June 2015

Xerox® DocuShare®
Administrator Guide

Publication Date: June 2015.

This document supports DocuShare 7.0.

Table of Contents

Introduction

1

DocuShare product editions

Xerox® DocuShare provides several product editions. Depending on which product edition you are using, certain features and add-ons are available.

Note: DocuShare Express is not available in all geographies.

DocuShare documentation describes all product features and add-ons. Refer to the below table to see which features and add-ons are available for your use.

Product comparison

	DocuShare Express	DocuShare Education	DocuShare	DocuShare Enterprise
Document Check-in / Check-out and Version History	•	•	•	•
Access Permissions	•	•	•	•
Expanded Permission Set	•	•	•	•
Full Text and Property Indexing and Search	•	•	•	•
Notifications	•	•	•	•
Change History / Activity History	•	•	•	•
Document Routing and Approval	•	•	•	•
Side-by-Side Document Content and Property Viewer	•	•	•	•
Scan Cover Sheets	•	•	•	•
Document Comments	•	•	•	•
Weblogs and Wikis		•	•	•
HTML Conversion	•	•	•	•
Custom Properties Creation	•	•	•	•
Custom Object Creation		•	•	•
Document and Permission Reports		•	•	•
DocuShare SharePoint Integration		•	•	•
LDAP Support		•	•	•

Product comparison

	DocuShare Express	DocuShare Education	DocuShare	DocuShare Enterprise
WebDAV Support	•	•	•	•
Product Add-ons				
Application Connector		Add-on	Add-on	Add-on
Archive Server		Add-on	Add-on	Add-on
Content Encryption			Add-on	Add-on
Content Rules Manager (content rules / workspaces features)		Add-on	Add-on	•
Database Connectors		Add-on	Add-on	•
eForms		Add-on	Add-on	Add-on
Email Agent		Add-on	Add-on	•
Federated Search		Add-on	Add-on	•
OCR Service			Add-on	Add-on
PDF Conversion		Add-on	•	•
Quick Search	•	Add-on	•	•
Records Manager			Add-on	Add-on

DocuShare administration

2

Introduction to administration

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

- Admin
- Site Administrator
- Content Administrator
- Account Administrator

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.
- 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.
- Using DocuShare external domains requires knowledge of LDAP server and LDAP interface operations.
- Using an external database to store DocuShare documents requires technical knowledge of that database.
- Using DocuShare Records Manager requires knowledge of the IBM DB2 Records Manager administrator UI.
- Major modifications to the site, such as VDF template modification, data migration, and client-side tool creation require a high level of programming experience.

Admin

The default login name for the main administrator for a site is **admin**. 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 only User-2 can change the admin password.

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

Forgotten admin password

If you have forgotten the admin account password, run the DocuShare command line utility **start_docushare resetpassword** to reset the admin account password to the default password **admin**.

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 the main admin account, and can see all of the possible tools displayed in the Administration menu.
- By default, Site Administrators can create or delete user and group accounts.
- By default, Site Administrators can edit the properties, password, and username of all user accounts.
- By default, Site Administrators can edit the properties of group accounts; such as the name of the group, the owner of the group, and the group membership list.
- By default, Site Administrators can administer the other administrator groups.
- By default, Site Administrators can edit the properties, permissions, subscriptions, and locations of all site objects.

Note: Only admin (User-2) can edit User-2 properties and password.

- 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**, **Site Management**, and **Applications**.
- Limited Site Administrators can edit the properties but not the permissions of all site objects.
- Limited Site Administrators cannot administer 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**.

- 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.
- 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.
- Content Administrators can create and delete user and group accounts.
- Content Administrators can edit the properties of user accounts.
- Content Administrators cannot change the password or username of a user account other than their own.
- Content Administrators can edit the properties of group accounts; such as the name of the group, the owner of the group, and the group membership list.
- Content Administrators cannot administer the other administrator groups.
- Content Administrators can edit the properties, permissions, subscriptions, and locations of all site objects.
- Content Administrators can open and view the content of any site object.

Account administrator (Group-3)

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

- 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.
- 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 create or delete user and group accounts, if site access policies are not set to limit account creation to only the admin account.
- Account Administrators can edit the properties, password, and username of all user accounts, except the password of User-2 (the Site Administrator).
- Account Administrators can edit the properties of group accounts; such as the name of a group, the owner of a group, and a group membership list.
- Account Administrators cannot administer the other administrator groups.
- Account Administrators cannot edit the properties, permissions, subscriptions, and locations of site objects.
- Account Administrators cannot open and view the content of site objects unless given permission to do so by admin or by the owner of a specific object.

User levels

When a user account is created, either by a user or by an administrator, the user is assigned a **user level**. The user level controls how much access the individual account has to site content and functions.

When creating user accounts, administrators see all user levels. When users create accounts, they see a limited set that is dependent on their own level.

- **Guest**—Allows unregistered users to view content.
- **Read-Only**—Allows the user to view content, add content (if permissions are given), manage personal content on My DocuShare, and edit and delete a collection (if permissions are given).
- **DocuShare**—Allows access to all DocuShare content management functions.
- **CPX**—Allows access to all DocuShare CPX content and process management functions.

Object class and user level relationships

- User level privileges for a custom object class are identical to the object class used as the clone.
- The ability of any user class to read or edit any individual object depends on the permissions applied to that object.

Object classes and user level privileges

Object type	CPX user	DocuShare user	Read-only user	Guest
Calendar	Read Edit/Create	Read Edit/Create	Read	Read
Collection	Read Edit/Create	Read Edit/Create	Read Edit/Create	Read
Discussion	Read Edit/Create	Read Edit/Create	Read	Read
Document	Read Edit/Create	Read Edit/Create	Read	Read
Version	Read Edit/Create	Read Edit/Create	Read	Read
Rendition	Read Edit/Create	Read Edit/Create	Read	Read
Event	Read Edit/Create	Read Edit/Create	Read	Read
Group	Read Edit/Create	Read Edit/Create	Read	Read
MailMessage	Read Edit/Create	Read Edit/Create	Read	Read

Object classes and user level privileges

Object type	CPX user	DocuShare user	Read-only user	Guest
Save Query	Read Edit/Create	Read Edit/Create	Read	Read
Subscription	Read Edit/Create	Read Edit/Create	Read	Read
Topic	Read Edit/Create	Read Edit/Create	Read	Read
URL	Read Edit/Create	Read Edit/Create	Read	Read
User	Read Edit/Create	Read Edit/Create	Read	Read Edit/Create
Workspace	Read Edit/Create	Read	Read	Read
Weblog	Read Edit/Create	Read Edit/Create	Read	Read
Weblog Entry	Read Edit/Create	Read Edit/Create	Read	Read
Wiki	Read Edit/Create	Read Edit/Create	Read	Read
Wiki Page	Read Edit/Create	Read Edit/Create	Read	Read

Relationships between objects

- The ability of any user class to read or edit any individual object depends on permissions applied to both objects.
- A use can create a new user account only if the account is of their own user level or lower. A Guest account cannot choose user levels for a new account, and any user account created by a site Guest is given the default user level of that particular site.
- When changing the owner of an object, the new owner can be of the same or to a higher user level. Guest cannot be an owner.
- User accounts merged can be merged to the same or to a higher user level. Guest cannot be merged.

Relationships between objects

Relationship type	CPX user	DocuShare user	Read-only user	Guest
Calendar and Event	Read Edit/Create	Read Edit/Create	Read	Read
Collection and object contained	Read Edit/Create	Read Edit/Create	Read Edit/Create	Read
Discussion and Topic	Read Edit/Create	Read Edit/Create	Read	Read

Relationships between objects

Relationship type	CPX user	DocuShare user	Read-only user	Guest
Document Version	Read Edit/Create	Read Edit/Create	Read	Read
Draft Version of Document	Read Edit/Create	Read Edit/Create	Read	Read
Rendition of Version	Read Edit/Create	Read Edit/Create	Read	Read
Mail Message attachment	Read Edit/Create	Read Edit/Create	Read	Read
Native message object on Mail Message	Read Edit/Create	Read Edit/Create	Read	Read
Threaded Mail Messages	Read Edit/Create	Read Edit/Create	Read	Read
Workspace and object contained	Read Edit/Create	Read	Read	Read
Workspace membership group	Read Edit/Create	Read	Read	Read
Weblog and entry	Read Edit/Create	Read Edit/Create	Read	Read
Moderated Weblog and not-yet-approved entry	Read Edit/Create	Read Edit/Create	Read	Read
Wiki and Wiki Page	Read Edit/Create	Read Edit/Create	Read	Read
Wiki attachment	Read Edit/Create	Read Edit/Create	Read	Read
Owner of object	Read Edit/Create	Read Edit/Create	Read	Read
Group membership	Read Edit/Create	Read Edit/Create	Read	Read
Subscription on object	Read Edit/Create	Read Edit/Create	Read	Read
Subscriber to Subscription	Read Edit/Create	Read Edit/Create	Read	Read
User holding lock on document	Read Edit/Create	Read Edit/Create	Read	Read
User favorite	Read Edit/Create	Read Edit/Create	Read	Read

Relationships between objects

Relationship type	CPX user	DocuShare user	Read-only user	Guest
Shortcut from object to object	Read Edit/Create	Read Edit/Create	Read Edit/Create	Read
Personal user collection	Read Edit/Create	Read Edit/Create	Read Edit/Create	Read
Comments on object	Read Edit/Create	Read Edit/Create	Read	Read
Record successor	Read Edit/Create	Read Edit/Create	Read	Read
Document job ticket	Read Edit/Create	Read Edit/Create	Read	Read

User levels after site upgrade

When upgrading a site, if the old site has more users than are licensed for the upgrade, the upgrade process converts all user accounts to inactive status. After an upgrade, the administrator must manually assign user accounts to available seats in a specific user level and then activate those users.

- When upgrading from DS 4.x, all user accounts default to DocuShare level users.
- When upgrading from DS 5.x, all user accounts default to CPX level users.

If the administrator downgrades a user to Read-Only level, and that user owns content the site, that user cannot add new content. The user can delete content they own, but they cannot edit the properties of that content.

Administration UI

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

Administration UI navigation bar

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 page footer.

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.

Help Desk contents

Help Link	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.
Developer Tools	All DocuShare related development and programming aids and documentation.
Downloads	DocuShare software application downloads.

Administration menu

The Administration menu and the main window make up the Administration 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 Admin or a user with full Site Administrator privileges can see the entire Administration menu. Some items displayed in the Administration menu are used in conjunction with other menu items to configure features and add-ons, and appear only when related features or add-ons are licensed and enabled.

Object Properties

Refer to Chapter 3 of this guide for more information on working with DocuShare object classes and object properties.

Administration menu items - Object Properties

Menu Item	Description
Object Properties	
Calendar	Make changes or create new default properties and default property values for this object class.
Collection	Make changes or create new default properties and default property values for this object class.
Discussion	Make changes or create new default properties and default property values for this object class.
Document	Make changes or create new default properties and default property values for this object class.
Event	Make changes or create new default properties and default property values for this object class.
Group	Make changes or create new default properties and default property values for this object class.
MailMessage	Make changes or create new default properties and default property values for this object class.
SavedQuery	Make changes or create new default properties and default property values for this object class.
Subscription	Make changes or create new default properties and default property values for this object class.
Topic	Make changes or create new default properties and default property values for this object class.
URL	Make changes or create new default properties and default property values for this object class.
User	Make changes or create new default properties and default property values for this object class.
Workspace	Make changes or create new default properties and default property values for this object class.
Weblog	Make changes or create new default properties and default property values for this object class.
Weblog Entry	Make changes or create new default properties and default property values for this object class.
Wiki	Make changes or create new default properties and default property values for this object class.
Wiki Page	Make changes or create new default properties and default property values for this object class.

Administration menu items - Object Properties

Menu Item	Description
Custom Object	Create, modify, and delete new object classes. Give the new object class a unique Name and a unique Label, and select an existing object class from the Clone menu to use as a template.
Global Properties	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, how 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.
Update Properties	Review and modify all of the property changes that you made during an object properties editing session. Review all of your changes and if necessary, return to the property pages for the objects that you modified and make the necessary corrections.

Account Management

Account Management menu items

Menu Item	Description
Account Management	
Users	
Go to List/Find/Add Users	List all of the registered user accounts on this site, locate a single registered user account on this site, or create a new user account on this site.
	To list registered user accounts on your site: 1. Click **List**. 2. Select that you want to list **Users**. 3. Select how you want to filter your list. 4. Click **Show All** to display the list of users within your parameters.
	To find a registered user account on your site: 1. Click **List**. 2. In the **Search** field, enter any part of a first, last, or username. 3. Click **Go** to display the list of users within your search parameters.
	To create a new user account on an internal domain: 1. Click **Add User.** 2. Fill in all of the appropriate fields. 3. Select the correct internal domain from the **Domain** field menu. 4. Select the appropriate **User Level** for this account. 5. Click **Apply**.
Activate Accounts	Activate user accounts that are inactive, or to inactivate user accounts that are active. 1. Select the **User Level** that you want to display. 2. Select those accounts that you want to activate or inactivate. 3. Change the **Active Status** of those accounts. 4. Click **Update**.
Change User Level	Change the user level of accounts. 1. Select whether you want to display active or inactive accounts. 2. Select those accounts that you want to change user level. 3. Change the **User Level** of those accounts. 4. If you want to activate all inactive users, select **Activate All Inactive Users**. 5. Click **Update**.

Account Management menu items

Menu Item	Description
Change User Quotas	Set the total number of documents and disk space allocated to one or more users. 1. Select the user accounts you want to assign quotas. 2. Set the **Document Count Quota** to the maximum number of documents that the selected accounts may own. This number does not include document versions and renditions. If a specific user has no quota set, then the effective quota for that user is the largest quota taken from all the groups of which the user is a member. If a specific user does have a quota set, then that quota overrides the set quota of any group of which the user is a member. 3. Set the **Document Content Size Quota** to the maximum disk space allocated for the documents owned by the selected accounts. This number includes document versions and renditions. If this number is greater than what is set on the Change User Level Quotas page, then the Document Content Size Quota defaults to the Change User Level Quotas page settings. If you select **Not Set**, the quota of the selected account defaults to the highest setting of any group of which the account is a member. 4. Click **Update**.
Change User Level Quotas	Set the maximum document storage size, in megabytes, for each user level (DocuShare, CPX). These settings restrict the amount of document storage that each DocuShare and CPX user is allowed on the site. This maximum storage size includes all documents and all versions and renditions of those documents. If a maximum size is not specified in any field on this page, then the maximum size defaults to **unlimited**, unless a Document Content Size Quota is set on the Change User Quotas or the Change Group Quotas page.
Merge Accounts	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. 1. From the **Add Accounts** field, select the accounts that you want to merge into one combined account, then click **Update Account List**. 2. 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. 3. Use the **Remove Accounts** and **Add Accounts** fields to refine the merge list, then click **Merge Accounts**.
Account Activity	Display a report of the last time each user, including the Guest account, logged into the site. You may select how the accounts are displayed by selecting a method from the **Sort Order** menu.

Account Management menu items

Menu Item	Description
Groups	
Go to List/Find/Add Group	List all of the group accounts on this site, locate a single registered group account on this site, or create a new group account on this site.
	To list registered group accounts on your site: 1. Click **List**. 2. Select that you want to list **Groups**. 3. Select how you want to filter your list. 4. Click **Show All** to display the list of groups within your parameters.
	To find a registered group account on your site: 1. Click **List**. 2. In the **Search** field, enter any part of a group name. 3. Click **Go** to display the list of groups within your search parameters.
	To create a new group account on an internal domain: 1. Click **Add Group**. 2. Fill in all of the appropriate fields. 3. Select the correct internal domain from the **Domain** field menu. 4. Select whether or not you want you add yourself to the group. 5. Click **Apply**.
Change Group Quotas	Set the total number of documents and disk space allocated to each member of one or more groups. 1. Select the group accounts you want to assign quotas. 2. Set the **Document Count Quota** to the maximum number of documents that the selected accounts may own. This number does not include document versions and renditions. 3. Set the **Document Content Size Quota** to the maximum disk space allocated for the documents owned by the selected accounts. This number includes document versions and renditions. If you select **No Quota Set**, then the Document Content Size Quota defaults to the maximum sizes as set on the **Change User Level Quotas** page. 4. Click **Update**.

Account Management menu items

Menu Item	Description
Domains	Add, edit, or delete internal and external domains within local registry. 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** reside on your DocuShare site. To create a new internal domain, enter a unique name for the new domain in the **Domain Name** field and then select **DocuShare/DocuShare** from the **Providers** menu. • **External domains** are created on a 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 an external domain, you must configure your site to connect to a specific LDAP server where the domain is already created, then use **Domains** to add the external domain to your local site registry.
LDAP Accounts	Refer to Chapter 5 of this guide for more information on using these menu items to configure DocuShare for use with external domains.
Configuration	Set up your DocuShare site to use an external LDAP server for account authentication and external domain hosting. 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.
Add	Register external domain user and group accounts with a specific DocuShare site. An external domain account may be registered on multiple DocuShare sites.
Convert	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.
Rename	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.
Synchronize	Synchronize local user and group account property information with account property changes that were made at the LDAP server.

Account Management menu items

Menu Item	Description
Bind User	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.
Bind Group	Set 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.
Providers	
Security Services	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.
Directory Services	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.
Records Management Roles	Assign or unassign specific records management roles to specific users. There are three roles available: • **Administrators** - can perform all of the Coordinator tasks as well as access the records management system. • **Contributors** - can classify objects, indicate the objects that are ready to be declared as records, and create personal classification presets. • **Coordinators** - can perform all of the Contributor tasks as well as declare classified objects as records, create group and collection classification presets, add successor records, and assign user roles (if you also are an Account Administrator).

Services and Components

Refer to Chapter 5 of this guide for more information on using these menu items to configure DocuShare features and add-ons.

Services and Components menu items

Menu Item	Description
Services and Components	
Administration	Select how you want DocuShare to display the Administration menu; either as a collapsible directory tree or as an expanded HTML list.
Archive Server	Set various DocuShare Archive Server properties, including pathname to the server, server password, and the intervals between polling for documents selected for archiving.
Background Job	Set the properties of the background job service.
Conversion	
HTML Conversion	Set the HTML/PDF conversion options for the DocuShare Conversion Service, including the **High Fidelity PDF Filter**.
Image Conversion	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 stretch to fit within the width and height parameters. In the **Thumbnail Image** fields, enter a value, in pixels, for both the thumbnail image width and the thumbnail image height.
PDF Conversion	Set the OpenOffice home directory for PDF conversion. Standard DocuShare converts TIFF, JPEG, and PNG into PDF. OpenOffice converts Microsoft Word, Excel, and PowerPoint; RTF; and GIF into PDF. For PDF conversion to function, you must have OpenOffice installed and running, and the environment set to display vector graphics. For DocuShare running on a Windows server, PDF conversion works only with **OpenOffice version 4.x or higher**.
Database	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.
Document Export Locations	Create links to external file locations for use with the document export feature, which allows users to easily export documents by selecting a preset location from a menu. Use Document Export Locations to create these preset export locations by providing a name, path, and export configuration.
Email Agent	
Email Account	Set the basic Email Agent account properties, including an email address for the Email Agent, external mail server pathname, and mail server type.

Services and Components menu items

Menu Item	Description
User Account	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, so we recommend that you create a special user account for this purpose, rather than assign the task to an existing user.
Digital Certificate	Set the Email Agent certificate properties for secure email and encryption.
Advanced	Set various Email Agent email properties; including email confirmation, digital signature requirement, first line addressing, and mail polling interval.
Email Server Integration	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.
Scan to Email	Configure DocuShare to use a specific server and account for scanning, if they differ from the Email Agent POP3/IMAP server that is set in Email Agent l Email Account.
Content Intake	
Configuration	Configure and manage custom Content Intake sockets.
Edit	Edit or delete an instance of a Content Intake socket. Also, use to enable and disable the Scan Cover Sheet feature.

Services and Components menu items

<table>
<tr><th>Menu Item</th><th>Description</th></tr>
<tr><td>Logging</td><td>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.

Logs are designed so if an administrator or a support engineer is trying to troubleshoot a problem in a suspected DocuShare service area, they can set the logging level of that service to record any ongoing problems. Errors are generally written to the .stdOUT log of a service, and are located in the DocuShare/log directory. In most cases, logs are not created until the service is actually used or errors are generated.

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.
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.</td></tr>
<tr><td>Records Management</td><td></td></tr>
<tr><td>Configuration</td><td>Configure DocuShare to use an IBM DB2 Records Manager server.

Fill-in the top five fields to establish a connection to an IRM server.
In the Enable Automatic Host Registration field, select Yes.
In the File Plan View Name field, enter the name of the File Plan that you selected for your IRM.
In the Email Attachment Filing Method field, select how you want Records Manager to handle mail messages and attachments.
In the Version Retention field, select how you want Records Manager to handle record versioning</td></tr>
<tr><td>Auditing</td><td>Enable Records Manager auditing and to select which activities you want to record; such as when a record is either undeclared or deleted, or when the properties of a record have changed.

To use Records Manager auditing, the IRM Administrator must set the audit configuration for each IRM record type. If an audit event activity is not configured for a record type, then that specific activity will not be audited even if it is enabled on the DocuShare Auditing page.</td></tr>
</table>

Services and Components menu items

Menu Item	Description
Property	Enable editing of specific properties of DocuShare/RM object classes; currently only Document, Mail Message, and custom object classes based on either Document or Mail Message. When you enable editing of a specific object class property, you are unlocking the property and permitting users to edit the value of that property on any instance of that object currently stored in Records Management. Changes made to the value of a property are currently done through the DocuShare UI. From the **DocuShare Objects** menu, select the object class you want displayed, then select the properties that you want to unlock.
Scan	Set the properties of the DocuShare scanning service. The menu item Scan appears when you have enabled scanning on the Site Configuration page. Scan via SMB is installed as a standard part of DocuShare software. If you want to also run Scan via FTP, you make that decision during initial DocuShare software installation. To load Scan via FTP software after initial DocuShare installation, run the scan jar file that is included on the DocuShare product media. To enable or disable scanning, go to **Site Management | Site Configuration** and select either **Yes** or **No** in the **Enable SMB Scanning** and **Enable FTP Scanning** fields. SMB scanning installs as part of the initial DocuShare software installation. During installation you are given the option of also installing Scan via FTP. Once both scanning methods are installed, you can choose to enable/disable either or both, by making your selection on the Site Configuration page. You may change default the Collection Handle field value, or let the Scan Repository auto-create a value. If your site is running with XST enabled, and you disable XST, you must go to **Site Management | Site Configuration** and disable **Enable SMB Scanning** (click Apply) then enable **Enable SMB Scanning** (click Apply). This restarts the SMB scan service.
Search	Set the properties for the search and filtering programs.
Index	Set the properties for the index server.
Subscription	Enable DocuShare Subscription service and set Subscription service properties. On the Web UI, Subscription is referred to as **Notification**. Enabling Subscriptions also enables **Content Rules**. Content Rules replace subscription workflows that were provided in previous DocuShare releases. In the **SMTP Mail Gateway** and **SMTP Mail Port** fields enter the address and port number of your SMTP Mail Gateway, fill in any remaining fields to set the frequency of subscription notifications, and then enter the email address of the person responsible for subscription maintenance. **Send Test Message** sends email to the site administrator to verify that the service is working correctly.

Services and Components menu items

Menu Item	Description
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	Manage current workflow instances and retrieve detailed task, graphical, and XML representations of the workflows. Workflow view: • **Tabular View** - see the workflow process in a table format. • **Graphical View** - see the workflow process in a graphical representation. • **XML View** - to see the workflow process in a XML code representation. Workflow action buttons: • **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	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.
Mobile Client Configuration	Enable the Mobile Client Connector and verify the settings for the Xerox Mobile Client for DocuShare app.
Object Reporting Configuration	Configure the object/properties reporting feature. Select specific properties, for each DocuShare object type that you want to appear in collection content reports.
Print Feature Configuration	Configure the DocuShare print feature; which allows users to print DocuShare documents using the Xerox Mobile Print Solution.
Email Feature Configuration	Configure the DocuShare email feature; which allows users to email DocuShare documents.
ConnectKey for DocuShare	
Configure Buttons	Create ConnectKey buttons that appear on MFP devices.
Configure Devices	Register and manage MFPs for use with ConnectKey for DocuShare.
ODBC Connection	Create button connections based on external data sources.
Autofill Profiles	Create profiles that pair text entered in a scan button field with data stored in an external data source.

Services and Components menu items

Menu Item	Description
ODBC Menus	Create menus that allow users to make selections from scan button menus, rather than enter text into a field.
ODBC Dependent Menus	Create menus that allow users to make selections from scan button menus, that then display additional menus, with choices based on the selection from the previous menu.
Server Configuration	Configure ConnectKey server and email servers used by ConnectKey
Server Setup	Configure ConnectKey server credentials, and to enable and register MFPs that are behind a firewall.
Email Setup	Configure email server credentials, and to allow the creation of scan-to-email buttons.
Logs	Configure and view ConnectKey logs
Scanning Log	View and download a log of all scan jobs.
Server Log	Configure the server logging level and to download the server log.

Content Management

Content Management menu items

Menu Item	Description
Content Management	
Repository Use	Generate a customized site repository use report. This report lists the registered users on your site, the number of files and documents owned by each user, the sum total size of all files and documents, including versions and renditions owned by each user. Objects holding content that have been deleted and are in the trash, are included in the total count. To print the report, select **Print** from your browser menu bar.
Content Store Configuration	Partition the site content store into separate directories, set directory size limits and define buffer size. Note: **This feature is available when the site is licensed for high scalability.**
Group Statistics	Generate a customized report of all site groups. Select the properties you want listed in the report; such as the group creation date or the assigned document quotas. If you do not select any properties to list, the report displays the name of all groups on the site.
Orphaned Content	
List Orphans	Locate and reassign or delete orphaned objects within your site. Depending on what menu item you selected, either a Move Orphans To page or a Delete Orphans page appears. Follow the instructions on the Delete Orphans page to either move the orphans to an appropriate container or space, or expunge the orphans from the site.
List Orphans Properties	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.
Trashcan	
Trashcan Contents	Either restore or expunge objects from the trashcan. Use the **Filter By** menu to select either all or specific object classes within the trashcan. You can restore or expunge **All**, **Expired**, or **Selected** objects.
Trashcan Properties	Enable 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 personal trashcans, go to Site Management I Site Configuration.
Permission Reports	View a variety of reports based on user /group membership relationships and access permissions.

Content Management menu items

Menu Item	Description
Lifecycle Management	
Email Notification Properties	Select the objects and properties that display in email notifications.

Site Management

Refer to Chapter 5 of this guide for more information on using these menu items to configure DocuShare features and add-ons.

Site Management menu items

Menu Item	Description
Site Management	
About DocuShare	Displays license, support, and warranty information, in addition to links to software release notes and the DocuShare web site. If you would like more information on a item, click the appropriate link.
Access Policies	Select who has permission to access this site and who has permission to create new user accounts on this site. **Site Access Authority** • Guest—Anyone may enter the site. • User—Only registered users may enter the site. • Administrator—Only members of the three administrator groups may enter the site. **Registry Access Authority** • Guest—Anyone can see all registered user and group accounts and associated properties. • User—Only registered users can see all registered user and group accounts and associated properties. • Administrator—Only site administrators can see all registered user and group accounts and associated properties. Registered users can still see their own accounts and properties. **Account Creation Authority** • Guest—Anyone may create a new user account. • User—Only registered users may create new user accounts. • Administrator—Only site administrators may create new user accounts. **Group Creation Authority** • User—Only registered users may create new group accounts. • Administrator—Only site administrators may create new group accounts.
Access Tracking	Enable and configure the recording of selected site operations on all site objects. Information obtained is archived before the system flushes it from the cache. You can set the flush frequency and how long the system keeps the archived data. Enable Data Capture to begin tracking and recording, then select the operations that you want the system to track and record; for example, if you want to track and record all instances when there is a change of object ownership, select **Change Owner**. Anyone can view the recorded operations by clicking **Change History** on object properties pages.

Site Management menu items

Menu Item	Description
Account Policies	Set specific polices for all user accounts; such as password life span and password rules. Note: **Changes made to Password Expiration apply to new user accounts only; they do not apply to existing accounts.** For **All passwords expire within specified days after creation**, enter the number of days user passwords are valid after they were created. For **Password Content Rules**, select the rules you want to apply to all user account passwords; such as the minimum number of characters that make up a password. For **Automatic Logout Policy**, select how you what to handle account inactivity before the system logs off a user. Note: **Logout user after minutes of inactivity is not compatible with Auto Login. See Site Configuration to make sure Auto Login is disabled before enabling Logout user after minutes of inactivity.** (Internal DocuShare domain use only) For **Failed Login Policy**, select whether or not to enable the system to lockout a user after a set number of failed login attempts, and enter the number of ties a user has before lockout. If enabled, user accounts are locked after a set number of unsuccessful login ties. To free a locked account, the administrator needs to either create a new password for the user whose account is locked or increase the number of login tries allowed.
Background Job Status	Display a list of all site background jobs currently in queue and delete selected background jobs from the queue. DocuShare now provides background processing for select operations; currently deleting user accounts and changing object permissions. Once a logged in administrator deletes a user account or changes the permissions to an object, a message appears at the top of the home page indicating how many background jobs are in progress. The administrator can click the message to display the background job queue. Clicking the background job message displays only those background jobs in queue that were generated by the administrator. Jobs created by individual users are not displayed to the administrator, but the jobs are displayed to the individual users who generated those jobs. Allow a background job to run to completion or on this page click the icon under Actions to modify a selected job. Currently, the only Action available is Delete the Job; represented by a Trashcan icon. If a job is running, you cannot delete it. Click the **Trashcan icon** under **Actions** to stop the selected background job, remove it from the queue, and return that item to its original state. If a job in queue is deleted, the object permissions are not changed and a user account and all objects that are owned by that account are neither deleted nor reassigned.
Class Icons	

Site Management menu items

Menu Item	Description
Small Class Icons	Associate a custom icon graphic with a specific DocuShare object class. Small icon graphics should measure approximately 20x20 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. 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.
Large Class Icons	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. 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/large then enter **large/document.gif** in the **Icon Path** field.
Site Configuration	Modify the look and functionality of your DocuShare site by changing site properties and enabling site functions. Important options on this page include: • 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 auto login. • Enabling Content Encryption. • Enabling the home page image slider and defining the collection where customs images are stored. • Enabling SMB and/or FTP scanning. • Enabling personal trashcans. Note: **Enable Auto Login: If enabled, the system allows Windows Domain Authentication to handle the DocuShare Login Authentication. Refer to** Auto login **on page 64 for instructions on setting up Auto Login. Auto Login and Account Policies Logout user after minutes of inactivity are incompatible**
Site Identification	See the Server ID of this site and to change the site name and description.

Site Management menu items

Menu Item	Description
Installed Languages	Select the default language for the site, select and enable a language to display for the site pages (if not the default language), and set the date format for the selected language. If the selected language is not enabled, the site pages display in the default language. Site users may configure their browsers to view the site in the selected language. Most of the site text, art, messages, and documentation appear in the selected and enabled language. DocuShare does not translate uploaded user documents.
License	License your DocuShare site and remove site evaluation restrictions, upgrade account limits, and 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. This page contains much useful information about a site; such as the host ID number, the maximum number of user accounts (of all levels) available, and DocuShare services that are licensed and available. If you cannot find a specific service in the Services Enabled field, that means the site has not been licensed to run that service.
Repository Log Files	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. Select **Yes** to enable access and error logging. 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. 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.
	Repository Log Access log columns: 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. 6. **Handle** - The handle of the object that the command in column 5 refers to, such as View Collection-25. 7. **Command Argument** - Up to three arguments used by the command in column 5.

Site Management menu items

<table>
<tr><th>Menu Item</th><th>Description</th></tr>
<tr><td></td><td>Repository Log Error log columns:
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 Collection-25.
8. Command Argument - Up to three arguments used by the command in column 6.</td></tr>
<tr><td>MIME Types</td><td>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.
Set 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.
This page displays all file formats, or MIME types, supported by this version of DocuShare.
File formats supported:
• DocuShare uses Autonomy technology to provide full-text indexing and HTML conversion. Using Autonomy, 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 Autonomy Key View™ technology to convert the non-text format documents into HTML documents.
• 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.</td></tr>
<tr><td>Site Operations</td><td>Toggle your site between Read/Write and Read Only modes, and to create and display a site-wide customized administrator message.</td></tr>
<tr><td>Directory Paths</td><td>Change the location of the Document Repository directory:
1. Create a new documents directory at the new repository location.
2. Place the DocuShare site into Read Only mode.
3. Enter the pathname of the new documents directory in the Document Repository directory field of the Directory Paths page.
4. Stop DocuShare.
5. Move the contents of the existing documents directory into the new documents directory; this includes all document buckets and the guid.txt file.
6. Restart DocuShare.</td></tr>
</table>

Site Management menu items

Menu Item	Description
Federation	
Settings	Either create a new DocuShare federation, join a DocuShare federation, change your federation name, or delete your federation. Your site must be licensed for Federated DocuShare to see the Federation menu items. The appearance of specific Federation menu pages displayed depends on whether your site is either a Moderator or a Member of a federation.
Member List	View information about the Members of your federation, cancel a Membership to your federation, invite new Members to join your federation, send email to the administrator of a federation Member, and/or delete your federation.
Invitation List	Invite new members to join your federation, monitor the invitations that you have already sent, cancel an invitation, send email to the administrator of a federation Member, and/or delete your federation. Only a federation Moderator sees the Site Management | Federation | Invitation List menu item.
Quick Search	DocuShare Quick Search provides a search-oriented home page, for supported object types, and a side-by-side viewer that lets users view document content while viewing and editing the properties of the document. Use the Quick Search administration page to select the top level folders that appear under Collection Explorer, and define the document types, and properties for each type, that appear in the side-by-side view page and the side-by-side edit page. Configuration and use of Quick Search is covered in the *DocuShare Quick Search Supplement*.
Permissions	Manage various permission attributes.

Applications

Refer to Chapter 5 of this guide for more information on using these menu items to configure DocuShare features and add-ons.

Applications menu items

Menu Item	Description
Applications	
Portal Integration	Select the collections and workspaces on your site what can be displayed in a JSR168 portlet and to create a portlet WAR file. In the **Location to Display in Portlet** section of the page, select a group of possible locations by either **Sort By** type, **Search** for specific, **Show All** locations, or **Show Favorite** locations. In the **Portlet File Location** section of the page, use the **Select Location** link to browse to the location on your DocuShare site where you want the portlet WAR file placed. In the **Portlet File Name** field, enter a name for the portlet WAR file (spaces not allowed). After creating the file, DocuShare displays a message showing you the WAR file name and location that you entered in the fields. Go to the DocuShare collection where the WAR file was placed and download the file to a temporary location on your local drive.

Working with objects 3

Object metaphor

DocuShare is built around an object metaphor. Objects form the basis of a DocuShare site. 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 on either a **default object class** or a **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.

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. 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.
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.
MailMessage	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.

Default object classes

Object Class	Description
Workspace	A workspace for individual users.
Weblog	A site blog for journal postings.
Weblog Entry	A blog entry item.
Wiki	A site wiki for interactive postings.
Wiki Page	A wiki entry item.

Object class default properties and property values

An administrator can change the default property and property values of all object classes. Each object class has an associated set ofbase 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 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. Common property fields on page 46 explains the meaning of that information. Property fields generally vary between object classes.

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, a value is necessary to create this object.
Read Only	If checked, the property is given a default value when first created and it cannot be changed by anyone other than an administrator.
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. Depending on the size and object volume of a site, updating properties can take a long time to complete.

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.

String property value limits

Many databases have limitations on the number of bytes allowed for string property values. Consult your database administrator for more information on any string property value limits for your specific site database.

When defining object string properties, keep in mind that multi-byte characters do not always equal one byte per character. A string property length of 256 bytes does not necessarily equal a string of 256 characters; a multi-byte character may use one, two, or three bytes. When planning string property lengths for a DocuShare object class, allow extra bytes for the possible use of multi-byte characters in the string value.

If a user enters a string property value, such as a document title, that exceeds the byte limit of a site database, DocuShare displays an error message telling the user to enter fewer characters in that property field. The user needs to simply shorten the string value to comply with the limits imposed by the database.

Content Indexing

Located to the right of the Add Custom Property menu on both the Object Properties l Document and Object Properties l Custom Object (only custom objects that were cloned from the document class) pages is a Yes/No selection field titled **Content Indexing**. This field allows you to specify whether or not the system will index the content of the object class. This applies only to site objects based on the Document object class or custom objects cloned from the Document object class.

Select **Yes** to index the content of all objects based on the Document object class or custom objects cloned from the Document object class.

Select **No** not to index the content of all objects based on the Document object class or custom objects cloned from the Document object class. Content Indexing set to No reduces the time required to index the site; however, users will not be able to search on document content.

If you change the Content Indexing setting, and the site contains instances of objects based on the Document object class or custom objects cloned from the Document object class, you must re-index the site using the **dsindex *-classname*** command; where -*classname* is the classname of all object classes that you have changed the setting. For example; if you change the Content Indexing setting for a custom object class named *invoice*, run the command **dsindex -invoice**

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 Network (DSDN).

Custom properties

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.

DocuShare does not translate custom property labels. If you give a custom property an English label and someone views your site in French, the system displays the property *name* instead of the property *label*. To correct this, in the French version of your site, you must manually enter a French property label by clicking the Edit button next to the custom property, entering the French equivalent of the English word(s) in the Label field, and then click **Apply**.

Caution

To avoid the risk of breaking existing object functionality, do not give generic names to custom properties. For example, creating a custom property and naming that property “date” may interfere with existing objects that already have date as a property name. Instead, give the property a more unique name such as “doc_create_date”. To be safe, avoid all common names such as title, name, or location, and use instead more descriptive names for custom properties such as “topic_title”, “file_name”, and “employ_location”. Never use “document” or part of the word “document”, such as “docu” or “doc”, as the name or part of the name of a custom object or custom property.

Types of custom properties available

Custom property types

Property	Description
BigDecimal	Create a property field that accepts BigDecimal values. BigDecimal supports fractional values. You can specify up to 5 digits to the right of the decimal and up to 30 digits to the left of the decimal.
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 (/) or by a dash (-). 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. Integers can range from -2147483648 to +2147483647. Fractional values are not allowed.
Long	Create a property field that accepts long integers. Long integers can range from -9223372036854775808 to +9223372036854775807. Fractional values are not allowed.

Custom property types

Property	Description
Menu	Create a menu that displays entered values.
String	Create a property field that accepts a string value. The standard property summary is an example of a string property. Note: **Do not use the following words (English version of the words) as custom string field names: subject, manager, company, and category.**
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.

Create a custom property for an object class

1. In the Object Properties category of the **Administration** menu, click the **object class**, such as Collection, 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.

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, 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. The default value can be only one menu item; you cannot select two or more menu items as the default value.

   Note: **If you do not want a default value to appear on your menu, create a new item in the Choices field with the ID and the Label fields empty. This adds to the Choices field, an item with the ID of b_l_a_n_k. When you have finished adding Choices, make sure the b_l_a_n_k item is at the top of the Choices window. When you have finished creating the property and the user attempts to add the object, the default value for this menu property will be blank. A user cannot add the object until they have made a selection from the menu items.**

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.

Edit a custom property

1. In the Object Properties category of the **Administration** menu, click the **object class**, such as Collection, 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.
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.

Delete a custom property

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

1. In the Object Properties category of the **Administration** menu, click the **object class**, such as Collection, 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.

Object class default properties

Use individual **Object Properties** Administration menu items to edit the default properties and property values for a particular object class. Changes you make to the property values of an object class are global and apply to both new and existing objects of that class.

Change default properties and default property values of an object class

1. From the **Administration** menu, click **Object Properties | *specific object class***.

   The property page for the chosen object class 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.

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, click **Object Properties | Update Properties**.

   The Update Properties page appears.

6. Review your changes and if necessary, return to the property page to modify the changes.
7. When you are satisfied with your changes, click **Submit**.

   DocuShare applies your changes to the object class default properties.

Create a custom default property for an object class

1. From the **Administration** menu, click **Object Properties | *specific object class***.

   The property page for the chosen object class 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**.

   Custom property names must be part of the ASCI character set (A ~ Z, a~z, 0~9), underscores accepted but no spaces, and follow a 32 character maximum length.

   DocuShare adds the new property to the object class property page.

4. When you have finished, click **Object Properties | Update Properties**.

   The Update Properties page appears.

5. Review your changes and if necessary, return to the property page to modify the changes.
6. When you are satisfied with your changes, click **Submit**.

   DocuShare applies your changes to the object class default properties.

Custom objects

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

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 that the system reads. The name you enter must be part of the ASCI character set (A ~ Z, a~z, 0~9), underscores accepted but no spaces allowed, and follow a 32 character maximum length. The classname must begin with a letter.

   Never use “document” or part of the word “document”, such as “docu” or “doc”, as the name or part of the name of a custom object or custom property.

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.

   DocuShare does not translate custom property labels. If you give a custom property an English label and someone views your site in French, the system displays the property *name* instead of the property *label*. To correct this, in the French version of your site, you must manually enter a French property label by clicking the **Edit** button next to the custom property, entering the French equivalent of the English word(s) in the Label field, and then click **Apply**.

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 name. For example, if the name 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.

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.

Rename a custom object class

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.

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 of the custom objects.

Delete a custom object class

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.
4. When you have finished making changes to the object class, 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 saves your changes and applies them to all of the custom objects.

Placeholder object class for RM

Users may create records of physical objects, such as paper documents and file boxes. To do this, users can add “placeholder documents” to collections and then classify and declare them as records. Users simply select **Uploading a document later** from the **Add Document** page. Refer to the *Records Manager User Guide* for more information.

If needed, a DocuShare administrator can create a custom document object class for Records Manager, using the object class Document as the clone, and name the object class **Placeholder**. A unique property, called the **Is Placeholder**, exists in the Document object class. After creating the custom Placeholder object class, the administrator must set the Is Placeholder property to **Yes**. The users selects the custom Placeholder class using the collection **Add** menu.

Create a Placeholder object class

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

   The Custom Object page appears.

2. In the **Name** field, enter the name **placeholder**.
3. In the **Label** field, enter the label **Placeholder**.

   This is the name of the class as it appears on the property page.

   Note: **DocuShare does not translate custom property labels. Custom property labels appear in the language in which they are written. If you give a custom property an English label and someone views your site in French, that custom property label appears in English. To correct this, you must manually translate the English label into French by entering the French equivalent of the English word(s) in the Label field.**

4. From the **Clone** menu, select the Document object class.
5. Click **Create**.

   A property page appears displaying the properties of the Placeholder object class that you just created.

6. Close the property page.
7. Click **Object Properties | Update Properties**.
8. On the Update Properties page, click **Submit**.
9. Open the property page for the Placeholder object class.
10. Click **Edit** next to the **Is Placeholder** property.
11. Make sure **Read Only** is set to **No**.
12. On the **Edit Placeholder Property** page, for the **Default Value** field, select **True**.
13. Click **Update**.
14. Click **Object Properties | Update Properties**.
15. On the Update Properties page, click **Submit**.

    DocuShare now saves your new Placeholder object class, with the Is Placeholder property enabled.

Global properties

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, how 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.

Note: DocuShare does not translate custom property labels. If you give a custom property an English label and someone views your site in French, the system displays the property name instead of the property label. To correct this, in the French version of your site, you must manually enter a French property label by clicking the Edit button next to the custom property, entering the French equivalent of the English word(s) in the Label field, and then click Apply.

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.

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.

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.

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. When you have finished editing your property changes, click **Submit**.

   DocuShare adds the properties to the selected object property pages.

   Note: DocuShare updates the database and may recompute its indexes if required by the class or property changes that were made. The database update is best done at off-peak production hours, because the update and any subsequent index recomputation requires sole access to the database and may take minutes to several hours.

Object Reporting Configuration

Use **Services and Components | Object Reporting Configuration** to configure the object/property report generating feature. This feature allows anyone to generate, and view or download, a CSV file that displays all of the objects and associated properties (and property values) contained within selected collections.

Select specific properties, for individual DocuShare object types, that you want to appear in a collection content report.

1. From the **Administration** menu, click **Services and Components | Object Reporting Configuration**.

2. From the **Select Object Type** menu, choose the Object Type that you want to configure.

   This menu lists all of the default object types and custom object types currently on the DocuShare site.

   When you select an object type, two additional lists are displayed; **Possible Properties** and **Selected Properties**.

3. Use the **Add** and **Remove** buttons to populate the **Selected Properties** list with the properties that you want included in a report.

4. When finished, click **Apply**.

Using the report feature

To generate a report in any collection:

1. Select a collection or collections, either from browsing a site or from running a site search.

2. From the **Edit Selected** menu, select **Generate Report**.

3. In the **Save Page As** window, either open the file or save the file.

   The report is generated as a CSV file, so it is easily viewed in Microsoft Excel. The report lists all of the objects within the collection, and all of the properties and values associated with each object listed, as configured in the Object Reporting Configuration page.

Site maintenance

4

Introduction

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

- Enable logging
- Enable the site trashcan
- Set site access policies
- Set account policies
- Set site configuration
- Enable subscriptions
- Assign administrator rights to select users

Enable logging

DocuShare monitors all site access activity and errors, then writes the information to log files. These logs are an excellent insight into DocuShare daily workings and are invaluable when something goes wrong and you must troubleshoot your site. Enable logging through the Administration menu item **Site Management | Repository Log Files**. **Use Services and Components | Logging** to set the logging levels for each service.

Enable the site trashcan

The site trashcan is where all objects go when users delete files. Without the trashcan enabled, deleted objects are expunged and cannot be recovered. When you enable the trashcan, you can manage the contents of the trashcan; recovering, deleting, or expunging select objects. Expunge the trashcan on a regular basis.

To enable the site trashcan, go to the Administration menu item **Content Management | Trashcan | Trashcan Properties**.

You can choose to enable personal trashcans to provide a trashcan for each user. If enabled, when a user deletes an object, it goes into both the personal trashcan and the site trashcan. Users can restore and expunge objects from their personal trashcan if you have not already expunged the objects from the site trashcan. However, the use of personal trashcans may slow site performance.

To enable the personal trashcan, go to the Administration menu item **Site Management | Site Configuration**.

Set site access policies

You may set site access policies during initial software installation. You may change site policies 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 polices is a simple way to control security on your DocuShare site. To set site access policies, go to the Administration menu item **Site Management | Access Policies**.

Set account policies

Account policies determine how you want to manage user passwords and log-ins, such as how long passwords remain valid before they expire, what type of character structure a password must have, and how long a logged-in account can remain inactive before the system logs out the account. To set account policies, go to **Site Management | Account Policies**.

Set site configuration

The setting on the Site Configuration page determine how your site looks and functions. Some items, such as Routing and Scanning, must be enabled for other site features to function properly. To enable, disable, or change individual configuration items go to **Site Management | Site Configuration**. Note that a number of items on the Site Configuration page are, by default, set to Yes.

Enable subscriptions

Enabling the subscription service and supplying an email address for a subscription administrator is mandatory for the subscription service to work properly. To enable DocuShare subscription service go to the Administration menu item **Services and Components | Subscription**.

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. Go to the Administration menu item **Account Management l Groups**, locate Group-1 and add those users to the group membership.

Auto login

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. When using auto login, make sure the DocuShare server usernames are the same usernames that are authenticated by the web server.

Note: **Auto Login is not compatible with Logout user after minutes of inactivity. Refer to Site Management | Account Policies to make sure Logout user after minutes of inactivity is disabled before enabling Auto Login. 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 either DocuShare Guest accounts or 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.

To configure DocuShare for auto login:

1. Disable **Anonymous Access** and enable **Integrated Windows authentication** in the IIS Web Site properties for Directory Security.
2. Restart IIS.
3. Log into DocuShare as admin.
4. Go to the Administration UI.
5. From the **Administration** menu, click **Site Management | Site Configuration**.

   The Site Configuration page appears.
6. In the Enable Auto Login field, click **Yes**.
7. Click **Apply**.

   DocuShare enables auto login.

Permissions

DocuShare provides control over user access to object content and to information about objects. The type of permission assigned controls what a user can do with the object. Settings on the Site

Permissions

Three Permissions	Six Permissions
Reader allows the user or group to read the content of the object and view its associated properties and permissions.	**Read Properties** allows the user or group to view the object's properties and permissions.
Writer allows the user or group to edit the object's properties and add new objects, including new versions of documents.	**Read Content** allows the user or group to read the content of the object.
Manager allows the user or group to delete the object, and change the object's permissions and owner.	**Read History** allows the user or group to view the object's change history.
	Write Properties allows the user or group to change the object's properties.
	Write Content allows the user or group to add new objects, including new versions of documents, and change the object, such as its location.
	Manage allows the user or group to delete the object, and change the object's permissions and owner

Management l Permission page of the Administrator Menu allow an administrator to change the default behavior of permissions:

- **Change site to use six permissions for objects**—switches from the default three permissions to six permissions. Once you switch to six permissions, you cannot return your site to three permissions.
- **Require Read Content permission to view abstract**—Requires a user to have Read Content permission to a document in order to view its abstract.
- **Require Manage permission to view object permissions**—Requires a user to have Manage permission to an object in order to view its permissions.
- **Enable Security Icons**—A collection looks at the permission assigned to each object, and displays a security icon next to each to show the level of access of that object. Enabling security icons slows site performance.

Permissions required for user tasks - 3 permissions

This table lists the permission required for each task on a site that is set up to use three permissions.

User Task	Reader	Writer	Manager
All Objects			
Add object		•	
View object content	•		
View object properties	•		
Change object properties		•	
View object change history	•		
View object permissions	•		
Change object permissions			•
Change object owner			•
Change object location			
object	•		
current location (for copy)	•		
current location (for move)		•	
new location		•	
Delete object			•
Document			
View document and versions	•		
Add new document version		•	
Edit document		•	
Lock document		•	
Unlock document Note: **Not controlled by permissions; user who locked the document and content administrators can unlock the document.**			
Export a document	•		
Route a document	•		
Approve or Disapprove Review and Make Changes		•	
Acknowledge Receipt Information	•		
Archive document, email message			•
Restore archived document, email message			•

User Task	Reader	Writer	Manager
Comment			
Add comment to document, weblog entry	•		
View comment on document, weblog entry	•		
Content Rule			
Create content rule			•
View content rule	•		
Change content rule			•
Copy content rule			•
Notification			
Add notification to object	•		
View object notifications	•		
Create recipient list for notification	•		
Scan Cover Sheet			
Create and use scan cover sheet for object		•	
Weblog			
Add weblog entry text		•	
Edit weblog entry text		•	
Approve weblog entry			•
Wiki			
Add wiki page		•	
Edit wiki page text		•	
Rename wiki page		•	
Delete wiki page			•
Workspace			
Re-assign membership group			•

Permissions required for user tasks - 6 permissions

This table lists the permission required for each task.

User Task	Read Properties	Read Content	Read History	Write Properties	Write Content	Manage
All Objects						
Add object					•	
View object content		•				

User Task	Read Properties	Read Content	Read History	Write Properties	Write Content	Manage
View object properties	•					
Change object properties				•		
View object change history			•			
View object permissions	•					
Change object permissions						•
Change object owner						•
Change object location						
object	•					
current location (for copy)		•				
current location (for move)					•	
new location					•	
Delete object						•
Document						
View document and versions		•				
Add new document version					•	
Edit document					•	
Lock document				•		
Unlock document Note: **Not controlled by permissions; user who locked the document and content administrators can unlock the document.**						
Export a document	•	•				
Route a document	•	•				

User Task	Read Properties	Read Content	Read History	Write Properties	Write Content	Manage
Approve or Disapprove Review and Make Changes					•	
Acknowledge Receipt Information		•				
Archive document, email message	•					•
Restore archived document, email message						•
Comment						
Add comment to document, weblog entry	•					
View comment on document, weblog entry	•					
Content Rule						
Create content rule						•
View content rule	•					
Change content rule						•
Copy content rule						•
Notification						
Add notification to object	•					
View object notifications	•					
Create recipient list for notification	•					
Scan Cover Sheet						
Create and use scan cover sheet for object				•	•	
Weblog						
Add weblog entry text					•	
Edit weblog entry text				•		

User Task	Read Properties	Read Content	Read History	Write Properties	Write Content	Manage
Approve weblog entry						•
Wiki						
Add wiki page					•	
Edit wiki page text				•		
Rename wiki page				•		
Delete wiki page						•
Workspace						
Re-assign membership group						•
Records Manager						
Classify document, email message				•		
Declare document, email message						•

Upgrades

The permissions of users on sites upgrading are set as shown in the table.

Old Permission	New Permission
Reader	Read Properties Read Content Read History
Writer	Write Properties Write Content
Manager	Manage

Permission reports

Use Permission Reports to view a variety of reports based on user and group membership relationships and access permissions. Reports are in CSV format, so they can be easily saved and viewed in Microsoft Excel.

User reports

Provides reports of groups and objects associated with specified users.

List Group Membership

To list the groups to which a user is a member:

1. From the **Administration** menu, click **Content Management | Permission Reports l User Reports l List Group Membership.**
2. In the **Display Report for User** field, enter a username or user email address. An auto-complete menu appears to help with names.
3. Click **Generate Report**.

   A list of groups to which the specified user is a member is displayed.
4. View the list, scrolling as necessary, or export the list as either a **CSV** file or an **Excel** spreadsheet.

List Objects With Matching Permissions

To list the DocuShare objects to which a user has specific access permissions:

1. From the **Administration** menu, click **Content Management | Permission Reports l User Reports l List Objects With Matching Permissions.**
2. In the **Display Report for User** field, enter a username or user email address. An auto-complete menu appears to help with names.
3. From the **Select Objects for Filtering the Results** menu, select an object to narrow the search.
4. From the **Select Permissions for Filtering the Results** menu, select an access permission to narrow the search.
5. Click **Generate Report**.

   A list of DocuShare objects, and object information, associated with the specified user is displayed.

   The Parent Collection column displays the parent of each displayed object.

   The Permissions column displays either three or six bit permissions, depending on how the DocuShare site is configured.

Group reports

Provides reports of groups, group memberships, and objects associated with specified groups.

List All Members

To list all of the members assigned to a specified group:

1. From the **Administration** menu, click **Content Management | Permission Reports | Group Reports | List All Members.**
2. In the **Display Report for Group** field, enter a group name. An auto-complete menu appears to help with names.
3. Click **Generate Report**.

   A list of members, and associated member information, of the specified group is displayed.
4. View the list, scrolling as necessary, or export the list as either a **CSV** file or an **Excel** spreadsheet.

List All Group Membership

To list all of the groups that are assigned to a specified group:

1. From the **Administration** menu, click **Content Management | Permission Reports | Group Reports | List All Group Membership.**
2. In the **Display Report for Group** field, enter a group name. An auto-complete menu appears to help with names.
3. Click **Generate Report**.

   A list of groups that the specified group is a member of, is displayed.
4. View the list, scrolling as necessary, or export the list as either a **CSV** file or an **Excel** spreadsheet.

List Objects With Matching Permissions

To list the DocuShare objects to which a group has specific access permissions:

1. From the **Administration** menu, click **Content Management | Permission Reports | Group Reports | List Objects With Matching Permissions.**
2. In the **Display Report for Group** field, enter a group name. An auto-complete menu appears to help with names.
3. From the **Select Objects for Filtering the Results** menu, select an object to narrow the search.
4. From the **Select Permissions for Filtering the Results** menu, select an access permission to narrow the search.
5. Click **Generate Report**.

   A list of DocuShare objects, and object information, associated with the specified group is displayed.

The Parent Collection column displays the parent of each displayed object.

The Permissions column displays either three or six bit permissions, depending on how the DocuShare site is configured.

6. View the list, scrolling as necessary, or export the list as either a **CSV** file or an **Excel** spreadsheet.

User quotas

User quotas enable you to limit the amount of content that a user can have on a DocuShare site. The installed and licensed DocuShare product edition may determine the maximum number of documents allowed on a site.

In addition to standard DocuShare documents, the maximum document number includes custom documents and documents attached to email messages, discussions, and wikis. The maximum number does not include versions and renditions of a document. Users can add to a document, as many versions and renditions as they want, and it still counts as one document against the set maximum.

You can also set the maximum storage size, in megabytes, for each type of site user. The maximum storage size includes all documents and all versions and renditions of those documents.

Setting quotas through the Administration Menu

You can set the document quota for a single user, several users, a single group, or several groups.

Change User Level Quotas page

Using the **Account Management l Users l Change User Level Quotas** page, You can set the maximum document storage size, in megabytes, for each user level (DocuShare, CPX). These settings restrict the amount of document storage that each DocuShare and CPX user is allowed on the site.

If a maximum size is not specified in any field on this page, then the maximum size defaults to unlimited, unless a Document Content Size Quota is set on the Change User Quotas or Change Group Quotas page.

Change User Quotas page

Using the **Account Management l Users l Change User Quotas** page, you can set, for specified users, the maximum number of documents allowed on the site. If a specific user has no quota set, then the effective quota for that user is the largest quota taken from all the groups of which the user is a member. If a specific user does have a quota set, then that quota overrides the set quota of any group of which the user is a member.

You also can set the Document Content Size Quota, in megabytes, for specified users. If this number is greater than what is set on the Change User Level Quotas page, then the Document Content Size Quota defaults to the Change User Level Quotas page settings.

If **Not Set** is selected under **Document Content Size Quota**, then the maximum content size of the specified user defaults to the highest setting of any group of which the user is a member (if group quotas are set).

Change Group Quotas page

Using the Account Management l Groups l Change Group Quotas page, you can set, for specified groups, the maximum number of documents allowed for each member of one or more groups.

You also can set the Document Content Size Quota, in megabytes, for specified groups. If you specified a maximum content size on the Change User Level Quotas page and it is smaller than the setting on this page, then the setting on the Change User Level Quotas page is used.

If **No Quota Set** is selected under **Document Content Size Quota**, then the Document Content Size Quota defaults to the maximum sizes as set on the **Change User Level Quotas** page.

Repository Use page

Using the **Content Management | Repository Use** page, you can review the Document Count and Document Content Size Quotas for site users.

Group Statistics page

Using the **Content Management | Group Statistics** page, you can review the Document Count and Document Content Size Quotas for site groups.

User view of quotas

Users view their own usage quotas displayed on the Quotas page of the View Properties page for their individual account. **Document Count Quota** and **Document Content Size Quota (MB)** display the assigned quotas. Click **Usage Meters** to display the assigned quotas and current usage. Users view the quotas assigned to a group from the View Properties page of a specific group.

When a user exceeds the set usage quota, the user receives an error message when trying to add another document to the site.

Secure Socket Layer (SSL) for Windows servers

SSL provides a secured communication layer between the IIS web server and client web browsers. SSL functionality is provided by your web server, but DocuShare must be informed that SSL is being used so it supplies SSL-based addresses (https:// instead of http://). SSL may be enabled or disabled anytime after DocuShare installation.

To use SSL with DocuShare, you must enable SSL for the IIS web server and close the Tomcat servlet port to web browser access.

To configure DocuShare for use with SSL:

1. From your server **Start** menu, select **Internet Information Services Manager**.
2. In the Internet Information Manager window, select **hostname (local computer) | Web Sites | Default Web Site**.
3. Right-click the **Default Web Site**, and then select **Bindings** and switch on SSL.
4. Click the **Directory Security** tab.
5. Click **Edit** in the Secure Communications section.

   The Secure Communications window appears.
6. Click the **Ignore client certificates** option.

   If **Require secure channel (SSL)** is not checked, the DocuShare site can be accessed in a non-secured mode.
7. Click **OK**. SSL is now configured for the IIS web server.
8. In a Command Prompt window, navigate to the directory <DSHome>\bin.
9. Stop DocuShare by entering the command, **stop_docushare**.
10. Run the dssetup command and change the status of the **Tomcat http port to off**. This action closes the port that provides access to the Tomcat web servlet via a web browser.

    To reverse this action, run the **dssetup** command and change the status of the **Tomcat http port to on**. This action provides access to the Tomcat web servlet.
11. Start DocuShare by entering the command, **start_docushare**.
12. Reboot the system if you are using IIS as a service.

Secure Socket Layer (SSL) for Solaris/Linux servers

SSL provides a secured communication layer between the Apache web server and client web browsers. SSL functionality is provided by your web server, but DocuShare must be informed that SSL is being used so it supplies SSL-based addresses (https:// instead of http://). SSL may be enabled or disabled anytime after DocuShare installation.

To use SSL with DocuShare, you must enable SSL for the Apache web server and close the Tomcat servlet port to web browser access.

To configure DocuShare for use with SSL:

1. Follow the instructions in the appropriate web server documentation to configure your web server for SSL use.
2. Log into the server as a UNIX server administrator (root).
3. In a Console window, navigate to the directory <DSHome>\bin.
4. Stop DocuShare by entering the command ./**stop_docushare.sh**.
5. Enter the command ./**start_docushare.sh tomcat http off** to close the Tomcat web servlet http port. This action closes the port that provides access to the Tomcat web servlet via a web browser.

   To reverse this action, enter the command **./start_docushare.sh tomcat http on** to open the port to the Tomcat web servlet. This action opens the port that provides access to the Tomcat web servlet.

   Note: To update only the environment, add the argument update-only to the end of the start_docushare command.

DocuShare site maintenance

As an administrator for your DocuShare site, you are responsible for a wide range of maintenance activities. Typical site maintenance activities include the following:

Maintaining user and group accounts

- **Changing account properties**. If a user forgets an account password or needs help changing account information, you can change any account property.
- **Creating new user and group accounts**. In some 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 on 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. 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.

  If your site performance appears slow, check the server virus scan software settings. 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.
- **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 DocuShare add-on.

Back up site data

To ensure the security of your DocuShare site data, you should back up daily. Follow the instructions provided with your server software and/or database application.

After completing a site backup, verify that the sizes of the backed up directory and database files are the same as the original files. Even if you seldom restore site data, you should occasionally test your data restore procedure on a test server to make sure everything is working correctly.

Minimum backup requirements

To keep database information and site information in synch, either stop DocuShare or place the site in Read Only mode before starting a backup. Back up database files and DocuShare directory files during the same backup cycle so there will be no inconsistencies between database information and site information.

You must, at a minimum, back up the **Docushare\documents** directory and all **DocuShare database** files.

The location of the \documents directory varies depending on the site installation environment. The \documents directory for a site is displayed in the Document Repository field on the Site Management | Directory Paths Admin UI page.

For sites using SQL databases, the default database files are named Docushare.mdf and Docushare_log.LDF.

If your site is using the database that was bundled with DocuShare, we recommend that you back up the entire DocuShare install directory. In this case you must stop both DocuShare and the database in order to release all necessary files from running processes.

Backup recommendations

- To make site file restoration faster and easier, we recommend that you back up the entire **Xerox\Docushare install directory**. Using this strategy, you back up all site content that is located under the Xerox\Docushare directory, including configuration files and site customization files.

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, migrating, or completing large volume updates. For the greatest benefit, perform database optimization after these changes and before running the dsindex index_all command.

Consult your DBA before running these procedures to determine the appropriate settings and configurations. The DBA should monitor database activity and adjust the maintenance schedule as needed. Only the DBA has the security permissions to run database optimization.

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

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

SQL Server and SQL Server Express

We recommend that the DBA run daily update statistics using the **SQL Query Analyzer** tool to update statistics for all 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.

Caution

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

To gather statistics for individual tables

To gather statistics for individual tables, run the following script for each table, replacing xxx with an actual table name:

UPDATE STATISTICS **xxx** WITH FULLSCAN;

For example; to gather statistics for the dsprop table, run the following script:

UPDATE STATISTICS **dsprop_table** WITH FULLSCAN;

To check for index fragmentation

We recommend running a monthly check for fragmentation. If the logical fragmentation is greater than 30%, we recommend that the DBA rebuild the index.

An example of checking index fragmentation: DBCC SHOWCONTIG

PostgreSQL

Optimize a PostgreSQL database by running **vacuumdb**. Depending on the underlying operating system, you may run vacuumdb in either a common prompt window or a shell window while logged in as the **postgres** 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. There are two methods you can use to gather database statistics.

To gather statistics for the entire schema

Run the following script:
dbms_stats.gather_schema_stats(ownname => upper('&ownername'), estimate_percent => dbms_stats.auto_sample_size, cascade => TRUE, options => 'GATHER');

If your database is partitioned, run the following script:
dbms_stats.gather_schema_stats(ownname => upper('&ownername'), estimate_percent => dbms_stats.auto_sample_size, cascade => TRUE, granularity => 'ALL', options => 'GATHER');

To gather statistics for individual tables

Recommended tables include:

- DSObject_table, eventTable
- CE_tableDSProp_table
- ACL_tableaccessTable
- userInfo_tablerootObjectTable
- Link_tableeventObjectTable

Run the following script for each table, replacing '**xxx**' with an actual table name:

execute dbms_stats.gather_table_stats(ownname => 'dshare41_fic', tabname => **'xxx'**, estimate_percent =>dbms_stats.auto_sample_size, cascade => TRUE, method_opt => 'FOR ALL INDEXED COLUMNS');

For example; to gather statistics for the DSObject table, run the following script:

execute dbms_stats.gather_table_stats(ownname => 'dshare41_fic', tabname => **'DSObject_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 merely admin privileges, while other customization requires programming knowledge.

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.

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.

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.

Home page customization

There are some easy ways for you to customize a site home page.

Add collections to the home page

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

The home page image slider

The DocuShare home page image slider allows you to display on a site home page, a slide show of images; advanced either manually by the user or automatically at a rate of approximately five seconds per image.

Enable the image slider

To enable the image slider:

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

   The Site Configuration page appears.

2. Select **Yes** next to **Enable Home Page Image Slider**.
3. Click **Apply**.

   The image slider is now enabled, and displays the default DocuShare image set. The images advance automatically through the set at approximately five seconds per image. Small buttons are displayed so users can manually change images.

Disable the image slider

To disable the image slider and hide all images on the home page:

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

   The Site Configuration page appears.

2. Select **No** next to **Enable Home Page Image Slider**.
3. Click **Apply**.

   The images on the home page are hidden, and the **Collections** and **Other Links** sections move up to occupy the empty space.

Display custom images using the image slider

To display custom images using the image slider:

1. Upload custom image files to a DocuShare collection.

   The images should be 580x185 pixels and in JPG format. Give each image file a summary property value that you want displayed as a caption under it on the home page. Only the preferred version of each JPG file will be used by the image slider.

2. Apply permissions to this collection to define who can see the custom images.

   To see custom images displayed in the home page image slider, guests and registered users must have read permission to the collection and to the objects within the collection. Users not given read permission to the collection see only the default slider images.

3. From the **Administration** menu, click **Site Management | Site Configuration**.
4. In the **Home Page Image Slider Collection** field, enter the handle of the collection where the custom images are stored; such as Collection-150.
5. Make sure **Enable Home Page Image Slider** is set to **Yes**.
6. Click **Apply**.

   The image slider is now enabled, and displays the custom image files in the defined collection, along with a caption below each image. The images advance automatically through the set at approximately five seconds per image. Small buttons are displayed so users can manually change images.

Add workspaces

A workspace provides a shared area for project and team collaboration. From a single DocuShare page, workspace members can gather and manage shared content, access collaboration tools, and communicate with each other.

Note: For more information on creating and managing workspaces, refer to the DocuShare User Guide.

Logged in Admin, Site Administrators, and Content Administrators see an **Add** link on the site home page. To add a workspace using this link:

1. Go to the DocuShare home page.
2. Click **Add**.
3. Select the type of workspace you want to add to the home page.

   Document Storage Space - this type of workspace is similar to a DocuShare collection, complete with four top-layer collections in the content portlet.

   Team Project Space - this type of workspace is designed for team projects, and contains a workspace collection, calendar, and members list.

4. Click **Next**.
5. In the **Title** field, give the workspace a unique and descriptive name.
6. In the **Summary** field, enter a brief summary of the workspace purpose.
7. Click **Done**.

The new workspace home page appears.

8. Follow the instructions in the *User Guide* to control access to the workspace, add content to the workspace, adding and managing shortcuts, using the workspace calendar, changing workspace portlet properties, managing workspace properties, and deleting the workspace.

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.

For more information on using DocuShare command line utilities, refer to the *Command Line Utilities Guide*.

Search stemming

The IDOL search service used by DocuShare contains default stemming rules for certain words. Words identified in a stemming file are stemmed as defined in the file. Words not in the file are stemmed according to the IDOL default stemming rules.

If you want to override the default stemming rules for specific words, in a select language, you can do so by creating a language-specific stemming file; which is simply a list of words and their stems. We recommend creating a stemming file only for unusual or specialized words that cannot be stemmed using the default rules. A stemming file should not be used as a replacement for the IDOL stemming algorithms.

To create a stemming file:

1. Create a text file that is formatted like a stopword list; the first line an encoding designation and subsequent lines made up of individual word pairs (a word followed by its stem).

   For example:

   [UTF8]

   mice mouse

   mouse mouse

   children child

2. Give the file a unique name, such as english_stem, and save it as a .dat file in the DocuShare\IDOLServer\IDOL\langfiles directory.

3. Open the IDOL configuration file (IDOLServer\IDOL\AutonomyIDOLServer.cfg, locate the section of the file that contains your selected language, and add the parameter **StemmingFile**=*dat filename* to the section.

   For example:

   [english]

   Encodings=ASCII:englishASCII,UTF8:englishUTF8

   Stoplist=english.dat

   StemmingFile=english_stem.dat

4. In the same section of the file, locate the parameter **Stemming=false**.

5. Change the value of the Stemming parameter to **true**, or there is no Stemming= parameter in the section, add the parameter **Stemming=true**.

6. Save and close the file.

7. Open a command prompt window and run the command **dsindex index_all**.

Server statistics

A number of server statistics pages are available to help you monitor server activities and diagnose various server problems.

The Server Statistics link is under Related Links; located on the page footer of Web UI pages. Click **Server Statistics** to display the list of available pages.

Command Statistics

DocuShare implements each request from the DocuShare Web UI by using one or more commands to the system. The DocuShare governor can block any command because of memory or event issues, or give priority to a favored application.

Command Statistics provides information on command and Web UI user activity. The page provides the following data.

The governor places commands into these categories:

- **Command does write**: Commands blocked if the system is placed into read-only mode.
- **Command triggers events**: Commands blocked if the requesting application is unattended and the event queue is more than 30% full.
- **Must run alone**: This applies to only the modifySchema command, which cannot run while other commands are running. Once the modifySchema command starts running, all subsequent commands are blocked until modifySchema has finished.
- **One at a time**: Commands that are part of a set of commands, such as background jobs, that run only one part of the command set at a time.

Reasons while the governor blocks commands:

Blockage #	Definition
1	The system is in read-only mode. The command needs for the system to be in read-write mode.
2	The system is in admin mode. The command cannot run with the system in admin mode.
3	This command uses a handle that is in use by another operation.
4	This command is a background application or is a long running application, and is blocked for a favored application.
5	Another command that needs exclusive access is already running.
6	The system is currently changing mode, such as read-only, read-write, or admin, and cannot run new requests.
7	This command must wait. The event queue is full.
8	This command is a background application, and is blocked for a favored background application.
9	The system is too low on memory to run this request at this time.

Blockage #	Definition
10	This command must run alone, and another is currently running.
11	This command applies to a user or group that is currently undergoing a change. Running this command at this time may cause data inconsistency.

Command Blockage Summary

Displays a history of blocked commands, including the command name, how many times the command was blocked, and the reason for the blockage.

Waiting Commands

Displays the commands that are waiting to run; including the command name, the user handle that initiated the command, the time of initiation, the thread name of the command, and the reason for the wait.

Running Commands

Displays the commands that are currently running; including the command name, the user handle that initiated the command, other user handles that are affected by the command, including those handles with write permission, and the thread name of the command.

Active UI User Sessions

Displays active user UI sessions. An active UI session is one that is initiated on behalf of a user operating an attended application, such as a web browser, where the application is activity requesting information from the system.

Information displayed include the user handle that initiated the command, the session ID number, how long the session has been established, and how long since the last information request. Note that each command generally requires multiple commands.

Content Intake Module Statistics

Content Intake Module Statistics provides general information on the Content Intake Manager (CIM) and specific information on individual CIM sockets. The page provides the following data.

Content Intake Statistics - General

Displays general information about the site Content Intake Manager, including the total number of attempted and successful document creations, the average time spent creating documents, the number of times document creations were blocked, and the total time blocked for all threads.

Socket Specific Statistics

Displays a table of data for each socket instance on the site. Information includes the number of files processed by the socket, the number of documents the socket has produced, the number of successfully created documents and the number of failed attempts, time spent waiting and time spent processing files, and the number of failures encountered during processing files.

Stack traces are displayed for failures to process files, file corruption problems, or failures to create documents from uncorrupted files.

Socket Specific Statistics - GlyphScan socket

Displays socket specific data for the site GlyphScan socket.

Socket Specific Statistics - Flat File socket

Displays socket specific data for the site Flat File socket.

Content Store Statistics

Displays information about file and file system volume management.

Content Store Statistics Since Startup

Displays a number of content statistics.

The Content Store upgrade utility

The Content Store upgrade utility flattens the directory hierarchy under the documents directory, making backups more scalable. When the utility is enabled, it runs bucket by bucket, first doing b000, then b001, etc until it's finished with the last bucket.

Content store statistics since startup table

Statistic	Description
Number of Content Fetches	A simple count of the times a user requested site content, which was then fetched from the content store.
Number of Bytes Fetched	A simple count of the total number of bytes streamed while fetching content. While this is a good measure of expected throughput, byte serving (range headers) can make this count somewhat inaccurate if the content requester disconnects before the last bytes are delivered.
Average fetched file size	An average derived from Number of Content Fetches and Number of Bytes Fetched.
Number of files saved	The number of files uploaded for each Create Document, Add Version, and Add Rendition. Some renditions can be multi-file, such as HTML.
Total time spent saving content	The total time, in milliseconds, needed to save content.
Total number of bytes saved	The total number of bytes calculated from the values of Average fetched file size and Number of files saved.

Content store statistics since startup table

Statistic	Description
Average # bytes per second to save	A running average for uploads, by taking the time for an upload and dividing that by the number of bytes; accumulating a running average for uploads. In this statistic, “save” refers to creating documents, versions, or renditions.
Legacy Storage Performance Upgrade Enabled	If true, then the upgrade utility is running.
Legacy Storage Performance Upgrade Completed	If false, and the Legacy Storage Performance Upgrade Enabled value is true, then the upgrade utility is currently running in the background. If true, and the Legacy Storage Performance Upgrade Enabled value is true, then the upgrade utility is done.

Partitions

If the site has partitioned the content store, a table displays information regarding the partitions.

Partition table

Statistic	Description
Repo ID	An internal number, 0 to n, that identifies the partition.
Path	The location of the partition on the drive.
Configured Size Limit	The maximum number of bytes writable to a partition before it is declared “full.”
Remaining Usable Space	The remaining free space on a volume accessible by DocuShare.
Total Space on Volume	The remaining free space on a volume, including any operating system overhead space that is not accessible by DocuShare.
Percentage Full	The percentage of how close DocuShare files are to the Configured Size Limit of a partition.
Accessible?	Yes if the partition is created and ready for use. No if this a placeholder configuration for a future partition that has been named but not yet created.
Upgrade Completed?	The upgrade utility is done with this partition.
Last Directory	Indicates the last directory that has been created on the partition. This field is a progress indicator, and is useful only if the upgrade utility is running and has not completed its compression task.

Database Statistics

Summary of API Calls

Displays a summary of API calls to the database.

Details on Each Call

Displays a breakdown of each command by number of calls made and times involved.

Current Calls in Progress

Displays any calls in progress and related times.

Document Creation Statistics

Primary use is for sites that intake documents at a high rate. This page displays information regarding the state of the database, the content store, and the event system as it relates to document creation.

Average Document Creation Times Since System Startup

Displays all creation components, average time used, and a description of the component.

Most Recent Document Creation Times

Displays the most recently used creation components, time used, and a description of the component.

Event Queue Report

Displays all used event queue names, the maximum size of each queue allowed before blocking, current events held, the number of handles held in all events within a queue, and the total number of handles held in all events.

Index Statistics

Displays a summary and snapshot of the Index Server activity.

Average Data Fetch Times

Displays a data fetching summary and running time averages.

Average Data Filter Times

Displays a content filter summary and average filter times.

Current running IDOL jobs

Displays all IDOL jobs currently in progress.

History of IDOL jobs

Displays a summary of all completed IDOL jobs, including jobs started, ended, and various running times.

Average Event Block Processing Times

Displays summary of event block processing times.

Subscription Service Statistics

Displays information about the Notification (Subscription) service and underlying email service, including a summary about service activity, and daily and weekly processing statistics.

Site troubleshooting

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

1 — Simple troubleshooting techniques

a. 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.

b. 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.

c. 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.

d. 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 support site

If step 1 does not solve your problem, then:

a. Go to **docushare.xerox.com/doug** to access the DocuShare Customer Support site.

b. The site provides links to the DocuShare Knowledge Base and contains updated downloads and technical bulletins, along with pertinent information that is supplied by other DocuShare users.

3 — Contact DocuShare support

If step 2 does not solve your problem, and if you have a support contract for your site or if your site is still under the initial 30 day product installation support contract, contact a DocuShare Support Engineer by doing one of the following:

a. On the DocuShare Resource Center select **North American and Europe** to submit an email request for technical assistance.

b. Select **Worldwide Support Contacts** to locate the phone number, website, and email address of support for your country.

Performance troubleshooting

If a site is having general performance issues and you want to improve throughput:

1. In your DocuShare install directory, open IDOLServer/IDOL/**AutonomyIDOLServer.cfg**.
2. In the open file, change the values of the following settings:
   a. DelayedSync=**TRUE** (the default is FALSE)
   b. MaxSyncDelay=**30** (the default is 10)
   c. RepositoryStorage=**TRUE** (the default is FALSE)
3. Save and close the file.
4. Run dsindex index_all.

Features and add-ons 5

Features included with your DocuShare software dramatically increase the functionality and performance of your site. Depending on your DocuShare version and how your site is licensed, some features are included with the product and others are optional add-on features.

Refer to the **Site Management l License** page to see what features and add-ons are available on your site.

Archive Server

The **Archive Server** allows users to mark site **documents** and **mail messages** and send them to an external DocuShare Archive Server. The Archive Server function 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.

Note: For more information on setting up the DocuShare Archive Server, refer to the DocuShare Installation Guide.

Archive Server setup

Follow the instructions in the *DocuShare Installation Guide* to load and configure a DocuShare Archive Server.

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 nor 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. 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.
- If the domain of a main DocuShare site changes, the Admin must change the domain of the Archive Server. Main DocuShare sites and the Archive Server must use the same domain. After you have changed the domain name of the Archive Server; go to the main DocuShare site, use Services and Components l Archive Server to change the domain name, click Apply, then restart DocuShare for the change to take affect.

Background jobs

DocuShare provides background processing for select operations; currently *deleting user accounts* and *changing object permissions*. Once a logged in administrator deletes a user account or changes the permissions to an object, a message appears at the top of the home page indicating how many background jobs are in progress. The administrator can click the message to display the background job queue.

Clicking the background job message displays only those background jobs in queue that were generated by the administrator. Jobs created by individual users are not displayed to the administrator, but the jobs are displayed to the individual users who generated those jobs.

Note: A logged in administrator can view all jobs in the background job queue by using the Site Management | Background Job Status page in the Admin UI. An administrator may also edit the background job service properties by going to Services and Components | Background Job.

1. Click the displayed background message to see the background job queue of jobs generated by the administrator.
2. Either allow a background job run to completion or click the icon under **Actions** to modify a selected job.

   Currently, the only Action available is **Delete the Job**; represented by a Trashcan icon. If a job is running, you cannot delete it.
3. Click the **Trashcan icon** under **Actions** to stop the selected background job, remove it from the queue, and return that item to its original state.

   If a job in queue is deleted, the object permissions are not changed and a user account and all objects that are owned by that account are neither deleted nor reassigned.

Background job properties

To set the properties of the background service:

1. From the **Administration** menu, click **Services and Components | Background Job**.
2. Enter the desired values in the Background Job fields, and then click **Apply**.

Content Encryption

Content Encryption enhances site security by providing automatic content encryption of all uploaded documents. Content Encryption encrypts all documents uploaded to the site. Documents uploaded and stored on the site before you enabled Content Encryption, remain unencrypted.

Note: **The level of encryption employed by this add-on requires Xerox/DocuShare to register each Content Encryption add-on customer with the US federal government.**

Content Encryption setup

To setup and configure your site to use Content Encryption:

1. Follow the Content Encryption add-on software installation wizard to load the necessary files onto your DocuShare server.
2. From the **Administration** menu, click Site Management | Site Configuration.
3. In the **Enable Content Encryption** field, select **Yes** to enable.

Content Store Configuration

Content Store Configuration allows you to set the properties of the site content store and to partition the content store into separate directories.

Note: This feature is available when the site is licensed for high scalability.

To set site content store properties:

1. From the **Administration** menu, click **Content Management | Content Store Configuration**.

   The Content Store Properties area displays the current size of the content store file operation, and whether Content Encryption and Rewrite Records Management Files are enabled.

2. To make changes to the current properties, click **Edit**.
3. Do not change **Buffer Size** unless instructed to do so by DocuShare Customer Support.
4. Select **Content Encryption** to encrypt content store files. Available only if the site has the Content Encryption add-on.
5. Select **Rewrite Records Management Files** to overwrite the content of the Records Management files before the system deletes those files. Enabling this feature ensures that deleted records cannot be recovered. Disabling this feature means that by using third-party software, the content of some deleted records can be recovered. Available only if the site has the Records Management add-on.
6. Click **Save**.

To partition a site content store:

1. If the site has been upgraded to the current DocuShare release, run the **setStorageUpgradeConfig** command (see the DocuShare Command Line Utility Guide) before you proceed with partitioning. This command upgrades the previous file directory structure to the more efficient structure used in the current release.
2. Create a new content store directory; either a local or remote directory.
3. Click **Edit**.
4. In the Content Store Directories area, click **Add Directory**.
5. In the **Directory Path** window, enter the full path to the new content store directory. You can give the new directory any name you want.

   Note: Do not have two content store directories on the same physical drive. The maximum number of content store directories is limited to the number of drives in an individual system; two drives, two content store directories, etc.

6. In the **Directory Limit** window, select either MB, KB, or %; then enter a maximum size limit.

   Note: When calculating Directory Limit, make sure you always leave plenty of free disk space to run disk utilities. We suggest at lease 15% free disk space for some platforms.

7. Click **Save**.

Document Export Locations

Document Export Locations allows you to create links to external file locations for use with the document export feature. This feature allows a user to easily export documents by quickly selecting a preset location from a menu and exporting documents to that location.

To create a document export location:

1. From the **Administration** menu, click **Services and Components | Document Export Locations**.
2. From the **Add** menu, select a location that you want to configure, and then click **Add**.

   Depending on your selection, a specific page is displayed. Fill in the fields and make selections according to your location selection.

- If you select **Add FTP Location**
  a. In the **Location Name** field, enter a unique and easily identifiable name for the document export location. This is the name that appears in the Export Document menu of all documents.
  b. In the **FTP Host Name** field, enter the path to the FTP host server. For example: ftpexport.example.com.
  c. In the **FTP Start Folder** field, enter the name of the FTP start folder. For example: backup.
  d. In the **FTP Login Name** field, enter the name used to log into the FTP host server.
  e. In the **FTP Password** field, enter the password used to log into the FTP host server.
  f. In the **Password Confirm** field, re-enter the FTP Password.
  g. In the **FTP Port Number** field, enter the port number of the FTP host server. The default is 21.
  h. Select the **Transfer Protocol** that you want the system to use when exporting documents to the FTP host server. The default is FTP.
  i. Select **Passive FTP mode**, to use passive FTP to export documents.
  j. In the **Character Encoding** field, enter the character encoding used on the FTP server.
  k. Click **Test FTP Connection** to make sure all of the information you entered is valid.
  l. Select the **Rendition Type to Send**. This identifies which document rendition to export.
  m. Select **For each document exported,** how they are sent; individually or zipped.
  n. Select **For multiple documents exported**, how they are sent; individually or zipped.
  o. Select **Send Metadata with Document**, if you want metadata sent with each document.
  p. Click **Save** to save the configuration for this export location. The configuration now appears in the Document Export Locations list, and can be used by users to export documents from a collection or create a content rule that uses an export document action.

- If you select **Add SMB Location**
  a. In the **Location Name** field, enter a unique and easily identifiable name for the document export location. This is the name that appears in the Export Document menu of all documents.
  b. In the **SMB Host Name** field, enter the path to the SMB host server. For example: smbexport.example.com.
  c. In the **SMB Start Folder** field, enter the name of the SMB start folder. For example: backup.
  d. In the **SMB Domain** field, enter the domain used to log into the SMB server.
  e. In the **SMB Login Name** field, enter the name used to log into the SMB host server.
  f. In the **SMB Password** field, enter the password used to log into the SMB host server.
  g. In the **Password Confirm** field, re-enter the SMB Password.
  h. Select the **Transfer Protocol** that you want the system to use when exporting documents to the SMB host server. The default is SMB.
  i. Click **Test SMB Connection** to make sure all of the information you entered is valid.
  j. Select the **Rendition Type to Send**. This identifies which document rendition to export.
  k. Select **For each document exported,** how they are sent; individually or zipped.
  l. Select **For multiple documents exported**, how they are sent; individually or zipped.
  m. Select **Send Metadata with Document**, if you want metadata sent with each document.
  n. Click **Save** to save the configuration for this export location. The configuration now appears in the Document Export Locations list, and can be used by users to export documents from a collection or create a content rule that uses an export document action.
- If you select **Add HTTP Location**
  a. In the **Location Name** field, enter a unique and easily identifiable name for the document export location. This is the name that appears in the Export Document menu of all documents.
  b. In the **HTTP URL** field, enter the URL of the handler on the HTTP server, it may be in the form of JSP, Servlet, CGI, ASP, or any other handler that can process the HTTP form. For example: http://httpexport.example.com/FileUpload.jsp.
  c. In the **HTTP Content Header** field, enter the name of the HTTP header indicating the binary file content on the form data. For example: ExportFile.
  d. In the **HTTP Login Name** field, enter the name used to log into the HTTP server.
  e. In the **HTTP Password** field, enter the password used to log into the HTTP server.
  f. In the **Password Confirm** field, re-enter the HTTP Password.
  g. Select the **Transfer Protocol** that you want the system to use when exporting documents to the HTTP host server. The default is HTTP.
  h. Click **Test HTTP Connection** to make sure all of the information you entered is valid.
  i. Select the **Rendition Type to Send**. This identifies which document rendition to export.
  j. Select **For each document exported,** how they are sent; individually or zipped.
  k. Select **For multiple documents exported**, how they are sent; individually or zipped.

l. Select **Send Metadata with Document**, if you want metadata sent with each document.

m. Click **Save** to save the configuration for this export location. The configuration now appears in the Document Export Locations list, and can be used by users to export documents from a collection or create a content rule that uses an export document action.

- If you select **Add DocuShare Location**

Define the target DocuShare site

a. In the **Target Name** field, enter a unique and easily identifiable name for the document export location.

b. In the **Target Host** field, enter the target host.

c. In the **Target Port** field, enter the port number used by the target host.

d. In the **Target Server Root** field, enter the root of the target server.

e. Select **True** for **Is SSL Enabled**, if SSL is enabled at the target; **False** if not enabled.

f. In the **Target Domain** field, enter the domain of the target.

g. In the **Target Account** field, enter the account username of the target.

h. In the **Target Account Password** field, enter the password for the target account.

i. Click **Continue** to advance to the next page.

Map object types

a. In the **Target Root Folder Handle** field, enter the handle of the root folder where the documents will be exported, if no dynamic path is selected. For example, Collection-12.

b. Select the **Destination Object Type** for the exported document object. This is the object type that will be applied to the exported document object. This could be a default object type or a custom object type, such as *Invoice*.

c. Select the **Source DocuShare Object Type** for the object type of the exported document. This is the object type of the exported document, such as *Document*. This allows you to map the source object type with a destination object type.

d. Select **Yes** for **Do you wish to export the entire version tree** to export the entire version tree of a document; including all of the versions and renditions. Choose **No** to export only the preferred version of a document. Use only if the Destination and Source Object Types are Document or a cloned Document object type.

e. Select **Yes** for **Do you wish to export the audit trail** to export the audit trail (history) of the exported document as a rendition of the exported document's preferred version. Use only if the Destination and Source Object Types are Document or a cloned Document object type.

f. Click **Continue** to advance to the next page.

Map properties

a. (Optional) Select a **Source Property to store destination location**. This is the location property of where the exported document will be stored. This is limited to String and URL source properties.

b. (Optional) Select a **Destination Property to store source location**. This is the location property of where the source document will be stored.

c. (Optional) Select **Yes** for **Informative error message** to have all export error messages stored in the source property, as selected from the **Source Property to store destination location** menu.

d. Map the target object property to the source object property.

e. Click **Continue** to advance to the next page.

Choose ACL settings and a dynamic path

a. Select an ACL setting from the **Choose the ACL setting for the exported object** menu. For example; Inherit from Parent.

b. (Optional) Select properties from the **Choose properties for dynamic path mapping** menu, to create a dynamic path mapping to be created at the exported object destination location. An example of properties selected for mapping might be /(title)/(summary).

c. Click **Done** when you are finished with this section.

d. Click **Add Mapping** to create addition dynamic path mappings.

e. Click **Save** to save the configuration for this export location. The configuration now appears in the Document Export Locations list, and can be used by users to export documents from a collection or create a content rule that uses an export document action.

Domains - internal and external

DocuShare allows you to create and use both internal domains, for site organizational purposes, and LDAP controlled external domains for account authentication and administration. Currently, DocuShare supports only **LDAP** (Lightweight Directory Access Protocol) for creating and maintaining external domains. Creation and maintenance of external domains require LDAP server access and knowledge of the LDAP administration interface.

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 login **Domain** menu. Attempting to log into the wrong domain results in an error message and a prompt to retry the login.

For more information on LDAP, refer to the *LDAP/Active Directory Guide*.

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.

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**.
2. Enter a unique name in the Domain name field.

   Domain names should be no longer than 128 characters; including upper and lower case letters, numbers, and spaces, but should not contain the special characters <>@#&?.
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.

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**.

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. Before making this selection, review the accounts currently on both domains. If there are any accounts with the same name registered in either domain, the *delete internal domain* operation will fail. To correct this, before starting the delete domain operation, change the name of either one of the duplicate accounts.
4. Click **Apply**.

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

External domains

For creating and maintaining external domains, DocuShare supports only LDAP running Microsoft Active Directory or Oracle Directory Server Enterprise Edition. Refer to the system requirements for the latest supported versions.

You may create any number of external domains on a single LDAP server. To add redundancy and thereby increase the reliability and security of your site, you may direct your site to multiple LDAP servers (hosts) by entering the multiple host names in the Host(s) field and separate each name with a space. 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.

To add a new external domain:

1. Go to **Account Management | LDAP Accounts | 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. In the **Domain Name** field, enter the name of the LDAP domain.

   Domain names should be no longer than 128 characters; including upper and lower case letters, numbers, and spaces, but should not contain the special characters <>@#&?.
7. Select **LDAP/LDAP** from the **Authentication and Directory Service Providers** menu.
8. To enable login by all user accounts registered under this LDAP domain, check **Enable Subtree Search**.
9. To enable real time synchronization, rather than relying on manual synchronization, check **Enable Listener**.

   For more information on Enable Listener, refer to *The Listener service* section following this procedure.
10. If you want to assign this domain to an LDAP server that is different from the LDAP server as defined in the LDAP Accounts | Configuration page, enter the following information in the **LDAP Server Info** field.

    Use this format when filling in the field:

    "<hosts>another.domain.com</hosts> <port>636</port> <ssl>true</ssl>
    <dit_root>dc=another_dc,dc=xerox</dit_root>
    <agentdn>cn=another_agent,dc=another_dc,dc=xerox</agentdn>
    <agentpassword>password_of_another_agent</agentpassword>"
11. Click **Add**.

    DocuShare adds the domain name to your local site registry. This domain now appears in all Domain menus on your site.
12. Go to **LDAP - Add** in this guide to populate the domain with external domain user and group accounts.
13. If you checked **Enable Listener**, go to the LDAP Advanced Configuration page and check **Enable Periodically Automatic Synchronization** and enter the **days/hour/minute** of the synchronization period; then click **Apply**.

The Listener service

When the Listener service is enabled; user and group synchronization occurs when changes are made to accounts on the LDAP server. Listener service enabled over-rides the **Enable On Login** setting on the DocuShare LDAP Advanced Configuration page.

When the Listener server is enabled; at DocuShare startup, the directory service performs a smart synchronization between DocuShare and the assigned LDAP server. At that time the directory service queries the LDAP server for any user or group account changes that were made at the server since the last DocuShare shutdown. The query results do not include any user or group accounts that were deleted at the LDAP server.

Listener service enabled/disabled comparison

Action taken on the LDAP server	Listener enabled	Listener disabled
A user property is changed	On DocuShare, the change is synchronized immediately.	On DocuShare, the change is synchronized when the user logs in.
A user membership is changed	On DocuShare, the change is synchronized immediately if the group exists on the site.	On DocuShare, the change is synchronized the first time any member of the group logs in. If the group does not yet exist in DocuShare, the group is automatically created on the site.
A user name is changed	On DocuShare, the change is synchronized immediately. The user must log in with the new user name	On DocuShare, the change is synchronized when the user logs in. The user can log in the first time with the old user name, but with subsequent log-ins, the user must use the new user name.
A group name is changed	On DocuShare, the change is synchronized immediately. The group RDN is updated automatically, and use of the group by members is not interrupted.	On DocuShare, the group RDN becomes invalid, and use of the group by members is interrupted. A DocuShare administrator must manually synchronize the group to update the RDN.
A user account is deleted	On DocuShare, if LDAP sends a delete event, the user account is either removed or set to inactive. If the user does not own any objects, the account is immediately deleted. If the user does own objects, the account is set to inactive. If LDAP does not send a delete event, the account remains active.	On DocuShare, when the deleted user logs in, if the user does not own any objects, the account is immediately deleted. If the user does own objects, the account is set to inactive.

Listener service enabled/disabled comparison

Action taken on the LDAP server	Listener enabled	Listener disabled
A group account is deleted	On DocuShare, if LDAP sends a delete event, the group account is removed, along with the members list. If LDAP did not send a delete event, the group account remains active and the membership list remains intact.	On DocuShare, when a member of the deleted group logs in, the user account is removed from the group membership list.
A user account is created	On DocuShare, the first time the new user logs in, the new account is created, along with any group memberships that were assigned to that user account.	On DocuShare, the first time the new user logs in, the new account is created, along with any group memberships that were assigned to that user account.
A group account is created	On DocuShare, an administrator must add the group to DocuShare.	On DocuShare, a new group is created when the first user, who is a member of the group, logs into DocuShare.
When LDAP receives a log in request from a DocuShare user	On DocuShare, there is no synchronization of user properties and memberships. This makes for a fast log in authentication.	On DocuShare, user properties and memberships are synchronized. This makes for a slower log in authentication.

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, and remove users and groups:

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 **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.

4. Click **Apply**.

   DocuShare deletes the domain pointer from you local site. DocuShare does not delete the original external domain. That domain still resides on the LDAP server.

To delete an external domain, and transfer users and groups:

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

   The Domains page appears.

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

   The Edit Domain page appears.

3. Change the **Authentication and Directory Service Providers** from **LDAP, LDAP** to **DocuShare, DocuShare**.

4. Click **Update**.

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

6. Select **Transfer users and groups to,** and select **DocuShare** from the menu.

7. Click **Apply**.

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

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, but they 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.

At login, users merely select their domain from a menu and DocuShare and LDAP perform all of the necessary authentication activities.

An overview for setting up a DocuShare/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 DocuShare tools 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. 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 administer external domain accounts.

LDAP Account Configuration

Use Configuration to 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.
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 and the validity of the LDAP Agent Account. 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 tests succeeded or if they failed.

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

Advanced LDAP configuration

Use to enhance LDAP operations by adding access control filters to block select users from accessing your site. 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.

2. Fill in all of the appropriate fields.

   Note: **When entering an email address as a filter, use the format (mail=test@acme.com). If the filter is meant to be broader, you can add a wildcard character; (mail=*@acme.com). All filters must be enclosed by parentheses, with no spaces between individual components of the filter.**

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**.

Caution

When you delete an external domain user account from your DocuShare registry, and if your DocuShare/Advanced LDAPConfiguration has Enable Automatic Account Creation enabled (the default), then the next time the deleted user attempts to log into the DocuShare site, DocuShare will re-created the old account. To completely delete a user account you must delete the account from both the DocuShare registry and the LDAP server.

LDAP - Add

Register external domain user and group accounts with a specific DocuShare site. An external domain account can be registered on multiple DocuShare sites.

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.

DocuShare supports nested LDAP groups.

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 and Group page.
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.

   Note: **To list user accounts only, LDAP under Active Directory requires that you Filter By Last Name Between a-z. For multi-byte characters, comparing rules is the sequence of multi-byte characters in the UTF-8 encoding. For example, these four Chinese characters:**
   &23567; UTF8 coding is: E5 B0 8F
   &28201; UTF8 coding is: E6 B8 A9
   &33539; UTF8 coding is: E8 8C 83
   &39532; UTF8 coding is: E9 A9 AC
   Filter by Last Name Between &28201;-&39532 means all multi-byte characters inclusive of or greater than E6 B8 A9, but less than E9 A9 AC

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 **Last Name + Match=Dean** returns James Dean. 2- Select **Last Name + Match=Dean*** 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 **Limit** menu.	Enter a letter or name to narrow the list. For example: Select Account Type=User; Limit=500; **Last Name + From=Ca** 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.

Filter By menus and fields

Filter By	Items	Filter field
Between / and	Select to return a value that is between the contents of the **between** field (inclusive value) and the contents of the **and** field (exclusive value).	Enter a letter or name range to narrow the list. For example: Select Account Type=User; Limit=100; **Last Name + Between= Y and Z** returns all names that begin with Y, if that list is under the selected 100 limit. Select Account Type=User; Limit=100; **Last Name + Between= Y and Zz** 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 arro**w 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.

11. Run **Account Management | Users|Go to List/Find/Add User** or **Account Management | Groups|Go to List/Find/Add Group** to see the list of users and groups now assigned to the domain.

LDAP - Convert

Use 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.

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.

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 **Last Name + Match=Dean** returns James Dean. 2- Select **Last Name + Match=Dean*** returns James Dean and Robin Deanne.

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 **Limit** menu.	Enter a letter or name to narrow the list. For example: Select Account Type=User; Limit=500; **Last Name + From=Ca** 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 **between** field (inclusive value) and the contents of the **and** field (exclusive value).	Enter a letter or name range to narrow the list. For example: Select Account Type=User; Limit=100; **Last Name + Between= Y and Z** returns all names that begin with Y, if that list is under the selected 100 limit. Select Account Type=User; Limit=100; **Last Name + Between= Y and Zz** 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.

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.
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.

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 **Last Name + Match=Dean** returns James Dean. 2- Select **Last Name + Match=Dean*** 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 **Limit** menu.	Enter a letter or name to narrow the list. For example: Select Account Type=User; Limit=500; **Last Name + From=Ca** 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 **between** field (inclusive value) and the contents of the **and** field (exclusive value).	Enter a letter or name range to narrow the list. For example: Select Account Type=User; Limit=100; **Last Name + Between= Y and Z** returns all names that begin with Y, if that list is under the selected 100 limit. Select Account Type=User; Limit=100; **Last Name + Between= Y and Zz** 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.

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 to synchronize local user and group account property information with account property changes that were made at the LDAP server. Refer to **Advanced LDAP Configuration** for information on setting up your site so user and group accounts perform auto-synchronization at login.

Set Home Page

Selecting **My DocuShare** for the **Set Home Page** field, at **Site Management | Site Configuration**, causes the system to create a My DocuShare page the first time the user logs into the site. With the My DocuShare setting, when you delete a user account from the LDAP directory and use Synchronize to update the DocuShare site registry, the system takes one of two paths:

1. If the user as not yet logged into the site, the system has not created a My DocuShare page. When you use Synchronize to update the registry, the deleted account is automatically removed from the local registry.
2. If the user has logged into the site, the system has created a My DocuShare page. Therefore, the system will not automatically remove the account from the local registry. The account is marked Inactive. An administrator must then use the normal Delete User tool to manually remove the inactive account from the DocuShare registry.

To synchronize local account information with LDAP information

Use the LDAP server administration UI to make changes to the properties of an external account.

1. From the **Administration** menu, click **Account Management | LDAP Accounts | Synchronize**.

    The Synchronize page appears.
2. In the **Account Type** field select either by **Users** or by **Groups**, depending on what type of account you want to synchronize.
3. Click **Go**.
4. From the **Domain** menu, select the external domain that contains the account that you want to synchronize.
5. From the **Limit** menu, select the maximum number of accounts that you want to list.
6. 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.

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

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- **Last Name + Match=Dean** returns James Dean. 2- **Last Name + Match=Dean*** 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 **Limit** menu.	Enter a letter or name to narrow the list. For example: Select Account Type=User; Limit=500; **Last Name + From=Ca** 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 **between** field (inclusive value) and the contents of the **and** field (exclusive value).	Enter a letter or name range to narrow the list. For example: Select Account Type=User; Limit=100; **Last Name + Between= Y and Z** returns all names that begin with Y, if that list is under the selected 100 limit. Select Account Type=User; Limit=100; **Last Name + Between= Y and Zz** 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.

8. Click **Go**.

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

9. If you want to synchronize all of the user or all of the group accounts, click **Synchronize All**.

   The LDAP server updates to your local site, all of the existing user or group account properties belonging to this domain.

10. 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.

To create new user accounts for all group members

To use Synchronize to create new user accounts for each member of a select group:

1. From the **Administration** menu, click **Account Management | LDAP Accounts | Synchronize**.
2. In the **Account Type** field select **Groups**.

   A checkbox titled **Create an account for each group member** appears.
3. Select **Create an account for each group member**.
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 name, to narrow the list even further.
8. From the **Filter By** menus, select how you want to narrow the list of groups.
9. Click **Go**.

   The **Possible Users/Groups** menu displays the accounts that are currently assigned to that external domain.
10. Select the group account from the **Possible Users/Groups** menu, and click **Synchronize Selected**.

    The LDAP server updates the selected group account properties on your local site and creates new DocuShare user accounts for each member of that group.

LDAP - Bind user

Use 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.
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.

Sample Bind User properties

Property	Description
First Name	The first name of the user. The Active Directory attribute is **givenName**.
Last Name	The last name of the user. The Active Directory attribute is **sn**.

Sample Bind User properties

Property	Description
Username	The login name of the user. The Active Directory attribute is **sAMAccountName**.
Email Address	The complete email address of the user. The Active Directory attribute is **mail**.
Phone	The phone number of the user. The Active Directory attribute is **telephoneNumber**.

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

   DocuShare saves your changes.

LDAP - Bind group

Use 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.

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.

Sample Bind Group properties

Property	Description
Title	The name of the group. The Active Directory attribute is **cn**.
Description	A detailed description of the group. The Active Directory attribute is **description**.

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

   DocuShare saves your changes.

Security services

Use 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.

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 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.

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.

Email Agent

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

To function, Email Agent requires a unique dedicated account on either an external POP3 or an external IMAP mail server. 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, Email Agent places the problem message into the defined default collection on the DocuShare site. If configured to do so, 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.

Email Agent setup overview

To set up and configure the DocuShare Email Agent:

1. Identify either a **POP3** or **IMAP** mail server that you want Email Agent to use for all incoming mail and create a DocuShare **email account** on that server; such as dsmail@mailserver.com.
2. 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 Email Agent.
3. Go to the **Services and Components | Email Agent** pages of the Admin UI and configure 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.

Configure Email Account properties

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

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

   The Email Account Configuration page appears.

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**.

Configure Email Agent User Account properties

Use to enable 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.

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

   The User Account Configuration page appears.

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**.

Configure Email Agent Digital Certificate properties:

Use to set Email Agent certificate properties for secure email and encryption.

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

   The Digital Certificate Configuration page appears.

2. Change property value fields as required to configure 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**.

Configure Advanced Email Agent properties:

Use to set various Email Agent email properties; including email confirmation, digital signature requirement, first line addressing, and mail polling interval.

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

   The Advanced Configuration page appears.

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**.

Enable and create email alias files:

Use 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.

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

   The Email Server Integration page appears.
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**.

Federated DocuShare

Federated DocuShare allows a DocuShare admin to create an association, or federation, of DocuShare sites; allowing other sites to become Members of the federation. Users on Member sites can search and read content that is stored on the other Member sites. Access Permission settings for each individual object on a Member site determine who has access to that object.

Federated terminology

- **Moderator** is the DocuShare site that initially creates a federation.
- **Member** is a DocuShare site that joins the federation created by the Moderator.

Federated overview

1. The administrator of **DocuShare Site A** uses the **Federated | Settings** administrator tool to create a new federation and gives the federation a unique name, for example: **City Lights Federation**.
2. Site A now becomes the **Moderator** for the City Lights Federation and by default also a **Member** of the City Lights Federation.
3. The admin account (User-2) of Site A is now in charge of City Lights Federation.
4. A **federation icon** appears on each site page, indicating that the site is now the Moderator and a Member of a City Lights Federation. Click the icon to display the **About City Lights Federation page**.
5. The Moderator admin of the City Lights Federation uses the **Federated | Invitation List** administration tool to invite other Federated DocuShare sites to join the City Lights Federation. The Moderator admin can monitor the invitation list and may cancel any invitation with the click of a button.
6. The administrator of each Federated DocuShare site invited to join City Lights Federation use their **Federated | Settings** administrator tool to join the City Lights Federation. Now they are Members of the City Lights Federation.
7. A **federation icon** appears on each site page of the Member site, indicating that the site is now a Member of a City Lights Federation.
8. The Member administrator can use **Federated | Members List** to cancel the membership.
9. In order to access other Member sites within the City Lights Federation, individual users on each of the Member sites must now go to their user account property page, click the Federation Settings tab, and map their personal account to a specific user account on other Member sites. Users on Member sites have only Guest access to other Member sites until they have mapped to those sites. Refer to the *DocuShare User Guide* for complete information on user mapping to federated Member sites.
10. The Moderator administrator can use **Federated | Settings** to change the name of the federation or delete the federation, and use **Federated | Members List** to monitor, invite, and delete federation Members.

Federation settings

Use **Site Management | Federation | Settings** to either create a new DocuShare federation, join a DocuShare federation, change your federation name, or delete your federation. Your site must be licensed for Federated DocuShare to see the Federation menu items.

The appearance of specific Federation menu pages displayed depends on whether your site is either a Moderator or a Member of a federation.

Create a new federation

To start a federation, you first must create a new federation using your DocuShare site as the **Moderator** of that federation.

To create a new DocuShare federation:

1. From the **Administration** menu, click **Site Management | Federation | Settings**.

   Since you have not yet created a new federation, the Settings page displays a choice of either creating a new federation or joining an existing federation.

2. Select **Create a New Federation**.

   The Create a New Federation page appears.

3. In the **New Federation Information** field, enter the **Name** and a brief **Description** for your federation. This is the formal name and description of your federation.

4. In the **My Server Membership Identification** field, enter a **Friendly Name** and a brief **Description** of your site. This is the name and description of the Moderator that other federation Members see when viewing a Members list.

   Note: The Server ID field and the My Server Contact Information fields are read-only, and are populated by reading the server ID for the URL and the Admin (User-2) account information for all of the My Server Contact Information. To change My Server Contact Information fields, edit the User-2 account properties.

5. If you want to create a federation using this information, click **Apply**.

   DocuShare creates your new federation; with your site both the Moderator and a Member of the new federation.

   A federation icon appears at the top of each site page letting everyone know that the site is now a federated DocuShare site. Clicking the icon opens the **Federation About** page, which displays federation information and a list of a Members within the federation.

   When you look at the Administration menu, under Federation, you will now see Settings, Member List, and Invitation List.

Join a federation

As a licensed Federated DocuShare site, you can register your site as a Member of a federation. Your site may be a Member of only one federation.

To become a Member of a DocuShare federation:

1. From the **Administration** menu, click **Site Management | Federation | Settings**.

The Settings page displays a choice of either creating a new federation or joining a federation.

2. Select **Join a Federation**.

   The Join a Federation page appears.

3. In the **Federation Moderator Server ID** field, enter the server ID of the federation that you would like to join.

   This ID may be given to you by the Moderator of the federation or it may arrive in an invitation email.

4. In the **Pass Code** field, enter the registration pass code that allows you to access that federation.

   This pass code may be given to you by the Moderator of the federation or it may arrive in an email invitation.

5. If you have not given your federated site a friendly name and description that is easily recognizable to the other federated sites, do so now by filling in the **Friendly Name** and **Description** fields.

6. Review and, if necessary, change the My Server Contact Information that appears at the bottom of the page. This information is taken from the properties of the admin (User-2) account.

7. Click **Apply**.

   Your site has now become a Member of a specific federation.

8. To search and access the various federation sites, each user on you site must map their user account to each federation site. Refer to the *DocuShare User Guide* for instructions on mapping user accounts.

   Access to federated sites depend on how each site has configured their own site access polices and object permissions.

Federation Settings as a Moderator

As the Moderator site of a federation, use **Site Management | Federation | Settings** to change your federation name and description, or to delete your federation.

To change the name and/or description of your federation:

1. From the **Administration** menu, click **Site Management | Federation | Settings**.

   As the Moderator of the federation, the Settings page displays editable information about your federation.

2. In the **Name** field, enter a new name for your federation.

3. In the **Description** field, enter a new description for your federation.

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

Delete your federation

When you delete your federation you are removing this federation from the federation Members list and cancelling all existing Memberships to this federation. To fully delete a federation, all federation Member sites must be accessible. If not, then only those Member sites that are accessible will have their Memberships cancelled.

To delete a federation and cancel all exiting Memberships:

1. From the **Administration** menu, click **Site Management | Federation | Settings**.

   As the Moderator of the federation, the Settings page displays basic information about your federation.

2. Click **Delete Federation**.

   The Delete Federation page appears informing you whether or not all Members of this federation can be contacted.

3. If all Members can be contacted, click **Confirm** to delete this federation.

4. If not all Members can be contacted, click **Confirm Partial Delete** and return later to complete the delete process, or click **Cancel** to abort the delete process.

   The Delete Federation page displays the URL of all federation Members that cannot be contacted.

Federation Settings as a Member

As a Member site of a federation, use **Site Management | Federation | Settings** to cancel your Membership to a federation.

To cancel your Membership to a federation:

1. From the **Administration** menu, click **Site Management | Federation | Settings**.

   As the Member of a federation, the Settings page displays uneditable information about your federation.

2. Click **Cancel Membership**.

3. To confirm that you want to cancel your Membership, click **OK**.

   DocuShare cancels your federation Membership.

Federation Member List as a Moderator

As the Moderator site of a federation, use **Site Management | Federation | Member List** to view information about the Members of your federation, cancel a Membership to your federation, invite new Members to join your federation, send email to the administrator of a federation Member, and/or delete your federation.

To cancel a Membership to your federation:

1. From the **Administration** menu, click **Site Management | Federation | Member List**.

   As the Moderator of the federation, the Member List page displays the name and URL of all current Members of your federation.

2. Click **Cancel Membership** next to the Membership that you want to cancel.

3. To confirm that you want to cancel the Membership, click **OK**.

   DocuShare cancels the selected Membership.

To invite a federated DocuShare site to join your federation:

1. From the **Administration** menu, click **Site Management | Federation | Member List**.

   As the Moderator of the federation, the Member List page displays an Invite a New Member button.

2. Click **Invite a New Member**.

   The Invite a New Member page appears.

3. In the New Member Server ID field, enter the server ID of the federated site you want to invite to join your federation.
4. In the **Pass Code** field, enter a simple pass code that the site administrator will use to verify the invitation when joining your federation.
5. Click **Apply** to send the invitation.

To send email to a Moderator administrator:

1. From the **Administration** menu, click **Site Management | Federation | Member List**.

   As the Moderator of a federation, the Member List page displays an email link to the administrators of all member sites.

2. Under the **Contact** heading, click the **Site Administrator** that corresponds to the administrator you want to send email.

   Your designated email program launches a standard blank email form, complete with the To field filled in.

3. Enter your message and click **Send**.

To delete this federation and cancel all exiting Memberships:

1. From the **Administration** menu, click **Site Management | Federation | Member List**.

   As the Moderator of the federation, the Member List page displays a button to delete your federation.

2. Click **Delete Federation**.

   The Delete Federation page appears informing you whether or not all Members of this federation can be contacted.

3. If all members can be contacted, click Confirm to delete this federation.
4. If not all Members can be contacted, click **Confirm Partial Delete** and return later to complete the delete process, or click **Cancel** to abort the delete process.

   The Delete Federation page displays the URL of all federation Members that cannot be contacted.

Federation Member List as a Member

As the Member of a federation, use **Site Management | Federation | Member List** to view information about the Members of your federation, cancel your Membership in the federation, and send email to the administrator of a federation Member.

To cancel your Membership to a federation:

1. From the **Administration** menu, click **Site Management | Federation | Member List**.

   As the Member of a federation, the Member List page displays the name and URL of the federation, and an email link to the administrator of the Moderator site.

2. Click **Cancel Membership**.

3. To confirm that you want to cancel your Membership, click **OK**.

   DocuShare cancels your federation Membership.

To send email to the Moderator administrator:

1. From the **Administration** menu, click **Site Management | Federation | Member List**.

   As the Member of a federation, the Member List page displays the name and URL of the federation, and an email link to the administrator of the Moderator site.

2. Under the **Contact** heading, click the **Site Administrator** that corresponds to the administrator you want to send email.

   Your designated email program launches a standard blank email form, complete with the To field filled in.

3. Enter your message and click **Send**.

Federation Invitation List

As the Moderator site of a federation, use **Site Management | Federation | Invitation List** to invite new members to join your federation, monitor the invitations that you have already sent, cancel an invitation, send email to the administrator of a federation Member, and/or delete your federation.

Note: Only a federation Moderator sees the Site Management | Federation | Invitation List menu item.

To invite a federated DocuShare site to join your federation:

1. From the **Administration** menu, click **Site Management | Federation | Invitation List**.

   The Invitation List page appears.

2. Click **Invite a New Member**.

   The Invite a New Member page appears.

3. In the **New Member Server ID** field, enter the server ID of the federated site you want to invite to join your federation.

4. In the **Pass Code** field, enter a simple pass code that the site administrator will use to verify the invitation when joining your federation.

5. Click **Apply** to register the invitation on the Invitation List.

6. Once the invitation appears on the Invitation List, click the **Envelope Icon** that appears next to a specific invitation to email an invitation to the administrator of the invited site.

   Your mail program displays a invitation email message template, already addressed to the administrator of the invited federated site.

7. Enter the **server ID of your moderator site** and the **Pass Code** that you entered on the Invite a New Member page, and click **Send**.

   The mail program sends the invitation email to the addressee.

To cancel an invitation to join your federation:

1. From the **Administration** menu, click **Site Management | Federation | Invitation List**.

   The Invitation List page appears.

2. Click **Cancel Invitation** next to the invitation that you want to cancel.
3. To confirm that you want to cancel the invitation, click **OK**.

   DocuShare cancels the selected invitation.

To send email to the administrator of an invited site:

1. From the **Administration** menu, click **Site Management | Federation | Invitation List**.

   The Invitation List page appears.

2. Under the **Contact** heading, click the **Site Administrator** that corresponds to the administrator you want to send email.

   Your designated email program launches a standard blank email form, complete with the To field filled in.

3. Enter your message and click **Send**.

To delete this federation and cancel all exiting Memberships:

1. From the **Administration** menu, click **Site Management | Federation | Invitation List**.

   The Invitation List page appears.

2. Click **Delete Federation**.

   The Delete Federation page appears informing you whether or not all Members of this federation can be contacted.

3. If all Members can be contacted, click **Confirm** to delete this federation.
4. If not all Members can be contacted, click **Confirm Partial Delete** and return later to complete the delete process, or click **Cancel** to abort the delete process.

   The Delete Federation page displays the URL of all federation Members that cannot be contacted.

JSR168 portal integration

You can select the collections and workspaces on your site that can be displayed in a JSR168 portlet and you can create a portlet WAR file.

Note: Before you begin, refer to the documentation of your selected portlet for configuration and assembly instructions. You must configure some portlets, such as when using Apache Pluto, before deploying the DocuShare portlet.

To select objects to display in a portlet

1. From the **Administration** menu, click **Applications | Portal Integration**.

   The Portal Integration page appears.

2. In the **Location to Display in Portlet** section of the page, select a group of possible locations by either **Sort By** type, **Search** for specific, **Show All** locations, or **Show Favorite** locations.

3. From the locations displayed in the **Possible Locations** window, select the collections or workspaces that can be displayed in a portlet, and click **Add**.

   If you want to remove collections or workspaces from being selected as locations to display in a portlet, make your selections in the **Selected Locations** window, and click **Remove**.

4. In the **Portlet File Location** section of the page, use the **Select Location** link to browse to the location on your DocuShare site where you want the portlet WAR file placed.

5. In the **Portlet File Name** field, enter a name for the portlet WAR file (spaces not allowed), and click **Apply**.

   After creating the file, DocuShare displays a message showing you the WAR file name and location that you entered in the fields.

6. Go to the DocuShare collection where the WAR file was placed and download the file to a temporary location on your local drive.

7. Refer to the documentation of your selected portlet for configuration and assembly instructions. You must configure some portlets, such as when using Apache Pluto, before deploying the DocuShare portlet.

8. A portal administrator then uses a reliable extraction tool to create portlet files from the JSR168 files contained within the WAR file, and adds these files to a webapp server.

   a. Unzip the JSR168 WAR file.

   b. Copy the /jsp/*.jsp files in the WAR file to <Portal Root>/jsp folder.

   c. Copy the /web-inf/classes/* in the WAR file to <Portal Root>/web-inf/classes folder.

   d. If you are adding the new portlet to an **existing portal**, then merge /web-inf/portlet.xml with the existing <Portal Root>/web-inf/portlet.xml file.

   e. If you are creating a **new portal**, then copy web-inf/portlet.xml to <Portal Root>/web-inf.

Languages

Select the default language for the site, select and enable a language to display for the site pages (if not the default language), and set the date format for the selected language. If the selected language is not enabled, the site pages display in the default language.

Site users may configure their browsers to view the site in the selected language. Most of the site text, art, messages, and documentation appear in the selected and enabled language. DocuShare does not translate uploaded user documents.

During DocuShare installation, selected languages are installed as part of the installation process. To install addition languages, rerun the DocuShare installation wizard and select the languages to install.

Languages setup

1. From the **Administration** menu, click **Site Management | Installed Languages**.

   The Installed Languages page displays the current settings.
2. From the **Default Language** menu, select the primary language for your site.

   This is the language your site pages display if no other language is enabled or available.

   Note: **Changing the Default Language also changes the language used in Notification emails.**
3. From the **Installed Language** menu, select a language for the site pages.
4. From the **Date Formats** menu, select how dates and time will display on your site.

   Format examples are displayed.
5. In the **Enable Language** field, select **Yes** to enable the language that you selected from the Installed Language menu.

   Most of the site text, art, messages, and documentation appear in the selected and enabled language.
6. To save your changes, click **Apply**.
7. If you changed the default language, run **dsindex index_all**.

   Note: **Changing the default language changes classname labels, requiring a complete site reindexing. Otherwise, search results may not be reliable.**

OCR (Optical Character Recognition)

Using DocuShare OCR, you can convert scanned PDF and image documents to a variety of commonly used document formats with searchable content. This add-on integrates an OCR converter within the DocuShare content rules feature, enabling you to create a content rule that converts documents scanned to DocuShare.

Note: **Verify that your server meets the minimum system requirements as are listed on the DocuShare OCR software download page. To run OCR, your DocuShare server must have more than one processor and running .NET 2.0 or 3.0.**

Installing OCR software

1. From your site **Help Desk**, select **Downloads**, then select **Software Extras for the DocuShare Platform**; this takes you to an external web site.
2. On the web site, select **Add-ons & Extras** and then select the **DocuShare Optical Character Recognition (OCR)** download.
3. Download the OCR software package to a temporary directory on your DocuShare server.
4. Unzip the OCR software package to a new folder, in the temporary directory, named OCR.
5. Log into the DocuShare server as a Windows administrator.
6. In the Windows Administrator Tool, select and open the Services application, select **DocuShare** and **stop** the service.
7. In the unzipped OCR software directory, open the Win32 directory.
8. In the Win32 directory, open the DocuShare directory and double-click **dsUpdate.exe** to start the OCR installation wizard.

   Be patient; it takes a few minutes to load and start the installer.
9. Once the install wizard begins, follow the onscreen instructions. Click **Next** to proceed or **Back** to return to a previous screen.
10. When asked, check the **OCR Update**, browse to and select the **ocr.jar** file, then click **OK**.
11. Click **Add Update**, then click **Next**.
12. When the installation successfully completes, click **Finish** to close the installer.
13. In the Windows Administrator Tool, select and open the Services application, select **DocuShare** and **start** the service.
14. Use a browser to connect to your site, and log in as an administrator.
15. Go to **Site Management l License** and enter your new license string.

    When correctly licensed, the Services Enabled field should show *Basic OCR Service*.
16. Refer to the *DocuShare OCR Guide* for instructions on how to use OCR to convert scanned images into searchable document formats.

Additional languages for OCR

The OCR feature uses the default language of the installed DocuShare site. To use additional languages for OCR, you must have the language packs installed on the site and you must configure the OCR converter.xml file to accept new languages.

To add languages for OCR use:

1. In the DocuShare installation directory, go to /**config** and open the **Converters.xml file**.
2. Near the bottom of the open Converters. xml file, locate the line **<language/>**.
3. Edit the line to include the desired languages.

   For example; <language/>en,fr,de</language>
4. Save and close the file.

PDF Conversion on a Windows server

If your site is licensed to use PDF Conversion, you must download and install OpenOffice and set the environment to access an X Server to display vector graphics. In a Windows environment, the DocuShare PDF Conversion feature works only with OpenOffice version 4.x or higher.

To install OpenOffice:

1. Download the latest version of OpenOffice.
2. Follow the installation instructions provided by OpenOffice. Note the pathname where you installed OpenOffice.
3. After installing OpenOffice, copy the juh.jar file from the program/classes directory to the program directory in the OpenOffice.org 4 installation directory.
4. Start an OpenOffice application.
   a. Click **Start | Programs | OpenOffice**.
   b. Select an OpenOffice application, such as OpenOffice Writer.
   c. When displayed, click to accept the License Agreement.
   d. OpenOffice is set to run only for the Administrator login.
5. If you had selected to run DocuShare as a service, you must enable OpenOffice to interact with DocuShare.
   a. Click **Start | Programs | Administrative Tools | Services**.
   b. In the Services window, right-click the **DocuShare service** and select **Properties**.
   c. Click **Log On** tab.
   d. Check that **Local System account** is selected.
   e. Select **Allow service to interact with desktop**.
   f. Click **OK**.
6. Click **Start | Programs | Administrative Tools | Services**.
7. In the Services window, right-click **DocuShare** to start as a service.
8. When displayed, click to accept the OpenOffice License Agreement. OpenOffice is now set to run as part of the system.
9. Enable PDF Conversion by logging into the DocuShare site as admin, using the password you supplied during the installation.
10. On the navigation bar, click **Admin Home**.
11. From the **Administration** menu, click **Services and Components | Conversion | PDF Conversion**.
12. Set the OpenOffice home directory for PDF conversion.
13. Click **Apply**.

PDF Conversion on a Solaris/Linux server

If your site is licensed to use PDF Conversion, you must download and install OpenOffice and set the environment to access an X Server to display vector graphics. To setup a Java platform for headless operation without an X Server, follow the instructions provided at *http://www.oracle.com/technetwork/java/index.html#1a*.

To install OpenOffice:

1. Stop DocuShare.

   You must have OpenOffice running before you restart DocuShare.
2. Download the latest version of OpenOffice.
3. Follow the installation instructions provided by OpenOffice. Note the pathname where you installed OpenOffice.
4. Accept the License Agreement and start OpenOffice.
5. In a console window, set the environment to display vector graphics by entering either **setenv DISPLAY serverhostname:0.0** or **setenv DISPLAY ipaddress:0.0**.
6. Enable PDF Conversion by logging into the DocuShare site as admin, using the password you supplied during the installation.
7. On the navigation bar, click **Admin Home**.
8. From the **Administration** menu, click **Services and Components | PDF Conversion**.
9. Set the OpenOffice home directory for PDF conversion.
10. Click **Apply**.

Records Manager

Records Manager (DRM) allows site users to easily create electronic records of documents and mail message to preserve and safeguard their content. Once a document or mail message is stored in Records Manager the content cannot be changed; ensuring its authenticity. The retention and disposition rules applied to individual records specify when it is no longer needed and how it should be removed from Records Manager.

DocuShare Records Manager works in conjunction with an IBM DB2 Records Manager (IRM) system, which both manages the records life cycle and provides an audit trail.

DocuShare Records Manager requires the installation and setup of the IBM DB2 Records Manager software, the careful creation of the record File Plan and the configuration of the DocuShare site, using **Services and Components | Records Management | Configuration**, so it can communicate with the IRM server.

Creating records of physical items

Users can create records of physical objects, such as paper documents and file boxes. To do this, users add "placeholder documents" to collections and then classify and declare them as records.

For this feature to work, the administrator must first create a custom document object class, using the object class Document as the clone, and name the object class **Placeholder**. A unique property, called the **IS Placeholder**, exists in the Document object class. After creating the custom Placeholder object class, the administrator must set the **IS Placeholder** to **Yes**.

Once all of this is completed, and the new object class is in the system, whenever users want to classify and declare a physical object, the select **Placeholder** from the **Add** menu.

Auditing records activities

The DocuShare administrator, using **Services and Components | Records Management | Auditing**, can enable DocuShare so it audits and records the activities of specific record activities, such as whenever a record is deleted or the properties of a record type are changed. Auditing also requires the IRM administrator to configure individual record types for activity auditing. If a record type, such as document, is not configured for auditing, the activities of that type will not be audited by DocuShare.

Records management roles

Use to assign or unassign specific records management roles to specific users.

The three roles are Administrators, Coordinators, and Contributors.

Caution

As part of Records Management initial setup, User-2, the Site Administrator account, was given the Records Management role of Administrator. It is critical to RM function that you do not unassign User-2 from this role.

- **Administrators** - can perform all of the Coordinator tasks as well as access the records management system.
- **Contributors** - can classify objects, indicate the objects that are ready to be declared as records, and create personal classification presets.
- **Coordinators** - can perform all of the Contributor tasks as well as declare classified objects as records, create group and collection classification presets, add successor records, and assign user roles (if you also are an Account Administrator).

To assign RM roles to users:

1. From the **Administration** menu, click **Account Management | Records Management Roles**.

   The Records Management Roles page appears.
2. From the **Roles** menu, select the role that you want to assign.

   Once selected, the Add Users window displays all available site users, and the Remover Users window display all users who currently are assigned the selected role.
3. If you wish to assign a user or users the selected role, select the names from the **Add Users** window.
4. If you wish to unassign a user or users from the selected role, select the names from the **Remove Users** window.
5. Click **Apply**.

   The selected user or users have been assigned/unassigned the selected Records Management role.

Deleting user accounts with Records Manager installed

DocuShare user accounts cannot be deleted nor merged if the user is an owner of a record. Ownership of records cannot be changed. User accounts that cannot be deleted nor merged because of records ownership, must be marked inactive.

To mark a user account inactive:

1. From the **Administration** menu, click **Account Management | Users | List Users**.
2. From the displayed list, select the name of the user account.
3. In the **Edit** menu, select **Edit Properties**.
4. Next to the **Active User** field, select **No**.
5. Click **Apply**.

   The user account is now marked inactive.

Records management configuration

To configure a DocuShare site to use an IBM DB2 Records Manager server:

1. From the **Administration** menu, click **Services and Components | Records Management | Configuration**.

The Records Management Configuration page appears.

2. Fill-in the top five fields to establish a connection to an IRM server.
3. In the **Enable Automatic Host Registration** field, select **Yes**.
4. In the **File Plan View Name** field, enter the name of the File Plan that you selected for your IRM.
5. In the **Email Attachment Filing Mode** field, select how you want Records Manager to handle mail messages and attachments.
6. In the **Version Retention** field, select how you want Records Manager to handle record versioning.
7. Click **Apply**.

   The DocuShare site is configured to operate with a specific Records Manager server.

Auditing

Use to enable Records Manager auditing and to select which activities you want to record; such as when a record is either undeclared or deleted, or when the properties of a record have changed.

To use Records Manager auditing, the IRM administrator must set the audit configuration for each IRM record type. If an audit event activity is not configured for a record type, then that specific activity will not be audited even if it is enabled on the DocuShare Auditing page.

To enable and set auditing:

1. Use the **IRM administrator UI** to configure individual Records Manager record types so specific record activities will be audited.
2. From the DocuShare **Administration** menu, click **Services and Components | Records Management | Auditing**.

   The Auditing page appears.
3. In the **Enable Auditing** field, select **Yes**.
4. In the remaining fields, select **Yes** to enable each specific recording action.
5. Click **Apply**.

   DocuShare saves you changes and begins auditing Records Manager activities.

Property

Use to enable editing of specific properties of DocuShare/RM object classes; currently only Document, Mail Message, and custom object classes based on either Document or Mail Message.

When you enable editing of a specific object class property, you are unlocking the property and permitting users to edit the value of that property on any instance of that object currently stored in Records Management. Changes made to the value of a property are currently done through the DocuShare UI.

Note: Future versions of DocuShare will allow changes to be made on the Records Management server, using Records Management administrator tools.

To unlock property editing:

1. From the DocuShare **Administration** menu, click **Services and Components | Records Management | Property**.

   The Property page appears.

2. From the **DocuShare Objects** menu, select the object class you want displayed.

   Currently, RM supports only the Document and Mail Message object classes, and custom object classes based on Document and Mail Message.

   DocuShare displays a list of all of the properties available to the selected object class.

3. Select the properties that you want to unlock.

   For example, if you want users to be able to change the **Title** of all Document objects stored in RM, then select the box next to the name **Title**.

4. Click **Apply**.

   DocuShare unlocks the selected object class properties. Now the values of all of the properties that you selected for this object class are editable in each individual object.

   To actually change the property value of an individual object, you must use the **IRM administrator UI** to make the value change. You cannot use DocuShare to change a property value of an object stored in RM.

Scanning to DocuShare

DocuShare provides several methods of scanning documents to a DocuShare site.

Scan via a WorkCentre

If site users have access to a Xerox® WorkCentre that has the **scan to file** feature enabled, they can scan documents directly to a DocuShare collection. 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. If the WorkCentre allows users to use a scan template to enter DocuShare property values at the device, provide the WorkCentre administrator with the DocuShare property names. The CentreWare Field Name in the template must match a DocuShare property name. For more information on template configuration, refer to the setup and operation guides of your specific WorkCentre.

There are a number of WorkCentresettings that may adversely affect the scan 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.

Once both scanning methods are installed you can choose to enable/disable either or both, by making your selection on the **Site Configuration** page.

Note: **DocuShare scanning supports the use of TIFF-6 (version 6), including multi-page TIFF, PDF, and JPEG. DocuShare scanning does not support the use of JPEG in TIFF.**

Note: **To use scan to DocuShare, stop the Microsoft FTP publishing service.**

Xerox® Scan Templates

The use of Xerox® Scan Templates is enabled by default. When enabled, images scanned into DocuShare using Xerox scanning devices, look for and use these scan templates. If users scan images into DocuShare through devices other than Xerox scanners, then you should disable Xerox® Scan Templates. Even if you disable Xerox® Scan Templates, you can still use Xerox devices to scan into DocuShare.

To disable Xerox® Scan Templates:

1. Go to **Services and Components l Scan**.
2. In the **Disable XST File Checking** field, select **Yes** to disable Xerox® Scan Templates.
3. Restart the SMB scan service:
    a. Go to **Site Management | Site Configuration**, and in the **Enable SMB Scanning** field select **No**, then click **Apply**.

b. In the **Enable SMB Scanning** field select **Yes**, then click **Apply**.
   This action restarts the SMB scan service.

To configure scan via WorkCentre

To configure your site to use WorkCentre to scan to DocuShare:

1. From the **Administration** menu, select **Site Management | Site Configuration**.

   The Site Configuration page appears.

2. If you want to SMB scanning, in the **Enable SMB Scanning** field, select **Yes**.
3. If you want to FTP scanning, in the **Enable FTP Scanning** field, select **Yes**.

   You can enable both FTP and SMB if you want to offer your users a choice.

4. Click **Apply**.
5. From the **Administration** menu, select **Services and Components | Scan**.

   The Scan page appears.

6. If you do not accept the defaults, make the necessary changes to the page to reflect your scan to DocuShare preferences.
7. Click **Apply**.

Resolving port conflicts with WorkCentre scanning

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

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

4. Click **Apply**.

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.

Scan cover sheet

With **scan cover sheets**, users can create scan cover sheets for the following objects:

- Documents - to scan a document as a new document version
- Collections - to scan a document to a collection
- Workspaces - to scan a document to the content portlet of a workspace
- User - to scan a document to a personal collection

A DataGlyph on the each cover sheet contains information about the scan location and the cover sheet owner. The user prints the cover sheet and places it on top of the document, then scans both to add the document to the scan location on DocuShare. Refer to the *DocuShare User Guide* for complete information on using scan to cover sheets.

Note: **The scan cover sheet feature has been optimized for use with Xerox® multifunction devices. Therefore, the feature does not support all non-Xerox multifunction devices and software. In addition, DocuShare currently supports image-only file formats when scanning (TIFF, non-searchable PDF, etc.). Searchable PDF file formats are not supported for use with scan cover sheets.**

To enable scan cover sheet

1. From the **Administration** menu, go to **Services and Components | Content Intake| Edit** and select **GlyphScan** from the **Type** field.

2. On the same page, select **Enabled**, then click **Update**.

   The Create Scan Cover Sheet option is now available under Actions in each Collection.

   Note: **If this procedure does not enable Scan Cover Sheet on your site, go to Services and Components | Scan and make sure the Integrate Scan Cover Sheet Feature with Scan Service field is set to Yes. This field should automatically go to Yes, when you enable Scan Cover Sheet.**

To disable scan cover sheet

1. From the **Administration** menu, go to **Services and Components | Content Intake| Edit** and select **GlyphScan** from the **Type** field.
2. On the same page, deselect **Enabled**, then click **Update**.

   The Create Scan Cover Sheet option is now grayed under Actions in each Collection.

WebDAV

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 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.

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

Caution

WebDAV does not work if your DocuShare site is set up to use IIS via the Tomcat/IIS bridge connection. Your site must be configured to use an Apache server. See the DocuShare Installation Guide for information on creating a bridge to an Apache server.

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. A**utomatic 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. **HTML 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.

WebDav title properties

Property and default value	Definition
Enable WebDAV Titles	If it is false, none of the webdav title features will occur.
Regenerate WebDAV Titles	Enables regenerating all WebDAV titles for all existing documents and collections.
Enable HTML Stripping	Enables HTML stripping on all objects.
Enable Auto Extensions	Enables automatic file extensions on document objects.
Enable Unique Filenames	Enables unique filenames on all objects.
Enable Sanitized Titles	Enables illegal character removal on all objects.
Disallowed Characters	The list of disallowed characters that will be substituted.
Substitution Characters	The character substituted for disallowed characters.

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.

To set the WebDAV service properties

1. From the **Administration** menu, click **Services and Components | WebDAV**.

   The WebDAV page appears displaying the current WebDAV properties.
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**.

Workflow

Workflow is a sequence of predetermined tasks or steps that run a semi-automated process, such as routing an electronic document to various company officers to obtain signature approval or the processing of invoices through company departments.

Enterprise Workflow **provides an experienced administrator with a comprehensive, Java-based** business process management and workflow tool that allows them to create and manage custom automated document processes that have far greater power and flexibility than that provided with basic workflow.

Enterprise Workflow provides the administrator with an advanced Workflow Manager; a complete toolset for managing custom workflows on a site.Subscription to the DSDN gives you access to the **DocuShare Workflow Studio**; a GUI application that provides the technically advanced administrator with the tools necessary to prototype, build, and deploy custom DocuShare workflows that can be run and managed using Enterprise workflow.

To configure the Workflow service

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

   The Workflow page appears displaying the current properties.
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**.

To manage workflows

Access the Workflow Manager through the Admin UI by going to **Services and Components | Workflow | Workflow Manager**. Click the Workflow ID number of a specific workflow and the Manager displays the option of inspecting a selected workflow either a in tabular, graphical, or XML view.

List workflows

Use 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.

Workflow action button

Button	Purpose
Abort	Stop all selected active workflows.
Activate	Start all stopped workflows.
Archive	Archive workflows started on a specific date or time line. Applies to all workflows, not specific ones.
Delete	Delete all selected workflows.
Delete Old	Delete workflows started on a specific date or time line. Applies to all workflows, not specific ones.
Instantiate	Create a workflow instance based on a selected template.
Refresh	Updates the workflow list. Use after making changes to displayed criteria checkboxes.

6. To inspect a workflow either by a tabular, graphical, or XML view click the **Workflow ID** number of a specific workflow.
   - Select **Tabular View** to see the workflow process in a table format.
   - Select **Graphical View** to see a graphical representation of a workflow process.
   - Select **XML View** to see the workflow process in a XML code.

Dashboard

View 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.

Engine activity report

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.

Xerox Mobile Client for DocuShare

The Xerox Mobile Client for DocuShare allows the use of mobile devices to access and manage content on a DocuShare site. The Mobile Client supports Apple iOS and Android devices.

The Mobile Client Connector is included in the DocuShare software. There is no additional software installation required. The administrator enables and disables the Connector from the Mobile Client Configuration page in the Admin UI. There is no uninstall procedure.

Mobile Client Configuration

To enable the Connector:

1. From the Administration Menu, go to **Services and Components l Mobile Client Configuration**.
2. In the **Enable Mobile Client Connector** field, select **Yes**; then click **Apply**.
3. Verify that the Mobile Client Settings shown on the Mobile Client Configuration page are correct.
4. If the settings are not correct, enter your DocuShare URL in the Server URL field and click **Set**.

   Based on the URL you entered, the new settings display on this page.
5. Click **Apply** to save the settings.

   he settings also display on the Mobile Client Settings page in the Web UI. The link to the page displays under Related Links. Users require the values to set up accounts on the mobile devices.

Use of the Restore Defaults and Reset buttons

- Click the **Restore Defaults** button to restore the Mobile Client Settings to the system settings; those written to amber.properties during either DocuShare installation or a dssetup session. Click **Apply** to save these settings as the current settings.
- Click the **Reset** button to display the Mobile Client Settings that were last applied.

Displayed Language

To display DocuShare in a language other than English on a mobile device, the target DocuShare site must have the appropriate language pack installed and configured, and the device must be set to the desired language.

Logging

The Mobile Client Connector creates log files **ds_mobile_connector.log** and **ds_mobile_connector.log.1**. The logs are located in the **tomcat\logs** folder of the DocuShare installation.

Index

E

F

G

H

I

J

L

M

N

O

P

Q

R

S

T

U

V

W

X