

# Administrator Guide

Release 4.0.1

**XEROX**  
**DocuShare®**

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# 1

## Getting started with DocuShare

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## Introduction to administration

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There are four types of DocuShare administrator, each with specific authority.

- Admin
- Site Administrator
- Content Administrator
- Account Administrator

### Administration caveat

It is important to note that administering a DocuShare site may require the expertise of others to help with certain DocuShare related tasks. DocuShare installation, setup, and maintenance require a range of skills that may or may not be performed by the same person.

- Software installation requires knowledge of server operating system software. In some cases, installing the software might be the responsibility of a dedicated system administrator.
- Some DocuShare site maintenance tasks, such as those using command line utilities to backup and restore data files, require skill in using a command prompt window to navigate and perform server-based operations. This task might be the responsibility of a dedicated system administrator.
- Using DocuShare external domains requires knowledge of LDAP server and LDAP interface operations. In some cases, setting up an LDAP server and creating and maintaining external accounts might be the responsibility of a dedicated LDAP server administrator.
- Using an external database to store DocuShare documents requires technical knowledge of that database. This task might be the responsibility of a dedicated database administrator.
- Major modifications to the site, such as VDF template modification, data migration, and client-side tool creation require a high level of programming and/or system administration experience.

## Admin

The default login name for the main administrator for a site is **admin**. You could think of admin as the site superuser. Anyone logged in as admin has the rights and privileges of all three DocuShare administrator groups. You may change the default login name at initial software installation or any time after that. Admin is always designated **User-2**. The default password for admin is **admin**, but that can be changed. Only User-2 can change the password for admin.



**TECH NOTE:** Forgot the Admin password? Run the DocuShare command line utility **start\_docushare reset password** to reset the admin account password to the default password **admin**.

By default, User-2 is a member of all three administrator groups, so admin sees all of the tools displayed in the Administration menu, allowing admin total control over a site. Admin can modify object class properties and create new object classes and perform all Account Management, Services and Components, Content Management, and Site Management activities. Admin can also edit the properties and permissions of all site objects.

As a logged-in admin, by default you have the authority to:

- Edit the default properties and default property values of all site object classes, and to create new site object classes
- Edit the properties of site objects, such as changing a user password, adding members to a group, and relocating, deleting, or changing the permissions of any object
- Create and maintain user and group accounts
- Create and maintain internal and external domains
- Change site and server properties, including the use of external databases for document storage
- Generate and read log files
- Modify your site appearance and functionality

## The administrator groups

Admin may assign administrator rights to any user or group by making that user or group a member of one of the three administrator groups; the **Site Administrators group**, the **Content Administrators group**, and the **Account Administrators group**.

### Site administrator (Group-1)

A Site Administrator is anyone who is a member of **Group-1 Site Administrators**.

- By default, Site Administrators are members of all three administrator groups, have the same privileges as admin, and can see all of the possible tools displayed in the Administration menu.
- By default, Site Administrators can edit the properties and permissions of all site objects.
- By default, Site Administrators can administrator the other administrator groups.
- By default, the Site Administrators Group-1 is a member of both the Content Administrators and Account Administrators groups.



**NOTE:** Admin can limit Site Administrator privileges by removing Group-1 from Group-2 and Group-3.

- Users who are Site Administrators log into a site using their own username and password combination, and they are given Site Administrator authority along with their own unique user account authority.

### Limited site administrator

If you want to limit site administrator access to only those tasks that deal with site maintenance, you can **remove Group-1 from Group-2 and Group-3**. Note that doing so gives all members of Group-1 **limited** Site Administrator privileges.

- Limited Site Administrators see a subset of the available tools displayed in the Administration menu; **Services and Components** and **Site Management**.
- Limited Site Administrators can edit the properties but not the permissions of all site objects.
- Limited Site Administrators cannot administrator the other administrator groups.
- Users who are limited Site Administrators log into a site using their own username and password combination, and they are given limited Site Administrator authority along with their own unique user account authority.

## Content administrator (Group-2)

A Content Administrator is anyone who is a member of **Group-2 Content Administrators**.

- Content Administrators see a subset of the available tools displayed in the Administration menu; including **Object Properties** that allow them to modify object class properties and create new object classes; **Content Management** activities; **limited Account Management** activities.

The most obvious omissions are that Content Administrators do not see the Services and Components and Site Management menu items, so they cannot configure nor maintain site services, site properties, or optional add-ons and they do not see the Account Management menu items Domains, LDAP Accounts, and Providers so they cannot create and manage domains nor configure and maintain the relationship between the DocuShare site and an LDAP server.

- Content Administrators can edit the properties and permissions of all site objects.
- Content Administrators cannot administrator the other administrator groups.
- Users who are Content Administrators log into a site using their own username and password combination, and they are given Content Administrator authority along with their own unique user account authority.

## Account administrator (Group-3)

An Account Administrator is anyone who is a member of **Group-3 Account Administrators**.

- Account Administrators see only the **Account Management** tools displayed in the Administration menu, allowing them to create and administer new user and group accounts; merge accounts; view account activity; create and manage domains; and configure and maintain the relationship between the DocuShare site and an LDAP server.
- Account Administrators can edit the properties but not the permissions of all site objects.
- Account Administrators cannot administrator the other administrator groups.
- Users who are Account Administrators log into a site using their own username and password combination, and they are given Account Administrator authority along with their own unique user account authority.

## Administration UI

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The tools available through the DocuShare Administration UI allow a logged-in Site, Account, or Content administrator to manage a DocuShare site and the objects within that site.

### Web browser support

To correctly view and use both the DocuShare site and the DocuShare Administration UI, you must use one of the following browsers:

- Microsoft Internet Explorer 5.5 SP2 or higher
- Netscape Navigator 6.x or higher
- Mozilla 1.7.1
- Mozilla Firefox 1.0
- Opera 7.52

## Administration UI navigation bar

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The Administration UI navigation bar is visible at the top of each Administration page.

### Home

Click **Home** to return to the DocuShare home page. You are still logged in with your administrator privileges and you may navigate the entire site, where you can perform all of the tasks allotted to your administrator designation. To return to the Administration UI, click **Admin Home** on the site navigation bar.

### Logout/Login

Click **Logout** to log out of the current session and return to the DocuShare Login page.

### Help

Click **Help** to display the DocuShare Help Desk page. The Help Desk contains the site collection of DocuShare user and administrator documentation, product tutorials, developer tools, and software downloads.

Table 1–1: Help Desk contents

Help Tab	Contents
Documentation	DocuShare Installation, User, and Administrator guides along with various support documentation. Site users see only user related documents.
Training	DocuShare User and Administrator tutorials that provide a brief introduction to using and administering a DocuShare site. Users see only the User tutorial.  Product tutorials are in html and appear in a separate browser window.
Developer tools	All DocuShare related development and programming aids, such as the DocuShare VDF Reference Guide for DocuShare template customization.
Software downloads	DocuShare software application downloads, complete with on-line help.

## Administration menu

The Administration menu and the main window make up the Administrator UI. To use the Administration menu, click a menu item to display the page associated with that item. Item pages contain various properties and property value fields, in addition to menus and radio buttons to help you make property selections.

Only the Admin or a user with full Site Administrator privileges can see the entire Administration menu.



**NOTE:** Netscape users: To see the Administration menu, you must install the **Full version**, not the **Recommended version**, of **Netscape 7.0**.

### Root collections menu item

The **Root Collections** menu item, available in DocuShare 3.0, is not available in the DocuShare 3.1 Administration menu. The Root Collections function, specifying which collections appear on the site home page, has moved to the **Properties** page of each collection. To list a collection on the site home page, below the four Initial Top Level Collections, an administrator selects the **Yes** radio button next to the **Appears on Home Page** field on the collection **Properties** page.

Table 1–2: Administration menu items

Menu Item	Description
Object Properties	
Calendar	Make changes to the default properties and the default property values of this object class.
Collection	Make changes to the default properties and the default property values of this object class.
Discussion (Bulletin Board in 3.x)	Make changes to the default properties and the default property values of this object class.
Document	Make changes to the default properties and the default property values of this object class.
Event	Make changes to the default properties and the default property values of this object class.
Group	Make changes to the default properties and the default property values of this object class.
Mail Message	Make changes to the default properties and the default property values of this object class.
Saved Query	Make changes to the default properties and the default property values of this object class.



Table 1–2: Administration menu items

Menu Item	Description
Subscription	Make changes to the default properties and the default property values of this object class.
Topic (Bulletin in 3.x)	Make changes to the default properties and the default property values of this object class.
URL	Make changes to the default properties and the default property values of this object class.
User	Make changes to the default properties and the default property values of this object class.
Custom Object	Create, modify default properties of, and delete a custom object class.
Global Properties	Use to edit or add default properties that are common to all object classes.
Update Properties	Review and save the changes that you made to the default properties and the default property values of all object classes.
<b>Account Management</b>	
<b>Users</b>	
List Users	List all of the registered user accounts on this site.
Find User	Locate a single registered user account on this site.
Add User	Create a new user account on this site.
Merge Accounts	Merge several user accounts into a single user account.
Account Activity	Generate a report showing when each registered user last logged into this site.
<b>Groups</b>	
List Groups	List all of the group accounts on this site.
Add Group	Create a new group account on this site, and add members to that group.
<b>Domains</b>	Create, edit, and delete internal and external domains.
LDAP Accounts	
Configuration	Set up and test a connection between your DocuShare site and an external LDAP server.
Add	Add to your local external domain registry, all or some of the accounts that exist in the external domain on the LDAP server.

Table 1–2: Administration menu items

Menu Item	Description
Convert	Convert an internal domain user account to an external domain user account, or convert an external domain user account to an internal domain user account.
Rename	Update local user account username and/or domain information so it corresponds to username and domain changes that were made to the account at the LDAP server.
Synchronize	Synchronize local user and group account property information with account property changes that were made at the LDAP sever.
Bind User	Set LDAP attributes and DocuShare properties for the entire User object class.
Bind Group	Set LDAP attributes and DocuShare properties for the entire Group object class.
Providers	
Security Services	Enable LDAP as your external authentication provider.
Directory Services	Enable LDAP as your external directory provider.
Services and Components	
Administration	Select the Administration menu style, either collapsible tree or static HTML menu.
Archive Server	Set Archive Server properties, including pathname and polling intervals.
HTML Conversion	Set the HTML/PDF conversion options for the DocuShare Conversion Service.
Image Conversion	Set the image properties for the DocuShare Conversion Service.
Database	Configure the database that this site uses for document storage.
Email Agent	
Email Account	Set the Email Agent account properties.
User Account	Set the Email Agent DocuShare account properties.
Digital Certificate	Set the Email Agent Certification Authority properties.
Advanced	Set the Email Agent mail server properties.
Email Server Integration	Enable and set the pathname for an alias file on the mail server.

Table 1–2: Administration menu items

Menu Item	Description
DocuShare Interact	
Configuration	Configure your server to use DocuShare Interact.
Verification	Verify the status of the DocuShare Interact server.
Logging	Set the logging level for all DocuShare services.
Scan	Set the properties of the DocuShare scan service.
Search	Set the properties for the Verity search and filtering programs.
Subscription	Enable or disable the DocuShare subscription service and enter the Site Administrator email address.
WebDAV	Set the properties of the WebDAV service.
Workflow	
Workflow Server	Set the workflow engine thread pool size and database connections, list workflow page size, and the file location of archived workflows.
Workflow Manager	
List Workflows	List and manage workflow instances.
Dashboard	View a summary of engine activity, resources consumed, and the number of active workflows within the system.
Engine Activity Report	View a summary of workflows by state and activation periods, and detailed information based on individual resources in the system.
<b>Content Management</b>	
Repository Use	Generate a customized report listing each registered user on this site, the number of files each user owns, and the total disk space those files occupy.
Orphaned Content	
List Orphans	Use to locate, reassign, or delete orphaned objects.
List Orphans Properties	Use to manage the DocuShare List Orphan content display.
Trashcan	
Trashcan Contents	Use to restore or expunge deleted content
Trashcan Properties	Use to enable or disable the DocuShare Trashcan function, and to enable and size Trashcan paging.

Table 1–2: Administration menu items

Menu Item	Description
Site Management	
About DocuShare	Display general information about your site, such as software version level.
Access Policies	Select who has permission to access this site and who has permission to create new user accounts on this site.
Class Icons	
Small Class Icons	Select a new small icon graphic to represent a specific object class.
Large Class Icons	Select a new large icon graphic to represent a specific object class.
Site Configuration	Make minor changes to the appearance and functionality of this site.
Installed Languages	Change the default language of the site, and enable or disable the installed languages.
License	Update or change your site license.
Repository Log Files	Enable or disable access and error logging for this site.
MIME Types	Select the MIME type assignment method, add new MIME types, edit existing MIME types, or delete a MIME type.
Site Operations	Toggle this site between Read Only and Read/Write, and enter and show an administrator message.
Directory Paths	Enter the paths to the document repository and to the temporary directory for this site.

## DocuShare client applications

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DocuShare provides users with two client-side applications that can help them navigate their DocuShare site. Both applications are designed to be installed and run on Windows-based PCs. DocuShare Windows Client software is included with your DocuShare software. DocuShare Outlook Client software must be purchased separately.

### DocuShare Windows Client

DocuShare Windows Client seamlessly integrates DocuShare's document management features within your Windows desktop environment. From a desktop icon called **My DocuShare Places** or from **My Computer**, you can easily access DocuShare content.

Using drag and drop, you can copy and move files between DocuShare collections and your local and network drives. You can also open, edit, and save DocuShare files from a variety of editor applications, such as Microsoft Word, Corel WordPerfect, and Windows accessories.

Refer to the DocuShare Windows Client Help for more information on using this application.

### DocuShare Outlook Client

The optional DocuShare Outlook Client, purchased separately, enables you to conveniently manage and share information within Microsoft Outlook. Mapped DocuShare servers and collections appear as mail folders in your Inbox. Simply open a folder to browse the contents of a collection, open files for editing, and save new versions of files. You can easily archive and share mail messages and attachments by dragging and dropping them to a collection. When you need to find information quickly, you can perform keyword searches. From a single desktop location, you can:

- Archive mail messages and attachments to DocuShare
- Open, edit, and save mail messages and files stored in DocuShare collections
- Copy and move objects between Outlook and DocuShare
- Change an object's properties and control access to objects
- Search for content in DocuShare

## Using WebDAV folders

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DocuShare supports the WebDAV (Web Distributed Authoring and Versioning) protocol, which enables you to access DocuShare content through a WebDAV-compliant folder. You do not need to install DocuShare client software. If you are running Windows 2000 or XP, you simply go to **My Network Places** to add a DocuShare server as a new network place. If you have a Macintosh running OS X, you simply select **Connect to Server** to add the URL to a DocuShare server.



**TECH NOTE:** In both Windows and OS X, you must append the DocuShare server's URL with **/webdav**. When you are prompted to log in, you should use your DocuShare username and password.

### Using the WebDAV title feature

A WebDAV client identifies a file stored in a folder by its filename. DocuShare uses a handle number to identify a file, or document, stored in a collection. The use of a handle number allows documents in the same collection to have identical titles.

When using a WebDAV client to interact with DocuShare, document titles map to filenames and collections map to folders. Since DocuShare titles are not unique and do not always retain the file extension, several issues occur when interacting with documents. To resolve these issues, a new property named **webdav title** was created for all DocuShare objects and is maintained separately from the title property. The webdav title property has several features, which you can enable:

1. **Automatic file extension on documents:** If enabled, DocuShare determines the document's MIME type and the associated extension. DocuShare then appends the extension to the title. Example: For a Microsoft Word document titled My Doc, the webdav title would be My Doc.doc.
2. **Unique filenames:** If enabled, DocuShare adds the document handle to the title, which makes the webdav filename unique throughout DocuShare. This occurs on all objects. Example: For a Microsoft Word document with the handle Document-123, the webdav title would be My Doc(Document-123) or My Doc(Document-123).doc (if auto file extension also is enabled).
3. **Illegal character removal:** If enabled, DocuShare substitutes individual characters in the title. This is referred to as title sanitation and occurs on all objects. If a character in the title appears in the list of disallowed characters, it is substituted with a specified character. Example: If a Microsoft Word document is titled My Doc & Yours, and the list of disallowed characters is `<>&#` and the substitution character is `_`, then the webdav title would be My Doc \_ Yours(Document-124).doc (if all features also are enabled).
4. **HTMP stripping:** If enabled, DocuShare removes HTML tags from the title. This occurs on all objects. Example: For a Microsoft Word document titled `<B>My Doc</B>`, the webdav title would be My Doc.doc (if auto file extension also is enabled).

You enable these features by editing the **Services and Components/WebDAV** properties page. After editing the WebDAV properties page, you must restart DocuShare. The following table summarizes the webdav title properties.

Table 1–3: WebDAV title properties

Property and default value	Definition
enableWebdavTitles=true	Master switch. If it is false, none of the webdav title features will occur.
enableAutoExtensions=true	Enables automatic file extensions on document objects.
enableUniqueFilenames=false	Enables unique filenames on all objects.
enableSanitizedTitles=false	Enables illegal character removal on all objects.
disallowedChars=<>&\#\:\:.*?	The list of disallowed characters that will be substituted.
substitutionChar=_	The character substituted for disallowed characters.
enableStripHtml=false	Enables HTML stripping on all objects.
titlesInitialized=false	INTERNAL value, DO NOT EDIT.



**NOTE:** Editing a sanitized title with a WebDAV client will change the DocuShare title property to the edited sanitized filename. Example: For a DocuShare document titled My Doc & Yourse, the WebDAV filename (as it appears in the WebDAV client) would be My Doc \_ Yourse. After changing the WebDAV filename to My Doc \_ Yours, the DocuShare document title would be My Doc \_ Yours.

If unique filenames is enabled, the DocuShare handle that is part of the WebDAV filename cannot be changed.

## DocuShare add-ons

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You may increase the capacity and functionality of your DocuShare site by purchasing license upgrades and feature add-ons. Add-ons require you to enter a new license string in the License field of the License Management page. In some cases, such as foreign language add-ons, you must load additional software.

### Archive Server

Allows users to remove documents from a site and archive them to a remote site. The user can search the archive and restore selected documents.

### DocuShare Interact

A lightweight HTML page creation and editing application that allows the average DocuShare user to create and distribute web pages that are easy for anyone reading the pages to also contribute content. Refer to the DocuShare Interact Authoring and Contributor Guides for complete information about creating and user Interact pages.

### Email Agent

Allows users to send email to any collection on a DocuShare site.

### External database connector

Use the external database connector to store your site metadata on either an Oracle or SQL server.

### Languages

A DocuShare site with licensed languages, displays site pages and most documentation, in a selected language. DocuShare does not translate uploaded documents.

### LDAP/Domains

Create and use internal and external domains. Currently, DocuShare supports only LDAP as an external domain account authority. Refer to Chapter 2 of this guide for more information on using LDAP and DocuShare domains.

### Increased account seats

Increase the maximum number of user accounts allowed on your site. Site user packages are sold in varying sizes.



# 2

## DocuShare domains

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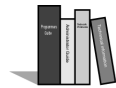
## Introduction

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DocuShare domains are available as an optional **LDAP/Domains add-on** for your DocuShare site. Entering the LDAP/Domains add-on license string in the License field of the Server License Management page enables your site to use internal and external domains. If for any reason your add-on license string is accidentally altered, all domains and domain administrator tools will disappear from the site. Re-entering the correct license string will restore all domains and domain administrator tools. No domain data will be lost.

Currently, DocuShare supports only **LDAP** (Lightweight Directory Access Protocol) for creating and maintaining external domains. With LDAP/Domains enabled, the DocuShare administrator uses Administration menu tools to easily create internal domains. Creation and maintenance of external domains require LDAP server access and knowledge of the LDAP administration interface.

With LDAP/Domains enabled, domain fields and menus appear in various user and administration pages across your site, in addition to **Domain**, **LDAP Accounts**, and **Providers** items appearing in the Administration menu.



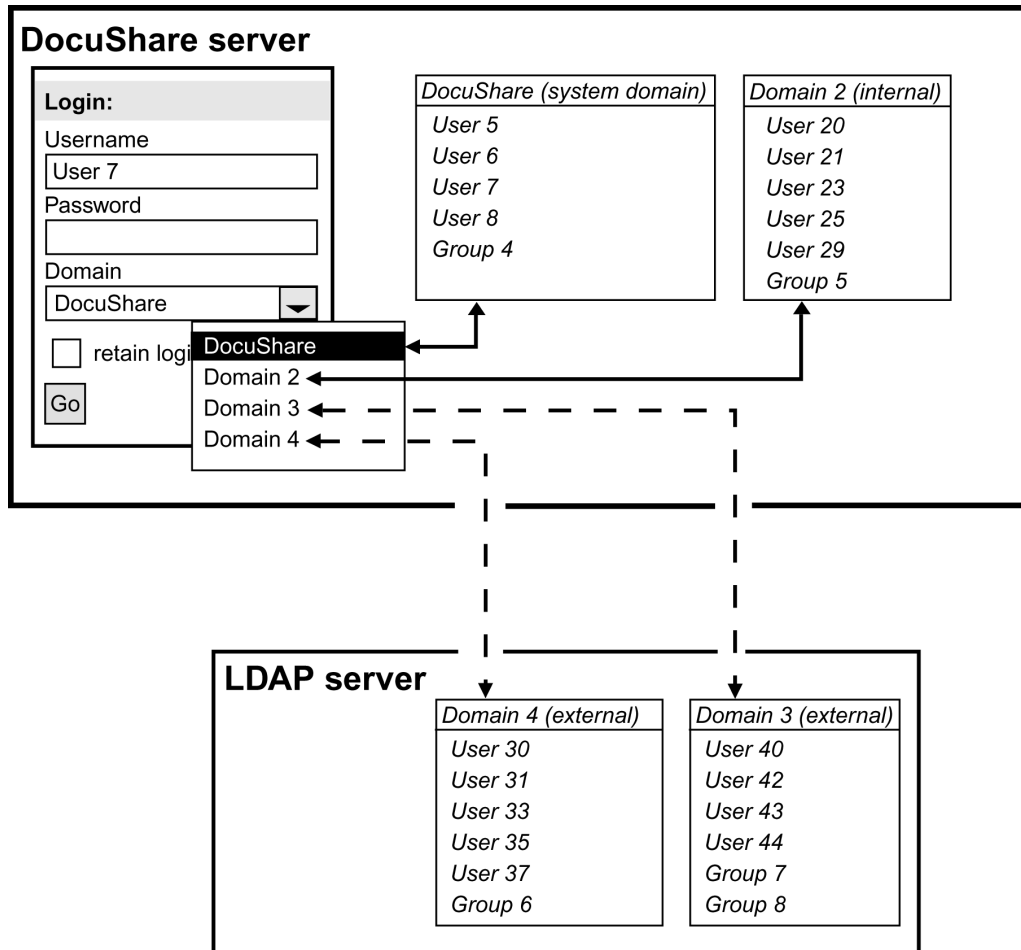
**RESOURCES:** For more information on LDAP, refer to the LDAP/Active Directory Guide available on the Help Desk page.

### LDAP server software supported

- Microsoft Active Directory running on Windows 2000 Server SP3 or on Windows 2003 with all current updates installed.
- SunOne/Sun Java Directory Server 5.2 or 5.1 SP1.

## DocuShare and LDAP relationship

The illustration below shows a DocuShare site that uses both internal and external domains. During account creation, users and groups are assigned a specific domain as part of their distinguished name, such as **Username@xyzdomain**. At login, the user must select the appropriate domain from the **Domain** menu. Attempting to log into the wrong domain results in an error message and a prompt to retry the login.



## Internal domains

---

An administrator may create any number of internal domains on a single DocuShare site. Internal domains are primarily useful for organization purposes. Currently, there are no access controls available for internal domains. Users may add themselves to any internal domain they choose. They may change their assigned internal domain, edit the properties of their account, and create accounts in other internal domains. Users may not create accounts in external domains. That is the task of the LDAP administrator.

When you enable the LDAP/Domains add-on, DocuShare displays a default internal domain named **DocuShare**. The DocuShare default domain is a system domain. You may change the name of the default domain to any unique name you choose, but you cannot delete it. Internal domains use DocuShare as both the authentication service and the directory service provider.

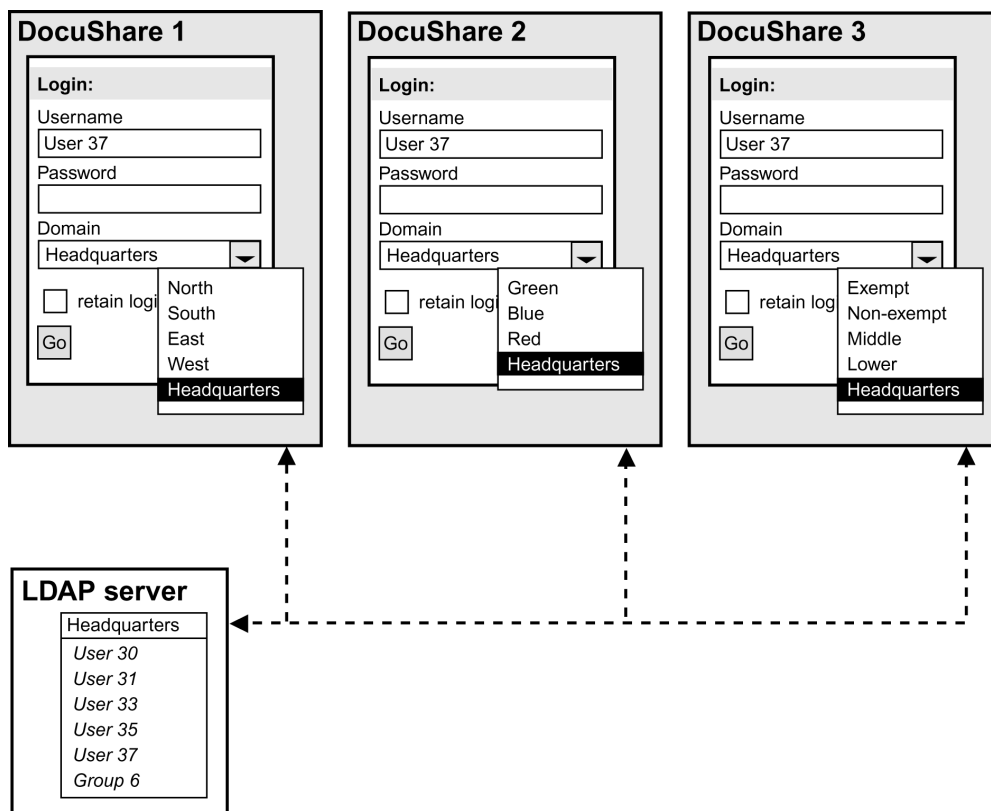
To create an internal domain:

1. From the **Administration** menu, select **Account Management / Domains**.  
The Domains page appears. Domains appears on your Administration menu only if you have enabled LDAP.
2. Enter a unique name in the **Domain name** field.
3. Select **DocuShare/DocuShare** from the **Providers** menu.
4. Click **Add**.  
DocuShare creates a new internal domain. This domain now appears in all Domain menus on your site. Users may now create new accounts in the domain.

## LDAP and external domains

Currently, DocuShare supports only LDAP for creating and maintaining external domains. You may create any number of external domains on a single LDAP server. You may also direct your site to multiple LDAP servers (hosts); adding redundancy and thereby increasing the reliability and security of your site. The only limitation is that all LDAP servers must contain the same DIT (Directory Information Tree). If the main LDAP host is unavailable, DocuShare tries the alternates.

To avoid confusing users, you should give all domains unique names; ones that are not likely to be duplicated as either internal or external domain names on other DocuShare sites that you may use. A single LDAP external domain may be used by a number of DocuShare sites. This feature allows users in a single domain to log into any site that includes their domain listed in the Login window.

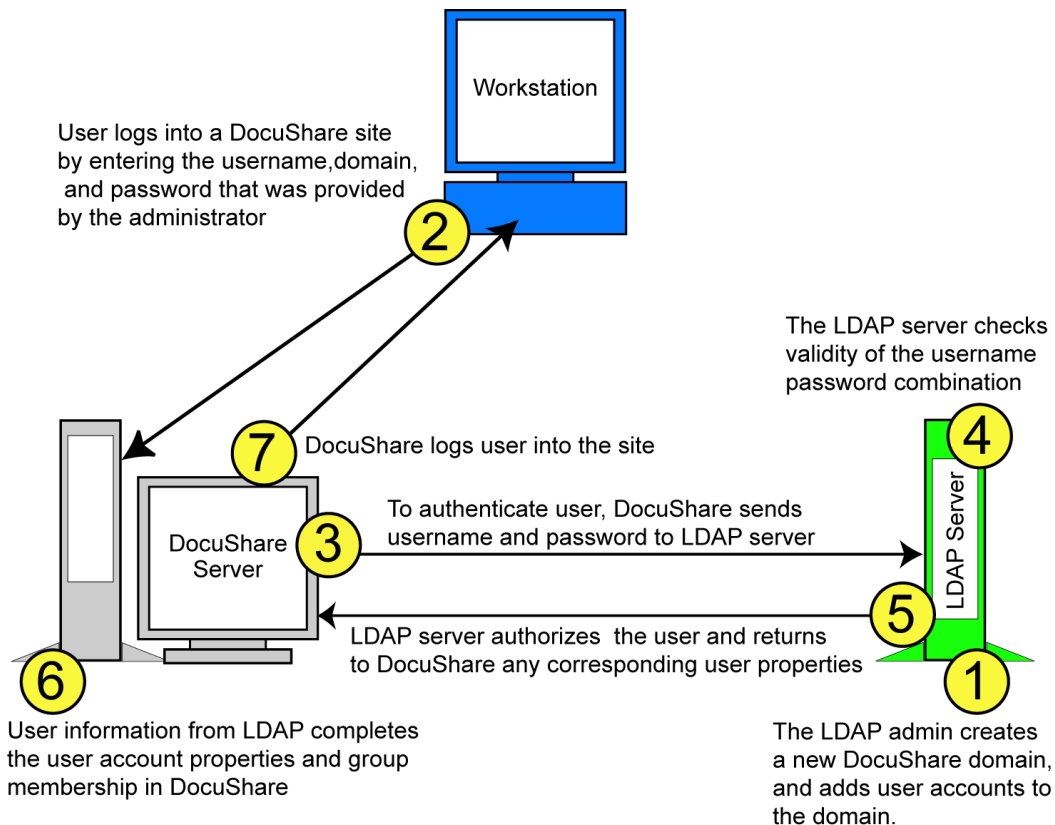


External domains are extremely useful for access control. External domains are administered directly at the LDAP server, using the LDAP administration UI. You cannot administer an external LDAP domain from the DocuShare administration UI. Currently, external domains use LDAP as both the authentication service and the directory service provider.

## User accounts on an external domain

The LDAP administrator creates accounts on the LDAP server, then gives the new user the username, domain, and password of the account. Users assigned to an external domain may view their account properties and change DocuShare-related account information. Users assigned to an external domain cannot change their password, username, or external domain-related account information. The LDAP administrator must make those changes for them, then “update” the local registry to reflect these changes.

Unless the domain name specifically refers to it as being an external domain, users have no way of knowing if their domain is internal or external. At login, users merely select their domain from a menu and DocuShare and LDAP perform all of the necessary authentication activities.



## Setting up a DocuShare and LDAP relationship

The working relationship between DocuShare and the LDAP server does not occur automatically. Simply identifying an LDAP server on your network does not create the relationship. To create the DocuShare/LDAP relationship you must:

1. Install an LDAP server, use your LDAP administrator UI to set up a domain (namespace) on the LDAP sever, and then create user and group accounts within that domain.  
  
When creating LDAP accounts, do not use non-ASCII characters, such as accent marks, in the account password.
2. Use the DocuShare administration menu tool **Account Management / LDAP Accounts / Configuration** to connect your DocuShare server to the LDAP server.
3. Use the DocuShare administration menu tool **Account Management / Providers / Security Services** to set the LDAP server as the account authentication source for your external domain.
4. Use the DocuShare administration menu tool **Account Management / Providers / Directory Services** to set the LDAP server as the account directory source for your external domain.
5. Use the DocuShare administration menu tool **Account Management / Domains** to add the external domain to your site registry. This only creates a local pointer to the existing external domain, it does not physically create a new domain on your site. The external domain now appears as a menu item on your site Login window.
6. Use the DocuShare administration menu tool **Account Management / Users / List Users** to list the users in your newly added external domain. At this point the domain appears empty. Now you must manually add user and group accounts from your external domain to the local domain pointer.
7. Use the DocuShare administration menu tool **Account Management / LDAP Accounts / Add** to select and add to your local list, all or some of the accounts that exist in the external domain. Not including an account in the **Add** operation, excludes that user from accessing your site.
8. Run **List Users** again and you will see your new domain populated with user and group accounts. It is important to remember that these accounts exist on the LDAP server and therefore must be maintained on the LDAP server. You cannot use DocuShare administration menu tools to administrator external domain accounts.





# 3

## Setting up and maintaining your site

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## Introduction

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After you have installed the DocuShare software onto your server, you are now ready to configure your new DocuShare site. Initial site configuration involves the following actions:

- License your DocuShare site
- Set site access permissions
- Set site properties
- Enable the site trashcan
- Assign administrator rights to select users

There are additional site parameters and properties that you may change at your discretion, but for now, you should accept the system defaults and concentrate on these few initial tasks.

### License your DocuShare site

When first installed, DocuShare runs as an unlicensed site. An unlicensed DocuShare site contains all of the functionality of a licensed site, but you are limited to a maximum of 50 objects within the site. To license your DocuShare site, go to the Administration menu item **Site Management / License** and enter your unique license string in the **License** field.

### Set site access permissions

You may set site access permissions during initial software installation. You may change site permissions anytime after initial installation. You should configure your DocuShare site so specific areas can be accessed only by one or more of the three types of DocuShare users: guests, registered users, and administrators. You may limit who may enter your DocuShare site and who may create new user accounts. Setting site access policies is a simple way to control security on your DocuShare site. To set site access permissions, go to the Administration menu item **Site Management / Access Policies**.

### Set site parameters

There are a few basic site parameters that you must set for DocuShare to function correctly. The most important setting is enabling the subscription service and supplying an admin email address. Without this information, the DocuShare subscription service will not work. To enable DocuShare subscription service go to the Administration menu item **Services and Components / Subscription**.

### Enable site trashcan

When the site trashcan is enabled, all deleted objects go immediately into the trashcan. A site administrator can view the contents of the trashcan and choose to restore or expunge the deleted objects.

If the site trashcan is disabled, all deleted objects are immediately expunged, and cannot be restored. To enable the site trashcan, go to the Administration menu item **Content Management / Trashcan / Trashcan Properties**.

## Assign site administrator rights to select users

As the DocuShare administrator using the account **admin**, you have authority to assign Site Administrator privileges to any registered user simply by adding the user to **Group-1**, the Site Administrator group. It is a good idea to immediately add one or two trusted users to Group-1, as precautionary backup Site Administrators. When a registered user logs into the DocuShare site, and if that user is a member of Group-1, DocuShare allows the user to access the Administration UI.



**NOTE:** If you want to give users **limited Site Administrator privileges**, you must remove the Site Administrator group (Group-1) from Group-2 and Group-3.

To assign a registered user to the Site Administrator group:

1. From the **Administration** menu, click **Account Management / Groups / List Groups**.  
The List Groups page appears.
2. Click **Site Administrators Group 1**.  
The Group Services page appears.
3. Select **Edit Properties** from the menu, and click **Go**.  
The Group Services page displays the current properties for Group 1.
4. From the **Add Member** menu, select the user accounts that you want to add to Group 1.
5. Click **Apply**.  
The user accounts selected are now members of Group 1, and they all now have Site Administrator privileges.
6. You may also add users to Group-2 (Content Administrators) and Group-3 (Account Administrators).

## Scan to DocuShare

---

If your site users have access to a Xerox WorkCentre that has the scan to file feature enabled, they can scan documents directly to the DocuShare site. The WorkCentre converts the documents to TIFF format and stores them in a temporary collection on the site. The user then saves the scanned documents to any permanent collection. Refer to the *DocuShare User Guide* for more information on using scan to DocuShare.

It is the task of the WorkCentre administrator to configure the WorkCentre templates for use with DocuShare. For more information on template configuration, refer to the setup and operation guides of your specific WorkCentre.

There are a number of WorkCentre settings that may adversely affect the scan to DocuShare function. One of the most common is when users scan multiple pages during a single scan job. If your WorkCentre is set to convert scans to **TIFF**, then the Centre generates multiple scan jobs. If your WorkCentre is set to convert scans to **TIFF (multi)**, then the Centre generates a single scan job that contains multiple pages. Inform the WorkCentre administrator of your TIFF setting preference. DocuShare does not support color images scanned using a WorkCentre Pro 40 and JPEG compression (JPEG-in-TIFF).

### To use scan to DocuShare

To use the scan to DocuShare feature, you must stop the **Microsoft FTP publishing service**.

### Resolving port conflicts

If you are having a port conflict with another FTP service on the same server and if the WorkCentre you are using supports a port other than the default port 21, you must modify the **FTPD.conf** file. Note that only a few WorkCentre models support a default port other than port 21. If you change the default port of the FTP service, Document Centres that do not support a different default port will not be able to scan to DocuShare.

### Scan-to-DocuShare via Shared Folder

To use the Scan-to-DocuShare via Shared Folder option:

1. Create an SMB directory (Windows Shared Folder) on your network that your scanning device can both access and place scanned files.
2. Create a shared SMB directory for a DocuShare Scan Archive folder that DocuShare can use to put copies of scanned files that it pulls from the network SMB directory that you created in step 1.
3. Verify that Read/Write access to these directories are available with Windows Network Places and Windows login.
4. Go to Services and Components/Scan and configure DocuShare scan services with the pathname to both folders and with the correct Windows login/passwords.

DocuShare begins polling the designated watched folder. When a scanned file appears in the watched folder, DocuShare copies the file to the Temporary Scan Collection and then moves it to the Scan Archive SMB folder.

## Selecting a default collection for scanned documents

When a user saves a scanned document, the Save page displays the default collection. The user has the option of saving to the default collection or selecting another collection. Admin, and all users with Site, Account, and Content Administrator authority, can select a specific default collection where scanned documents are saved.

To select a default collection for scanned documents:

1. Under **Related Links** at the bottom of the left pane on the DocuShare home page, click **WorkCentre Scans**.

WorkCentre Temporary Scan Repository page appears.

2. In the **Default Destination** field, click **Select**.

The Select Destination page appears.

3. Search for a specific collection, show all, or show favorites.

4. From the **Possible Locations** list, select the collection you want as the default collections for all scanned documents.

A user can choose to select another collection when they save a scanned document.

5. Click **Apply**.

The new default collection is set.

## Changing access to the Temporary Scan Repository

The Temporary Scan Repository on the DocuShare home page appears to the site administrator and content administrators. As an administrator, you manage the collection's access permissions and location. Depending on your site's security requirements, you can change the collection's permissions to give all logged-in users access to the collection.

## Auto login

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The DocuShare auto login feature allows Windows domain authentication to handle DocuShare login authentication. By default, this feature is disabled. To use auto login, you must configure your Internet Information Server (IIS) and enable the DocuShare auto login feature.

To configure to use DocuShare auto login:



**NOTE:** Make sure the DocuShare server usernames are the same usernames that are authenticated by the web server.

1. In the Control Panel, open the **Services** application.
2. In the Services window, select **IIS Server**.
3. Click **Stop**.
4. From the **Start** menu, select **Internet Information Manager**.
5. In the Microsoft Management Console window, right-click the **DocuShare server host**.

The host server Properties window appears.

6. Click **Edit** for **Master Properties**.  
The WWW Service Master Properties window appears.
7. Click the **Directory Security** tab.
8. Right-click **Edit** for **Anonymous Access and Authentication Control**.  
The Authentication Methods window appears.
9. In the Authentication Methods window, disable **Allow Anonymous Access** and enable **Windows NT Challenge/Response**.
10. Click **OK**.

11. Start your IIS web site.
12. Login to DocuShare as admin.
13. Go to the Administration UI.
14. From the **Administration** menu, click **Site Management / Site Configuration**.

The Site Configuration page appears.

15. In the Enable Auto Login field, click **Yes**.
16. Click **Apply**.

DocuShare enables auto login.



**TECH NOTE:** You may use auto login with a web server other than IIS. Verify that the web server has set the REMOTE\_USER environment variable to the username of the authenticate user, as follows:

**REMOTE\_USER=<domain>/<username>**

Make sure the Remote User <username> matches the DocuShare <username>.

REMOTE\_USER is available as an environment variable for CGI scripts. If the web server supports authentication, and if the CGI script is protected, then this value holds the username of the authenticated user.

If your site is restricted (allow anonymous is disabled and access is restricted for CGI commands), the web server sets a REMOTE\_USER variable to the value of the authenticated username. When auto login is enabled, DocuShare compares the value of that variable and checks to see if it matches a DocuShare username. If there is a match, the user is automatically logged into the site. If there is no match, the user is not logged in as a registered user, but instead is logged in as a DocuShare Guest account.

Auto login does not apply to neither DocuShare Guest accounts nor DocuShare admin accounts, so if you are logged in as a remote domain administrator, you will not be automatically logged in as a DocuShare admin.

## Archive server

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The Archive Server add-on allows users to mark site **documents** and **mail messages** to be archived on an external DocuShare Archive Server. The Archive Server requires creating a special DocuShare site that is **external** to your main DocuShare site. At set intervals DocuShare polls your main site looking for objects marked for archiving, then moves those objects to the specified Archive Server. Users can run searches on the archive and restore archived objects to their original locations on the main site.



**RESOURCES:** For more information on setting up the DocuShare Archive Server, refer to the *Installation Guide* available on the site Help Desk.

To setup and configure your site to use a DocuShare Archive Server:

1. Enter your special DocuShare Archive Server license string in the **License** field of the **Site Management/Server License Management** page.  
The Archive Server feature is now enabled for your site, and the Archive Server item appears under the **Services and Components** menu category.
2. Follow the instructions in the DocuShare *Installation Guide* to set up and configure an external Archive Server. This involves installing DocuShare software on another server, but selecting the **Archive Server** option to create a designated DocuShare Archive Server site.
3. Go to **Services and Components/Archive** of the Admin UI to configure your site to use the Archive Server that you just created.

## Archive server administrator

Since the DocuShare Archive Server is a separate, although special-purpose DocuShare site, the DocuShare Archive Server administrator has the same privileges as an administrator on a standard DocuShare site. There are exceptions that the Archive Server administrator should be aware of when administering an Archive Server.

- Only the **admin** account can log into an DocuShare Archive Server. Neither Users or Guests can log into an Archive Server.
- Admin privileges are the same as those on a standard DocuShare site, although admin must be careful to avoid creating problems by misuse of certain administration tools.
  - Admin should **not** create new objects on an Archive Server. As with all DocuShare objects, objects created on an Archive Server are given unique handles. If an object on the main site has the same handle as an object created on the Archive Server, the object on the main site cannot be archived.
  - Admin should **not** edit object properties, permissions, owner, location, or any other characteristics of archived objects.



- Admin should **not** make changes to object classes or object class properties.
- Admin should **not** attempt to resolve orphans on the Archive Server. Since the collection structure of the main site is not replicated on the Archive Server, all archived objects will appear as orphans. Running the List Orphans tool will list all archived objects on the Archive Server.
- Admin should **not** change Archive Server access policies.
- Admin should **not** change site configuration options that involve either user accounts or Archive Server usage.
- Admin should **not** change html or image conversion services.

## Email agent

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The Email Agent add-on allows users to send email messages and attachments from any desktop to any collection or group within a specific DocuShare site. The Email Agent also has the capability of using digital authentication certificates for greater email security.

To function, the Email Agent requires a unique dedicated account on either an external POP3 or an external IMAP mail server. The DocuShare Email Agent monitors the external mail account for incoming messages. When a message appears, the Agent processes that message; converts it into a new DocuShare Mail Message object, complete with properties and ACL; and distributes the message according to the addressees. If the message is addressed to a collection, then the Agent moves the message into that collection. If the message is addressed to a group, then the Agent forwards the message to the group members — as defined in the properties for that group.

### Default collection

If there is a problem with either the addressed collection or the addressed group, the Email Agent places the problem message into the defined **default collection** on the DocuShare site. If configured to do so, the Email Agent also emails a confirmation to the sender. Use the Services and Components/Email Agent/User Account page to enter a specific default collection.

The default collection tends to accumulate a lot of unclaimed messages, so the administrator should either act as postmaster and periodically reroute or remove misdirected and old messages from the collection, or made the default collection visible so users can access the collection and claim their own messages. One way of making the default collection visible is to make it a root collection that appears on the site home page. The administrator should give All Users except Guests, Reader and Writer permission to the collection.

To setup and configure the DocuShare Email Agent:

1. Enter your special DocuShare Interact license string in the **License** field of the **Site Management/Server License Management** page.  
The Email Agent feature is now enabled for your site, and the Email Agent items appear under the **Services and Components** menu category.
2. Identify either a **POP3** or **IMAP** mail server that you want the Email Agent to use for all incoming mail and create a DocuShare **email account** on that server; such as dsmail@mailserver.com.
3. Create a **username** and **password** for the new email account.  
Make note of the username and password; you will use them to configure DocuShare to use the Email Agent.
4. Go to the **Services and Components/Email Agent** pages of the Admin UI and configure the DocuShare Email Agent.

To get Email Agent up and running, you must configure the **Email Agent Account** page, the **Email Agent User Account** page, and the **Email Agent Digital Certificate** page. The Advanced and Server Integration pages allow you to set additional Email Agent properties.

## DocuShare Interact

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The DocuShare Interact add-on allows the average user to create and distribute collaborative web pages that are easy for anyone reading the pages to contribute content. Interact menu items and documentation appear only after Interact is enabled.

Interact pages appear on your site as modified Document objects; complete with the properties and ACL of any DocuShare Document object. Interact documents are identified by a special Interact icon.



**RESOURCES:** For more information on creating and using DocuShare Interact pages, refer to the documentation available on the site Help Desk. The *Interact Contributor Guide* provides instruction on using Interact pages. The *Interact Authoring Guide* provides instruction on editing existing Interact templates and on creating new templates. The Authoring Guide also includes all of the Interact programming code, so authors with html programming experience can create new templates from scratch.

To enable and configure DocuShare Interact for use on your site:

1. Enter your special DocuShare Interact license string in the **License** field of the **Site Management/Server License Management** page.

DocuShare Interact is now enabled. Interact documentation is now available on the Help Desk and an Interact Page item is added to the **Add** menu that appears on each site collection.

2. If you do not accept the default Interact servlet location, go to the **Services and Components/DocuShare Interact/Configuration** page of the Admin UI and enter a new pathname.

## DocuShare site maintenance

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As an administrator for your DocuShare site, you are responsible for a wide range of maintenance activities. Some maintenance activities are regular and ongoing, other activities may be infrequent. Some activities require admin or full Site Administrator privileges. Some activities require server access.

Typical site maintenance activities include the following:

### Maintaining user and group accounts

- **Changing account properties.** If a user forgets a account password or needs help changing account information, you can easily access and change any account property.
- **Creating new user and group accounts.** In most cases users can create their own accounts, but there may be occasions when that tasks falls to the administrator. If your site uses external domains, creating and editing new user and group accounts on an external domain is the job of the LDAP administrator. Any changes made using the DocuShare UI must also be made at the LDAP server.
- **Merging multiple user accounts.** Sometimes a user may inadvertently create numerous user accounts on your site. To cleanup the site and organize the user's world, you can easily merge several accounts, and the objects associated with the accounts, into a single user account.
- **Deleting user and group accounts.** To cleanup and organize the site, you can delete obsolete user and group accounts.
- **Monitoring user activity and site usage.** To better understand site usage and population, you can view site repository use and user account activity reports.

### Maintaining the site

- **Backing up and restoring site data.** One of the most frequent and scheduled site maintenance activities should be backing up site data.
- **Checking for computer viruses.** We strongly advise that you install a robust virus checking application on your DocuShare server. Follow the application instructions for information on configuring, running, and updating your virus checking software.
- **Monitoring site errors.** To monitor the health of your site, you can view the site error logs.
- **Locating and fixing orphaned objects.** To cleanup and organize the site, you may need to locate, and delete or reassign unassigned objects.
- **Recovering objects from the trashcan.** Periodically you may be asked to restore a deleted object.
- **Updating the site license.** Occasionally you may have to update the site license to increase the site user capacity or enable a newly added DocuShare feature or foreign language add-on.

## Back up and restore

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To ensure the security of your DocuShare site data, you should back up daily.

Use the following procedures to backup and restore data on your DocuShare.

### File system level back up and restore

#### Backup the document repository

1. Use the **dsservice shutdown** command to stop your DocuShare service.
2. Using the database Service Manager, stop the database service.
3. Use your standard backup procedure to back up your entire **Xerox/DocuShare** directory and any additional document directories that were created outside of the DocuShare directory.
4. When you have completed your back up, restart the database service.
5. Restart your DocuShare service by using either the **start\_docushare** command line utility or restart DocuShare if you are running it as a service, by using **Administrative Tools/Services**.

#### Restore the document repository

1. Use the **dsservice shutdown** command to stop your DocuShare service.
2. Using the database Service Manager, stop the database service.
3. Use your standard restore procedure to restore your saved **Xerox/DocuShare** directory and any additional documents directories that were created outside of the DocuShare directory.
4. When you have completed your restore, restart the database service.
5. Restart your DocuShare service by using either the **start\_docushare** command line utility or restart DocuShare if you are running it as a service, by using **Administrative Tools/Services**.

## MSDE database back up and restore

### Back up only the MSDE database

1. Use the **dsservice shutdown** command to stop your DocuShare service.
2. Using the MSDE Service Manager, stop the MSDE service.
3. Use your standard backup procedure to back up the **DocuShare.mdf** and the **DocuShare\_log.LDF** files that are contained in the - - **/MSDE/Data/MSSQL\$DocuShare/Data** folder of your DocuShare software installation.
4. When you have completed your back up, restart the MSDE service.
5. Restart your DocuShare service by using either the **start\_docushare** command line utility or restart DocuShare if you are running it as a service, by using **Administrative Tools/Services**.

### Restore only the MSDE database

1. Use the **dsservice shutdown** command to stop your DocuShare service.
2. Using the MSDE Service Manager, stop the MSDE service.
3. Use your standard restore procedure to restore the **DocuShare.mdf** and the **DocuShare\_log.LDF** files to the - - **/MSDE/Data/MSSQL\$DocuShare/Data** folder of your DocuShare software installation.
4. When you have completed your restore, restart the MSDE service.
5. Restart your DocuShare service by using either the **start\_docushare** command line utility or restart DocuShare if you are running it as a service, by using **Administrative Tools/Services**.

## Using osql.exe to back up and restore the MSDE database

You can use the Microsoft utility **osql.exe** to back up and restore MSDE database information and when you want to move the MSDE database to another server. Osql.exe is contained in the **DocuShare/MSDE/Binn** folder of your DocuShare software installation. Use of osql.exe requires an understanding of SQL and of the osql.exe functions. For a list of osql command options, enter **osql/?**



**NOTE:** Run the osql.exe command from a command prompt window. **Do not attempt to open the utility by double-clicking the osql.exe file.**

### To use osql.exe to back up the MSDE database

1. Login to your DocuShare server.
2. Create a folder anywhere on your local drive and name it **DocuShare\_BAK**.
3. Open a command prompt window on the server and enter **--\MSDE\Binn>osql -E**, and press **Enter**.

The osql -E option grants you sysadmin privileges.

4. Enter **BACKUP DATABASE Docushare TO DISK=Localdrive:\DocuShare\_BAK\MSDE\Docushare.bak**, and press **Enter**.

The command to back up the database **Docushare**.

5. Enter **BACKUP LOG Docushare TO DISK=Localdrive:\DocuShare\_BAK\MSDE\Docushare\_log.bak**, and press **Enter**.

The command to back up the log **Docushare**.

6. Enter **Go**, and press **Enter**.

The Go command executes the script and backs up both the MSDE database and log to the DocuShare\_BAK folder.

## To use osql.exe to restore the MSDE database

1. Login to your DocuShare server.
2. Open a command prompt window on the server and enter **Localdrive:\Xerox\DocuShare\MSDE\Binn>osql -E**, and press **Enter**.  
The osql -E option grants you sysadmin privileges.
3. Enter **RESTORE DATABASE Docushare FROM DISK=Localdrive:\DocuShare\_BAK\MSDE\Docushare.bak**, and press **Enter**.  
The command to restore the database **Docushare**.
4. Enter **RESTORE LOG Docushare FROM DISK=Localdrive:\DocuShare\_BAK\MSDE\Docushare\_log.bak**, and press **Enter**.  
The command to restore the log **Docushare**.
5. Enter **Go**, and press **Enter**.  
The Go command executes the script and restores both the MSDE database and log to the MSDE folder.

## Using osql.exe to move the MSDE database to another server

### To move the MSDE database to another server

1. Login to your DocuShare server either as sysadmin or as dbcreator.
2. Stop your DocuShare service by using the **dsservice shutdown** command.
3. Create a folder anywhere on your local drive and name it **DocuShare\_BAK**.
4. Open a command prompt window on the server and enter **Localdrive:\Xerox\DocuShare\MSDE\Binn>osql -E**, and press **Enter**.  
The osql -E option grants you sysadmin privileges.
5. Enter **BACKUP DATABASE Docushare TO DISK=Localdrive:\DocuShare\_BAK\MSDE\Docushare.bak**, and press **Enter**.  
The command to back up the database **Docushare**.
6. Enter **BACKUP LOG Docushare TO DISK=Localdrive:\DocuShare\_BAK\MSDE\Docushare\_log.bak**, and press **Enter**.  
The command to back up the log **Docushare**.
7. Enter **Go**, and press **Enter**.  
The Go command executes the script and backs up both the MSDE database and log to the DocuShare\_BAK folder.
8. Enter **RESTORE DATABASE Docushare FROM DISK=Localdrive:\DocuShare\_BAK\MSDE\Docushare.bak**, and press **Enter**.  
The command to restore the database **Docushare**.



9. Enter **RESTORE LOG Docushare FROM DISK=Localdrive:\DocuShare\_BAK\MSDE\Docushare\_log.bak**, and press **Enter**.

The command to restore the log **Docushare**.

10. Enter **Go**, and press **Enter**.

The Go command executes the script and restores both the MSDE database and log to the MSDE folder. You now have on your server, both the old and the restored MSDE database. The following steps tell you how to “detach” the old database and “attach” the restored database.

11. In the command prompt window enter **EXEC sp\_detach\_db 'Docushare'**, and press **Enter**.

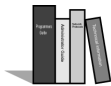
12. Enter **Go**, and press **Enter**.

Osql detaches the old database.

13. In the command prompt window enter **EXEC sp\_attach\_db @dbname='DocuShare', 'C:\backup\Docushare.mdf', 'C:\backup\Docushare.ldf'**, and press **Enter**.

14. Enter **Go**, and press **Enter**.

Osql attaches the restored database.



**RESOURCES:** Refer to these Microsoft Knowledge Base articles for more information on using osql.exe to back up, restore, and move your MSDE database.

<http://support.microsoft.com/default.aspx?scid=kb;EN-US;314546>

<http://support.microsoft.com/default.aspx?scid=kb;en-us;304692>

<http://support.microsoft.com/default.aspx?scid=kb;en-us;325003>

## Back up and restore - Solaris/Linux

---

Use the following procedures to back up and restore data if your DocuShare site is running under Solaris or Linux using the PostgreSQL database.

### File system level backup and restore

This procedure backs up and restores the PostgreSQL database files. Be sure to back up **all** tables and commit log files, and **NOT** just individual files.

#### To back up your PostgreSQL database files:

1. Use the **dsservice shutdown** command to stop your DocuShare service.  

```
$ dsservice.sh shutdown
```
2. Use **pg\_ctl** to stop the database.  

```
$ pg_ctl -D mnt1/dbs/postgresql stop
```
3. Use your usual back up method, such as the Tar command, to copy all of the database files.  

```
$ tar -cf backup.tar /usr/local/presql/data
```
4. Use **pg\_ctl** to restart the database.  

```
$ pg_ctl -D mnt1/dbs/postgresql start
```
5. Use the **start\_docushare** command to restart DocuShare.  

```
$ start_docushare
```

#### To restore your PostgreSQL database files:

1. Initialize PostgreSQL.  
This is part of the normal DocuShare installation process.
2. Use **pg\_ctl** to stop the database.  

```
$ pg_ctl -D mnt1/dbs/postgresql stop
```
3. Change your current directory to /usr/local/presql/data.  

```
$ cd /usr/local/presql/data
```
4. Restore files from the backup file to the current working directory.  

```
$ tar -xf backup.tar
```
5. Use **pg\_ctl** to restart the database.  

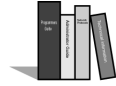
```
$ pg_ctl -D mnt1/dbs/postgresql start
```
6. Use the **start\_docushare** command to restart DocuShare.  

```
$ start_docushare
```

## SQL dump back up and restore

You can use the PostgreSQL utility **pg\_dumpall** to back up the entire data cluster. The **pg\_dumpall** utility uses SQL commands to copy the site database to a text file.

You can run **pg\_dumpall** while the database is active, but updates made to the database while **pg\_dumpall** is running will not be included in the dump. We recommend that you place DocuShare in Read Only mode before beginning the backup.



**RESOURCES:** For more information on general use of the **pg\_dumpall** utility or how to use the utility to back up and restore selected databases, refer to the PostgreSQL or the Red Hat Database documentation available on their respective web sites.

### To back up the data files:

1. Put DocuShare into **Read-Only** mode.  

```
$ dsservice.sh state readonly
```
2. Login as the **database super user**.
3. Run the **pg\_dumpall** utility to copy the database to a specific file.  

```
$ pg_dumpall > DBBackupFile
```
4. Return DocuShare to **Read/Write** mode.  

```
$ dsservice.sh state normal
```

### To restore the data files:

1. Put DocuShare into **Read-Only** mode.  

```
$ dsservice.sh state readonly
```
2. Login as the **database super user**.
3. Use **psql** to restore the database from the file that was created during backup.  

```
$ psql < DBBackupFile
```
4. Return DocuShare to **Read/Write** mode.  

```
$ dsservice.sh state normal
```

## Database optimization

---

Database optimization is a maintenance task that is performed by the Database Administrator (DBA) and usually is scheduled on a periodic basis. Certain DocuShare operations may require the database to be optimized before the next scheduled database optimization. Optimization is recommended after upgrading from earlier 3.x versions, migrating from DocuShare 2.2, or completing large volume updates. For the most benefit, perform database optimization after these changes and before running the `dsindex index_all` command.

Consult your DBA before attempting to run these commands. The DBA will determine the appropriate settings and configurations for your environment. Only the DBA has the security permissions to run the database optimization.



**NOTE:** Depending on the size and usage of your DocuShare site, performance may be slow during database optimization. We recommend that you use **Site Management/Access** and set **Site Access Authority** to **Administrator**.

The following commands are recommendations for various database applications. Changes may be necessary to fit your specific environment. All commands in the examples run on the database server, which may or may not be the same server that is running your DocuShare site.

### Microsoft SQL Server Desktop Engine (MSDE)

This database optimization procedure assumes that the default installation of DocuShare is on a Windows server.

To optimize the database:

1. Open a command prompt window.
2. Use the **CD** (change directory) to navigate to the **Binn** directory where MSDE is installed.  
  
For example; **CD C:\Xerox\DocuShare\MSDE\Binn.**
3. From the Binn directory, run the **osql.exe** command by entering the following line, replacing all bracketed names with the correct values for your installation:  
  
**osql -S [servername]\[MSDE\_InstanceName] -d [DocushareDatabaseName] -U SA -P [SA\_Password]**
4. Press **Enter**.  
  
The command displays the OSQL prompt **1>**.
5. At the **1>** prompt, enter **UPDATE STATISTICS DSOBJECT\_table WITH FULLSCAN;**
6. Press **Enter**.
7. At the **2>** prompt, enter **UPDATE STATISTICS ACL\_table WITH FULLSCAN;**
8. Press **Enter**.

9. At the **3>** prompt, enter **UPDATE STATISTICS Link\_table WITH FULLSCAN;**
10. Press **Enter**.
11. At the **4>** prompt, enter **go**.
12. Press **Return**.

When the optimization processing is complete, OSQL displays a **1>** prompt.

## SQL server

An SQL server Database Administrator may use the **SQL Query Analyzer** tool to update statistics for all DocuShare tables and indexes. The SQL Query Analyzer is part of the Microsoft SQL Server Enterprise Manager, and only members of **sysadmin** can access the database management tools. Optionally, the DBA may choose to use the SQL Query Analyzer window to run the commands database optimization commands shown in *Microsoft SQL Server Desktop Engine (MSDE)*.



**CAUTION:** Only an experienced Microsoft SQL Server DBA should use the analyzer. Creating unnecessary indexes can severely degrade database performance.

## PostgreSQL

You may optimize a PostgreSQL database by running **vacuumdb**. Depending on the underlying operating system, you may run vacuumdb in either a common prompt window or in a shell window while logged in either as **root** or as the **Postgre** user.

Run the command line **vacuumdb -d [yourdatabase] -f -z -e**, replacing the bracketed name with the name of your DocuShare database file.



**CAUTION:** To preserve your PostgreSQL indexes, do not use the PostgreSQL cluster command. Cluster will physically reorder your index information.

## Oracle

You can optimize your Oracle database by keeping database statistics current. Run **dbms\_stats.gather\_schema\_stats** to gather database statistics for the DocuShare schema, or alternatively run **dbms\_stats.gather\_table\_stats** to gather statistics on individual tables.



**TECH NOTE:** For best optimization results, we recommend that you run only **dbms\_stats.gather\_table\_stats**.

### A sample script to gather statistics for the whole schema:

```
exec dbms_stats.gather_schema_stats(ownname => upper('&schema_name'), cascade
=> TRUE, options => 'GATHER');
```

### A sample script to gather statistics for individual tables:

```
execute dbms_stats.gather_table_stats( ownname => upper('&schema_name'), tablename
=> 'DSObject_table', estimate_percent =>dbms_stats.auto_sample_size, cascade =>
TRUE, method_opt => 'FOR ALL INDEXED COLUMNS');
```

```
execute dbms_stats.gather_table_stats( ownname => upper('&schema_name'), tablename
=> 'ACL_table', estimate_percent =>dbms_stats.auto_sample_size, cascade => TRUE,
method_opt => 'FOR ALL INDEXED COLUMNS');
```

```
execute dbms_stats.gather_table_stats( ownname => upper('&schema_name'), tablename
=> 'Link_table', estimate_percent =>dbms_stats.auto_sample_size, cascade => TRUE,
method_opt => 'FOR ALL INDEXED COLUMNS');
```

## DocuShare site customization

---

There are a number of ways you can customize your DocuShare site to give it a unique look and feel. Some customization requires admin privileges, while other customization requires programming experience using html/xml editors and tools.

Ways to customize your DocuShare site include the following:

- **Site styles customization** requires admin privileges.
- **DocuShare VDF interface customization** requires experience programming in XML.
- **Custom scripts and client applications** requires experience programming in Microsoft Visual Basic, Visual Basic for Applications, Visual Basic Script, or C++.

### Site styles customization

You can use the tools available through the Administration menu to make minor changes to your DocuShare site.

#### Create custom properties

You can use the Administration menu / Object Properties tools to create custom object properties such as new input fields and new menus. You can also use the Custom Objects tool to create new object classes for your site. Refer to Chapter 4, Object Properties for details on creating custom properties and custom objects.

#### Change site configuration

You can use the Administration menu / Site Management / Site Configuration tool to customize a number of site attributes, such as the page background color. Refer to Chapter 8, Site Management for details on changing your site configuration.

#### Home page collections

You can configure any collection to appear on the site home page merely by going to the Properties page of any collection and selecting the **Appears on Home Page** radio button.

### DocuShare interface customization (XML)

If you are experienced in programming in XML, you can customize the DocuShare VDF interface pages to include unique art, fonts, colors, and fields. Refer to the *VDF Reference Guide* for details on interface customization.

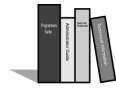
### Custom scripts and client applications

If you are experienced in Microsoft Visual Basic, Visual Basic for Applications, Visual Basic Script, or C++, you can use the optional DocuShare Software Developer Environment to write custom scripts and create Windows client applications for use with your DocuShare site.

## Command line utilities

---

There are times when you will need to enter command lines in the command prompt window. Some commands lines are used frequently, such as when using command line utilities to back up or restore site data. Some command line utilities are used less frequently, such as when you use batch commands to relocate a large number of files or when you use command lines in a script to automate a repetitive function.



**RESOURCES:** For more information on using DocuShare command line utilities, refer to the Command Line Utilities Guide that is available on the site Help Desk.



# Site troubleshooting

---

There may be times when you have problems with your DocuShare site or with specific site functionality. Follow the three step process show below to guide you through the troubleshooting process.

## 1 — Simple troubleshooting techniques

1. If you have recently changed something about your site, such as a configuration setting, return the setting to how it was before you made the change.
2. If you cannot open a recently uploaded document, try opening the document at its original source to determine if the original document is damaged. Locate on your site another document with the same file extension, and try opening that document to see if the problem is with DocuShare or with the document.
3. Refer to the **Solving common problems** section at the end of this chapter for a possible solution.
4. Refer to the site logs for a record of site problems. The DSService log might provide the most information, or read the log that you feel could be related to your specific problem.
5. If your site relies on external databases for authentication or data storage, check to make sure those services are running and functioning correctly.

## 2 — Use the online support assistant

If step 1 does not solve your problem, then:

1. Go to **<http://swsupport.xerox.com/products/docushare>** to access the DocuShare Online Support Assistant. As an alternate site, you can go to <http://docushare.xerox.com/ds30/support.html> to access the online support assistant and to locate support in a specific world region.
2. Follow the instructions on the Software Support web site telling you how to use the Online Support Assistant to locate a possible solution to your problem.
3. The latest DocuShare FAQs and product documents are also available on this web site. FAQs may contain information that can easily solve your problem.
4. You can also use **DOUG**, the DocuShare User Group site at **<http://docushare.xerox.com:8002>**. The site contains updated downloads and technical bulletins, along with pertinent information supplied by DocuShare users and customers.

## 3 — Contact DocuShare support

If step 2 does not solve your problem, then:

Contact a DocuShare Support Representative if you have a support contract for your site or if your site is still under the initial 30 day product installation support contract.

Phone – 1-800-835-9013

Email – select **Contact Us** from the menu on the Software Support web site

## Solving common problems

---

This section provides solutions to some common DocuShare problems.

### You cannot connect to a DocuShare site

#### Problem

Using Internet Explorer, you cannot connect to a specific DocuShare site.

#### Solution

You must use a proxy server if your PC is on a private intranet and you are attempting to connect to a DocuShare site that is on the Internet. Check Internet Explorer proxy server settings at Tools/Internet Options/Connections/LAN Settings.

### You cannot view a selected file

#### Problem

When you attempt to download and view a file from a DocuShare collection, either a strange or meaningless icon appears in the browser window or an **Open With** window appears.

#### Solution

1. You may not have a valid icon/application association. There are two methods to correct this problem:
  - A. In your Windows Explorer go to View/Options/File Types and edit the file icon so the correct application opens the file.
  - B. In the **Open With** window, select from the list the application you want to use to open the file. Check **Always use this program to open this type** of file if you want to make this file association permanent.
2. You may have recently installed Quicktime. Quicktime software changes your File Types TIFF file association without installing a TIFF viewer. There are two methods to correct this problem:
  - A. Custom install a TIFF viewer. Use the Quicktime custom install and install the Tiff viewer browser plug-in that is available on the Apple web site.
  - B. Use the application **wangimg.exe** to reset the file associations.
    - a. Uninstall Quicktime.
    - b. Select any TIFF file on your workstation.
    - c. Press and hold SHIFT while you right-click the TIFF file.
    - d. From the menu, click **Open With**.
    - e. In the Open With window, click **Other**.
    - f. In the Open With window, navigate to c:\program files\windows nt\accessories\imagevue\wangimg.exe.
    - g. Select wangimg.exe and click **Open**.

- h. Check **Always use this program to open this type of file** if you want to make this file association permanent.
- i. Click **OK**.

## A “permissions” error appears

### Problem

A permission error appears whenever you attempt to use the DocuShare site.

### Solution

There is probably an NT permissions problem. This problem is common when DocuShare is installed on a Primary Domain controller or on a Backup Domain controller. In most cases, the cause of the problem is that the IUSR\_[machinename] users account is not enabled. DocuShare uses this account for all read/write transactions to the NTFS file system.

Use the following procedure to correct this problem:

1. Use Windows Explorer to navigate to the DocuShare directory file.
2. Right-click the **DocuShare directory file folder**.  
A menu appears.
3. Select **Properties**.  
The DocuShare Properties window appears.
4. Click the **Securities** tab in the Properties window.
5. Click the **Permissions** button in the Securities window.  
The Directory Permissions window appears.
6. Check **Replace Permissions on Subdirectories** and **Replace Permissions on Existing Files**.
7. Click **OK**.



**TECH NOTE:** DocuShare requires the IUSR\_[ComputerName] account directories to have the following NTFS permissions:

- Read permission to the drive that holds your DocuShare site.
- RWXD permission to the Temp directory.
- RWXD permission to the DocuShare directory structure.
- RWX/RX to the \winnt\system32\inetssrv directory.

## You cannot download DocuShare files

### Problem

You can add and view files on your DocuShare site, but when you attempt to download a file, the browser displays the error **The page cannot be displayed**.

### Solution

There is a bug in the Microsoft Windows NT Service Pack 6 software that prevents DocuShare from working correctly. If your server is running NT SP6, go to the Microsoft web site. Download and run the sslune41.exe hotfix.



**TECH NOTE:** If the problem still occurs, check the version number of **w3svc.dll** located in `winnt\system32\inetrv`. The correct version should be 4.02.728. If the version number is not correct, then rerun sslune41.exe.

## Your DocuShare site performance seems slow

### Problem

DocuShare overall performance seems slow. The performance of other applications running on the same server appears to be normal.

### Solution

There are two possible solutions for this problem:

1. If performance slows only when you access a particular collection, check to make sure that the collection contains no more than 50 objects. It takes time for the server to dynamically build the collection htm file before the browser can display it. The more files within a collection, the longer it takes to build the htm file. Break up large collections into a number of smaller ones.
2. Check the server virus scan software settings. DocuShare performance slows if you have Enable-On-Access selected. To improve DocuShare performance:
  - a. Deselect Enable-On-Access scanning.
  - b. Exclude from scanning the entire DocuShare directory. Do not exclude the DocuShare/documents directory.
  - c. Deselect scanning outbound files.

## **You get a Size Exceeded warning when using MSDE for your database**

### **Problem**

When using MSDE for your database, you get a Size Exceeded warning, even though you know you have not exceeded the specified 2GB maximum size limit.

### **Solution**

The revised maximum size limit for an MSDE database is 1.82GB.



# 4

## Object properties

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**NOTE:** Only logged in admin, Site, and Content Administrators see the Object Properties menu.

## Object properties overview

### Object metaphor

DocuShare is built around an **object metaphor**. Objects form the basis of a DocuShare site. There are currently twelve default DocuShare object classes. Each default object class has a specific name and representative icon.

Each individual site object, such as a specific collection, a specific user, or a specific document, is based either on a default object class or on custom object class. Each individual object has unique property values that can be modified by the object owner or by an administrator. Each individual object also has a unique handle, such as User-55 for an individual user object or Collection-122 for an individual collection object.

Using DocuShare tools, an administrator may edit, relocate, rename, or delete individual objects. An administrator may also edit and change the label name of the default class objects. Note that if you change the label name of a default class object, it still retains the original handle name. For example, if you change the Document class object label to File, the handle remains Document, as in Document-20.

Table 4–1: Default object classes

Object Class	Description
Calendar	A site calendar. Users enter reminders, or events, on specific calendar days.
Collection	A DocuShare equivalent of a folder. Anyone can create a new collection. Users place other objects, such as documents or calendars, inside collections. Collections may also contain other collections.
Discussion	A site discussion board. Users post topics on the a discussion board.
Document	A file stored on a DocuShare site, such as a .doc file.
Event	A calendar entry, such as a meeting day and time. Used in conjunction with calendar objects.
Group	An assemblage of users, groups, or both.
Mail Message	A DocuShare secure mail message.
Saved Query	Saved DocuShare search terms.
Subscription	When applied to an object, subscription emails data changes to all subscribed users.
Topic	A message created by a user for posting on a discussion board.
URL	A standard WWW address.
User	A registered user account.



## Object class default properties and property values

An administrator has the authority to change the default property and property values of all object classes on a site. Each object class has an associated set of base properties and default property values that help to define the character and function of that object class.

As an example, the DocuShare object class **User** has **Email Format** as a default property and either **Plain Text** or **HTML** as the default property value. As an administrator, you can use tools in the Administration menu to both modify the Email Format properties and select either Plain Text or HTML as the default property value. With some object properties you select default values either from a menu or from radio buttons. Other object properties provide a field where you may enter text.

On the object class property pages, each property field displays associated information about the property and the current value of the property. [Table 4–2](#) explains the meaning of that information. Property fields generally vary between object classes.

Table 4–2: Common property fields

Property Information	Description
Label	The current name of the property.
Type	The data type of the property value, such as a string or a menu.
Required	If checked, it means a value is necessary to create this object.
Read Only	If checked, it means the property was given a value when first created and cannot be changed.
Default Value	The current default value, if any, that appears in a property field of an object class. Users may change a default property value when they create a new object from the object class.
Help Text	Text that appears when you click the field label.

Default properties and default property values are global and appear throughout your site as properties for both newly created and existing objects. Owners of individual objects may choose to change a default property value, but they may not edit nor delete an object class property.

An administrator may configure some properties so that a property value is required. DocuShare displays an error message if the creator of an object fails to enter data into a required field on an object properties page.

DocuShare holds in session, all object property changes. When you have completed your changes to default property values, you then navigate to **Update Properties**, where you can review, change, delete, or save all of your changes.

## Using Global Properties

Use **Object Properties/Global Properties** to edit the default properties and the default property values of specific properties that are common to all object classes on a site. Changes made to a property through Global Properties are reflected in each object class. You can add new properties by using the **Add Custom Property** menu. All new properties created on the Global Properties page appear as properties of all object classes on the site.

As with all edits to object class properties, go to the **Update Properties** page to review and save your changes.

## Using display sequence

Each object class properties page has a **Display Sequence** tool that allows you to select and order specific properties for that object class. Simply enter the order of display, 1 being the top of the list, and click **Update Sequence**. As with all edits to object class properties, go to the **Update Properties** page to review and save your changes. Now only those properties you selected are listed in all instances of the object class.

If you want to return to the default list of properties for that object class, simply click **Remove Custom Sequence**, go to the **Update Properties** page to review and save your changes. Now the system default properties are listed in all instances of the object class.

## Changing the property values of individual objects

Owners of site objects can change the property values of their own objects, but as a logged-in admin, Site, or Content Administrator you have the authority to change the property values of all individual objects on your site. If you have correct administrator privileges and you are on the user side of your DocuShare site, clicking the properties icon that appears next to an object displays a properties page for that object. By editing the properties page, you can change specific property values, such as a user password or members of a group. You can also delete the object.

If you are working on the administration side of your DocuShare site, you can **List Users** or **List Groups**, then click on any account in the list to display the properties page for that account. By editing the properties page, you can change the property values of the account or you can delete the account.

## Link types

Link types appear at the bottom of various property pages and provide object relational information for DocuShare programing.

DocuShare uses links to describe relationships between two different objects. A link consists of two linked objects and a link type that describes the type relationship that exists. One end of the link is the **source**, or parent object, and the other end of the link is the **destination**, or child object.

**Source** lists the link type relationship in which Collection can be the source object end of the link.

**Destination** lists the link type relationship in which Collection can be the destination object end of the link.

**Container Destination** lists the link types in the Destination list that are a container link relationship, where Collection can be the contained object in a link of these link types.

As an example; document objects can be in a **version** relationship. The role of the document can be to contain document versions. Since only objects that have a Containment and draft/Containment role may contain documents, a version cannot be a container for a document object.

For more information on links and link types, refer to the DocuShare Java Programmer's Guide available in the optional DocuShare Developer's Environment (DSDE).

## Creating custom properties

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Using the Add Custom Property menu, you can add, edit, or delete custom properties for any DocuShare object class. For example, you could use the Add Custom Property menu to create a Budget Center fill-in field for each user on your site, or you could create a list of meeting rooms that are available for calendar event objects. Each object properties page contains an Add Custom Property menu that lists the available types of custom properties.

### Types of custom properties available

- **Boolean**—Create a property field that accepts either a true or a false value. You must specify displayed labels for the choices, such as Yes and No.
- **Date**—Create a property field that accepts numeric values in date format, with each value separated by either a forward slash (/), a dash (-), or a comma (.). The DocuShare system converts the date into the correct internal format.
- **Email**—Create a property field that accepts an email address.
- **Float**—Create a property field that accepts a floating point value. You can specify a minimum and maximum float value. DocuShare generates and displays an error message if the user enters a value that is out of range.
- **Integer**—Create a property field that accepts integer values. You can specify a minimum and a maximum integer value. DocuShare generates and displays an error message if the user enters a value that is out of range.
- **Menu**—Create a menu that displays entered values. Use a comma to separate each item you want listed in the menu.
- **String**—Create a property field that accepts a string value. The standard property summary is an example of a string property.
- **Text**—Create a property field that accepts an arbitrary length text value. The standard property description is an example of a text property. Text properties are indexed as stream data. DocuShare applies all advanced word searches, such as word stemming, to stream data.
- **URL**—Create a property field that accepts a URL as a string value.

### To create a custom property

To create a custom property for an object class:

1. In the Object Properties category of the **Administration** menu, click the **object class**, such as Bulletin, that you want to edit.  
The property page for that object class appears.
2. From the **Add Custom Property** menu located near the top of the page, select the type of property you want to add to the object.
3. Click **Go**.  
The Add Property page appears.  
[Click any field name to view help for that particular field.](#)
4. Enter information into the fields presented for your specific object property page.  
You must enter data into all fields that are designated as **required**.



**NOTE:** When adding a Menu property to an object class, make sure you enter a **menu item ID**, not an item Label, in the **Default Value** field.

If you add a **required** Menu property to an object class and you do not fill in the **Default Value** field, the system enters, as the default value, the value of the first item in the menu Choices field. If you do not want a default value for your menu, create a new item in the **Choices** field with an **ID** of **\_blank\_**; leave the **Label** field empty; and enter **\_blank\_** in the **Default Value** field.

5. Click **Add**.

DocuShare adds the custom property to the object class.

6. Click **Object Properties / Update Properties**.

The Update Properties page appears.

7. Review your changes and, if necessary, return to the object property page to modify your custom property.

8. When you are satisfied with your changes, click **Submit**.

DocuShare saves your custom property. All objects of this class now display this property.

## To edit a custom property

To edit a custom object class property:

1. In the Object Properties category of the **Administration** menu, click the **object class**, such as Bulletin, that you want to edit.

The object property page appears.

2. To change a custom property, locate the appropriate property and click **Edit** next to that property.

An Edit Property page appears.

[Click any field name to view help for that particular field.](#)

3. Change the appropriate property on the Edit Property page.

4. When you have finished, click **Update**.

DocuShare saves the changes.

5. When you have finished making changes to the object class, click **Object Properties / Update Properties**.

The Update Properties page appears.

6. Review your changes and, if necessary, return to the object property page to modify the changes.

7. When you are satisfied with your changes, click **Submit**.

DocuShare saves your changes and applies them to all objects of this object class.

## To delete a custom property

You may delete only custom properties. A delete button does not appear for system properties.

To delete a custom object class property:

1. In the Object Properties category of the **Administration** menu, click the **object class**, such as Bulletin, that you want to edit.  
The object property page appears.
2. To delete a custom property, locate the appropriate property and click **Edit** next to that property.  
An Edit Property page appears.
3. Click **Delete**.
4. Click **Object Properties / Update Properties**.  
The Updated Properties page appears.
5. Review your changes and, if necessary, return to the object property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.  
DocuShare deletes the property from all of the objects of this object class.

## Calendar properties

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Use **Object Properties / Calendar** to make changes to the default properties and default property values for the object class **calendar**. Changes you make to the calendar property values are global and apply to both new and existing calendar objects.

To change calendar object class default properties and default property values:

1. From the **Administration** menu, click **Object Properties / Calendar**.  
The calendar property page appears.
2. To change a property or a default property value, locate the appropriate property and click **Edit** next to that property.  
An Edit Property page appears.  
[Click any field name to view help for that particular field.](#)
3. Change the appropriate properties and values on the Edit Property page.
4. When you have finished, click **Update**.  
DocuShare saves the changes.
5. When you have finished making changes to the calendar object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
6. Review your changes and if necessary, return to the calendar property page to modify the changes.
7. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all calendar objects.

To create a custom default property for the calendar object class:

1. From the **Administration** menu, click **Object Properties / Calendar**.  
The calendar property page appears.
2. Select a custom property from the **Add Custom Property** menu and click **Go**.  
The Add Property page appears.
3. Change the appropriate properties on the Add Property page and click **Add**.  
DocuShare adds the new property to the calendar property page.
4. When you have finished making changes to the calendar object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.  
[Click any field name to view help for that particular field.](#)
5. Review your changes and if necessary, return to the calendar property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all calendar objects.

## Collection properties

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Use **Object Properties / Collection** to make changes to the default properties and default property values for the object class **collection**. Changes you make to the collection property values are global and apply to both new and existing collection objects.

To change collection object class default properties and default property values:

1. From the **Administration** menu, click **Object Properties / Collection**.  
The collection property page appears.
2. To change a property or a default property value, locate the appropriate property and click **Edit** next to that property.  
An Edit Property page appears.  
[Click any field name to view help for that particular field.](#)
3. Change the appropriate properties and values on the Edit Property page.
4. When you have finished, click **Update**.  
DocuShare saves the changes.
5. When you have finished making changes to the collection object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
6. Review your changes and if necessary, return to the collection property page to modify the changes.
7. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all collection objects.

To create a custom default property for the collection object class:

1. From the **Administration** menu, click **Object Properties / Collection**.  
The collection property page appears.
2. Select a custom property from the **Add Custom Property** menu and click **Go**.  
The Add Property page appears.  
[Click any field name to view help for that particular field.](#)
3. Change the appropriate properties on the Add Property page and click **Add**.  
DocuShare adds the new property to the collection property page.
4. When you have finished making changes to the collection object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
5. Review your changes and if necessary, return to the collection property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all collection objects.



## Discussion properties

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Use **Object Properties / Discussion** to make changes to the default properties and default property values for the object class **discussion**. Changes you make to the discussion property values are global and apply to both new and existing discussion objects.

To change discussion object class default properties and default property values:

1. From the **Administration** menu, click **Object Properties / Discussion**.  
The discussion property page appears.
2. To change a property or a default property value, locate the appropriate property and click **Edit** next to that property.  
An Edit Property page appears.  
[Click any field name to view help for that particular field.](#)
3. Change the appropriate properties and values on the Edit Property page.
4. When you have finished, click **Update**.  
DocuShare saves the changes.
5. When you have finished making changes to the discussion object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
6. Review your changes and if necessary, return to the discussion property page to modify the changes.
7. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all discussion objects.

To create a custom default property for the discussion object class:

1. From the **Administration** menu, click **Object Properties / Discussion**.  
The discussion property page appears.
2. Select a custom property from the **Add Custom Property** menu and click **Go**.  
The Add Property page appears.
3. Change the appropriate properties on the Add Property page and click **Add**.  
DocuShare adds the new property to the discussion property page.
4. When you have finished making changes to the discussion object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
5. Review your changes and if necessary, return to the discussion property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all discussion objects.

## Document properties

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Use **Object Properties / Document** to make changes to the default properties and default property values for the object class **document**. Changes you make to the document property values are global and apply to both new and existing document objects.

To change document object class default properties and default property values:

1. From the **Administration** menu, click **Object Properties / Document**.  
The document property page appears.
2. To change a property or a default property value, locate the appropriate property and click **Edit** next to that property.  
An Edit Property page appears.  
[Click any field name to view help for that particular field.](#)
3. Change the appropriate properties and values on the Edit Property page.
4. When you have finished, click **Update**.  
DocuShare saves the changes.
5. When you have finished making changes to the document object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
6. Review your changes and if necessary, return to the document property page to modify the changes.
7. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all document objects.

To create a custom default property for the document object class:

1. From the **Administration** menu, click **Object Properties / Document**.  
The document property page appears.
2. Select a custom property from the **Add Custom Property** menu and click **Go**.  
The Add Property page appears.
3. Change the appropriate properties on the Add Property page and click **Add**.  
DocuShare adds the new property to the document property page.
4. When you have finished making changes to the document object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
5. Review your changes and if necessary, return to the document property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all document objects.

## Event properties

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Use **Object Properties / Event** to make changes to the default properties and default property values for the object class **event**. Changes you make to the event property values are global and apply to both new and existing event objects.

To change event object class default properties and default property values:

1. From the **Administration** menu, click **Object Properties / Event**.  
The event property page appears.
2. To change a property or a default property value, locate the appropriate property and click **Edit** next to that property.  
An Edit Property page appears.  
[Click any field name to view help for that particular field.](#)
3. Change the appropriate properties and values on the Edit Property page.
4. When you have finished, click **Update**.  
DocuShare saves the changes.
5. When you have finished making changes to the event object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
6. Review your changes and if necessary, return to the event property page to modify the changes.
7. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all event objects.

To create a custom default property for the event object class:

1. From the **Administration** menu, click **Object Properties / Event**.  
The event property page appears.
2. Select a custom property from the **Add Custom Property** menu and click **Go**.  
The Add Property page appears.
3. Change the appropriate properties on the Add Property page and click **Add**.  
DocuShare adds the new property to the event property page.
4. When you have finished making changes to the event object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
5. Review your changes and if necessary, return to the event property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all event objects.

## Group properties

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Use **Object Properties / Group** to make changes to the default properties and default property values for the object class **group**. Changes you make to the group property values are global and apply to both new and existing group objects.

To change group object class default properties and default property values:

1. From the **Administration** menu, click **Object Properties / Group**.  
The group property page appears.
2. To change a property or a default property value, locate the appropriate property and click **Edit** next to that property.  
An Edit Property page appears.  
[Click any field name to view help for that particular field.](#)
3. Change the appropriate properties and values on the Edit Property page.
4. When you have finished, click **Update**.  
DocuShare saves the changes.
5. When you have finished making changes to the group object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
6. Review your changes and if necessary, return to the group property page to modify the changes.
7. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all group objects.

To create a custom default property for the group object class:

1. From the **Administration** menu, click **Object Properties / Group**.  
The group property page appears.
2. Select a custom property from the **Add Custom Property** menu and click **Go**.  
The Add Property page appears.
3. Change the appropriate properties on the Add Property page and click **Add**.  
DocuShare adds the new property to the group property page.
4. When you have finished making changes to the group object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
5. Review your changes and if necessary, return to the group property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all group objects.

## Mail Message properties

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Use **Object Properties / Mail Message** to make changes to the default properties and default property values for the object class **mail message**. Changes you make to the mail message property values are global and apply to both new and existing mail message objects.

To change mail message object class default properties and default property values:

1. From the **Administration** menu, click **Object Properties / Mail Message**.  
The mail message property page appears.
2. To change a property or a default property value, locate the appropriate property and click **Edit** next to that property.  
An Edit Property page appears.  
[Click any field name to view help for that particular field.](#)
3. Change the appropriate properties and values on the Edit Property page.
4. When you have finished, click **Update**.  
DocuShare saves the changes.
5. When you have finished making changes to the mail message object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
6. Review your changes and if necessary, return to the mail message property page to modify the changes.
7. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all mail message objects.

To create a custom default property for the mail message object class:

1. From the **Administration** menu, click **Object Properties / Mail Message**.  
The mail message property page appears.
2. Select a custom property from the **Add Custom Property** menu and click **Go**.  
The Add Property page appears.
3. Change the appropriate properties on the Add Property page and click **Add**.  
DocuShare adds the new property to the mail message property page.
4. When you have finished making changes to the mail message object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
5. Review your changes and if necessary, return to the mail message property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all mail message objects.

## Saved query properties

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Use **Object Properties / Saved Query** to make changes to the default properties and default property values for the object class **saved query**. Changes you make to the saved query property values are global and apply to both new and existing saved query objects.

To change saved query object class default properties and default property values:

1. From the **Administration** menu, click **Object Properties / Saved Query**.  
The saved query property page appears.
2. To change a property or a default property value, locate the appropriate property and click **Edit** next to that property.  
An Edit Property page appears.  
[Click any field name to view help for that particular field.](#)
3. Change the appropriate properties and values on the Edit Property page.
4. When you have finished, click **Update**.  
DocuShare saves the changes.
5. When you have finished making changes to the saved query object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
6. Review your changes and if necessary, return to the saved query property page to modify the changes.
7. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all saved query objects.

To create a custom default property for the saved query object class:

1. From the **Administration** menu, click **Object Properties / Saved Query**.  
The saved query property page appears.
2. Select a custom property from the **Add Custom Property** menu and click **Go**.  
The Add Property page appears.
3. Change the appropriate properties on the Add Property page and click **Add**.  
DocuShare adds the new property to the saved query property page.
4. When you have finished making changes to the saved query object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
5. Review your changes and if necessary, return to the saved query property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all saved query objects.

## Subscription properties

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Use **Object Properties / Subscription** to make changes to the default properties and default property values for the object class **subscription**. Changes you make to the subscription property values are global and apply to both new and existing subscription objects.

To change subscription object class default properties and default property values:

1. From the **Administration** menu, click **Object Properties / Subscription**.  
The subscription property page appears.
2. To change a property or a default property value, locate the appropriate property and click **Edit** next to that property.  
An Edit Property page appears.  
[Click any field name to view help for that particular field.](#)
3. Change the appropriate properties and values on the Edit Property page.
4. When you have finished, click **Update**.  
DocuShare saves the changes.
5. When you have finished making changes to the subscription object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
6. Review your changes and if necessary, return to the subscription property page to modify the changes.
7. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all subscription objects.

To create a custom default property for the subscription object class:

1. From the **Administration** menu, click **Object Properties / Subscription**.  
The subscription property page appears.
2. Select a custom property from the **Add Custom Property** menu and click **Go**.  
The Add Property page appears.
3. Change the appropriate properties on the Add Property page and click **Add**.  
DocuShare adds the new property to the subscription property page.
4. When you have finished making changes to the subscription object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
5. Review your changes and if necessary, return to the subscription property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all subscription objects.

## Topic properties

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Use **Object Properties / Topic** to make changes to the default properties and default property values for the object class **topic**. Changes you make to the topic property values are global and apply to both new and existing topic objects.

To change topic object class default properties and default property values:

1. From the **Administration** menu, click **Object Properties / Topic**.  
The topic property page appears.
2. To change a property or a default property value, locate the appropriate property and click **Edit** next to that property.  
An Edit Property page appears.  
[Click any field name to view help for that particular field.](#)
3. Change the appropriate properties and values on the Edit Property page.
4. When you have finished, click **Update**.  
DocuShare saves the changes.
5. When you have finished making changes to the topic object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
6. Review your changes and if necessary, return to the topic property page to modify the changes.
7. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all topic objects.

To create a custom default property for the topic object class:

1. From the **Administration** menu, click **Object Properties / Topic**.  
The topic property page appears.
2. Select a custom property from the **Add Custom Property** menu and click **Go**.  
The Add Property page appears.
3. Change the appropriate properties on the Add Property page and click **Add**.  
DocuShare adds the new property to the topic property page.
4. When you have finished making changes to the topic object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
5. Review your changes and if necessary, return to the topic property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all topic objects.



## URL properties

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Use **Object Properties / URL** to make changes to the default properties and default property values for the object class **URL**. Changes you make to the URL property values are global and apply to both new and existing url objects.

To change URL object class default properties and default property values:

1. From the **Administration** menu, click **Object Properties / URL**.  
The URL property page appears.
2. To change a property or a default property value, locate the appropriate property and click **Edit** next to that property.  
An Edit Property page appears.  
[Click any field name to view help for that particular field.](#)
3. Change the appropriate properties and values on the Edit Property page.
4. When you have finished, click **Update**.  
DocuShare saves the changes.
5. When you have finished making changes to the URL object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
6. Review your changes and if necessary, return to the URL property page to modify the changes.
7. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all URL objects.

To create a custom default property for the URL object class:

1. From the **Administration** menu, click **Object Properties / URL**.  
The URL property page appears.
2. Select a custom property from the **Add Custom Property** menu and click **Go**.  
The Add Property page appears.
3. Change the appropriate properties on the Add Property page and click **Add**.  
DocuShare adds the new property to the URL property page.
4. When you have finished making changes to the URL object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
5. Review your changes and if necessary, return to the URL property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all URL objects.

## User properties

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Use **Object Properties / User** to make changes to the default properties and default property values for the object class **user**. Changes you make to the user property values are global and apply to both new and existing user objects.

To change user object class default properties and default property values:

1. From the **Administration** menu, click **Object Properties / User**.  
The user property page appears.
2. To change a property or a default property value, locate the appropriate property and click **Edit** next to that property.  
An Edit Property page appears.  
[Click any field name to view help for that particular field.](#)
3. Change the appropriate properties and values on the Edit Property page.
4. When you have finished, click **Update**.  
DocuShare saves the changes.
5. When you have finished making changes to the user object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
6. Review your changes and if necessary, return to the user property page to modify the changes.
7. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all user objects.

To create a custom default property for the user object class:

1. From the **Administration** menu, click **Object Properties / User**.  
The user property page appears.
2. Select a custom property from the **Add Custom Property** menu and click **Go**.  
The Add Property page appears.
3. Change the appropriate properties on the Add Property page and click **Add**.  
DocuShare adds the new property to the user property page.
4. When you have finished making changes to the user object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
5. Review your changes and if necessary, return to the user property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all user objects.

## Custom object

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Use **Object Properties / Custom Object** to create, modify, and delete new object classes for your DocuShare site.

To create a new object class:

1. From the **Administration** menu, click **Object Properties / Custom Object**.  
The Custom Object page appears.
2. In the **Name** field, enter a name for your object.  
This is the classname. The name you enter can be either upper or lowercase letters, with underscores and numbers. The classname must begin with a letter.
3. In the **Label** field, enter a label for your object.  
This is the name of your class as it appears on the property page. The label you enter may be upper or lower case, and may contain numbers, special characters, and spaces.
4. From the **Clone** menu, select an object class.  
Your new object inherits the properties of the object that you select from the Clone menu. Your new object class creates a new handle name that is based on the object label. For example, if the label is Invoice, the handle will be Invoice-#.
5. Click **Create**.  
A property page appears displaying the properties of the custom object that you just created.



**NOTE:** Immediately after you create a custom object class, the property page displays only a few of the properties of the clone. This is normal and indicates that you haven't yet updated the site database. After you click Submit on the Update Properties page, DocuShare adds the custom object class to the site database, so the next time you open the properties page of the new custom object class, all of the properties of the clone will be displayed.

6. Click **Object Properties / Update Properties**.  
The Update Properties page appears.
7. Review your changes and if necessary, return to the object property page to modify the changes.
8. When you are satisfied with your changes, click **Submit**.  
DocuShare saves your changes and applies them to your new object.

To change custom object class properties and default property values:

1. From the **Administration** menu, click **Object Properties / Custom Object**.  
The Custom Object page appears.
2. Select the object you want from the **Custom Objects** menu.
3. Click **Edit**.  
The property page for the custom object appears.
4. To change a property, locate the appropriate property and click **Edit** next to that property.  
A property page appears.
5. Change the appropriate properties on the Edit Property page.  
Click a property name for information about that property.
6. When you have finished, click **Update**.  
DocuShare saves the changes.
7. When you have finished making changes to the object class, click **Object Properties / Update Properties**.  
The Update Properties page appears.
8. Review your changes and if necessary, return to the object property page to modify the changes.
9. When you are satisfied with your changes, click **Submit**.  
DocuShare saves your changes and applies them to all of the custom objects.

To rename a custom object class:



**NOTE:** **Label** is the name of the custom object as it appears on the object property page. **Name** is the system name of the custom object and is used by the DocuShare system. You can change the Label of a custom object, but you cannot change the system Name of a custom object. To change the system Name of a custom object, you must first delete the object and then create a new custom object, giving it a different Name.

1. From the **Administration** menu, click **Object Properties / Custom Object**.  
The Custom Object page appears.
2. Select the object you want from the **Custom Objects** menu.
3. Click **Rename**.  
The Rename Custom Object page appears.
4. In the **Label** field, enter a new name for the object and click **Apply**.  
DocuShare renames the custom object.

To delete a custom object class:



**NOTE:** You cannot delete a custom object class if there are instances of that custom object anywhere on your site. You must first locate and delete from your site, all instances of the custom object before you can delete the custom object class.

1. From the **Administration** menu, click **Object Properties / Custom Object**.

The Custom Object page appears.

2. Select the object that you want to delete from the **Custom Objects** menu and click **Edit**.

The custom object property page appears.

3. Click **Delete**.

DocuShare removes the custom object from your site.

## Global properties

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Use **Object Properties/Global Properties** to edit the common default properties of all site object classes. Changes made on this page appear as changes to all objects that have these common properties. For instance, if you want to change a common property name, such as **Title**, to perhaps **Caption**, you use Global Properties to make that change. Now all object classes that had Title as a default property, now have Caption instead.

Properties assigned to Global Properties are no longer editable on individual object property pages. You must use Global Properties to make any changes.

You may use Global Properties to create new properties. These new properties appear as default properties of all site objects.

To change object class default properties and default property values:

1. From the **Administration** menu, click **Object Properties / Global Properties**.  
The Global Properties page appears.
2. To change a property or a default property value, locate the appropriate property and click **Edit** next to that property.  
An Edit Property page appears.  
[Click any field name to view help for that particular field.](#)
3. Change the appropriate properties and values on the Edit Property page.  
Changes made to a property through Global Properties are reflected in each object class on your site.
4. When you have finished, click **Update**.  
DocuShare saves the changes.
5. When you have finished making changes, click **Object Properties / Update Properties**.  
The Update Properties page appears.
6. Review your changes and if necessary, return to the object property page to modify the changes.
7. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your changes to all object property pages.

To create a custom default property for all object classes:

1. From the **Administration** menu, click **Object Properties / Global Properties**.  
The Global Properties page appears.
2. Select a custom property from the **Add Custom Property** menu and click **Go**.  
The Add Property page appears.
3. Change the appropriate properties on the Add Property page and click **Add**.  
New properties added through Global Properties are reflected in each object class on your site.

4. When you have finished making changes, click **Object Properties / Update Properties**.

The Update Properties page appears.

5. Review your changes and if necessary, return to the object property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.  
DocuShare applies your new properties to all object property pages.

## Update properties

---

Use **Object Properties / Update Properties** to review and modify all of the property changes that you made during an object properties editing session. Using Update Properties saves site down time by batching all of your changes into a single update.

To complete your property change session:

1. From the **Administration** menu, click **Object Properties / Update Properties**.  
The Update Properties page appears.
2. Review all of your changes and if necessary, return to the property pages for the objects that you modified and make the necessary corrections.
3. From the **Re-index When** menu, select when you want DocuShare to reindex the database.



**NOTE:** Depending on the size of your DocuShare site, reindexing could take several hours to complete. We recommend that you reindex after normal work hours.

- **Later, by typing dsindex\_all** means that after you have completed the update, you must open a command prompt window and manually run the dsindex\_all command line utility. If you do not run dsindex\_all, your object property changes will not show up in site searches.
  - **Immediately after property updates** means that after you click Submit, DocuShare automatically runs the dsindex\_all command.
4. When you have finished editing your property changes, click **Submit**.  
DocuShare adds the properties to the selected object property pages.



# 5

## Account management

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**NOTE:** All logged in admin, Site, Content, and Account administrators see the Account Management menu. A Content Administrator sees only a subset of the Account Management menu. A limited Site Administrator does not see the Account Management menu.

## List users

---

Use **Account Management / Users / List Users** to display an alphabetized list of site users and associated handle numbers. **List Users** is a quick way to find out who is registered on your site or in any domain on your site. By clicking any name on the list you can display and edit the properties and password for that user.

To list all of the registered user accounts on your site:

1. From the **Administration** menu, click **Account Management / Users / List Users**.

The List Users page appears, listing the name and handle number of each user account that is currently in your site registry.

2. From the **Show users from** menu, select a domain.

The List Users page appears, listing the name and handle number of each user account that is currently in the domain you selected.



**NOTE:** If you have just added an external domain to your DocuShare site and the List Users page is empty when you run **List Users** for that external domain, you must first run **LDAP Accounts / Add** to add external user accounts to the domain.

To view or edit the properties of a specific account that is displayed in the user list:

1. Click any user within the list of names to display the property page for that particular user.

The User Services page lists all of the current property values for that user.

[Click any field name to view help for that particular field.](#)

2. To edit property values for the user, select a task from the **Edit** menu.

A task User Services page appears.



**NOTE:** Passwords and usernames of users assigned to an external domain must be changed by the LDAP administrator at the LDAP server. Using DocuShare to change an external account password or username will prevent user authentication the next time the user attempts to log into DocuShare. When you have selected a task from the **Edit** menu, click **Go**.

3. Edit the appropriate fields on the User Services page.
4. When you have finished editing the User Services page, click **Apply**.  
DocuShare saves your changes to the user properties.
5. From the Administration menu click **Account Management / Users / List Users** to return to the List Users page.

## Find user

---

Use **Account Management / Users / Find User** to locate a specific registered user on your site.

To find a specific user on your site:

1. From the **Administration** menu, click **Account Management / Users / Find User**.

The Find User page appears.

[Click any field name to view help for that particular field.](#)

2. Fill in as many search fields as possible.
3. Use the **Domain** field menu to limit your search to a specific domain.
4. If you want to clear all of the fields, click **Reset**.
5. When you have finished filling in the fields, click **Find**.

A page appears displaying the results of your search.

To view or edit the properties of a specific account that is displayed in the user list:

1. Click any user within the list of names to display the property page for that particular user.

The User Services page lists all of the current property values for that user.

[Click any field name to view help for that particular field.](#)

2. To edit property values for the user, select a task from the **Edit** menu.

A task User Services page appears.



**NOTE:** Passwords and usernames of users assigned to an external domain must be changed by the LDAP administrator at the LDAP server. Using DocuShare to change an external account password or username will prevent user authentication the next time the user attempts to log into DocuShare. When you have selected a task from the **Edit** menu, click **Go**.

3. Edit the appropriate fields on the User Services page.
4. When you have finished editing the User Services page, click **Apply**.

DocuShare saves your changes to the user properties.

## Add user

---

Use **Account Management / Users / Add User** to create new user accounts on any **internal** domain on your site.



**NOTE:** To add a new user account to an external domain, you must go directly to the LDAP server. You cannot use **Add User** to create a new external domain user account.

To create a new user account on an internal domain:

1. From the **Administration** menu, click **Account Management / Users / Add User**.

The Add User page appears.

[Click any field name to view help for that particular field.](#)

2. Fill in all of the appropriate fields.

Some fields are labeled "**required**". DocuShare will not create a new user account if you do not enter information into a required field.

3. Select the correct internal domain from the **Domain** field menu.

You do not want to assign your new user to the wrong domain. Domain assignment can be changed after you create an account.

4. If you want to clear all of the fields, click **Reset**.

5. When you have completed entering information for the new user account, click **Apply**.

DocuShare adds the new user account to the site registry.

## Merge accounts

---

Use **Account Management / Users / Merge Accounts** to combine duplicate user accounts into a single user account. Before deleting the other accounts, the DocuShare account unification process takes all information associated with the selected accounts and transfers ownership, ACL, and group membership into the single account that you are retaining.

To merge multiple accounts:

1. From the **Administration** menu, click **Account Management / Users / Merge Accounts**.

The Merge Accounts page appears.

[Click any field name to view help for that particular field.](#)

2. From the **Add Accounts** field, select the accounts that you want to merge into one combined account.
3. Click **Update Account List**.

The Unify Redundant Account table appears, displaying information for all of the accounts that you selected.

4. In the **Merge Into** row of the table, select the radio button next to the account that you want to retain as the main account.

When you merge accounts, DocuShare deletes all of the accounts except the one you selected as the main account. All of the information associated with the deleted accounts is associated with the main account.

5. Click **Edit**.

The Select Accounts to be Merged page appears listing the accounts still available and the accounts that you selected to merge.

6. If there is an account listed in the **Remove Accounts** field that you do not want to merge, then select that account and click **Update Account List**.

DocuShare moves that account from the **Remove Accounts** field, back to the Add Accounts menu. That account is no longer selected to be merged.

7. If there are accounts listed in the **Add Accounts** field that you want to include in the merge list, then select that account and click **Update Account List**.

DocuShare moves that account from the **Add Accounts** field to the Remove Accounts menu. That account is selected to be merged with the other accounts that you have selected.

8. When you are satisfied with the merge list, click **Update Account List**.

The Unify Redundant Account table reappears, displaying information for all of the accounts that you selected.

9. In the **Merge Into** row of the table, make sure the radio button that you select is next to the account that you want to retain as the main account.

10. If you are ready to merge all of the accounts into the one account that you selected in the Unify Redundant Account table, click **Merge Accounts**.

The Merge Results page appears, verifying the merge operation.

## Account activity

---

Use **Account Management / Users / Account Activity** to display a report of the last time each user, including the Guest account, logged into the site.

To view the account activity report:

1. From the **Administration** menu, click **Account Management / Users / Account Activity**.

The Account Activity page appears.

[Click any field name to view help for that particular field.](#)

2. Select the appropriate **Sort Order** from the menu.
3. Click **View Report**.

DocuShare generates a list of each site user and when they last logged into the site. DocuShare displays the list in the sort order that you selected in step 2.

To view or edit the properties of a specific account that is displayed in the user list:

1. Click any user within the list of names to display the property page for that particular user.

The User Services page lists all of the current property values for that user.

2. To edit property values for the user, select a task from the **Edit** menu.

A task User Services page appears.



**NOTE:** Passwords and usernames of users assigned to an external domain must be changed by the LDAP administrator at the LDAP server. Using DocuShare to change an external account password or username will prevent user authentication the next time the user attempts to log into DocuShare. When you have selected a task from the **Edit** menu, click **Go**.

3. Edit the appropriate fields on the User Services page.
4. When you have finished editing the User Services page, click **Apply**.

DocuShare saves your changes to the user properties.

## List groups

---

Use **Account Management / Groups / List Groups** to display a list of site groups and associated handle numbers. List Groups is a quick way to find out what groups are registered on your site or in any domain on your site. By clicking any group on the list you can display and edit the properties of that group.

To list all of the registered group accounts on your site:

1. From the **Administration** menu, click **Account Management / Groups / List Groups**.  
The List Groups page appears, listing the name and handle number of each group account that is currently in your site registry.
2. From the **Show groups from** menu, select a domain.  
The List Group page appears, listing the name and handle number of each group account that is currently in the domain you selected.

To view or edit the properties of a specific account that is displayed in the group list:

1. Click any group within the list to display the property sheet for that particular group.  
The Group Services page lists all of the current property values for that group.  
[Click any field name to view help for that particular field.](#)
2. To edit property values for the group, select a task from the **Edit** menu.  
Not only can you edit the properties of the group, but you also can change the owner of the group and send an email mass mailing to all members of the group.
3. When you have selected a task from the **Edit** menu, click **Go**.  
A task Group Services page appears.
4. Edit the appropriate fields on the task Group Services page.
5. If you want to return to the saved settings, click **Reset**.
6. When you have finished editing the Group Services page, click **Apply**.  
DocuShare saves your changes to the group properties.
7. From the **Administration** menu click **Account Management / Groups / List Groups** to return to the List Groups page.

## Add group

---

Use **Account Management / Groups / Add Group** to create a new group account on any **internal** domain on your site.



**NOTE:** To add a new group account to an external domain, you must go directly to the LDAP server. You cannot use **Add Group** to create a new external domain group account.

To create a new group account:

1. From the **Administration** menu, click **Account Management / Groups / Add Group**.

The Add Group page appears.

[Click any field name to view help for that particular field.](#)

2. Fill in all of the appropriate fields.

Some fields are labeled **"required"**. DocuShare will not create a new group account if you do not enter information into a required field.

3. Make sure you choose correctly when making a selection in the **Change Membership** field.

Select **Owner** so only the owner of the group can change group membership.  
Select **Members** so current group members can change the group membership.

4. In the **Members** field, select members of the new group.

Additional members can be added, or deleted, later using the group properties page.

5. If you want to clear all of the fields, click **Reset**.
6. When you have completed entering information for the new group, click **Apply**.  
DocuShare adds a new internal group account to the site registry.



## Domains

---

Use **Account Management / Domains** to add, edit, or delete internal and external domains within local registry. Domains is visible only when the LDAP add-on is enabled. DocuShare supports the use of multiple domains, either internal to your site, external to your site, or both.

**DocuShare** is the default name of the system internal domain. You cannot delete the system internal domain. However, you can change the default name from DocuShare to any unique name.

### Internal domains

Internal domains reside on your DocuShare site. DocuShare is the default name of the system internal domain. You cannot delete system internal domain, but you can change the default name to any unique name. Internal domains use DocuShare as their authentication and directory service provider.

To create a new internal domain:

1. From the **Administration** menu, click **Account Management / Domains**.

The Domains page appears.

2. Enter a unique name for the new domain in the **Domain Name** field.
3. Select **DocuShare/DocuShare** from the **Providers** menu.
4. Click **Add**.

DocuShare creates a new local domain. This domain now appears in all Domain menus on your site. Users may now create new accounts in the domain.

To edit an internal domain:

1. From the **Administration** menu, click **Account Management / Domains**.

The Domains page appears.

2. Click **Edit** next to the internal domain that you want to edit.

The Edit Domain page appears.

3. Edit the **Domain Name**.
4. Click **Update**.

DocuShare saves the changes.

To delete an internal domain:

1. From the **Administration** menu, click **Account Management / Domains**.

The Domains page appears.

2. Click **Delete** next to the domain that you want to delete.

The Delete Domain page appears.

3. Select either:
  - **Remove users and groups** to delete the domain and all of the users and groups that are registered in the domain. If any user that is registered in this domain owns objects on the site, DocuShare prompts you to correct ownership issues before deleting the domain.
  - **Transfer users and groups to**, and select a new internal domain from the menu.
4. Click **Apply**.

DocuShare deletes the domain, and if selected, transfers all accounts registered in that internal domain, to another internal domain.

## External domains

External domains are created on an external LDAP server. Using the DocuShare **Domains** tool to add a new external domain, does not actually create a new domain. It merely adds to your site registry, a pointer to a domain that you have created on an LDAP server.

To add a new external domain:

1. Go to **Account Management / LDAP Configuration** to set up DocuShare so it can connect to a specific LDAP server.
2. Go to **Account Management / Providers / Security Services** and select **LDAP** as the external provider.
3. Go to **Account Management / Providers / Directory Services** and select **LDAP** as the external provider.
4. Use LDAP administrator tools to create the new domain on the LDAP server.

You cannot use DocuShare admin tools to create domains on the LDAP server.
5. From the DocuShare **Administration** menu, click **Account Management / Domains**.

The Domains page appears.
6. Enter the name of the LDAP domain, in the **Domain Name** field.
7. Select **LDAP/LDAP** from the **Providers** menu.
8. Click **Add**.

DocuShare adds the domain name to your local site registry. This domain now appears in all Domain menus on your site.
9. Go to **LDAP - Add** in this guide to populate the domain with external domain user and group accounts.

To edit an external domain:

1. Use LDAP administrator tools to edit any existing domain on the LDAP server.
2. From the **Administration** menu, click **Account Management / Domains**.

The Domains page appears.

3. Click **Edit** next to the external domain that you want to edit.

The Edit Domain page appears.

4. Edit the page fields as needed.

Changes you make to this page affect your local pointer, they do not affect the domain properties on the LDAP server.

5. Click **Update**.

DocuShare saves the changes.

To delete an external domain:

1. From the **Administration** menu, click **Account Management / Domains**.

The Domains page appears.

2. Click **Delete** next to the external domain that you want to delete from your local site.

The Delete Domain page appears.

3. Select either:

- **Remove users and groups** to delete the domain and all of the users and groups that are registered in the domain. If any user registered in this domain owns objects on the site, DocuShare prompts you to correct ownership issues before deleting the domain.
- **Transfer users and groups to**, and select an internal domain from the menu. DocuShare does not allow you to transfer users and groups in an external domain to another external domain.

4. Click **Apply**.

DocuShare deletes the domain pointer from your local site, and if selected, transfers all users and groups registered in that external domain, to an internal domain. DocuShare does not delete the original external domain. That domain still resides on the LDAP server.

## LDAP configuration

---

Use **Account Management / LDAP Accounts / Configuration** to set up your DocuShare site to use an external LDAP server for account authentication and external domain hosting.

Using Configuration, you enable a DocuShare site to communicate with an external LDAP server. An LDAP administrator must first setup the LDAP server, build the Directory Information Tree, establish the RDN Key, and then provide you with all of the information necessary to fill in the required fields on this page. Refer to the *LDAP/Active Directory Guide* for more information.

To configure your site to communicate with an LDAP server:

1. From the **Administration** menu, click **Account Management / LDAP Accounts / Configuration**.

The LDAP configuration page appears.

[Click any field name to view help for that particular field.](#)

2. Fill in all of the appropriate fields with the information secured from your LDAP administrator. If you want to return to the saved settings, click **Reset**.
3. When you have finished editing the LDAP configuration fields, click **Apply**.  
DocuShare saves the LDAP configuration information.
4. Use the **Test LDAP Connection** section of the LDAP Configuration page to test the DocuShare to LDAP connection. This test does not check the validity and accuracy of the Directory Information Tree.
5. Enter the required information into the fields.

If you select Agent to make the test, then enter the distinguished name and password of the agent, if you select User, then enter the username and password of the user.



**NOTE:** We recommend that you test the connection three times using all three distinguished name options.

6. When you have finished entering the information, click **Apply and Test**.

DocuShare sends a message to the LDAP server and the LDAP server returns a message to DocuShare. The message lets you know if the test succeeded or if it failed.

7. If the test succeeded, proceed to **Advanced LDAP configuration**.

## Advanced LDAP configuration

Use **Advanced LDAP configuration** to enhance LDAP operations. You may add access control filters to block select users from accessing your site, and you may configure your LDAP connection so whenever a user logs into the site, LDAP automatically synchronizes the local account information to the user account and associated group account information that is on the LDAP server.

1. At the bottom of the LDAP Configuration page, click **Advanced**.

The LDAP Advanced Configuration page appears.

[Click any field name to view help for that particular field.](#)

2. Fill in all of the appropriate fields.
3. If you want to return to the saved settings, click **Reset**.
4. When you have finished editing the LDAP advanced configuration fields, click **Apply**.

DocuShare saves the LDAP advanced configuration information.

## LDAP - Add

Use **Account Management / LDAP Accounts / Add** to select and add external user and group accounts to the external domain pointer in your local registry. This creates a local list of accounts that reside on an external LDAP server. **Add** is an excellent way for the DocuShare administrator to control which users in an external domain have access to a DocuShare site. Not including an account in the **Add** operation excludes that user from logging into a site.



**NOTE:** If you use this tool to add a group that does not yet have members, DocuShare will first add the group then immediately delete it when group synchronization runs as part of the normal Add Group process.

To avoid this dilemma, either add only groups that already have members or go into Advance LDAP Configuration and disable **Automatic Group Removal** before using the Add tool.

To add external domain user and group accounts to the local listing for an external domain:

1. Make sure you have first created the new external domain for your site.
2. From the **Administration** menu, click **Account Management / LDAP Accounts / Add**.

The Add page appears. Note that this is not the same page as the Add User page or the Add Group page.

[Click any field name to view help for that particular field.](#)

3. Choose either **User** or **Group** as the Account Type you want to add.
4. From the **Domain** menu, select the external domain that contains the user or group accounts that you want to add to your local DocuShare site.
5. From the **Limit** menu, select the maximum number of external users or groups that you want to list.
6. From the **Filter By** menus, select how you want to narrow the list of users or groups.

Table 5–1: Filter By menus and fields

Filter By	Items	Filter field
Name	Last name First name Username	Select a filter from either Match, From, or Between.  No filter selected returns all users and groups.

Table 5–1: Filter By menus and fields

Filter By	Items	Filter field
Match	Select to return a value that is an exact match to the contents of the field.	Enter a letter or name to narrow the list. For example:  1- Select <b>Last Name + Match=Dean</b> returns James Dean.  2- Select <b>Last Name + Match=Dean*</b> returns James Dean and Robin Deanne.
From	Select to return a value that is from the contents of the field up to the number of accounts selected from the <b>Limit</b> menu.	Enter a letter or name to narrow the list. For example:  Select Account Type=User; Limit=500; <b>Last Name + From=Ca</b> returns a list of up to 500 users with last names starting at Ca and ending at Zz, assuming Zz is within the 500 limit.
Between / and	Select to return a value that is between the contents of the <b>between</b> field (inclusive value) and the contents of the <b>and</b> field (exclusive value).	Enter a letter or name range to narrow the list. For example:  Select Account Type=User; Limit=100; <b>Last Name + Between= Y and Z</b> returns all names that begin with Y, if that list is under the selected 100 limit.  Select Account Type=User; Limit=100; <b>Last Name + Between= Y and Zz</b> returns all names that begin with Y and all names that begin with Z (excluding users with last names that begin with Zz) if that list is under the selected 100 limit.
Property	No Properties Bound  NOTE: To use the Property filter, set the Name field to blank.	Enter a specific property to narrow the list

7. Click **Go**.  
All of the user or group accounts for the selected external domain appear in the **Possible User/Group** field.
8. Select the accounts that you want to add to the local listing of the external domain, and click the **Add arrow** to move them to the **Selected User/Group** field.
9. To remove a user or group from the **Selected User/Group** field, select the account and click the **Remove arrow**.
10. When you have finished making your selections, click **Add Accounts**.  
DocuShare adds the external domain user or group accounts to the local listing of the external domain.
11. Run **Account Management / List Users** or **List Groups** to see the list of users and groups now assigned to the domain.



## LDAP - Convert

Use **Account Management / LDAP Accounts / Convert** to convert an internal domain user account to an external domain user account, or to convert an external domain user account to an internal domain user account. It is important to remember the Convert merely updates local information to user account changes that have already been made at the LDAP server.

To convert a single user account from an internal domain to a single user account in an external domain:

1. Use the LDAP server administration tool to create a new user account in a specific external domain.
2. From the **Administration** menu, click **Account Management / LDAP Accounts / Convert**.

The Convert page appears.

[Click any field name to view help for that particular field.](#)

3. From the **Convert User Accounts** menu, select **DocuShare To LDAP (Single User)**.

This means there is a single **internal** domain user account that you want to change to a single **external** domain user account - maintained by LDAP.

4. From the **Limit** menu, select the maximum number of single accounts that you want to list.
5. In the **From DocuShare** section of the page, use the **Domain** menu to select the internal domain that you want to search.
6. From the **Filter By Name** menu, select how you want to narrow the list of users and include a filter, such as a first name, to narrow the list even further.
7. From the **Filter By** menus, select how you want to narrow the list of users.

Table 5–2: Filter By menus and fields

Filter By	Items	Filter field
Name	Last name First name Username	Select a filter from either Match, From, or Between.  No filter selected returns all users and groups.
Match	Select to return a value that is an exact match to the contents of the field.	Enter a letter or name to narrow the list. For example:  1- Select <b>Last Name + Match=Dean</b> returns James Dean.  2- Select <b>Last Name + Match=Dean*</b> returns James Dean and Robin Deanne.

Table 5–2: Filter By menus and fields

Filter By	Items	Filter field
From	Select to return a value that is from the contents of the field up to the number of accounts selected from the <b>Limit</b> menu.	Enter a letter or name to narrow the list. For example:  Select Account Type=User; Limit=500; <b>Last Name + From=Ca</b> returns a list of up to 500 users with last names starting at Ca and ending at Zz, assuming Zz is within the 500 limit.
Between / and	Select to return a value that is between the contents of the <b>between</b> field (inclusive value) and the contents of the <b>and</b> field (exclusive value).	Enter a letter or name range to narrow the list. For example:  Select Account Type=User; Limit=100; <b>Last Name + Between= Y and Z</b> returns all names that begin with Y, if that list is under the selected 100 limit.  Select Account Type=User; Limit=100; <b>Last Name + Between= Y and Zz</b> returns all names that begin with Y and all names that begin with Z (excluding users with last names that begin with Zz) if that list is under the selected 100 limit.
Property	No Properties Bound  NOTE: To use this filter set the Name field to blank.	Enter a specific property to narrow the list.

8. Click **Go**.

The **From DocuShare User** menu displays the internal user accounts that met your parameters.

9. From the **User** menu, select the internal user account that you want to convert to an external domain account, such as JDoe@DocuShare.
10. In the **To LDAP** section of the page, use the **Domain** menu to select the external domain where you created the new external domain user account.
11. From the **Filter By Name** menu, select how you want to narrow the list of users and include a filter, such as a first name, to narrow the list even further.
12. From the **Filter By** menus, select how you want to narrow the list of users.

13. Click **Go**.

The **To LDAP User** menu displays the external domain user accounts that met your parameters.

14. From the **User** menu, select the external user account that you want as the converted account, such as JDoe@LDAP.

15. Click **Convert**.

DocuShare changes the registry to show that the selected internal domain user account is now registered as the selected external domain user account. When you run **List Users** for the external domain, you will see the user account listed.

To convert a number of user accounts in an internal domain to user accounts in an external domain:

1. Use the LDAP server administration tool to create new user accounts in a specific external domain.
2. From the **Administration** menu, click **Account Management / LDAP Accounts / Convert**.

The Convert page appears.

[Click any field name to view help for that particular field.](#)

3. From the **Convert User Accounts** menu, select **DocuShare To LDAP (Multiple Users)**.

This means there are a number of **internal** domain user accounts that you want to change to a number of **external** domain user accounts - maintained by LDAP.

4. From the **Limit** menu, select the maximum number of accounts that you want to list.
5. In the **Multi-User** field, select the **All** radio button.
6. In the **From DocuShare** section of the page, use the **Domain** menu to select the internal domain that you want to search.
7. In the **To LDAP** section of the page, use the **Domain** menu to select the external domain where you created the new external domain user accounts.
8. In the **Matching Criteria** area of the page select either **First Name**, **Last Name**, or **Username** to match internal accounts with external accounts.



**CAUTION:** When you set up external accounts, be aware of how DocuShare matches internal and external accounts during multiple user DocuShare to LDAP account conversion.

The value of a matching property in both the DocuShare and the LDAP accounts must be a unique value for a conversion to work correctly. If the matching values are not unique, then when you convert accounts you may inadvertently convert the wrong account.

For example, if you have several users with the last name Smith, and

you use **Last Name** as the matching property for your conversion, you could very easily match the wrong accounts. The DocuShare account of Jack Smith may be unintentionally converted to the LDAP account of Mary Smith if you do a match based solely on the **Last Name** property.

**Convert matching properties are determined by those properties that were bound on the Bind User page.**

9. Click **Convert**.

DocuShare changes the registry to show that the selected internal domain user accounts are now registered as external domain user accounts. When you run **List Users** for the external domain, you will see the user accounts listed.

To convert some of the users accounts in an internal domain to user accounts in an external domain:

1. Use the LDAP server administration tool to create new user accounts in a specific external domain.
2. From the **Administration** menu, click **Account Management / LDAP Accounts / Convert**.

The Convert page appears.

[Click any field name to view help for that particular field.](#)

3. From the **Convert User Accounts** menu, select **DocuShare To LDAP (Multiple Users)**.

This means there are a number of **internal** domain user accounts that you want to change to a number of **external** domain user accounts - maintained by LDAP.

4. From the **Limit** menu, select the maximum number of accounts that you want to list.
5. In the **Multi-User** field, select the **Select** radio button.
6. In the **From DocuShare** section of the page, use the **Domain** menu to select the internal domain that you want to search.
7. From the **Filter By Name** menu, select how you want to narrow the list of users and include a filter, such as a first name, to narrow the list even further.
8. From the **Filter By** menus, select how you want to narrow the list of users.
9. Click **Go**.

The **From DocuShare User** menu displays the internal user accounts that met your parameters.

10. From the **User** menu, select the internal user account that you want to convert to an external domain account, such as JDoe@DocuShare and RSmith@DocuShare.
11. In the **To LDAP** section of the page, use the **Domain** menu to select the external domain where you created the new external domain user accounts.

12. In the **Matching Criteria** area of the page select either **First Name**, **Last Name**, or **Username** to match internal accounts with external accounts.

When you set up the external accounts, be aware of how you are going to match internal and external accounts during the conversion. If you match by Username, make sure the Username of the accounts you create in the external domain match the username of the accounts in the internal domain.

13. Click **Convert**.

DocuShare changes the registry to show that the selected internal domain user accounts are now registered as external domain user accounts. When you run **List Users** for the external domain, you will see the user accounts listed.

To convert a single user from an external domain to an internal domain:

1. Use the LDAP server administration tool to create a new user account in a specific external domain.
2. From the **Administration** menu, click **Account Management / LDAP Accounts / Convert**.

The Convert DocuShare User page appears.

3. From the **Convert User Accounts** menu, select **LDAP to DocuShare To LDAP (Single User)**.

This means there is a single **external** domain user account that you want to change to a single **internal** domain user account - maintained by DocuShare.

4. From the **Limit** menu, select the maximum number of accounts that you want to list.
5. From the **Filter By Name** menu, select how you want to narrow the list of users and include a filter, such as a first name, to narrow the list even further.
6. From the **Filter By** menus, select how you want to narrow the list of users.
7. Click **Go**.

The **From LDAP User** menu displays the external user accounts that met your parameters.

8. From the **User** menu, select the external user account that you want to convert to an internal domain account, such as JDoe@LDAP.
9. In the **To DocuShare** section of the page, use the **Domain** menu to select the internal domain where you created the new internal domain user account.
10. Enter your DocuShare admin password in the **Password** field.
11. Re-enter your DocuShare admin password in the **Confirm** field.
12. Click **Convert**.

The selected external user account is now part of the selected internal domain.

Although the user account is now part of an internal domain, the account has not actually been deleted from the external domain. If you want to purge the account, the LDAP administrator must manually delete the account from the LDAP server.

## LDAP - Rename

There may be times when you want to change the username or the domain of a user account that is assigned to an external domain. For instance, you would use **Rename** if a user wanted to change his username from BobSmith to BSmith, or if the user Bob was moved from the Marketing domain to the Staff domain. Use **Account Management / LDAP Accounts / Rename** to make these changes to the local user account property information so it corresponds to the changes that were made to the account at the LDAP sever.

To change the username or domain of an existing external user account:

1. Use the LDAP server administration UI to give the user a new username or to move the user account to a different external domain.
2. From the **Administration** menu, click **Account Management / LDAP Accounts / Rename**.

The Rename page appears.

[Click any field name to view help for that particular field.](#)

3. From the **Limit** menu, select the maximum number of accounts that you want to list.
4. In the **From Old Name** section, select from the **Domain** menu the external domain that contains the user account that you want to rename.
5. From the **Filter By Name** menu, select how you want to narrow the list of users and include a filter, such as a first name, to narrow the list even further.
6. From the **Filter By** menus, select how you want to narrow the list of users.

Table 5–3: Filter By menus and fields

Filter By	Items	Filter field
Name	Last name First name Username	Select a filter from either Match, From, or Between.  No filter selected returns all users and groups.
Match	Select to return a value that is an exact match to the contents of the field.	Enter a letter or name to narrow the list. For example:  1- Select <b>Last Name + Match=Dean</b> returns James Dean.  2- Select <b>Last Name + Match=Dean*</b> returns James Dean and Robin Deanne.

Table 5–3: Filter By menus and fields

Filter By	Items	Filter field
From	Select to return a value that is from the contents of the field up to the number of accounts selected from the <b>Limit</b> menu.	Enter a letter or name to narrow the list. For example:  Select Account Type=User; Limit=500; <b>Last Name + From=Ca</b> returns a list of up to 500 users with last names starting at Ca and ending at Zz, assuming Zz is within the 500 limit.
Between / and	Select to return a value that is between the contents of the <b>between</b> field (inclusive value) and the contents of the <b>and</b> field (exclusive value).	Enter a letter or name range to narrow the list. For example:  Select Account Type=User; Limit=100; <b>Last Name + Between= Y and Z</b> returns all names that begin with Y, if that list is under the selected 100 limit.  Select Account Type=User; Limit=100; <b>Last Name + Between= Y and Zz</b> returns all names that begin with Y and all names that begin with Z (excluding users with last names that begin with Zz) if that list is under the selected 100 limit.
Property	No Properties Bound  NOTE: To use the Property filter, set the Name field to blank.	Enter a specific property to narrow the list

7. Click **Go**.

The **From Old Name User** menu displays the accounts that are currently in the selected external domain.

8. From the **User** menu, select the user account that you want to rename or move.
9. In the **To New Name** section, select from the **Domain** menu the external domain that contains the user account that you have renamed or moved.
10. From the **Filter By Name** menu, select how you want to narrow the list of users and include a filter, such as a first name, to narrow the list even further.
11. From the **Filter By** menus, select how you want to narrow the list of users.

12. Click **Go**.

The **To New Name User** menu displays the accounts that are currently in the selected external domain.

13. From the **To New Name User** menu, select the user account that you have renamed.

14. Click **Rename**.

DocuShare changes the local registry to show the new external username and/or new external domain.



## LDAP - Synchronize

Use **Account Management / LDAP Accounts / Synchronize** to synchronize local user and group account property information with account property changes that were made at the LDAP server.



**NOTE:** Refer to **Advanced LDAP configuration**, in the **LDAP configuration** section of this chapter, for information on setting up your site so user and group accounts perform auto-synchronization at login.

To synchronize local account information with LDAP account information:

1. Use the LDAP server administration UI to make changes to the properties of an external account.
2. From the **Administration** menu, click **Account Management / LDAP Accounts / Synchronize**.

The Synchronize page appears.

[Click any field name to view help for that particular field.](#)

3. In the **Account Type** field select either by **Users** or by **Groups**, depending on what type of account you want to synchronize.
4. Click **Go**.
5. From the **Domain** menu, select the external domain that contains the account that you want to synchronize.
6. From the **Limit** menu, select the maximum number of accounts that you want to list.
7. From the **Filter By Name** menu, select how you want to narrow the list of accounts and include a filter, such as a first name, to narrow the list even further.

If you selected **Groups** in the **Account Type** field, then select either **No Properties Bound** to list all of the groups or select a blank field and enter a group property in the **Filter** field.

8. From the **Filter By** menus, select how you want to narrow the list of users or groups.

Table 5–4: Filter By menus and fields

Filter By	Items	Filter field
Name	Last name First name Username	Select a filter from either Match, From, or Between.  No filter selected returns all users and groups.

Table 5–4: Filter By menus and fields

Filter By	Items	Filter field
Match	Select to return a value that is an exact match to the contents of the field.	Enter a letter or name to narrow the list. For example:  1- Select <b>Last Name + Match=Dean</b> returns James Dean.  2- Select <b>Last Name + Match=Dean*</b> returns James Dean and Robin Deanne.
From	Select to return a value that is from the contents of the field up to the number of accounts selected from the <b>Limit</b> menu.	Enter a letter or name to narrow the list. For example:  Select Account Type=User; Limit=500; <b>Last Name + From=Ca</b> returns a list of up to 500 users with last names starting at Ca and ending at Zz, assuming Zz is within the 500 limit.
Between / and	Select to return a value that is between the contents of the <b>between</b> field (inclusive value) and the contents of the <b>and</b> field (exclusive value).	Enter a letter or name range to narrow the list. For example:  Select Account Type=User; Limit=100; <b>Last Name + Between= Y and Z</b> returns all names that begin with Y, if that list is under the selected 100 limit.  Select Account Type=User; Limit=100; <b>Last Name + Between= Y and Zz</b> returns all names that begin with Y and all names that begin with Z (excluding users with last names that begin with Zz) if that list is under the selected 100 limit.
Property	No Properties Bound  NOTE: To use the Property filter, set the Name field to blank.	Enter a specific property to narrow the list

9. Click **Go**.

The **Possible Users/Groups** menu displays the accounts that are currently assigned to that external domain.

10. If you want to synchronize all of the user or all of the group accounts, click **Synchronize All**.  
The LDAP server updates the selected user or group account properties on your local site.
11. If you want to synchronize specific accounts, then select those accounts from the **Possible Users/Groups** menu, and click **Synchronize Selected**.  
The LDAP server updates all of the specified user or group account properties on your local site.

## LDAP - Bind user

---

Use **Account Management / LDAP Accounts / Bind User** to set LDAP attributes and DocuShare properties for the entire User object class. DocuShare treats any field containing a correctly constructed LDAP attribute entry as an LDAP property. DocuShare treats any field left empty as a user-editable DocuShare property.

To use Bind User:

1. From the **Administration** menu, click **Account Management / LDAP Accounts / Bind User**.

The Bind User page appears.

[Click any field name to view help for that particular field.](#)

2. Enter a correctly constructed LDAP attribute in the **LDAP Attribute** field if you want that corresponding DocuShare property to become an LDAP attribute.

Any LDAP Attribute field left empty indicates that DocuShare should treat that property as a user-editable DocuShare property.

Table 5–5: Sample Bind User properties

Property	Description
First Name	The first name of the user. The Active Directory attribute is <b>givenName</b> .
Last Name	The last name of the user. The Active Directory attribute is <b>sn</b> .
Username	The login name of the user. The Active Directory attribute is <b>sAMAccountName</b> .
Mail Stop	The mail stop of the user. The Active Directory attribute is <b>mail</b> .
Phone	The phone number of the user. The Active Directory attribute is <b>telephoneNumber</b> .

3. When you have completed filling in the fields, click **Apply**.

DocuShare saves your changes.

## LDAP - Bind group

---

Use **Account Management / LDAP Accounts / Bind Group** to establish LDAP attributes and DocuShare properties for the entire Group object class. DocuShare treats any field containing a correctly constructed LDAP attribute entry as an LDAP property. DocuShare treats any field left empty as a user-editable DocuShare property.

To use Bind Group:

1. From the **Administration** menu, click **Account Management / LDAP Accounts / Bind Group**.

The Bind Group page appears.

[Click any field name to view help for that particular field.](#)

2. Enter a correctly constructed LDAP attribute in the **LDAP Attribute** field if you want that corresponding DocuShare property to become an LDAP attribute.

Any LDAP Attribute field left empty indicates that DocuShare should treat that property as a user-editable DocuShare property.

Table 5–6: Sample Bind Group properties

Property	Description
Title	The name of the group. The Active Directory attribute is <b>name</b> .
Description	A detailed description of the group. The Active Directory attribute is <b>description</b> .

3. When you have completed filling in the fields, click **Apply**.  
DocuShare saves your changes.

## Security services

---

Use **Account Management / Providers / Security Services** to select LDAP as the authentication service provider for all external domains used by your site. DocuShare is your default internal authentication service and cannot be changed.

To select LDAP as your external authentication service provider:

1. From the **Administration** menu, click **Account Management / Providers / Security Services**.

The Security Services page appears.

2. Select **LDAP** to enable LDAP as your external authentication provider.
3. Click **Apply**.

DocuShare saves your changes. LDAP now appears as a menu item on the Account Management / Domain page.

4. If you have not already done so, go to the **Directory services** section of this chapter and enable LDAP as your external directory services provider.

## Directory services

---

Use **Account Management / Providers / Directory Services** to select LDAP as the directory service provider for all external domains used by your site. DocuShare is your default internal directory service and cannot be changed.

To select LDAP as your external directory service provider:

1. From the **Administration** menu, click **Account Management / Providers / Directory Services**.

The Directory Services page appears.

2. Select **LDAP** to enable LDAP as your external directory provider.
3. Click **Apply**.

DocuShare saves your changes. LDAP now appears as a menu item on the Account Management / Domain page.

4. If you have not already done so, go to the **Security services** section of this chapter and enable LDAP as your external security services provider.





# 6

## Services and Components

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**NOTE:** Only logged in admin, Site, and limited Site Administrators see the Services and Components menu.

## Administration

---

Use **Services and Components / Administration** to set how you want DocuShare to display the Administration menu; either as a collapsible directory tree or as an expanded HTML list.

To set the Administration menu style:

1. From the **Administration** menu, click **Services and Components / Administration**.  
The Administration page appears.  
[Click any field name to view help for that particular field.](#)
2. In the **Use Javascript Menu** field, select **Yes** to display the Javascript version of the Administration menu (not 508 compliant) or **No** to display the HTML version of the Administration menu (508 compliant).
3. If you want to return to the default setting, click **Reset**.
4. If you want to save your setting, click **Apply**.  
DocuShare saves your Administration menu setting.

## Archive server

---

Use **Services and Components / Archive Server** to set various DocuShare Archive Server properties, including pathname to the server, server password, and the intervals between polling for documents selected for archiving.

To configure DocuShare to use an Archive Server:

1. From the **Administration** menu, click **Services and Components / Archive Server**.

The Archive Server page appears.

[Click any field name to view help for that particular field.](#)

2. Change property value fields as required for your particular archive server usage.
3. If you want to return to the default setting, click **Reset**.
4. If you want to save your setting, click **Apply**.

DocuShare saves your Archive Server settings.

## HTML Conversion

---

Use **Services and Components / HTML Conversion** to set the HTML/PDF conversion options for the DocuShare Conversion Service.

To configure the HTML/PDF conversion options:

1. From the **Administration** menu, click **Services and Components / HTML Conversion**.

The HTML Conversion page appears.

[Click any field name to view help for that particular field.](#)

2. In the **Enable High Fidelity PDF Filter** field, select **Yes** to enable the filter or **No** to disable the filter.
3. If you want to return to the default setting, click **Reset**.
4. If you want to save your setting, click **Apply**.

DocuShare saves your HTML Conversion choice.

## Image Conversion

---

Use **Services and Components / Image Conversion** to specify the width and height of the thumbnail viewing area for converted file images. Converted images maintain their original aspect ratio when displayed in the thumbnail viewing area. They do not stretched to fit within the width and height parameters.

To edit Image Conversion properties:

1. From the **Administration** menu, click **Services and Components / Image Conversion**.

The Image Conversion page appears.

[Click any field name to view help for that particular field.](#)

2. In the **Thumbnail Image** fields, enter a value, in pixels, for both the thumbnail image width and the thumbnail image height.
3. If you want to return to the saved settings, click **Reset**.
4. If you want to save your changes, click **Apply**.

DocuShare saves your Conversion settings.

## Database

---

Use **Services and Components / Database** to configure your site to use external databases for metadata or object storage. Changes that you make in these fields, you must also make to the properties of the external database program.

To configure Database properties:

1. From the **Administration** menu, click **Services and Components / Database**.  
The Database page appears.  
[Click any field name to view help for that particular field.](#)
2. Change property value fields as required for your particular database usage.
3. If you want to return to the previous Database properties settings, click **Reset**.
4. If you want to save your changes, click **Apply**.  
DocuShare saves your Database properties changes.
5. Restart DocuShare for the changes to take affect.

## Email Account

---

Use **Services and Components / Email Agent / Email Account** to set the basic Email Agent account properties; including an email address for the Email Agent, and external mail server pathname and mail server type.



**NOTE:** To get Email Agent up and running, you must configure the **Email Agent Email Account** page, the **Email Agent User Account** page, and the **Email Agent Digital Certificate** page. The Advanced and Server Integration pages allow you to set additional Email Agent properties.

To configure Email Account properties:

1. From the **Administration** menu, click **Services and Components / Email Agent / Email Account**.

The Email Account Configuration page appears.

[Click any field name to view help for that particular field.](#)

2. Change property value fields as required to configure the Agent account.
3. If you want to return to the previous Email Account properties settings, click **Reset**.
4. If you want to save your changes, click **Apply**.

DocuShare saves your Email Account properties changes.

## Email Agent User Account

---

Use **Services and Components / Email Agent / User Account** to enable the Email Agent and to specify an Email Agent user account. For some sites there may be a very high volume of incoming mail. We recommend that the administrator create a special user account for this purpose, rather than assign the task to an existing user.



**NOTE:** To get Email Agent up and running, you must configure the **Email Agent Email Account** page, the **Email Agent User Account** page, and the **Email Agent Digital Certificate** page. The Advanced and Server Integration pages allow you to set additional Email Agent properties.

To configure Email Agent User Account properties:

1. From the **Administration** menu, click **Services and Components / Email Agent / User Account**.

The User Account Configuration page appears.

[Click any field name to view help for that particular field.](#)

2. Change property value fields as required to set the DocuShare user account properties.
3. If you want to return to the previous User Account properties settings, click **Reset**.
4. If you want to save your changes, click **Apply**.

DocuShare saves your Email Agent User Account properties changes.



## Email Agent Digital Certificate

---

Use **Services and Components / Email Agent / Digital Certificate** to set the Email Agent certificate properties for secure email and encryption.

To configure Email Agent Digital Certificate properties:

1. From the **Administration** menu, click **Services and Components / Email Agent / Digital Certificate**.

The Digital Certificate Configuration page appears.

[Click any field name to view help for that particular field.](#)

2. Change property value fields as required to configure the Email Agent to use a digital certificate file.
3. If you want to return to the previous Digital Certificate properties settings, click **Reset**.
4. If you want to save your changes, click **Apply**.

DocuShare saves your Email Agent Digital Certificate properties changes.

## Email Agent Advanced

---

Use **Services and Components / Email Agent / Advanced** to set the Email Agent email confirmation properties and specify a default collection for problem mail.

If there is a problem with either the addressed collection or the addressed group, an incoming email message goes to the assigned **default collection**. You may accept the system default or select a specific collection as the recipient for all problem mail.



**NOTE:** The default collection tends to accumulate a lot of unclaimed messages, so the administrator should periodically inspect the collection and remove or reroute any outdated or misdirected messages. You can also set the default collection to appear on the site home page so users can access it and retrieve their own messages. The administrator should give All Users except Guests, Reader and Writer permission to the collection.

To configure Advanced Email Agent properties:

1. From the **Administration** menu, click **Services and Components / Email Agent / Advanced**.

The Advanced Configuration page appears.

[Click any field name to view help for that particular field.](#)

2. Change property value fields as required.
3. If you want to return to the previous Advanced properties settings, click **Reset**.
4. If you want to save your changes, click **Apply**.

DocuShare saves your Advanced Email Agent properties changes.

## Email Agent Email Server Integration

---

Use **Services and Components /Email Agent / Email Server Integration** to enable and set the pathname for an alias file on the mail server. This page is useful if you want to establish unique email addresses for DocuShare groups.

The alias file contains a UNIX style alias that maps a unique group email alias to a dedicated POP/IMAP email account. This file can be used by email servers, such as Postfix, to take mail sent to a unique group email address and forward it to a dedicated email account.

To enable and create email alias files:

1. From the **Administration** menu, click **Services and Components / Email Agent / Email Server Integration**.

The Email Server Integration page appears.

[Click any field name to view help for that particular field.](#)

2. Select **Yes** to enable alias file creation.
3. Enter the full pathname to the file.
4. If you want to save your changes, click **Apply**.

DocuShare saves your Email Agent Email Server Integration changes.

## DocuShare Interact configuration

---

Use **Services and Components / DocuShare Interact / Configuration** to configure the server to use the DocuShare Interact feature.

To configure for DocuShare Interact:

1. From the **Administration** menu, click **Services and Components / DocuShare Interact / Configuration**.

The DocuShare Interact Configuration page appears displaying the current property values.

[Click any field name to view help for that particular field.](#)

2. In the **URL of DocuShare Servlet** field, if you do not accept the default value of `http://docushare.your company.com:8080/docushare`, then enter a new URL.
3. If you want to return to the saved URL value, click **Reset**.
4. If you want to save the change you made to the URL field, click **Apply**.

DocuShare saves the value of the URL field and returns all applicable Interact settings to the default values.

## DocuShare Interact verification

---

Use **Services and Components / DocuShare Interact / Verification** to verify the status of the DocuShare Interact service.

To verify the DocuShare Interact service:

1. From the **Administration** menu, click **Services and Components / DocuShare Interact / Verification**.

The DocuShare Interact Verification page appears, displaying a detailed configuration page to confirm that DocuShare Interact is working correctly.

## Logging

Use **Services and Components / Logging** to set the log size and the logging levels for the various DocuShare services. If you choose not to accept the default **Logs** directory, can select a new directory to store log files. If you do change the location of the Logs directory; be sure to stop DocuShare, move or delete the old Logs directory from the DocuShare tree, then restart DocuShare. DocuShare will continue writing to the old directory if you leave it in place.

Based on the logging level that you select, the search service records information during execution. Logging levels are listed in ascending order of priority with information recorded only for levels equal or greater than the selected logging level. For example, the DEBUG level will result in the recording of information for all levels throughout the system whereas ERROR will only trigger ERROR, LETHAL and FATAL levels to be logged.

To set logging levels:

1. From the **Administration** menu, click **Services and Components / Logging**.  
The DocuShare Logging page appears displaying the current logging levels for each service. From the **Maximum Log File Size** menu, select the maximum size of each log file created.  
[Click any field name to view help for that particular field.](#)
2. From the **Log File Backup Index** menu, select the maximum number of log files the system creates for each individual service log.  
When the maximum log file size is reached, the log either resets, if backup index is set to 0, or rolled over into another log, if backup index is set to any number other than 0.
3. Use the individual field menus to select a logging level for each service.

Table 6–1: Logging level meaning

Logging level	Description
DEBUG	Record all levels of logging.
TRACE	Record errors, information, and troubleshooting data.
INFO	Record errors and information.
WARN	Record warnings and errors.
ERROR	Record fatal and general errors.
LETHAL	Record instances where server or service must immediately shut down.
FATAL	Record instances where server or service is malfunctioning or disabled.

4. If you want to return to the saved settings, click **Reset**.
5. If you want to save your changes, click **Apply**.

DocuShare saves your DocuShare Logging changes.

## Scan

---

Use **Services and Components / Scan** to set the properties of the DocuShare scanning service.

To set scanning properties:

1. From the **Administration** menu, click **Services and Components / Scan**.  
The DocuShare Scan page appears displaying the current scanning property values.  
[Click any field name to view help for that particular field.](#)
2. If you do not accept the default values, then change the values as appropriate.
3. If you want to return to the saved settings, click **Reset**.
4. If you want to save your Scan changes, click **Apply**.  
DocuShare saves your Scan changes

## Search

---

Use **Services and Components / Search** to edit the properties of the Verity search and filtering programs that are used by DocuShare.

To edit Search properties:

1. From the **Administration** menu, click **Services and Components / Search**.  
The Search page appears displaying the current search property values.  
[Click any field name to view help for that particular field.](#)
2. If you do not accept the default values, then change the values as appropriate.
3. If you want to return to the saved settings, click **Reset**.
4. If you want to save your Search changes, click **Apply**.  
DocuShare saves your Search changes.



## Subscription

---

Use **Services and Components / Subscription** to enable the DocuShare Subscription service and to set Subscription service properties.

To set the Subscription properties:

1. From the **Administration** menu, click **Services and Components / Subscription**.

The Subscription page appears displaying the current Subscription properties.

[Click any field name to view help for that particular field.](#)

2. In the **Enable Subscriptions** field, select **Yes** to enable subscriptions.
3. In the **SMTP Mail Gateway** and **SMTP Mail Port** fields enter the address and port number of your SMTP Mail Gateway.
4. Fill in any remaining fields to set the frequency of subscription notifications.
5. Enter the email address of the person responsible for subscription maintenance.
6. If you want to return to the saved settings, click **Reset**.
7. If you want to save your subscription changes, click **Apply**.

DocuShare saves your Subscription changes.

8. Click **Send Test Message**.

The Subscription service sends a test email message to the site administrator to verify that the service is working correctly.

## Using a subscription script

To run a subscription script:

1. Make sure your site has **Full Subscription** enabled.

This requires a change to your site license string. The Subscription service will not run scripts unless Full Subscription is enabled.

2. Give your subscription script a unique file name and place it in the **extension** folder of your DocuShare directory.
3. On your site, locate the object that you want to use the subscription script and properties icon for that object.
4. Click the **Subscriptions** tab.
5. In the **Notification Action** field, select **Run Script**.
6. In the **Script** field, enter the script file name.

You do not need to enter the pathname to the script. The service executes only designated files that are in the extension folder.

7. Click **Apply** to save your changes.

Now, whenever the subscribed action occurs to this object, the Subscription service runs the script.

## WebDAV

---

Use **Services and Components / WebDAV** to set the properties of the WebDAV service.

To set the WebDAV properties:

1. From the **Administration** menu, click **Services and Components / WebDAV**.  
The WebDAV page appears displaying the current WebDAV properties.  
[Click any field name to view help for that particular field.](#)
2. If you do not accept the default values, then change the values as appropriate.
3. If you want to return to the saved settings, click **Reset**.
4. If you want to save your WebDAV changes, click **Apply**.  
DocuShare saves your WebDAV changes.

## Workflow server

---

Use **Services and Components / Workflow / Workflow Server** to configure and manage the DocuShare Workflow service.

To set the Workflow configuration:

1. From the **Administration** menu, click **Services and Components / Workflow / Workflow Server**.

The Workflow page appears displaying the current properties.

[Click any field name to view help for that particular field.](#)

2. Edit the Workflow property values.
3. If you want to return to the saved settings, click **Reset**.
4. If you want to save your changes, click **Apply**.

DocuShare saves your Workflow settings.

## List workflows

---

Use **Services and Components / Workflow / Workflow Manager / List Workflows** to manage and view current workflow instances and to retrieve detailed task, graphical, and XML representations of the workflows.

To use the List Workflows page:

1. From the **Administration** menu, click **Services and Components / Workflow / Workflow Manager / List Workflows**.

The List Workflows page appears, displaying by default, a table containing all current workflow processes.

2. Check one or more boxes above the table to display specific workflow process states.
3. Click **Refresh**.
4. To perform a task on a specific workflow, check the box to the left of the appropriate workflow entry.
5. Click the appropriate action button.

Table 6–2: Workflow action button

Button	Purpose
Activate	Start all stopped workflows.
Abort	Stop all selected active workflows.
Delete	Delete all selected workflows.
Delete Old	Delete workflows started on a specific date or time line. Applies to all workflows, not specific ones.
Archive	Archive workflows started on a specific date or time line. Applies to all workflows, not specific ones.

## Dashboard

---

Use **Services and Components / Workflow / Workflow Manager / Dashboard** to see a summary of workflow engine activity and system resources being used.

To view the Dashboard:

1. From the **Administration** menu, click **Services and Components / Workflow / Workflow Manager / Dashboard**.

The Dashboard page appears displaying the current Workflow activity.

[Click any field name to view help for that particular field.](#)

## Engine Activity Report

---

Use **Services and Components / Workflow / Workflow Manager / Engine Activity Report** to view a summary of workflow activity and detailed information on individual user activity.

To use Engine Activity Reports:

1. From the **Administration** menu, click **Services and Components / Workflow / Workflow Manager / Engine Activity Report**.

The Engine Activity Report page appears displaying a general workflow activity summary and a individual user workflow activity summary.

# 7

## Content management

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**NOTE:** Only logged in admin, Site, and Content Administrators see the Content Management menu.

## Repository use

---

Use **Content Management / Repository Use** to have DocuShare generate a customized site repository use report. This report lists the registered users on your site, the number of documents each own, and the total disk space those documents occupy. You may select additional parameters to appear in your report.

To generate a customized site repository use report:

1. From the **Administration** menu, click **Content Management / Repository Use**.  
The Repository Use page appears.  
[Click any field name to view help for that particular field.](#)
2. From the **Include in Report** menu, select the options you want for the report.
3. When you have finished selecting the options, click **Generate Report**.  
DocuShare generates and displays a repository use report based on the properties that you set up using the **Include in Report** menu.
4. To print the report, select **Print** from your browser menu bar.



## List orphans

---

Use **Content Management / Orphaned Content / List Orphans** to locate and reassign or delete orphaned objects within your site. A DocuShare object can become orphaned when it is not within a site container.

To locate, reassign, or delete orphaned objects:

1. From the **Administration** menu, click **Content Management / Orphaned Content / List Orphans**.

The List Orphans page appears, displaying all of the orphaned objects found on your DocuShare site.

[Click any field name to view help for that particular field.](#)

2. Use the **Filter By** menu to show either all or specific orphaned objects.
3. Click **Refresh** to list all known orphaned objects on your site.
4. From the list of located orphaned objects, **check the box** next to the orphaned object or objects that you want to resolve.
5. From the **Resolve Orphans** menu, select the action to take with the selected orphans. Either reassign or delete all or reassign or delete selected.



**CAUTION:** If you select either **Delete All** or **Delete Selected**, as soon as you click **Go**, DocuShare deletes the selected orphans. If you accidentally delete an orphaned object, you can recover the object if you have enabled the trashcan.

6. Click **Go**.

Depending on what menu item you selected, either a Move Orphans To page or a Delete Orphans page appears.

7. Follow the instructions on the Delete Orphans page to either move the orphans to an appropriate container or delete the orphans from the site.

## List orphans properties

---

Use **Content Management / Orphaned Content / List Orphans Properties** to enable orphan paging and set the page size. Paging displays a set number of orphaned objects per displayed page, then starts a new page for additional objects.

To enable orphan paging and set the page size:

1. From the **Administration** menu, click **Content Management / Orphaned Content / List Orphans Properties**.

The List Orphans Properties page appears.

[Click any field name to view help for that particular field.](#)

2. From the **List Orphans Page Size**, select how many orphaned objects you want to appear on a displayed page.
3. From the **Enable Orphans Paging**, select **Yes** to enable orphan paging.
4. Click **Apply**.

DocuShare saves your changes.

## Trashcan contents

---

Use **Content Management / Trashcan / Trashcan Contents** to either restore or expunge objects from the trashcan. The trashcan must be enabled for deleted objects to appear in the trashcan. If the trashcan has never been enabled, all deleted objects are automatically expunged. You cannot recover an object after it is expunged.

To restored deleted objects from the trashcan:

1. From the **Administration** menu, click **Content Management / Trashcan / Trashcan Contents**.

The Trashcan Contents page appears, displaying the all objects currently in the trashcan

[Click any field name to view help for that particular field.](#)

2. Use the **Filter By** menu to select either all or specific object classes within the trashcan.
3. Click **Refresh**.
4. If you want to restore all of the objects in the trashcan, from the **Trashcan Contents** menu, select **Restore all**, and click **Go**.
5. If you want to restore only expired objects in the trashcan, from the **Trashcan Contents** menu, select **Restore expired**, and click **Go**.
6. If you want to restore only a few objects, select those objects that you want to restore, and from the **Trashcan Contents** menu, select **Restore selected**, and click **Go**.

The Restore Objects page appears displaying a count of the trashcan objects that DocuShare restored to their original locations.

To permanently remove deleted objects from the trashcan:

1. From the **Administration** menu, click **Content Management / Trashcan / Trashcan Contents**.

The Trashcan Contents page appears.

2. Use the **Filter By** menu to select either all or specific object classes within the trashcan.
3. Click **Refresh**.
4. If you want to expunge all of the objects in the trashcan, from the **Trashcan Contents** menu, select **Expunge all**, and click **Go**.
5. If you want to expunge only expired objects in the trashcan, from the **Trashcan Contents** menu, select **Expunge expired**, and click **Go**.
6. If you want to expunge only a few objects, select those objects that you want to expunge, and from the **Trashcan Contents** menu, select **Expunge selected**, and click **Go**.

The Expunged Objects page appears displaying a total number of trashcan objects that DocuShare expunged.

## Trashcan properties

---

Use **Content Management / Trashcan / Trashcan Properties** to enable/disable the trashcan and set the object expiration period. The trashcan must be enabled for deleted objects to appear in the trashcan. If the trashcan is disabled, all deleted objects are automatically expunged. You cannot recover an object after it is expunged.

To enable the trashcan:

1. From the **Administration** menu, click **Content Management / Trashcan / Trashcan Properties**.

The Trashcan Properties page appears.

[Click any field name to view help for that particular field.](#)

2. In the **Enable Trashcan** field, select **Yes**.

If Enable Trashcan is set to Yes, you can restore deleted objects. If the property is set to No, you cannot restore deleted objects.

3. In the **Expiration Period** field, select from the menu how long you want objects to remain in the trashcan before DocuShare tags them expired.
4. From the **Trashcan Page Size**, select the number of objects you want displayed on each displayed trashcan contents page. Once this number is reached, the system continues the content on another page.
5. If you want to display a specific number of trashcan objects, set using the Trashcan Page Size property, on each page, click **Yes** in the **Enable Trashcan Paging** field.

If you do not enable trashcan paging, trashcan objects display in one continuous page. On large sites, this page can become very long.

6. If you want to return to the saved settings, click **Reset**.
7. When you have finished configuring your trashcan, click **Apply**.

DocuShare saves your new trashcan settings.

# 8

## Site management

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**NOTE:** Only logged in admin, Site, and limited Site Administrators see the Site Management menu.

## About DocuShare

---

Use **Site Management / About DocuShare** to view general information about your DocuShare software. About DocuShare appears as default whenever you click **Admin Home** in the navigation bar.

To view About DocuShare:

1. From the **Administration** menu, click **Site Management / About DocuShare**.

The About DocuShare page appears displaying license, support, and warranty information, in addition to links to software release notes, the DocuShare web site, and the Xerox Software Support web site.

2. If you would like more information, click the appropriate link.

Table 8–1: About DocuShare links

Link	Description
License	License and support agreement and warranty for DocuShare software and related documentation.
Release Notes	Release notes for your version of DocuShare software.
DocuShare website	The Xerox DocuShare web site.
Custom support	The Xerox Software Support web site.

## Access policies

Use **Site Management / Access Policies** to control who may enter your DocuShare site, who may see accounts and account properties, and who may create new user and group accounts.

To set site access policies:

1. From the **Administration** menu, click **Site Management / Access Policies**.  
The Access Policies page appears.  
[Click any field name to view help for that particular field.](#)
2. Select who has access to the Registry, to Account Creation, and to Site Access.

Table 8–2: Access policies

Access	Description
Site Access Authority	<b>Guest</b> —Anyone may enter the site. <b>User</b> —Only authenticated registered users may enter the site. <b>Administrator</b> —Only site administrators may enter the site.
Registry Access Authority	<b>Guest</b> —Anyone who connects to your site can see all registered user and group accounts and associated properties. <b>User</b> —Only registered users can see all registered user and group accounts and associated properties. <b>Administrator</b> —Only site administrators can see all registered user and group accounts and associated properties. Registered users can still see their own accounts and properties, and in DS4.0 they can now change their own passwords.
Account Creation Authority	<b>Guest</b> —Anyone who connects to your site may create a new user account. <b>User</b> —Only registered users may create new user accounts. <b>Administrator</b> —Only site administrators may create new user accounts.
Group Creation Authority	<b>Guest</b> —Anyone who connects to your site may create a new group account. Not a valid selection. You must select either User or Administrator for this field. <b>User</b> —Only registered users may create new group accounts. <b>Administrator</b> —Only site administrators may create new group accounts.

3. If you want to return to the saved settings, click **Reset**.
4. When you have finished setting site access permissions, click **Apply**.  
DocuShare saves your changes.

## Small class icons

---

Use **Site Management / Class Icons / Small Class Icons** to associate a custom icon graphic with a specific DocuShare object class. Small icon graphics should measure approximately 18x18 pixels and have either a GIF or a PNG extension. Place the new icon graphic file in the {DSHOME}/tomcat/webapps/docushare/images/**small** folder of your DocuShare installation.

To change an object class/small icon association:

1. From the **Administration** menu, click **Site Management / Class Icons / Small Class Icons**.

The Small Class Icons page appears displaying the name of the DocuShare object, the icon, and the pathname to the graphics file for the icon.

2. Enter the pathname to the new icon graphics file in the appropriate **Icon Path** field.

For example, if you placed a new icon graphics file titled "newtopic.gif" into the directory {DSHOME}/tomcat/webapps/docushare/images/small, then enter **small/newtopic.gif** in the **Icon Path** field.

3. If you want to return to the saved settings, click **Reset**.
4. If you want to save your changes, click **Apply**.

DocuShare saves your icon changes and displays an image of the new icon next to the object class. Whenever DocuShare calls to display a small icon, it displays your new icon graphic.



## Large class icons

---

Use **Site Management / Class Icons / Large Class Icons** to associate a custom page icon graphic with a specific DocuShare object class. These icons appear at the top of an open object page, such as a calendar or document. Large icon graphics should measure approximately 36x36 pixels and have either a GIF or a PNG extension. Place the new icon graphic file in the {DSHOME}/tomcat/webapps/docushare/images/**large** folder of your DocuShare installation.

To change an object class/small icon association:

1. From the **Administration** menu, click **Site Management / Class Icons / Large Class Icons**.

The Large Class Icons page appears displaying the name of the DocuShare object, the icon, and the pathname to the graphics file for the icon.

2. Enter the pathname to the new icon graphics file in the appropriate **Icon Path** field.

For example, if you placed a new icon graphics file titled "document.gif" into the directory {DSHOME}/tomcat/webapps/docushare/images/small, then enter **small/document.gif** in the **Icon Path** field.

3. If you want to return to the saved settings, click **Reset**.
4. If you want to save your changes, click **Apply**.

DocuShare saves your icon changes and displays an image of the new icon next to the object class. Whenever you open an object page, DocuShare displays your new large icon graphic.

## Site configuration

---

Use **Site Management / Site Configuration** to modify the look and functionality of your DocuShare site by changing site properties and enabling site functions. Options on this page include:

- Setting the duration of the NEW icon.
- Setting the mail list delimiter to either a semicolon or a comma.
- Controlling the automatic generation of document context summaries.
- Controlling the conversion of specific documents into HTML format.
- Controlling the generation of thumbnail views of documents.
- Controlling the document workflow function.
- Controlling the use of JavaScript.
- Controlling the use of persistent login.
- Controlling the use of auto login.
- Setting site background color or image.

To edit your site configuration:

1. From the **Administration** menu, click **Site Management / Site Configuration**.

The Site Configuration page appears, displaying the current configuration settings.

[Click any field name to view help for that particular field.](#)

2. Select and edit the appropriate fields.



**NOTE: Enable JavaScript:** If disabled, document routing will not work.

**Enable Persistent Login:** If enabled, the system provides a checkbox on the Login page. If the user checks the box, DocuShare places a cookie on the user's PC. As long as the user does not log out of DocuShare, the cookie logs the user back in whenever the user reconnects to the DocuShare site. **Yes** to enable. **No** to disable.

**Enable Auto Login:** If enable, the system allows Windows Domain Authentication to handle the DocuShare Login Authentication. Refer to Auto Login in the *Administrator Guide* for instructions on setting up Auto Login.

3. If you want to return to the saved settings, click **Reset**.
4. If you want to save your changes, click **Apply**.

DocuShare saves your site configuration changes.

## Installed languages

---

Use **Site Management / Installed Languages** to set the default language for the site and to enable or disable the installed languages. You must first install the desired languages by loading them from an optional DocuShare Language Pack. Under the basic site license you may enable two languages, then choose one as your default language and one as your secondary language. If your site has an expanded license, you may enable more secondary languages.

With languages installed, licensed, and enabled, site users may configure their browsers to view the site in a selected language. Most of the site text, art, messages, and documentation appear in the selected languages.



**NOTE:** DocuShare does not translate uploaded user documents.

To enable and configure languages:

1. From the **Administration** menu, click **Site Management / Installed Languages**.  
The Installed Languages page appears, displaying the current settings.  
[Click any field name to view help for that particular field.](#)
2. In the **Enable Language** field, select **Yes**.
3. In the **Default Language** field, use the menu to select the primary language for your site.
4. In the **Installed Languages** field, use the menu to select the secondary language for your site.  
If you have an extended license, you may choose more than one secondary language for your site.
5. If you want to return to the saved settings, click **Reset**.
6. If you want to save your changes, click **Apply**.  
DocuShare saves your language changes.

## License

---

Use **Site Management / License** to license your DocuShare site and remove site evaluation restrictions, to upgrade account limits, and to enable DocuShare features, languages, and add-ons. A DocuShare license is a unique numerical string that is based on the ID number of the DocuShare server, specific customer information, the maximum number of site seats purchased, and any add-ons that you want enabled.

To edit your DocuShare license:

1. From the **Administration** menu, click **Site Management / License**.

The Server License Management page appears.

2. Enter the appropriate license number string in the **License** field.
3. Click **Apply**.

DocuShare saves the new license string and begins functioning according to the new license attributes.

## Repository log files

Use **Site Management / Repository Log Files** to enable and set up site access and error logging and to specify directory pathnames for log downloads. DocuShare provides a custom logging facility that stores operational information in comma-separated value (CSV) format files. These CSV files can be easily read by most spreadsheet and database applications.

To enable and configure site logging:

1. From the **Administration** menu, click **Site Management / Repository Log Files**.  
The Repository Log Files page appears.  
[Click any field name to view help for that particular field.](#)
2. In the **Enable Logging** field, select **Yes** to enable access and error logging.
3. If you do not want to use the default log locations, enter new pathnames into the **Access Log** and **Error Log** fields.
4. The remaining fields allow you to set maximum size for the log files and the maximum number of backup files the system creates each time the maximum log size is reached. Accept the defaults or change accordingly.
5. If you want to return to the previous logging settings, click **Reset**.
6. If you want to save your changes, click **Apply**.  
DocuShare saves your logging changes.

To download a log file:

1. Click either **Download Error Log** or **Download Access Log**.  
DocuShare displays the selected log file. A Download button is grayed if there is no log file available.
2. To view a log file in a spreadsheet, navigate to the server DocuShare logs folder and use your spreadsheet application to open a csv log file.  
Log content is separated into columns, with each log line representing a single server request.

Table 8–3: Access log columns

Column	Column content
1- Date	The date and time of the request.
2- User Handle	The handle of the user who made the request.
3- Browser identifier	The value of the HTTP USER-AGENT header.
4- Client IP address	The value of the HTTP REMOTE-ADDR header.
5- Command	The DocuShare command used for the request, such as View or Add.

Table 8–3: Access log columns

Column	Column content
6- Handle	The handle of the object that the command in column 5 refers to, such as View <b>Collection-25</b> .
7- Command Argument	Up to three arguments used by the command in column 5.

Table 8–4: Error log columns

Column	Column content
1- Date	The date and time of the request.
2 - Exception Name	The symbol of the DocuShare exception raised.
3- User Handle	The handle of the user who made the request.
4- Browser identifier	The value of the HTTP USER-AGENT header.
5- Client IP address	The value of the HTTP REMOTE-ADDR header.
6- Command	The DocuShare command used for the request, such as View or Add.
7- Handle	The handle of the object that the command in column 6 refers to, such as View <b>Collection-25</b> .
8- Command Argument	Up to three arguments used by the command in column 6.

## MIME types

MIME (Multipurpose Internet Mail Extensions) types provide a standard method of classifying the file types that are used on the Internet. All Internet programs and browsers, including DocuShare, maintain a list of standard MIME types. The MIME type list makes it possible for DocuShare to easily transfer files of the same type between servers running on different operating systems.

A MIME type contains two parts: a **MIME type** and a **MIME subtype**. A slash (/) separates the two parts. To illustrate this, the MIME type **application/msword** indicates that the MIME type is an application and the MIME subtype is msword.

Use **Site Management / MIME Types** to create a new MIME type or to edit an existing MIME type for any file used on your DocuShare site, and associate that file with a specific icon, application, or file extension. Administrator tools also provide you with the option of setting DocuShare so it either uses the MIME type/file extension as defined in the MIME type table or selects a MIME type/file extension based on the actual contents of the file.

To change the MIME type assignment method:

1. From the **Administration** menu, click **Site Management / MIME Types**.  
The MIME Types page appears displaying the currently used MIME Type Assignment Method and a button that allows you switch to the alternate method.  
The two methods are **file extension algorithm** and **file content algorithm**.
2. Click the **Switch to** button.  
DocuShare switches from the current assignment method to the alternative assignment method.

To add a new MIME Type:

1. From the **Administration** menu, click **Site Management / MIME Types**.  
The MIME Types page appears.
2. Locate the top line of the Current MIME Types table and fill in all of the blank fields with information about your new MIME type.  
See [Table 8–5](#) for MIME type property information.
3. When you have finished editing the MIME type fields, click **Add**.  
DocuShare adds the new MIME type to the MIME types table.

Table 8–5: MIME type properties

Property	Description
Icon path	The path of the GIF image used to represent the file format. The image file must be located in the <b>{DSHOME}/tomcat/webapps/docushare/images/small</b> directory. Therefore, enter the subdirectory and filename only. For example, small/doc.gif.

Table 8–5: MIME type properties

Property	Description
MIME type	The MIME type, a slash (/), and the MIME subtype. For example <b>application/msword</b> indicates that the MIME type is an application and the MIME subtype is msword.
File Extension	The filename extension(s) associated with the file format. If you are using the file extension algorithm to assign the MIME type to uploaded files, DocuShare checks the file extensions listed in the Current MIME Types table and assigns the corresponding MIME type to the file.

To edit an existing MIME Type:

1. From the **Administration** menu, click **Site Management / MIME Types**.  
The MIME Types page appears.
2. Click **Edit** that is next to the appropriate MIME table entry  
The Edit MIME type page appears.
3. Make the appropriate changes to the Edit MIME type page.
4. If you want to return to the saved settings, click **Reset**.
5. If you want to save your changes, click **Submit**.  
DocuShare saves your MIME type changes and displays the changes in the Current MIME types table.

To remove an existing MIME Type from the MIME Type table:

1. From the **Administration** menu, click **Site Management / MIME Types**.  
The MIME types page appears.
2. Locate the MIME entry that you want to delete.
3. Click **Delete**.  
You can delete only custom MIME types. You cannot delete system MIME types.



## Site operations

---

Use **Site Management / Site Operations** to toggle your site between Read/Write and Read Only modes, and to create and display a site-wide customized administrator message.

To toggle your site between Read/Write and Read Only modes:

1. From the **Administration** menu, click **Site Management / Site Operations**.  
The Site Operations page appears.  
[Click any field name to view help for that particular field.](#)
2. Select either **Read/Write** or **Read Only** from the **System Mode** menu.
3. If you want to return to the previous settings, click **Reset**.
4. If you want to save your changes, click **Apply**.  
DocuShare is now in the mode you set.

To create and display an administrator message:

1. From the **Administration** menu, click **Site Management / Site Operations**.  
The Site Operations page appears.
2. Enter an administrator message in the **Admin Message** field.  
The message may contain a combination of letters, numbers, and special characters.
3. To display the administrator message, click **Yes** next to **Show Admin Message**.  
To hide the administrator message, click **No**.
4. If you want to return to the previous settings, click **Reset**.
5. If you want to save your changes, click **Apply**.  
DocuShare now displays your administrator message throughout your site.

## Directory paths

---

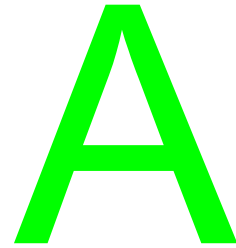
Use **Site Management / Directory Paths** to enter pathnames to the site document repository directory and to the site temporary file directory.

To change the TMP directory path:

1. From the **Administration** menu, click **Site Management / Directory Paths**.  
The Directory Paths page appears.  
[Click any field name to view help for that particular field.](#)
2. If you do not accept the default path to the site TMP directory, enter a new pathname in the **TMP Directory** field.
3. If you want to return to the previous TMP directory pathname setting, click **Reset**.
4. If you want to save your changes, click **Apply**.  
DocuShare saves your new TMP directory pathname.

To change the Document Repository directory path:

1. Go to **Site Management/Site Operations** and place the DocuShare server into **Read Only** mode.
2. Copy the contents of the existing **docushare/documents** directory to the new directory location.
3. From the **Administration** menu, click **Site Management / Directory Paths**.  
The Directory Paths page appears.  
[Click any field name to view help for that particular field.](#)
4. Enter the pathname to the new documents directory in the **Document Repository** directory field.
5. If you want to return to the previous pathname settings, click **Reset**.
6. If you want to save your changes, click **Apply**.  
DocuShare saves your new Document Repository pathname.
7. Go to **Site Management/Site Operations** and return the DocuShare server to **Read Write** mode.



## File formats supported by DocuShare

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## File formats supported by DocuShare

DocuShare uses Verity technology to provide full-text indexing and HTML conversion. Using Verity, DocuShare can index the content of files even if they are in a non-text format, such as MS Word. The DocuShare View option uses Verity Key View™ technology to convert the non-text format documents into HTML documents.

At installation, DocuShare loads the list of supported file formats, or MIME types. Refer to Chapter 8 - Site Management - MIME types for instructions on editing the file format list.

DocuShare does not automatically convert every document to HTML. Instead, HTML conversion occurs on the first viewing of a file. DocuShare saves the HTML rendition for subsequent viewing. DocuShare deletes the HTML document when a new version of the original document is added to the site and that document is viewed.

Table A–1 lists all of the file types that are currently supported by DocuShare.

- **Application:** the application or type of application used to create a file.
- **MIME type:** the MIME type associated with an application.
- **Indexed:** whether or not DocuShare indexes the content of the file.
- **Summarize:** whether or not DocuShare summarizes the content of the file.
- **HTML conversion:** whether or not DocuShare converts the content of the rendition into HTML. You cannot change the setting for HTML conversion. Some files show an N in this column because that file is already in a browser-viewable format.

Table A–1: File formats supported

File Format	MIME Type	Indexed	Summarize	HTML Conversion
AIFF Audio	audio/x-aiff	N	N	N
Ami Pro	application/vnd.lotus-amipro	Y	Y	Y
AU Audio	audio/basic	N	N	N
AutoCAD	image/vnd.dxf	N	N	N
AutoDesk	image/vnd.dwg	N	N	N
AVI Movies	video/avi	N	N	N
Bitmaps	image/bmp	N	N	Y
CGM Graphics	image/cgm	N	N	N
Compressed files	application/x-compressed	N	N	N
Corel Draw	application/vnd.corel-draw	N	N	Y

Table A–1: File formats supported

File Format	MIME Type	Indexed	Summarize	HTML Conversion
Corel Presentations	application/vnd. corel presentations	Y	Y	Y
Encapsulated Postscript	application/eps	N	N	Y
Encrypted PGP	application/pgp encrypted	N	N	N
Framemaker	application/vnd. framemaker	N	N	N
GIF Images	image/gif	N	N	N
Gzip	application/x - gzip	N	N	N
Harvard Graphics	image/vnd. harvard graphics	N	N	N
HTML	text/html	Y	Y	N
JPG images	image/jpeg	N	N	N
Lotus 123	application/vnd. lotus-123	Y	N	Y
Lotus Freelance	application/vnd. lotus - freelance	Y	Y	Y
Lotus Symphony	application/vnd. lotus - symphony	N	N	N
Lotus Word Pro	application/vnd. lotus- wordpro	Y	Y	Y
Microsoft Access	application/vnd. ms-access	N	N	N
Microsoft Excel	application/vnd. ms - excel	Y	N	Y
Microsoft PowerPoint	application/vnd. ms - powerpoint	Y	Y	Y
Microsoft Project	application/vnd. ms - project	N	N	N
Microsoft Publisher	application/vnd. ms - publisher	N	N	N
Microsoft Word	application/ msword	Y	Y	Y

Table A–1: File formats supported

File Format	MIME Type	Indexed	Summarize	HTML Conversion
Microsoft Works	application/vnd.ms-works	Y	Y	Y
MIDI Audio	audio/x-midi	N	N	N
MPEG Movies	video/mpeg	N	N	N
PageMaker	application/vnd.pagemaker	N	N	N
PDF Viewer	application/pdf	Y	N	N
PGP Keys	application/pgp-keys	N	N	N
PGP Signature	application/pgp - signature	N	N	N
PICT Images	image/x-pict	N	N	N
PKZip	application/x-zip	N	N	N
Plain Text	text/plain	Y	Y	N
PNG Images	image/png	N	N	N
Postscript	application/postscript	N	N	N
Quattro Pro	application/vnd.quattro - pro	Y	N	Y
QuickTime Movies	video/quicktime	N	N	N
Real Audio	audio/real-audio	N	N	N
Rich Text Documents	application/rtf	Y	Y	Y
SGML	text/sgml	Y	Y	N
SHAR	application/x-shar	Y	N	N
Stuftit	application/x-stuftit	N	N	N
SVF Images	image/vnd.svf	N	N	N
Tar	application/x-tar	N	N	N
Targa Images	image/targa	N	N	N
TIFF Images	image/tiff	N	N	Y
USENET News	message/news	Y	Y	N
WAV Audio	audio/x-wav	N	N	N

Table A–1: File formats supported

File Format	MIME Type	Indexed	Summarize	HTML Conversion
Windows Metafile	image/vnd. windows - metafile	N	N	N
Windows Write	application/vnd. ms- write	N	N	N
WordPerfect	application/vnd. wordperfect	Y	Y	Y
WordStar	application/vnd. wordstar	N	N	N
XML	text ? xml	Y	N	N





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