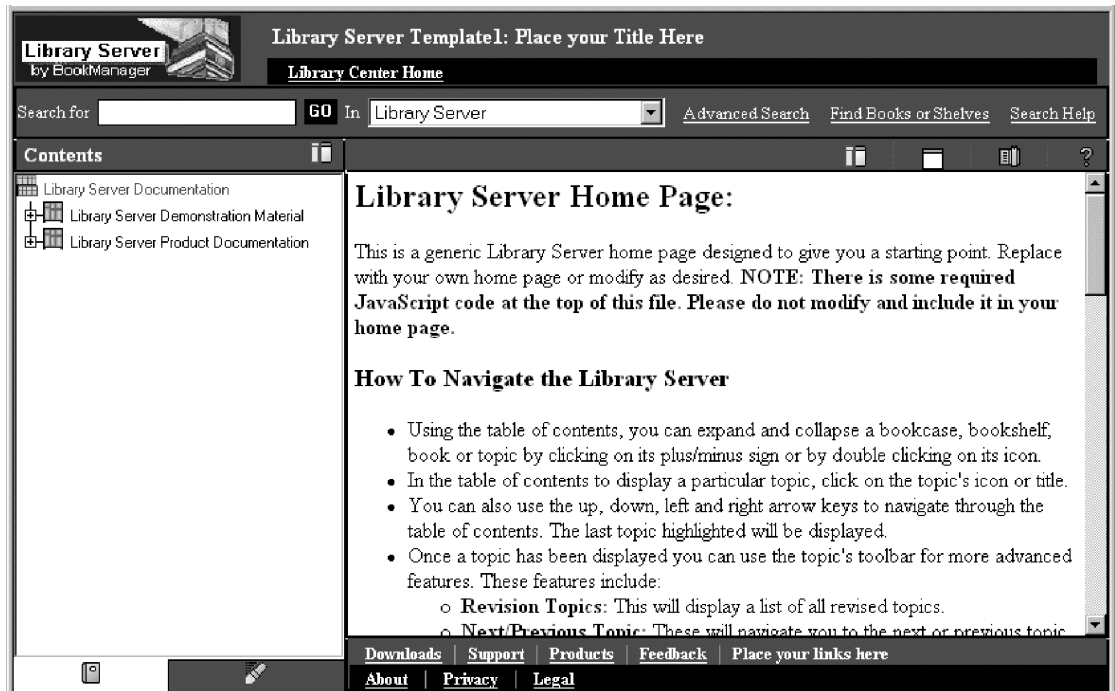


Figure 20. LibraryCenter interface created from Template 1

Figure 21 shows the different frames in the LibraryCenter interface generated by Template 1. The example is shown with a softcopy Book open, which causes the icons/links in the ToolBar frame to be displayed and active. When you move your cursor over each of the links and icons a fly-over description will appear next to it.

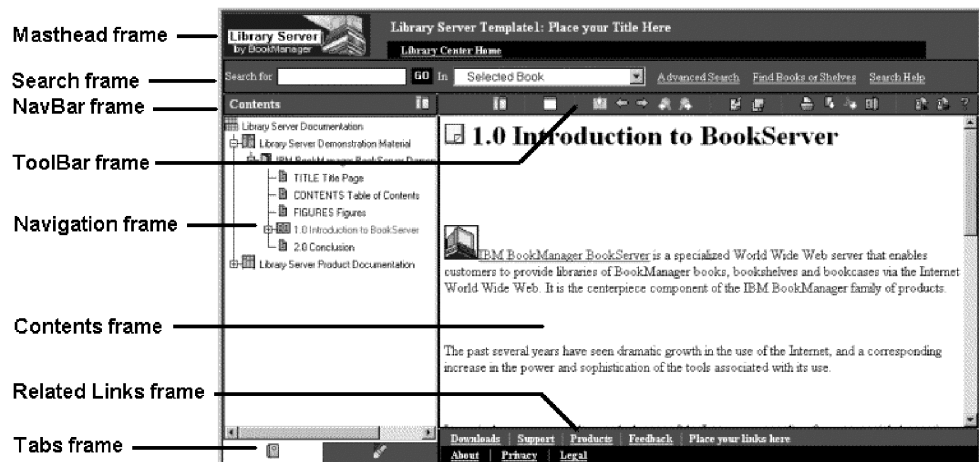


Figure 21. Template 1 LibraryCenter frames

### Masthead frame

The Masthead frame contains the following links:

#### Masthead logo

Can contain a link to a corporate home page or to another location.

## **LibraryCenter Home**

Clicking on this link takes you back to the Welcome page of your LibraryCenter.

## **Search frame**

The Search frame contains the search-data entry areas and tools to allow you to do searches and advanced searches.

### **Search for [entry field]**

This is an entry field for you to enter a search word or phrase.

### **In [drop-down listbox]**

This drop down list box lists the scope of the search (exactly where you are going to search). This list box will contain one or more of the following items:

- LibraryCenter
- If a shelf is selected:
  - LibraryCenter
  - Selected shelf
- If a Book is selected:
  - LibraryCenter
  - Parent shelf
  - Selected Book
- List of search results items
- List of find results items
- Additional "Search Scope" items designated by the Library Server Administrator, such as Google.

### **Filters [drop-down listbox]**

Selecting an item from this drop-down menu will limit the Scope of the Search to enabled documents/topics that have been classified as task, reference, etc., or have been tagged with unique identifiers such as message IDs or command names. The items in the Filters drop-down list is configurable by the administrator. By default, <none> is selected. For information on enabling documents with classifications or unique identifiers see, "Tips for Authors - Enabling BookManager Books for Search Filters" on page 27.

## **Advanced Search**

Clicking on this link brings up the Advanced Search window.

## **Find Books or Shelves**

Clicking on this link brings up the **Find Books or Shelves** window, which allows you to find Books and PDFs, shelves with titles, or names that match the contents of the "Find" field.

## **Search Help**

Clicking on this icon brings up help on how to do searches.

## **NavBar frame**

The NavBar frame will contain the following icons/links:

### **Expand/Contract the Navigation Frame**

This will expand the width of the navigation frame to a width necessary to view the longest item in the list or table of contents. Selecting the icon again will return the navigation frame to it's original size (Internet Explorer browser only).



## ToolBar frame

The ToolBar frame, when a Book is open, will contain the following icons/links:



### Hide/Show Navigation Frame

Clicking on this icon will show or hide (open and close) the Navigation frame (Internet Explorer browser only).

### Unframed View

Clicking on this icon takes you to the Unframed view, see “Library Server – Traditional BookServer Interface” on page 21. This will open an unframed view of whatever Bookcase, shelf, Book or topic is currently being displayed. The Unframed View is fully functional and provides accessibility.

### Revised Topics

This will display a list of all revised topics.

### Next/Previous Topic

These will navigate you to the next or previous topic.

### Next/Previous Search Hit

If the topic was displayed as a result of a search, you can use these buttons to navigate to the next or previous search hit.

### Create Note

This will allow you to create a note for this topic.

### List Notes

This will display a list of all notes for the Book.

### Print Topic(s)

This will open a print dialog that will allow you to do a print preview of the current topic or any other topics in the Book.

### Download Book

This will download the Book for use with a workstation Book reader such as Softcopy Reader, which is available for free from the BookManager Web site.

### Download PDF

Depending on your browser settings this will either open or download the PDF version of this document.

### Bookmark Topic (Internet Explorer only)

- This will add a Favorite to your Browser that can be used to return to this topic inside of Library Server. Please use only this link when trying to Bookmark a topic inside of the LibraryCenter interface.
- With **Other browsers** – use the Unframed View function to get to a page that can be Bookmarked.

### Handheld Disconnected

This will display a handheld enabled version of the topic for use when your handheld is not connected to a network. This will be displayed only if the Library Server Administrator has enabled the "Clipping for Handhelds" feature, see “How to Permit Clipping for Handhelds” on page 96.

### Handheld Connected

This will display a handheld enabled version of the topic for use when your handheld is connected to a network. This will be displayed only if the

Library Server Administrator has enabled the "Clipping for Handhelds" feature, see "How to Permit Clipping for Handhelds" on page 96.


**Info** This will display a window with the Book title, document number, date and time, security, copyright and current topic information.

**Help** This will open up the Library Server User's Guide to a location relevant to what is currently being viewed or displayed.

### **Navigation frame**

This frame displays either the:

- Contents pane (Default) – displays hierarchical contents of Bookcases, shelves, and Books –or–
- Search Results pane – displays results of any recent searches or find, depending up the most recent user action.

You can display long shelf and Book titles by expanding the width of the Navigation frame. This is done by clicking on the "Expand/Contract Navigation Frame" icon  on the NavBar frame (Internet Explorer browser only).

### **Contents frame**

This frame displays text and pictures. This frame can include "Home Page" information, the contents of the Book, Search tips, etc. It can also contain "Notes" information, which is displayed when the user selects the "Notes" icon in the ToolBar frame.

### **Related Links frame**

This frame contains a number of links. Links in this frame generally go to a URL that is external to the current LibraryCenter. When you click on one of these external links, a new browser window will be launched and the corresponding Web page will be displayed.

### **Tabs frame**

This frame contains the "Contents" tab and "Search Results" tab. You can switch the view of the Navigation frame between the Contents and Search Results panes.

## **LibraryCenter – Template 2**

Figure 22 on page 127 shows you the LibraryCenter interface (home page) that is created when you use Template 2.

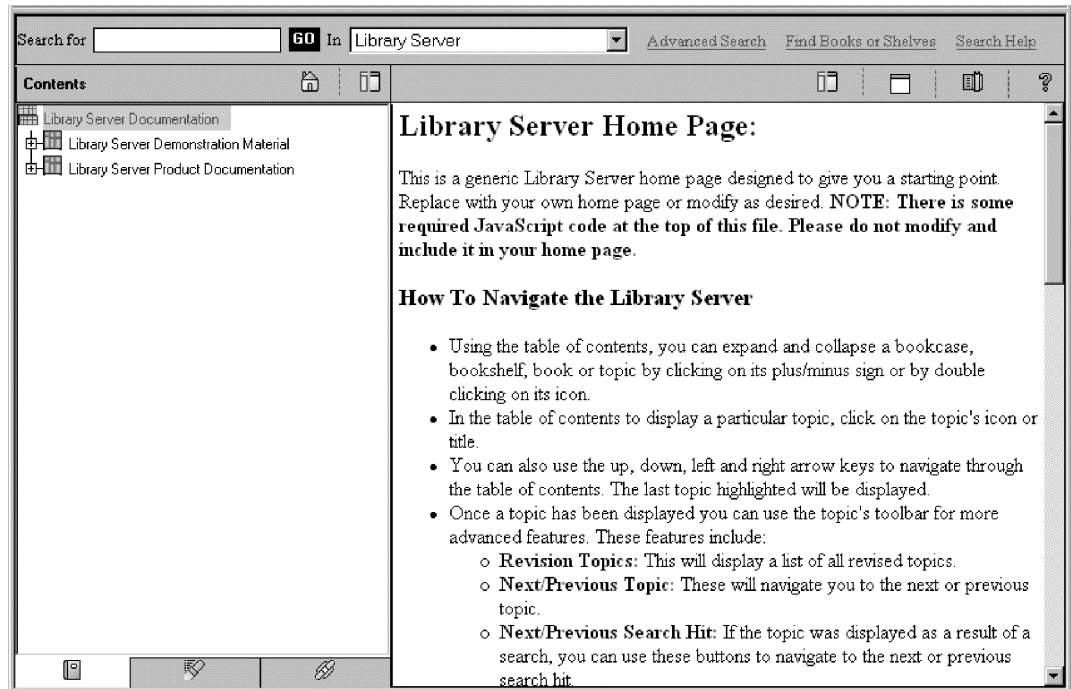


Figure 22. LibraryCenter interface created from Template 2

Figure 23 shows the different frames in the LibraryCenter interface generated by Template 2. The example is shown with a softcopy Book open, which allows the icons/links in the ToolBar frame to be displayed and active. When you move your cursor over each of the links and icons a fly-over description will appear next to it.

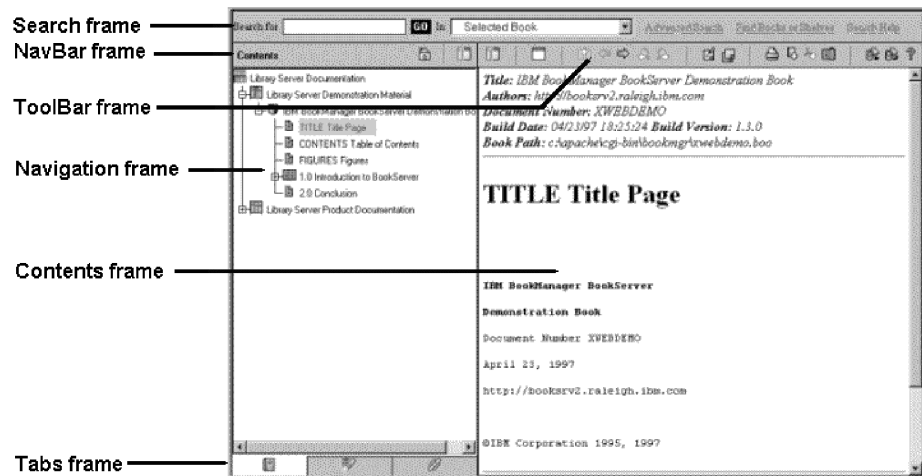


Figure 23. Template 2 LibraryCenter frames

### Search frame

The Search frame contains the search-data entry areas and tools to allow you to do searches and advanced searches.

#### Search for [entry field]

This is an entry field for you to enter a search word or phrase.

### In [drop-down listbox]

This drop down list box lists the scope of the search (exactly where you are going to search). This list box will contain one or more of the following items:

- LibraryCenter
- If a shelf is selected:
  - LibraryCenter
  - Selected shelf
- If a Book is selected:
  - LibraryCenter
  - Parent shelf
  - Selected Book
- List of find results items
- List of search results items
- Additional "Search Scope" items designated by the Library Server Administrator, such as Google.

### Filters [drop-down listbox]

Selecting an item from this drop-down menu will limit the Scope of the Search to enabled documents/topics that have been classified as task, reference, etc., or have been tagged with unique identifiers such as message IDs or command names. The items in the Filters drop-down list is configurable by the administrator. By default, <none> is selected. For information on enabling documents with classifications or unique identifiers see, "Tips for Authors - Enabling BookManager Books for Search Filters" on page 27.

### Advanced Search

Clicking on this link brings up the Advanced Search window.

### Find Books or Shelves

Clicking on this link brings up the **Find Books or Shelves** window, which allows you to find Books and PDFs, shelves with titles, or names that match the contents of the "Find" field.

### Search Help

Clicking on this icon brings up help on how to do searches.

### NavBar frame

The NavBar frame will contain the following icons/links:

#### LibraryCenter Home

Clicking on this icon takes you back to the Welcome page of your LibraryCenter.

#### Expand/Contract the Navigation Frame

This will expand the width of the navigation frame to a width necessary to view the longest item in the list or table of contents. Selecting the icon again will return the navigation frame to it's original size (Internet Explorer browser only).

### ToolBar frame

The ToolBar frame, when a Book is open, will contain the following icons/links:



**Show/Hide Navigation Frame**

Clicking on this icon will show or hide (open and close) the Navigation frame (Internet Explorer browser only).

**Unframed View**

Clicking on this icon takes you to the Unframed view, see “Library Server – Traditional BookServer Interface” on page 21. This will open an unframed view of whatever Bookcase, shelf, Book or topic is currently being displayed. The Unframed View is fully functional and provides accessibility.

**Revised Topics**

This will display a list of all revised topics.

**Next/Previous Topic**

These will navigate you to the next or previous topic.

**Next/Previous Search Hit**

If the topic was displayed as a result of a search, you can use these buttons to navigate to the next or previous search hit.

**Create Note**

This will allow you to create a note for this topic.

**List Notes**

This will display a list of all notes for the Book.

**Print Topic(s)**

This will open a print dialog that will allow you to do a print preview of the current topic or any other topics in the Book.

**Download Book**

This will download the Book for use with a workstation Book reader such as Softcopy Reader, which is available for free from the BookManager Web site.

**Download PDF**

Depending on your browser settings this will either open or download the PDF version of this document.

**Bookmark Topic (Internet Explorer only)**

- This will add a Favorite to your Browser that can be used to return to this topic inside of Library Server. Please use only this link when trying to Bookmark a topic inside of the LibraryCenter interface.
- With **Other browsers** – use the Unframed View function to get to a page that can be Bookmarked.

**Handheld Disconnected**

This will display a handheld enabled version of the topic for use when your handheld is not connected to a network. This will be displayed only if the Library Server Administrator has enabled the "Clipping for Handhelds" feature, see “How to Permit Clipping for Handhelds” on page 96.

**Handheld Connected**

This will display a handheld enabled version of the topic for use when your handheld is connected to a network. This will be displayed only if the Library Server Administrator has enabled the "Clipping for Handhelds" feature, see “How to Permit Clipping for Handhelds” on page 96.

**Info**

This will display a window with the Book title, document number, date and time, security, copyright and current topic information.

**Help** This will open up the Library Server User's Guide to a location relevant to what is currently being viewed or displayed.

### **Navigation frame**

This frame displays either the:

- Contents pane - or -
- Search Results pane - or -
- Related links pane – this pane contains a number of links. Links in this pane generally go to a URL that is external to the current LibraryCenter. When you click on one of these external links, a new browser window will be launched and the corresponding Web page will be displayed.

You can display long shelf and Book titles by expanding the width of the Navigation frame. This is done by clicking on the "Expand/Contract Navigation Frame" icon



### **Contents frame**

This frame displays text and pictures. This frame can include "Home Page" information, the contents of the Book, Search tips, etc. It can also contain "Notes" information, which is displayed when the user selects the "Notes" icon in the ToolBar frame.

### **Tabs frame**

This frame contains the "Contents" tab, the "Related Links" tab and "Search Results" tab. You can switch the view of the Navigation frame between the Contents, the Related Links and Search Results panes.

## **LibraryCenter – Template 3**

Figure 24 on page 131 shows you the LibraryCenter interface (home page) that is created when you use Template 3.

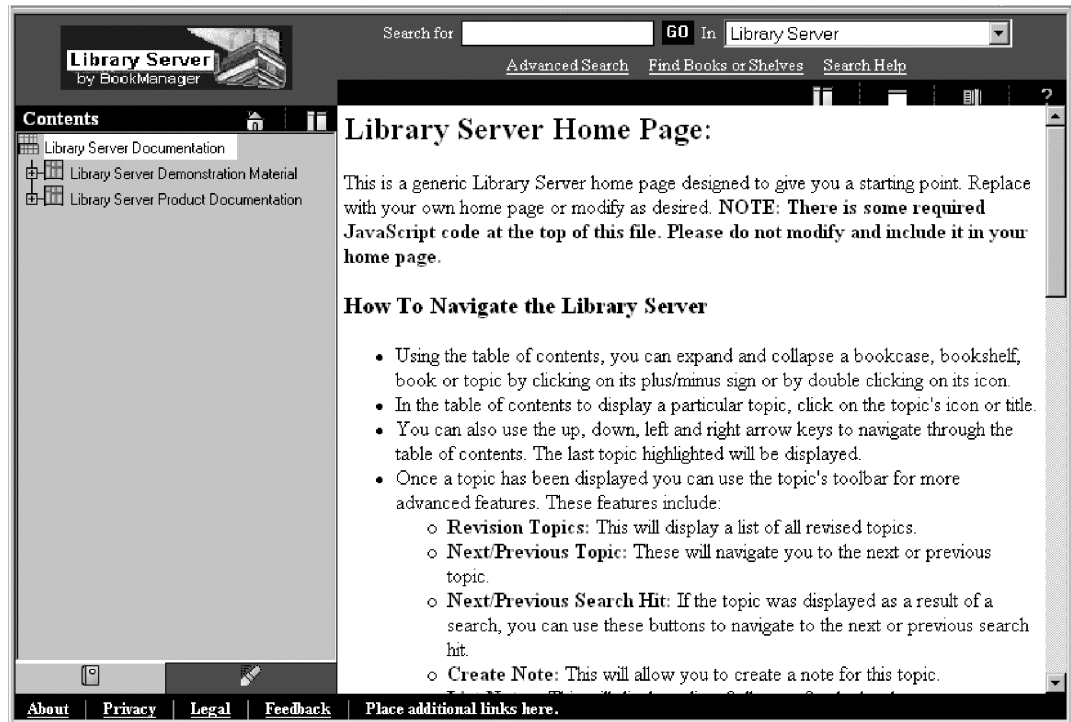


Figure 24. LibraryCenter interface created from Template 3

Figure 25 shows the different frames in the LibraryCenter interface generated by Template 3. The example is shown with a softcopy Book open, which allows the icons/links in the ToolBar frame to be displayed and active. When you move your cursor over each of the links and icons a fly-over description will appear next to it.

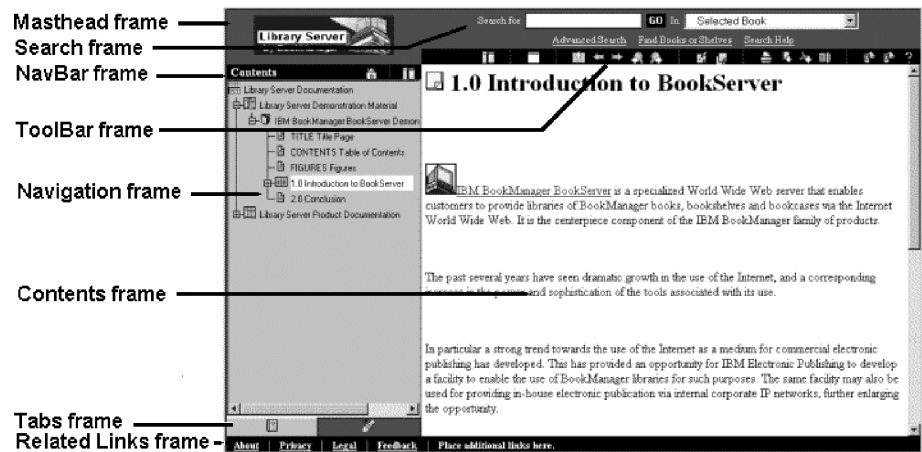


Figure 25. Template 3 LibraryCenter frames

### Masthead frame

The Masthead frame contains the product name and logo.

### Masthead logo

Can contain a link to a corporate home page or somewhere else.

## Search frame

The Search frame contains the search-data entry areas and tools to allow you to do searches and advanced searches.

### Search for [entry field]

This is an entry field for you to enter a search word or phrase.

### In [drop-down listbox]

This drop down list box lists the scope of the search (exactly where you are going to search). This list box will contain one or more of the following items:

- LibraryCenter
- If a shelf is selected:
  - LibraryCenter
  - Selected shelf
- If a Book is selected:
  - LibraryCenter
  - Parent shelf
  - Selected Book
- List of find results items
- List of search results items
- Additional "Search Scope" items designated by the Library Server Administrator, such as Google.

### Filters [drop-down listbox]

Selecting an item from this drop-down menu will limit the Scope of the Search to enabled documents/topics that have been classified as task, reference, etc., or have been tagged with unique identifiers such as message IDs or command names. The items in the Filters drop-down list is configurable by the administrator. By default, <none> is selected. For information on enabling documents with classifications or unique identifiers see, "Tips for Authors - Enabling BookManager Books for Search Filters" on page 27.

### Advanced Search

Clicking on this link brings up the Advanced Search window.

### Find Books or Shelves

Clicking on this link brings up the **Find Books or Shelves** window, which allows you to find Books and PDFs or shelves with titles or names that match the contents of the "Find" field.

### Search Help

Clicking on this icon brings up help on how to do searches.

## NavBar frame

The NavBar frame will contain the following icons/links:

### LibraryCenter Home

Clicking on this icon takes you back to the Welcome page of your LibraryCenter.

### Expand/Contract the Navigation Frame

This will expand the width of the navigation frame to a width necessary to view the longest item in the list or table of contents. Selecting the icon again will return the navigation frame to it's original size (Internet Explorer browser only).



## ToolBar frame

The ToolBar frame, when a Book is open, will contain the following icons/links:



### Show/Hide Navigation Frame

Clicking on this icon will show or hide (open and close) the Navigation frame (Internet Explorer browser only).

### Unframed View

Clicking on this icon takes you to the Unframed view, see “Library Server – Traditional BookServer Interface” on page 21. This will open an unframed view of whatever Bookcase, shelf, Book or topic is currently being displayed. The Unframed View is fully functional and provides accessibility.

### Revised Topics

This will display a list of all revised topics.

### Next/Previous Topic

These will navigate you to the next or previous topic.

### Next/Previous Search Hit

If the topic was displayed as a result of a search, you can use these buttons to navigate to the next or previous search hit.

### Create Note

This will allow you to create a note for this topic.

### List Notes

This will display a list of all notes for the Book.

### Print Topic(s)

This will open a print dialog that will allow you to do a print preview of the current topic or any other topics in the Book.

### Download Book

This will download the Book for use with a workstation Book reader such as Softcopy Reader, which is available for free from the BookManager Web site.

### Download PDF

Depending on your browser settings this will either open or download the PDF version of this document.

### Bookmark Topic (Internet Explorer only)

- This will add a Favorite to your Browser that can be used to return to this topic inside of Library Server. Please use only this link when trying to Bookmark a topic inside of the LibraryCenter interface.
- With **Other browsers** – use the Unframed View function to get to a page that can be Bookmarked.

### Handheld Disconnected

This will display a handheld enabled version of the topic for use when your handheld is not connected to a network. This will be displayed only if the Library Server Administrator has enabled the "Clipping for Handhelds" feature, see “How to Permit Clipping for Handhelds” on page 96.

### Handheld Connected

This will display a handheld enabled version of the topic for use when your handheld is connected to a network. This will be displayed only if the Library Server Administrator has enabled the "Clipping for Handhelds" feature, see “How to Permit Clipping for Handhelds” on page 96.

**Info** This will display a window with the Book title, document number, date and time, security, copyright and current topic information.

**Help** This will open up the Library Server User's Guide to a location relevant to what is currently being viewed or displayed.

### Navigation frame

This frame displays either the:

- Table of Contents panel (Default) – displays hierarchical contents of Bookcases, shelves, and Books –or–
- Search Results panel – displays results of any recent searches or find, depending up the most recent user action.

You can display long shelf and Book titles by expanding the width of the Navigation frame. This is done by clicking on the "Expand/Contract Navigation Frame" icon



### Contents frame

This frame displays text and pictures. This frame can include "Home Page" information, the contents of the Book, Search tips, etc. It can also contain "Notes" information, which is displayed when the user selects the "Notes" icon in the ToolBar frame.

### Tabs frame

This frame contains the Contents tab and "Search Results" tab. You can switch the view of the Navigation frame between the Contents and Search Results panes.

### Related Links frame

This frame contains a number of links. Each link goes to a URL. When you click on one of these links a new browser window will be launched and the corresponding Web page will be displayed.

---

## Configuring and Customizing Your LibraryCenter

This section describes how to configure and customize the LibraryCenter you created using the procedure "Creating a LibraryCenter" on page 88. To customize the LibraryCenter, you may be working with HTML, Javascript or style sheets. To take advantage of the customized LibraryCenter, the user must be using one of the Web browsers listed in "Client Product Prerequisites" on page 11.

### Location of Configured LibraryCenters

The newly created LibraryCenter will contain a number of files, which include HTML, Javascript, Simplified Style Sheet, and Search Parameters files that are associated with LibraryCenter frames. By default, these files will most likely be stored on your computer in the following directory, depending on your operating system:

**z/OS** */usr/lpp/booksrv/public/bookmgr/libraryserver/your LibraryCenter name*

For z/OS, this LibraryCenter configuration directory can also be specified (i.e. changed from the installed default) using the new *LIBCENTERDIR=* parameter in your Web server's version of Library Server **bookmgr.nn** configuration file. This parameter is intended to be used to redefine the parent directory (from the installed default) for configured LibraryCenters.

To specify your own LibraryCenter "parent configuration directory", enter the fully qualified path name of a directory that you create yourself as the `LIBCENTERDIR=` parameter (Library Server will not create your non-default directory). If you specify your own `LIBCENTERDIR` directory, you must grant `*RWX` authority for it to your HTTP server's user profile(s). Do not end the path name with a forward slash.

For your LibraryCenters to function properly, you **must** create a "pass rule" as specified by the program directory or readme file. Your HTTP server pass rule should look like this:

- If you are using the default location for LibraryCenters:

#### **z/OS**

```
PASS /libraryserver/* /usr/lpp/booksrv/public/bookmgr/libraryserver/*
```

#### **Apache for AIX and Linux**

```
Alias "/libraryserver/"  
"/usr/lpp/booksrv/htdocs/bookmgr/libraryserver/"
```

#### **Apache for Windows**

```
Alias "/libraryserver/"  
"C:/ProgramFiles/ApacheGroup/Apache2/htdocs/bookmgr/libraryserver/"
```

- If you are using a non-default location `LIBCENTERDIR=/etc/mylibcenters`, for example

```
PASS /libraryserver/* /etc/mylibcenters/*
```

To enable the "Browse LibraryCenters" function from the Library page, an `index.html` file in the installed default directory or on z/OS, the directory specified by the `LIBCENTERDIR= param` (discussed earlier in this section) must be created. If not done automatically, the easiest way to do this is to make a copy of the shipped sample file `indexsamp.html` and name it `index.html`. You must then edit this file if you want it to contain links to your new LibraryCenters. See "Customizing LibraryCenter Files" for more information on editable LibraryCenter files.

If the 'Add LibraryCenter' checkbox on the 'Create a LibraryCenter' dialog is checked, the initial creation of and subsequent additions to the 'Browse LibraryCenters `index.html` file occur automatically.

## **Customizing LibraryCenter Files**

In the newly created LibraryCenter, the user-interface frames and customizable attributes shown in Table 4 on page 136 are created by default. You can use them as they are, or you can customize them. In the table, you will see:

- The different areas of Library Server and the LibraryCenters you can customize
- What you can configure and customize
- The type of file that you will customize (HTML, Javascript or style sheets)
- The name of the file in which you will do the customization

To edit (customize) your LibraryCenter, you will go to the HTML or TXT file and follow the instructions in the commented areas within the file. You will be shown which areas can be customized - start and stop points, and any special instructions you need.

Table 4. What you can configure and customize in the LibraryCenter Templates

Areas you can customize	What you can configure / customize	File type and name
<b>Browse LibraryCenters window</b>	You can change the names of the LibraryCenters or Template names that are displayed when you select the "Browse LibraryCenters" link from the Library Server Library page.	HTML file <ul style="list-style-type: none"> <li>• index.html (created manually or automatically) (1)</li> <li>• indexsamp.html (shipped as a sample for index.html) (1)</li> </ul>
<b>Frame Layout</b>	<ul style="list-style-type: none"> <li>• LibraryCenter specific information, URL Bookcase, etc.</li> <li>• Frame layouts and sizes</li> </ul>	HTML file and style sheets <ul style="list-style-type: none"> <li>• index.html (2)</li> <li>• styles.txt (2)</li> </ul>
<b>Masthead frame</b> (Templates 1 and 3)	<ul style="list-style-type: none"> <li>• Logo and/or associated link on the masthead</li> <li>• Title of the LibraryCenter masthead</li> <li>• Name of the "LibraryCenter Home" link</li> </ul>	HTML file and style sheets <ul style="list-style-type: none"> <li>• masthead.html (2)</li> <li>• styles.txt (2)</li> </ul>
<b>Search frame</b> (Templates 1, 2 & 3)	<ul style="list-style-type: none"> <li>• Custom Search engines in the "inpulldown"</li> <li>• Additional links</li> <li>• Search filters</li> </ul>	HTML file, style sheets, and config. file <ul style="list-style-type: none"> <li>• search.html (2)</li> <li>• styles.txt (2)</li> <li>• search_engines.txt (2)</li> <li>• search_filters.txt (2)</li> </ul>
<b>NavBar frame</b> (Templates 1, 2 & 3)	<p>Links and Icons:</p> <ul style="list-style-type: none"> <li>• "Home" link (Template 2 and 3)</li> <li>• Expand/contract Navigation frame (only supported by the Internet Explorer browser)</li> </ul>	HTML file and style sheets <ul style="list-style-type: none"> <li>• navbar.html (2)</li> <li>• styles.txt (2)</li> </ul>
<b>Toolbar frame</b> (Templates 1, 2 & 3)	<p>Links and Icons:</p> <ul style="list-style-type: none"> <li>• All toolbars, icons and most functions</li> </ul>	Javascript and style sheets <ul style="list-style-type: none"> <li>• toolbar.txt (z/OS) (2)</li> <li>• toolbar.js (multiplatforms) (2)</li> <li>• styles.txt (2)</li> </ul>
<b>Navigation frame</b> (Templates 1, 2 & 3)	<p>Navigation frame with Tabs:</p> <ul style="list-style-type: none"> <li>• "Contents" tab</li> <li>• "Search Results" tab</li> <li>• "Links" tab (Template 2 only) <ul style="list-style-type: none"> <li>– Internet URLs</li> <li>– Libraries within your system</li> <li>– Other LibraryCenters</li> <li>– Shelves and Books</li> </ul> </li> </ul>	HTML file and style sheets <ul style="list-style-type: none"> <li>• nav_styles.txt (2)</li> <li>• styles.txt (2)</li> <li>• links.html (2)</li> </ul>
<b>Welcome Page</b> (Templates 1, 2 & 3)	Information that appears on the Welcome page of your LibraryCenter	HTML file <ul style="list-style-type: none"> <li>• home.html (2)</li> </ul>
<b>Related Links frame</b> (Templates 1 & 3)	<p>You can put your own links to:</p> <ul style="list-style-type: none"> <li>• Internet URLs</li> <li>• Libraries within your system</li> <li>• Other LibraryCenters</li> <li>• Shelves and Books</li> </ul>	HTML file and style sheets <ul style="list-style-type: none"> <li>• links.html (2)</li> <li>• styles.txt (2)</li> </ul>

Table 4. What you can configure and customize in the LibraryCenter Templates (continued)

Areas you can customize	What you can configure / customize	File type and name
<b>Tabs frame</b> (Templates 1, 2 & 3)	Names / Icons of the tabs: <ul style="list-style-type: none"> <li>• Contents tab</li> <li>• Search Results tab</li> <li>• Links tab (Template 2 only)</li> </ul>	HTML file and style sheets <ul style="list-style-type: none"> <li>• tabs.html (2)</li> <li>• styles.txt (2)</li> </ul>
<b>Advanced Search</b> (Templates 1, 2 & 3)	<ul style="list-style-type: none"> <li>• Search Filters</li> <li>• Style</li> </ul>	style sheets <ul style="list-style-type: none"> <li>• search_filters.txt (2)</li> <li>• styles.txt (2)</li> </ul>
<b>Find Books and Shelves</b>	<ul style="list-style-type: none"> <li>• Style</li> </ul>	style sheets <ul style="list-style-type: none"> <li>• styles.txt (2)</li> </ul>

(1) Located in the default `/"customer name"/public/bookmgr/libraryserver/` directory (where `/"customer name"/` is the Library Server product installation directory), or in the directory specified by the `LIBCENTERDIR=` keyword of the `bookmgr.port#` file.

(2) Located in the `/"your_LibraryCenter_name"/` subdirectory of the default `/"customer name"/public/bookmgr/libraryserver/` directory, (where `/"customer name"/` is the Library Server product installation directory), or in the directory specified by the `LIBCENTERDIR=` keyword of the `bookmgr.port#` file.

---

## Copying an Existing LibraryCenter

You (Library Server Administrator) can have as many LibraryCenters as you want in your library. This section shows you how to make a copy of a LibraryCenter that you have already created with the process described in “Creating a LibraryCenter” on page 88. By making copies of your LibraryCenter, you can easily customize and make adjustments to them without going through all of the creation and customization steps again.

### To make a copy of an existing LibraryCenter

Copy the source LibraryCenter directory and all its files to a new target LibraryCenter directory of a different name. The new directory must be a sibling to the old directory; that is, all your LibraryCenters must be under the same parent directory. Once this is done, navigate to the new LibraryCenter directory and edit the `index.html` file. Specifically update the following fields:

- `LIBSERVERURL` – This is the URL fragment to your LibraryCenter. Change from `/libraryserver/olddirectoryname/` to `/libraryserver/newdirectoryname/`
- `LibraryServerBookcase` – This is the file name of the Bookcase that contains the data for your LibraryServer. Change from "oldcase" to "newcase". You can come back to this if you have not already created a Bookcase for this LibraryCenter. See “Creating a Bookcase” on page 85 for more information.
- `title` – This is the title of your LibraryCenter. Change from "Old LibraryCenter Title" to "New LibraryCenter Title".

You will now have a new LibraryCenter with the same customizations as the old LibraryCenter but with a new title, URL and Bookcase. For further customization see “Customizing LibraryCenter Files” on page 135.

**Note:** Be sure to update the file used by the Browse LibraryCenters link from the Library page so users can find your new LibraryCenter. This file can be found in the parent directory of your LibraryCenters and is also named *index.html*. See topic 'Location of Configured LibraryCenters' for more information on location of LibraryCenter files.

---

## Appendix B. Support for Handheld Devices

You can use Palm OS and Windows CE handheld devices to view pages served by Library Servers on the internet. The Library Servers are capable of delivering pages that are optimized for downloading and viewing on a handheld device.

You will use a service (such as AvantGo and Palm.Net Wireless Communications Service) to download information from a Library Server Web site to the handheld device. Web clipping produces a condensed version of the Web page that is fast and efficient to download and use on a handheld device.

---

### Downloading BookManager Book Pages to a Handheld Device

There are two methods of downloading BookManager pages to a handheld device. With both, you will initially connect your handheld, in its cradle synchronized to a PC, to the Library Server Web site. You will download the BookManager pages you wish to store in the memory of your handheld.

The Library Server Web site can be configured, via an option on the Administration Page (1)<sup>1</sup>, to display two buttons (icons) on the tool bar for various pages. This will allow you to select the type of pages that will be downloaded to the handheld device:

**Disconnected button** 

After the handheld is removed from the cradle it has no connection to the internet. The Book pages you selected from the Web site are downloaded and you can view and link between the these pages on your handheld.

**Connected button** 

The handheld can have a wireless connection to the internet. The Book pages you selected from the Web site are downloaded to your handheld. In addition to being able to view and link between the pages stored in your handheld, you can establish a wireless connection to the Web site with your handheld and link to and download other Book pages. With the **Connected** method, your Book pages have more functions than with the Disconnected method, such as being able to do searches and sorting.

### Disconnected

Click on the **Disconnected** button  if you plan to use your handheld **without** an internet connection.

1. Place your handheld device in a docking station (or cradle)
2. Use your PC's browser to view the Web site that contains the BookManager Books from which you want to download pages
3. Click on the **Disconnected** button to view the page optimized for handhand viewing

---

1. 1 On the Library Server Administration Page, go to "Options," and put a check in the box next to "Permit clipping for handhelds."

4. Download the optimized Book pages to your handheld using the Web clipping service of your choice.

**Note:** The method of downloading pages to the handheld will vary for different Web clipping services.

The pages from the Book are now stored in the memory of your handheld device. You can use the handheld independently from the cradle to view and link between the Book pages you downloaded.

**Note:** You will not be able to link to pages on the Web site that you did not download on the handheld. This can be done only when using the Connected button and a wireless handheld device, see below.

## Connected

Click on the **Connected** button  if you plan to use your handheld **with** a wireless internet connection.

1. Place your handheld device in a docking station (or cradle)
2. Use your PC's browser to view the Web site that contains the BookManager Books from which you want to download pages
3. Click on the **Connected** button to view the page optimized for handheld viewing
4. Download the optimized Book pages to your handheld using the Web clipping service of your choice.

**Note:** The method of downloading pages to the handheld will vary for different Web clipping services.

The pages from the Book are now stored in the memory of your handheld device. You can use the handheld independently from the cradle to view and link between the Book pages you loaded. You will also be able to view, do searches, and link to pages you did not store in the memory of your handheld. You can connect your handheld to the internet to download new pages from the Web site.



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## Appendix C. Rebuild Catalog from the Command Line

This appendix describes how to run the rebuild catalog function from the command line interface.

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### Command Line Rebuild Catalog for Library Server for z/OS

Library Server Rebuild Catalog via the command line is an enhanced alternative to running Rebuild Catalog via the Library Server Administration page. Command Line Rebuild Catalog also provides incremental cataloging and HFS-Only cataloging, which are not available with Rebuild Catalog via the Administration page. Command Line Rebuild Catalog can be run in either full, incremental mode or HFS-Only mode.

#### Full Rebuild Catalog

will catalog all Books, PDFs, shelves, and InfoCenter plug-ins known to Library Server via Library Server Administration and the QLSHELF parameter located in bookmgr.80 (or the equivalent Library Server Configuration file).

#### Incremental Rebuild Catalog

will add Books, PDFs, shelves, and InfoCenter plug-ins to the Library Server Catalog individually or together with other Books, PDFs, shelves, and InfoCenter plug-ins.

#### HFS-Only Rebuild Catalog

will ignore the QLSHELF parameter in bookmgr.80 and catalog only the Books, PDFs, shelves, and InfoCenters stored in the HFS.

Two samples shipped with Library Server, **EPHCATJC** (sample JCL) and **EPHCATSC** (sample STDIN file for use with EPHCATJC), are located in the *SEPHSAMP* dataset. Both are shown below.

### EPHCATJC Sample (JCL) Template

EPHCATJC is sample JCL for running the Rebuild Catalog administrative function. This JCL should be customized for your environment, including an appropriate jobcard. The **STEPLIB** is optional if EPHBOOKS is in the LINKLIST or LPA. If not, specify the appropriate load library containing EPHBOOKS. In the sample JCL, the PATH names for STDIN, STDOUT, and STDERR refer to files "*etc/booksrv...*". These names are only for example and may be changed to suit your environment.

The job requires read access to STDIN, and write access to STDOUT and STDERR. If you are NOT using the *EPHConfigPath* environment variable with Library Server, remove the *EPHConfigPath* record. If you ARE using the *EPHConfigPath* environment variable with Library Server, then specify the same directory name as input to STDIN.

#### Sample EPHCATJC:

```
//BPXBATCH EXEC PGM=BPXBATCH
//STDIN      DD  PATH='/etc/booksrv/booksrv.stdin',PATHOPTS=(ORDONLY)
//STDOUT     DD  PATH='/etc/booksrv/booksrv.stdout',
//           PATHOPTS=(OWRONLY,OCREAT,OTRUNC),
//           PATHMODE=SIRWXU
//STDERR     DD  PATH='/etc/booksrv/booksrv.stderr',
//           PATHOPTS=(OWRONLY,OCREAT,OTRUNC),
```

```
//          PATHMODE=SIRWXU
//STDENV   DD      *
EPHConfigPath=/etc/booksrv
/*
```

## EPHCATSC Sample STDIN File Template

The first 2 statements in EPHCATSC are required sample execution control statements. The remaining statements are optional sample incremental cataloging control statements. Copy the 2 required execution control statements from EPHCATSC into `/etc/booksrv/booksrv.stdin` (or your equivalent) and modify them as necessary. If the EPHCATSC statements are copied to other than `/etc/booksrv/booksrv.stdin`, be sure to change the STDIN DD statement in your customized EPHCATJC job accordingly. Additionally, copy any desired incremental cataloging control statements and make the necessary modifications.

All execution control statements and incremental cataloging control statements MUST begin in column 1.

The first statement is required. It switches to the directory containing the Library Server programs (default location, `/usr/lpp/booksrv/cgi-bin`, as shown).

The second statement is also required. It invokes the EPHBOOKS program. It takes three parameters:

1. **/R, or /H or /B**

Run Type:  
 /R — full catalog rebuild (shown in sample)  
 /H — HFS-only catalog rebuild  
 /B — incremental catalog rebuild  
 Specify exactly one of them.

2. **/P password**

Library Server administration password (the distributed default, BOOKMGR, is shown in the sample and must be changed to the password you set, see “Administration Password” on page 93.

3. **Port number**

The port number whose configuration files are to be used (the port number is the suffix of the filename of the config files). The default HTTP port, 80, is shown in the sample.

The incremental cataloging control statements follow the execution control statements. You must use the `/B` parameter to perform incremental cataloging. The `/B` parameter instructs Library Server to read the incremental cataloging control statements. Each control statement is explained by the comments in the parentheses to the right of the statement. Do not include these comments when using the control statements. You may use one or more control statements per execution.

### Sample EPHCATSC:

```
cd /usr/lpp/booksrv/cgi-bin
/usr/lpp/booksr/cgi-bin/EPHBOOKS /R /PBOOKMGR 80
rebuild          (Rebuild entire catalog)
add /u/books/xyz.boo (Add a single hfs book)
add /u/books/*.boo (Add an entire hfs directory of Books)
add /u/shelves/xyz.bks (Add a single hfs Bookshelf)
add /u/shelves/*.bks (Add an entire hfs directory of Bookshelves)
add /u/shelves/xyz.xks (Add a single Extended Shelf)
add /u/shelves/*.xks (Add a directory of Extended Shelves)
```

```
add HLQ.XYZ.BOOK      (Add a single dataset Book)
add HLQ.XYZ.BKSHELF  (Add a single dataset Bookshelf)
add HLQ.XYZ.BKLSHELF (Add a single dataset Bookshelf list)
```

**Note:** The "add" statements for Books and PDFs must precede the "add" statements for the corresponding shelves.



---

## Appendix D. Command Line PDF Indexing

Usage: ephpdf filename <options>

Where: filename - FQ or relative path to PDF file.

On MVS, this may be a RECFM=V or RECFM=VB dataset, specified as "'fully.qualified.DSN'" or "partially.qualified.DSN" (both the outer \_" and the inner \_' quotes are required, when specifying a fully qualified dataset name). Indexing a PDF in a dataset is supported only if it is indexed in place. Updating the metadata (the -author, -docnum, -subj, and -title options) of a PDF in a dataset is not currently supported.

Where: <options> are:

- h - displays usage info
  - cpd arg - Fully qualified path to directory containing code page tables and LEXIS dictionaries. Defaults to the directory ephpdf.exe is in, if it can be determined, or to the current directory. MVS datasets are not supported for this option.
  - d [arg] - Message and diagnostic output control.  
If arg is specified, then it must be a 1-8 hex digit number, specifying which kinds of regular and diagnostic messages are to be emitted. -d 0 turns off all but severe errors. -d 1 produces regular messages (this is the default, if neither -d nor -df is used at all). -d 3 produces regular and basic diagnostic messages (this is the default, if -d is specified without an argument, or if -df is specified without -d). If -df is not specified, then output is to standard out. WARNING! If you specify both -df and -d with an argument, be sure to specify -d **\*\*after\*\*** -df, on the command line.
  - df arg - diagnostic output will be written to file name specified. MVS datasets are not supported for this option.  
-df also enables basic diagnostic output. If this is not what you want, then you must specify -d arg on the command line to the right of the -df option.  
Example: -df logfile -d 1 produces a log file containing only regular messages. But -d 1 -df logfile would produce a diagnostic log containing both regular and basic diagnostic messages. This would be the same as:  
-df logfile -d 3 or -df logfile or  
-df logfile -d or -d -df logfile
  - ignoreUntranslatableText - Do not abort the operation, the PDF contains text which this program is unable to process. If this option is not specified, and text is encountered for which no font definition can be located in the PDF, or ephpdf cannot understand it, then the requested operation will be terminated.
  - extract arg - PDF index will be extracted and written to specified file. MVS datasets are not supported for this option.
  - m - meta data will be written to standard out.
- \*\*\* Do not use any option in this group, when the PDF is in an MVS dataset:
- author arg - PDF author field will be updated with value specified
  - docnum arg - PDF docnum field will be updated with value specified
  - subj arg - PDF subject field will be updated with value specified
  - title arg - PDF title field will be updated with value specified
  - insert arg - Pre-existing Advanced Search Index at specified file name

will be inserted into PDF. The specified file must have been created by a previous execution of ephpdf, with the -boo option specified. MVS datasets are not supported for this option. The original PDF is replaced by the updated PDF, if no errors are detected, and no output PDF is specified via the -o option. This option is mutually exclusive with -index.

-bif [arg] - PDF to Bif conversion.  
Result written to default or specified file.  
MVS datasets are not supported for this option.

-int [arg] - Create Interchange workfile.  
Result written to default or specified file.  
MVS datasets are not supported for this option.  
If this option is specified with -boo or -index, then the Interchange workfile used by -boo/-index is not erased.

-boo [arg] - Create an Advanced Search Index, but do not store it in the PDF (PDF to Interchange to BOOII conversion).  
Result written to default or specified file.  
MVS datasets are not supported for this option.  
-boo implies -int.  
If this option is specified with -index, then the Advanced Search Index workfile used by -index is not erased.

-index [arg] - Create a new Advanced Search Index and put it in the PDF (PDF to Interchange to BOOII to PDF conversion).  
Argument specifies an output PDF file name. The -o option is an alternative way to specify an output PDF file name. The original PDF is replaced by the updated PDF, if no errors are detected, and no output PDF is specified (by -o or by -index arg). -index implies -boo.  
This option is mutually exclusive with -insert.  
Specifying an MVS dataset as the argument is not supported. MVS datasets may only be indexed in-place (i.e. no argument on the -index option, and no -o option specified).

-o arg - Relative or fully qualified path to output PDF file.  
'-o arg -index' is an alternative form of '-index arg'.  
If '-o arg -index arg' are specified, then the last one on the command is used.  
If -index is specified without arg and -o is not specified, or -insert is specified and -o is not specified, then the input PDF will be updated in place, using a PDF workfile with a default name. This option is meaningless, unless -insert or -index is specified.  
MVS datasets are not supported for the -o option.

-w arg - Relative or fully qualified path to work directory, and/or name prefix for workfile names as '/directory/prefix' or (for Windows) 'd:\directory\prefix' . To specify just a directory path, the argument must end with a directory separator ('/' or (for Windows) '\'). MVS datasets are not supported for this option. Workfiles are not deleted, if message EPHPB03000E is issued, if -d or -df is specified, or if ephpdf abends. If any of the -bif, -int, -boo, -index, or -o options specifies a file name, then that workfile is not deleted. Modifies the default workfile names when -bif, -int, -boo, -index, or -o options do not specify output file names.  
Default:  
Windows: %TEMP%\ or %TMP\  
others: /tmp/

You may perform more than one operation in a single invocation of ephpdf. If you specify -int and/or -boo with -index, then the -index operation is performed, with the Interchange and BOOII workfiles receiving the names specified by the -int and/or -boo options.

File and directory names must not contain blanks.

On most platforms, if ephpdf is run by a superuser, and any file to be written or updated is read-only, the file will be written or updated, anyway.

On MVS, when -insert or -index option is used, and the input PDF is a dataset, then the PDF workfile or output file (-index arg or -o arg) may have permissions 666 (see 'man cp').

All use of ephpdf requires that the directory containing the supplied DLLs/shared objects be in the library path. When not using the -boo or -index options, you may invoke ephpdf by typing the full path to it, regardless of whether it is in the PATH or not. When using the -index or -boo options, you must have the directory containing the executables in the PATH. Be sure that you do not also have a directory containing any BookManager Build product in PATH or library path, or unpredictable results may occur.

When ephpdf finishes, it will display timing information and give a return code. You may test that return code in a script that you write, if you so desire. The return code is also reported in the EPHPB05221I message, as shown below:

```
2005-08-03T14:34:46 ephpdf::main      : EPHPB01000I      Total time:
Elapsed= 0 sec., CPU= 0.000 sec.
2005-08-03T14:34:46 ephpdf::main      : EPHPB05221I FINAL_RC=0
```

In most cases of non-zero return codes, there is also a message issued, whose message number matches the return code. Here are the common non-zero return codes:

8	EPHPDF_RC_INVALID_COMMAND (variable text from a PDF_ArgumentParsingException)	
9	EPHPDF_RC_INT_ERR_COMMAND while parsing the command line: %s"	"An internal error occurred
12	EPHPDF_RC_UNSUPPORTEDVERSION not supported"	"The version of the PDF is not supported"
13	EPHPDF_RC_UNSUPPORTEDPDF is not supported, or no outline could be found."	"The PDF's internal structure is not supported, or no outline could be found."
16	EPHPDF_RC_PDF_WRITE_ERROR writing %s" /* %s is a PDF filename */	"An error occurred while writing %s" /* %s is a PDF filename */
17	EPHPDF_RC_PDF_READ_ERROR_OTHERWHEN processing %s" /* %s is a PDF filename */	"An error occurred while processing %s" /* %s is a PDF filename */
18	EPHPDF_RC_PDF_READ_ERROR_DURING_BIF processing %s" /* %s is a PDF filename */	"An error occurred while processing %s" /* %s is a PDF filename */
20	EPHPDF_RC_PDF_READ_ERROR_DURING_INT processing %s" /* %s is a PDF filename */	"An error occurred while processing %s" /* %s is a PDF filename */
24	EPHPDF_RC_BUILDX_FAILED	(messages issued by BuildX)
28	EPHPDF_RC_CREATE_WORK_PDF_FAILED %s is a PDF filename */	"PDF copy failed: %s" /* %s is a PDF filename */
32	EPHPDF_RC_OVERWRITE_ORIGINAL_PDF_FAILED failed: %s" /* %s is a PDF filename */	"Overwrite original PDF failed: %s" /* %s is a PDF filename */

When sending problem reports to IBM, be sure to include the message log. You will usually also be asked for a copy of the input PDF (i.e. a copy of the PDF before it is modified by ephpdf), a copy of the output PDF (after modification by ephpdf), and the -int and -boo workfiles, if you are having a problem with the -int, -boo, -insert, or -index options. Therefore, you should attempt to make problem reports using small, non-confidential, documents





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## Appendix E. Command Line Shelf Creation and Indexing

Please refer to the Shelf Indexer Readme file (default location is /usr/lpp/booksrv/cgi-bin/ShelfIndexer.README) for instructions on how to create and index shelves using the Shelf Indexer Utility via the command line interface.

**Note:** After indexing shelves with the command line interface, you must rebuild the Library Server catalog.



---

## Appendix F. Command Line InfoCenter Indexing and Message/Status Viewing

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### What does Indexing an InfoCenter Do?

"Indexing an InfoCenter" consists of three major steps (Prepare Plug-ins, Recieve Plug-ins and Create InfoCenter Search Index) which collectively do the following things:

1. These steps create a new subdirectory in the parent directory of the InfoCenter's configured Location. This subdirectory holds files needed by Library Server for the InfoCenter. It is named indices/ when the InfoCenter is successfully indexed, but is named indices.locked/when indexing is pending, in progress, or has failed. All files related to the InfoCenter's index are stored here.
2. Creates plug-in level indices for fast morphological (BookManager-style) searching
3. Creates a cached Table of Contents file for each InfoCenter plug-in used for displaying the InfoCenter (files are stored in the Library Server frames cache)
4. Creates a Library Server Catalog entry file for each InfoCenter plug-in (files are stored in the books/ subdirectory of the Library Server catalog)
5. Creates the TOC Table and full Infocenter search index file needed for searching the InfoCenter

**Note:** The name of the indices/ or indices.locked/ directory should never be changed manually.

---

### Indexing an InfoCenter from the Command Line

As an alternative to indexing an InfoCenter from the Library Server Manage InfoCenters administrative interface, an InfoCenter can be indexed from the command line using the process steps identified below:

1. Logon to z/OS Unix System Services.
2. `cd /usr/lpp/booksrv/cgi-bin`
3. `export PATH=.:$PATH` (ensures that Library Server is in the PATH).
4. Ensure that Java is also in the PATH
5. `export SERVER_PORT=80` (or whatever port# is used by the httpd server)
6. `export LIBPATH=./usr/lpp/ixm/IBM/xml4c-5_7/lib:$LIBPATH`  
(this assumes XML Toolkit 1.10 (5655-J51) is installed in its default location)
7. Issue the following command on the command line (one line):  
`java -Xms200m -Xmx1000m -cp com.ibm.bkmgr.jar com.ibm.bkmgr.InfoCenter -c -p /etc XXX`

where:

XXX is the InfoCenter ID (as identified by the corresponding ICIDS= value in `booksrv.port#`) of the InfoCenter to be indexed.

`/etc` should be replaced with the directory containing `booksrv.port#`, if the config files are located elsewhere.

Note that an Indexing Report file called "indexMsgs" is written to the indices/ subdirectory of the configured root directory for the InfoCenter (as identified by the corresponding ICPATH= value in `booksrv.port#`).

To capture the Indexing Debug Log to a file, append `2>someDebugLogFile` to the command (note that debug logging depends on the `DEBUG=` value in `booksrv.port#` which is controlled via the Generate Diagnostic Output checkbox on the Library Server Administration page).

A brief parameter feedback report (similar to that displayed by the Indexing InfoCenters page in Library Server) is produced on stdout (normally the terminal) when the indexing process starts. It reports all command line parameter errors (e.g. unknown InfoCenter ID) and locking errors (could not obtain the lock on a specified InfoCenter). If there were any parameter or locking errors then nothing is indexed. Locking errors usually mean that either another process (command line initiated or from Manage InfoCenters) is already indexing the InfoCenter, or the userid running the process does not have read/write access.

The resulting process may run anywhere from 10 minutes for a small InfoCenter to many hours for a large InfoCenter.

If the process fails as the result of a storage shortage, then increase the `-Xmx` value on the batch command and reissue the command.

If indexing fails for any reason, correct the problem and reindex the InfoCenter. Do not rename the `indices.locked/` directory to `indices/` because doing so may cause incorrect indexing, or incorrect displays or searches of the InfoCenter. The indexing process (either run from the command line, using this procedure, or run via the Manage InfoCenters Library Server page) automatically recovers the `indices.locked/` directory from failed indexing attempts.

The userid under which this indexing process is run must have read/write access to the configured root directory for the InfoCenter being indexed.

If a previous attempt to index this InfoCenter has already been made by another user, then ensure that the `indices/` subdirectory of the InfoCenter, and everything in it, is, in fact, read/write accessible for the userid under which this indexing process is run. If the previous indexing attempt failed, then the subdirectory is called `indices.locked/`.

When the process finishes successfully (a "function ended successfully" message exists near the end of the report, or the Manage InfoCenters page of the Library Server administrative interface reports the InfoCenter's status as "INDEXED"), ensure that the `indices/` directory and everything in it is readable by the userid under which the httpd server runs.

This process is typically CPU-bound. IBM does not recommend running more than one indexing process one at a time.

For performance considerations, it is strongly recommended that the file system (HFS or zFS) containing and InfoCenter not be shared when indexing that InfoCenter.

---

## Viewing Status and Messages associated with Indexing an InfoCenter

Indexing processes, whether initiated from the Manage InfoCenters page of the Library Server administrative interface, or initiated from the command line (as described above), always write an Indexing Report file called "indexMsgs" to the `indices/` subdirectory of the parent of the configured Location directory (Location is identified by the corresponding `ICPATH=` value in `booksrv.port#` for the InfoCenter).

The indices/indexMsgs Indexing Report file is a binary file that can be viewed (during or after indexing) by clicking the Status link for the InfoCenter on the Manage InfoCenters page or Indexing InfoCenters page in Library Server, or by running the InfoCenterMessagesDataFile command line utility against it as follows:

1. Logon to z/OS Unix System Services.
2. `cd /usr/lpp/booksrv/cgi-bin`
3. `export PATH=.:$PATH` (ensures that Library Server is in the PATH).
4. Ensure that Java is also in the PATH
5. Issue the following command on the command line (one line):

```
java -cp com.ibm.bkmgr.jar com.ibm.bkmgr.InfoCenterMessagesDataFile -p
  /INFOCENTER/INDICESDIR/indexMsgs
```

where:

INFOCENTER is fully qualified parent of configured Location for the InfoCenter, Location is identified by the corresponding ICPATH= value in booksrv.port#, and INDICESDIR is "indices", if the InfoCenter was indexed successfully, or "indices.locked", if indexing the InfoCenter failed, or is not yet finished.

In addition to the Indexing Report, an Indexing Debug Log is generated when indexing an InfoCenter and debugging is enabled via the DEBUG= keyword in booksrv.port#. When indexing via the Library Server Manage InfoCenters administrative interface, the Indexing Debug Log is always written to a file (whose name is of the form index\_job\*.log) in the directory specified by the LOGDIR= keyword in bookmgr.port# (default is /usr/lpp/booksrv/cgi-bin/). However, when indexing via the command line interface, the Indexing Debug Log must be captured to a file by redirecting stderr to a file (e.g. `2>someDebugLogFile`) on the command line. Unlike the Indexing Report file, the Indexing Debug Log file is a flat text file, and can be viewed with an editor.

---

## Displaying InfoCenter Indexing Remote Status

The indexing status of an InfoCenter may be determined either by looking at the status for the InfoCenter on the Manage InfoCenters page in Library Server, or by running the InfoCenter Remote Status command line utility against that InfoCenter using the following steps:

1. Logon to z/OS Unix System Services.
2. `cd /usr/lpp/booksrv/cgi-bin`
3. `export PATH=.:$PATH` (ensures that the Library Server is in the PATH)
4. Ensure that Java is also in the PATH
5. Issue the following command on the command line (enter this command as one line):

```
java -cp com.ibm.bkmgr.jar com.ibm.bkmgr.InfoCenterRemoteStatus
  -c INFOCENTER/INDICESDIR/RMIproxy
```

where: INFOCENTER is the fully qualified parent of the configured Location directory for the InfoCenter (Location is identified by the corresponding ICPATH= value in booksrv.port#), and INDICESDIR is "indices", if the InfoCenter was successfully indexed or "indices.locked", if indexing the InfoCenter failed, or is not yet finished.



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## Appendix G. Java Bridge Java Server (JBJS) Considerations

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### General Information about the Java Bridge Java Server (JBJS)

The Java Bridge Java Server (JBJS) is a special Java Virtual Machine (JVM) which is sometimes also referred to as the Library Server JVM. The JBJS is a component of the Library Server Java Bridge which is the application that handles InfoCenter-related Java-based functions first introduced in Library Server 3.2. Since all of Library Server is cgi-bin based, the Java Bridge (ephjbcgi.exe) has the responsibility to start and maintain a persistent Java environment via the JBJS, so that the overhead of starting a new JVM is not incurred for each cgi call. Once establishing this persistent JVM, the Java Bridge subsequently communicates with it to process InfoCenter-related requests in conjunction with the Java Pages back end component. Note that since indexing InfoCenters is a resource intensive process, the Java Bridge does not route InfoCenter indexing processes through the JBJS. Instead, it establishes, and subsequently terminates, a dedicated (nonpersistent) JVM to handle each indexing request.

---

### JBJS Status and Configuration Settings

To obtain status and other information about the JBJS, point a web browser at the following URL:

`http://YOURHOSTNAME:port#/bookmgr-cgi/ephjbcgi.exe/BridgeStatus`

This URL returns a page that indicates whether or not the JBJS is running (and if so, its process id), its current working directory and the fully qualified name of its associated log file (jbjs.log). This page also displays the configuration settings in effect for the JBJS as specified in the bookmgr.port# configuration file and documented in the "Library Server Customization Considerations" topic of the z/OS V2R1 Program Directory document. Note that the EPHJB\_JVM\_ARGUMENTS and EPHJB\_INDEX\_JVM\_ARGUMENTS JBJS bookmgr.port# configuration keywords are especially important with respect to performance tuning. The former establishes JVM options to be used by the JBJS JVM, and the latter establishes JVM options to be used by the dedicated JVM for indexing InfoCenters. Any -option valid for the "java" command may be specified, but specifying the -cp option may cause errors. Insofar as the MVS default JVM heap size settings of 1MB initial and 64MB maximum are generally insufficient, it is recommended that the following be added to the bookmgr.port# file:

- EPHJB\_JVM\_ARGUMENTS=-Xms4m -Xmx200m
- EPHJB\_INDEX\_JVM\_ARGUMENTS=-Xms200m -Xmx1000m

---

### When to Stop and Start the JBJS

The following are circumstances under which the JBJS should be "bounced":

- After applying Library Server service that involves updates to any of the `ibm.com.bkmgr*.jar` files, the JBJS must be restarted in order to pick up any such service. In this situation it is usually recommended to re-index all configured InfoCenters, as well.
- If memory exceptions and/or heapdumps are being logged in the LOGDIR= directory, it is recommended to increase the heap allocation specifications for the EPHJB\_JVM\_ARGUMENTS= keyword in the bookmgr.port# file, and subsequently restart the JBJS.

- If performance for InfoCenter-related functions becomes sluggish or non-responsive, it is recommended to restart the JBJS.
- Over time, it is possible to have one or more "orphan" JBJS JVMs needlessly consuming system resources. All such JVMs should be killed. In order to list all running JVM processes issue the `ps -Af | grep java` command from a superuser id. The Library Server JVM processes can usually be identified by those whose associated java command have `-Xms` and `-Xmx` arguments that match those configured in the `bookmgr.port#` configuration file and have a TTY of "?". Unless the Library Server transaction which caused the JBJS JVM to be started is still running, the PPID will be "1".

---

## How to Stop and Start the JBJS

Following are the instructions for stopping a running JBJS (note that after stopping, it is not necessary to manually restart a JBJS, as one will automatically be started as soon as the first Library Server InfoCenter-related request requiring Java is subsequently submitted by a user):

1. Logon to z/OS Unix System Services as a superuser, or as the userid under which requests are served by the httpd server (usually a surrogate userid) as specified in the `httpd.conf` file.
2. Determine the Log directory as specified by the `LOGDIR=` keyword in the `bookmgr.port#` configuration file (default is `/usr/lpp/booksrv/cgi-bin`).
3. `cd <the Log directory>`:
4. `cat pidfile.txt` (to determine the process id of the JBJS associated with port#)
5. `kill -9 <the JBJS process id>`
6. `rm pidfile.txt`
7. It is also recommended to remove or rename the following files (if they exist) from the Log directory when stopping the JBJS:
  - a. `jbjs.log`
  - b. `bookmgr.dbg`
  - c. `logwrt.dbg`
  - d. `bookmgr.log`



---

## Appendix H. Notices

This document describes:

- Library Server for z/OS Version 2 Release 1 and above

This document primarily documents information that is NOT intended to be used as Programming Interfaces to Library Server. This document also provides intended Programming Interfaces that allow the customer to write programs to obtain the services of BookRead, which is a programming interface shipped with Library Server for z/OS. This information is identified where it occurs, by an introductory statement to a chapter.

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## Glossary

This glossary defines all new terms and abbreviations used in this document. Definitions that were derived from the following sources are identified by the symbols indicated:

- The *American National Standard Dictionary for Information Systems*, ANSI X3.172-1990, copyright 1990 by the American National Standards Institute (ANSI). Copies can be purchased from the American National Standards Institute, 1430 Broadway, New York, New York 10018. Definitions are identified by the symbol (A) after the definition.
- The *Information Technology Vocabulary*, developed by Subcommittee 1, Joint Technical Committee 1, of the International Organization for Standardization and the International Electrotechnical Commission (ISO/IEC JTC1/SC1). Definitions of published parts of this vocabulary are identified by the symbol (I) after the definition; definitions taken from draft international standards, committee drafts, and working papers being developed by ISO/IEC JTC1/SC1 are identified by the symbol (T) after the definition, indicating that final agreement has not yet been reached among the participating National Bodies of SC1.

## Special Characters

\*. A multiple-character wildcard, the symbol used as a substitute for one or more letters in a word when defining a search request.

?. A single-character wildcard, the symbol used as a substitute for one letter in a word when defining a search request.

&. In Boolean searching, an operator you enter in a search request to connect two words or phrases with an AND relationship.

I. In Boolean searching, an operator you enter in a search request to connect two words or phrases with an OR relationship.

!. In Boolean searching, an operator you enter in a search request to connect two words or phrases with a BUT NOT relationship.

() . Grouping operators, which allow you to group together words or phrases in a Boolean search to change the order of precedence of the search.

'. In a Boolean search, the "AS IS" operator used to prevent special characters, such as "&," from being treated as search operators.

,. A phrase separator, used to separate one or more words or phrases from each other in a search request.

## A

**active.** The window or icon that you are currently using or that is currently selected.

**AFS.** Andrew File System. A worldwide distributed file system.

**American National Standard Code for Information Interchange (ASCII).** The standard code, using a coded character set consisting of 7-bit coded characters (8 bits including parity check), that is used for information interchange among data processing systems, data communication systems, and associated equipment. The ASCII set consists of control characters and graphic characters. (A)

**author.** The person who wrote or prepared the information in a softcopy document.

## B

**Book.** In the BookManager family of products, a softcopy document, created by BookManager BUILD, that can be read and searched with a display device. A softcopy Book often has the traditional structure of a printed book, including standard book elements such as a cover page, table of contents, chapters, and an index. BookManager Book files have the *.boo* file extension.

**Bookcase.** In BookManager, a logical grouping of shelves and other Bookcases organized for convenience. The contents of a specific Bookcase are displayed on the Bookcase page. Bookcase files have the *.bkc* file extension.

**Book search.** A search done within a single Book, on selected topics or on the entire Book. Search matches are emphasized in the Book text.

**Boolean.** A process where combinatorial relationships are established between elements and the result takes on one of two values. In a Boolean operation, each of the elements may be assigned a value, such as 0 or 1, true or false.

**Boolean search.** A search method that uses Boolean processing to analyze search matches. Boolean operators are used in a search request to make a Boolean expression.

**browser.** A software product or tool used to read an electronic document on the World Wide Web.

## C

**case-sensitive.** Pertaining to the ability to distinguish between uppercase and lowercase letters. When you do a “case-sensitive” search, the search results match the case of the search request.

**catalog.** The set of all electronic documents and associated information available from a Library Server installation, usually consisting of multiple Collections. Also referred to as the Catalog of All Documents.

**Catalog of all Documents.** See catalog.

**CD-ROM.** Compact disc-read only memory. High-capacity, read-only memory in the form of an optically read compact disc.

**CGI script.** Common Gateway Interface script. A program that is run on a Web server in response to input from a browser.

**chapter.** In BookManager, a section or part of a softcopy Book whose topic ID begins with a major topic number, such as 1.0 or 4.0.

**choose.** To use a mouse or keyboard to pick an item that begins an action. You choose items on menus to perform tasks, and you choose icons to start applications.

**client.** A computer system that uses data or services from another computer, known as the server.

**Collection.** A set of electronic documents that reside at a single file system location, such as /usr/lpp/booksrv/books.

**Collection Kit.** A set of electronic documents provided by IBM on a CD-ROM.

**cross-Book link.** A link that takes you from one softcopy Book to another softcopy Book.

## D

**data set.** In MVS, a unit of information that can be stored and retrieved.

**default.** A value used when you have not explicitly specified one.

**document.** A collection of information, intended to be perceived and understood by a human being.

**document index.** The portion within the binary document object that contains the search data. BookManager Book documents inherently contain a

document index. Adobe PDFs only contain a document index after having been processed by the IBM PDF Index Utility.

**document number.** The form number of a manual that can be used to link between Books, or order copies of the manual. The document number is displayed in the table of contents, in a Collection, and in a shelf. See cross-Book link.

## E

**Eclipse Document Plug-in.** A tree structured set of documentation topic pages defined by the table of contents XML files that it contains. IBM-authored Eclipse Document Plug-ins are typically packaged in IBM InfoCenters for subsequent distribution and installation.

**electronic document.** A document stored on a computer as a file, and accessed by readers using software that presents its content in a familiar, document-like manner.

**ESA.** Enterprise Systems Architecture

**exact match.** A word or phrase found during a Book search, that corresponds exactly to the word or phrase typed in the search request. Contrast with fuzzy match.

## F

**figure.** A vector graphic, image, or other kind of illustration in the text of a document that is identified by a title or caption and a sequential number.

**FIGURES.** The topic ID of a topic in a softcopy Book that contains the list of figures in the Book.

**filter.** A string of text used to list Books or shelves containing the string within their names and titles.

**form.** An electronic document into which you enter information to complete an action.

**FTP.** File Transfer Protocol. In TCP/IP, an application protocol used for transferring files to and from host computers.

**fuzzy match.** A word or phrase found during a single-Book that is a variation the word typed in a search request. Fuzzy matches are different forms of the same root word.

## G

**GIF.** Graphics Interchange Format. A widely supported format for image data on the World Wide Web.

**Google.** A Web-based search engine. See <http://www.google.com>.

**graphic.** Pertaining to pictorial material or the output of graphics software, in contrast to text. Graphics in a softcopy Book can be integrated into the text or displayed in a separate window.

**grouping operators.** In a search request, the symbols used to change the Boolean operators' default order of precedence. In Library Server, the grouping operators are the left and right parentheses.

## H

**heading.** Words indicating the beginning of a new topic or section.

**HFS.** Hierarchical File System. Refers to the kind of file system used on UNIX in which files and directories are arranged in a hierarchical tree-like structure leading to the highest level directory, called the root directory.

**home page.** The initial Web page that is returned by a Web site when a user specifies the uniform resource locator (URL) for the Web site. For example, if a user specifies the URL for the IBM Web site, which is <http://www.ibm.com>, the Web page that is returned is the IBM home page. Essentially, the home page is the entry point for accessing the contents of the Web site. The home page may sometimes be called the "welcome page" or the "front page."

**HTML.** Hypertext markup language. HTML is the standard format for the interchange of document text between World Wide Web clients and servers.

**HTML document.** A document represented using HTML, consisting of one or more pages.

**HTML form.** An HTML page containing input fields, radio buttons, and other controls where the user provides information to be returned to a Web server.

**HTML page.** (1) A unit of HTML content that is accessed in a single transaction over the World Wide Web. (2) The default HTML page provided by a Web server when no page is explicitly requested is called the server's home page.

**hypertext.** A method of accessing information in a nonlinear fashion by linking to more information on a particular graphic or idea.

**hypertext link.** An automatic connection between an element in one part of a softcopy Book to another element in the same Book or to another softcopy Book.

## I

**icons.** Graphical representations of various elements such as disk drives, applications, and documents.

**index.** An alphabetical list of the subjects in a softcopy document and the topics in which each subject is found. Contrast with table of contents and search index.

**InfoCenter.** Information Center. A set of documentation topic pages defined by the base directory of a set of Eclipse Document Plug-ins and the relationship between those Eclipse Document Plug-ins. IBM InfoCenters are packaged and distributed by IBM, and may be installed on a customers' system.

**inline image.** A graphic image that appears on the same line as text in a document.

**Internet.** The global "network of networks" that connects large corporations, small businesses, universities, governments, private organizations and individuals.

**Internet resource.** A document or service accessible via the Internet.

## L

**LAN.** Local area network. A computer network located on user premises within a limited geographical area.

**library.** A collection of electronic documents. A Library Server library is the set of all electronic Books, PDFs, shelves and Bookcases available from one Library Server installation.

**link.** (1) A connection between related pieces of information. (2) To go to a related piece of information by activating the connection. See hypertext link.

## M

**mainframe.** A computer, usually in a computer center, with extensive capabilities and resources to which other computers can be connected so that they can share facilities.

**match.** A word or phrase that is identical or similar to the words or phrases in a search request.

**modify.** Add or remove objects. For example, you can modify a shelf by adding documents to it or removing documents from it.

**morphological search.** Searching in a manner that takes into account the different forms taken by words in the language of the text. For example, finding occurrences of "media", in response to a search request for "medium".

## N

**name.** (1) The name of a Book, shelf, or Bookcase. These names appear in the Name column on several Library Server product pages. (2) The name assigned

by Library Server to a Collection, such as 4-COLLECTION. Assigned Collection names appear in the Name column on the Shelves page. (3) On the Administration page, a descriptive name or title for a Collection. Descriptive Collection names appear in the Title column on the Shelves page.

**navigate.** To locate and work with information in a document.

**NFS.** Network File System. A remote file system in which server computers make files available to client computers. NFS runs over the Internet Protocol.

**Non Primary Topic.** A subtopic of an InfoCenter Primary Topic. It is set at a deeper nesting level within an InfoCenter Table of Contents (TOC) that a Primary Topic. They have topic IDs of the form 1.2, 2.4.9, etc. (i.e. never end in .0).

## O

**object.** Anything that you can focus attention on and manipulate as a single unit (for example, a Book or a shelf).

**online.** Connected to, served by, or available through, a system or computer.

**operator.** (1) A symbol that represents an operation to be done. (2) In a search request, the lexical entity that indicates the action to be performed on a word or phrase.

**order of precedence.** The order of priority in which Boolean operators are processed in a search request. The default order of precedence is BUT, AND, and then OR. The order can be altered by putting parentheses around words or phrases in the search request.

## P

**page.** A unit of content, usually textual, that is accessed in a single transaction over the World Wide Web. (May be the equivalent of one or many pages of printed material.)

**path.** The storage location of a file. The path includes the drive, directory, and, if applicable, the line of subdirectories leading to the directory in which the file resides.

**PDF.** Portable Document Format. A standard specified by Adobe Systems, Incorporated, for the electronic distribution of documents. PDF files are compact; can be distributed globally via e-mail, the Web, intranets, or CD-ROM; and can be viewed with the Adobe Reader, which is software from Adobe Systems that can be downloaded at no cost from the Adobe Systems home page.

**PDF Ultralite.** PDF Ultralite is the support, by which, when a Book has a corresponding PDF (based on name) in the library, the PDF is made accessible to the end user. This level of support exists for the download, find, shelf and Shelf Search functions.

**phrase.** In a search request, a collection of two or more words treated as a unit.

**plugin.xml file.** The list of Table of Contents (TOC) files which define the tree structure of the topics for an Eclipse Document Plug-in.

**Primary Table of Contents (TOC) File.** In the context of an Eclipse Document Plug-in, a TOC file whose entry in the plugin.xml file is designated with the PRIMARY attribute. There may be more than one Primary TOC file in an Eclipse Document Plug-in.

**Primary Topic.** A primary topic which is also one of the left-most nodes in the Table of Contents (TOC) under a particular InfoCenter. Primary topics have topic IDs of the form 1.0, 2.0, etc. (i.e. always end in a .0).

**prebuilt.** Refers to existing files, such as documents and shelves found on an IBM CD-ROM Collection Kit.

## R

**rank.** The relative significance of one topic within a set of topics that match a search query.

**resources.** Documents, data, or services.

**revision character.** A character in the margin, such as a bar (|), that indicates that the text line beside it has been changed by the author.

**revisions.** Changes an author has made to a Book. Revisions may be marked with revision characters. Readers can move through a Book looking at only those topics that have been changed or added to the Book.

**revision bars.** See revision character.

**RFC.** Request for Commands. Documents describing Internet protocols, standards, experiments and proposals.

## S

**search.** A powerful Library Server function that lets you locate specified words and phrases within multiple documents on a shelf, a single document, or selected topics.

**search options.** In Library Server, the options you can set to specify which type of search form is to appear, what areas of the Book to search, what type of search to do, and how to show results.

**search results.** In a single-Book search, a list a topics that contain one or more search matches.

**select.** To mark an item so that a subsequent action can be carried out on that item.

**server.** A computer that makes resources available to other computers.

**shelf.** In the BookManager family of products, a logical grouping of softcopy Books or PDFs organized for convenience and for faster searching. The contents of a specific shelf are displayed on the Shelf page. Shelf files have the *.bks* or *.xks* file extension.

**shelf index.** In the BookManager family of products, a file named with a suffix of *.BKI* or *.bki*. These files contain an index which cross references the vocabulary of all the documents on a Bookshelf or Extended Shelf to the documents where they occur. These files are used when seaching an indexed Bookshelf or an indexed Extended Shelf or a Bookcase which contains an indexed Bookshelf or an indexed Extended Shelf. Several shelves can share the same index. For ease of management, it is recommended that shelves not share indexes and that each shelf have a separate index.

**shelf search index.** An index of all information in documents on a shelf, created with the Index Utility that is supplied with BookManager BUILD/MVS, BookManager READ/MVS, BookManager BUILD/VM, BookManager READ/VM and BookManager BUILD for Windows. It can be downloaded from the BookManager Web site [http://www.ibm.com/support/entry/portal/Overview/Software/Other\\_Software/BookManager\\_Product\\_Family](http://www.ibm.com/support/entry/portal/Overview/Software/Other_Software/BookManager_Product_Family). Using a search index can make searching the documents in a shelf significantly faster. The search index is usually created as a file that has the same name as the shelf, and has the *.bki* file extension. Shelf indexes are available only for shelves having the *.bks* file extension.

**softcopy.** Online information that can be electronically distributed, manipulated, and printed.

**sort.** To arrange a set of items to be used in a specified sequence, such as alphabetic or numeric.

## T

**table.** Information presented in rows and columns and defined by the author as a table.

**table of contents.** A list of topics in the order in which they appear in a Book.

**TABLES.** The topic ID of a topic in a softcopy document that contains the list of tables in the Book.

**topic.** A heading and its subsequent text up to the next heading; the basic unit of information in a Library

Server softcopy document. This is the equivalent of what's referred to as an article in Eclipse terminology.

**topic heading.** A heading that introduces a new topic in softcopy. Each topic heading is made up of two parts: a topic ID and a topic title.

**topic title.** The title that is associated with a topic heading. See also topic heading.

**topics list.** A list of all the topics in a softcopy document that have topic IDs.

## U

**URL.** Uniform resource locator. The standard World Wide Web means for specifying the location of a resource on the Internet. The official standard for URLs is RFC1738.

## V

**vector graphic.** Computer graphics in which display images are generated from display commands and coordinate data. (I) (A)

## W

**wildcard.** The character used to substitute for unknown or unspecified characters or words in a search word or phrase. An asterisk (\*) is an example of a wildcard character.

**Web browser.** A browser for reading World Wide Web documents. See browser.

**World Wide Web.** A worldwide network of linked documents on the Internet that point to other documents on related topics. Using Mozilla Firefox or other Web browser software, a user can navigate quickly and easily around the global Internet, following the pointers to topics of interest.





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## Bibliography

Listed below is the BookManager family of products and related information.

### Library Server

*Library Server for z/OS: Getting Started*  
GI11-9481 (available in softcopy only)

### BookManager READ

*IBM Softcopy Reader User's Guide*  
SC34-3164 (available in softcopy only)

### BookManager BUILD for Windows

*IBM BookManager BUILD for Windows:  
Getting Started*, SC34-3098 (available in  
softcopy only)

*IBM BookManager BUILD for Windows:  
Messages and Codes*, SC31-8902  
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### BookManager MVS

*IBM BookManager READ/MVS and  
BUILD/MVS: General Information*,  
GC38-2032

*IBM BookManager READ/MVS: Getting  
Started and Command Summary*,  
SC38-2033

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Online Books*, SC38-2034

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