

Proceedings of the 8th Annual Federal Depository Library Conference

April 12 - 15, 1999

How to Use the Digital Library of the State of the Environment on the Web and on a Web-Connected CD/DVD-ROM

Dr. Brand L. Niemann, U.S. Environmental Protection Agency
Washington, DC

Abstract

Since last year's presentation entitled LandView III and the CEIS Digital Library of the State of the Environment <www.access.gpo.gov/su_docs/dpos/98pro41.html>, the Digital Library of the State of the Environment has greatly expanded its content and upgraded the Folio CD-ROM and Web Server technology to version 4.2.

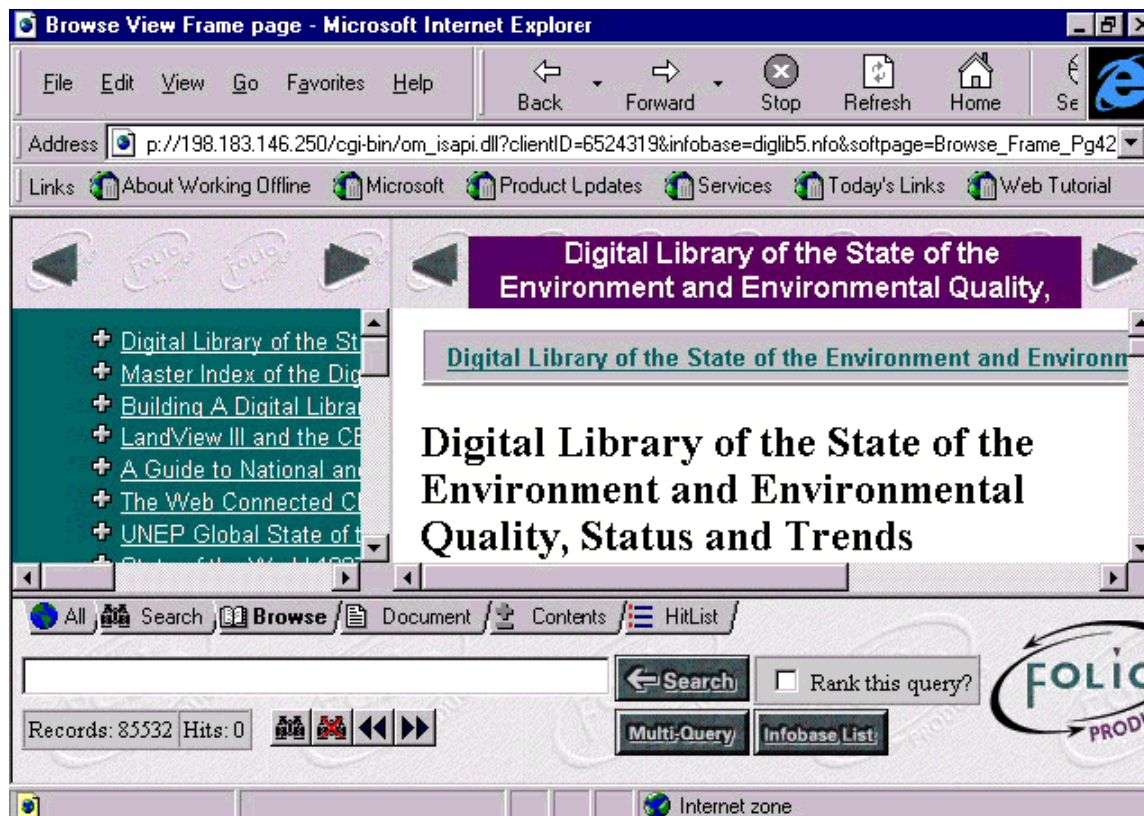
A new Digital Library of the State of the Environment Reading Room is now available <www.sdi.gov/diglib.htm>. The purpose of this demonstration is to provide an introduction to the new content and technology for depository librarians and others attending the conference. Only the first part of the "how to use" information is reprinted here and the complete file is available on the Web site <www.sdi.gov/bnfdlc99.htm>. The demonstration will show how the same State of the Environment content is available on both the Web and the CD-ROM using essentially the same interface. The Web-connected CD-ROM is available for those who need it and is updated periodically to maintain an archive of the Web site content.

Table of Contents

1. Overview
2. Query Syntax and Multiple Infobase Query
3. Web-Connected CD/DVD-ROMs
4. Introduction
5. Understanding the User Interface

1. Overview

Figure 1. Digital Library of the State of the Environment on the Web in Browse View



Folio delivers the same content with essentially the same interface on both the Web and CD-ROM. All the elements of the interface are defined below.

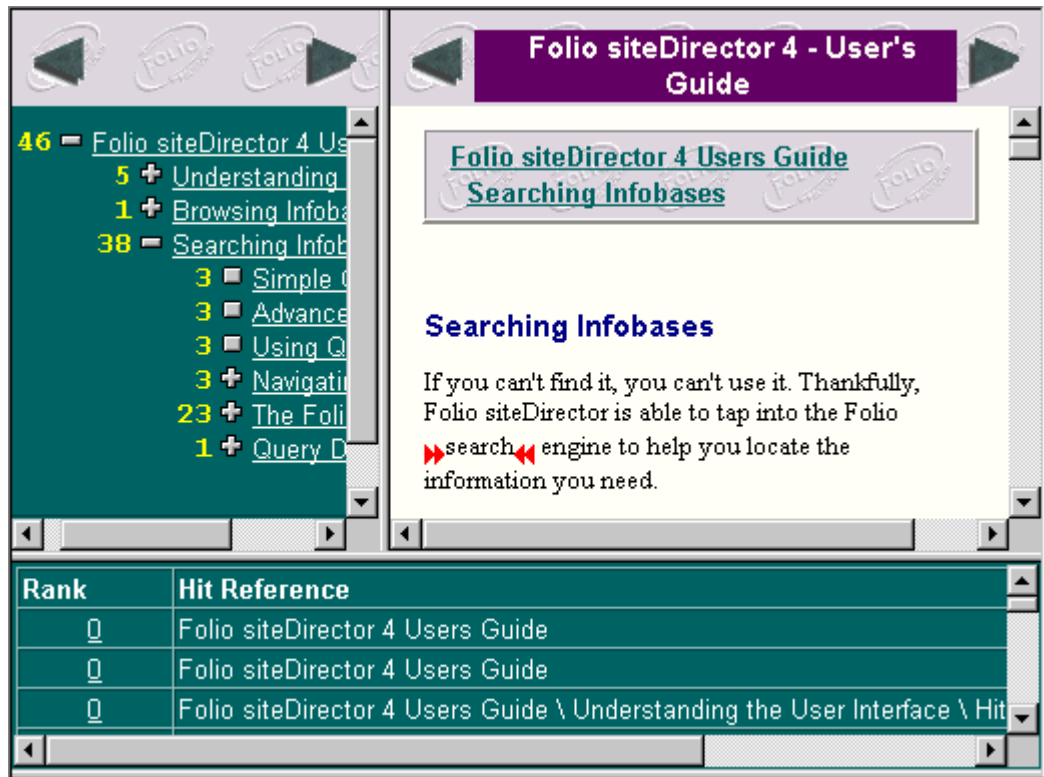
Figure 1 shows one of six different views of infobases in the digital library, namely, Browse with the Contents in the left side frame and the Reference and the Document frames in the middle. The frames may be resized with the mouse, and the interface may be customized (e.g., simplified with fewer choices for beginning users on both the Web and CD-ROM). The Contents frame contains a hyperlinked table of contents that may be expanded (+) or collapsed (-), and together with the Reference frame tells you where you are in the overall structure of the infobase. The All view is best for searching and when you want to see all the information at once. The Search view is best for finding the most relevant information because it provides the Hit List view at the bottom. The Hit List view allows you to view as many references in the hit list as possible and link to them. The Document view is for reading the information, especially after you have narrowed the search, while the Contents view is best for navigating and scanning the table of contents.

Folio also provides for query templates on both the CD-ROM and the Web distributions to facilitate searching by fields as well as by words and phrases, when the infobase contains fielded information like dates, numeric data, etc. Furthermore, the Folio search results take

the user directly to hits in documents or table of contents headings as well as to hit list with relevance ranking.

All of the interface elements are defined below:

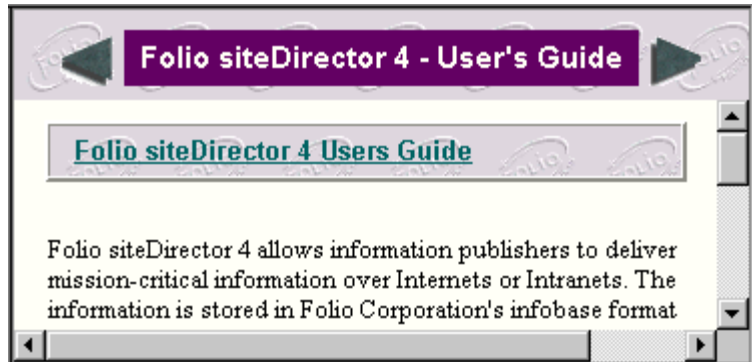
Simple Combined View: What you see after doing a word search and selecting the All Tab



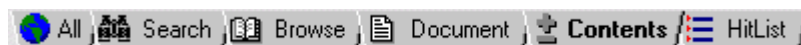
Document Tab: When you want to read the document



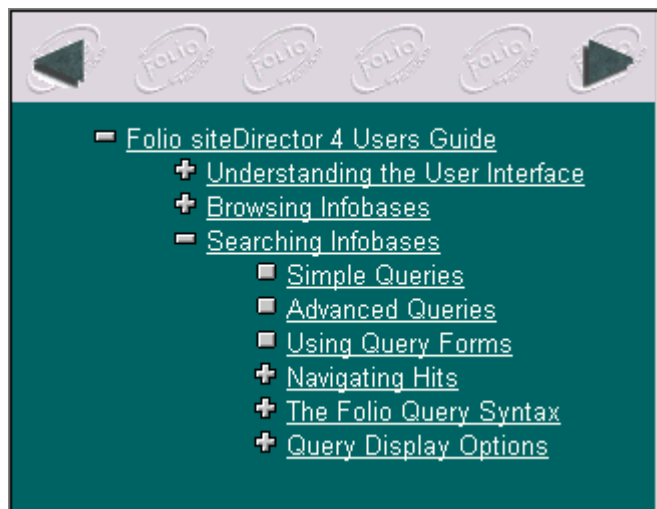
Simple Document View



Contents Tab: When you want to browse and use the dynamic Table of Contents



Simple Table of Contents View



Icon-Plus: Click to expand to see subheadings



Icon-Minus: Click to collapse to hide the subheadings



Icon-Empty: When there are no subheadings



Query Single: Click to enter a query and its specifications

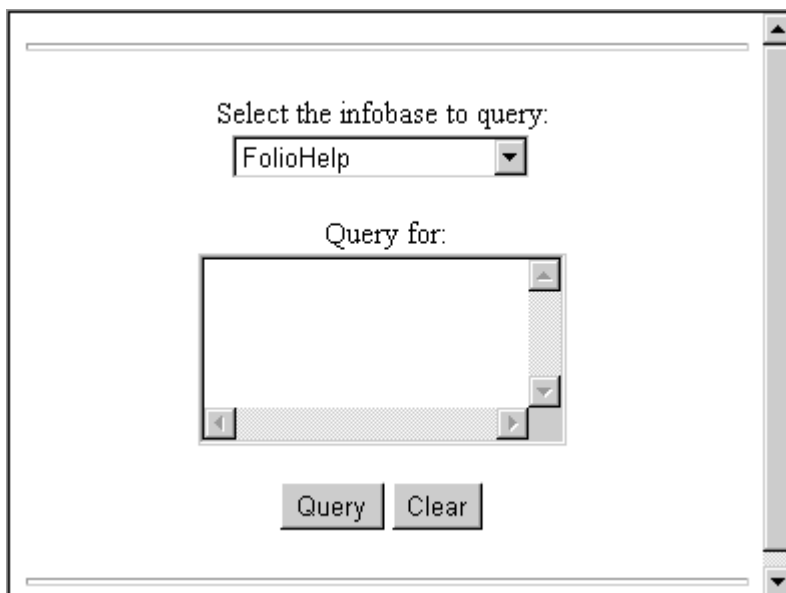


Search Edit Window: Enter a word or phrase and hit Enter



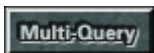
A horizontal text input field with a dark border. To its right is a dark button with a white left-pointing arrow and the text "Search".

Simple Query Form: Use for field searches (e.g. dates, etc.) when provided with infobase



A window titled "Simple Query Form" with a scroll bar on the right. Inside the window, the text "Select the infobase to query:" is followed by a dropdown menu showing "FolioHelp". Below this is the text "Query for:" followed by a large text input field. At the bottom of the window are two buttons: "Query" and "Clear".

Query Multiple: Select multiple infobases to search



Simple Intermediate Query Results: Help you decide which infobases to look at for search hits

Folio Views 4 Getting Started
Returned a total of 39 Hits

folio - 154
 help - 45 } & - 39

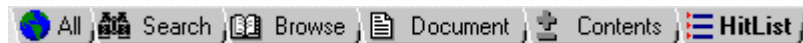
[All View](#) | [Document View](#)

Folio siteDirector 4 - User's Guide
Returned a total of 4 Hits

folio - 19
 help - 11 } & - 4

[All View](#) | [Document View](#)

Hit List Tab: Use to browse the list of search hits



Simple Hit List View: What you see after doing a word search and selecting the Hit List Tab

Rank	Hit Reference
100	Folio siteDirector 4 Users Guide \ Searching Infobases \
99	Folio siteDirector 4 Users Guide \ Browsing Infobases \ B
98	Folio siteDirector 4 Users Guide \ Searching Infobases \
97	Folio siteDirector 4 Users Guide \ Searching Infobases \
97	Folio siteDirector 4 Users Guide \ Searching Infobases \ (And, Or, Not, XOR) \ Or

Left and Right Hit Marks: How the search hits are marked

▶▶Search Hit◀◀

Next Hit: Use to jump forward from one hit to the next



Previous Hit: Use to jump backward from one hit to the previous



Next Page-sans cursor: Navigation button to go forward to next page



Next Page-with cursor: Same as previous when cursor is present



Previous Page-sans cursor: Navigation button to go back to previous page



Previous Page-with cursor: Same as previous when cursor is present



Help: Provides customized help when provided with the infobase and/or Web site



2. Query Syntax and Multiple Infobase Query

How to search an infobase <http://198.183.146.250/cgi-bin/om_isapi.dll?&softpage=Howto42>

Multiple Infobase or Document Query Interface <http://198.183.146.250/cgi-bin/om_isapi.dll?&softpage=Multi_Query_Request42>

3. Web-Connected CD/DVD-ROMs

The Web and CD-ROM are evolving as complementary, rather than competing technologies for multimedia electronic publishing of value added content. Web-connected CD/DVD-ROMs can serve to overcome grid lock on the info highway and deliver Web resources to those whose time is too valuable for the "World Wide Wait." Even more so, Web-connected DVD/CD-ROMs can provide a value added interface to Internet information that is "quirky, transient, and chaotically shelved" and deliver multimedia and interactivity that is beyond the foreseeable future for the Internet infrastructure.

A Web-connected CD-ROM can be used in two ways. First, it can be accessed and examined from a standalone computer with CD-ROM drive. Second, for those with

computers having Internet browser capabilities, active Web links allow users to interact with Web sites from the CD-ROM. Web-connected CD/DVD-ROMs like Microsoft's Encarta provide a comprehensive multimedia encyclopedia on the CD/DVD-ROM with connections to many Web resources and periodic updates that are downloadable to the user's PC and work seamlessly with the CD/DVD-ROM.

The SIGCAT (Special Interest Group on CD/DVD Applications & Technology) is the world's largest user group (11,000 members) devoted to the investigation of CD/DVD technology and its many applications in government, business, and education. The SIGCAT has featured the convergence between the Web and CD/DVD-ROMs during its annual conferences the past three years (c.f. The Convergence Hits Home: A Survey of Late Breaking Web-Connected Titles-SIGCAT '98 Conference, May 20, 1998 <www.sigcat.org/meetings/sigcat98/catalog/session/tchh.html> [**live link NOW www.sigcat.org/meetings/sigcat98/catalog/ .]**

4. Introduction

The information is stored in Folio Corporation's infobase format and converted to HTML on-the-fly. The infobase format allows you, accessing this site through your Web browser, to search for and view information in ways that go beyond traditional HTML indexing and display paradigms.

This help file should provide you with the basics of using Folio siteDirector 4, including:

Understanding the User Interface - Folio siteDirector makes use of several default buttons and views that may be new to you.

Browsing Infobases - Folio siteDirector serves HTML pages in your browser. However, because there is an infobase on the back end of that HTML, there is some functionality available for browsing information that may be new to you.

Searching Infobases - The powerful Folio search engine enables you to find what you need, when you need it.

5. Understanding the User Interface

Folio siteDirector allows site administrators to completely customize how infobases are displayed over the Web. As such, the appearance of the site you are currently using may be completely different from any other site running Folio siteDirector. However, typically there are several components that are constant. This section describes those components.

Document View

Contents View

Hit List View

Query Views

Intermediate Query Results

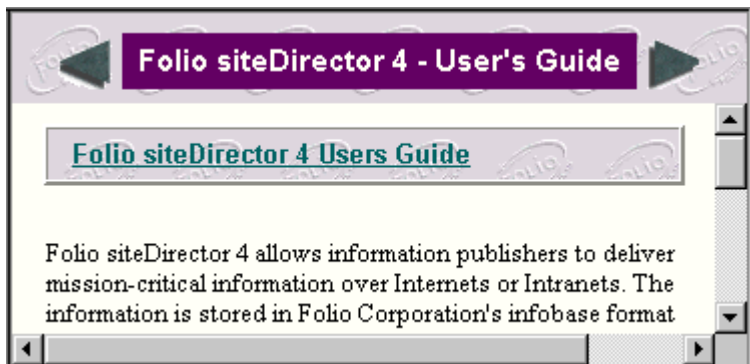
Combined Views

Standard Buttons





Document View

The document view displays the main body of the infobase. Within the document view, you can read the text of the infobase, view images, and follow links to other areas in the infobase. Usually, the document view provides links (either text or graphic buttons) to take you to the next or previous page of information in the infobase. The document view also highlights the hits from queries on the infobase. Usually, these hits are marked by red arrows. For example, this is an **▶example hit◀**.




Below is a simple document view. Note the graphics at the top of the page; these are for moving forward and back through the infobase.

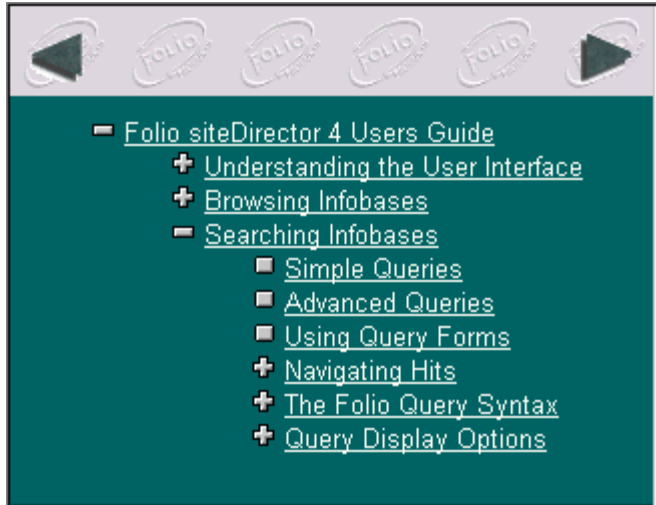


Contents View

The Contents view displays the table of contents for an infobase. The table of contents may be expanded or collapsed by clicking the  and  images next to each heading in the view. Click a  to expand a branch of the table of contents; click a  to collapse a branch.

Each heading in the contents view is linked to the corresponding information in the body of the infobase. When you follow the link, the information is displayed in a document view.

Below is a simple contents view. Note the  and  images next to the headings that can be expanded or collapsed. Also note the  images next to headings which are fully expanded.



Hit List View

The Hit List view displays a summary of query hits for the infobase. This view is only populated if you have performed a search on the infobase.

The hit list view will have at least one column; often, it will have two or more columns. Text in the first column is always linked to the corresponding information in the body of the infobase. When you follow the link, the information is displayed in a document view.

The hit list view most often displays the relative rank of the hit in the first column and the heading path in the second column. The relative rank only applies to ranked queries (as is done through a simple query and through some custom query forms). The heading path lists the parent headings of the information (such as Chapter 2 \ Section 3 \ Item 47). These are the same headings as are displayed in the contents view.

The hit list may also display a snippet from the body of the infobase, showing a few words around each actual query hit, beneath the heading list. You could use this information to better identify the context of the hit before linking to the full information.

Below is a simple hit list view. Note the information in the columns. Also note that only the first column is linked.

Rank	Hit Reference
100	Folio siteDirector 4 Users Guide \ Searching Infobases \ I
99	Folio siteDirector 4 Users Guide \ Browsing Infobases \ B
98	Folio siteDirector 4 Users Guide \ Searching Infobases \ I
97	Folio siteDirector 4 Users Guide \ Searching Infobases \ U
97	Folio siteDirector 4 Users Guide \ Searching Infobases \ T (And, Or, Not, XOR) \ Or

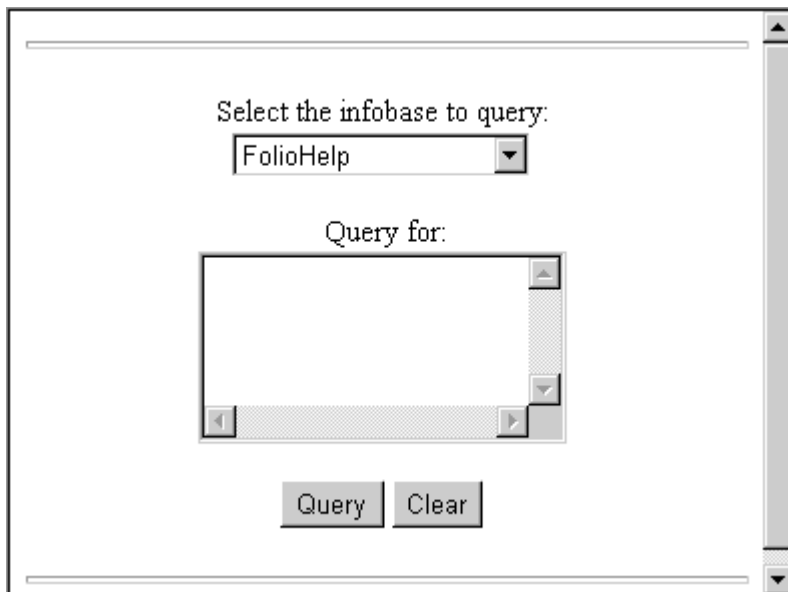
Query Views

The query views provide a form for you to query one or more infobases. Typically, the form provides a list box to choose the infobases you wish to query and one or more fields to enter the terms you wish to search for. It may also provide a set of options to control how the information is displayed.

There are basically two types of queries: the simple query and the advanced query. The simple query does not require you to know anything about the Folio query syntax and provides ranked results. The advanced query requires that you understand the Folio query syntax and does not provide ranked results by default. Most single-field query forms use the simple query method; multiple-field query forms usually use the advanced query method. However, most multiple-field query forms attempt to hide the Folio query syntax from you (they make sure the syntax is correct for you), so you do not need to learn it unless you want to.

See [Simple Queries](#) and [Advanced Queries](#) for more information.

Below is a query view that uses the simple query method. Note the list of infobases to choose from and the single field for entering the terms you wish to search for.



The image shows a screenshot of a web-based query form. At the top, it says "Select the infobase to query:" followed by a dropdown menu with "FolioHelp" selected. Below that is a text input field labeled "Query for:". At the bottom of the form are two buttons: "Query" and "Clear". The form is enclosed in a window-like border with a scrollbar on the right side.

Intermediate Query Results

After performing a search, you may be taken to an intermediate query results page. Rather than taking you to the first hit in the document view, this page shows you the number of hits for each infobase that you searched. Some also display a query map to help you see which terms had the greatest effect on the search. The query map allows you to see immediately if a structure or term is part of the infobase, as well as which combinations of structures and terms provide hits.

From the intermediate query results page, you can link to the document view to see the first hit in the selected infobase.

Below is a simple query results page.

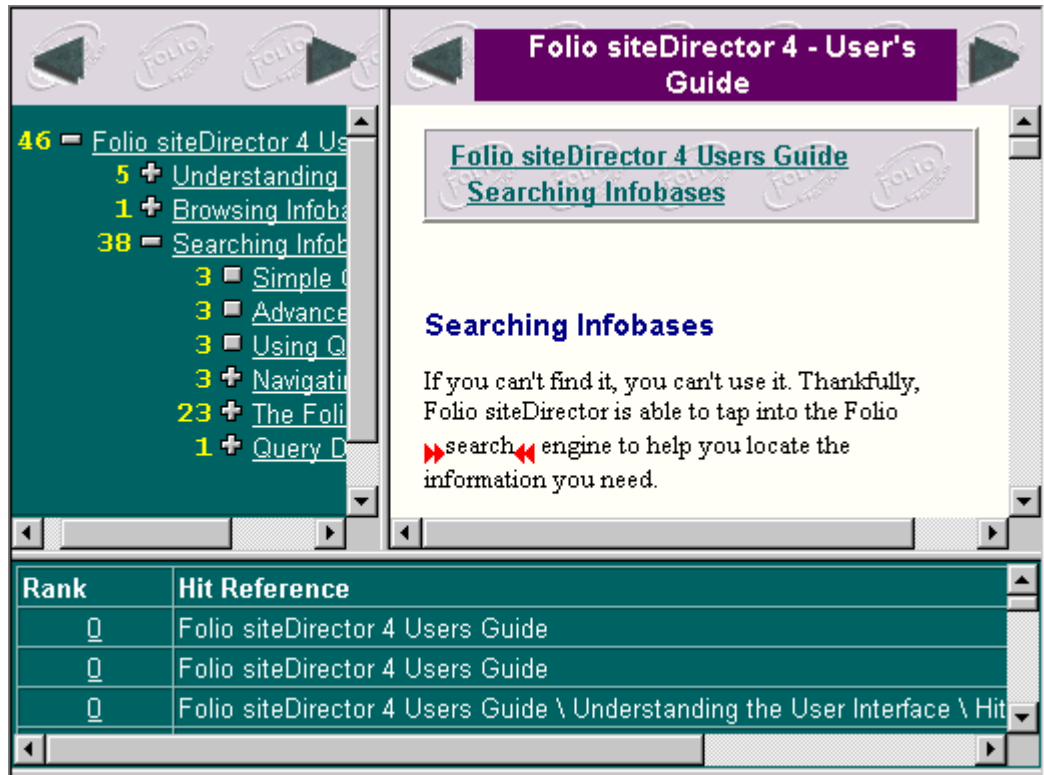


Combined Views

Using frames, these basic views may be combined on a single page. For example, a common view shows the contents view on the left of the page and the document view on the right. Following links in the contents view updates the document view. Another common view shows the document view on the top of the page and the hit list view on the bottom of the page. Again, as you follow links from the hit list, the document is updated.

No matter what combination of views the site designer creates, simply remember that the primary functionality comes from the Document, Contents, or Hit List views (query views are usually on their own page).

Below is a simple combined view, showing the contents, document, and hit list views. Note that a query hit is highlighted in the document view.



Standard Buttons

Folio siteDirector includes several standard buttons to aid in navigating through infobases. These include buttons for moving to the next and previous page, moving to the next and previous hit, querying the infobase, or changing to another view of the infobase.

The standard buttons are divided into the following categories:

Navigation Buttons

View Buttons

Query Buttons

Navigation Buttons

Navigation buttons help you move through the infobase. These buttons include:

Next & Previous Page

Next & Previous Hit

Next & Previous Page



Folio siteDirector transfers only a discrete portion of the infobase to the browser for display; this saves time and bandwidth. These buttons display the previous or next portion of the infobase when clicked. Notice that the buttons change when the cursor is placed over them.

Next & Previous Hit



Query hits are highlighted with arrow icons (»query hit«). By clicking the Previous and Next Hit buttons, the browser displays the appropriate hit.

View Tabs

View tabs are displayed in the bottom pane of the browser window and allow you to choose the display you wish to see. These tabs include:

Document

Contents

Hit List

Document



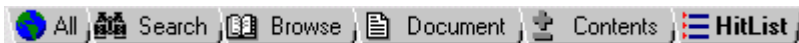
Clicking the Document tab displays the document view of an infobase, allowing you to view the main body of information for the infobase.

Contents



Clicking the Contents tab displays the contents view of an infobase. The contents view contains a fully functional infobase Table of Contents window, complete with expandable and collapsible branches. You may follow links from the headings in the contents view to the document view.

Hit List



Clicking the Hit List tab displays the hit list view of an infobase. If no query has been

performed, the hit list is empty; if a query has been performed, then the hit list displays heading information for each hit. You may follow links from headings in the hit list view to the document view.

The other tabs -- All, Search, and Browse -- combine the other views in useful ways.

Query Buttons

Query buttons display different query forms for you to use.

Query Single or Multiple Infobases



The query single infobase button displays a form that queries a single infobase. The query multiple infobase button displays a form that allows you to search several infobases at once. These buttons may use the simple query format, which automatically ranks queries by relevance, or the advanced query format (which allows you to take advantage of the powerful Folio query syntax), or a custom query form which provides you with several fields to fill in before submitting the query.



Additionally, you can simply type your query in the query edit box and click the Search button. The query edit box is located in the bottom pane of your browser when viewing an infobase.