



# USER GUIDE

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## Design File Management

DFM 2.3

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## PREFACE

### Purpose

The purpose of this guide is to instruct you on how to set up and operate Adenium Design File Manager (DFM). The steps and procedures are organized to walk you through the steps necessary to use DFM to share any files with DFM File Sharing. You will also learn how to Publish and Share AutoCAD drawings in conjunction with an Adenium DFS portal. You can also use this guide as a reference manual for creating certain types of design documents.

### Audience

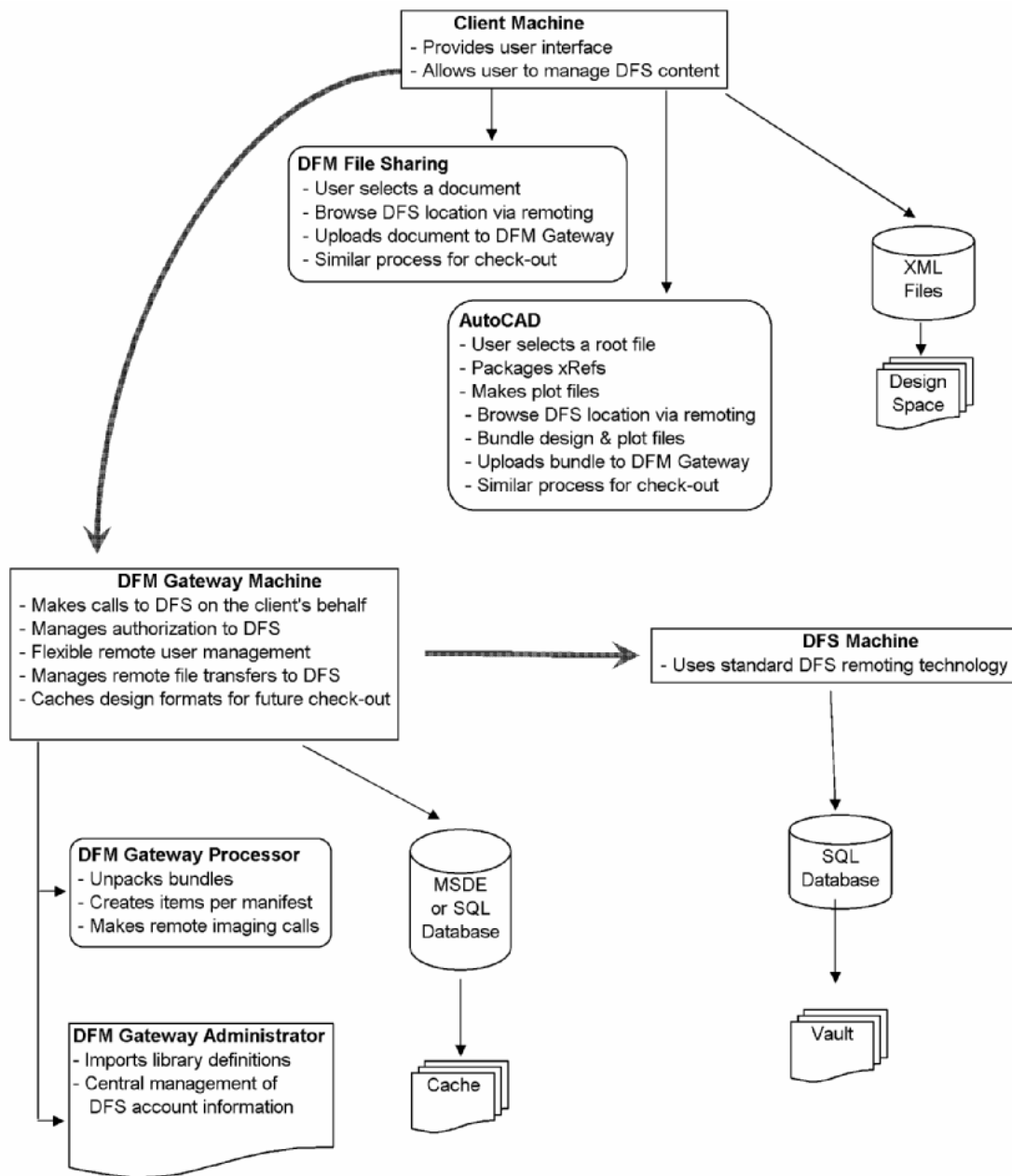
This guide is intended for DFM users, operations personnel, technical personnel, and technical managers.

### Documentation Notes

When the phrase “<Your Company>”, “<Your Client>”, or “<Your Project>” is used in the documentation, it indicates that you should enter the specific name of your company, client, or project. For example, if your company name is “Adenium Blue”, and the procedure indicates that you should enter “<Your Company> Plan Room Owner”, you would type “Adenium Blue Plan Room Owner”.

All screen shots in the documentation are captured using fictitious examples for the fictitious company “Adenium Blue”.

# DESIGN FILE MANAGER (DFM) OVERVIEW



## DFM FILE SHARING SETUP

Prior to using the DFM system for file sharing and collaboration, there are some simple setup steps that must be completed. The procedures in this guide are intended for the end users that use DFM File Sharing to publish plan room content.

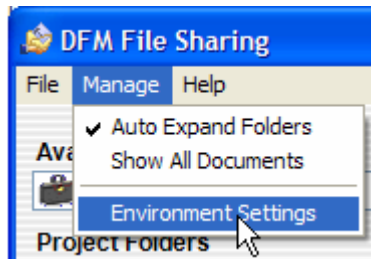
### Initial Configuration of DFM

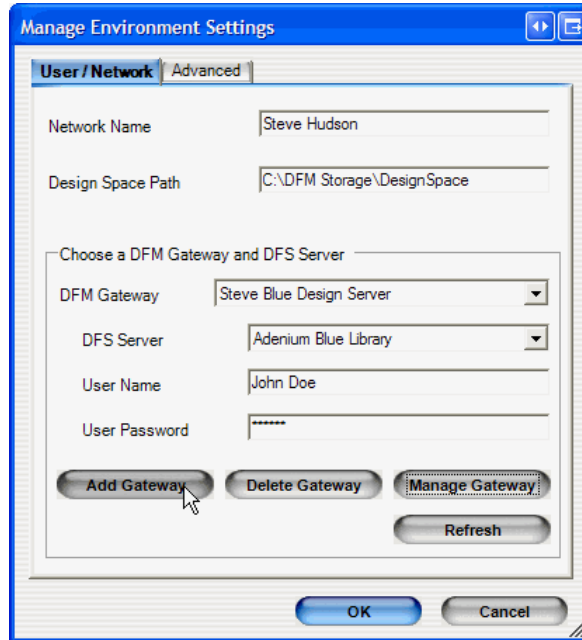
Since DFM uses Adenium DFS as a repository for storing released information, the first step in the initial configuration is to define the DFS Access Information.

The local Adenium DFS administrator must set up accounts and projects prior to your use of DFM. Those procedures are contained in the DFM Gateway operations guide. Please contact your DFM administrator and get the following information:

DFM Gateway Address	
User Name	
User Password	
Design Space Path	

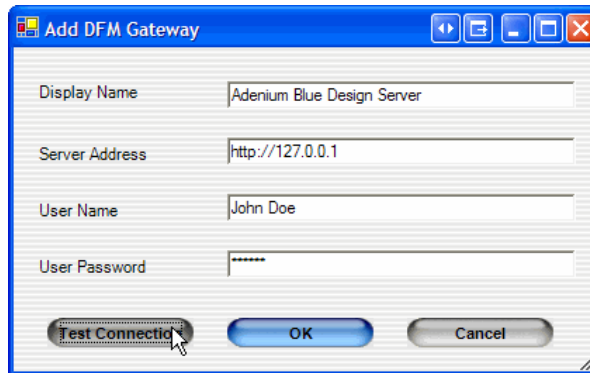
Set the Environment Settings with the following menu:



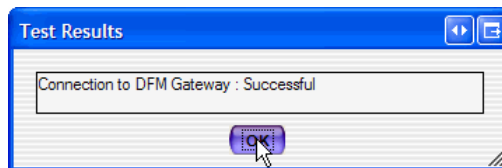


Note that Network Name can not be changed. It is the name of your workstation, and is displayed here because it will be sent to the Design Server along with your User Name and User Password.

If no servers are listed in the DFM Gateway combo box, then click on the Add Gateway button.



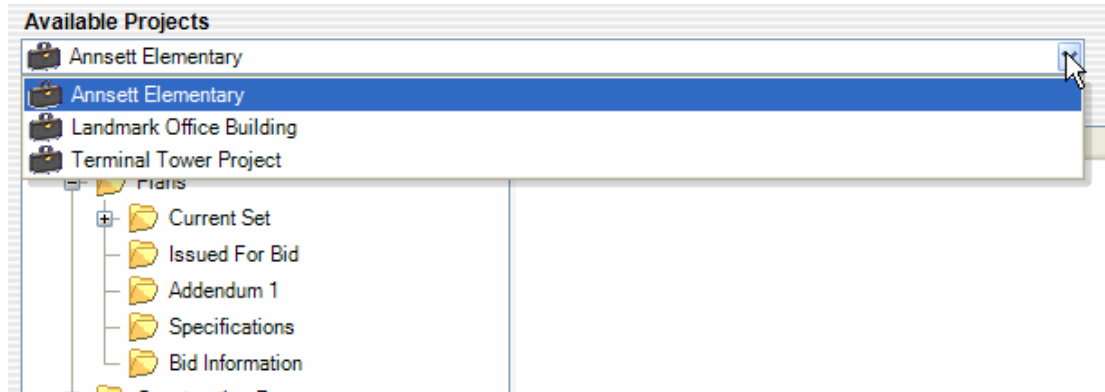
You can verify the setup with the Test Connection button.



## SHARING FILES WITH DFM FILE SHARING

### Choosing Projects with DFM

The drop down list box at the top of the program will list all the projects that you have been given access to.

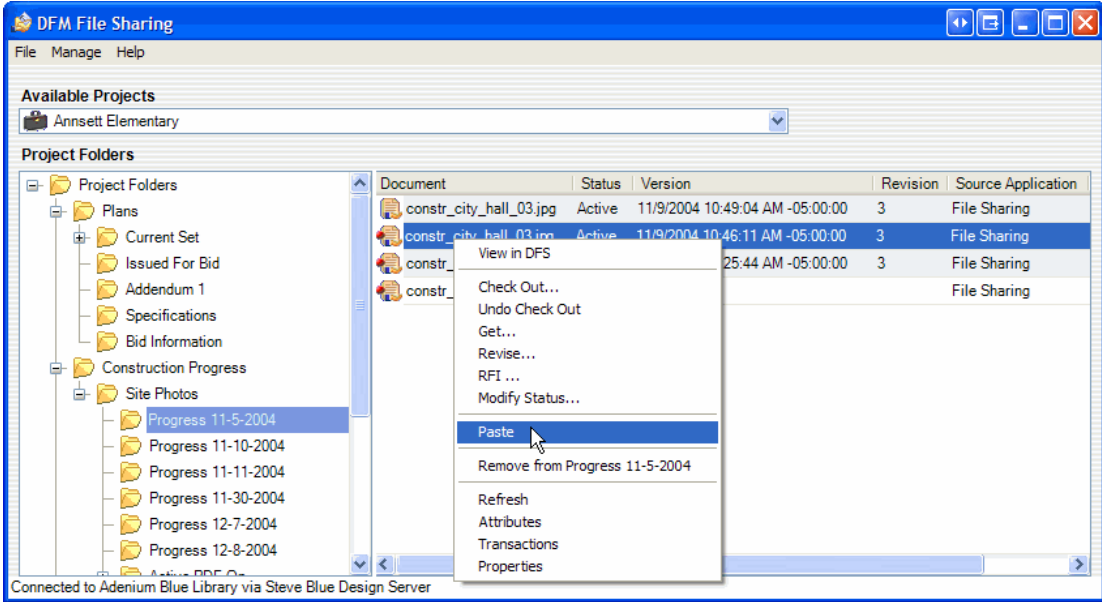


When you change projects, the folders and documents are updated to show that projects content.

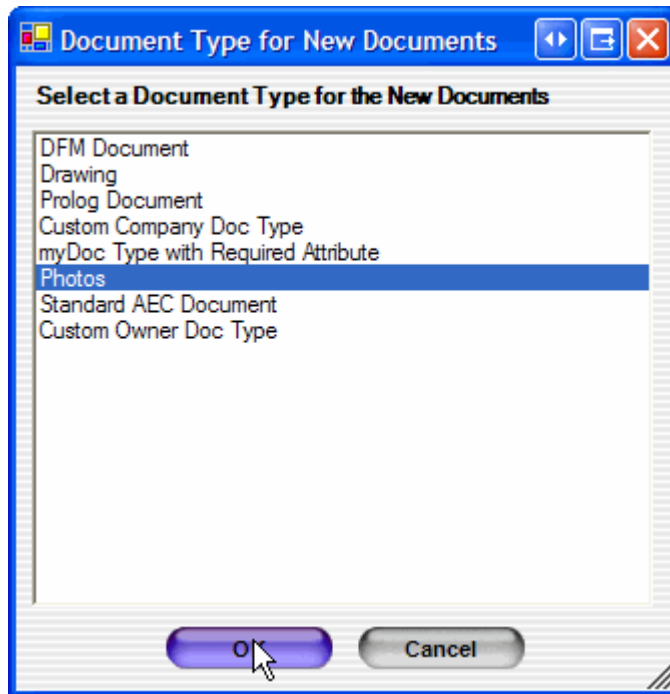
### Publishing Documents with DFM

Using DFM File Sharing is very similar to using Windows Explorer. You can use drag and drop or cut and paste to place files in the DFS system. When you first start DFM File sharing, it will connect to the DFS system and retrieve the list of all projects that you have access to. Choose the project and folder you want to publish files to, then drag and drop files from windows explorer. In the following screen shot, right click on the documents grid and choose paste.

If you paste or drop a file into a folder that already contains a file with the exact same name, then a new version of the existing document will be created. If the file name is unique, then the document will go in as the first version. See instructions on version control and red dots later in this documentation.



Next, a window to choose the document type appears. If you are not sure what document type to use, contact your DFS administrator. If the DFS Administrator has preconfigured a default document type, then this step will be skipped.



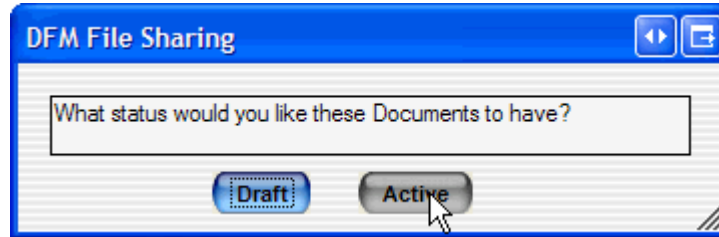
The next step varies depending on how the DFS system has been configured. If the administrator has defined required attributes for the selected Document Type, then a window to collect these attributes will appear.

The screenshot shows a dialog box titled "Attributes for corporatecenter3.". It contains the following fields and controls:

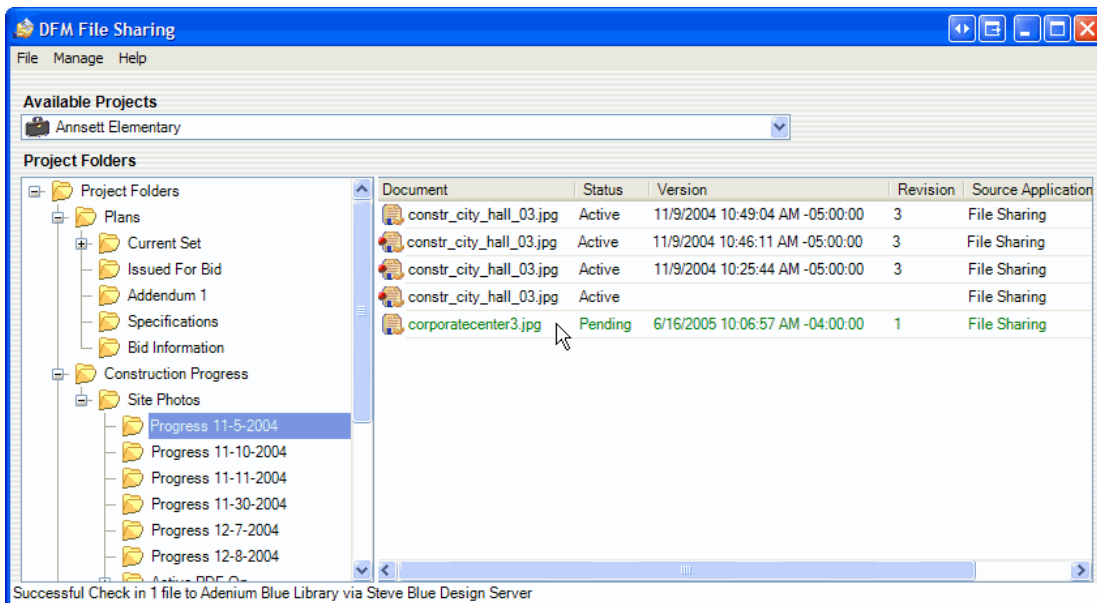
- Name (Text):** corporatecenter3.jpg
- Item Number (Text):** corporatecenter3.jpg
- Version (Text):** 6/16/2005 10:06:57 AM -04:00:00
- Revision (Text):** 1
- Project Name (Text):** Annssett Elementary
- \* List Test - Shipping Required (Combo):** FED EX - Ground
- Custom Date Attribute (Date):** (Empty)
- Status:**  Draft  Active
- Buttons:** OK, Cancel

In the attributes dialog box, required attributes are marked with a red asterisk. The Name field is read only, and is already set to the filename. If Project Name is defined as a custom attribute, it will also be read only, and already be set to the name of the project. If the DFS administrator has not set a default status for the project, then you must set the Status for the new Document. Active Documents are immediately available for viewing and ordering through the DFS Web Site, while Draft Documents must go through an approval process.

If your DFS Administrator has not set any required attributes, and has not set a default status for the project, then instead of the attributes dialog box, you will simply be asked for the status for the new document.



The document will now appear Pending with green text in the folder. Pending documents are waiting to be processed by the DFS server. If you document remains pending for more than a couple minutes, the DFS server may not be running, and you should call your DFS administrator.



### Revise a Document

Revise will version the document selected similar to drag-drop or paste. The difference is that the file names do not have to match to be considered the next version. After choosing revise, you will be prompted to pick a file that will become the next version.

### Retrieving Documents with DFM

There are two ways to retrieve a document. Use Check Out when you intend to change the document and post a new version. Use Get if you need the document, but will not be posting changes. The two procedures are identical except that Get does not prompt for the under change information. Start the procedure by right click on the Document.

Document	Status	Version	Revision	Source Type
victoria_street_site_01.jpg	Active	11/10/2004 4:22:18 PM 05:00:00	4	Share File
constr_city_hall_02.jpg	Active			Share File

- View in DFS
- Check Out...**
- Undo Check Out
- Get...
- Revise...
- RFI ...
- Modify Status...

---

- Paste

---

- Remove from Site Photos

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- Refresh
- Attributes
- Transactions
- Properties

Next you will be asked to document the under change fields. Under Change Available will leave the document on the DFS Web Site and users can still order and print. Under Change Unavailable will lock it on the DFS Web Site. It will be shown in Red, and will not be available for order, view, or instant print. The Under Change Comment will be shown to users trying to access the document.

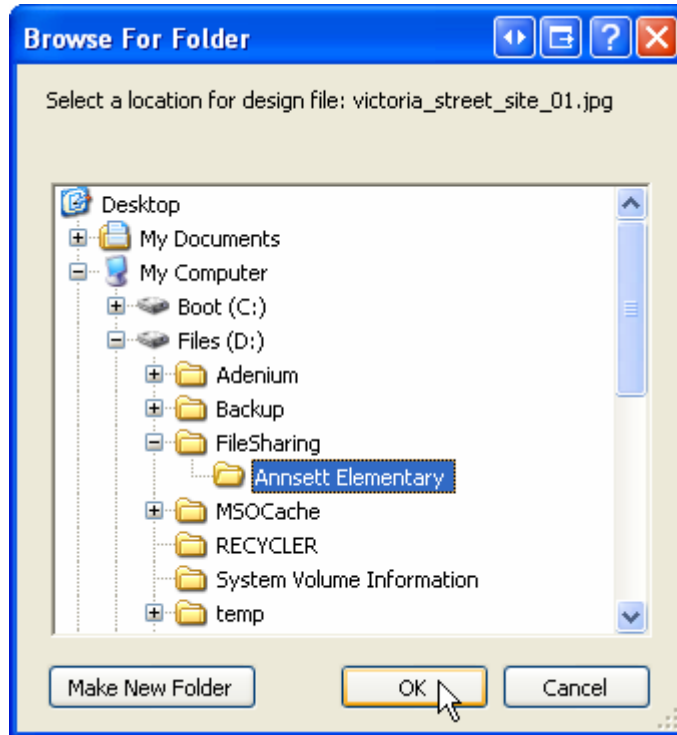
Check Out Document

Required Information

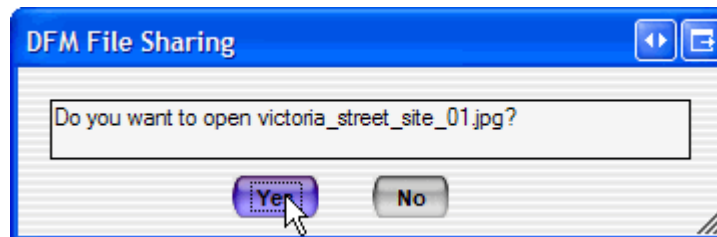
- Check-Out Type
  - Under Change, Available
  - Under Change, Unavailable
- Under Change Comment
  - Enter any information that might be helpful to others, like :
    - The reason for, or results of, the change
    - The estimated completion date for the change
    - Who to contact with questions while the change is pending
  - Need to change the background for more contrast. Should be done 11-5-04 by noon.

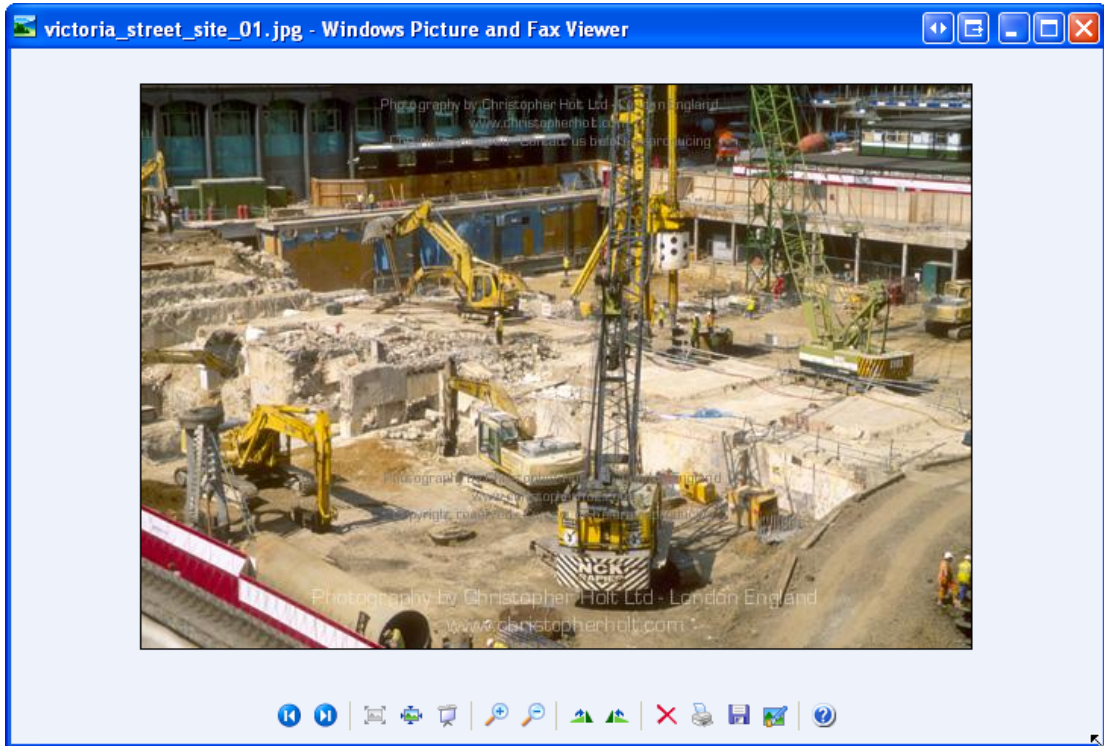
Finish Cancel

The status is updated in the DFS system, and then the file is downloaded to your local computer. You then need to specify a location to put the file.



Finally, you are asked if you want to open the file that you just downloaded. If you choose yes, it will launch the file with the associated program the same way that double clicking in explorer would.



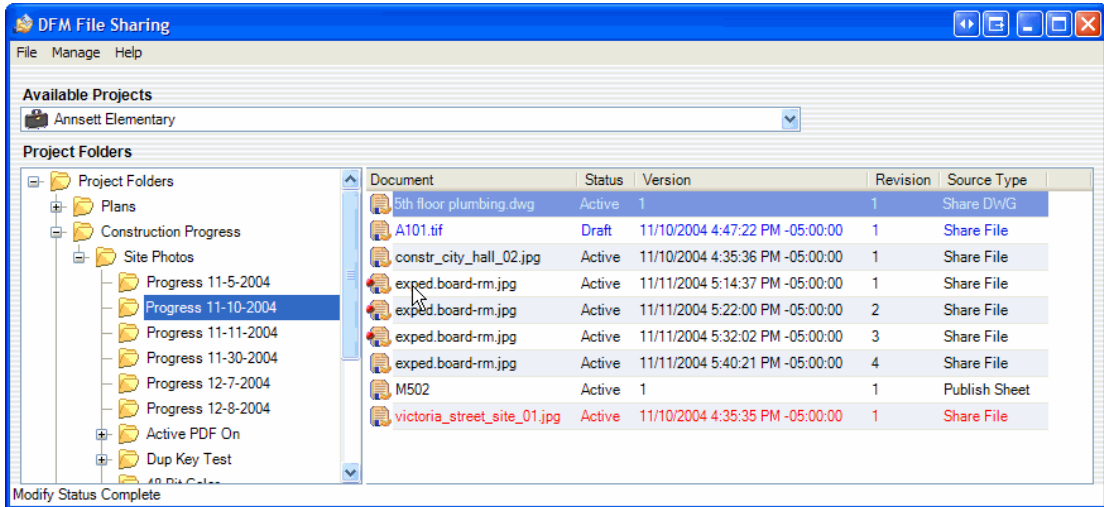


## Text Color and Symbols

The DFM System uses text color to emphasize the status of a document as follows:

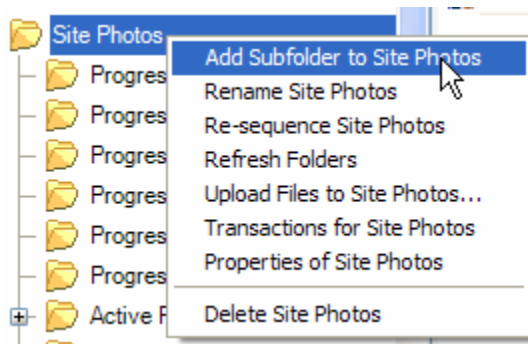
- Black Normal Document with status Active
- Red Documents that are Under Change
- Blue Draft Documents (not visible in DFS Web Application)
- Gray Inactive or Deleted Document

Additionally, throughout the DFM & DFS system, the icon next to a document immediately identifies the current version of the document. Any document that is not the current version will have a red dot in the icon. See `exped.board-rm.jpg` – Revision 1, 2, and 3 in the screen shot below.



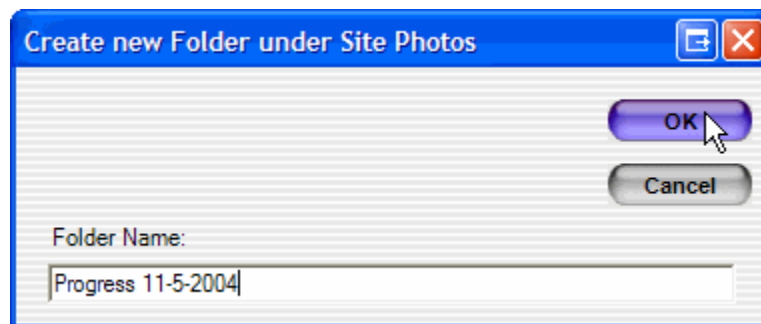
## Folder Operations

Right click on a folder to see a menu of actions.



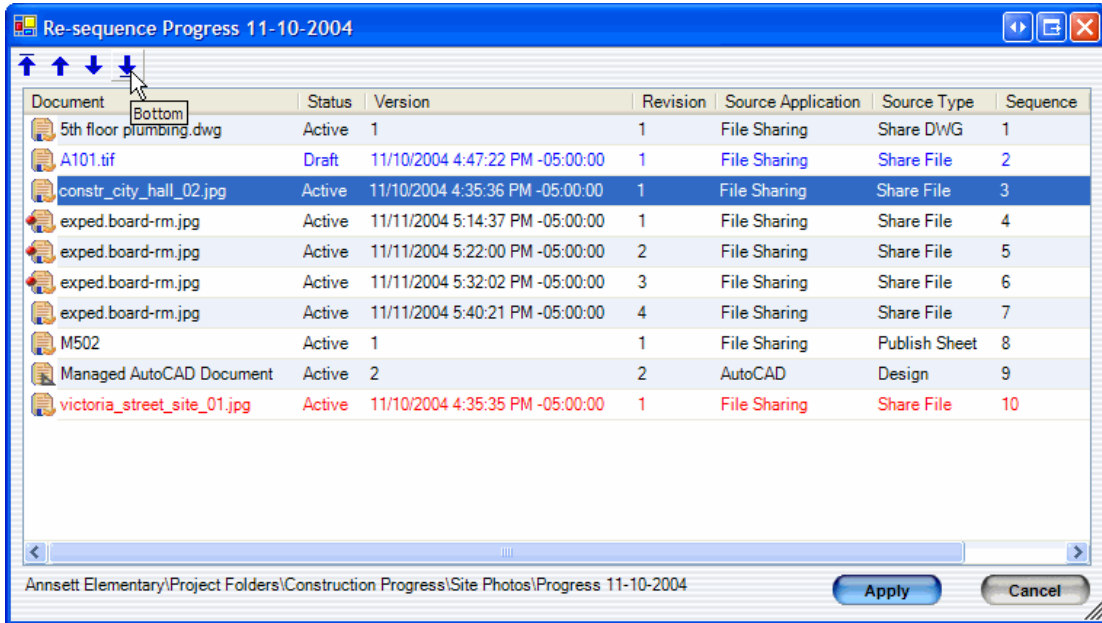
### Add Subfolder

Click Add Subfolder, and you will be prompted for the name of the new folder.



### Resequence

Right click on a folder and click Resequence to launch the resequence dialog.



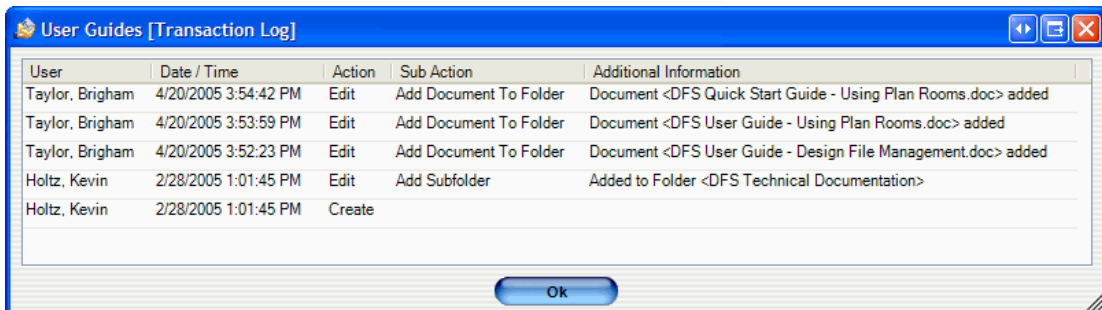
The full folder name is listed at the bottom of the dialog box. The four buttons at the top are Top, Up, Down, Bottom. To sort by a column, click on the header for that column. Multiple documents can be selected at once by using the control and shift keys while clicking. You can also drag and drop to resequence.

#### Upload

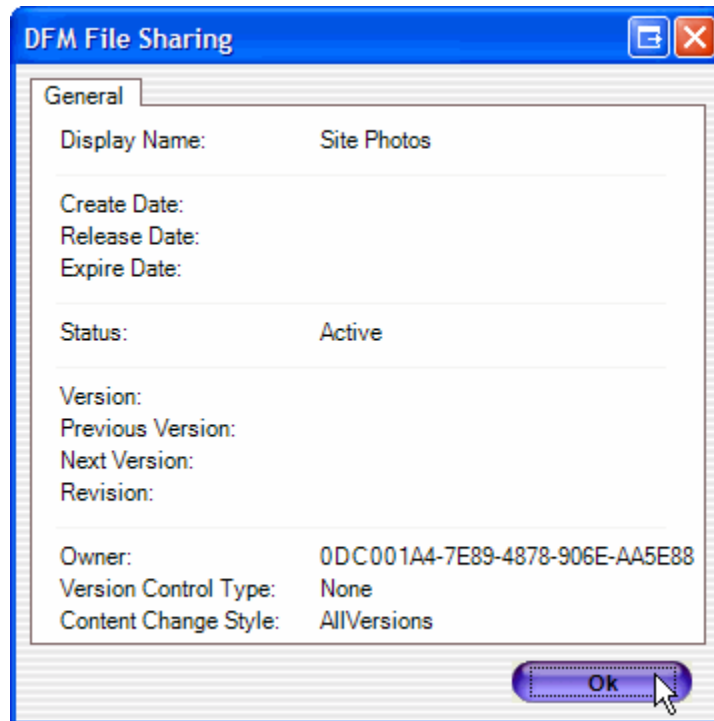
This will start a batch upload. You choose a root directory on your local computer, and this will upload all the file and subfolders recursively from the selected root location.

#### Transactions

This will show all the activity for the selected folder. See example below.



## Properties

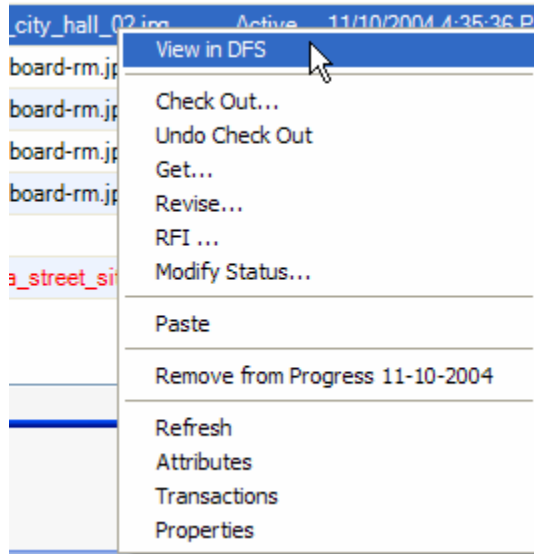


This screen tells basic information about the folder. The last two fields need some explanation. An important concept in the DFS / DFM system is that the same document can exist in multiple folders. If the document is updated in any folder, the change will be reflected in all the other folders too.

- Version Control Type: None is most common and simply means there are no special rules for this folder. Version folders can not be changed once their status changes from draft to active. Folders with this condition will have a black lock icon on the folder. The other possible value is Revision.
- Content Change Style: Static works like a normal windows folder. Only the documents you put in the folder are displayed. All Versions displays all versions of the document. Current Version only displays the current version.

## Document Operations

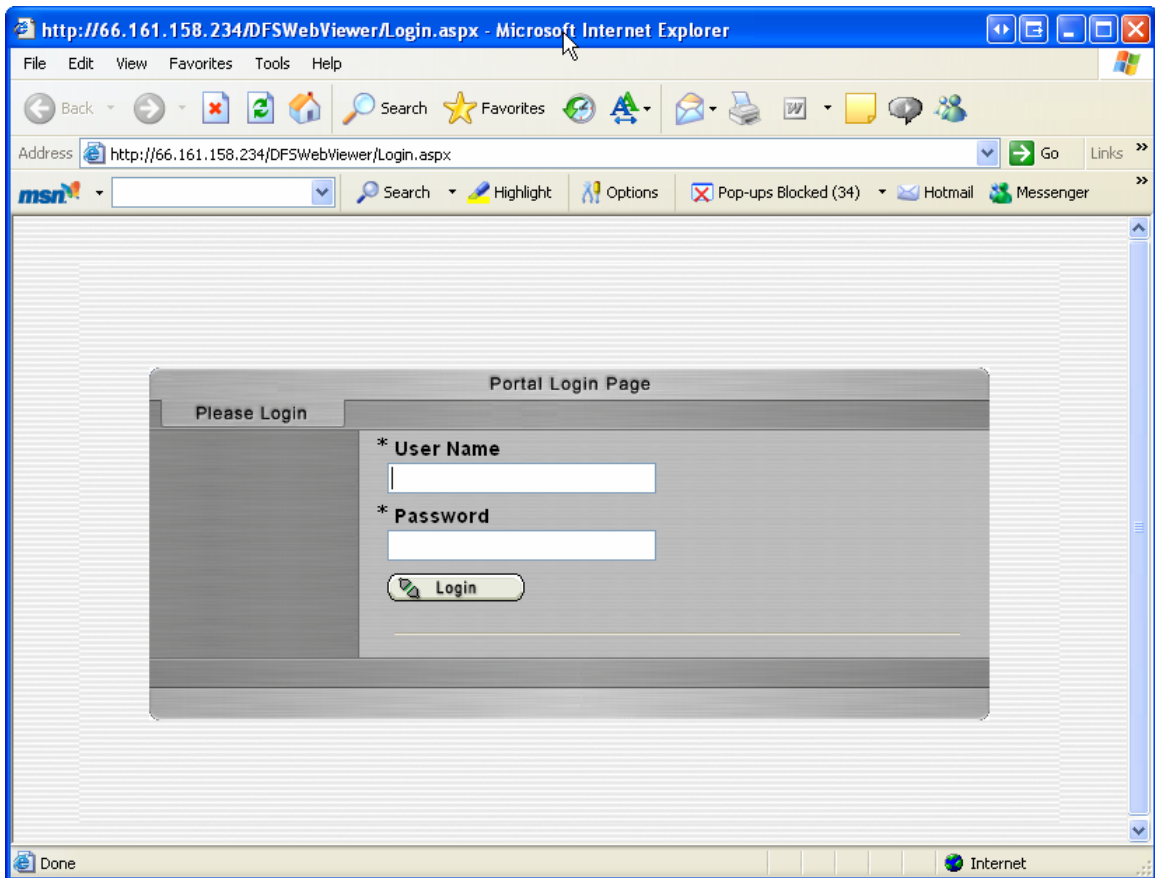
Right click on a document to see a menu of actions.



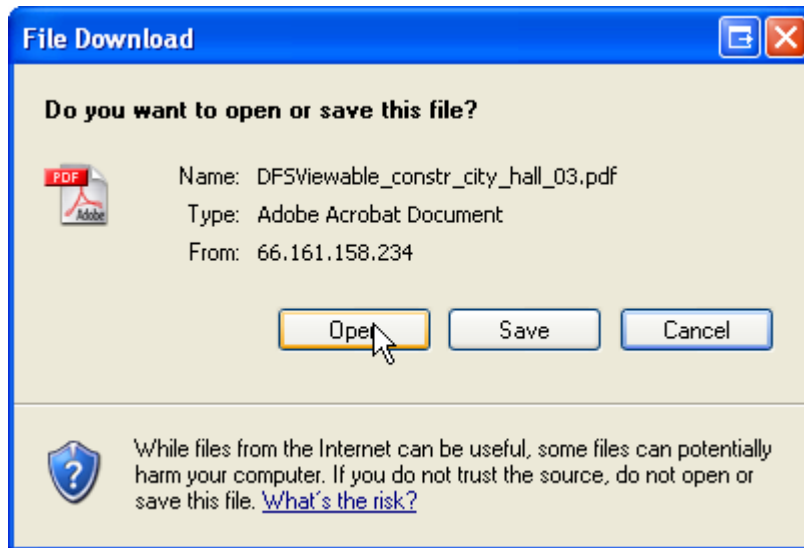
Check Out and Get were covered above in section Retrieving Documents with DFM.

### View

View in DFM will open a DFS Web page to view the documents. The first time you click view, you are presented with the login screen:



After you log in, the web page will launch the associated program to view the Document.

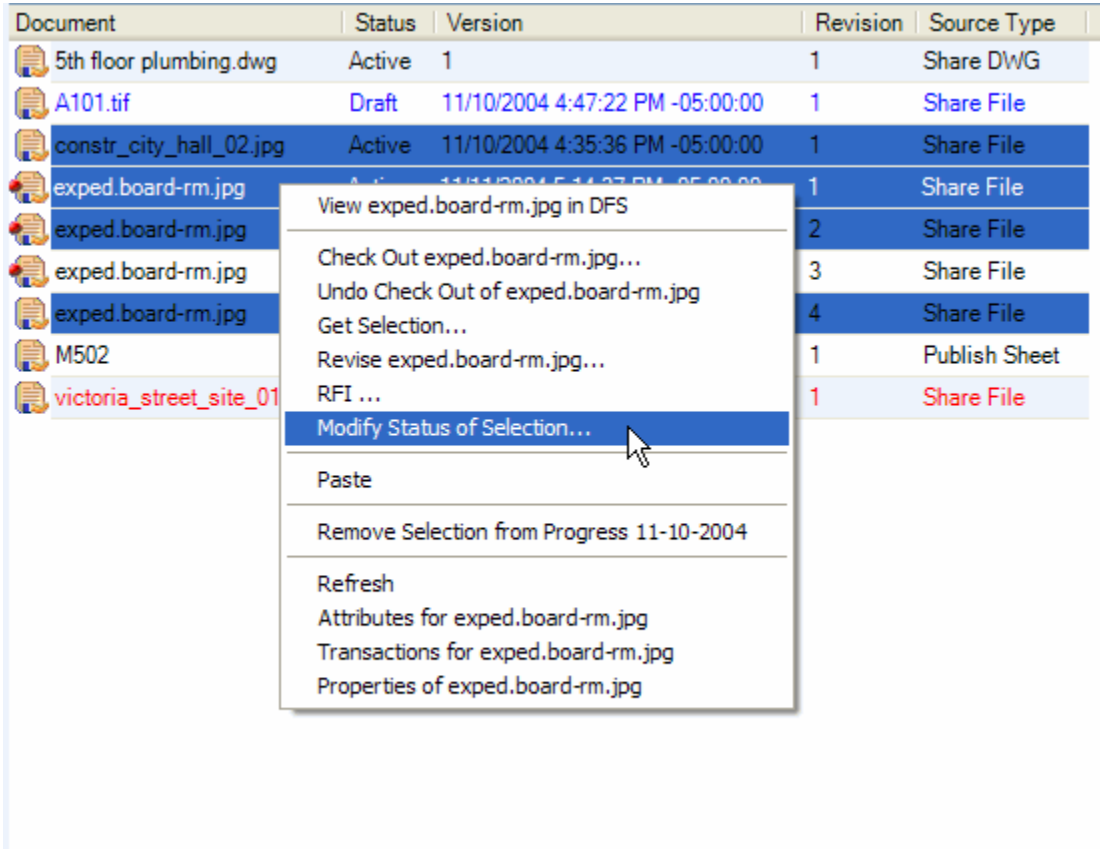


#### Undo Check Out

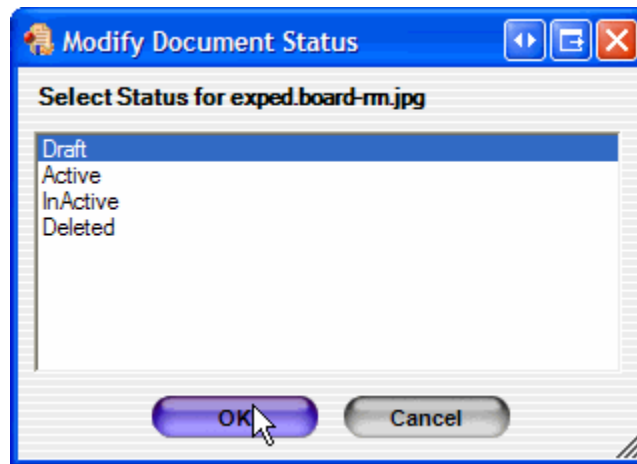
Use Undo Check Out when you decide that you don't need the document to change. This will reset the under change status back to not under change. You must be the person that checked it out or have an administrator account to successfully use this menu.

#### Modify Status

Modify Status, Get, and Remove from Folder are the commands that can work on multiple documents at once. To select multiple document use the control and shift keys like in windows explorer. The menu will add Selection as shown below.



If you only selected a single document, it will just say *Modify Status*. You will then be asked for the new status.



### Paste

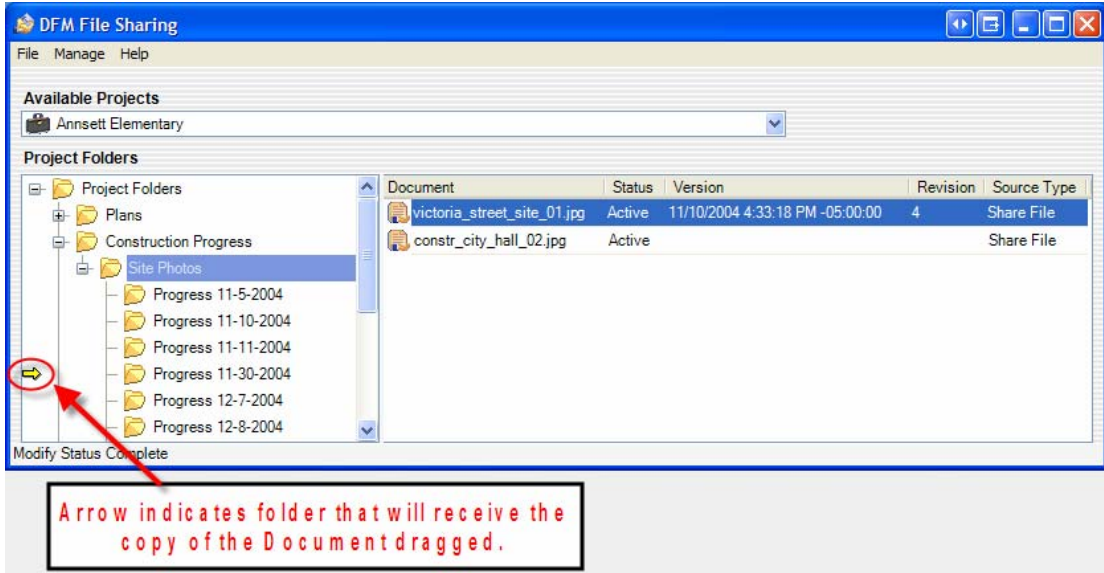
Paste will be available whenever there is a file on the clipboard (right click a file and select copy, or select and press ctrl+C). Paste does the same thing as dragging and dropping a file.

## Remove

As mentioned earlier, the same document can exist in multiple folders. Remove does not delete a document; it simply removes it from the folder. If you remove a document that is only contained in 1 folder, you will not be able to access it with DFM File Sharing. Your DFS administrator can restore the document using the administrator tools.

## Copy

To copy a document to another folder simply drag it to the new folder. A yellow arrow will appear that tells you the folder it will be copied to:

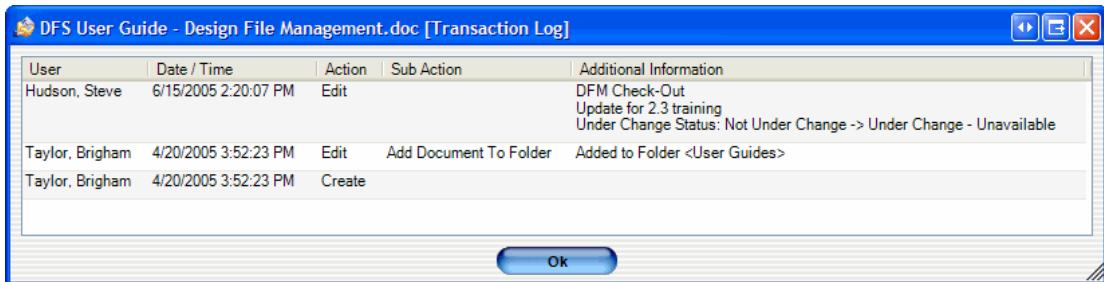


## Attributes

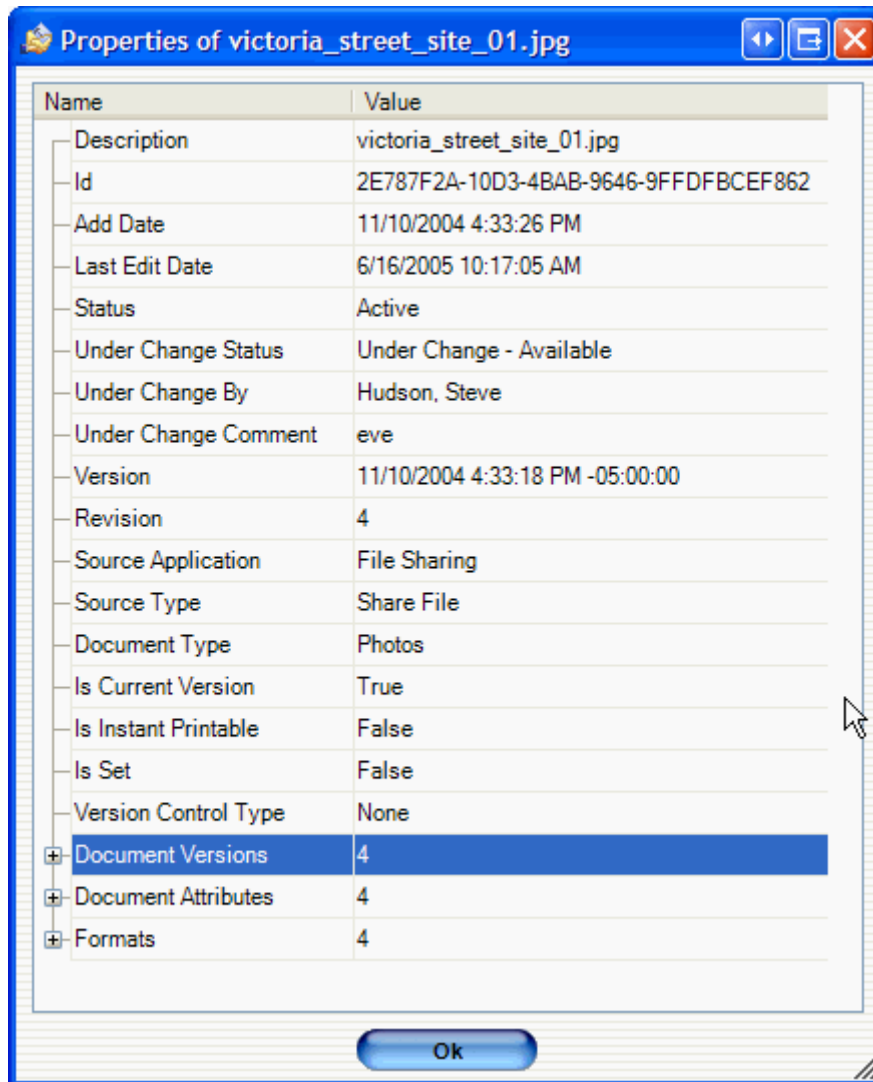
This dialog will list the standard and custom attributes of the document. This is a simple subset of the information available on the Properties dialog.

## Transactions

This dialog will list all the transactions for this version of the document. To see transactions for other versions, use the properties dialog, expand the Document Versions tree, and right click on the version you want to see transactions for.



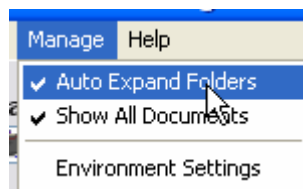
## Properties



This screen tells detailed information about the Document. If you choose a document that has red text (red indicates that it is checked out), you can use properties to see who is changing it as shown above. The Last Edit Date will tell you the date and time that person checked the document out.

## User Preferences

There are two preference settings on the Manage Menu.



Auto Expand Folders will automatically expand all the folders in the folder tree. It is usually only turned on if your projects contain a small number of folders.

Show All Documents. By default, DFM File Sharing will only show Documents created with DFM File Sharing or Shared or Published by AutoCAD. If you turn on Show All Documents, you will see an additional column containing the DFS/ DFM application that created the document as shown below.

Document	Status	Version	Revision	Source Application
Managed AutoCAD Document	Active	1	1	AutoCAD
constr_city_hall_02.jpg	Active	11/5/2004 8:25:40 AM -05:00:00	1	FileSharing
constr_city_hall_03.jpg	Active	11/5/2004 10:59:33 AM -05:00:00	1	FileSharing
constr_city_hall_03.jpg	Active	11/5/2004 11:00:38 AM -05:00:00	2	FileSharing
LTakingShape_.jpg.jpg	Draft	11/5/2004 10:59:52 AM -05:00:00	1	FileSharing
LTakingShape_.jpg.jpg	Active	11/5/04	2	Unknown
victoria_street_site_01.jpg	Active	11/4/2004 11:49:22 AM -05:00:00	1	FileSharing

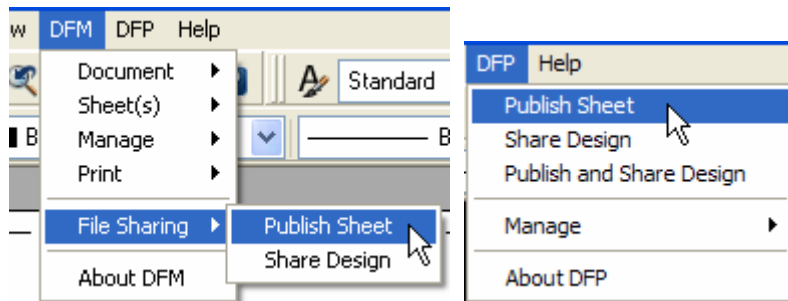
**With Menu "Show All Documents" Checked, Source column Application is displayed.**

## SHARING AND PUBLISHING FROM AUTOCAD WITH DFM

The DFM system was designed to let users adopt DFM into their existing workflow processes in stages. The first stage is simple file sharing. The second stage is AutoCAD publishing and sharing. The final and most integrated stage is fully managed AutoCAD DFM.

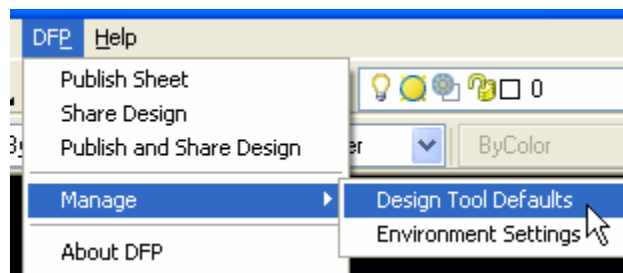
### Interacting with DFM

The DFM system is integrated into AutoCAD. It can be installed in one of two ways depending on end user preference. There will either be a DFM menu that has the entire DFM functionality, or the simpler DFP (Design File Publishing) menu. To change which menus are displayed, use choose Manage | Design Tool Defaults, and go to the Preferences tab.

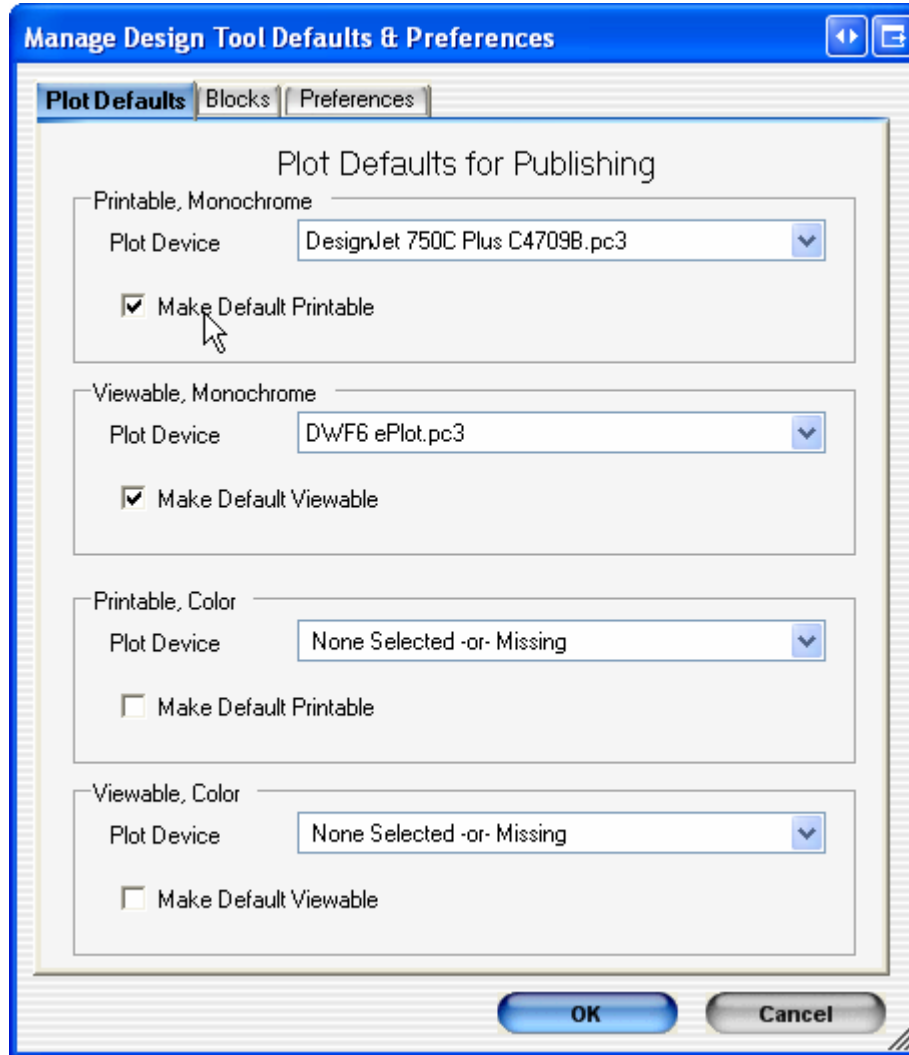


### Publishing with DFM

Publish Sheet creates a Viewable and Printable file in the DFS system, but does not do anything with the design file. The only setup step required is to pick a plotter for the Viewable and Printable formats. Pick a plotter from the Manage menu:

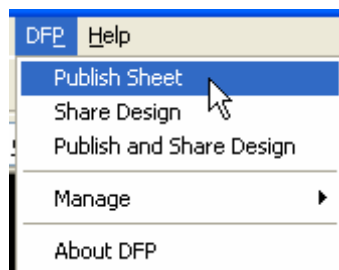


Switch to the Plot Defaults Tab. Use the checkboxes to pick a Viewable format (either Color or Monochrome), and a Printable format. Then pick a plotter for that format.

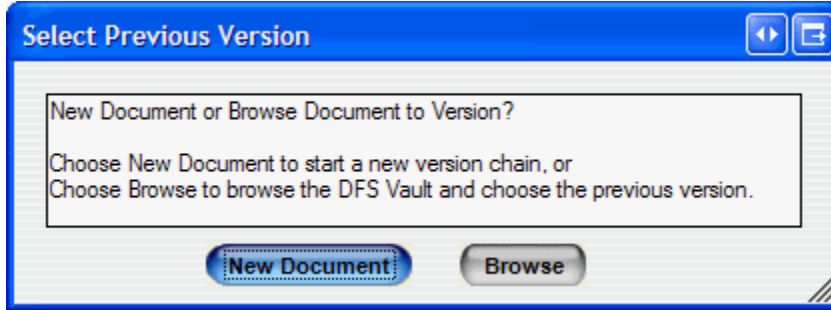


In the above example, we have chosen Monochrome formats. We will create a HPGL file for the printable format, and a DWF file for the viewable format. That is all the setup required for DFP.

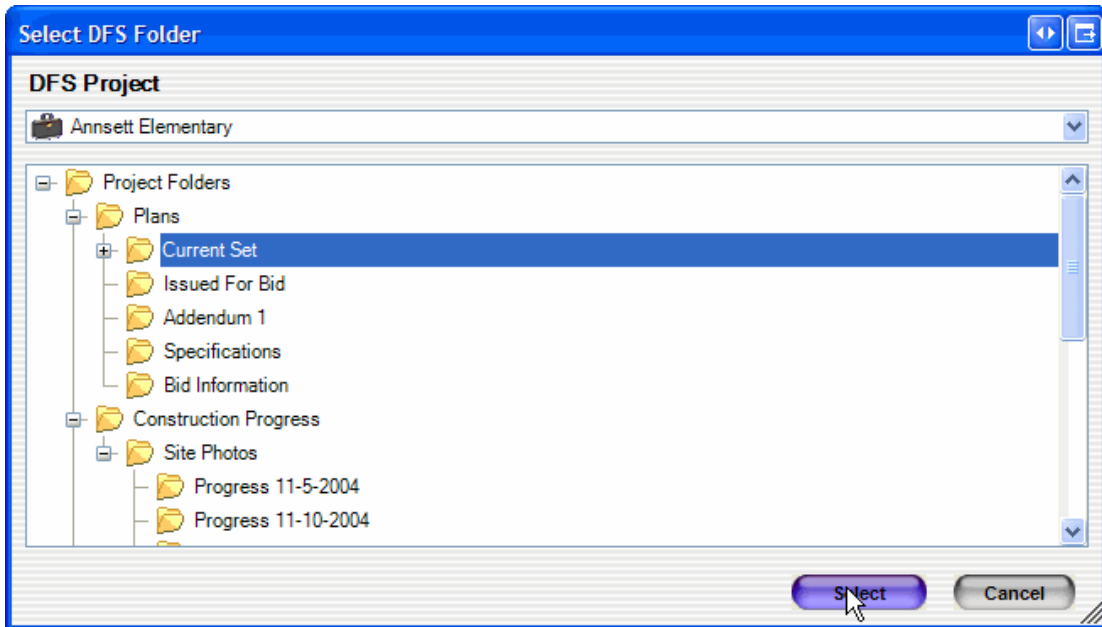
The next step is to open the file you want to publish. You will Publish whatever is displayed, so make sure to switch to the correct Model or Layout tab, and zoom to the region you want published. When ready, choose publish from the menu:



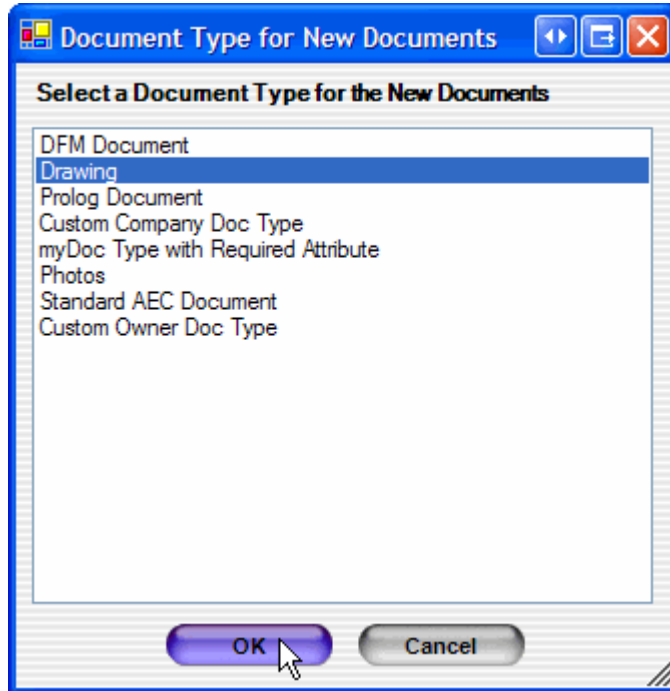
The Viewable and Printable formats will be created, and then you will be asked if this is a new document or a new version of an existing document.



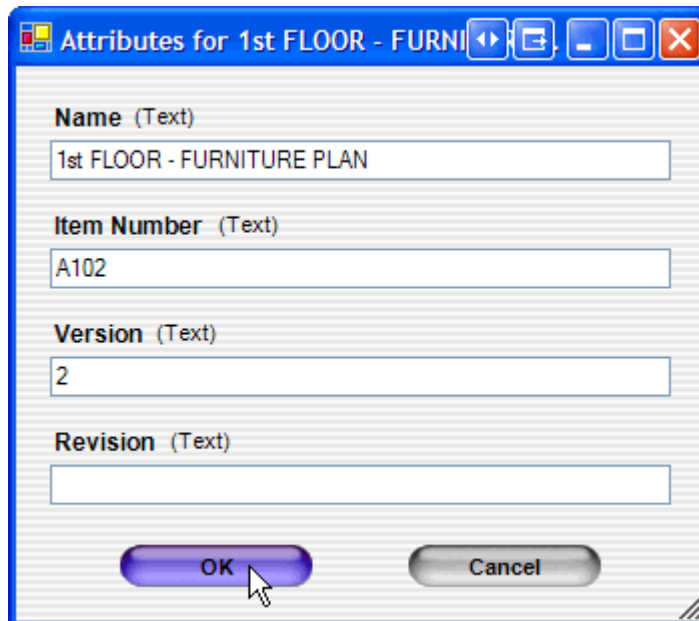
In our example, we will make a New Document and place it in the Current Set folder:



Next, a window to choose the document type appears. If you are not sure what document type to use, contact your DFS administrator. If the DFS Administrator has preconfigured a default document type, then this step will be skipped.



Next, we need to fill in the attributes for the selected document type.

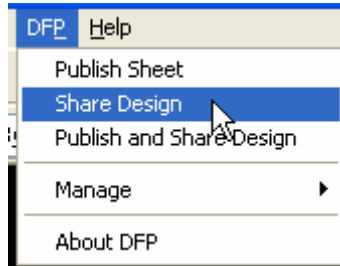


When you click OK, the file is uploaded and processed into the DFS system. If you have “Show preview on Publish” turned on in Design tool Preferences, you will see an approval page before the file is uploaded.

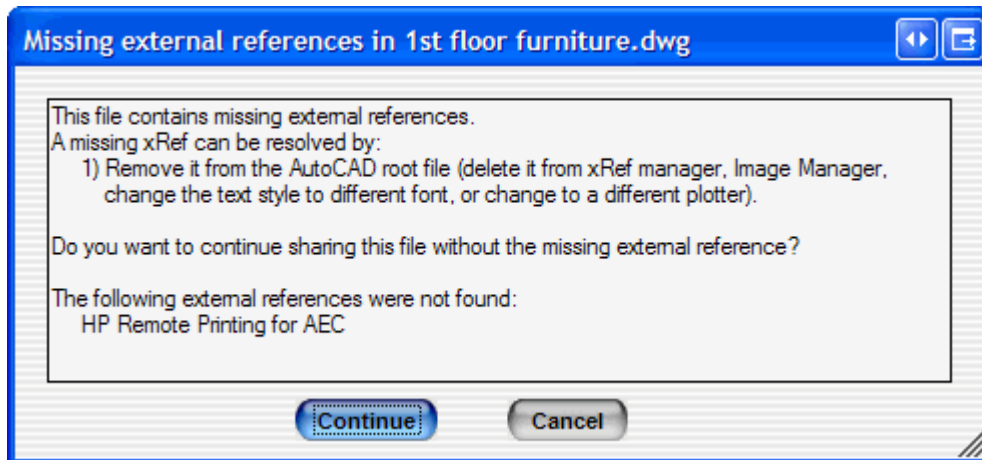
## Sharing Designs with DFM

Share Design creates a Design format in the DFS system, but does not create a viewable or printable file. The DFM system will find all the external references and fix the reference paths in the dwg file. Everything needed to open the design file is packaged and submitted to DFS.

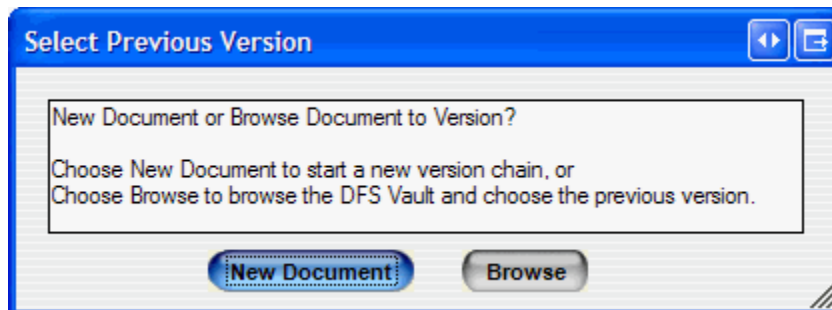
To start, open the file you want to share, and then choose Share Design from the menu:



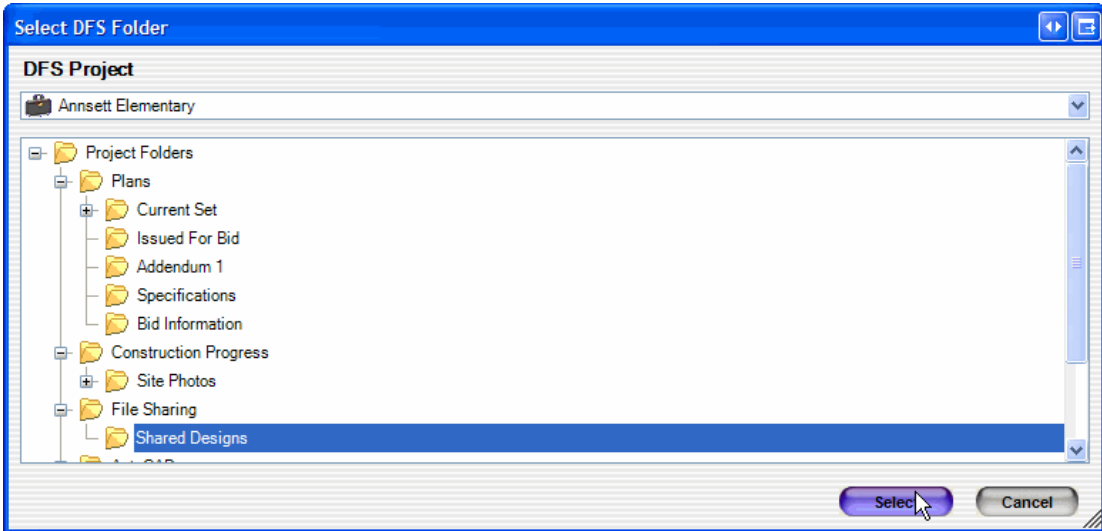
If your file contains any unresolved external references, you will be warned so you can cancel and fix them. If you know that the person you are sharing the design with does not need the file, you can choose continue.



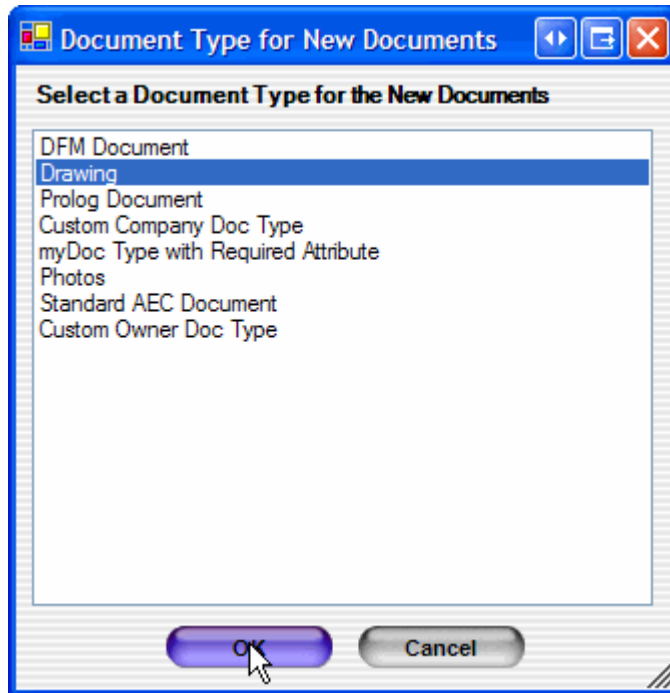
If there are no unresolved external references, then you will be asked if this is a new document or a new version of an existing document.



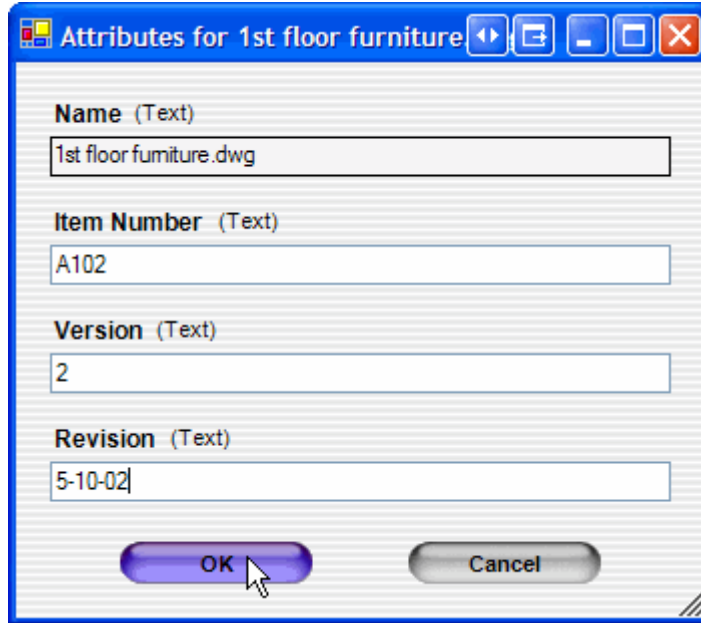
In our example, we will make a New Document and place it in the Shared Designs folder.



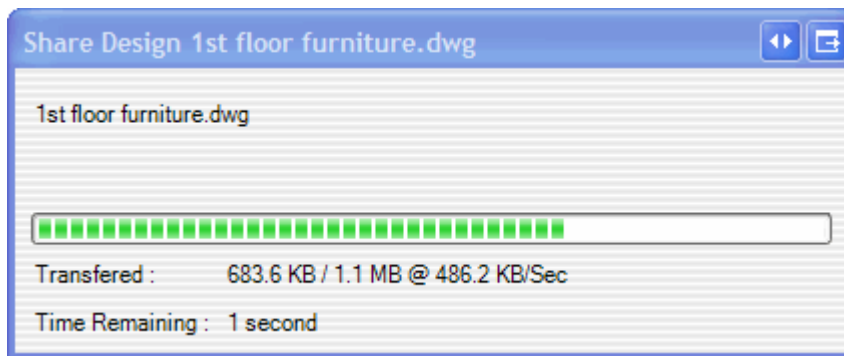
Next, a window to choose the document type appears. If you are not sure what document type to use, contact your DFS administrator. If the DFS Administrator has preconfigured a default document type, then this step will be skipped.



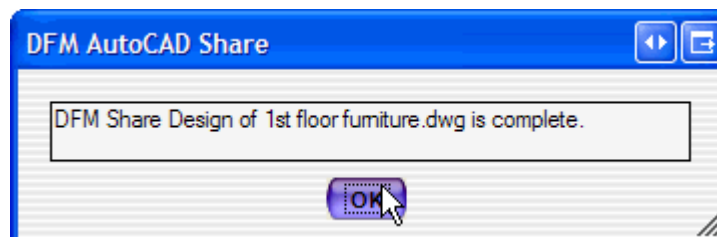
Next, we need to fill in the attributes for the selected document type.



When you click OK, the file is uploaded and processed into the DFS system.



Finally, you get confirmation that the operation is complete.



### Publish and Share Design

The Publish and Share Design menu combines the Publish and Share menus. It does the same thing as Share design (upload the AutoCAD dwg file including all external references), and in addition it creates a Viewable and Printable file that can be viewed and printed by people that do not have AutoCAD.

## MANAGED DFM SETUP (ADVANCED)

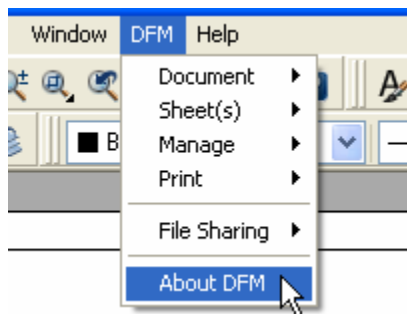
### Introduction

DFM can fully manage your AutoCAD documents. If you choose to use this functionality, DFM will control where the design files are located and take care of all the details of packaging them up to send to the server, and unpacking them upon checkout. It also provides a convenient way to organize the drawings into projects, folders and sheets, and lets you open and print sheets using this information. This is an advanced section, and may be skipped if you don't want to change your current drawing procedures.

Prior to using the DFM system for design file management and distribution, there are a number of setup steps that must be completed. The procedures in this guide are intended for the engineers, architects, or designers that use AutoCAD to create plan room content.

### Interacting with DFM

The DFM system is completely integrated into the native design application. Using AutoCAD as in example, notice the new DFM Menu located to the left of the Help Menu.



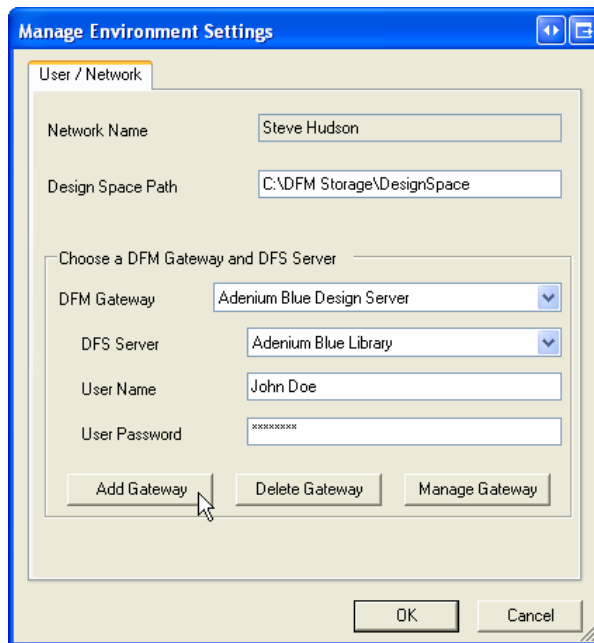
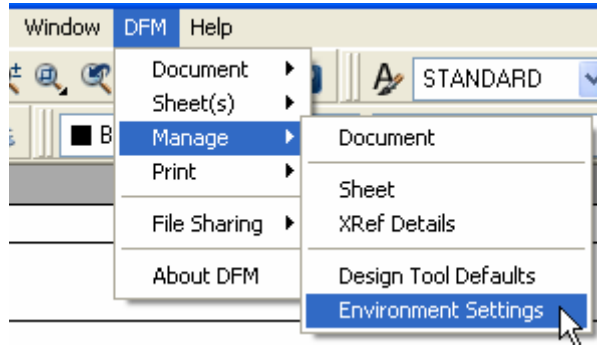
### Initial Configuration of DFM

Since DFM uses Adenium DFS as a repository for storing released information, the first step in the initial configuration is to define the DFS Access Information.

The local Adenium DFS administrator must set up accounts and projects prior to your use of DFM. Those procedures are contained in the DFM Gateway operations guide. Please contact your DFM administrator and get the following information:

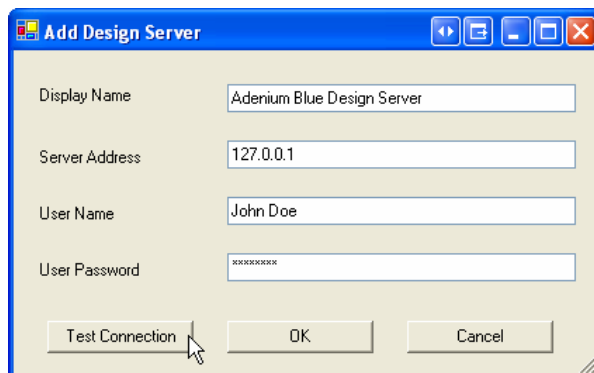
DFM Gateway Address	
User Name	
User Password	
Design Space Path	

Set the Environment Settings with the following menu:



Note that Network Name can not be changed. It is the name of your workstation, and is displayed here because it will be sent to the Design Server along with your User Name and User Password.

If no servers are listed in the Design Server combo box, then click on the Add Gateway button.



## Setting Design Tool Defaults

Each time a new Document is created, some of the options are inherited from the defaults set for that workstation. Similarly, each time a sheet is created, the defaults are inherited from the Document. The defaults collected for different design applications will be different. For example, AutoCAD will have different default settings than the settings for Word. This is the key for which menu to use to make a setting:

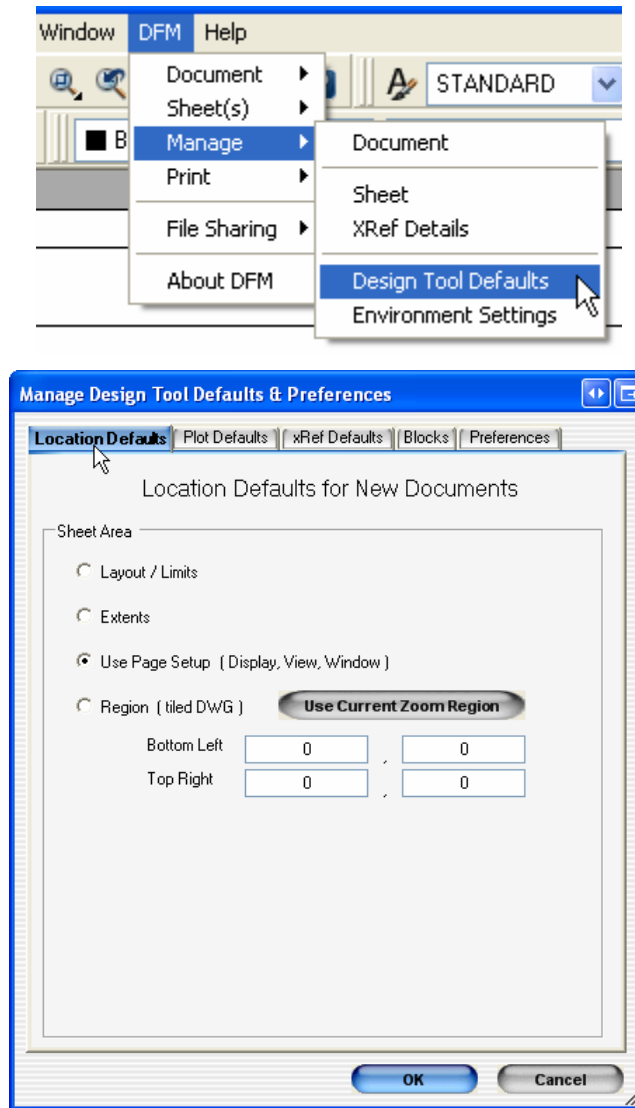
1. The Manage Environment Settings menu has settings that apply to all design applications (examples include AutoCAD, Excel, Word)
2. The Manage Design Tool Defaults menu has settings that are specific to a particular design application.

We will continue using AutoCAD as our example design application.

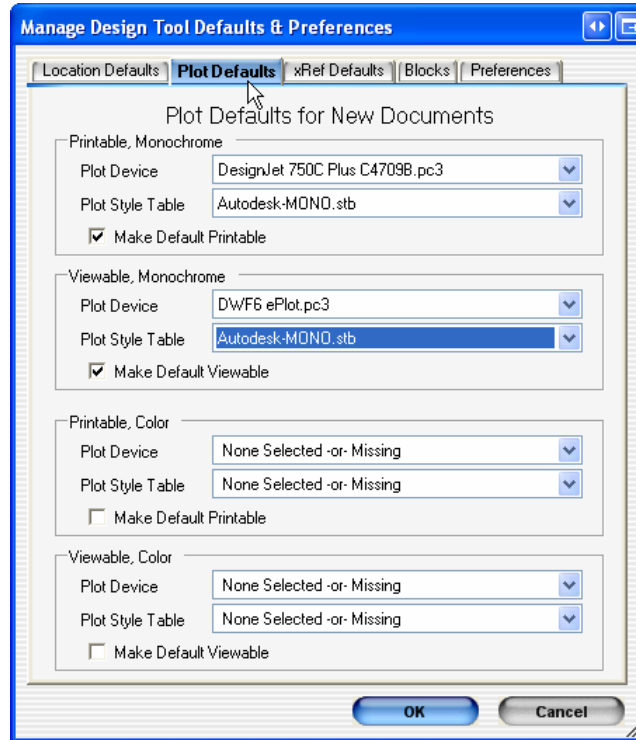
The Manage Design Tool Defaults Dialog box groups related information on tabs. In the first tab, named Location Defaults, we will need to set the following information:

<b><i>Location Defaults – Sheet Area</i></b>	
Layout / Limits	This option will force the sheet area to the size set in the layout in AutoCAD. For the model tab, it will set to the area set by AutoCAD's drawing limits.
Extents	This option will force the sheet area AutoCAD's Extents.
Use Page Setup (Display, View, Window)	This option will not force any sheet area, but instead use what is saved in AutoCAD's Page Setup.
Region (tiled DWG)	This option will force the sheet area to the coordinates specified. If you zoom to the exact area you want before opening the Defaults Dialog box, then you can use the button [Use Current Zoom Region] to quickly import those coordinates. Setting the default to Region, but leaving all the coordinates 0, will cause AutoCAD to prompt you for the coordinates as you create a sheet

Set the Design Tool Defaults with the following menu:



The next tab of the Manage Defaults dialog box is Plot Defaults. In the section, you set up the Default Plot Device and Plot Style Table for each of the DFS formats. If you do not have your own standard plot style tables, then use `monochrome.ctb/stb` for black and white, and use `acad.ctb/stb` for color formats. You can also select which format you want to make the default format. If the Plot Device is set to “None Selected –or- Missing”, then that format will be skipped and not available for order through the DFS system.



The third tab of the Manage Defaults dialog box is xRef Defaults. In this section, you set up how you want to handle the different kinds of external files. In DFM terminology, a root file is a single AutoCAD file. Any additional files that are also needed to produce the final output are called External References or xRefs. xRef files are categorized in four groups.

### Fonts and Font Maps

These include the Windows TrueType fonts, the AutoCAD shx fonts, and the Font Map. The font map contains substitutions that AutoCAD uses when it can not find the requested font.

### Plot Configurations and Plot Style Tables

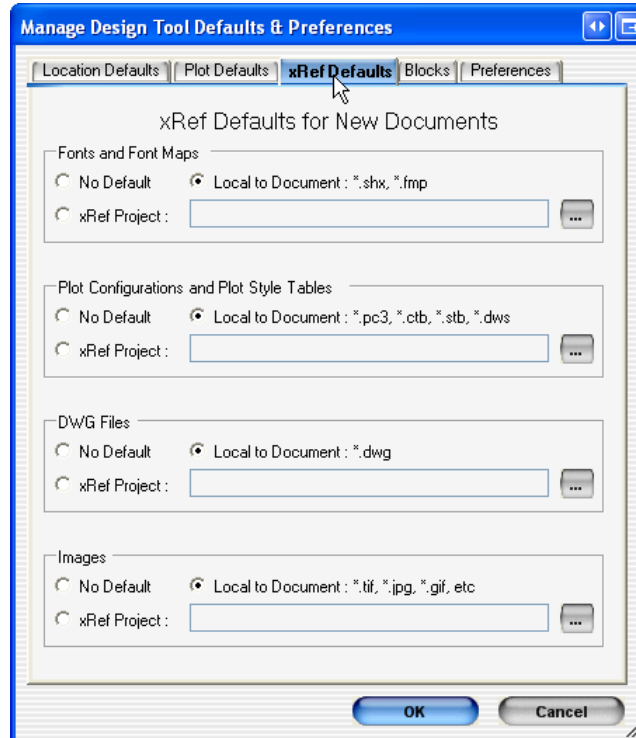
These contain the plotter configurations (.pc3) and the pen map files (.ctb & stb).

### DWG Files

These are other AutoCAD files that are inserted into the root file from AutoCAD menu Insert | External Reference (or the command XATTACH).

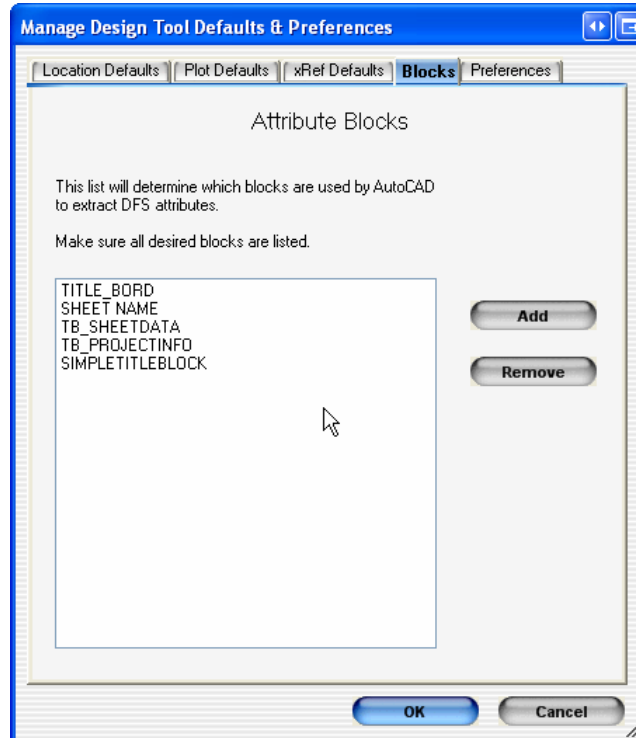
### Images

These are raster images that are inserted into the root file from AutoCAD menu Insert | Raster Image (or the command IMAGEATTACH).



For each of these four categories, you can set the default behavior to one of three values:

1. No Default – Use this if you do not want a default behavior. For each root file you will be asked what to do with each external reference at the time you add the root file.
2. Keep Local to Document – Use this option if you want to copy the external reference locally to the folder containing the Document. If a shared xRef is used the two or more Documents, then each Document will get their own copy of the external reference.
3. xRef Project – Use this option if you want to share an external reference among two or more Documents. This powerful option allows the DFM system to control versions of the xRef (xRefs have to be Checked-Out and Checked-In just like Documents) and maintains tables about where the xRef is used. Using these “Where Used” tools, a designer can get a report and know which Documents need to be checked out and replotted after a change to an xRef occurs. The [...] button will bring up a dialog box allowing you to browse for a DFS project.



The fourth tab is Blocks. Add the name of each block that you want examined for titleblock attributes. The attribute tag name must be the same as either the attribute name, or the attribute description in the DFS system. It is okay to leave this blank if you do not need to automatically extract attribute information.

The fifth and final tab of the Manage Defaults dialog box is Preferences. In this section, you set user (drafter) settings.

#### Default Check-In Status

This combo box sets the status for documents checked in to the DFS system. This value will only be used if the DFS owner has not specified a default value for the project. If no default check-in status is set, then the user will be prompted for status every time.

#### Integrated Menu

This combo box lets you choose the simple DFP menus, the full blown DFM menus, or both.

#### Show preview on Publish

If checked, a preview page will be generated so you can look at exactly what information will be sent before it gets transferred to DFS.

#### Always select window on Add Sheet

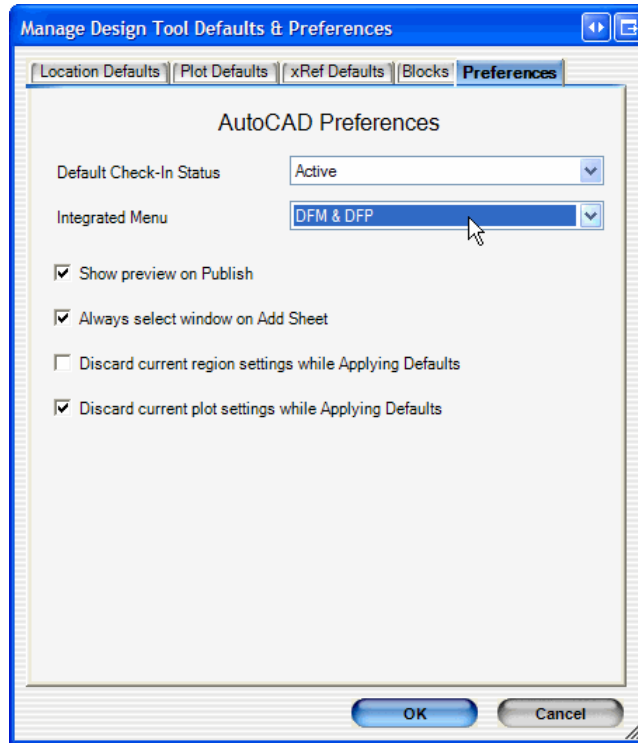
This setting works together with the Sheet Area on the Location Defaults tab. If the Sheet Area is set to Region, then the user is always prompted to enter a plot window prior to displaying the Manage Sheet dialog box.

Discard current region settings while Applying Defaults

When doing a Manage Document or Manage Sheet, this setting controls if the region gets overwritten by the Default Region when clicking the Apply Default button.

Discard current plot settings when Applying Defaults.

When doing a Manage Document or Manage Sheet, this setting controls if the plot settings get overwritten by the Default plot settings when clicking the Apply Default button.



All the settings on these five tabs (accessed via DFM | Manage | Defaults) will be referred to collectively as Local Defaults later in this documentation.

## MANAGING THE DESIGN PROCESS WITH DFM

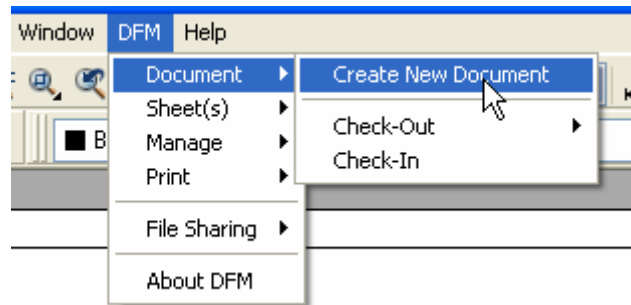
### A Note about Root Files and Sheets

A Document is the smallest orderable unit in the DFM system. Additionally, the Document is the smallest unit that can be checked out or checked in. Considerable attention must be paid to the distribution consequences of design practices. It is possible from AutoCAD, and fully supported within the DFM system for a single file to result in multiple printed sheets. Since Documents are the smallest unit that can be ordered or versioned, it is recommended that there be only one root file per Document, and only one Sheet per root file. Putting multiple sheets and multiple root files in a single Document will result in Documents that have multi-page tif files for printing, and multi-page pdf files for viewing.

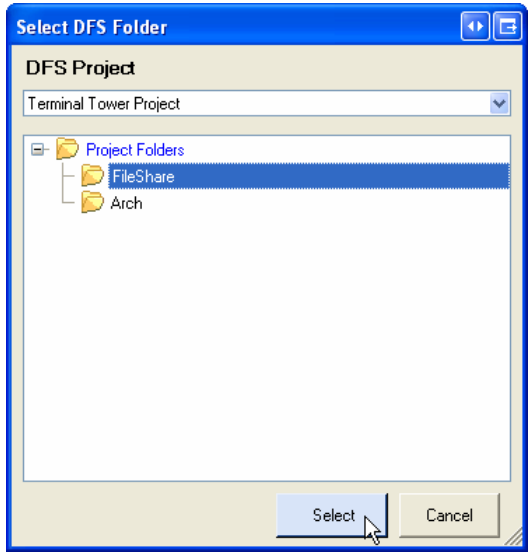
Keep in mind that it is a simple matter to later group Documents into Sets (bid set, current set, electrical set) using the DFS system. The reverse however is not possible (individual pages of a multi-page pdf can not be converted into individual Documents).

### Creating a New Document

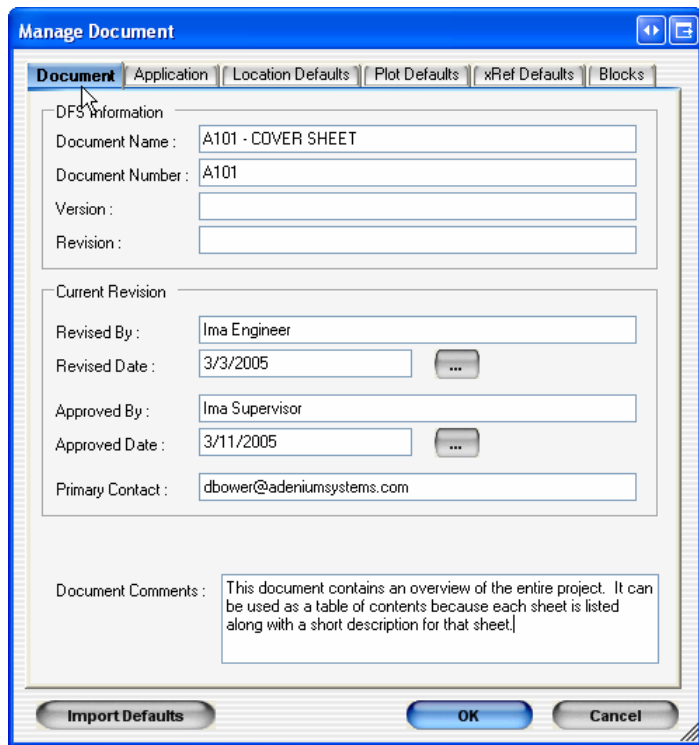
The next step after defining the Environment Settings and Design Tool Defaults is to create a new Document. Start the process from the DFM menu:



This will establish a remote connection the DFS server and list all the projects that you have access to:

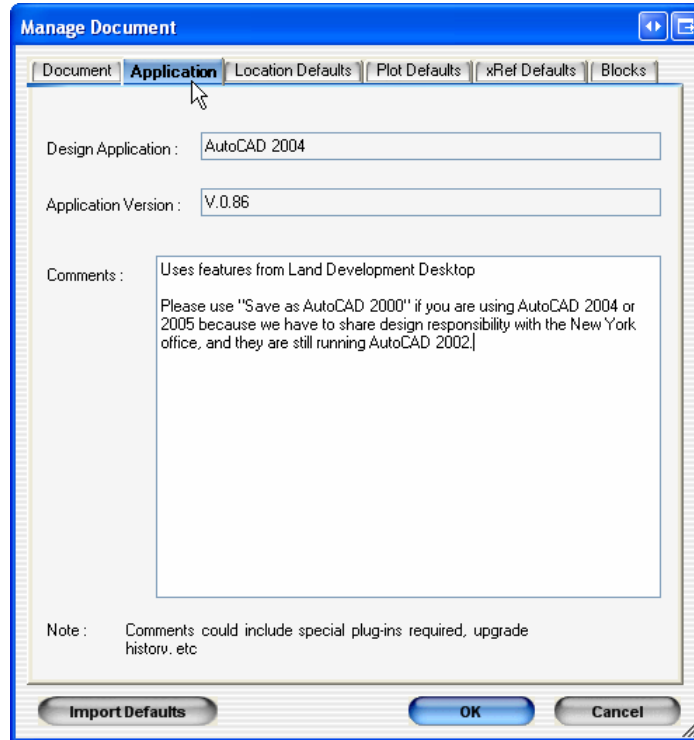


In this example the project 'Terminal Tower Project' was selected which opened the Manage Document dialog box. The Manage Document Dialog box also groups related information on tabs. The first tab, named **Document**, looks like this:



<b>Manage Document – Document Tab</b>	
Document Name	The Document Name in the DFS System.
Document Number	The Document Number in the DFS System.
Version	The Version in the DFS System.
Revision	The Revision in the DFS System.
Revised By, Revised Date Approved By, Approved Date	These DFS fields can be set to required or left as optional as determined by the DFS Administrator. They are used for filtering and searching. They can also be useful for companies wanting manual version control and approval.
Primary Contact	This DFS field can be used for companies that want a central contact person for a Document. You could put an email address here or a name and phone number.
Document Comments	This field contains notes about the Document that the designer thinks would be useful in searches to locate this Document.

The next tab, named **Application**, looks like this:



<b>Manage Document – Application Tab</b>	
Design Application Design Version	These read-only fields show information about what design application you are using, and the specific version (release level or service pack).
Comments	This is where you can put additional information that you want other designers to see regarding the intended design environment. When browsing designs from the vault, designers can see if they have the necessary software before starting the check-out process.

The next four tabs, **Location Defaults**, **Plot Defaults**, **xRef**, and **Blocks Defaults** have already been covered in Setup Defaults section. If necessary, refer to that section again for explanation. When the Manage Document dialog first appears after adding a new Document, the Local Defaults already have been applied. If you change settings on these last three tabs, then decide you want to revert back to the default values, you can use the Import Defaults to overwrite all the settings.

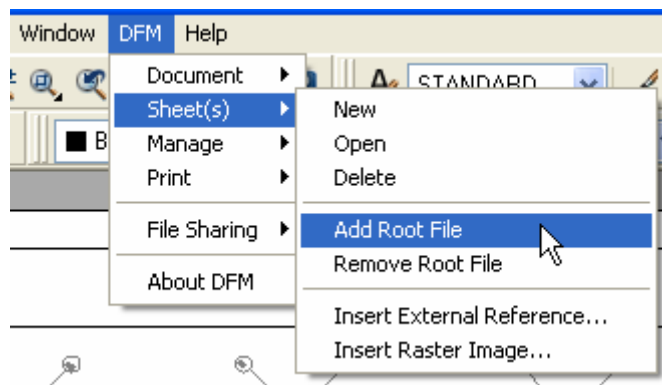
## Adding a Root File to a Document

So far, we have setup the Environment Settings, the Design Tool Defaults, and have added and Document. The next step is to add a root file to our newly created but empty Document. The normal process would be to start by checking in all the external references, but for this simple example, we will skip that step and declare all the external references as local to the Document.

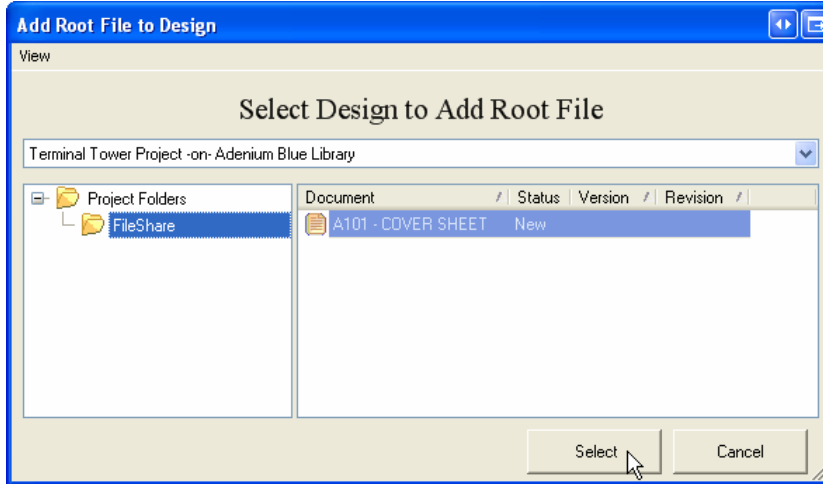
## Managed vs. Unmanaged Space

In DFM terminology, *Unmanaged* refers to files that are outside version control of the DFM system. *Managed* files are files that are maintained, checked out, checked-in, and backed up by the DFM system. *Managed* files are DFS Documents that reside in DFS Projects.

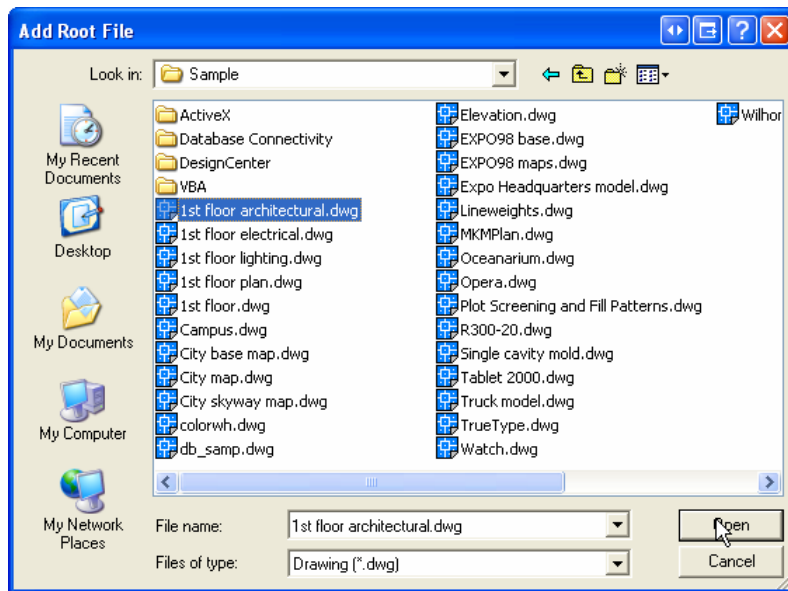
We start the process of moving the file from Unmanaged Space to Managed Space using the DFM Menu:



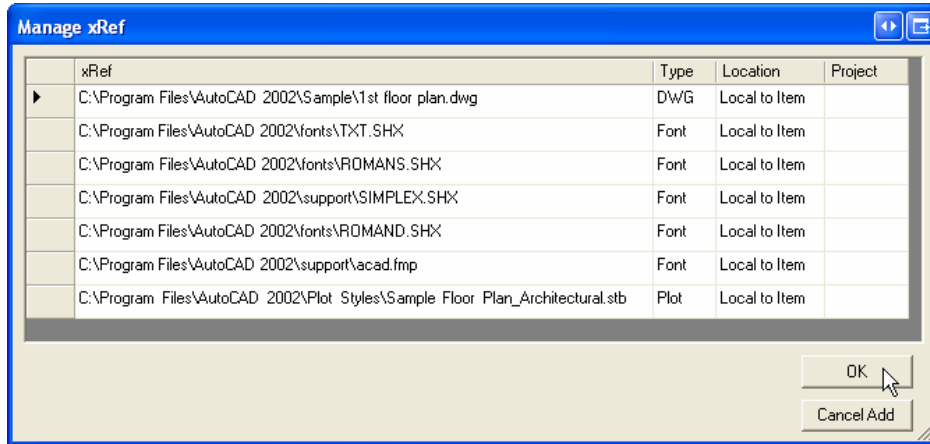
This will prompt us for the project and Document that we want to add our root file to:



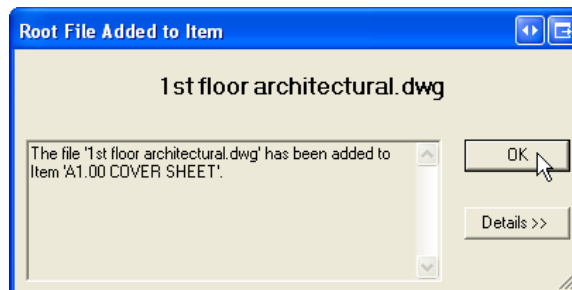
When we choose Select, we are prompted to choose a root file from its original unmanaged location. For this example we open one of the sample projects that come with AutoCAD:



DFM will open the File still in its original Unmanaged location. It examines the drawing for external references, and then closes the file so it is ready when the user confirms the transfer to managed space. If the file has external references, the next screen displayed is:



As stated above, we will be using the simplest case where all the external references are copied into the same directory as the root file. When OK selected, the copy process from unmanaged to managed space begins. When complete, we get a confirmation message:

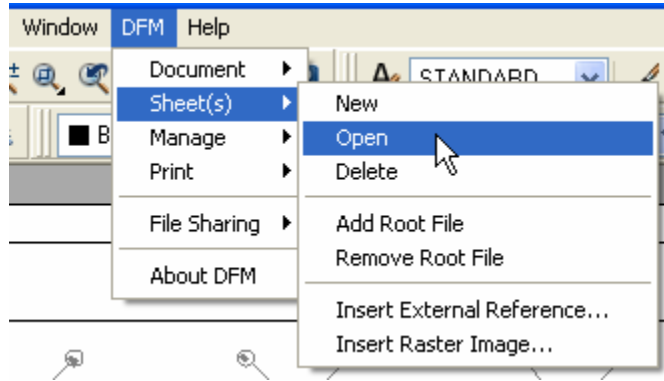


Important note, the file is copied from its original location to the location managed by the DFM system. From this point on, all operations (notable example being opening the file) should be initiated from the DFM menus to keep the designer from working with the wrong (unmanaged) copy of the file.

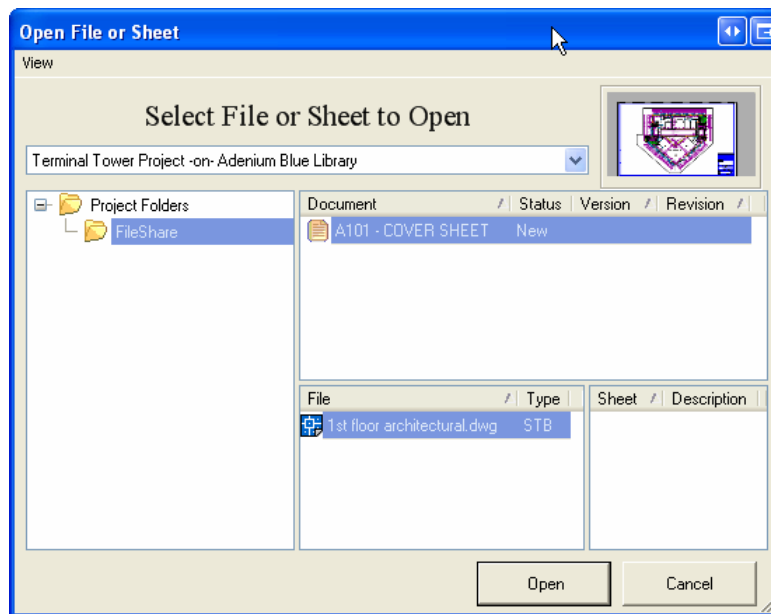
Flow now transfers to the Add Sheet dialog box. See Add Sheet instructions below.

## Opening a Root File or Sheet from Managed Space

In the previous step, the design file was copied to managed space. Now we will learn how to open it from its new location. Start the process from the DFM menu:

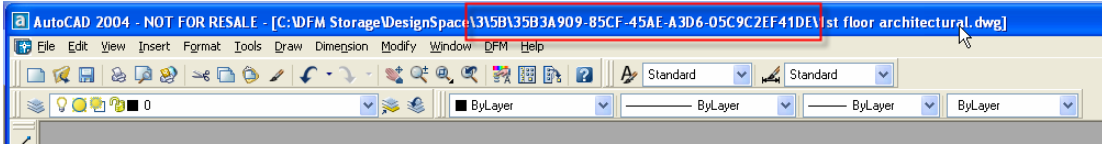


The Select File or Sheet dialog that appears:



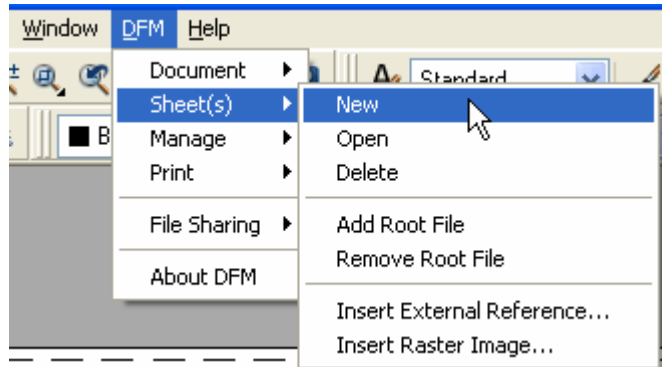
Notice the single Root File (1st floor architectural.dwg) in our newly created Document. Since we have not defined any sheets yet, there are no Sheets to select in the Sheet area. Select Open to complete this operation. Another clue that this is a managed drawing is found in the AutoCAD's title bar.

Note the strange path:

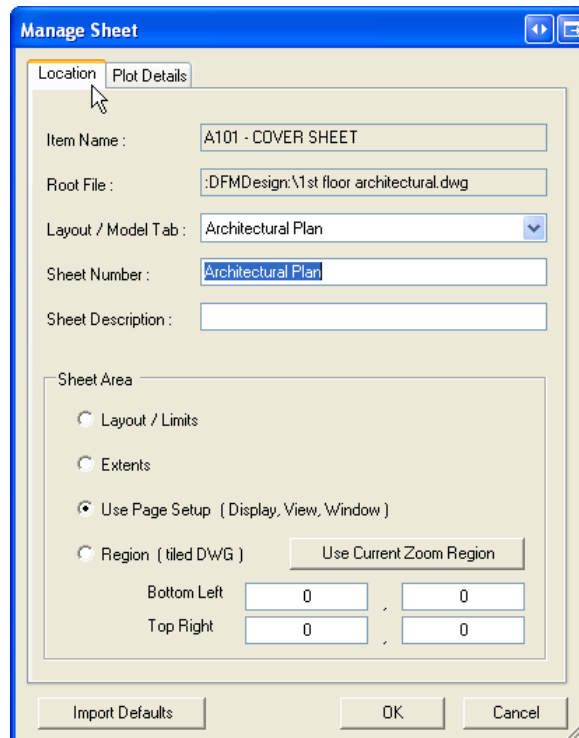


### Adding a Sheet to a Root File

The final step to moving a file into the DFM system is to tell DFM information about the Sheets. To start this process, use the DFM menu:



The Manage Sheet Dialog is then displayed:



If all the defaults are set correctly, all that is necessary is verify the Layout / Model Tab is correct, and that the Sheet Number is correct, and select OK. Now if we revisit the Sheets | Open dialog, we can see that our newly created sheet now shows up:

