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# Falcon/DMS



The Document  
Manager

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General Documents (Windows)

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Documentation manual written by Thomas M. Synnott

## The Document Manager (Windows)



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### Contents at a Glance

**Chapter 1 – Introduction:** Chapter 1 introduces the General Document (Windows) version of the Document Manager.

**Chapter 2 – Document Retrieval:** Chapter 2 provides a step-by-step explanation of the procedures used to retrieve documents for modification or for viewing, and includes an explanation of how reference files are attached and managed. This section includes a detailed discussion of how Falcon/DMS manages requested files and explains the difference between the open and checkout operations. The procedures used to refresh documents and manage reference files are also explained.

**Chapter 3 – The New Document Commands:** Chapter 3 explains how to use Falcon/DMS to create a document and its database records. Also discussed in this chapter: Revision Control, the Add Local command, and the Add Server command.

**Chapter 4 – Document Manipulation:** Chapter 4 covers the Move, Copy, Copy/Replace, Rename, and Delete commands.

**Chapter 5 – Database Operations:** Chapter 5 discusses the database operations available in the Windows version of the Document Manager. Special attention is given to the database search tools and how the document manipulation commands presented in Chapter 4 can be used in combination with the search command. Also discussed is Generate Document List, which allows users to designate the current file by choosing from a list that displays the Filename, its Document #, and its Description, and Document Notes, a feature that provides a easy and powerful way for users to itemize activity for any document. Included in this chapter is an explanation of the Mass Update command.

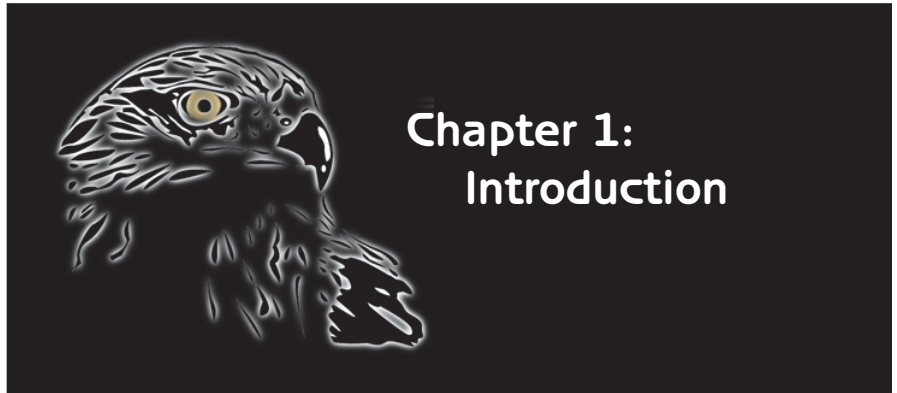
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## The Document Manager (Windows)



The Document Manager is the user interface for the Falcon/DMS Engineering Document Management System.

Two versions of the Falcon/DMS Document Manager are available: The Windows version, the subject of this guide, is application-independent and capable of fully managing documents for any Windows-based program, including Microsoft Office applications, MicroStation and AutoCAD. The MicroStation (MDL) version is seamlessly integrated with MicroStation's graphical user interface and has virtually all the capabilities of its Windows counterpart (see the 'Document Manager: MicroStation [MDL] User Guide' for more information).

There are several important differences between the Windows and MDL versions of the Document Manager.

One is that while you can manage any type of document with either, the only document type you can open with the MDL version of the Document Manager is a MicroStation design file. The Windows Document Manager, on the other hand, is able to launch any Windows-based application when a

document associated with the application is opened.

Another is the availability of certain administrator level commands on the Windows version that are not included with the MDL version; these are the Location Checkout and Check In, Archive and UnArchive, and Mass Update commands.

In a Windows environment, the Windows and the MDL versions of the Document Manager can be used interchangeably. You can start MicroStation from either the Windows Document Manager or from a MicroStation icon, and then open or checkout additional design files from whichever interface you choose. When you select and open a design file from the Windows Document Manager, you have the additional benefit of being able to select a MicroStation workspace or engineering application, provided they have been defined by the Falcon/DMS administrator.

## TERMS

**Availability:** A database attribute that identifies whether a document is available for modification. A document's Availability condition appears on the General Info tab.

When you select a file and its Availability is shown as 'On server', it is available to authorized users.

When the file is shown as 'On Workstation', it is checked out for modification; Falcon/DMS identifies the workstation on which the document is located, the user to whom the document is checked out, and the checkout date.

**Status:** Document Status, or Status, is an attribute that is typically defined and assigned to documents by an administrator and usually cannot be changed by a user. Status assigns an 'access mode' to a document.

The three access modes are: modify (which allows for full access, provided 'write' access is granted by the operating system), view only, and no access.

## NOTE

Typically, Falcon/DMS is configured to copy checked out documents to the workstation. There are several benefits to placing these 'working' versions of documents on the local hard disk:

First, network traffic is minimized.

Second, an application's performance is optimized.

Third (and perhaps most important), users can continue to work on local documents when the server or the network fail.

## Basic Concepts

Opening a single document or checking out one or more documents are the two most basic Falcon/DMS file retrieval operations.

When you open or check out a document through Falcon/DMS, a copy of that document (the 'working' document) is placed in a predefined location on your local hard disk where it can be modified. The server version of this file (the 'record' document) is set to a 'view only' access mode and remains so until the working document is checked in. When a working document is checked in it is removed from your workstation and placed back on the server (becoming the new 'record' document), and is once again available to authorized users for modification.

When you select the Open or Checkout commands, Falcon/DMS checks several database attributes to determine whether you can access the document. The attributes most likely to affect your ability to manipulate a document are *Availability* and *Status*.

A document that is not checked out shows an *Availability* of 'On Server'; this indicates that the document is available for modification (provided you are authorized to do so). A document that is checked out to another user shows an *Availability* of 'On Workstation' (or 'Reserved by User', see Note). Falcon/DMS identifies the workstation on which the document is located, the user to whom the document is checked out, and the date on which it was checked out.

*Status* refers to Document Access Status. This is a database attribute, typically defined by an administrator, that assigns access modes of modify, view only or no access to a document. When a document's Status has a 'modify' access mode you may check out and modify the document. When the mode is 'view only', you are given the option of proceeding with a read only version of the document or terminating the request. When the mode is 'no access', Falcon/DMS provides a message defined by the administrator.

Each document's *Availability* and *Status* are listed on the General Info tab.

There is relatively little difference between the Checkout and Open commands.

When you **check out** one or more documents, you reserve those documents for your use, usually to be opened and modified at a later time.

When you **open** a document, Falcon/DMS checks out the document, launches the associated application if necessary, and opens it in that application as part of a single transaction. Access by other users to any checked out document is limited to 'view only', meaning that they cannot modify the 'On Workstation' document until it is checked in.

The Open command is available only when you select a single document. The Checkout command can be used to checkout one or more documents in a single transaction.

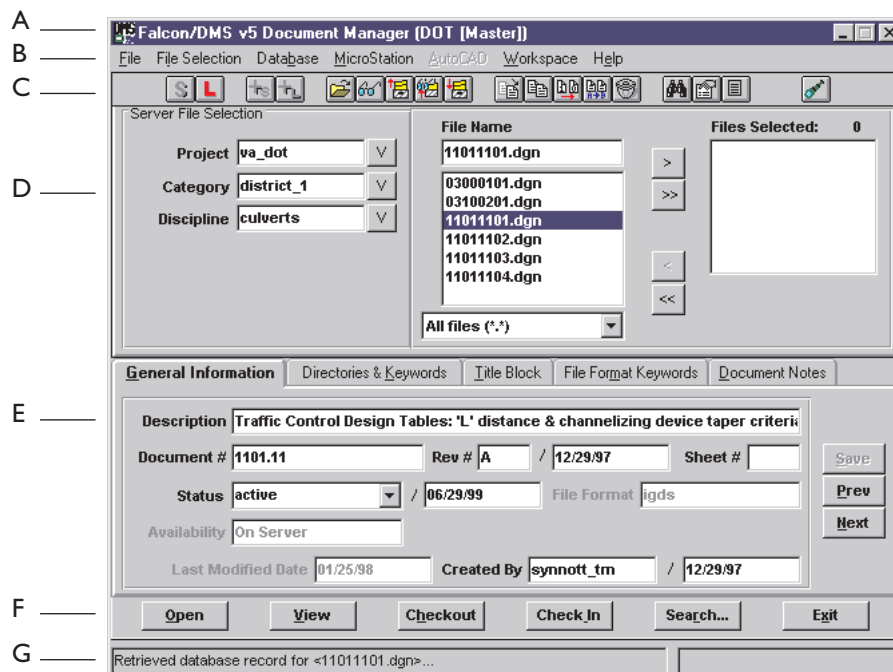
**Note:** A file format, or document type, can be configured so that checked out documents are accessed on the server instead of copied to the requesting workstation's hard disk. Under this configuration, documents that are checked out will show an *Availability* of 'Reserved by user'. (Apart from an increase in network traffic, an important disadvantage to accessing files directly on the server is that clients are unable to get to their documents if the network fails.)



## Graphical User Interface

The components of the Windows Document Manager are:

- A. Control Bar: Provides standard Windows functions (move, close, minimize, etc.). Additionally, when the Environments feature is enabled the control bar displays the current environment.
- B. Menu Bar: Provides access to pulldown command menus.  
If application properties for MicroStation and AutoCAD are defined, the menu bar includes pulldown menus for each; when you select a MicroStation or AutoCAD file the relevant menu activates.
- C. Button Bar: Provides quick access to a variety of management operations contained within the Menu Bar pulldown menus.
- D. File Selection Region: Server File Selection is a view of server-based record documents. Local File Selection is a view of local working documents. From this area you navigate through the directory structure and select the documents you wish to work with.
- E. Database Information Tabs: These tabs allow you to view different categories of database information. The five database info tabs are General Information, Directories & Keywords, Title Block, File Format Keywords, and Document Notes.
- F. Bottom Button Panel: Provides access to the basic management operations: Open, View, Checkout, Copy Out, Check In, and Search.
- G. Status Bar: Provides information and statistics about the current operation.



## The Document Manager Menu Bar

### File Menu

The File pulldown menu provides access to the following operations:

GROUP	COMMAND	DESCRIPTION
FILE MENU	New >	Used to create a new document and its database record.
	New Revision...	Used to create a new revision of the current document.
	Add Server Files... & Add Local Files...	Used to add server-based and local files, respectively, to the database. [Available only when the Server View Mode is set to Directory.]
	File Retrieval Commands	Falcon/DMS provides two categories of retrieval commands: modify and view. The modify commands are Open, Checkout, and Checkin. The view commands are View and Copy Out.
	File Manipulation Commands	The file manipulation commands are New, New Revision, Move, Copy, Copy/Replace, Delete, and Rename.
	Sets >	New, Add to..., View/Remove from...
	File Association >	Add to..., View/Remove from...
	Location...	Includes the Checkout & Check In operations.
	Archive...	Includes the Archive & Unarchive operations.
	Close	Exits the Falcon/DMS Document Manager.

### File Selection Menu

The File Selection pulldown menu provides access to the following operations:

GROUP	COMMAND	DESCRIPTION
FILE SELECTION	Server File Selection	Points Falcon/DMS to the server-based project directories listed in the Master 'Project' Table.
	Local File Selection	Points Falcon/DMS to the local working directories defined for each file format.
	Checked Out to [User]...	Opens a form listing all the files checked out to the current user. From this dialog box the user can open or check in any files that appear in the list.

### Database Menu

The Database pulldown menu provides access to the following operations:

GROUP	COMMAND	DESCRIPTION
DATABASE	Search...	Opens the Database Search Form
	Generate Document List...	Provides an expanded view of a directory's contents that includes the document number and description for each filename.
	Mass Update	Permits an administrator to perform database updates on multiple documents.

### MicroStation Menu

The MicroStation pulldown menu provides access to the following operations:

GROUP	COMMAND	DESCRIPTION
MICRO-STATION	Attach Reference File	Permits users to attach reference files to the active design file.
	File Refresh >	The Refresh commands facilitate the backup or retrieval of the most current version of MicroStation files.

## AutoCAD Menu

The AutoCAD pulldown menu provides access to the following operations:

GROUP	COMMAND	DESCRIPTION
AutoCAD	Attach Xref	Used to attach Xref files to the active drawing file.
	File Refresh >	The Refresh commands facilitate the backup or retrieval of the most current version of AutoCAD files.

## Workspace

The Workspace pulldown menu provides access to the following operations:

GROUP	COMMAND	DESCRIPTION
WORK-SPACE	ENVIRONMENTS >	Lists the environments for which you are authorized. Used to select the current environment.
	USER PREF >	
	Directory Selection >	TEXT LIST BOXES: This option uses list boxes from which projects and their subdirectories are chosen. Click the < button to display a list box. DIRECTORY LIST BOX: The option displays project subdirectories in the standard Windows mode. Click the < button to select a project and drill down to the required subdirectory.
	Directory List Button	[ON/OFF] When enabled, the file list won't display until you click the <List button.
	Minimize on Open	Minimizes the Document Manager after each Open operation.
	Button Bar	[ON/OFF] Controls the display of Button Bar.
	Bottom Button Panel	[ON/OFF] Controls the display of Bottom Button Panel.
	Database Info Tabs	[ON/OFF] Controls the display of the database information tabs: General Info, Directories and Keywords, Title Block, File Format Keywords (when defined), and Document Notes.
	Master Project Description	[ON/OFF] Controls the display of project descriptions (project descriptions are defined by the Falcon/DMS Administrator).
	Subdirectory Description	[ON/OFF] Controls the display of subdirectory descriptions (subdirectory descriptions are defined by the Falcon/DMS Administrator)
	Post Reference Dialog	[ON/OFF] Controls the display, or 'posting', of the Reference File List dialog box. This dialog box opens as reference files are copied to the local workstation and provides information about each reference file's status.
	Reference File Check	[ON/OFF] When on, Falcon/DMS automatically checks for reference file attachments; when off, Falcon/DMS will not check for reference file attachments.
	Auto Delete Local Reference Files	[ON/OFF] When on, Falcon/DMS automatically deletes local reference files when a design file is checked in; otherwise, the user deletes local reference files at his discretion.
	Server View Mode >	[Database/Directory] This preference allows you to view the server-based documents as records in the database (Database mode) or as items in a directory listing of the actual server directory (Directory mode).

## The Document Manager Button Bar

The Button Bar menu provides access to the following operations:



COMMAND	DESCRIPTION
Server File Selection	Points Falcon/DMS to the server-based project directories listed in the Master 'Project' Table.
Local File Selection	Points Falcon/DMS to the local working directories defined for each file format.
Add Server File	Used to add server-based documents to the database. [Available when the Server View Mode is set to Directory.]
Add Local File	Used to add local documents to the database.
File Retrieval Commands	The file retrieval commands found on the button bar are Open, View, Checkout, Copy Out and Check In.
File Manipulation Commands	The file manipulation commands found on the button bar are New, Move, Copy, Copy/Replace, Delete, and Rename.
Search	Opens the Database Search form.
Database Info Tabs	[On/Off] Controls the display of the database information tabs.
Generate Document List	Provides an expanded view of a directory's contents that includes the document number and description for each filename.
Launch Viewer [optional]	Opens the selected file in AutoVue in view mode.

## File Selection Modes:

Falcon/DMS restricts users to specific 'project' directories on the network file servers and to specific 'working' directories on the local workstation. The Document Manager's File Selection option allows you to choose between viewing the contents of the server-based 'project' directories and the contents of the local working directories.

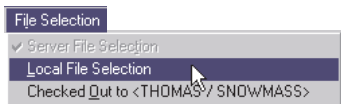
Recall that when Falcon/DMS opens or checks out a design file, it places a copy of that file (the 'working' document) in the working directory on the local workstation. The original (the 'record' document) stays on the server, where it remains as a 'view only' file until the document is checked back into the database. A user may select his own checked out document (where *Availability* equals 'On Workstation') from its server-based home directory or from the local working directory to which it was checked out. In either case, Falcon/DMS *always* opens the local version of the file.

### Server File Selection

When Falcon/DMS points to a server it limits access on the server to the directories listed in the Master 'Project' Table.



### Local File Selection



When Falcon/DMS points to the local working directory, it views a replication of the server directories built as documents are checked out. (When documents are checked in, Falcon/DMS automatically deletes empty local directories.)

### ✓ TIP

Use the Button Bar commands to quickly switch between Server and Local File Selection.



## ✓ TIP

In addition to selecting a project from a text list box, you may keyin a project name in the 'Project' field.

## ✓ TIP

You may select any list box item with a double-click.

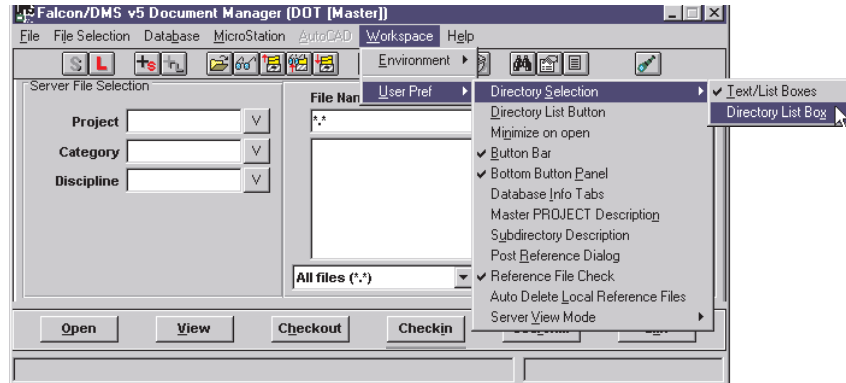
## ✓ TIP

To move up through a directory structure when the directory selection preference is set to Text List box, simply click the button associated with the higher level directory and select an entry or, double-click the current directory and press the delete key.

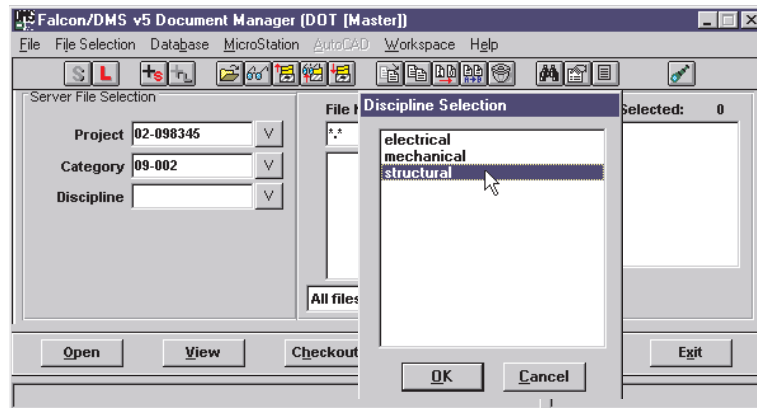
## Navigating Directories & Selecting Files

The Falcon/DMS Document Manager uses standard Windows conventions to navigate through a directory structure and select documents.

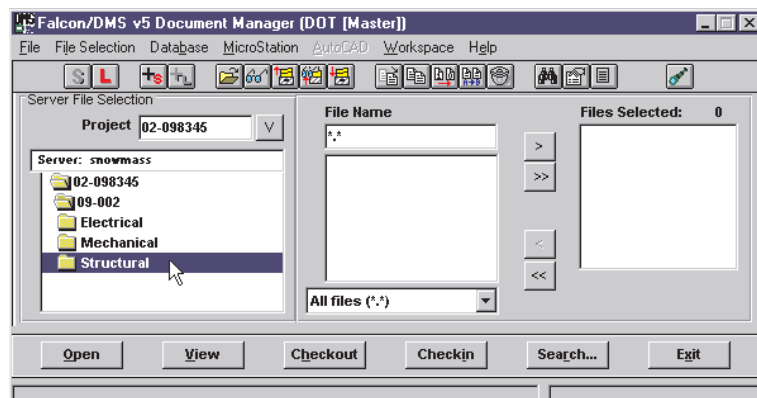
You may view the current directory structure from Text List boxes or a Directory List box. Use the Directory Selection user preference to set the preferred control.



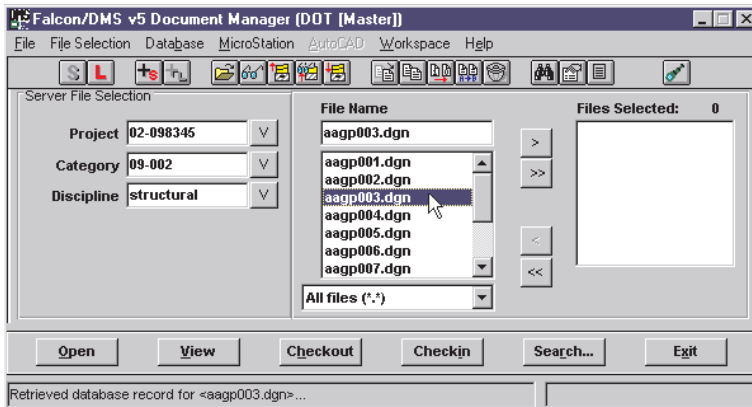
When the Text/List Boxes preference is enabled, the Document Manager displays the available directories in a list boxes opened by clicking on the associated V buttons.



When the Directory List Box preference is enabled, the Document Manager displays the available 'Project' directories in a list box while the subdirectories are shown in the standard Windows mode.

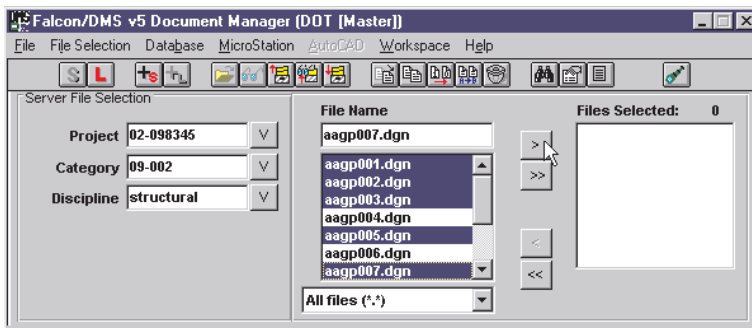


If you wish to perform any operation on a single document, the easiest method is to single-click the document in the Filename window and select the desired command. When you wish to perform a transaction on a *single document* it is not necessary to list the filename in the Files Selected window.



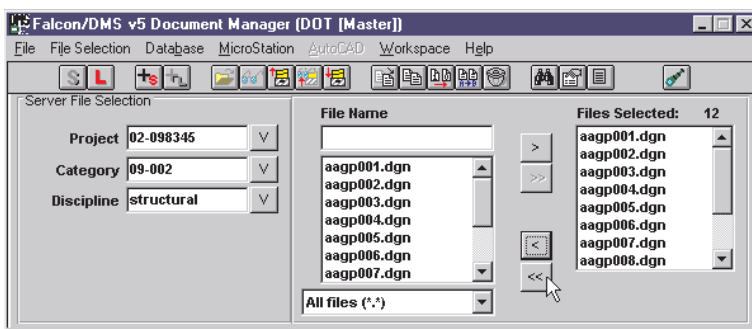
If you wish to perform an operation on two or more documents, the easiest method is to double-click on the documents in the Filename window. Once the required files display in the Files Selected window you can select the desired command (Note that when you select more than one document the Open command is not available.)

To select multiple files you may use the standard <Ctrl>+click or the 'press & drag' combinations. Once a group of files is chosen, the group is considered a single selection. Use the > button to display the items in the Files Selected window.



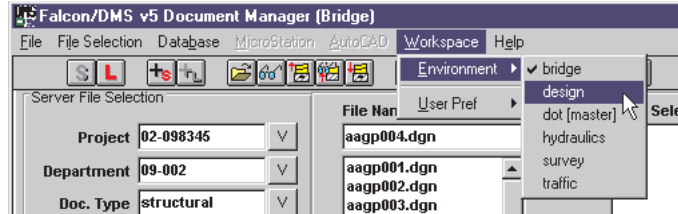
To select all the files in a directory, use the >> button to display the contents of the entire directory in the Files Selected window.

Use the < and << buttons to deselect combinations of files or all files, respectively.



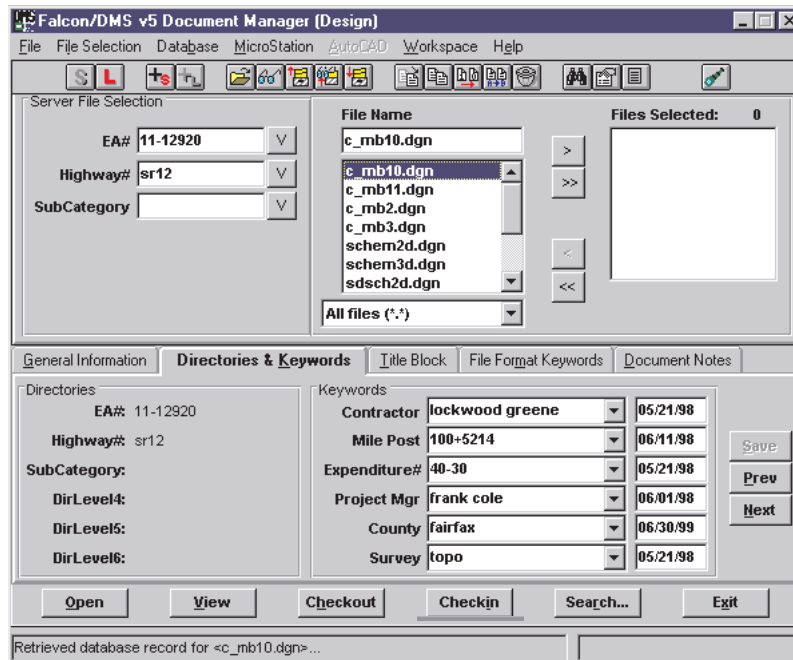
## Environments

The Environments feature allows different groups or departments (or for that matter, individuals) to work with a configuration set and a user interface specific to their unique requirements.



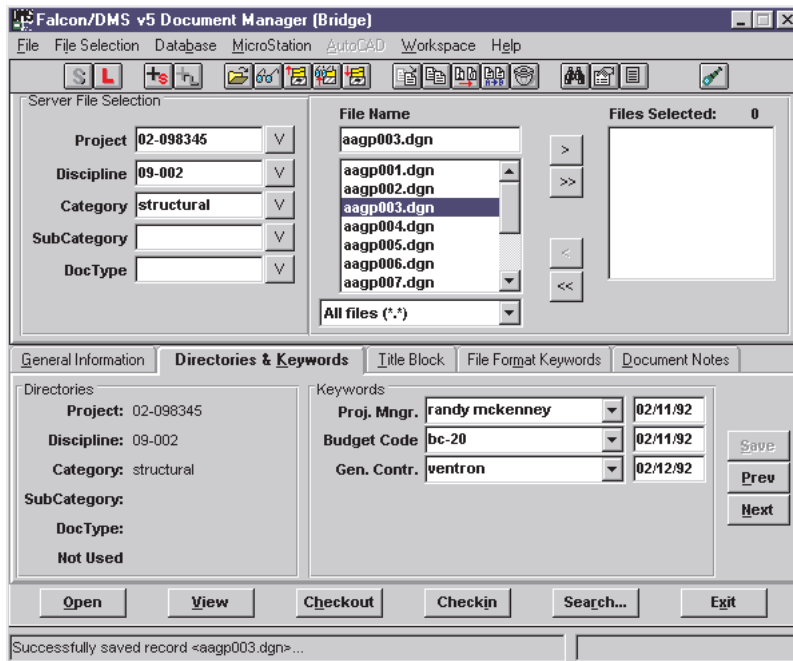
An example of how Environments affect the appearance of the user's interface appears below:

The Document Manager for the [Design] environment uses EA#, Highway#, and SubCategory for its directory labels and has its own 'EA#' table. It has six system level Keyword Categories with unique tables. Compare this with the Document Manager that appears on the following page.





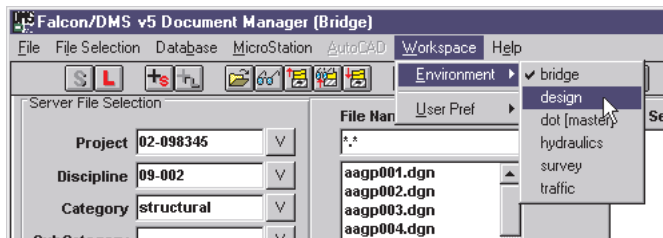
The Document Manager for the [Bridge] environment (below) uses Project, Discipline, Category, SubCategory, and DocType for its directory labels and has its own 'Project' table. It has three system level Keyword Categories with unique tables.



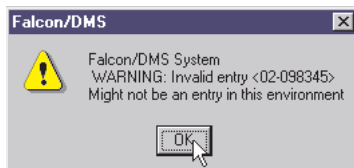
### Selecting an Environment (Document Manager):

To set an environment or to change the current environment:

1. From the Document Manager's menu bar, select Workspace > Environment > (Environment Name).

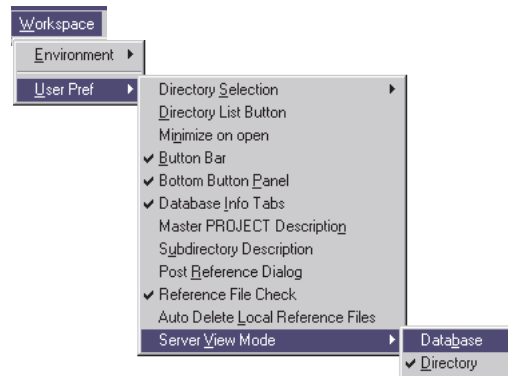


2. If the current project is not included in the selected environment, a message box appears. Press OK on the Falcon/DMS message box and proceed.



## The Server View Mode User Preference

The Server View Mode user preference allows you to view the server-based documents as records in the database or as items in a directory listing of the actual server directory.



- The Database mode displays only those items that have database records.
- The Directory mode displays all files located in the current directory, including those that are not in the database.
- When in Database mode, the Directory Selection user preference is locked in Text List Box mode.
- When in Database mode, only those directories that contain database records are visible. Once you add a document to an empty directory, you can access that directory in either mode.

To create a document in an empty directory, first set the Server View Mode to Directory.

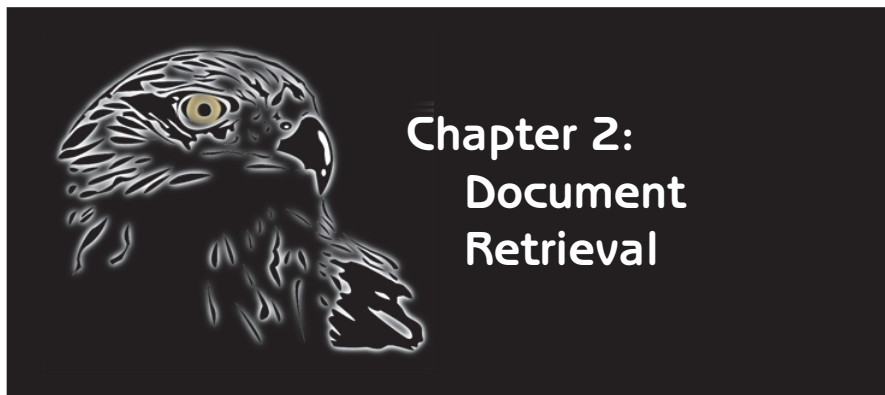
To move or copy a document to an empty directory, first set the Server View Mode to Directory.

To use the Add Server File command, first set the Server View Mode to Directory.

- The Database view allows you to more easily view database records for non-electronic records and sets; previously these items could be seen only from a database search result.
- The Database view is recommended when poor network performance is an issue.

# Falcon/DMS

## The Document Manager (Windows)



This chapter provides a step-by-step explanation of the procedures used to retrieve documents for modification or for viewing. Included is an explanation of how MicroStation reference files and AutoCAD Xrefs are attached and managed.

The Falcon/DMS document retrieval commands include the following operations:

- Open (Modify)
- Attach Reference/Xref Files
- Refresh Files
- Open (View)
- Check out (Modify)
- Copy Out (View)
- Check In

As indicated in Chapter 1, opening a single document or checking out one or more documents are the two most basic Falcon/DMS operations.

When you open or check out a document through Falcon/DMS, a copy of that document (the 'working' document) is placed in a predefined location on your local hard disk where it can be modified. The server version of this file (the 'record' document) is set to a view only access mode and remains so until the working document is checked in.

When a working document is checked in it is removed from your workstation and placed back on the server (becoming the new 'record' document), and is once again available to authorized users for modification.

When you *open* a document, it is checked out, if necessary the associated application is launched, and the document is opened in the application, all as part of the same transaction.

When you *check out* one or more documents, Falcon/DMS reserves the documents for your use, usually to be opened and modified at a later time.

In each instance, other users' access to checked out files is limited to view only; they cannot be modified until you check in the documents.

The 'view' versions of the Open and Checkout commands (View and Copy Out) place a 'throw away' copy of a document on the local hard disk. View documents cannot be returned to the server and are deleted at your discretion.

## TERMS

**Open vs Checkout:** When you open a document, Falcon/DMS checks out the document and, as part of that transaction, opens the file in the appropriate application. Given that the open command checks out the document as it is opened, it is not necessary to first use the check out command before opening a document.

When you check out one or more documents, Falcon/DMS reserves the documents for your use, usually to be opened and modified at a later time.

In each instance, other users' access to checked out files is limited to view only; they cannot be modified until you check them in.

The Open command is available only when you select a single document, while the Checkout command can be used to reserve multiple documents.

## ATTENTION

When a user opens a document that has already been checked out to that user's workstation, Falcon/DMS knows to open the local version of the file, even if the user selects the file from the Server File Selection region. It is not necessary to set File Selection to Local File Selection to open checked out documents.

## TIP

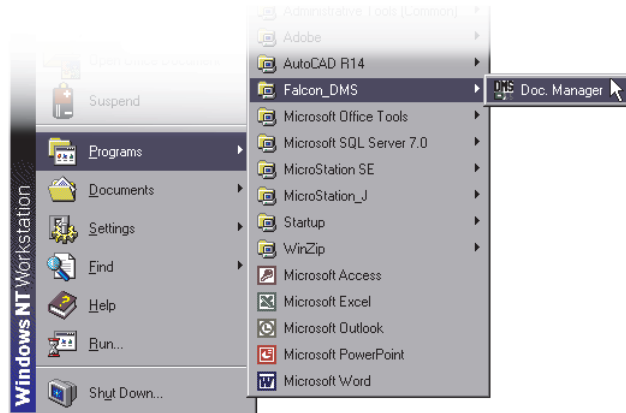
When you select a single file it is not necessary to display that file-name in the File Selected window. Simply click on the desired file—its name will display in the File Name field—and select a command.

## Open (Modify)

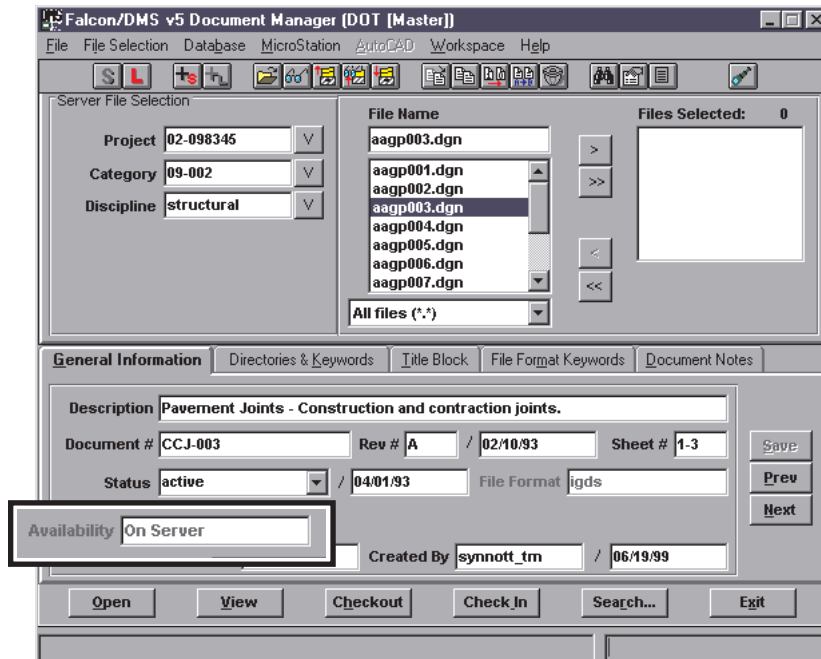
The Open (Modify) command places the working document on your local hard disk. The record document remains on the server as a view only file.

To open a document:

1. From the Windows Start Button, select **Programs > Falcon/DMS > Doc.Manager**. The Falcon/DMS Document Manager opens.



2. From the Server File Selection region, designate the current directory.
3. In the File Name list window, select a single document.
3. On the General Information tab, check the document's Availability and access Status.



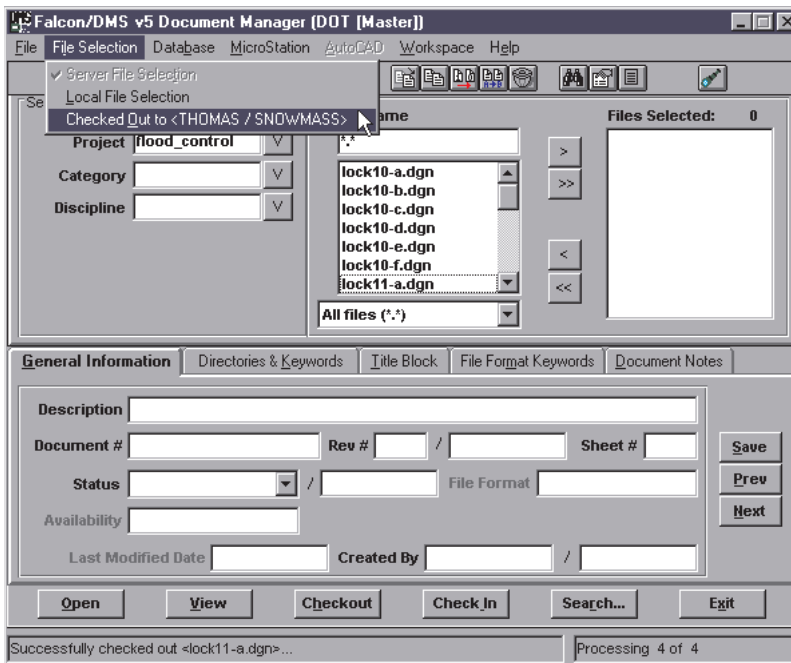
4. If the document's Availability is 'On Server', press Open (or select File > Open).  
If the document's Availability is 'On Workstation' and the Access status permits you to view the file, you can press View to copy out the file as a view only document

## Open (Modify)—From the Checked Out to <user> dialog box

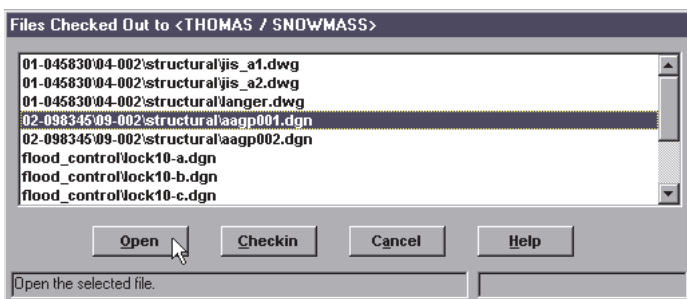
The Checked Out to <user> dialog box lists all the files that are checked out to you on the current workstation. This command is especially useful when you have checked out files from multiple projects and subdirectories.

To open a document from the Checked Out to <user> dialog box:

1. From the Document Manager's menu bar, select File Selection > Checked Out to <user>.

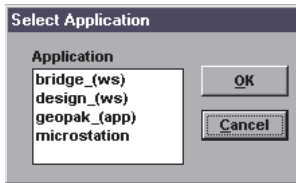


2. From the Files Checked Out to <user> dialog box, select the file you wish to open.
3. Press Open.



**ATTENTION**

Falcon/DMS can be configured to redirect MicroStation's and AutoCAD's File > Open and File > New commands, and MicroStation's Reference > Attach command. When the command redirects are enabled, affected commands will open the Falcon/DMS Document Manager.



## The Select Application Option

Multiple applications can be associated with a single file format. For example, a file format that describes an image file (tiff, jpeg, bmp, etc.) could be associated with the Windows Image Viewer (for viewing) and Adobe Photoshop (for imaging editing). In the case of MicroStation and AutoCAD, different applications and workspace configurations can be associated with the 'igds' and 'acad' file formats.

When multiple associations exist for a file format, the Document Manager presents a list box after you select the Open command. To proceed, simply double-click the desired application on the Select Application box.

## Reference Files and Xrefs

When Falcon/DMS opens or checks out a MicroStation design file or AutoCAD drawing file, it also determines which files, if any, are externally referenced to document. Falcon/DMS then 'copies out' the reference files to your local workstation. Do not confuse 'copy out' with 'checkout; to 'copy out' a file does not effect its Availability.

Before any reference file is copied to your workstation Falcon/DMS performs a number of database checks. The first is to insure that Falcon/DMS provides the most current version of the reference file available on the server. The second is to identify when a reference file may not be the most current version of the document. This usually occurs when another user has checked out a file that is referenced to your active document. In this case, Falcon/DMS identifies the user and the workstation to which the reference file is checked out.

Typically, the reference file is copied to c:\dms\_local\ref for MicroStation files and c:\dms\_local\xref for AutoCAD files. This directory is defined by the Falcon/DMS administrator.

For MicroStation users: Because MicroStation with Falcon/DMS is configured to look for reference files in a specific location (i.e. c:\dms\_local\ref) it is not necessary to enable the Save Full Path option.

Because the reference files are 'copied out' rather than 'checked out', they are considered to be 'throw-away' files and cannot be returned to the server. Reference files remain on your workstation until you delete it (deleting reference files is discussed later in this chapter).

### The Reference File User Preferences

- Post Reference Dialog: When enabled, the Refence File list box opens each time a document to which reference files are attached is opened or checked out.
- Reference File Check: When enabled, Falcon/DMS performs a reference file check for files as they are opened or checked out. When checking out multiple files, it is recommended that you turn off the Reference File Check preference, then turn it on before you open any checked out document.
- Auto Delete Local Reference Files: When enabled, Falcon/DMS automatically deletes local reference files when the parent document is checked in. It is important to note that when Auto Delete is enabled, Falcon/DMS has to download reference files each time you open a MicroStation or AutoCAD document, resulting in increased network traffic.

## The Reference File list box

When the Post Reference Dialog user preference is on, each time a document to which reference files are attached is opened or checked out, the Reference File List box opens. In addition to the filename, this list box provides the following information about each reference file:

### The status of each reference file

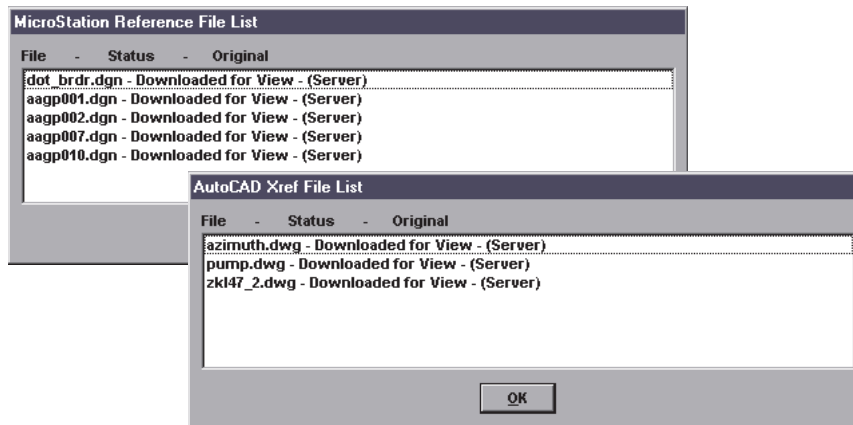
- Downloaded for view—a local version is not found; the reference file is copied out for view.
- Local version is current with server—a local version is found; because the local version is identical to the server version no action is taken.
- Not database record—either a reference file does not have a record or Falcon/DMS is unable to resolve the attachment; see the Falcon/DMS administrator.

### The present location of the most current version of the each reference file.

- Server—the most current version of the original file is not checked out.
- <user/workstation>—the most current version of the original file is checked out to the identified user on the identified workstation.

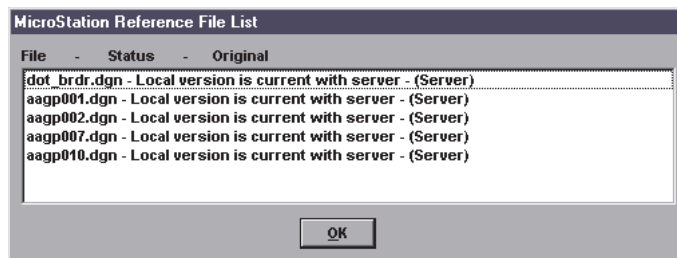
### Filename - Downloaded for view - (Server)

This status indicates that all the attached reference files have been downloaded to the local hard disk. The notation '(Server)' indicates that the most current version of the original of each reference file is not checked out. The MicroStation Reference File List and AutoCAD Xref File List forms shown below are typical.



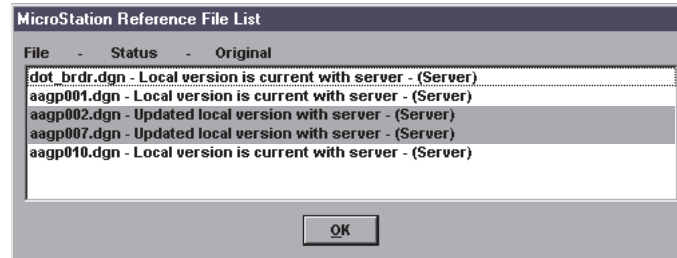
### Filename - Local version is current with server - (Server)

This status indicates that all the attached reference files have already been copied to the local hard disk and that they are identical to their server versions. In this case no reference files are recopied to the local hard disk.



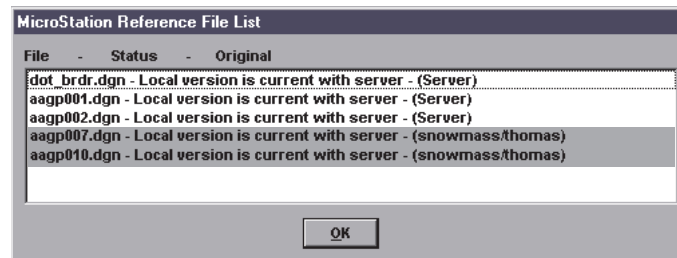
### Filename - Updated local version with server - (Server)

This status indicates that the local versions of two of the five reference files have been downloaded again. At some point, between the time the active file was closed and/or checked in and then reopened, another user modified and then checked in the indicated files.



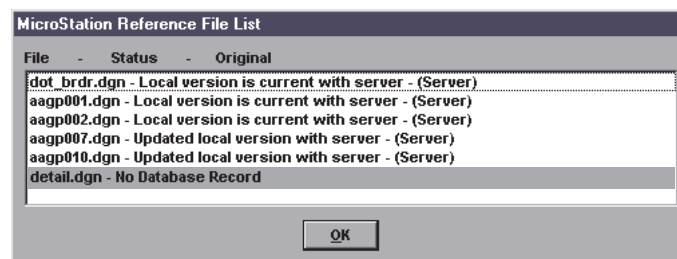
### Filename - Local version is current with server - (workstation/user)

This status appears when all the attached reference files are already on the local hard disk and that they are identical to their server versions. However, the indicated files, while current with their server versions, are no longer the most current versions of the files. Note that the workstation and user to whom documents are checked out are identified. (The Refresh Reference File command, available in the MDL version of the Document Manager, can be used to retrieve a more current version of these files.)



### Filename - No Database Record

This status appears when a reference file does not have a database record or Falcon/DMS is unable to resolve the attachment. Usually a file without a database record will not display in the parent design file. Please see the Falcon/DMS administrator when this notation appears.





## Attaching MicroStation Reference Files from the Document Manager

It is strongly recommend that you use the Falcon/DMS Attach Reference File command to attach reference files to the active design file. When you use Falcon/DMS, the Document Manager writes a system generated reference file path logical to the active design file. This insures that Falcon/DMS always finds the correct file without the need to define multiple MS\_RFDIR values in workspace configurations. (This occurs only for database types that permit a specific filename to be used more than once.)

Note: A detailed explanation of how Falcon/DMS uses reference file path logicals is provided in the Administrator Guide.

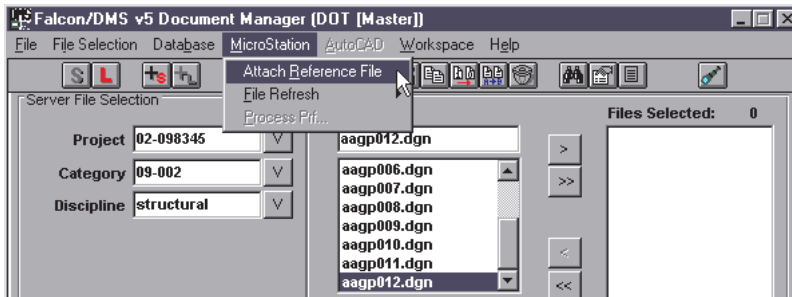
Because most organizations now configure Falcon/DMS to use UNC or FTP to access network resources, the only access to the production design files on a file server is through Falcon/DMS. This means that when mapped network drives are not defined, MicroStation's Attach Reference command cannot see the server-based production directories.

When MicroStation's Falcon/DMS file format (igds) is defined, the standard attach reference file command is often 'redirected' to Falcon/DMS. Thus, when a user selects MicroStation's File > Reference File > Attach command, the Falcon/DMS Document Manager opens instead of the standard MicroStation dialog box.

### To attach a reference file to the active design file:

Falcon/DMS requires that the document to which you are attaching reference files be open in MicroStation.

1. If necessary, navigate to the directory that contains the document you wish to attach as a reference file. (Because Falcon/DMS will build its own path logicals the document can exist anywhere within the data structure.)
2. Select the document you wish to attach as a reference file. From the Falcon/DMS menu bar, select MicroStation > Attach Reference File.



3. At this point Falcon/DMS turns the task over to MicroStation—proceed as usual.

### ATTENTION

MicroStation Users: It is important that new reference file attachments be made for the following reasons:

1. It is difficult for MicroStation to access the production area of a server when mapped network drives are not defined.
2. Falcon/DMS writes a system generated reference path logical to the active design file, insuring that the Document Manager is always able to locate all reference files. (This applies to installations that are not configured for unique filenames.)
3. Falcon/DMS is often configured to 'redirect' the File > Reference > Attach command to the Document Manager.

**✓ TIP**

When attaching a reference file with Falcon/DMS, it is not necessary to enable the Save Full Path option on MicroStation's Attach Reference File dialog box.

**⚠ ATTENTION**

Except for the Attach Reference command, all reference file operations are performed with standard MicroStation Reference File commands.

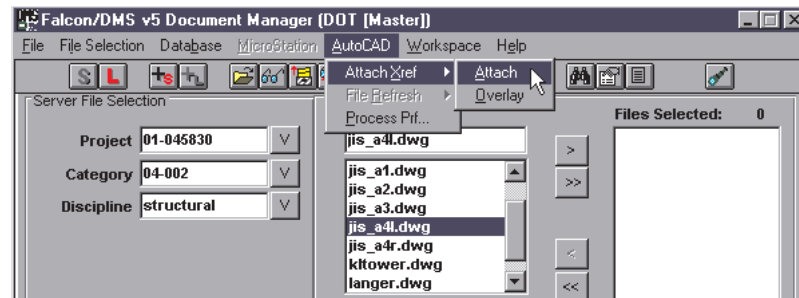
## Attaching AutoCAD Xref Files from the Document Manager

- ❑ The Falcon/DMS Attach Xref command invokes AutoCAD's standard Insert > Internal Reference > Attach operation and should be used only when unique filenames are required.
- ❑ For databases configurations that permit duplicate filenames, continue to attach Xrefs through the AutoCAD interface.

### To attach an external reference file to the active drawing file:

Falcon/DMS requires that the document to which you are attaching external reference files be open in AutoCAD.

1. If necessary, navigate to the directory that contains the document you wish to attach as a reference file.
2. Select the document you wish to attach as a reference file. From the Falcon/DMS menu bar, select AutoCAD > Attach Xref > Attach.



3. At this point Falcon/DMS turns the task over to AutoCAD—proceed as usual.

## Detaching a Reference / Xref File

Use the standard method prescribed by MicroStation and/or AutoCAD to detach reference files.

## Deleting Local Reference / Xref Files

Falcon/DMS provides two ways to ‘throw away’ the local reference files:

- ❑ **Auto Delete:** When enabled, Falcon/DMS automatically deletes the appropriate local reference files when the parent file is checked in.
- ❑ **Local File Selection > Delete:** This procedure allows you to view the contents of the local reference directories and select and delete files at your own discretion. (The local reference directories are usually `c:\dmslocal\ref\` [for MicroStation] and/or `c:\dmslocal\xref\` [for AutoCAD].)

### Enabling Auto Delete:

From the Document Manager’s menu bar select `Workspace > User Preference > Auto Delete Reference Files > On`.

As a document is checked in, Falcon/DMS identifies and deletes the appropriate local reference files, if any.

### Manually Deleting Local Reference / Xref Files:

1. Set File Selection to Local File Selection.
2. The Document Manager’s current directory becomes the local working directory—the default is `c:\dms_local\`.
3. Navigate to `c:\dms_local\ref` for MicroStation or `c:\dms_local\xref` for AutoCAD.
4. Select the file or files that you wish to delete. Press Delete (or select `File > Delete`).

On the Falcon/DMS Confirmation box select `Yes` to delete files individually or `Yes to All` to delete all selected files.

### Attention MicroStation Users:

You cannot delete a reference file attached to the active file—Falcon/DMS does not permit reference files attached to the active file to be deleted. If you attempt to delete any of the active document’s reference files, Falcon/DMS ignores the operation.

### ✓ TIP

Because Falcon/DMS verifies reference files each time it opens a design file, it is recommended that you not delete local reference files until after a design file is completed.

### ⚠ WARNING: Refresh Local & Refresh Server

**USE WITH CAUTION**—Be guided by the basic rule of carpentry when using these commands: measure twice, cut once.

**Refresh Local File:** Because the local file is overwritten by a fresh copy of the server-based original, any modifications made to the local file are lost.

**Refresh Server File:** This command overwrites the server-based record copy of a file with its working version. If the server file is unintentionally refreshed you will have to retrieve a new record version from backup.

### ⚠ ATTENTION

The MDL version of the Document Manager permits you to refresh the local copies of any reference files attached to the

## File Refresh Commands

Because these commands are essentially copy and replace operations, they should be used with caution.

The Windows Document Manager provides the following Refresh File operations:

### The 'Refresh Local File' Command

The File Refresh > Local Design File (MicroStation) and the File Refresh > Local Drawing File (AutoCAD) commands permit you to automatically retrieve and open a 'fresh' version of your current file. Because the local file is overwritten by a fresh copy of the server-based original, any modifications made to the local file are lost.

#### To refresh a Local File:

1. From the Document Manager's menu bar,
  - choose MicroStation > File Refresh > Local Design File,
  - or
  - choose AutoCAD > File Refresh > Local Drawing File.
2. Press OK on the Refresh Local Design File alert box.

### The 'Refresh Server File' Command

The Refresh Server File command permits you to automatically refresh the server-based original with the current file without closing the current file. Please note that if the server file is unintentionally refreshed, you will have to retrieve a new record version from backup. **[Use this command with caution.]**

#### To refresh a Server File:

1. From the Document Manager's menu bar,
  - choose MicroStation > File Refresh > Server Design File,
  - or
  - choose AutoCAD > File Refresh > Server Drawing File.
2. Press OK on the Refresh Server Design File alert box.

## Open (View)

The Open (View) command permits you to view a document without checking it out from the database. Use this command to view a document that is checked out to another user. When you view a document, a copy of that document is placed in the 'view' directory on the client workstation (usually `c:\dms_local\view`).

### To view a document:

1. From the Server File Selection region, designate the current directory.
2. From the File Name list window, select a document.
3. Press View (or select File > View).
4. The Falcon/DMS Information box indicates that the file is read only. Press OK.

Falcon/DMS copies out and opens the selected document for viewing.

### To view a document already copied out for viewing:

A view file that is copied out to the requesting workstation remains available for viewing until the file is deleted (see next section). If you do not wish to update a copied out file with its server version, you may view the copied out version of the document by setting the File Selection to Local.

1. From the File Selection menu, choose Local File Selection.
2. In the Local File Selection region, navigate to the project under the `c:\dms_local\view` directory.
3. From the File Name list window, select a document.
4. Press View (or select File > View).
5. A Falcon/DMS Alert box opens, indicates that the file is on your workstation, and asks if you want to view the server file. Click Cancel to view the local file or OK to view the server file.
6. A Falcon/DMS Information box opens, indicating that the file is read only. Press OK.

Falcon/DMS opens the selected document for viewing.

**✓✓ HOT TIP**

When checking out multiple files, it is recommended that you turn off the Reference File Check preference, then turn it on before you open a checked out document.

## Checkout (Modify)

The Checkout (Modify) command permits you to checkout one or more documents to a client workstation and reserve them for modification. Until they are checked back into the database, Falcon/DMS restricts access to the original documents on the server to view only.

**To Checkout a document for modification:**

1. From the File Selection menu, choose Server File Selection.
2. From the Server File Selection region, designate the current directory.
3. From the File Name list window, select one or more documents.
4. Press Checkout (or select File > Checkout).

## Copy Out (View)

The Copy Out (View) command permits you to copy multiple files to your workstation without checking them out from the database; the server-based record version of documents remain available to be opened or checked out by another user.

When Falcon/DMS is used to view a design file, a copy of that file is placed in a 'view' directory under the application's working directory (usually `c:\dms_local\view`).

**To Copy Out multiple documents for viewing:**

1. From the File Selection menu, choose Server File Selection.
2. From the Server File Selection region, designate the current directory.
3. From the File Name list window, select one or more documents.
4. From the menu bar, select File > Copy Out (View). Use the View command to open the documents in the associated application.

## Deleting 'View' Documents

A view file that is copied out to a workstation is considered to be a 'throw away' file and may be deleted through the Windows Explorer or through the Falcon/DMS Document Manager.

**To delete a local document/documents copied out for viewing:**

1. From the File Selection menu, choose Local File Selection.
2. In the Local File Selection region, navigate to the project under the `c:\dms_local\view` directory.
3. From the File Name list window, select the documents you wish to delete.
4. Press Delete (or select File > Delete). On the Falcon/DMS Confirmation Box, press Yes or Yes to All.

## Check In

The Check In command returns checked out documents to the server and updates the database record of affected documents, making each available to other users for modification. Falcon/DMS provides several ways to check in documents:

### To check in a document—Server File Selection:

1. From the File Selection menu, choose Server File Selection.
2. From the Server File Selection region, designate the current directory.
3. From the File Name list window, select the file/files to check in.
4. Press Check In (or select File > Check In).

### To check in a document from the Checked Out to <user> dialog box:

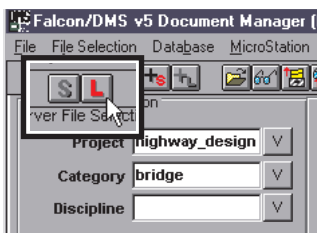
The Checked Out to <user> dialog box lists all the files that are checked out to you on the current workstation. This command is especially useful when checking in files from multiple projects and subdirectories.

1. From the Document Manager's menu bar, select File Selection > Checked Out to <user>.
2. From the Files Checked Out to <user> dialog box, select the file/files to check in.
3. Press Check In.

## Creating Records with the Check In Command

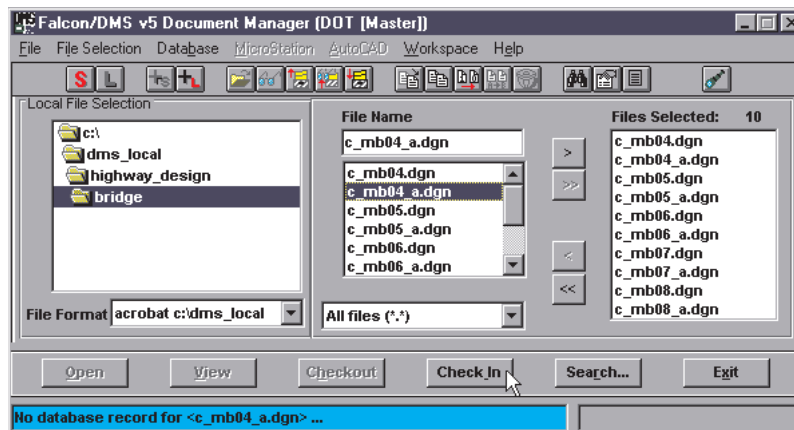
When a list of files selected for check in contains documents for which database records do not exist, Falcon/DMS can create the necessary records as part of the check in operation. This feature is especially useful when working with applications that generate new files locally that you want Falcon/DMS to manage.

For Falcon/DMS to check in a set of files containing these new, local items and create their database records, you must select the files from a Local File Selection. Otherwise, the Document Manager will not be able to see the new files.

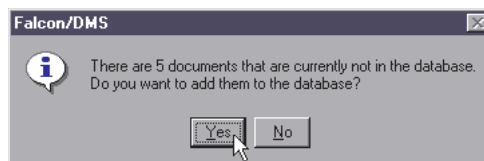


To create database records during check in [Local File Selection]:

1. Set the Directory Selection to Local File Selection. Navigate to the desired local directory and select the files to be checked in. (Whether all files have database records does not matter at this point.)



2. Press Check In. Falcon/DMS first checks in all documents with database records.
3. The Document Manager then displays a message box indicating the number of documents not in the database. You have the option of adding them to the database or leaving them on the local workstation.



On the Falcon/DMS message box, click Yes to add the documents to the database. The Add Local Document dialog box opens. A complete explanation of the Add Local Document dialog box is provided in Chapter 3 (see Add Local File command)

For any ‘create-record-on-check-in’ scenario, Falcon/DMS requires that a file format be assigned to each new record. A file format can be assigned automatically or manually. The automatic process uses a predefined list to associate a filename extension with a file format. Each file format, in turn, is associated with one or more applications. This enables the Document Manager to automatically launch an application based on a document’s file format.

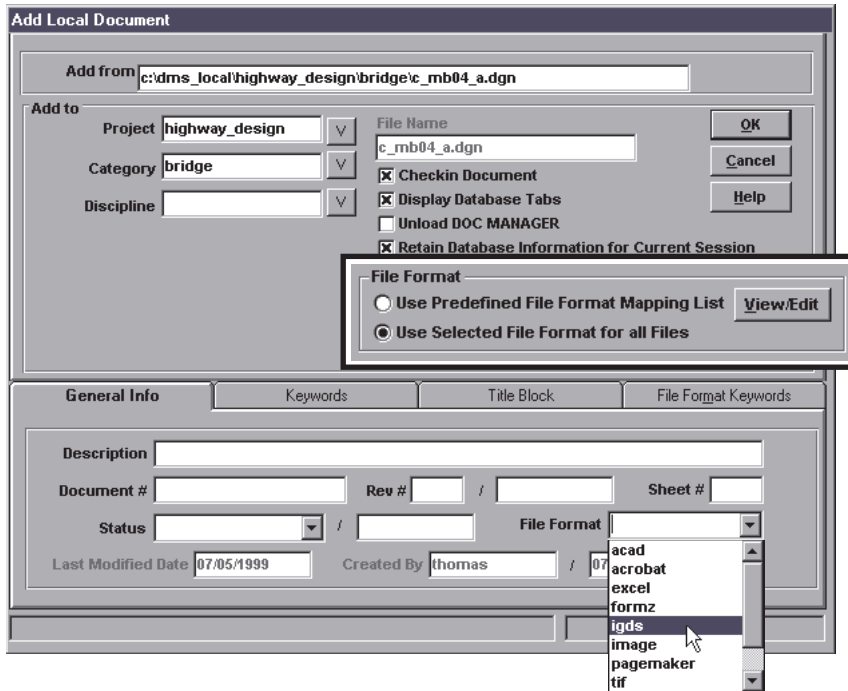
The File Format region on the Add Local Document dialog box provides two options: ‘Use Predefined File Format Mapping List <View/Edit>’, and ‘Use Selected File Formats for all Files’.

The first option is discussed on the following page. Steps 4 and 5 (below) demonstrate the second option.

‘Use Selected File Format for all Files’ allows you to assign the file format selected in the File Format drop-down list box to all new files. (When a file format association exists for the current file, the File Format field is automatically filled in.)

4. On the Add Local dialog box, select the ‘Use Selection File Format for all Files’ option and press OK.





5. Select one of the following options:

- Yes—to add the current local file with the selected file format.
- Yes to All—to add all the identified local files with the selected file format.
- No—to skip the current file and advance to the next item in the selection list.
- Edit Record—to return to the Add Local Document dialog box
- Cancel—to cancel the current operation.

#### The 'Predefined File Format Mapping List' option:

When selected, the 'Use Predefined File Format Mapping List' option automatically associates an extension with a file format. This process uses the System File Format Mapping list, defined by the Falcon/DMS administrator. Falcon/DMS allows you to create a local File Format Mapping list to define associations not available in the system list.

To open the File Format Mapping dialog box, press View/Edit in the File Format region of the

#### To define a local File Format Mapping scheme:

1. On the File Format Mapping dialog box, press Add.
2. In the extension field, enter an extension. The maximum length is twenty characters, not including the period delimiter.
3. From the File Format drop-down list box, select a file format. Press OK.

## Prompt for Backup

Falcon/DMS provides for the automatic backup of MicroStation and AutoCAD documents.

The backup can be configured to save the file to a designated backup directory on the server or to the file's server-based home directory.

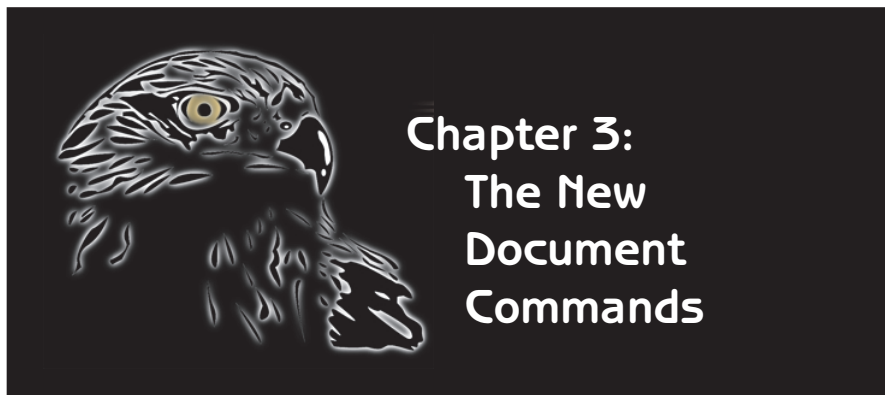
The most common backup configuration prompts you for a backup. Under this configuration you are asked to create a backup when you exchange one file for another or when you exit MicroStation or AutoCAD.

## User Defined Filters

Falcon/DMS supports up to four user defined file filters. Simply enter a filter string in the filename field and press <Enter> or <Tab> out of the field. A rolling list of user defined filters is added to the bottom of the filter drop-down list box.

# Falcon/DMS

## The Document Manager (Windows)



The focus of this chapter is on how to use Falcon/DMS to create a document and its database record.

The topics discussed in this chapter are:

- The Create New File Command
- The New Revision Command
- The Add Local File Command
- The Add Server File Command

## The Create New File Command

The Create New File command permits you to create a new document file and its database record.

### To Create a Document:

1. On the Document Manager, select File > New > File Format. (Only File Formats that have templates are available.) The Create New Document dialog box opens.

If it is necessary to use a template file other than the default, click the Browse button to the right of the Template field. From the Select a New Template dialog box, select a template as needed.

### Miscellaneous Options:

- Open document: Checks out and opens the new design file.
  - Checkout document: Checks out the new document (otherwise, the document is moved up to the server and its Availability set to 'On Server').
  - Display database tabs: Displays the database tabs.
  - Unload DocMan: Closes the Document Manager after the operation completes.
  - Keep dialog box open: Maintains the Create New File dialog box as the current dialog box.
2. Select the server-based home directory into which the new file will be placed.
  3. In the File Name field, key in a file name. Fill in database fields as necessary—Falcon/DMS alerts you to which fields are required.

Press OK.

## Revision Control

Revision Control is designed to track revisions in one of two modes—a History mode or an As-Built/Work-in-Progress mode. The key difference between modes is in how each identifies the current revision.

Revision Control schemes can vary between file formats and can be enabled for some and not for others. Revision Control can be configured to create a new revision at file checkout or file checkin, either automatically or at a prompt. Finally, Revision Control can be configured to allow you to create a revision whenever you deem it appropriate. We will consider this option—creating a new revision at your discretion.

### History Mode

In the History mode, the current revision is the document with the original filename, also referred to as the working document. Revision Control creates a backup of the working document, usually appending a revision number to the filename of the backup, and incrementing the revision number of the working document's database record. In other words, the working document's filename does not change and its (database) revision number will always be one increment greater than the last backup.

For example, `lock10a.dgn` is the working document for which no revision has been created. Revision Control creates a backup of this document named `lock10a.dgn.rev0`. The revision field in the database record for `lock10a.dgn`, the working document and current revision, is updated to read revision equal to 1. The revision field in the database record for `lock10a.dgn.rev0`, the backup and now previous revision, remains empty.

In this scheme, the current revision is `lock10a.dgn` because its (database) revision number has the highest increment.

### As-Built/Work-in-Progress Mode

In the As-Built/Work-in-Progress mode, Revision Control copies the working document and assigns a new revision notation to its filename. The working document will always be an incremented version of the original document, which 'owns' the original filename. In other words, both the working document's filename as well as its (database) revision number change.

For example, `aagp003.dgn.revA` is the working document; its (database) revision number reads revision equal to **A**. Revision control creates a copy of this document named `aagp003.dgn.revB`; its (database) revision number reads revision equal to **B**.

In this scheme, the current revision is `aagp003.dgn.revB` because both its filename and its (database) revision number have the highest increment.

### Miscellaneous

For AutoCAD documents, Revision Control is configured to insert the revision notation between the filename and the extension.

Revision Control is often configured to move the previous revision to a subdirectory of the current directory. If so, only the current revision will be displayed in the current directory.

The previous revision can be assigned a Document Status with an access mode of view only or no access.

#### TERMS

**History Mode:** The current revision is the document with the original filename. its (database) revision number will always be one increment greater than the last backup.

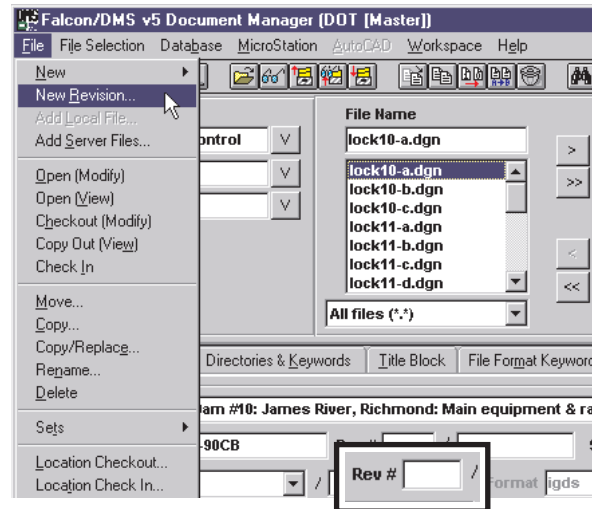
**As-Built:** The current revision is the document whose filename and (database) revision number have the

**ATTENTION**

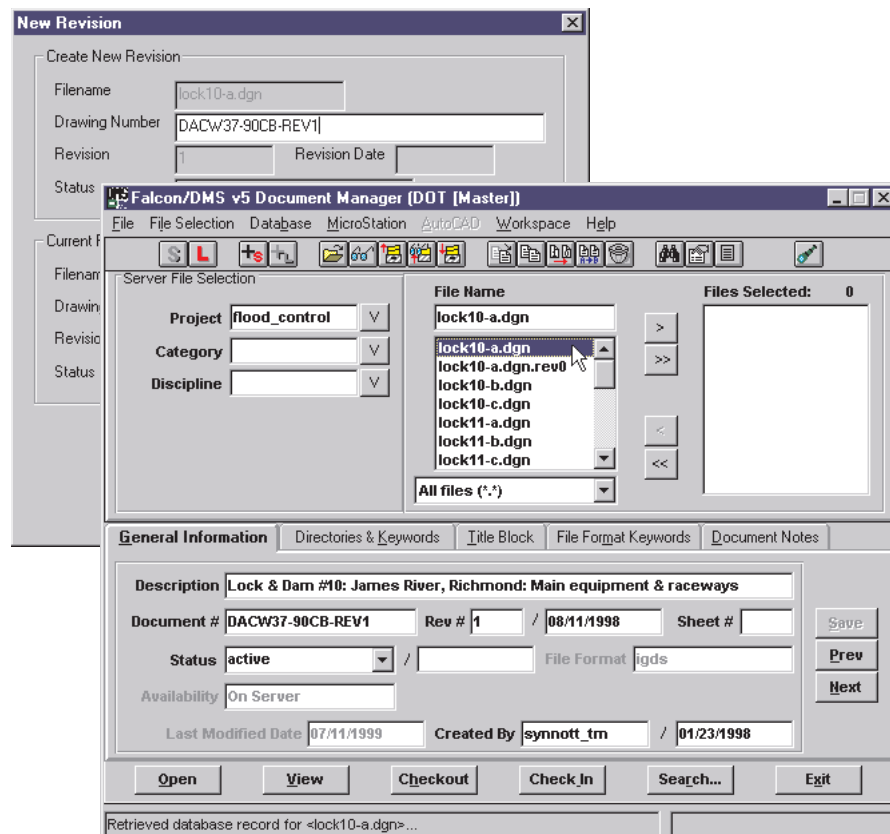
To create a new revision of a document, its Availability must be 'On Server'.

## To create a new revision—History mode

1. From the Document Manager, select a filename. Verify that the document's availability is 'On Server'. Note that in the example lock10-a.dgn does not have yet have a revision number.



2. From the Falcon/DMS menu bar, select File > New Revision. The New Revision dialog box opens.
3. In this example the Document # field can be edited. Edit as required and click the OK button.



## The Add Local Files Command

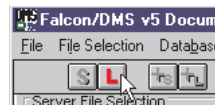
The Add Local Files command permits you to add files located on a client workstation to the database, and then move the files to the server. For example:

An outside consultant provides your organization with a set of documents that are to be used in the development of a project. The documents must be available to every person working on the project. This is accomplished with the Add Local Files command

### To add a local document

1. From the operating system, place the files in the Falcon/DMS local working directory (usually `c:\dms_local`). Open the Document Manager.
2. From the File Selection menu, choose Local File Selection.
3. From the File Name list window, select the files you wish add to the database.
4. On the Document Manager, click the Add Local Files button (or choose File > Add Local Files).

The Add Local File dialog box opens.



### Miscellaneous Options:

- Checkout document: Checks out the new document (otherwise, the document is moved up to the server, its Availability set to 'On Server').
  - Display database tabs: Displays the database tabs.
  - Unload DocMan: Closes the Document Manager after the operation completes.
  - Retain database information for current session: Retains the database information for multiple documents
  - Use Predefined File Format Mapping List <View/Edit>: Automatically associates an extension with a file format. Useful when a file set contains files for different applications and filenames with different extensions. (Please refer to page twenty seven for additional information.)
  - Use Selected File Format for all Files: Assigns the file format selected in the File Format drop-down list box to all new files.
5. In the Add to region, designate the server-based target (or home) directory. Enter information and define settings on the General Info, Keyword, and Title Block tabs, as required.
  6. Click the OK button. Select one of the following options:
    - Yes—to add the current local file with the selected file format.
    - Yes to All—to add all the identified local files with the selected file format.
    - No—to skip the current file and advance to the next item in the selection.
    - Edit Record—to return to the Add Local Document dialog box.
    - Cancel—to cancel the current operation.



### NOTE

This capability is especially useful when a user is permitted to create files on his local workstation with the intention of eventually placing one or more of these files under the control of Falcon/DMS.

### NOTE

The Check In command can also be used to create records for local files that are not yet controlled by Falcon/DMS. When using this approach you do not have the option to checkout files as their records are created.

**ATTENTION**

The Add Server Files command is available only when the Server View Mode user preference is set to 'Directory'. When Server View Mode is set to Database, files without database records do not display.

## The Add Server File Command

The Add Server File command permits you to create database records for files located in their server-based home directory. The operation of this command is very similar to that of the Add Local command.

### To add a file located on the server:

1. From the operating system, place the files in their server-based home directory (access to the server is required). Open the Document Manager.
2. From the File Selection menu, choose Server File Selection. Designate the directory containing the files to be added to the database as the current directory.
3. From the File Name list window, select the files you wish add to the database.
4. On the Document Manager, choose File > Add Server.

The Add Server File dialog box opens.

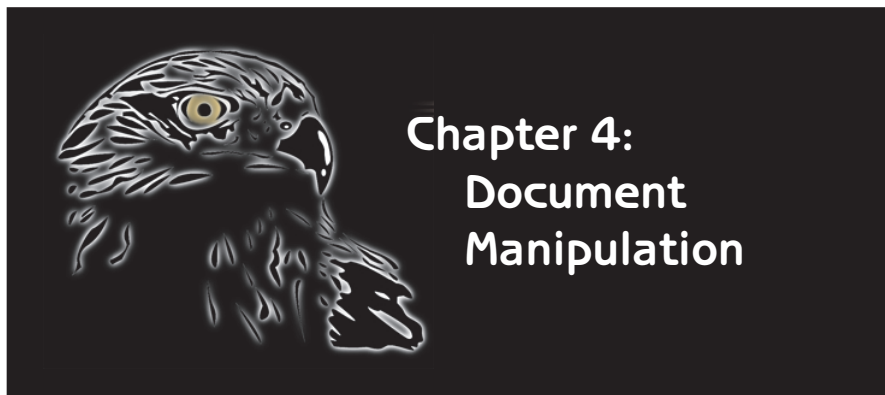
### Miscellaneous Options:

- Checkout document: Checks out the new document (otherwise, the document is moved up to the server, its Availability set to 'On Server').
  - Display database tabs: Displays the database tabs.
  - Unload DocMan: Closes the Document Manager after the operation completes.
  - Retain database information for current session: Retains the database information for multiple documents
  - Use Predefined File Format Mapping List <View/Edit>: Automatically associates an extension with a file format. Useful when a file set contains files for different applications and filenames with different extensions. (Please refer to page twenty seven for additional information.)
  - Use Selected File Format for all Files: Assigns the file format selected in the File Format drop-down list box to all new files.
5. In the Add to region, enter information and define settings on the General Info, Keyword, and Title Block tabs, as required.
  6. Click the OK button. Select one of the following options:
    - Yes—to add the current local file with the selected file format.
    - Yes to All—to add all the identified local files with the selected file format.
    - No—to skip the current file and advance to the next item in the selection.
    - Edit Record—to return to the Add Local Document dialog box.
    - Cancel—to cancel the current operation.



# Falcon/DMS

## The Document Manager (Windows)



Falcon/DMS helps manage the inevitable changes to a database with a full complement of document manipulation commands. The Move, Copy, Copy/Replace, Rename, and Delete commands are designed to make safe what could be treacherous operations without Falcon/DMS. For example:

- ❑ Falcon/DMS will not move, copy, delete, or otherwise manipulate a document until it satisfies all the database rules that govern such procedures.
- ❑ When a document is renamed a record of its former name is maintained in the database.
- ❑ Documents are NOT necessarily deleted, rather they can be marked for deletion in your database and moved to a special location from which they can be easily restored.

**TERMS**

**Source Directory**—The directory containing the document/documents to be moved or copied.

**Target Directory**—The directory to which the document/documents is moved or copied.

**ATTENTION**

To move a document, its Availability must be 'On Server'.

**NOTE**

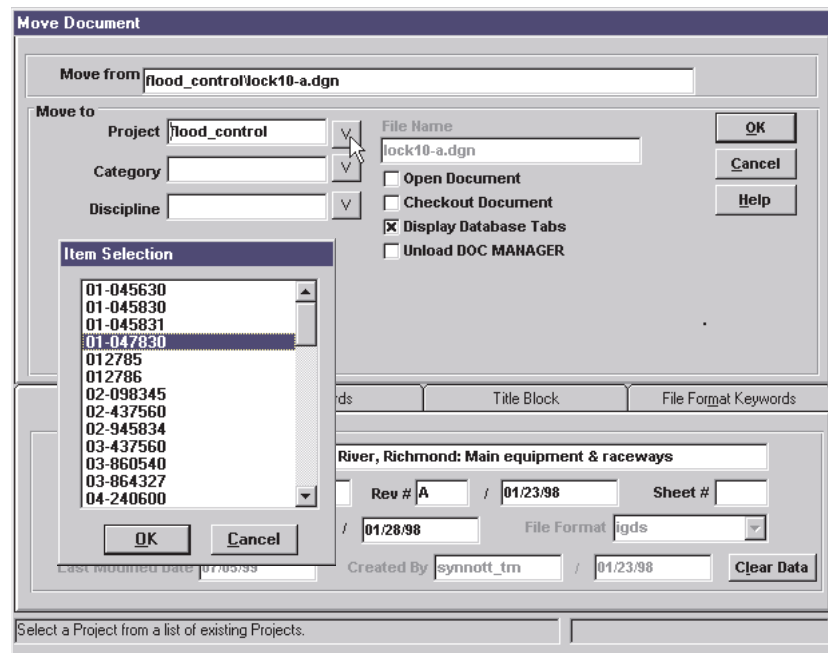
When a single document is moved, copied, copied and replaced, or renamed you may enable either the 'Open' or the 'Checkout' option. When multiple documents are selected only the 'Checkout' option is available.

## The Move Document Command

Use the Move command to move documents from one location to another and update their database records. The directory containing the documents to be moved is the source directory. The directory to which the documents are moved is the target directory. To move a document, its Availability must be 'On Server'.

### To move a document:

1. From the Server File Selection region, make the source directory the current directory.
2. From the File Name list box, select the document or documents to be moved.
3. Press Move (or select File > Move). The Move Document dialog box opens.



### Miscellaneous Options:

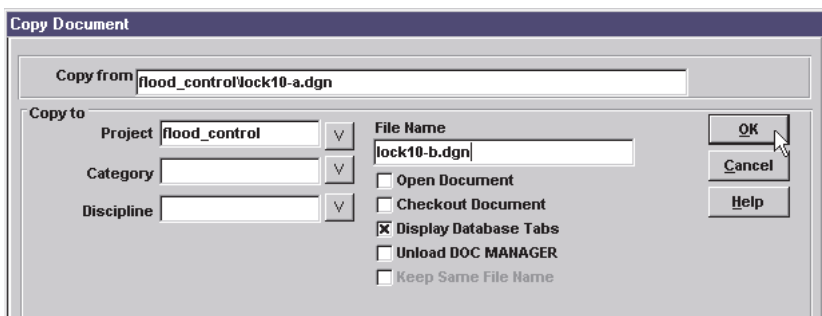
- Open document: Checks out and opens the new design file.
  - Checkout document: Checks out the new document (otherwise, the document is moved up to the server, its Availability set to 'On Server').
  - Display database tabs: Displays the database tabs.
  - Unload DocMan: Closes the Document Manager after the operation completes.
4. In the Move To region, designate a target directory.
  5. Press OK.

## The Copy Document Command

Use the Copy Document command to copy a document/documents and create database records for the new files.

**The Primary Index Key & the Copy Command:** The level of filename uniqueness allowed by Falcon/DMS affects the operation of the Copy Document command:

- ❑ When the database requires unique filenames, the Copy Document command forces you to specify a new filename.
- ❑ When the database does not require unique filenames, it is possible to use non-unique filenames in the target directory—you have the option of keeping the original name, or providing a new name for each file as it is copied. Falcon/DMS will check the database rules that govern filename uniqueness and indicate whether a filename is valid. If a filename is invalid, assign a different name.



To copy a document (Availability = On Server):

1. From the Server File Selection region on the Document Manager, designate the source directory as the current directory.
2. From the File Name list box, select the document or documents to be copied.
3. Press Copy (or select File > Copy). The Copy Document dialog box opens.
4. In the Copy To region, designate a target directory, then key in a filename.

If the database permits duplicate filenames you may enable the 'Keep Same Filename' option.

5. Press OK.

### NOTE

The Copy command captures the document's previous name in the database. This information is available to the Falcon/DMS Administrator.

**To copy a document (Availability = On Workstation [your workstation]):**

Use this procedure to copy a file that is checked out to your workstation:

1. From the Server/Local File Selection region, designate the source directory as the current directory.
2. From the File Name list box, select the checked out document or documents to be copied.
3. Press Copy (or select File > Copy). The Copy Document dialog box opens.
4. In the Copy To region, designate a target directory and key in a filename.

If the database permits duplicate filenames you may enable the 'Keep Same Filename' option.

5. Press OK. On the message box, press Yes to copy the local file,

or

press No. A second message box opens. Press Yes to copy the server file.

**To copy a document (Availability = On Workstation [another workstation]):**

Use this procedure to copy a file checked out to another user's workstation.

1. From the Server/Local File Selection region, designate the source directory as the current directory.
2. From the File Name list box, select the checked out document or documents to be copied.
3. Press Copy (or select File > Copy). The Copy Document dialog box opens.
4. In Copy To region, designate a target directory and key in a filename.
5. Press OK. On the message box, press Yes to copy the server version of the file,

or

press No to terminate the command.

## The Copy/Replace Document Command

The Copy/Replace Document command permits you to replace one document (the *target* document) with a copy of another (the *source* document). The Availability of both the 'target' and 'source' documents must be 'On Server'.

The content of the target document changes while its name remains the same.

The target document's database record is only partially altered—Falcon/DMS keeps the original creation, archive, backup, and location dates, as well as the archive time.

Why is this information retained? Perhaps an error is made in identifying the target design file and remains undiscovered for several days or weeks. In other words, the wrong file was overwritten. Because the archive information is unaltered, the Falcon/DMS administrator can determine precisely where in your system backup the previous version of the overwritten target design file can be found .

**To copy/replace a document:**

1. From the Server File Selection region, designate the source document's directory as the current directory.
2. From the File Name list box, select the source document/documents.
3. From the File menu, select the Copy/Replace command. The Copy/Replace Document dialog box opens.
4. In the Replace File region, designate the target document's directory as the current directory.
5. Select the target document—press (←) beside the File Name field. From the File List list box, choose the target document.

When multiple source documents are selected, Falcon/DMS will prompt you to identify the next target document.

6. Press OK to close the Copy/Replace Document dialog box.

## The Rename Document Command

Use the Rename Document command to rename a document. The Availability of the documents to be renamed must be 'On Server'.

The Rename Document command captures the previous name of renamed documents in the database.

**To rename a Document:**

1. From the Server File Selection region, designate the current directory.
2. From the File Name list box, select the document or documents to be renamed.
3. Press Rename (or select File > Rename). The Rename Document dialog box opens.
4. In the File Name input field, enter the document's new name.
5. Press OK.

### ATTENTION

To copy/replace a document, its Availability must be 'On Server'.

### NOTE

The Copy/Replace command captures the document's previous name in the database. This information is displayed in the 'Copied/Renamed From' field on the File Access Info tab on the Database Maintenance dialog box.

### ATTENTION

To rename a document its Availability must be 'On Server'.

### NOTE

If all rules governing filename uniqueness are not satisfied, Falcon/DMS will not allow a document to be renamed with a filename that already exists.

## The Delete Document Command

Use the Delete command to delete a document or documents. To delete a document its Availability must be 'On Server'.

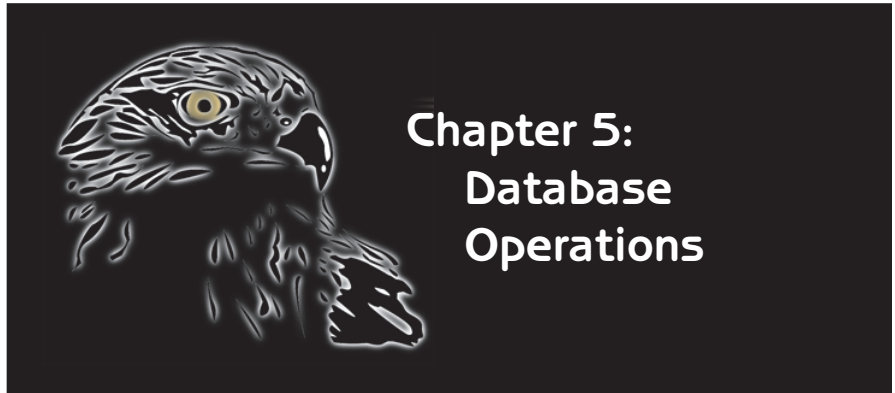
**Note:** Falcon/DMS can be configured to move 'deleted' documents to a secure area on the application server rather than actually deleting the files. Typically, files moved to this area will be maintained for a prescribed period before they are finally deleted. See your Falcon/DMS Administrator for more information.

### To Delete a Document:

1. From the Server File Selection region, designate the current directory.
2. From the File Name list box, select the document or documents to be deleted.
3. Press Delete (or select File > Copy).
4. A Falcon/DMS alert box opens. Press Yes or Yes to All, as required.

# Falcon/DMS

## The Document Manager (Windows)



A principal benefit of the Falcon/DMS Engineering document management system is the ability to search the document database and produce a search result based on user-defined criteria. Additionally, the Document Manager allows you to perform any of the file manipulation operations on a file or combination of files listed in the search result.

The Document Manager provides the following database tools:

- ❑ Database Search—a robust, easy to use searching tool. You can search on text strings in the Description and Title Block fields, all fields on the General Info tab, single or multiple 'project' directories and subdirectories, Keywords, and an extensive selection of supplemental fields. The appropriate fields support the standard SQL comparison operators.
- ❑ Generate Document List—an expanded view of a directory's contents that includes the document number and description for each filename.
- ❑ Document Notes—provides a way for you to itemize activity and communicate specific information for any document.
- ❑ Mass Update—permits authorized users to edit selected fields for a set of files.

## The Database Search Command

Falcon/DMS offers a robust searching environment from which you can search on text strings (whole and segmented) in the Description and Title Block fields, all fields on the General Info tab, single or multiple 'project' directories and subdirectories, Keywords, and an extensive selection of supplemental fields.

### The Database Search Command



1. From the Document Manager menu bar, select Database > Search, or from the button bar press the search button. The Database Search dialog box opens.

The screenshot shows the 'Database Search' dialog box with the 'General Information' tab selected. The 'General Info' section contains the following fields:

- Description:
- Document #:
- Status:  (dropdown menu)
- Availability:  (dropdown menu)
- File Format:  (dropdown menu)
- Rev #:
- Location:
- Created By:
- File Name:
- Sheet #:
- User:
- Station:

Buttons at the bottom: Submit SQL, Clear, Exit.

2. From the Database Search dialog box, define the search criteria.
  - ❑ On the main Database Form, above, the example search criteria is a text string containing the characters 'LOCK' anywhere in the description, and a status of 'Archived'.
  - ❑ For additional search criteria, click the supplemental tab. The example shows that the search is narrowed by specifying all matching files that were archived before '1/8/1995'.

The screenshot shows the 'Database Search' dialog box with the 'Supplemental' tab selected. The 'Search Criteria' section contains the following fields:

- DB Fields: A list box containing:
  - # Of Plots
  - \$ Complete
  - \$ Complete Date
  - Approval
  - Archive Date
- Edit Search Criteria:
  - Archive Date:
  - Buttons: Edit, Accept

Buttons at the bottom: Submit SQL, Clear, Exit.

To define a value for a listed field, select the field and press Edit—or double-click the item—and fill in the input field. When finished, press Accept.

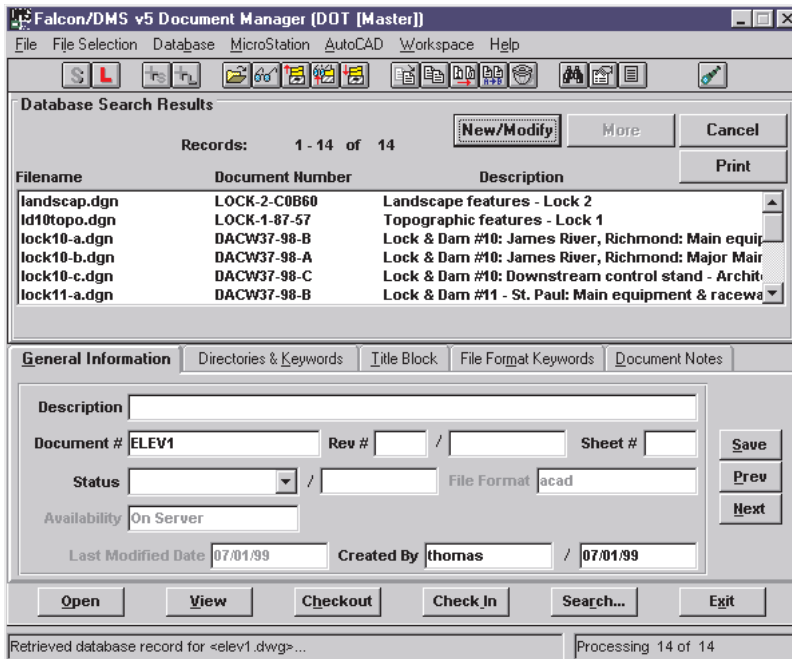
To clear the form and define a new search, press Clear.

3. Press Submit SQL.
4. When the process completes, the File Selection region on the Document Manager



switches to a search results mode. From this region you can select one or more files, then the operation you wish to perform.

- To define a new search criteria or modify the current search criteria, press New/Modify.
- When the search returns more than fifty records, press More to view an expanded list; if necessary, you can continue to expand the list in increments of fifty items.
- Press Print to send the search result to the system printer.
- Press Cancel to exit the search mode.



**Using Comparison Operators:** The Database Search command supports the following comparison operators for date and number fields: The format for criteria using comparison operators is —

[operator] space [value] space [and/or] space [operator] space [value]

- < e.g. < 1/1/96 [searches for events that occurred before 1/1/96]
- > e.g. > 1/1/96 [searches for events that occurred after 1/1/96]
- = e.g. = 1/1/96 [searches for events that occurred on 1/1/96]
- <= e.g. <= 1/1/96 [searches for events that occurred before or on 1/1/96]
- >= e.g. >= 1/1/96 [searches for events that occur after or on 1/1/96]

Other examples of 'and' / 'or' operator combinations are:

- > 1/1/95 and < 1/1/96 [after 1/1/95 and before 1/1/96]
- >= 1/1/95 and < 1/1/96 [after or on 1/1/95 and before 1/1/96]
- 1/1/95 or 1/1/96 [on 1/1/95 or on 1/1/96]
- 1/1/95 or > 1/1/96 [on 1/1/95 or after 1/1/96]

## TERMS

Database Keywords: Keywords are user-defined database attributes and are useful in narrowing database searches. Keywords are selected from designated drop-down list boxes appearing on the database information tabs.

An important benefit of keywords is the ability to use a well defined structure for choosing your search criteria. Discrete categories and predefined keyword lists give a clear picture how information is organized and assist in producing useful search results.


Falcon/DMS provides six system-level keyword categories and twenty file-format keyword categories for each file-format (igds [MicroStation], acad [AutoCad], word, excel, etc.).

## The Database Search Dialog Box

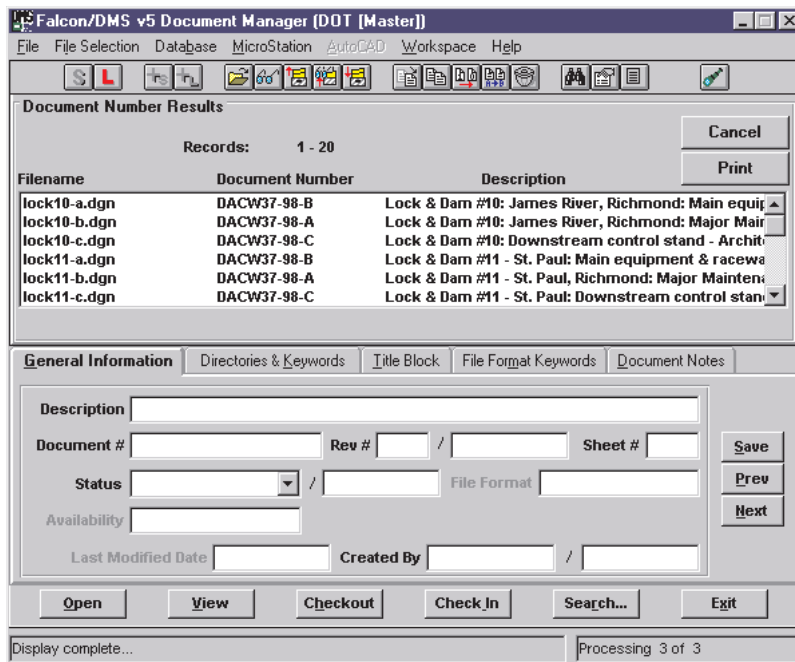
GROUP	OPTION	DESCRIPTION
<b>GENERAL INFO:</b>	Description	80 character document description.
	Document #	40 character document number.
	Status [< ]	Click the [< ] button to select from a Status Selection list box. Multiple selections can be made.
	Availability [< ]	Click the [< ] button to select from a Availability Selection list box. Multiple selections can be made.
	Location	Searches the location to which a file is checked.
	Revision #	5 character revision number.
	File Format [< ]	Click the [< ] button to select from a File Format Selection list box. Multiple selections can be made.
	Create By	Searches the user who created the document.
	File Name	80 character limit (defined by Falcon/DMS Administrator).
	Sheet #	3 character sheet number.
	User	Searches on user to whom a document is checked out.
Station	Searches on the workstation to which a document is checked out.	
<b>FILE SELECTION &amp; KEYWORDS</b>	Directory Level 1 [< ]	Click the [< ] button to select from the Project list box. Multiple selections can be made.
	Directory Level 2-5 [< ]	Click the [< ] button to select from a subdirectory list box. Multiple selections can be made.
	1-6 [System Level] [< ]	Click the [< ] button to select from a Keyword list box. Multiple selections can be made.
<b>TITLE BLOCK</b>	1-6	Each field supports a 60 character title block entry. The keyin can be a whole or segmented text string. Wild cards are used for segmented text strings; for example *arrangement* searches for all occurrences of the word 'arrangement' in the indicated title block field.
<b>SUPPLEMENTAL</b>	Date fields	Keywords 1-6 Creation Status % complete Revision Last Modified Last Accessed Last Plotted (PlotStation only) Archive Backup
	Time	Total Acitivity Archive
	Disk/Volume	Archive Backup
	Misc	% complete DOS File Name Main Local Dir. # of Plots Approval IDL Format File
	File Format Keyword	1-20

## The Generate Document List Command

The Generate Document List provides an expanded view of a directory's contents that includes the document number and description for each filename.

From the Document Manager menu bar, select Database > Generate Document List,  or from the button bar press Generate Doc List.

- To select a single file while in Document List mode, simply click on the required Filename, then choose a command.
- To select multiple files while in Document List mode, use the <Shift>+click and <Ctrl>+click key combinations, then choose a command.
- Press Print to send the list to the system printer.
- Press Cancel to exit Document List mode.

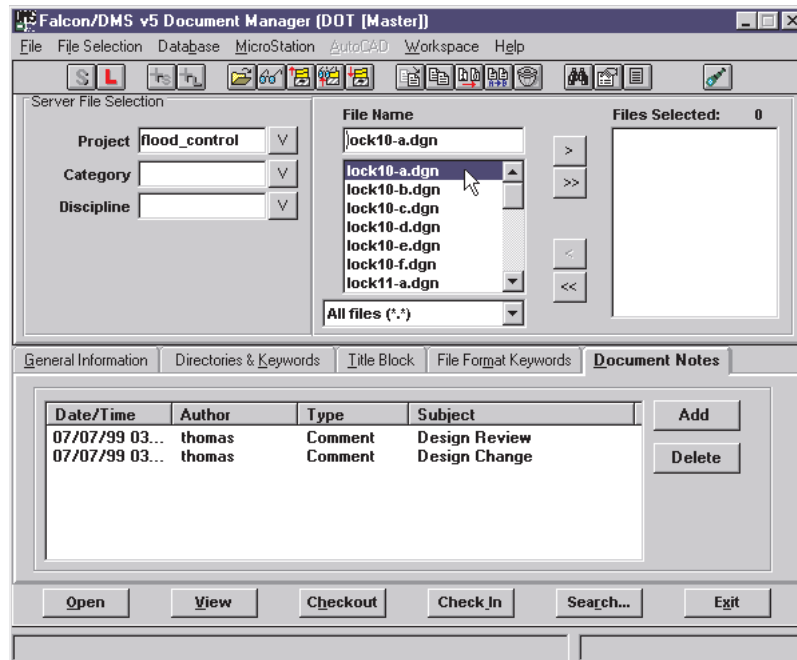


## Document Notes

The Document Notes feature helps you itemize activity and communicate specific information for any document. Notes are stored as part of the document's permanent database record and can be displayed, modified, and deleted, depending upon your level of access. You can create, display, and edit notes from either the Windows or the MDL versions of the Document Manager.

### To Display a Document's Notes:

1. Select a file from the File Name list window.
2. Click the Document Notes tab. If the selected record has one or more notes, they are displayed on this tab.
3. Double-click the note you wish to view.

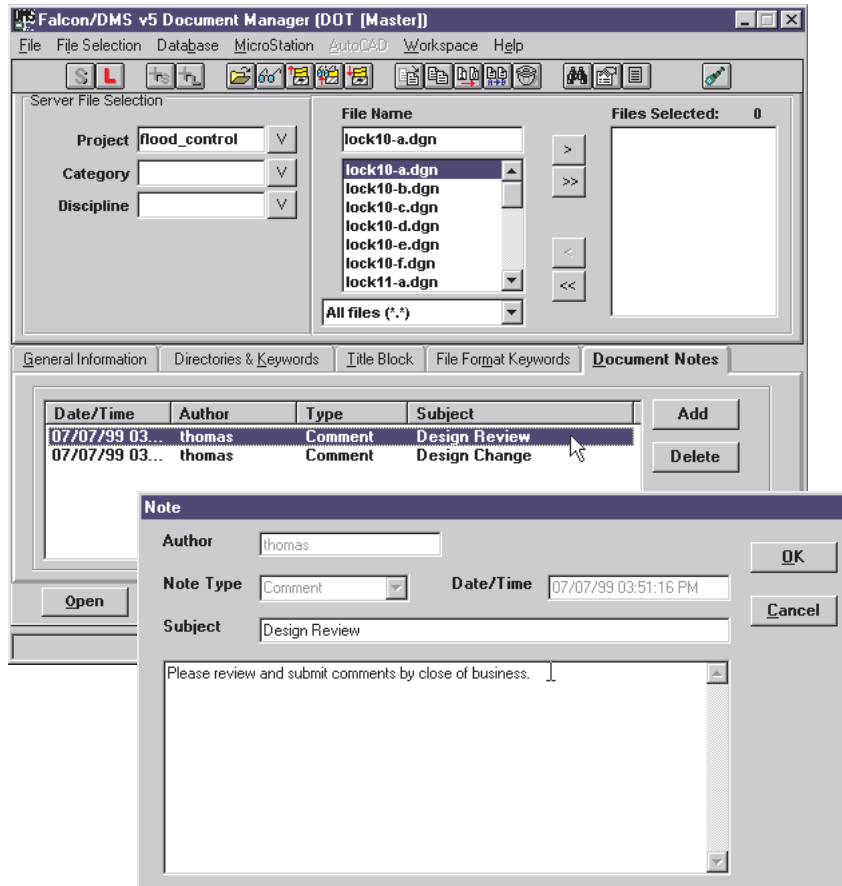


### To Add a Document Note:

1. Select a file from the File Name list window.
2. Click the Document Notes tab.
3. Click the Add button. The Note dialog box opens.
4. Enter information in the Subject input field. Press <Tab> to shift to the Note input region. Enter information in the Note region. Click the OK button.

### To Edit a Document Note:

1. Select a file from the File Name list window.
2. Click the Document Notes tab.



3. Double-click on the Document Note that you wish to edit. The Note dialog box opens. You can modify the Subject and/or the attached note. When finished, click the OK button.

### To Delete a Document Note:

1. Select a file from the File Name list window.
2. Click the Document Notes tab.
3. Select the note you wish to delete. Click the Delete button. Click the Yes button on the Falcon/DMS Confirmation box.

## The Mass Update Command

The Mass Update command permits the Falcon/DMS administrator to edit selected database fields for multiple files.

Certain record fields are not available to the Mass Update command: these include the Availability and Last Modified fields on the General Info tab, and the Directory Levels fields on the Directories & Keywords tab.

### Running the Mass Update Command:

1. On the Document Manager, select the files whose records you wish to update.
2. From the Document Manager menu bar, select Database > Mass Update.
3. On the Database Info tabs, define the contents of the field or fields that you wish to update.
4. Click the Process button.
5. A Falcon/DMS option palette opens:

When two or more files are selected you may process the files singly by clicking the Yes button—this allows you to individually define the contents of the database fields,

or

to process the group, click the Yes to All button.

### Using the Database Search and Mass Update Commands in Combination:

1. Select the Search command.
2. From the Database Search dialog box, define the search criteria. Click the Submit button.
3. On the search result, highlight the entire list.
4. From the Document Manager menu bar, select Database > Mass Update.
5. On the Database Info tabs, define the contents of the field or fields that you wish to update.
6. Click the Process button.
7. A Falcon/DMS option palette opens:

When two or more files are selected you may process the files singly by clicking the Yes button—this allows you to individually define the contents of the database fields,

or

to process the group, click the Yes to All button.