

# DocXchanger<sup>TM</sup>

## **eDirectory Edition User Guide**

*Version 1.0*  
March 2008



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OpenSSL acknowledgments

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).

This product includes software written by Tim Hudson (tjh@cryptsoft.com).

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# 1 Introduction

## 1.1 Conventions Used

**Bold** Words in **bold** indicate key terms or items of interest.

*Italics* Words in *italics* indicate names, such as the name of a menu item, selectable option, or a screen name.

Code

Sections of code such as actual text from a configuration file, message structure, or other text representing actual parameters within a file.



Best practice. Although the information contained here may not be appropriate in all cases, it is the general rule of thumb.



General information. Content here is generally helpful in better understanding the operation or design of part of the product.



Warning or notice. This content should be carefully read and understood to prevent problems with configuration or operation of the product.

## 1.2 Terminology



**Provider** – any user who creates a sharing link.



**Consumer** – the recipient of a sharing link.



**Internal user** – a user who has a network account in the same eDirectory tree as the DocXchanger server. This user may be a provider or a consumer.



**External consumer** – a consumer referenced only by an email address.



**Sharing link** – an access token granted by a provider to a consumer allowing local and/or remote access to a specified network file or directory.

## 1.3 Client Types

### 1.3.1 Web Access

DocXchanger Web Access has the following features:

- ▶ Requires no software installation.
- ▶ Provides access to DocXchanger from any computer with a browser and Internet access.

### 1.3.2 DocXchanger Client

The DocXchanger Client has the following features:

- ▶ Supports drag-and-drop for document transfers.
- ▶ Provides multiple document upload / download capabilities not available in Web Access.
- ▶ Leverages the Novell Client for local connections.
- ▶ Provides desktop integration through extensions to Windows Explorer.

### 1.3.3 DocXchanger Plug-in for External Users

The DocXchanger Plug-in for External Users (Plug-in) has the following features:

- ▶ Simple interface for accessing just sharing links through a remote connection.
- ▶ Can be used by anyone who has created or received a sharing link, including external consumers without an account.
- ▶ Provides drag-and-drop for file transfers to and from the client interface.
- ▶ Provides multiple file and folder upload / download capabilities which are not available in the Web Access interface.

### 1.3.4 Client Feature Comparison

Table 1.1 - Client Feature Matrix





















Feature	Web Access	Client	Desktop Integration	Plug-in
Access my managed storage				
Create sharing links				
Manage sharing links				
Access sharing links provided by me				
Access sharing links provided to me				
Transfers multiple files and folders	<sup>1</sup>			
Drag-and-drop support for file transfers				
Requires user account in eDirectory	<sup>2</sup>			
Works with the Novell Client				
Integrates with Windows Explorer		<sup>3</sup>		
No client software installation required				

1. Multiple files can be transferred, but only one at a time. Folders cannot be transferred, but must be created manually.
2. Depending on DocXchanger configuration, external consumers may be required to provide an email address and password to access sharing links.
3. DocXchanger Client extends the functionality of the Windows Explorer *Send To* context menu and uses Windows Explorer shell controls for local file operations.

## 1.3.5 Client Use Cases

<b>Local Mode</b>	User has an eDirectory account in the specified Tree and is logged into that tree with the Novell Client on the local workstation.
<b>Remote Mode</b>	User has an eDirectory account in the specified Tree, but is not logged into that tree with the Novell Client.
<b>External</b>	User does not have an eDirectory account in the specified Tree.

Table 1.2 - Client Use Matrix

User Type	Client	Desktop Integration	Plug-in	Web Access
Local				
Dynamic	 <sub>1</sub>	 <sub>2</sub>		
Remote				
External				
Kiosk environment				

1. Mode can change between local and remote as the Novell Client changes its connection to the specified eDirectory Tree. This may be common with mobile users.
2. Desktop Integration only functions when DocXchanger Client is connected in local mode.

# 2 DocXchanger Web Access

## 2.1 System Requirements

DocXchanger Web Access is supported on any operating system that can run one of the following web browsers:

- ▶ Internet Explorer 7
- ▶ Firefox 2.x
- ▶ Safari 2.x

Other web browsers may work but are not supported at this time.

For best results, the display should be running at a minimum resolution of 1024 x 768 pixels.

## 2.2 Using DocXchanger Web Access

### 2.2.1 Logging In

1. Start the web browser
2. Enter the address for DocXchanger in the browser's address field. If the current address for DocXchanger is unknown, check with the local DocXchanger administrator for assistance.
3. At the login screen, enter a valid name and password, then click *Login*.











## 2.2.2 Navigating the Main Tool Bar



The main tool bar sits at the top of the Web Access interface and has the following items:



Table 2.1 - Main Tool Bar

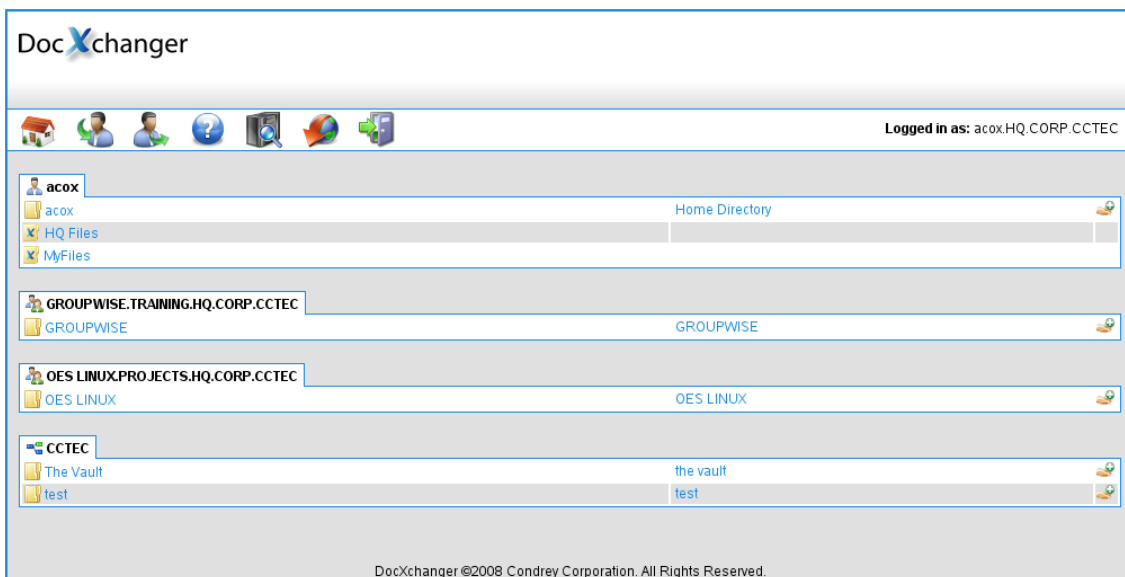
Icon	Name	Description
	Home	Displays resources of current user.
	Consumed sharing links	Displays the list of sharing links that have been sent to the current user.
	Provided sharing links	Displays the list of sharing links created by the current user.
	System parameters	Access the parameters pages for administration of DocXchanger. (This option is only available if the current user has administrative privileges.)
	Help	Redirects the current user to a custom help site.
	Browse all servers	Navigate all servers and volumes for providing shared links. (This option is only available if configured by the administrator.)
	Download software	Redirects the user to the software download location for DocXchanger Client. (This option is only available if configured by the administrator.)
	Exit	Log out of the DocXchanger web interface.

## 2.3 Accessing Managed Resources

A user's managed resources can be accessed via the DocXchanger Web Access.

To access user data:

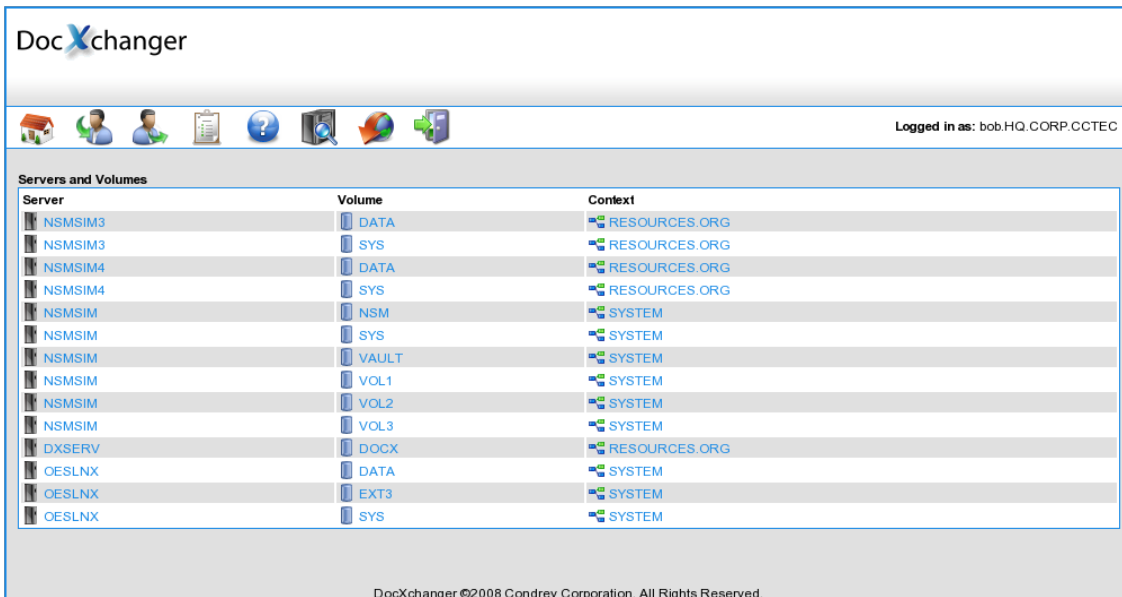
1. Log in to the DocXchanger Web Access interface.
2. Select the *Home*  option from the tool bar or select the *Browse All Servers*  option from the tool bar. (The *Browse All Servers* option is only available if enabled by the DocXchanger administrator.)
3. In the *Home* view, a list of managed resources for the current user is displayed.



These resources include:

- ▶ User Home Directory.
- ▶ Group Home Directories.
- ▶ Consumed sharing links.
- ▶ Storage Locations (from NetStorage).
- ▶ DocXchanger managed resources.
- ▶ IUAdmin resources stored in eDirectory.

4. In the *Browse All Servers* view, a list of all servers and volumes in the same eDirectory tree as DocXchanger is displayed.



DocXchanger

Logged in as: bob.HQ.CORP.CCTEC

**Servers and Volumes**

Server	Volume	Context
NSMSIM3	DATA	RESOURCES.ORG
NSMSIM3	SYS	RESOURCES.ORG
NSMSIM4	DATA	RESOURCES.ORG
NSMSIM4	SYS	RESOURCES.ORG
NSMSIM	NMS	SYSTEM
NSMSIM	SYS	SYSTEM
NSMSIM	VAULT	SYSTEM
NSMSIM	VOL1	SYSTEM
NSMSIM	VOL2	SYSTEM
NSMSIM	VOL3	SYSTEM
DXSERV	DOCX	RESOURCES.ORG
OESLNX	DATA	SYSTEM
OESLNX	EXT3	SYSTEM
OESLNX	SYS	SYSTEM

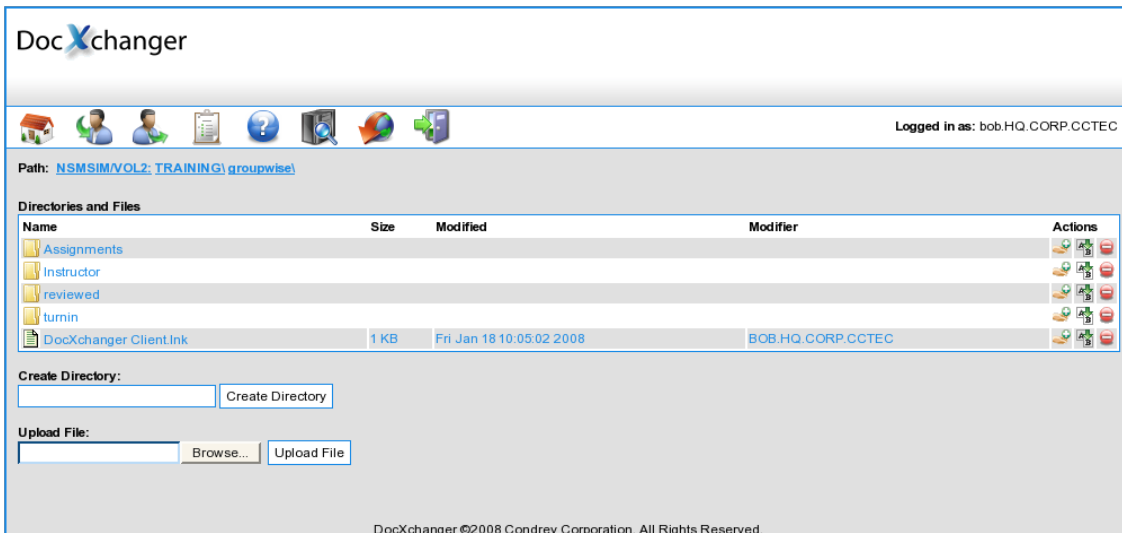
DocXchanger ©2008 Condrey Corporation. All Rights Reserved.

This list can be navigated by clicking on a server / volume pair in the list.

### 2.3.1 Navigating Directories

To navigate to a subdirectory, click on the directory entry in the list view.

To navigate to a parent directory, click on one of the parent directory entries in the *Path* links displayed at the top of the page under the tool bar.



DocXchanger

Logged in as: bob.HQ.CORP.CCTEC

Path: [NSMSIM/VOL2: TRAINING\groupwise](#)

**Directories and Files**

Name	Size	Modified	Modifier	Actions
Assignments				
Instructor				
reviewed				
turnin				
DocXchanger ClientLink	1 KB	Fri Jan 18 10:05:02 2008	BOB.HQ.CORP.CCTEC	

Create Directory:

Upload File:

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## 2.3.2 Downloading a File

To download a file:

1. Navigate to the directory containing the file to download.
2. Click on the file entry in the list.
3. Using the browser's provided dialog, save the file to a local directory.


## 2.3.3 Uploading a File

To upload a file:

1. Navigate to the directory where the file should be placed.
2. Click *Browse* to open the file browser dialog.
3. Select a file to be uploaded using the provided browse dialog.
4. Click the *Upload File* button.

## 2.3.4 Renaming a File or Directory

To rename a file or folder:

1. Navigate to the folder containing the file or directory to rename.
2. Click on the *Rename* icon  next to the entry to rename.
3. In the *Rename Directory* text field, modify the selected entry.
4. Click *Rename* to finish the rename process.


## 2.3.5 Creating a Directory

To create a directory:

1. Navigate to the directory in which to create the new directory.
2. Type in the name of the new directory in the *Create Directory* text field at the bottom of the page.
3. Click *Create Directory* to finish the process.

## 2.3.6 Deleting a File or Directory

To delete a file or directory:



1. Navigate to the directory containing the file or directory to delete.
2. Click on the *Delete*  icon next to the entry to delete.
3. Click *Delete* in the confirmation page to finish the process.

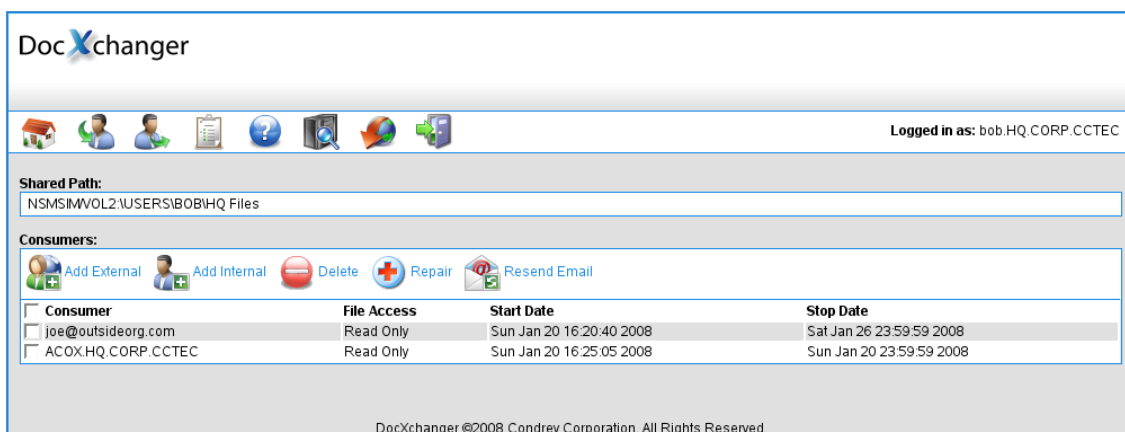
Note: To delete a directory and its contents, first check the checkbox *Delete contents of 'directory' and all subdirectories*.


## 2.4 Providing Sharing Links

### 2.4.1 Access the Sharing Links Provider Page


To access the sharing links Provider page:

1. Login to the DocXchanger Web Access interface.
2. Select the *Home*  option from the tool bar or select the *Browse All Servers*  option from the tool bar. (This option is only available if enabled by the DocXchanger administrator.)
3. Navigate to the desired directory or file.



4. Click on the *Share*  icon in the *Actions* column. The *Sharing Link Summary* for that path will be displayed.

## 2.4.2 Provide Sharing Links to Internal Users

1. Follow the steps listed in 2.4.1 *Access the Sharing Links Provider Page*.
2. In the *Consumers* tool bar Click on *Add Internal* .

<b>Notification Email</b> <b>From:</b> <input type="text" value="bob@cctec.org"/> <b>Subject:</b> <input type="text" value="Project Files"/> <b>Description:</b> <input type="text" value="Please review and make corrections as necessary."/>		<b>Expiration</b> <b>Date to start:</b> <input type="text" value="06/08/2007"/> <b>Date to end:</b> <input type="text" value="06/22/2007"/> <input type="checkbox"/> Sharing Link never expires.
<b>Consumers</b> <input type="text"/> <input type="button" value="Add"/> <small>Comma or semicolon delimited list. e.g. joe;mary,sally</small>		<b>Access Rights</b> <input checked="" type="checkbox"/> Give Consumer Write Access.
		<b>Address Book</b> <input type="button" value="Search"/>

3. Verify the following fields:
  - ▶ From email address
  - ▶ Subject
  - ▶ Description
  - ▶ Date to start
  - ▶ Date to end or *Sharing Link Never Expires*
  - ▶ Access Rights (*Give Consumer Write Access*)



Some fields such as *Give Consumer Write Access Rights* and *Sharing Link Never Expires* may not be available depending on DocXchanger system settings, access controls and user file system rights.

- For the *Consumers* field, type in the user ID of an internal consumer. For multiple users, enter each name separated by a comma or semicolon.

To find consumers in eDirectory, click on *Search* in the *Address Book* field.

DocXchanger

Userid  Search

Wildcard search criteria. e.g. b\*; a\*; etc. The maximum number of returned results will be 100.

<input type="checkbox"/>	Email Address	Userid	Name	Department
<input type="checkbox"/>	ACOX@cctec.org	ACOX.HQ.CORP.CCTEC	Aaron COX	
<input type="checkbox"/>	AJSTATEN@cctec.org	AJSTATEN.ATL.CORP.CCTEC	STATEN	
<input type="checkbox"/>	ALTEMPLES@cctec.org	ALTEMPLES.ATL.CORP.CCTEC	TEMPLES	
<input type="checkbox"/>	ALTHOMAS@cctec.org	ALTHOMAS.ATL.CORP.CCTEC	THOMAS	
<input type="checkbox"/>	ARPRICE@cctec.org	ARPRICE.ATL.CORP.CCTEC	PRICE	
<input type="checkbox"/>	ASTIMMS@cctec.org	ASTIMMS.NYC.CORP.CCTEC	TIMMS	
<input type="checkbox"/>	AWPRESTON@cctec.org	AWPRESTON.ATL.CORP.CCTEC	PRESTON	
<input type="checkbox"/>	AWRIGHT@cctec.org	AWRIGHT.HQ.CORP.CCTEC	WRIGHT	
<input type="checkbox"/>	admin@cctec.org	admin.SYSTEM	admin	

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- ▶ Users may be searched by *Userid* or *Last Name*.
- ▶ Select the check box next to each desired user, then click *Add* to populate the list of consumers on the sharing link page.
- ▶ Click *Close* when finished with the Address Book.

Remove

<input type="checkbox"/>	Email Address	Userid	Name	Department
<input type="checkbox"/>	<input type="text" value="BCLARK@cctec.org"/>	BCLARK.HQ.CORP.CCTEC	CLARK	Finance
<input type="checkbox"/>	<input type="text" value="BCSTONE@cctec.org"/>	BCSTONE.ATL.CORP.CCTEC	STONE	
<input type="checkbox"/>	<input type="text" value="bsmith@cctec.org"/>	BSMITH.HQ.CORP.CCTEC	Smith	Engineering

- Fill in the email address for any users without one.
- Click *Apply* to create the sharing link(s).

## 2.4.3 Provide Sharing Links to External Consumers

1. Follow the steps listed in 2.4.1 *Access the Sharing Links Provider Page*.
2. In the *Consumers* tool bar Click on *Add External* .

**Path to share:**  
NSMSIM/VOL3\GROUPS\Public1

**Notification Email**

**From:**  
bob@cctec.org

**Subject:**  
Public Documents

**Description:**  
Here are the reference materials.

**Expiration**

**Date to start:**  
06/12/2007

**Date to end:**  
06/12/2007

Sharing Link never expires.

**Access Rights**

Give Consumer Write Access.

**Consumers**

tsmith@outsideorg.com;jhenry@outsideorg.com  
Comma or semicolon delimited list. e.g. joe@outsideorg.com;mary@outsideorg.com,sally@outsideorg.com

3. Verify the following fields:
  - ▶ From email address
  - ▶ Subject
  - ▶ Description
  - ▶ Date to Start
  - ▶ Date to End or *Sharing Link Never Expires*
  - ▶ Access Rights (*Give Consumer Write Access*)
  - ▶ Consumers' email addresses





Some fields such as *Give Consumer Write Access* and *Sharing Link Never Expires* may not be available depending on DocXchanger system settings or access controls.

4. Click *Apply* to create the sharing link.

## 2.5 Accessing Sharing Links



### 2.5.1 Accessing Provided Sharing Links

To access a sharing link created by the current user:

1. Login to the DocXchanger Web Access interface.
2. Select the *Provided Sharing Links*  option from the tool bar.
3. To view the details of a sharing link, click the *Properties of Sharing Link*  icon for that sharing link.
4. To access the sharing link itself, click on the sharing link entry listed in *Provided Sharing Links*.

### 2.5.2 Accessing Consumed Sharing Links

To access a received sharing link sent to the current user:

1. Login to the DocXchanger Web Access interface.
2. Select the *Consumed Sharing Links*  option from the tool bar.
3. To view the details of a sharing link, click the *Properties of Sharing Link*  icon for that sharing link.
4. To access the sharing link itself, click on the sharing link entry listed in *Consumed Sharing Links*.

### 2.5.3 Accessing Sharing Links by URL

External consumers (who do not have eDirectory accounts) must access all sharing links via a URL. Internal users may also use the associated URL from any sharing links they provide or consume.



To access a sharing link via a URL:

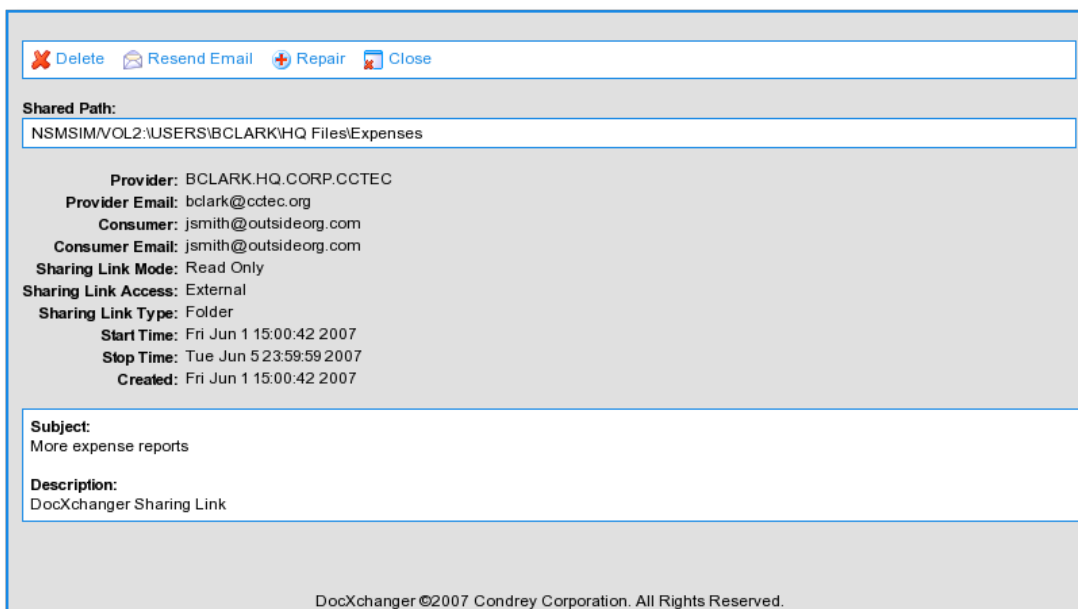
1. Open the email notification that was sent when the sharing link was first created. If the email is not available, the Provider of the sharing link may resend the email notification. See 2.6.4 *Resending a Sharing Link Notification* for information on how to do this.
2. Click on the URL link in the email. This should open a web browser with the correct URL containing the address of DocXchanger and the ticket number needed for access.
3. An optional login dialog will be presented in the following circumstances:
  - ▶ The sharing link was for an internal consumer.
  - ▶ DocXchanger has been configured for challenge / response for external consumers.

## 2.6 Managing Sharing Links

### 2.6.1 Viewing Sharing Link Details

To view the details of a sharing link:




1. Log in to the DocXchanger Web Access interface.
2. Select the *Provided Sharing Links*  or *Consumed Sharing Links*  option from the tool bar.
3. Click on the desired entry in the list of sharing links.



4. The sharing links Detail page shows the following information:
  - ▶ Shared Path
  - ▶ Provider and Provider's email address
  - ▶ Consumer (if internal) and consumer's email address
  - ▶ Access Type (read-only or read-write and internal or external)
  - ▶ Link type (file or folder)
  - ▶ Start / Stop / Creation Times
  - ▶ Subject and Description

## 2.6.2 Repairing a Sharing Link

Occasionally a sharing link may become unsynchronized with the actual rights in the file system. DocXchanger's Janitor process will perform a sweep once each day to review all sharing links and try to correct these problems. If a sharing link needs to be resynchronized prior to the next Janitor sweep, end users may initiate a *Repair* process to try correcting these problems manually. Internal consumers and providers may initiate a repair on any sharing links to which they have access.



1. Log in to the DocXchanger Web Access interface.
2. Select the *Provided Sharing Links*  or *Consumed Sharing Links*  option from the tool bar.
3. Select the check box next to each desired sharing link.
4. Click the *Repair*  icon at the top of the list.

Sharing links may also be repaired from other pages where the *Repair* button is available for sharing links.

## 2.6.3 Deleting a Sharing Link

Only providers with appropriate access may delete sharing links.

To delete a sharing link:



1. Log in to the DocXchanger Web Access interface.
2. Select the *Provided Sharing Links*  option from the tool bar.
3. Select the check box next to each desired sharing link.
4. Click the *Delete*  icon at the top of the list.

Sharing links may also be deleted from other pages where the *Delete* button is available for sharing links.

## 2.6.4 Resending a Sharing Link Notification

A Provider may resend the email notification that was initially sent with a sharing link when it was first created.

To resend the sharing link email notification:

1. Log in to the DocXchanger Web Access interface.
2. Select the *Provided Sharing Links*  option from the tool bar.
3. Select the check box next to each desired sharing link.
4. Click the *Resend Email*  icon at the top of the list.

Sharing link notifications may also be resent from other pages where the *Resend Email* button is available for sharing links.

# 3 DocXchanger Client

## 3.1 System Requirements

The DocXchanger Client is supported on the following operating systems:


- ▶ Windows XP sp2 or later
- ▶ Windows Vista
- ▶ Windows Server 2003 sp1 or later

In addition, DocXchanger Client requires the display settings to be set at a minimum resolution of 1024 x 768 pixels.

## 3.2 Installing the Client

### 3.2.1 Downloading the Client

DocXchanger Client may be obtained by clicking the download software link in the web interface. (This is only available if configured by the DocXchanger administrator.)

1. Log in to DocXchanger Web Access. See Section 2.2.1 *Logging In* for details.
2. Click on *Download Software*  in the tool bar at top.
3. Click on the entry **DocXchanger-client-win32.msi** to download the DocXchanger Client.

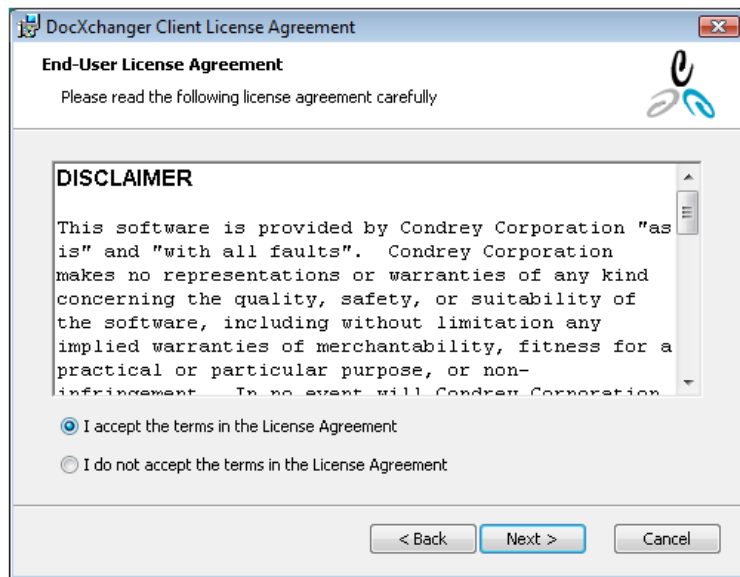
### 3.2.2 Running the Client Installer

To install the client:

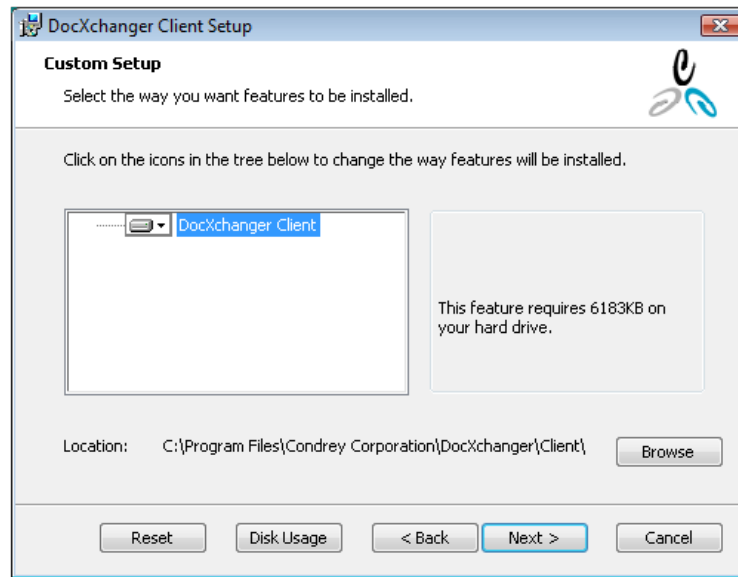
1. Run the **DocXchanger-client-win32.msi** executable.



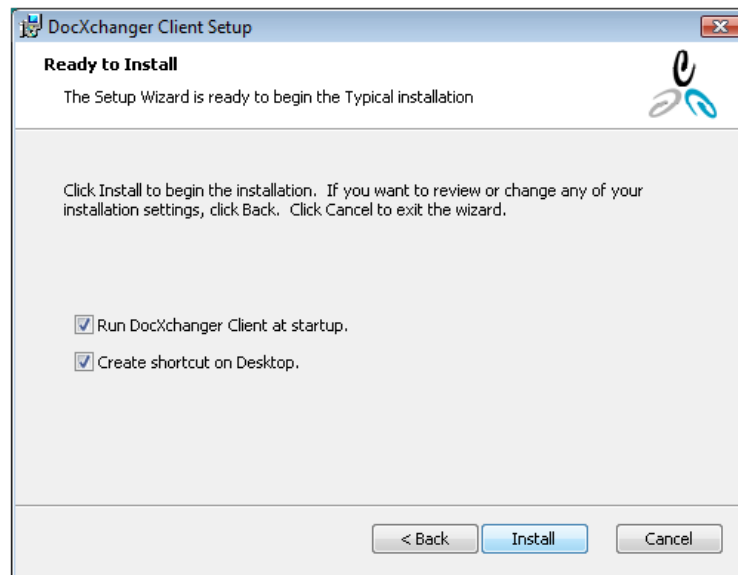
2. At the welcome screen, click *Next*.



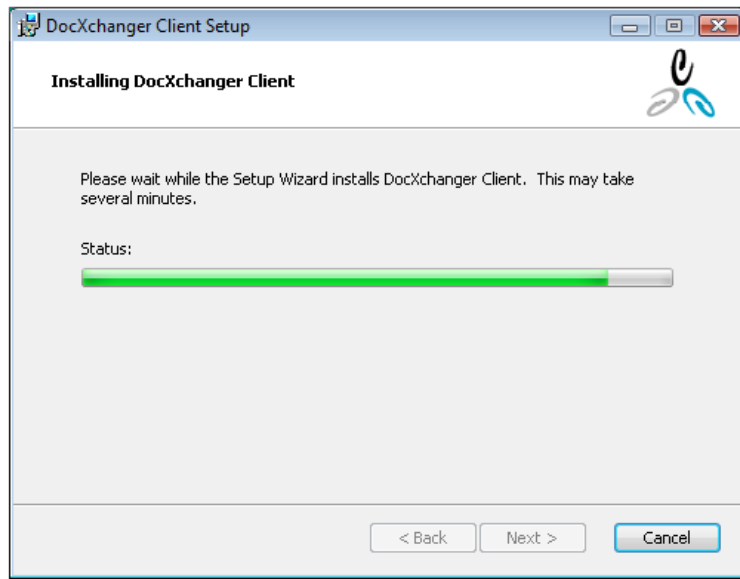
3. Select *I accept the terms in the License Agreement*, then click *Next*.



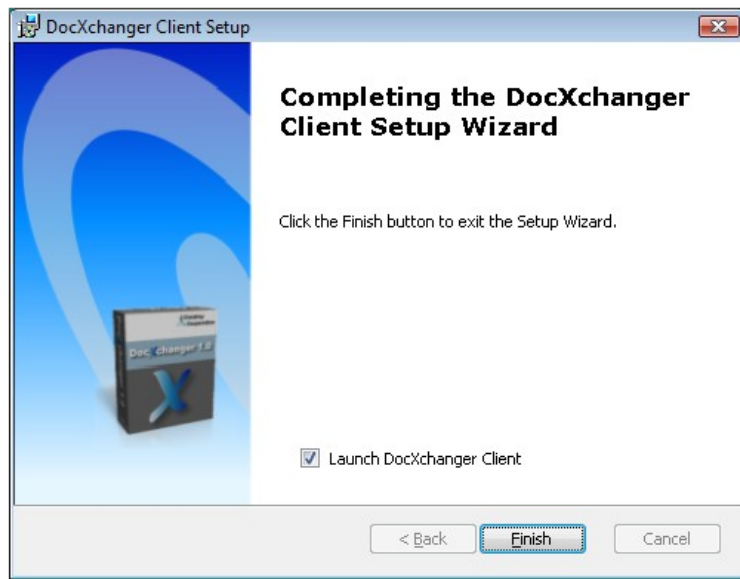
4. Select a path in which to install DocXchanger Client, then click *Next*.



5. Select whether to *Run DocXchanger Client at startup* and whether to *Create shortcut on Desktop*, then click *Next*.




6. Wait for the file installation process to complete.

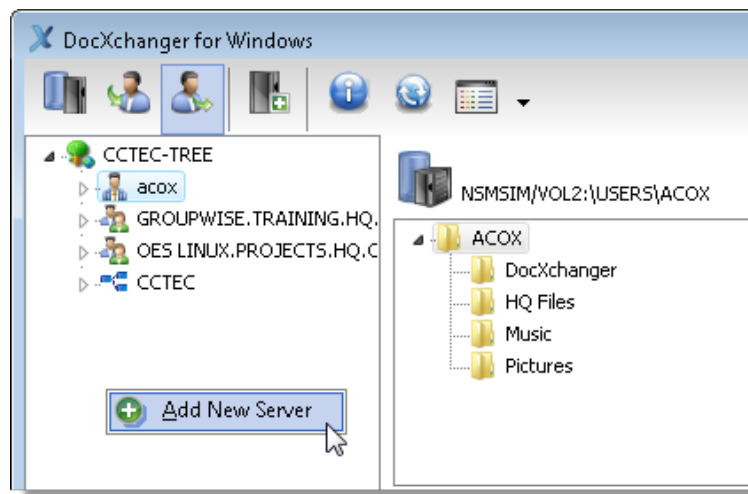



7. Click *Done* to complete the installation.

## 3.3 Configuring the Client

### 3.3.1 Adding a Server Configuration

1. Start DocXchanger Client.
2. Click on the DocXchanger  icon in the system tray to open the client interface.



3. In the navigation panel on the left, right-click any empty area and select *Add New Server*, or click the *Add Server*  button in the tool bar at top.

Modify Server Parameters

Modify client configuration parameters for this tree server.

Tree and Server Information


Tree Name: CCTEC-TREE

Server Name (or Address): docx.cctec.org

Port Number: 8009  SSL-Enabled Secure Port

Access Mode

Local Only

Dynamic 

Remote Only

Dynamic Mode: This machine transitions to and from being connected to this tree using Novell Client32. Connection to this tree will be actively monitored for changes. When a Client32-based connection is not present, the user will be prompted to login using a DocXchanger remote connection.

Automatic Prompting for Login Credentials when in Remote Mode

Do not enable automatic prompting

Enable automatic prompting

Automatic Polling for New Storage Resources

New Identity-Based Storage

At application startup only

Every Hour

Every 3 Hours

Every 6 Hours

Every 24 Hours

New Sharing Links

At application startup only

Every 5 minutes

Every 10 minutes

Every 30 minutes

Every Hour

OK Cancel

4. Enter the *Tree Name*, *Server Name* (DNS name or IP address), and *Port Number*.
5. Check *SSL-Enabled Secure Port* for encrypted communication with the DocXchanger server. Uncheck the option to use clear-text communication.
6. Click *OK* to save all changes.

Table 3.1 - Server Configuration Properties


Property	Description
Tree Name	Name of eDirectory tree.
Server Name	DNS name or IP address of DocXchanger server.
Port Number	Port number the DocXchanger server listens on (typically 8008 or 8009).
SSL-Enabled Secure Port	When checked, enables SSL communication.
Access Mode	Type of client connection. Can be <i>Local</i> , <i>Dynamic</i> , or <i>Remote</i> . See Section 3.4 <i>Comparing Access Modes</i> for details on these connection types.
Automatic Prompting for Login Credentials	When checked, the client will prompt for login credentials when first starting, or whenever the <i>Access Mode</i> changes.
Automatic Polling – Identity-Based Storage	Interval at which the client polls the server for managed resources. Values include: <ul style="list-style-type: none"> <li>▶ At application startup only</li> <li>▶ Every hour</li> <li>▶ Every 3 hours</li> <li>▶ Every 6 hours</li> <li>▶ Every 24 hours</li> </ul>
Automatic Polling – Sharing Links	Interval at which the client polls the server for new sharing links. Values include: <ul style="list-style-type: none"> <li>▶ At application startup only</li> <li>▶ Every 5 minutes</li> <li>▶ Every 10 minutes</li> <li>▶ Every 30 minutes</li> <li>▶ Every hour</li> </ul>

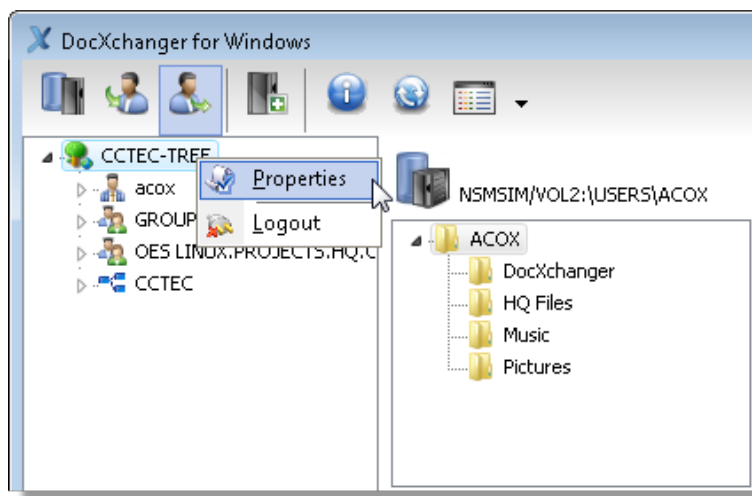



Currently, DocXchanger Client only allows for one server configured for each eDirectory tree. However, multiple eDirectory trees may be added, each with its own server and configuration parameters.

### 3.3.2 Modifying a Server Configuration

To modify an existing server configuration:


1. Start DocXchanger Client.
2. Click on the DocXchanger  icon in the system tray to open the client interface.




3. In the navigation panel on the left, right-click on the eDirectory tree entry and select *Properties* .
4. Modify the desired properties.
5. Click *OK* to save the changes or *Cancel* to discard them.

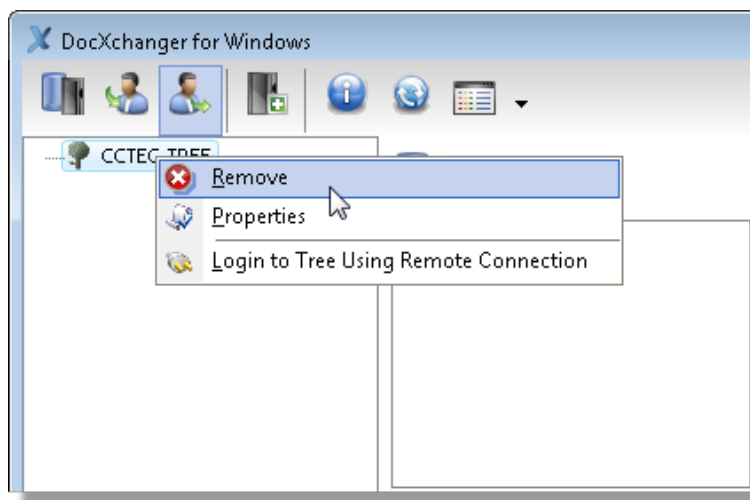
### 3.3.3 Removing a Server Configuration


To remove an existing server configuration:

1. Start DocXchanger Client.
2. Click on the DocXchanger  icon in the system tray to open the client interface.
3. Verify that DocXchanger Client is logged out of the server configuration to remove.

For remote mode connections, right-click the eDirectory tree and select *Logout* .



For local mode connections or dynamic mode connections connected locally, log out of eDirectory. Alternately, change the DocXchanger connection type to *Remote*, but do not log back in. See Section 3.3.2 *Modifying a Server Configuration* and Section 3.3.1 *Adding a Server Configuration* for details on how to modify the server connection mode.

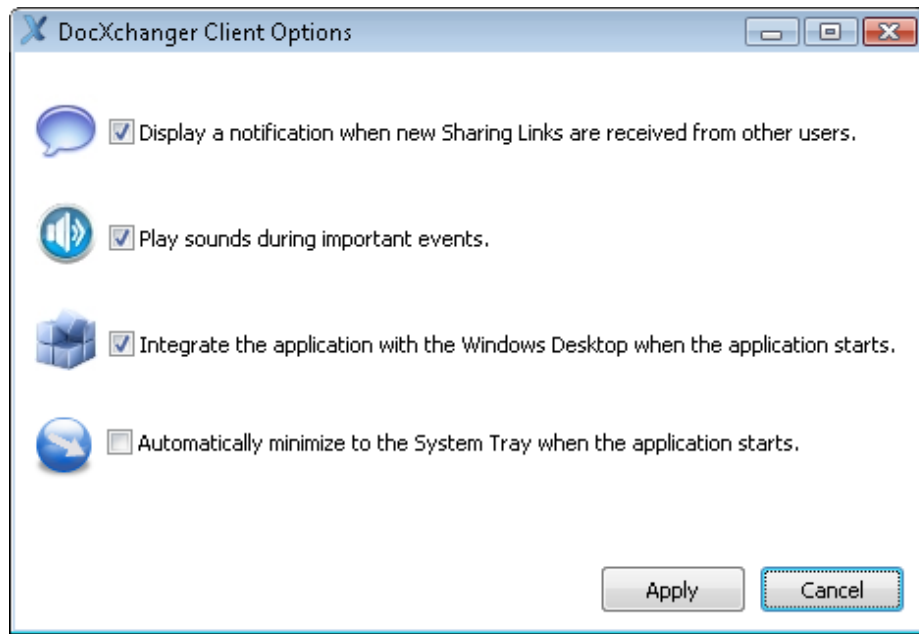


4. In the client's navigation panel on the left, right-click on the eDirectory tree entry and select *Remove* .

### 3.3.4 Modifying Client Options

To access the general client options for DocXchanger Client:

1. Start DocXchanger Client.
2. Click on the DocXchanger  icon in the system tray to open the client interface.
3. Click the *About DocXchanger*  icon in the tool bar at top.
4. Click the *Options* button in the *About DocXchanger* dialog.
5. Set the options as desired.



6. Click *Apply* to save the changes, or *Cancel* to discard them.

Table 3.2 - Client Options

Option	Description
Display notification for new Sharing Links	Turn new sharing link notification on or off.
Play sounds	Play audible alerts for key events.
Integrate with Windows Desktop	Enable or disable the Windows Explorer extension. (Requires client restart.)
Minimize at application start	Minimize the client to the system tray at startup.

## 3.4 Comparing Access Modes

### 3.4.1 Local Mode

When using DocXchanger Client in local mode, the following features are available:

- ▶ Context menus and navigation for managed resources and sharing links are the same as provided by Windows Explorer.
- ▶ File and folder operations take advantage of the Novell Client connection to the network.
- ▶ Desktop Integration provides seamless access to managed resources and sharing links through Windows Explorer.



If the Novell Client is not installed on the local workstation, DocXchanger Client will only operate in *Remote Mode*.

---

### 3.4.2 Remote Mode

When using DocXchanger Client in remote mode, the following features are available:

- ▶ Does not require the Novell Client.
- ▶ Access to managed resources and sharing links is via HTTP / HTTPS connection.

### 3.4.3 Dynamic Mode

When using DocXchanger Client in dynamic mode, the following features are available:

- ▶ Automatically switches between local and remote mode based on the Novell Client connection to eDirectory and network resources.
- ▶ Assists mobile users that frequently change from local to remote connectivity.






If the Novell Client is not installed on the local workstation, DocXchanger Client will only operate in *Remote Mode*.

---

### 3.4.4 Connection States

DocXchanger Client maintains an independent connection to each configured DocXchanger server and tree. The state of each connection is seen in the left navigation panel of DocXchanger Client.

*Table 3.3 - Client Connection States*

Connection State	Description
 <b>Local Connection</b>	Current connection to this tree is via the Novell Client.
 <b>Remote Connection</b>	Current connection to this tree is via a remote DocXchanger connection.
 <b>Unauthenticated</b>	Tree and server are configured, but not actively logged in.

## 3.5 Logging Into DocXchanger

### 3.5.1 Logging In Using Local Mode


To log in to a DocXchanger connection configured for local mode, simply log in to the corresponding eDirectory tree using the Novell Client. Upon startup, DocXchanger Client will detect any existing Novell connections and validate those connections with the DocXchanger server.

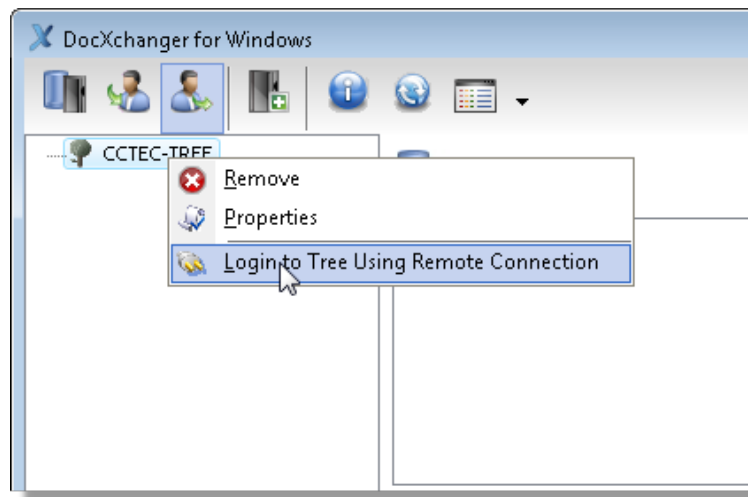
To log out of a DocXchanger connection configured for local mode, log out of the corresponding eDirectory tree using the interfaces provided with the Novell Client.

The DocXchanger Client polls the Novell connection tables every few seconds, and updates the DocXchanger connections accordingly. As a result, a user can perform login / logout operations with the Novell Client at any time before or after starting DocXchanger Client.

### 3.5.2 Logging In Using Remote Mode

To log in to a DocXchanger connection configured for remote mode:

1. Start DocXchanger Client.
2. Click on the DocXchanger  icon in the system tray to open the client interface.



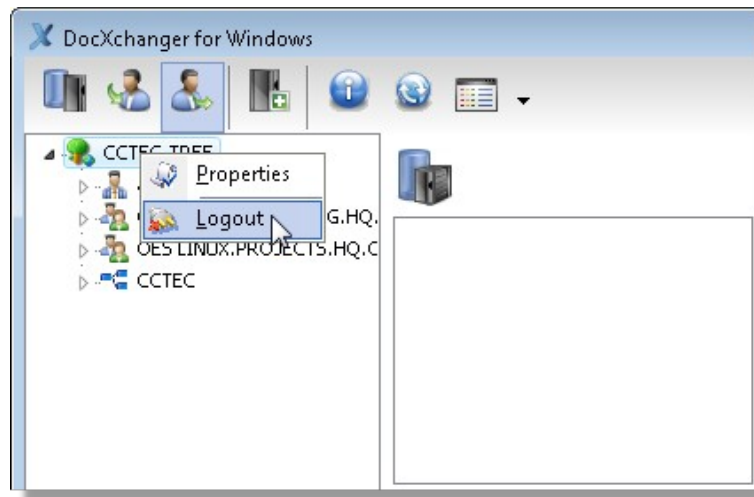
3. Right-click on the DocXchanger connection identified by the eDirectory tree.
4. Select *Login to Tree Using Remote Connection*.



5. At the login prompt, enter the user name and password. The user name may be either the simple name or the full distinguished name.

To log out of a DocXchanger connection configured for remote mode:

1. Right-click the DocXchanger connection identified by the eDirectory tree.



2. Select *Logout* from the context menu.

### 3.5.3 Logging In Using Dynamic Mode

To log in to a DocXchanger connection configured for dynamic mode, use one of the methods described in the previous sections.

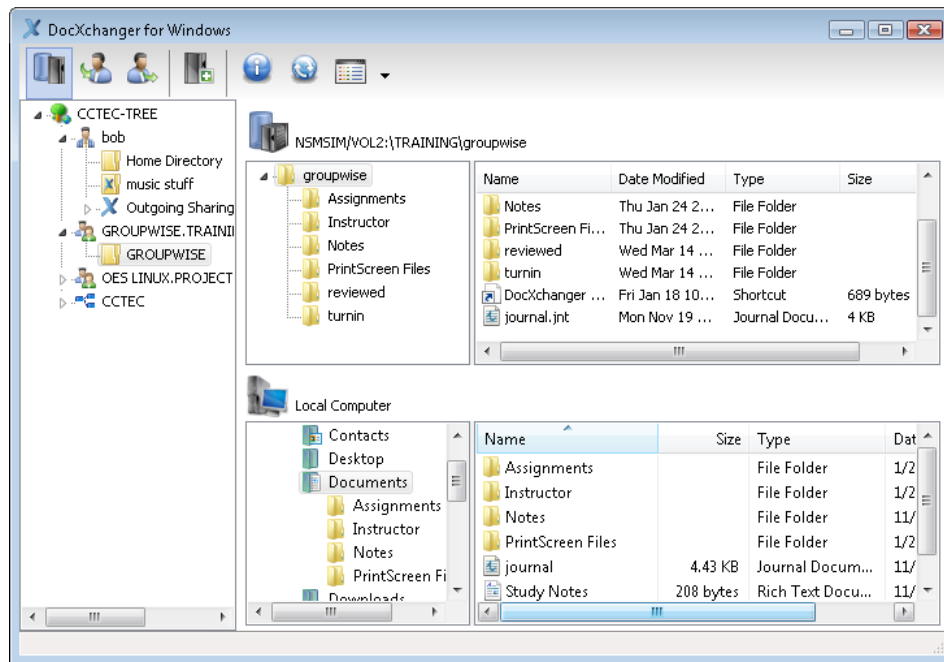
To log out of a DocXchanger connection configured for dynamic mode, use the appropriate method for the connection's current state (local or remote), also listed in the previous sections.

Note that with dynamic mode, DocXchanger Client responds to changes in the Novell Client's connection for a given tree. If, for example, a DocXchanger connection were set to dynamic mode, and a user was logged in as remote, a subsequent login of the Novell Client to that same eDirectory tree would cause the DocXchanger client to switch that connection from remote to local mode.

## 3.6 Accessing Managed Resources

To access existing managed resources from DocXchanger Client:

1. Log in to DocXchanger Client. (See Section 3.5 *Logging Into DocXchanger.*)

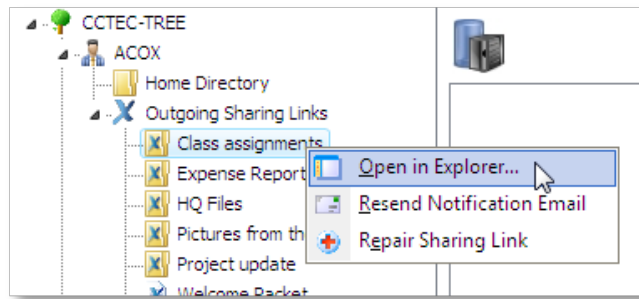


2. Navigate the resources displayed in the navigation tree on the left.

Each resource is associated with either a container or group of which the user is a member. These resources include:

- ▶ User and Group home directories.
- ▶ Sharing links.
- ▶ Storage Locations (from NetStorage).
- ▶ DocXchanger managed resources.
- ▶ IUAdmin resources stored in eDirectory.

3. Select a resource on the left to display that resource's files and folders on the right. The resource location (server, volume, and path) will be displayed immediately above the top panel where the resource contents are displayed.

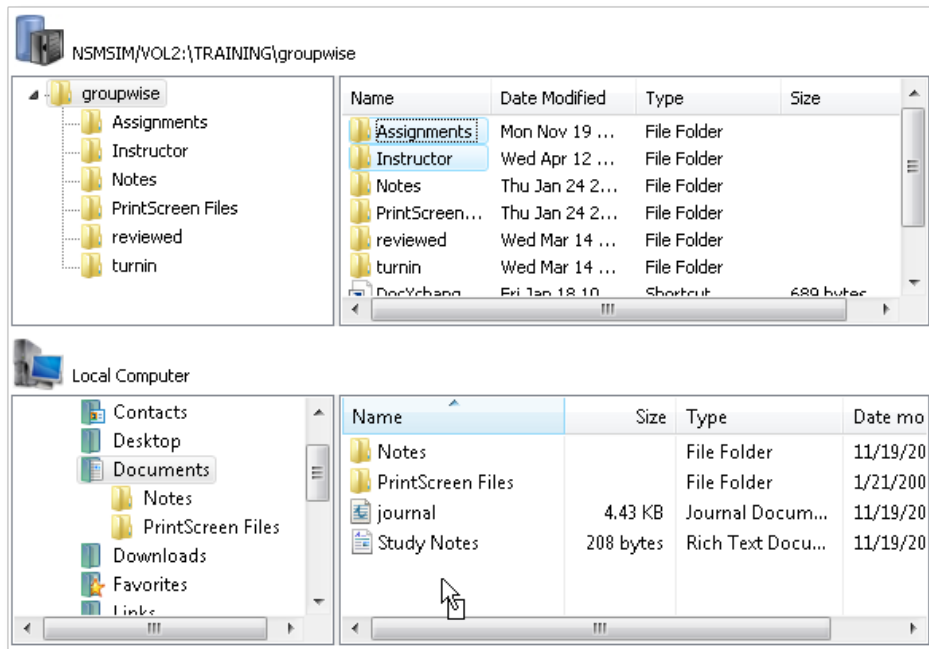


For users connected in local mode,

### 3.6.1 Downloading a File or Folder

To download a file:

1. Start DocXchanger Client and log in.
2. In the upper panel, navigate to a directory in a resource or sharing link where files to download are located.

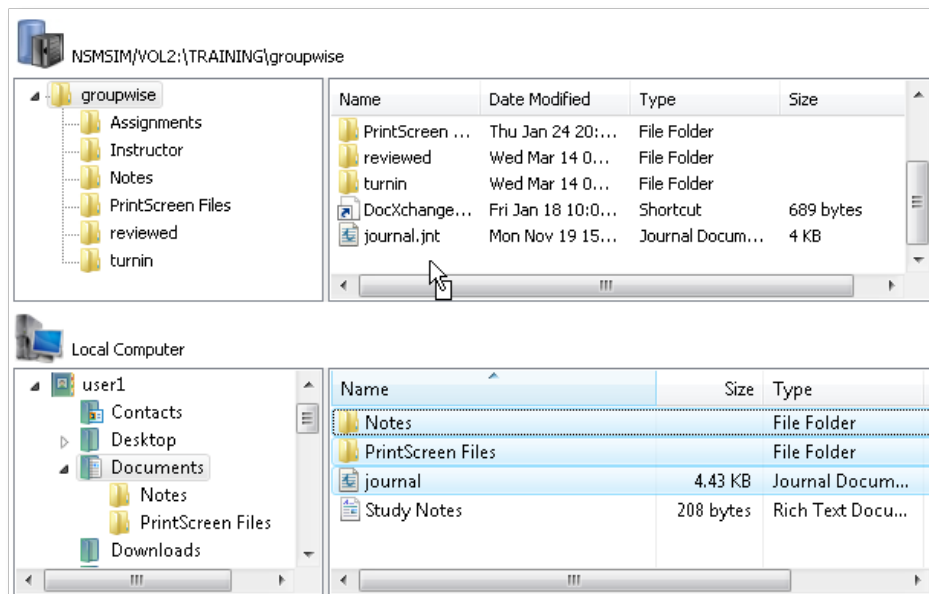


3. In the lower panel, navigate to the directory in the local computer where the downloaded files should be placed.
4. Drag and drop the desired files and folders from the upper panel to the lower panel.
5. To download multiple files or folders, hold the shift or control key while selecting the files and folders, then drag and drop the selected set to the local computer directory in the lower panel.

## 3.6.2 Uploading a File or Folder

To upload a file or folder:

1. Start DocXchanger Client and log in.
2. In the upper panel, navigate to a directory in a resource or sharing link where files will be uploaded.



3. In the lower panel, navigate to the directory in the local computer where the files and folders for uploading are located.
4. Drag and drop the desired files and folders from the lower panel to the upper panel.

To upload multiple files or folders, hold the shift or control key while selecting the files and folders, then drag and drop the selected set to the resource directory in the upper panel.

### 3.6.3 Renaming a File or Folder

To rename a file or folder:

1. Start DocXchanger Client and log in.
2. In the upper panel, navigate to a directory in a resource or sharing link containing the file or folder to be renamed.
3. Right-click on the file or folder to rename and select *Rename*.

### 3.6.4 Creating a Folder

To create a directory:

1. Start DocXchanger Client and log in.
2. In the upper panel, navigate to the desired directory in a resource or sharing link.
3. Right-click an empty area and select *New Folder*.

### 3.6.5 Deleting a File or Folder

To delete a file or directory:


1. Start DocXchanger Client and log in.
2. In the upper panel, navigate to the directory in a resource or sharing link containing the file or folder to delete.
3. Select the file or folder to delete then press the delete key or right-click and select *Delete*.

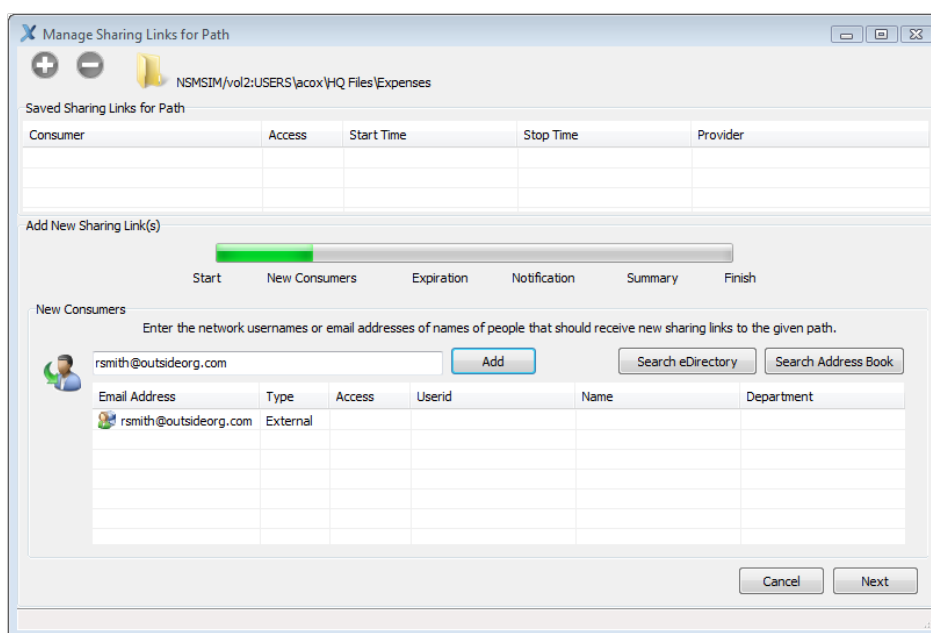
To delete multiple files or folders, hold the shift or control key while selecting the files and folders, then press the delete key or right-click and select *Delete*.

## 3.7 Providing Sharing Links

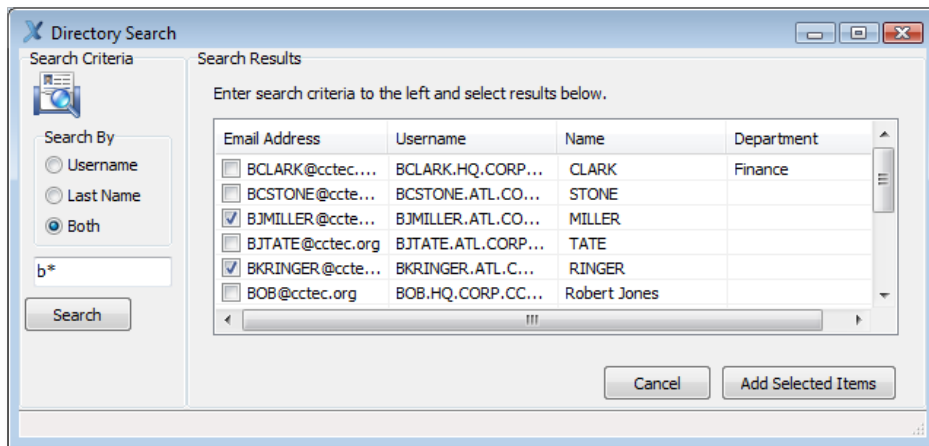
### 3.7.1 Providing Sharing Links Using DocXchanger Client

To create a sharing link using DocXchanger Client:

1. Start DocXchanger Client and log in.
2. Navigate to the network path containing the file or folder to share.
3. Right-click on the file or folder to share and select *Send To > DocXchanger Sharing Recipient*.
4. To start the *Sharing Link Wizard* click *OK* in the *Add Sharing Links* dialog box or click the *Add Consumer*  button at the top of the *Manage Sharing Links for Path* form.



5. Add consumers to the sharing link. Consumers may be added using any of the following methods:
  - ▶ Type the eDirectory user name of an internal consumer then click *Add*.
  - ▶ Click *Search eDirectory* to search for internal consumers in eDirectory.



- a) Select *Username*, *Last Name*, or *Both* for the search criteria.
  - b) Enter a name (case insensitive) then click *Search*.
  - c) Asterisks may be used as wildcards in the search criteria.
- ▶ Type the email address of an external consumer then click *Add*.
  - ▶ Type a portion of a user name or email address then click *Search Address Book* to perform a MAPI (Messaging Application Programming Interface) search of an external consumer in an email address book.



MAPI is a standard means of interacting with email clients from third-party applications, such as DocXchanger Client. Since each email client provides its own MAPI interface, the *Search Address Book* functionality may not be consistent with all email clients. The following are a list of email clients that are known to work with the *Search Address Book* function:

- ▶ Outlook Express (Windows XP)
- ▶ Windows Mail (Windows Vista)
- ▶ Outlook 2003 / 2007 (local Contacts only)
- ▶ GroupWise 7 (GroupWise address book only)


Retrieving email address entries from Exchange via Outlook requires Extended MAPI, and will be implemented in a later release.



The following email clients are known to have incomplete or broken MAPI interfaces, and will not work with DocXchanger Client's *Search Address Book* function:

- ▶ Thunderbird
- ▶ Eudora
- ▶ Pegasus Mail

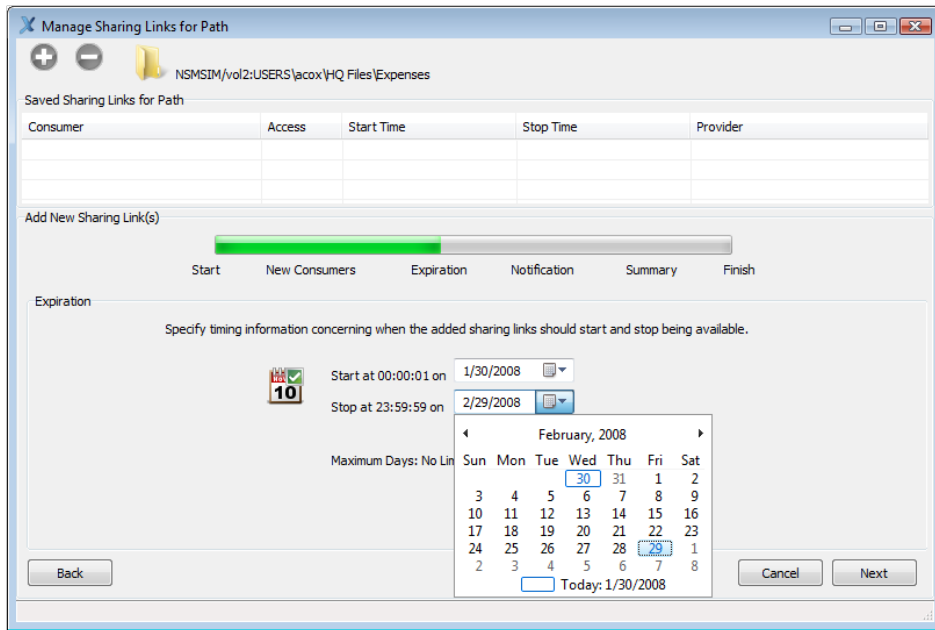


6. For each consumer select *Read Only* or *Read, Write, and Update*.

Remove a consumer from the list by right-clicking on the listed consumer and selecting *Remove* .

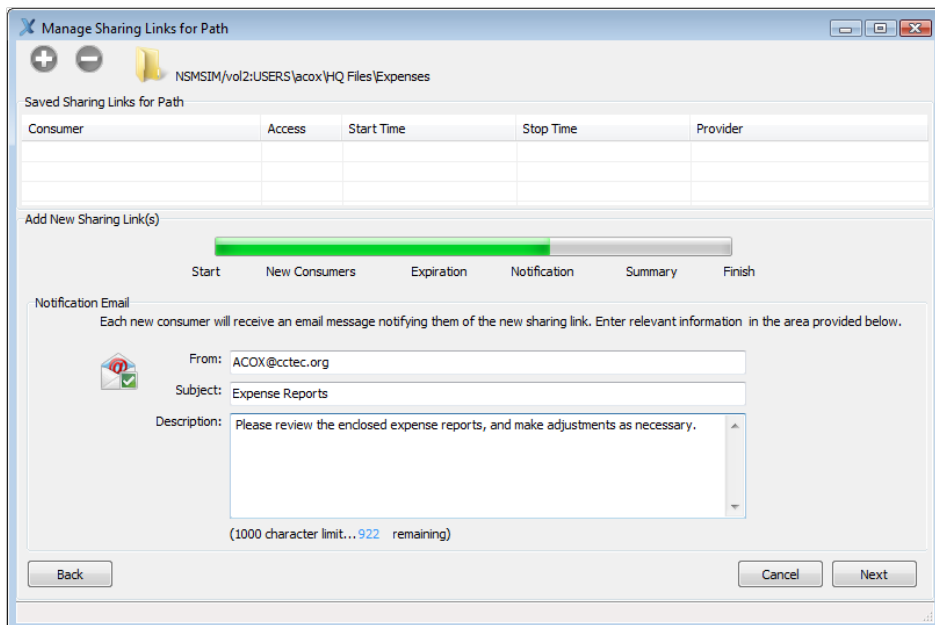
Change a consumer's sharing link privileges to read-only or read-write by right-clicking on the listed consumer and selecting *Change to Read/Write*  or *Change to Read-Only* .

7. Click *Next* when all consumers have been added to the list.

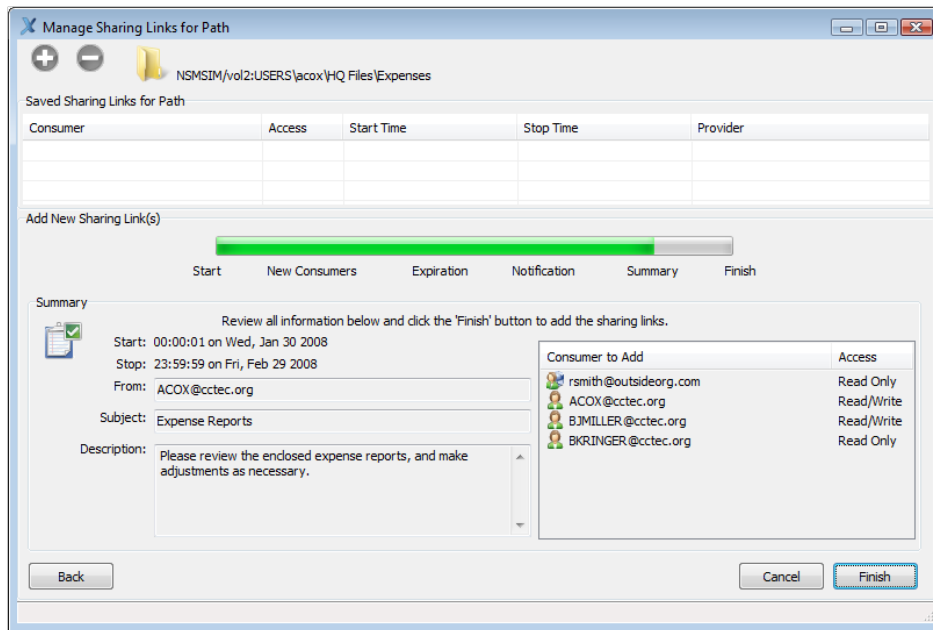


8. Select the start and stop dates for the sharing link. A sharing link may be shared for any number of days up to the *Maximum Days* shown in the form.

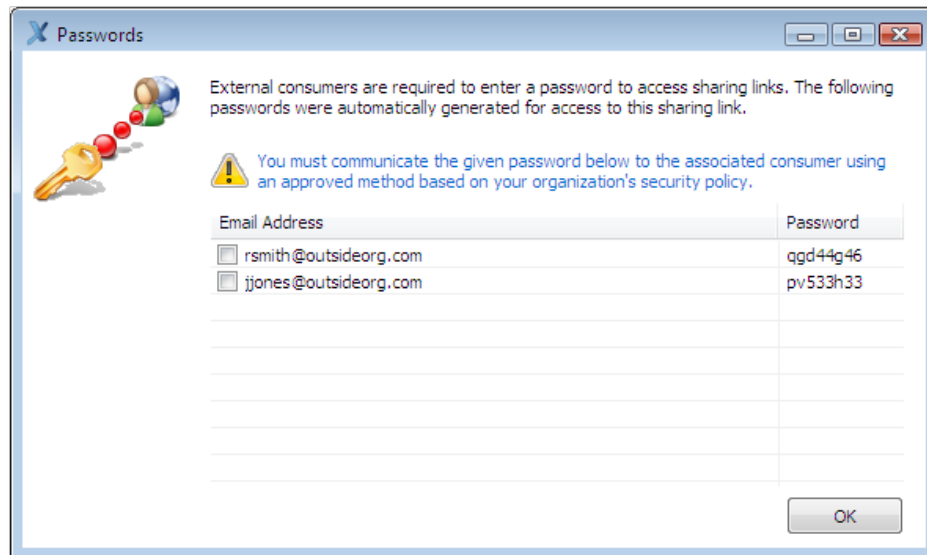
9. Click *Next* to continue.



10. Enter the *Subject* and *Description* then click *Next*.

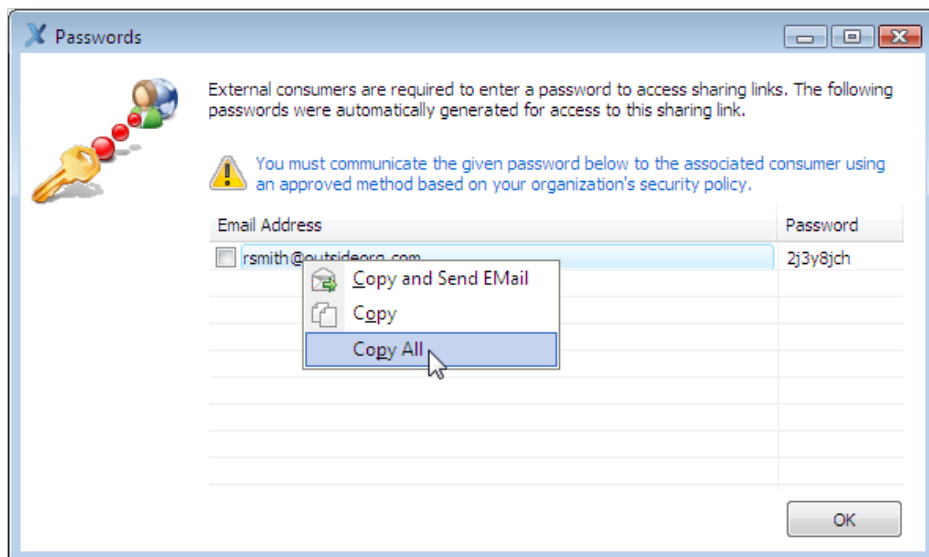


11. Review the summary then click *Finish*.



12. If DocXchanger has been configured to require authentication for external sharing links, the sharing link wizard will display a form including the email address and generated password for each added external consumer. Each password should be communicated to the associated recipient using an approved method of password distribution.

As a convenience, the *Passwords* form provides methods for copying the email addresses and passwords to the system clipboard and for launching the default email client.



To copy the names and passwords to the clipboard, do one of the following:

- ▶ Right-click a single entry and select *Copy*.
- ▶ Select multiple entries and select *Copy*.
- ▶ Right-click anywhere on the list and select *Copy All*.

To start the email client, do one of the following:

- ▶ Double-click a single entry in the list.
- ▶ Right-click a single entry and select *Copy and Send Email*.

The *To*, *From*, and *Subject* of the new email will be automatically filled in. To include the password in the email, perform a *Paste* action (using Control-V or right-click *Paste*) anywhere in the body of the email.

13. Once all passwords have been properly distributed, click *OK* to close the *Passwords* form, then click *Yes* to close the confirmation dialog.



When using passwords for external sharing links, please adhere to the local organization's policy for distributing information such as passwords. Please do not send the password via email if doing so violates company policy. If you have any question concerning an appropriate means of password distribution, please contact your local network security officer or network administrator.

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## 3.7.2 Providing Sharing Links Using Windows Explorer

To create a sharing link using Windows Explorer:

1. Using Windows Explorer, navigate to a network path containing a file or folder to share.
2. Right-click on the file or folder to share and select *Send To > DocXchanger Sharing Recipient*.
3. Follow steps 4 – 13 from Section 3.7.1 *Providing Sharing Links Using DocXchanger Client* using the *Sharing Link Wizard* to complete the sharing link.



A network file or folder may only be shared if the following conditions are true:

- ▶ The file or folder is on a server managed by DocXchanger.
- ▶ The user is indexed as a valid provider by DocXchanger.
- ▶ The user has appropriate file rights (read-only or read-write) to the file or folder.
- ▶ The file or folder is included in DocXchanger's list of approved paths for sharing.

If any of the conditions are not met, the DocXchanger Client will notify that the path cannot be shared.

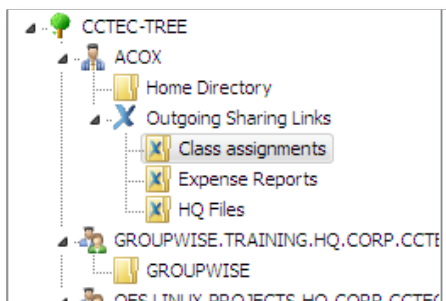
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## 3.8 Accessing Sharing Links

### 3.8.1 Accessing Provided Sharing Links


To access sharing links provided to others by the current user:

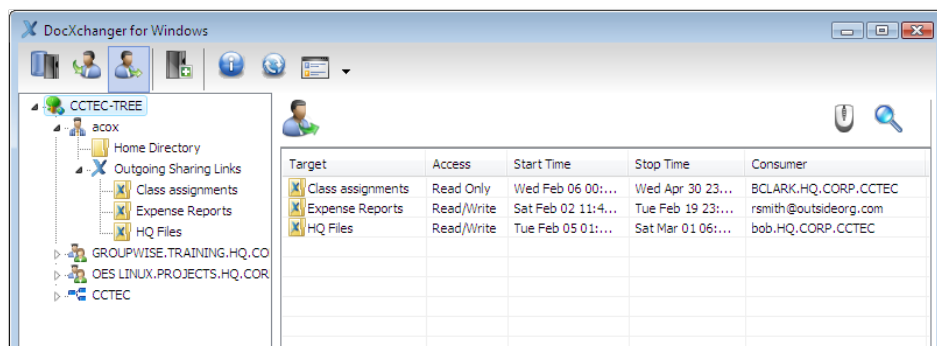
1. Start DocXchanger Client and log in.
2. In the left panel navigate to *Outgoing Sharing Links* located under the current user.



3. Click one of the sharing links to view the sharing link content in the top panel.

Alternately, provided sharing links may also be accessed via the *Outgoing Sharing Links* view:

1. Start DocXchanger Client and log in.
2. Click the *Outgoing Sharing Links*  button in the tool bar at top.

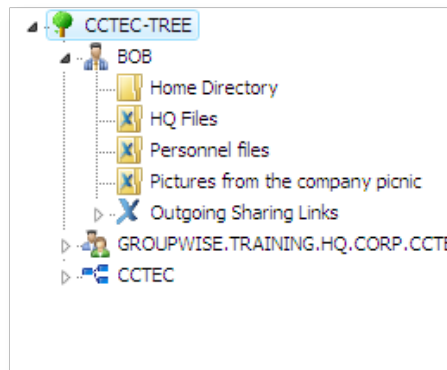



3. Double-click one of the sharing link entries. The sharing link contents will be available in the top panel.

## 3.8.2 Accessing Consumed Sharing Links


To access sharing links consumed by the current user:

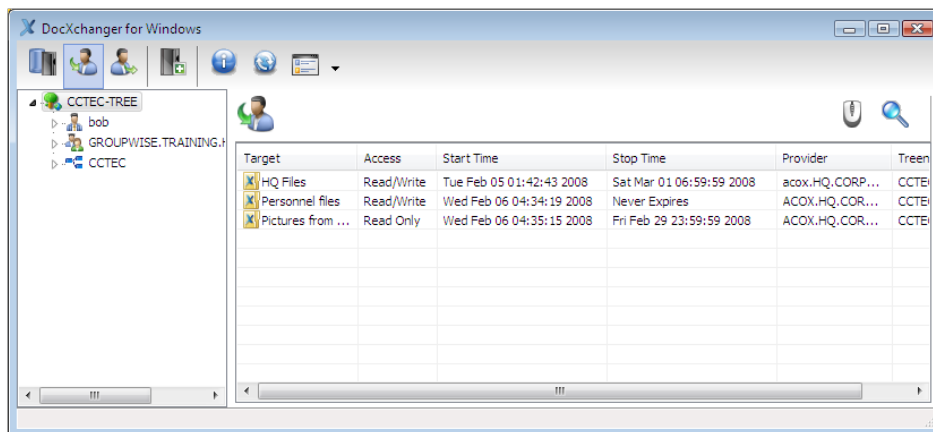
1. Start DocXchanger Client and log in.
2. In the left panel navigate to the current user.



3. Click one of the incoming sharing links (identified by the folders with the DocXchanger logo  ) listed under the user to view the sharing link content in the top panel.

Alternately, consumed sharing links may also be accessed via the *Incoming Sharing Links* view:

1. Start DocXchanger Client and log in.
2. Click the *Incoming Sharing Links*  button in the tool bar at top.



3. Double-click one of the sharing link entries. The sharing link contents will be available in the top panel.



### 3.8.3 Performing File and Folder Operations with Sharing Links

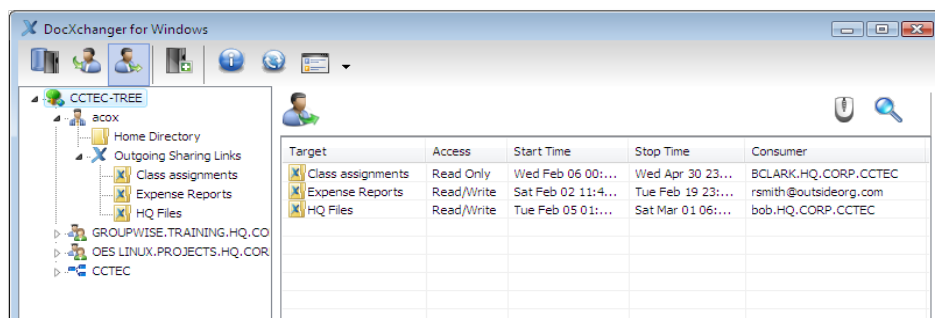
Once an incoming or outgoing sharing link has been accessed, files and folders may be uploaded, download, deleted, renamed, and created. For details on performing these actions using the DocXchanger Client interface, see Section 3.6 *Accessing Managed Resources*.

## 3.9 Managing Sharing Links

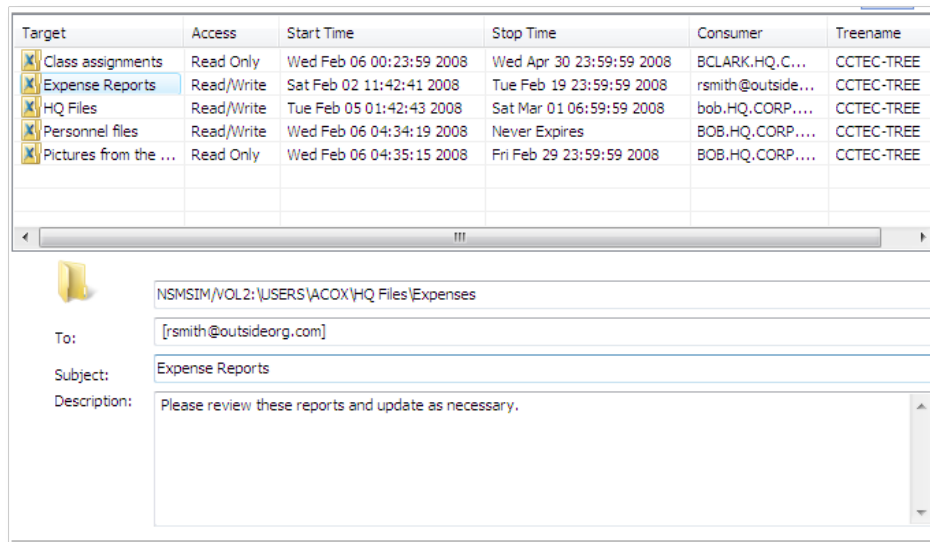
### 3.9.1 Viewing Sharing Links Details


To view the details of a sharing link:

1. Start DocXchanger Client and log in.
2. Click the *Incoming Sharing Links*  button or the *Outgoing Sharing Links*  button in the tool bar at top.



3. Click the *Show Details*  button at the top of the sharing links list.





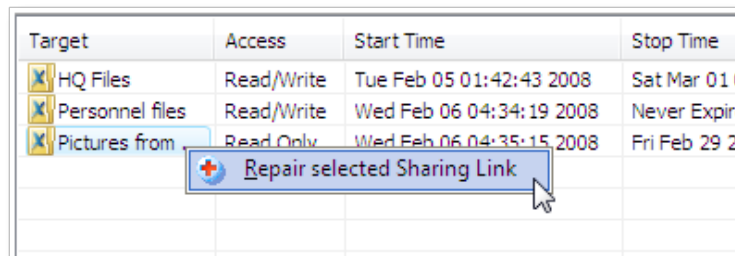
- Single-click a sharing link *Target* to display the details for that link. Optionally, click the *Update Details on Mouse Over* button  to see sharing link details by simply moving the mouse over a sharing link without clicking.


### 3.9.2 Repairing a Sharing Link

Sharing links may need to be repaired if the rights to a given file or folder for that sharing link have changed. Both internal consumers and providers may repair sharing links.

To repair a sharing link:

- Start DocXchanger Client and log in.
- Click the *Incoming Sharing Links*  button or the *Outgoing Sharing Links*  button in the tool bar at top.



- Right-click the desired sharing link and select *Repair selected Sharing Link* .



When sharing just a single file and not a folder, repairing the sharing link may be needed after modifying the file. This is always true for any application which modifies a file by renaming or deleting the original copy, then creating a new file for the modified contents. When this occurs, effectively a new file has been created, and any rights issued for this file via DocXchanger are no longer valid. Note that this issue is especially true for many office applications including word processors and spreadsheet applications.

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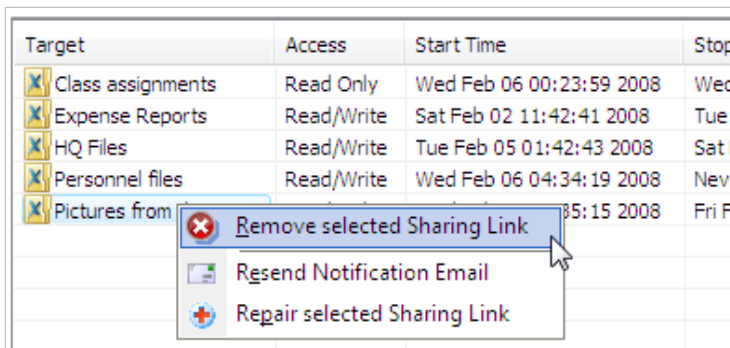
For best results when sharing a single file, create a new folder, move or copy the file into that folder, then share the folder rather than the file itself. Doing this will prevent the potential issue related to needing to repair the sharing link every time the file is modified.


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### 3.9.3 Deleting a Sharing Link

Only providers may delete sharing links. To delete a sharing link you have provided:

1. Start DocXchanger Client and log in.
2. Click the *Outgoing Sharing Links*  button in the tool bar at top.



3. Right-click the desired sharing link and select *Remove selected Sharing Link* .

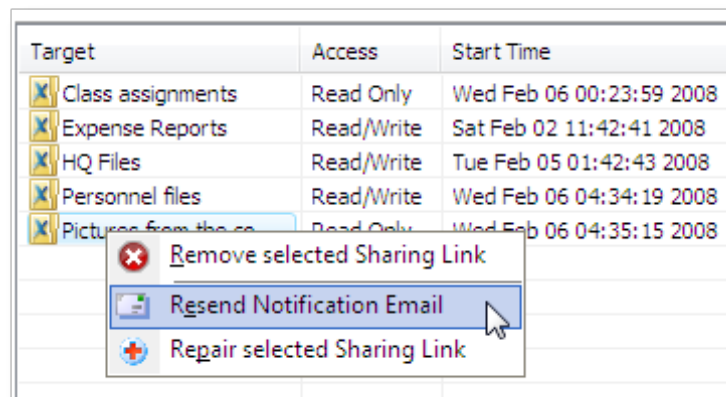
### 3.9.4 Resending a Sharing Link Notification


A provider may wish to resend the sharing link notification email for the following reasons:

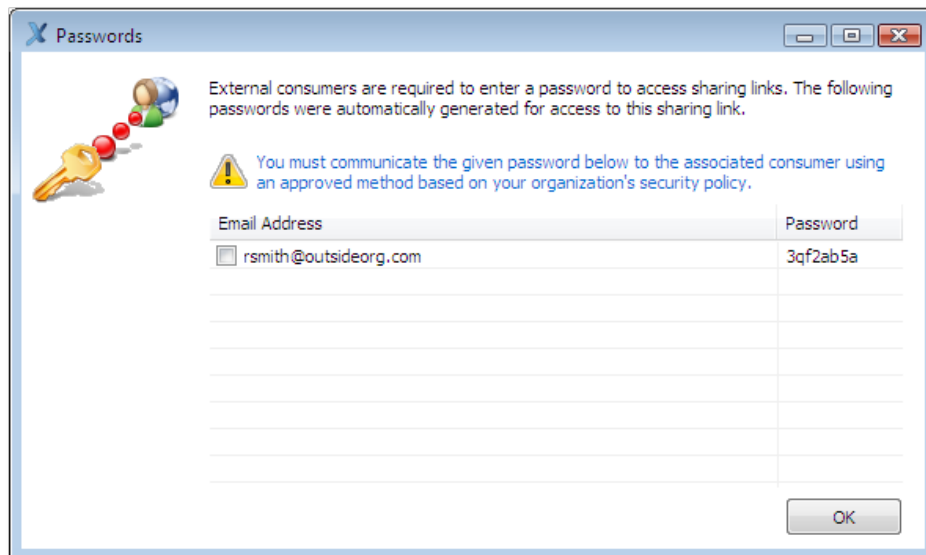
- ▶ The consumer no longer has the sharing link access information.
- ▶ The provider needs to reset the password for an external sharing link. This only applies to DocXchanger configurations requiring passwords for external sharing links.

To resend the notification email for a provided sharing link:

1. Start DocXchanger Client and log in.
2. Click the *Outgoing Sharing Links*  button in the tool bar at top.



3. Right-click the desired sharing link and select *Resend Notification Email* .



4. For DocXchanger systems requiring passwords for external sharing links, resending the notification for an external sharing link will reset the password for that sharing link. Follow the instructions for communicating the password to the consumer, then click *Next*.



When using passwords for external sharing links, please adhere to the local organization's policy for distributing information such as passwords. Please do not send the password via email if doing so violates company policy. If you have any question concerning an appropriate means of password distribution, please contact your local network security officer or network administrator.


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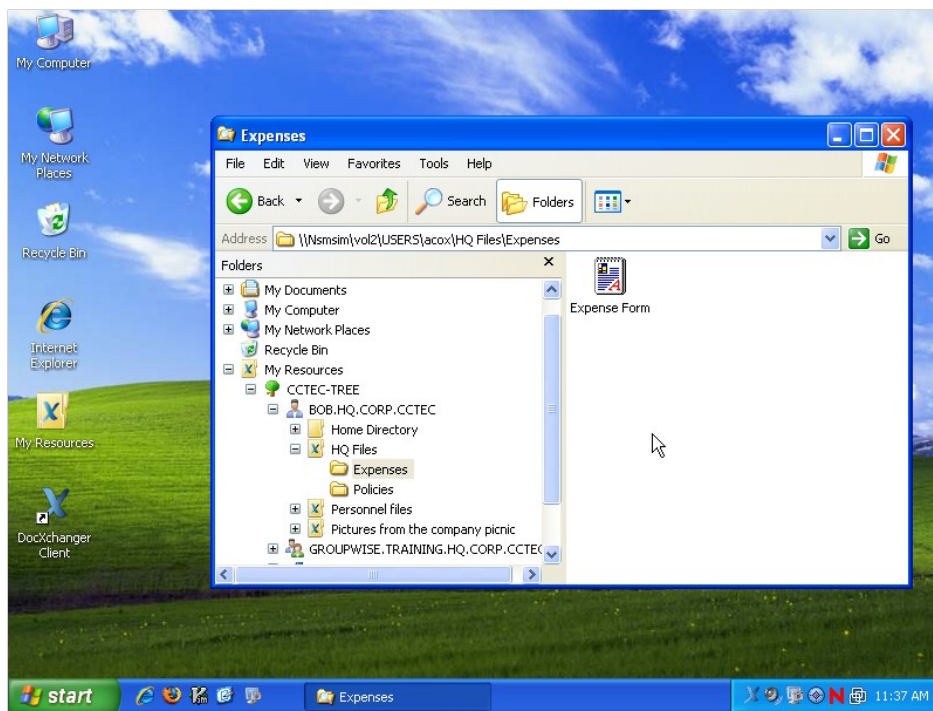
# 4 Working with Desktop Integration

## 4.1 Understanding Desktop Integration

DocXchanger Desktop Integration is an extension to Windows Explorer which allows internal users to access DocXchanger managed resources and sharing links with Windows Explorer. This extension has the following benefits:

- ▶ Sharing links and resources may be accessed directly through Windows Explorer, and not just the DocXchanger Client interface.
- ▶ Sharing links and resources are available through the open/save file browse dialogs available with many Windows applications.
- ▶ Dependencies on drive mappings are reduced.

DocXchanger Desktop Integration can be recognized by the *My Resources*  folder.



The *My Resources* folder provided by Desktop Integration is available from the following locations:

- ▶ Windows Desktop.
- ▶ In the *My Computer* folder. This includes anywhere that *My Computer* is displayed, including many open/save file browse dialogs.
- ▶ In the *Folders* sidebar navigation of Windows Explorer.
- ▶ In the “Send To” context menu.

## 4.2 Running Desktop Integration

### 4.2.1 System Requirements

Use of Desktop Integration has the following requirements:

- ▶ Windows XP SP2. (Windows Vista will be supported in a future release.)
- ▶ Novell Client installed and user logged in to eDirectory.
- ▶ DocXchanger Client installed and running in Local Mode.

### 4.2.2 Starting and Stopping Desktop Integration


By default, when the DocXchanger Client starts, it registers the Desktop Integration extensions with Windows Explorer. When registered, Windows Explorer displays the *My Resources* folder on the Windows Desktop as well as the other locations listed in Section 4.1 *Understanding Desktop Integration*.

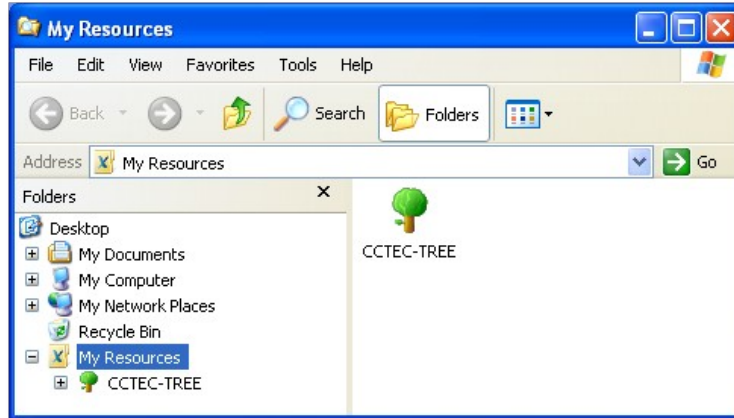
When the DocXchanger Client is shut down (by right-clicking on the DocXchanger logo in the system tray and selecting *Exit*), it unregisters the Desktop Integration extension with Windows Explorer, and the *My Resources* folder is removed from the Windows Desktop and other locations listed in Section 4.1 *Understanding Desktop Integration*.

Desktop Integration may be enabled or disabled by checking or unchecking the Desktop Integration option in DocXchanger Client. See Section 3.3.4 *Modifying Client Options* for details on how to change this setting.

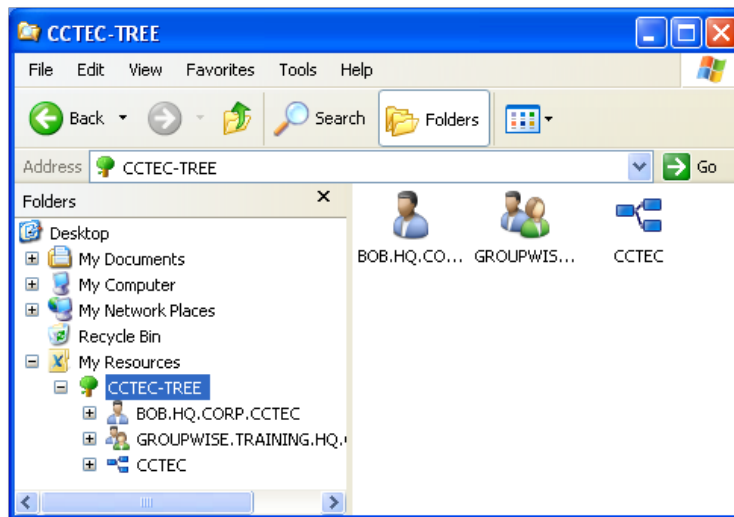
## 4.3 Using Desktop Integration

To access sharing links and managed resources using DocXchanger Desktop Integration:

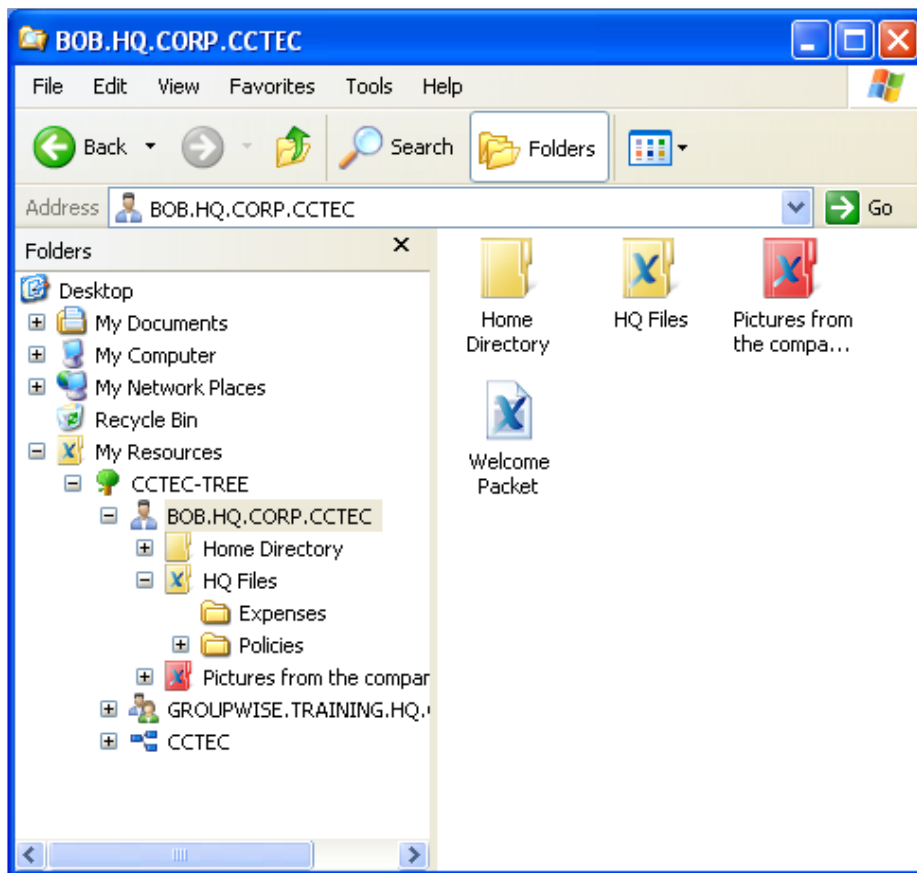
1. Open the *My Resources*  folder located on the Windows Desktop or under *My Computer*.



2. Double-click the tree icon to open the tree folder. For each configured tree in DocXchanger Client that is connected in Local Mode, a tree icon will be displayed here.









3. Open the user, group, or container folder to see the associated resources for that object. See *Table 4.1 - Desktop Integration Icons* for details on each resource and object type.



4. Open the desired managed resource for the selected user, group or container. For user objects, incoming sharing links are also available. Open the desired sharing link folder, or double-click a sharing link file to open it with an associated application.

See *Table 4.1 - Desktop Integration Icons* for details on each resource and object type.

Table 4.1 - Desktop Integration Icons







Icon	Description
	User folder. This is a folder for managed resources and incoming sharing links directly associated with the current user.
	Group folder. The current user is a member of this group which has managed resources associated with it.
	Container folder. The current user is in the hierarchy of this container which has managed resources associated with it.
	Managed resource folder. This folder is for a managed resource such as a user or group home directory or a DocXchanger managed resource.
	Sharing link folder. This folder is an incoming sharing link.
	Sharing link file. This file is an incoming sharing link.

## 4.4 Managing Sharing Links with Desktop Integration

### 4.4.1 Identifying Sharing Link Status

Desktop Integration indicates the status of each sharing link by displaying an appropriate icon for each sharing link. The status indicators for sharing links are shown below.

Table 4.2 - Sharing Link Status Icons

Icon	Description
	Healthy sharing link folder – contents should be fully accessible.
	Broken sharing link folder – the sharing link may not have appropriate rights or it may have expired.
	Unavailable sharing link folder – the sharing link may have a future start date.
	Healthy sharing link file – contents should be fully accessible.
	Broken sharing link file – the sharing link may not have appropriate rights or it may have expired.
	Unavailable sharing link file – the sharing link may have a future start date.

### 4.4.2 Repairing a Sharing Link

When view sharing links through Windows Explorer, Desktop Integration attempts to validate each displayed sharing link. If a sharing link cannot be validated, its associated icon is updated to reflect the current status. Desktop Integration automatically issues a repair command via the DocXchanger Client for each broken sharing link.



Sharing links with an unhealthy status will be updated once Desktop Integration has determined that the sharing link is functional. At this point, Desktop Integration will update the sharing link icon to display the new status of the sharing link.

Expired sharing links are removed automatically by DocXchanger Client and Desktop Integration at the next sharing link polling interval.

### 4.4.3 Identifying Managed Resource Status

Desktop Integration indicates the status of each managed resource by displaying an appropriate icon for each managed resource folder. The status indicators for managed resources are shown below.

*Table 4.3 - Managed Resource Status Icons*

Icon	Description
	Healthy managed resource folder – contents should be fully accessible.
	Unhealthy managed resource folder – contents are not currently available. Contact your network administrator if this persists.

### 4.4.4 Repairing Managed Resources

Broken managed resources must be fixed by a network administrator. DocXchanger only provides links to the resources, and does not manage the rights associated with these resources.