

Novell iFolder

1.0

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ADMINISTRATION GUIDE



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Novell, Inc.
1800 South Novell Place
Provo, UT 84606
U.S.A.

www.novell.com

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Novell iFolder Administration Guide

Novell® iFolder™ 1.0 is a file storage and management solution to the universal problems associated with storing and retrieving data. With iFolder you have the latest version of your data when you need it and where you need it from any computer that you regularly use. And if you are not at a computer that you regularly use, you can still access and manage your files if you have an Internet connection and a Java-enabled browser.

Documentation Conventions

In this documentation, a greater-than symbol (>) is used to separate actions within a step and items in a cross-reference path.

Also, a trademark symbol (®, ™, etc.) denotes a Novell trademark. An asterisk (*) denotes a third-party trademark.

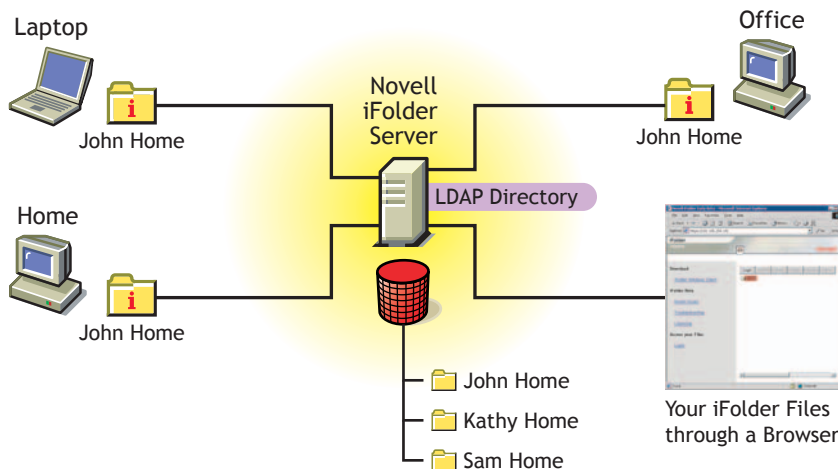
1

Welcome to Novell iFolder

Novell® iFolder™ gives you automatic, secure, and transparent synchronization of files between your hard drive and the iFolder server, which results in easy access to personal files anywhere, anytime.

Being able to access your files from any computer from any location eliminates the editing mistakes and menial updating tasks that frequently occur when your local machine is not accessible from different access points.

The following figure illustrates how the iFolder server is accessed from different computers or locations.



What Is Novell iFolder?

There are three components to Novell iFolder:

- ◆ iFolder client software

Novell iFolder is compatible with Windows* 95, 98, 2000, NT, and ME workstations.

The iFolder client must be installed on every workstation that you will use to access your iFolder files. Once the iFolder client is installed, it places a shortcut on your desktop to your iFolder directory, located in `My_Documents\iFolder\userid\Home`, and it also installs the iFolder icon in the system tray.

The iFolder icon looks like this:



The iFolder directory, located on your computer's hard drive, is where you will keep your files. Once a file is placed in the iFolder directory and synchronized out to the iFolder server, you can see it from all workstations that you are logged in to that have the iFolder client installed. Applications associated with the files in the iFolder directory must be installed at the local workstation. For example, if you have a Microsoft* Word document in your iFolder directory, you need to have the application installed on your workstation in order to access that file. Any changes that are made in this directory, from any workstation, are uploaded to the iFolder server. The frequency of the uploading can be determined by either the user or the network administrator.

When you right-click the iFolder icon located in the system tray, you get a menu giving you access to your iFolder preferences and an activity status screen displaying what transactions are taking place between the client workstation and the iFolder server. The activity screen can also be accessed by double-clicking the iFolder icon. If the iFolder client is in the process of downloading files from the iFolder server to your computer, the icon will look like a folder with a blinking down-arrow.

When you log in, iFolder asks you for a username and a password. Next, iFolder prompts you for a pass phrase. This pass phrase is used to encrypt files that are uploaded or downloaded to the server.

- ◆ iFolder server software

iFolder runs on NetWare[®] 5.1, NetWare 6, Windows NT* 4.0, and Windows 2000 servers.

Once you have installed the iFolder server software on your server, you can access the Server Management Console and the default iFolder Web site.

From the Server Management Console, you can perform administrative tasks for all your iFolder user accounts. From the iFolder Web site, your iFolder users will download the iFolder client software. It is also where you can access the Java* applet and view your iFolder files from a browser. The iFolder Web site is meant to be customized to fit your company's look, feel, and business needs.

- ◆ iFolder Java applet

The iFolder Java applet runs in Internet Explorer or Netscape*. From the browser, you can access your iFolder files from a computer that does not have the iFolder client installed.

These three pieces work together seamlessly to provide you with instant access to any iFolder files stored on your hard drive from anywhere in the world.

If you are installing Novell iFolder on NetWare 5.1, follow the instructions in [Chapter 2, “Installing Novell iFolder on NetWare 5.1,”](#) on page 13.

If you are installing Novell iFolder on NetWare 6, follow the instructions in [Chapter 3, “Installing Novell iFolder on NetWare 6,”](#) on page 19.

If you are installing Novell iFolder on Windows NT 4.0 or Windows 2000, follow the instructions in [Chapter 4, “Installing Novell iFolder on Windows NT 4.0 or Windows 2000,”](#) on page 25.

If you are installing Novell iFolder on Novell Cluster Services, follow the instructions in [Chapter 5, “Installing Novell iFolder on Novell Cluster Services,”](#) on page 33.

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Installing Novell iFolder on NetWare 5.1

Before you begin the iFolder™ installation, make sure that you have met the following iFolder server, client, and browser requirements.

Server Requirements

- NetWare® 5.1 server with Support Pack 3 installed.

NetWare Support Packs are available at the [Consolidated Support Pack Home Page \(http://support.novell.com/csp/csplist.html\)](http://support.novell.com/csp/csplist.html).

- An LDAP v3 enabled directory, such as NDS® eDirectory™ 8.5. (Other LDAP v3 compliant directories will also work.)

If you are using the same server for LDAP and iFolder, you must install NDS eDirectory 8.5 or later on your server.

- 10 MB of free space on the SYS: volume where you plan to install iFolder.
- 256 MB of RAM.
- If your LDAP server is not the same server as your iFolder server, and you want LDAP over SSL, copy the trusted root certificate (usually called ROOTCERT.DER) from your LDAP server to the SYS:Public directory of your iFolder server. (Remember where you copied this because you will be prompted for its location during the iFolder installation.)
- If you have a DNS name configured for your iFolder server, verify that the DNS name and its corresponding IP address are in the SYS:ETC\HOSTS file of your iFolder server.

Client Workstation Requirements

Novell® iFolder is compatible with Windows 95, 98, 2000, NT, and ME workstations. The iFolder client is very small and will take only about 2 MB of free space on your workstation.

IMPORTANT: If you are installing the iFolder client on a Windows 95 workstation, you must have the Winsock 2 update from Microsoft installed. This update can be downloaded from the [Microsoft Web site \(http://www.microsoft.com/Windows95/downloads/contents/WUAdminTools/S_WUNetworkingTools/W95Sockets2/Default.asp\)](http://www.microsoft.com/Windows95/downloads/contents/WUAdminTools/S_WUNetworkingTools/W95Sockets2/Default.asp).

Browser Requirements

You can use either Netscape 4.7 or later or Internet Explorer 5 or 5.5 to download the iFolder client. Netscape 6 is not supported with this release.

IMPORTANT: Although you can use either Netscape or Internet Explorer (IE) to download the iFolder client, IE 5 or 5.5 must be installed on every workstation where you plan to install the iFolder client.

Installing Novell iFolder on NetWare 5.1

Novell iFolder uses the Apache Web server version 1.3.20. Apache uses port 80, which happens to be the same port that NetWare Enterprise Web server (the default NetWare Web server) uses. In order to run the Apache Web server, you must unload the NetWare Enterprise Web server before you can install iFolder. If you want to run both the Apache Web server and the NetWare Enterprise Web server, you must set the secondary IP address prior to the iFolder installation and assign either the Apache or Enterprise Web server to that secondary IP address.

- 1** On your workstation, map a Novell drive to the SYS: volume on the server where you plan to install iFolder and Apache.

IMPORTANT: Apache *must* be installed on the SYS: volume.

- 2** Locate the iFolder software that you downloaded and double-click the iFolder Apache server executable (ApacheiFolderServer.EXE) for NetWare.
- 3** Read the Welcome screen and click Next.
- 4** Click Yes to accept the licensing agreement.

- 5** Enter your username and the name of your company, and then click Next.
- 6** Browse to the drive letter that you mapped in **Step 1** and then click Next.

HINT: In order to install Novell iFolder on multiple servers from the same workstation, you must delete the directory that represents your last installation. To do this, go to C:\Program Files\Installshield Installation Information. If there are multiple directories, look at their creation timestamps and delete the one that was created at the time that you performed your last installation. After you delete this directory, you should be able to install Novell iFolder on another server from the same workstation.

- 7** (Conditional) If Apache is already installed on your server, choose one of the following options and then click Next:

- ◆ Overwrite the existing Apache installation on your server and install Apache *and* iFolder.
- ◆ Leave the existing Apache installation on your server and install only iFolder.
- ◆ Exit the install.

- 8** (Conditional) If you chose to overwrite an existing Apache installation, or if Apache was not previously installed on your server, enter the DNS name of the server, the IP address of the server, your e-mail address, and then click Next.

- 9** Enter the IP address of your LDAP server in the LDAP Host field.

- 10** Enter the LDAP port you want to use.

If you are using port 389, the LDAP Group object must be marked to Allow Clear Text Passwords. To verify this, launch ConsoleOne™ and locate the context where your server resides, right-click the LDAP Group object, click Properties, and check Allow Clear Text Passwords.

HINT: Choose port 389 if you want to use LDAP without SSL encryption or if your LDAP server does not support SSL. Port 389 is also a good choice if iFolder and LDAP are running on the same server (no communication or data is being transferred across the wire, so no encryption is necessary).

Choose port 636 if you want to use SSL, which provides your network with encryption and security when data is transferred across the wire. If you choose port 636, make sure you have copied the ROOTCERT.DER file from your LDAP server's SYS:PUBLIC directory to your iFolder server prior to the iFolder installation.

- 11** (Conditional) If you have chosen port 636, enter the path to the LDAP trusted root certificate.

This will be the path to the SYS:Public directory where you copied the ROOTCERT.DER prior to the installation. For more information, see [“Server Requirements” on page 13](#).

12 Enter the LDAP login DN context.

This is the context of the container where your User objects are located. iFolder allows you to enter multiple contexts. After each context, insert a semicolon. Do not put any spaces between the contexts.

13 (Optional) If you want iFolder to search all subcontainers below the specified LDAP login DN context, make sure you check the Subcontainer Search check box.

14 (Conditional) If you checked the Subcontainer Search check box, you must do *one* of the following:

- ◆ Assign the CN property to the Public object.

To assign the CN property to the Public object, continue with the next step.

- ◆ Create an LDAP proxy user.

To create an LDAP proxy user, follow the instructions in [Step 16 on page 17](#).

15 (Conditional) Assign the CN property to the Public object.

IMPORTANT: Any rights assigned to the Public object are automatically inherited by all other objects in the NDS tree. You might not want to assign the CN property to the Public object if these rights will cause a security risk. If your iFolder server is outside the firewall and you do not want the CN property assigned to all objects in your NDS tree, you can also use an LDAP Proxy Username to search the subcontainers of your tree.

15a Launch ConsoleOne.

15b Right-click your NDS Tree object and then click Properties.

15c Click NDS Rights > Public object > Assigned Rights > Add Property.

15d Check the Show All Properties check box, select the CN property from the list, and then click OK.

15e Check the Inheritable check box and then click Apply > OK.

Continue with [Step 17](#).

- 16** (Conditional) Create an LDAP proxy user.
- 16a** Launch ConsoleOne.
 - 16b** Create a user without a password.
 - 16c** Right-click your NDS tree object and then click Properties > NDS Rights > Add Trustee.
 - 16d** Browse to your NetWare server, select the User object you just created and then click Apply > OK.
HINT: When you add this user as a trustee of the tree, just accept the default Compare and Read rights.
 - 16e** Right-click the LDAP Group object in your NDS tree and then click Properties > General.
 - 16f** Click the Browse button next to the Proxy Username field and browse to the user that you just gave trustee rights to.
 - 16g** Double-click the user so that the name appears in the Proxy Username field.
 - 16h** Click Apply > OK.
- 17** Click Next in the iFolder setup.
- 18** (Conditional) If you are using a secondary LDAP server, enter the LDAP information for that server.
- Fill in this information only if you have two LDAP directories that contain usernames that need iFolder accounts. For example, suppose you have one LDAP directory that contains all your employee usernames and another LDAP directory that contains all your vendor usernames and you want the users from both directories to have iFolder accounts. You would enter the information for a secondary LDAP server.
- 19** Enter the path to the directory where you want the iFolder user data to be stored on the server.
- 20** Enter the names of all the administrators who need rights to modify iFolder user account information via the Server Management Console and then click Next.
- HINT:** The Admin names must have user accounts in your LDAP directory.
- If you are entering more than one name, separate the usernames with a semicolon, not spaces. For example, if you wanted users jsmith and admin to have rights to administer the Server Management Console, you would enter **admin;jsmith**.

21 If prompted, enter the IP address or the DNS name of your server and then click Next.

22 Click Finish to complete the installation.

23 Do one of the following:

- ◆ If you are using only one IP address, to start Novell iFolder you can reboot your server (this will run the edited AUTOEXEC.NCF) or enter the following commands at the server console:

```
search add sys:\Apache
```

```
search add sys:\Apache\iFolder\Server
```

```
STARTIFOLDER
```

- ◆ If you are using two IP addresses, edit the AUTOEXEC.NCF file and enter the following lines after the *search add sys:\Apache\iFolder\Server* command line:

```
set command line prompt default choice=on
```

```
set command line prompt time out=60
```

Also enter ? in front of the STARTIFOLDER command line.

Once you have edited the AUTOEXEC.NCF, to start Novell iFolder you can reboot your server (this will run the edited AUTOEXEC.NCF) or enter the following commands at the server console:

```
search add sys:\Apache
```

```
search add sys:\Apache\iFolder\Server
```

```
STARTIFOLDER
```

Novell iFolder is now installed on your NetWare 5.1 server. To learn more about Novell iFolder, go to [Chapter 6, “Using Novell iFolder,” on page 37](#).

3

Installing Novell iFolder on NetWare 6

Before you begin the iFolder™ installation, make sure that you have met the following iFolder server, client, and browser requirements.

Server Requirements

- ❑ 10 MB of free space on the SYS: volume where you plan to install iFolder.

Client Workstation Requirements

Novell® iFolder is compatible with Windows 95, 98, 2000, NT, and ME workstations. The iFolder client is very small and will take only about 2 MB of free space on your workstation.

IMPORTANT: If you are installing the iFolder client on a Windows 95 workstation, you must have the Winsock 2 update from Microsoft installed. This update can be downloaded from the [Microsoft Web site \(http://www.microsoft.com/Windows95/downloads/contents/WUAdminTools/S_WUNetworkingTools/W95Sockets2/Default.asp\)](http://www.microsoft.com/Windows95/downloads/contents/WUAdminTools/S_WUNetworkingTools/W95Sockets2/Default.asp).

Browser Requirements

You can use either Netscape 4.7 or later or Internet Explorer 5 or 5.5 to download the iFolder client. Netscape 6 is not supported with this release.

IMPORTANT: Although you can use either Netscape or Internet Explorer (IE) to download the iFolder client, IE 5 or 5.5 must be installed on every workstation where you plan to install the iFolder client.

Installing Novell iFolder on NetWare 6

- 1 Do a *Custom* install of NetWare 6.

For instructions on installing NetWare 6, see the [NetWare 6 Overview and Installation Guide](#).

- 2 During the NetWare 6 installation, select iFolder as one of the products that you want to install.
- 3 (Conditional) If prompted, resolve port conflicts or assign secondary IP addresses.

If you are installing iFolder with no other Web products, you will not see this screen.

- 4 When prompted, enter the following information:

- ◆ User data

Enter the path to the directory where you want the iFolder user data to be stored on the iFolder server.

- ◆ Admin names

Enter the names of all the administrators who need rights to modify iFolder user account information via the Server Management Console.

HINT: The Admin names must have user accounts in your LDAP directory.

If you are entering more than one name, separate the usernames with a semicolon, not spaces. For example, if you wanted users `jsmith` and `admin` to have rights to administer the Server Management Console, you would enter `admin;jsmith`.

- ◆ Network domain

Enter the IP address or the DNS name of your server.

- ◆ Admin's e-mail addresses

- 5 At this point, if you do not want to configure any LDAP settings, you can finish the NetWare 6 installation. No post-installation tasks are required.

To learn more about iFolder once it is installed, see [Chapter 6, "Using Novell iFolder," on page 37](#).

If you would like to configure your LDAP settings, continue with [Step 6](#).

- 6** (Optional) Continue with the NetWare 6 installation until you get to the Summary screen at the end of the NetWare 6 installation.

The Summary screen lists all the products that you have selected to install with NetWare 6.

- 7** At the Summary screen, click NetWare 6 > iFolder > Configure > Primary LDAP Settings.

- 8** Enter the following LDAP information for your primary LDAP server:

- ◆ LDAP Host

Enter the IP address of your LDAP server in the LDAP Host field.

IMPORTANT: If you change your IP address here and your LDAP server is configured with SSL encryption, there will be some post-installation configuration required after the NetWare 6 installation. For more information, see [“LDAP over SSL” on page 24](#).

- ◆ LDAP Port

Enter the LDAP port you want to use.

If you are using port 389, the LDAP Group object must be marked to Allow Clear Text Passwords. For more information, see [“Port 389 and Clear Text Passwords” on page 24](#).

HINT: Choose port 389 if you want to use LDAP without SSL encryption or if your LDAP server does not support SSL. Port 389 is also a good choice if iFolder and LDAP are running on the same server (no communication or data is being transferred across the wire, so no encryption is necessary).

Choose port 636 if you want to use SSL, which provides your network with encryption and security when data is transferred across the wire. If you choose port 636, there will be some post-configuration required after the NetWare 6 installation. For more information, see [“LDAP over SSL” on page 24](#).

- ◆ LDAP Login DN Context

This is the context of the container where your User objects are located. iFolder allows you to enter multiple contexts. After each context, insert a semicolon. Do not put any spaces between the contexts.

- ◆ Subcontainer Search

If you want iFolder to search all subcontainers below the specified LDAP login DN context, check this option.

IMPORTANT: If you selected to do subcontainer searches, there will be some post-installation configuration required after the NetWare 6 installation. For more information, see [“Subcontainer Searches” on page 22](#).

9 (Conditional) If you have a secondary LDAP server, click Secondary LDAP Settings.

10 Enter the settings for the secondary LDAP server.

Fill in this information only if you have two LDAP directories that contain usernames that need iFolder accounts. For example, suppose you have one LDAP directory that contains all your employee usernames and another LDAP directory that contains all your vendor usernames and you want the users from both directories to have iFolder accounts. You would enter the information for a secondary LDAP server.

HINT: You will fill in the same information for the secondary LDAP server as you did for your primary LDAP server. To review the primary LDAP server instructions, see [Step 8 on page 21](#).

11 Finish the NetWare 6 installation and then reboot your server.

12 (Conditional) If you have a DNS name configured for your iFolder server, verify that the DNS name and its corresponding IP address are in the SYS:ETC\HOSTS file of your iFolder server.

If you chose to do subcontainer searches, port 389, or if you want LDAP over SSL, continue with the next section, [Post-Installation Tasks](#).

IMPORTANT: These post-installation tasks are *not* optional. If you disregard them, iFolder will not function properly.

If your iFolder selections do not require post-installation tasks, see [Chapter 6, “Using Novell iFolder,” on page 37](#) to learn more about Novell iFolder.

Post-Installation Tasks

Complete the appropriate post-installation tasks.

Subcontainer Searches

To allow iFolder to do a subcontainer search, you must do *one* of the following:

- ◆ Assign the CN property to the Public object
- ◆ Create an LDAP proxy user

Assign the CN Property to the Public Object

IMPORTANT: Any rights assigned to the Public object are automatically inherited by all other objects in the Novell® eDirectory™ tree. You might not want to assign the CN property to the Public object if these rights will cause a security risk. If your iFolder server is outside the firewall and you do not want the CN property assigned to all objects in your eDirectory tree, you can also use an LDAP Proxy Username to search the subcontainers of your tree.

- 1 Launch ConsoleOne™.
- 2 Right-click your Tree object and then click Properties.
- 3 Click NDS Rights > Public object > Assigned Rights > Add Property.
- 4 Check the Show All Properties check box, select the CN property from the list, and then click OK.
- 5 Check the Inheritable check box and then click Apply > OK.

Novell iFolder is now installed and running on your NetWare 6 server. To learn more about Novell iFolder, go to [Chapter 6, “Using Novell iFolder,” on page 37](#).

Create an LDAP Proxy User

- 1 Launch ConsoleOne.
- 2 Create a user without a password.
- 3 Right-click your Tree object and then click Properties > NDS Rights > Add Trustee.
- 4 Browse to your NetWare server, select the User object you just created and then click Apply > OK.
HINT: When you add this user as a trustee of the Tree object, just accept the default Compare and Read rights.
- 5 Right-click the LDAP Group object and then click Properties > General.
- 6 Click the Browse button next to the Proxy Username field and browse to the user that you just gave trustee rights to.
- 7 Double-click the user so that the name appears in the Proxy Username field.
- 8 Click Apply > OK.

Novell iFolder is now installed and running on your NetWare 6 server. To learn more about Novell iFolder, go to [Chapter 6, “Using Novell iFolder,” on page 37](#).

LDAP over SSL

If your LDAP server is not the same server as your iFolder server, and you want LDAP over SSL, you need to export your LDAP server's trusted root certificate and then copy it to your iFolder server.

This certificate (ROOTCERT.DER) should be located in your LDAP server's SYS:PUBLIC directory. Copy the trusted root certificate to the SYS:Apache\iFolder\Server directory on your iFolder server.

For instructions on exporting a trusted root certificate, see the *Novell Certificate Server Administration Guide* (<http://www.novell.com/documentation/lg/crt221ad/index.html>) > Managing Novell Certificate Server > Exporting a Trusted Root or Public Key Certificate.

Port 389 and Clear Text Passwords

- 1** Launch ConsoleOne and locate the context where your server resides.
- 2** Right-click the LDAP Group object and then click Properties > Allow Clear Text Passwords.

4

Installing Novell iFolder on Windows NT 4.0 or Windows 2000

Before you begin the iFolder™ installation, make sure that you have met the following iFolder server, client, and browser requirements.

Server Requirements

- A Windows NT 4.0 server with Service Pack 6A or later installed or a Windows 2000 server with Service Pack 1 installed.

Microsoft Service Packs are available at the [Microsoft Web site \(http://updates.zdnet.com/products/pr_13616.htm\)](http://updates.zdnet.com/products/pr_13616.htm).

- IIS 4 or later installed.
- An LDAP v3 enabled directory, such as NDS® eDirectory™ 8.5. (Other LDAP v3 compliant directories will also work.)
- 256 MB of RAM.
- If you want to have LDAP over SSL encryption when the iFolder server communicates with the LDAP server:
 - ◆ For NetWare, go to the SYS:PUBLIC directory of your LDAP server and copy the LDAP Root Certificate, ROOTCERT.DER, to your iFolder server.
 - ◆ For other operating systems, export the LDAP server's root certificate and then copy it to your iFolder server.
- Get an SSL certificate and install it onto your iFolder server.

You can do this in either of two ways: 1) If you have your own certificate server, such as Novell Certificate Server, then you can get a certificate from your server, or 2) You can go to a certificate vendor, such as Entrust* or VeriSign*, and purchase a certificate from them.

For more information on installing and creating SSL certificates for IIS 4, go to the [Microsoft Product Support Services Web site \(http://support.microsoft.com/support/kb/articles/Q228/9/91.ASP\)](http://support.microsoft.com/support/kb/articles/Q228/9/91.ASP).

For information on SSL certificates for IIS 5, go to the [Microsoft Product Support Services Web site \(http://support.microsoft.com/support/kb/articles/Q228/8/36.ASP\)](http://support.microsoft.com/support/kb/articles/Q228/8/36.ASP).

Client Workstation Requirements

Novell® iFolder is compatible with Windows 95, 98, 2000, NT, and ME workstations. The iFolder client is very small and will take only about 2 MB of free space on your workstation.

IMPORTANT: If you are installing on a Windows 95 workstation, you must have the Winsock 2 update from Microsoft installed. This update can be downloaded from the [Microsoft Web site \(http://www.microsoft.com/Windows95/downloads/contents/WUAdminTools/S_WUNetworkingTools/W95Sockets2/Default.asp\)](http://www.microsoft.com/Windows95/downloads/contents/WUAdminTools/S_WUNetworkingTools/W95Sockets2/Default.asp).

Browser Requirements

You can use either Netscape 4.7 or later or Internet Explorer 5 or 5.5 to download the iFolder client. Netscape 6 is not supported with this release.

IMPORTANT: Although you can use either Netscape or Internet Explorer (IE) to download the iFolder client, IE 5 or 5.5 must be installed on every workstation where you plan to install the iFolder client.

Installing Novell iFolder on Windows NT 4.0 or Windows 2000

- 1 Stop the Internet Information Server (IIS).
 - ♦ For Windows NT 4, go to Control Panel > Services > IIS Admin Services > Stop.
 - ♦ For Windows 2000, go to Control Panel > Administrative Tools > Services > IIS Admin Service > Stop.

- 2** Locate the iFolder software that you downloaded and double-click the iFolder IIS server executable (IISiFolderServer.EXE).
- 3** Read the Welcome screen and click Next.
- 4** Click Yes to accept the licensing agreement.
- 5** Enter your username and the name of your company, and then click Next.
- 6** Browse to the location where you want iFolder to install the setup files and then click Next.
- 7** Enter the IP address of your LDAP server in the LDAP host field.
- 8** Enter the LDAP port you want to use.

If you are using port 389, the LDAP Group object must be marked to Allow Clear Text Passwords. To verify this, launch ConsoleOne™ and locate the context where your server resides, right-click the LDAP Group object, click Properties, and check Allow Clear Text Passwords.

HINT: Choose port 389 if you want to use LDAP without SSL encryption. Port 389 is also a good choice if LDAP and iFolder are running on the same server or if your LDAP server does not support Secure Socket Layer (SSL).

Choose port 636 if you want to use SSL, which provides your network with encryption and security when data is transferred across the wire. If you choose port 636, you must create and install an SSL certificate for your iFolder server prior to the iFolder installation. For more information, see [“Server Requirements” on page 25](#).

- 9** If you have chosen port 636, enter the path to the LDAP Root Certificate.
This is the path to the place where you copied the SSL certificate prior to the installation. For more information, see [“Server Requirements” on page 25](#).
- 10** Enter the LDAP login DN context.
- 11** Enter the context of the container where your User objects are located.
iFolder lets you enter multiple contexts. After each name, insert a semicolon. Do not put any spaces between the names.
- 12** (Optional) If you want iFolder to search all subcontainers below the LDAP login DN context, make sure you check the Subcontainer Search check box.
- 13** (Conditional) If you are doing a subcontainer search, you must assign the CN property to the Public object or create an LDAP proxy user.

- ♦ If you are assigning the CN property to the Public object, continue with the next step.

Any rights assigned to the Public object are automatically inherited by all other objects in the NDS tree. You might not want to assign the CN property to the Public object if these rights will cause a security risk. If your iFolder server is outside the firewall and you do not want the CN property assigned to all objects in your NDS tree, you can also use an LDAP Proxy Username to search the subcontainers of your tree.

- ♦ If you are creating an LDAP proxy user, continue with step [Step 15](#).

14 (Conditional) To assign the CN property to the Public object, follow these instructions:

14a Launch ConsoleOne.

14b Right-click your NDS Tree object and then click Properties.

14c Click NDS Rights > Public object > Assigned Rights > Add Property.

14d Check the Show All Properties check box, select the CN property from the list, and then click OK.

14e Check the Inheritable check box.

14f Click Apply > OK.

Continue with [Step 16](#).

15 (Conditional) To create an LDAP proxy user, follow these instructions:

15a Launch ConsoleOne.

15b Create a user without a password.

15c Right-click your NDS tree object and click Properties > NDS Rights > Add Trustee.

15d Browse to your NetWare server, select the LDAP Group object, and click Apply > OK.

HINT: When you add this user as a trustee of the tree, just accept the default Compare and Read rights.

15e Right-click the LDAP Group object and then click Properties > General.

15f Click the Browse button next to the Proxy Username field and browse to the user that you just gave trustee rights to.

15g Double-click the user so that the name appears in the Proxy Username field.

15h Click Apply > OK.

16 Click Next in the iFolder setup.

17 (Conditional) If you are using a secondary LDAP server, enter the LDAP information for that server.

Fill in this information only if you have two LDAP directories that contain usernames that need iFolder accounts. For example, suppose you have one LDAP directory that contains all your employee usernames and another LDAP directory that contains all your vendor usernames and you want the users from both directories to have iFolder accounts. You would enter the information for a secondary LDAP server.

18 Enter the path to the directory where you want the iFolder user data to be stored on the server.

19 Enter the names of all the administrators who need rights to modify iFolder user account information via the Server Management Console and then click Next.

If you are entering more than one name, separate the usernames with a semicolon, not spaces. For example, if you wanted John Smith and user Admin to have rights to administer the Server Management Console, you would enter **admin;jsmith**.

20 If prompted, enter the IP address or the DNS name of your server.

21 Click Finish to complete the installation.

22 Restart the IIS server.

After Novell iFolder is installed, you have a few things left to configure through the Internet Services Manager in order for the iFolder Web site and the Java applet to work correctly.

If your iFolder server is running Windows NT 4.0, follow the instructions in [“Configuring the iFolder Web Site on Windows NT 4.0” on page 30](#).

If your iFolder server is running Windows 2000, follow the instructions in [“Configuring the iFolder Web Site on Windows 2000” on page 30](#).

Configuring the iFolder Web Site on Windows NT 4.0

- 1** Launch the Internet Services Manager by clicking Start > Windows NT 4.0 Option Pack > Microsoft Internet Information Server > Internet Service Manager.
- 2** Right-click the Default Web Site icon and then click Properties > Home Directory.
- 3** Set the local path.

For example, if you installed iFolder on your C: drive, then you would enter

```
C:\inetpub\wwwroot\iFolder\DocumentRoot
```

HINT: Enter this path in exactly as you see it, except for the drive letter. What drive letter you enter depends on where you installed iFolder.

- 4** From the Permissions drop-down box, select Script.
- 5** Click Documents.
- 6** Check the Enable Default Documents check box and then click Add.
- 7** Enter `index.html` into the text field and click OK.

Novell iFolder is now installed on your Windows NT 4.0 server. For more information about Novell iFolder, go to [Chapter 6, "Using Novell iFolder,"](#) on page 37.

Configuring the iFolder Web Site on Windows 2000

- 1** Launch the Internet Services Manager by clicking Start > Settings > Control Panel > Administrative Tools > Internet Services Manager.
- 2** Right-click the Default Web Site icon and click Properties > Home Directory.
- 3** Set the local path.

For example, if you installed iFolder on your C: drive, then you would enter

```
C:\inetpub\wwwroot\iFolder\DocumentRoot
```

HINT: Enter this path in exactly as you see it, except for the drive letter. What drive letter you enter depends on where you installed iFolder.

- 4** Check the Script Source Access check box.
- 5** From the Execute Permissions drop-down box, select Scripts Only.

- 6** Click the Documents tab.
- 7** Check the Enable Default Documents check box.
- 8** Click the Add button.
- 9** Enter `index.html` into the text field and click OK.

Novell iFolder is now installed on your Windows 2000 server. For more information about Novell iFolder, go to [Chapter 6, “Using Novell iFolder,” on page 37](#).

5

Installing Novell iFolder on Novell Cluster Services

Before you set up Novell® iFolder™ on Novell Cluster Services™, you should already have a basic understanding of how Novell Cluster Services works. A short overview is provided in the *Novell Cluster Services Overview and Installation Guide* (<http://www.novell.com/documentation/lg/ncs/index.html>).

NOTE: Novell Clustering Services runs only on NetWare.

To configure Novell iFolder on Novell Cluster Services, complete the following steps:

- 1** Meet the iFolder NetWare server, client, and browser requirements.
 - ◆ For NetWare 5.1, follow the instructions beginning with “**Server Requirements**” on page 13.
 - ◆ For NetWare 6, follow the instructions beginning with “**Server Requirements**” on page 19.
- 2** Install iFolder on all NetWare servers in the cluster that you want to run iFolder.
 - ◆ For NetWare 5.1, follow all steps of the procedure in “**Installing Novell iFolder on NetWare 5.1**” on page 14.
 - ◆ For NetWare 6, follow all steps of the procedure in “**Installing Novell iFolder on NetWare 6**” on page 20.

Once iFolder is installed on your clustered servers, continue with the next section, **Post-Installation Tasks**.

Post-Installation Tasks

1 Do one of the following:

- ◆ For NetWare 5.1 servers, create an NSS volume on your shared storage disk system, commonly referred to as a storage area network or SAN.

This is the volume that will contain all your iFolder user data and accounts. The size of this volume will vary according to how many iFolder users you plan to have and the amount of data they will be storing.

For more information, see [NetWare Cluster Services \(http://www.novell.com/documentation/lg/ncs/index.html\)](http://www.novell.com/documentation/lg/ncs/index.html) > Installation and Setup > Setting Up NetWare Cluster Services > Create Cluster Volumes.

- ◆ For NetWare 6 servers, create an NSS volume on a pool. If a pool already exists, make sure there is enough space on the pool for the NSS volume that you plan to make.

For more information on creating pools and NSS volumes, see [Novell Cluster Services \(http://www.novell.com/documentation/lg/ncs6p/index.html\)](http://www.novell.com/documentation/lg/ncs6p/index.html).

2 Do one of the following:

- ◆ For NetWare 5.1 servers, cluster-enable the NSS volume that you just created.

This involves assigning an IP address to the cluster-enabled volume. Remember this IP address; you'll need it later.

For more information, see [NetWare Cluster Services \(http://www.novell.com/documentation/lg/ncs/index.html\)](http://www.novell.com/documentation/lg/ncs/index.html) > Installation and Setup > Setting Up NetWare Cluster Services > Create Cluster-Enabled Volumes.

- ◆ For NetWare 6 servers, cluster-enable the pool you created in **Step 1**. (cluster-enabling the pool automatically cluster-enables the NSS volume that you created on the pool).

For more information, see [Novell Cluster Services \(http://www.novell.com/documentation/lg/ncs6p/index.html\)](http://www.novell.com/documentation/lg/ncs6p/index.html) > Installation and Setup > Setting Up Cluster Services.

3 Create a folder on the cluster-enabled volume.

- 4** Choose one iFolder server in the cluster and go to the SYS:Apache\iFolder\Server directory and edit the HTTPD.CONF file to include the following parameters:
 - ◆ Set the LDAP host to the IP address that you assigned to the cluster-enabled volume.
 - ◆ Set the iFolderServerRoot to the folder that you created on the cluster-enabled volume.

For example, if your cluster-enabled volume was called SHAREDVOL and you had created a folder on that volume called NIFDIR, you would set the iFolderServerRoot to SHAREDVOL:\NIFDIR.
- 5** Copy the edited HTTPD.CONF file to every iFolder server in the cluster.
- 6** Edit the AUTOEXEC.NCF file on every iFolder server in the cluster and comment out the line that commands iFolder to start by default when you reboot your server. (iFolder will be started by NetWare Cluster Services.)
- 7** Launch ConsoleOne™.
- 8** Browse to your cluster container object.
- 9** Right-click the cluster volume resource and then click Properties > IP Address.
- 10** Verify that the IP address that appears is the one that you have assigned to the cluster-enabled volume.
- 11** Click Load Script.
- 12** Add the following commands to the *end* of the existing load script:

```
search add sys:\apache
search add sys:\apache\ifolder\server
load address space = apache apache
```
- 13** Click Apply > Unload Script.

14 Add the following commands to the *beginning* of the existing unload script:

```
unload apachestopifolder
```

```
delay 2
```

```
unload ldapssl
```

```
unload ldapsdk
```

```
unload fpsm
```

15 Click Apply.

Novell iFolder is now installed. For more information on using Novell iFolder, see [Chapter 6, “Using Novell iFolder,” on page 37](#).

6

Using Novell iFolder

This chapter covers the following three topics:

- ♦ “Managing Novell iFolder Accounts” on page 37
- ♦ “Using the Server Management Console” on page 38
- ♦ “Optimizing Your iFolder Server” on page 39

Managing Novell iFolder Accounts

Once Novell® iFolder™ is installed and running, you have access to the following two Web sites:

- ♦ The default iFolder Web site

This site contains the *iFolder Client Quick Start Guide* and other important information about Novell iFolder. It is also where users will download the iFolder client and access their iFolder files via a browser. You can modify this page to fit your company’s internal needs.

To access the default iFolder Web site, enter the IP address or the DNS name of your server into a browser.

- ♦ The Server Management Console

The Server Management Console lets you manage your users’ iFolder accounts. From this site, you perform administrative tasks and manage the activity between the server and the iFolder clients. Access the Server Management Console by opening a browser and entering **https://ifolderserverip/iFolderServer/Admin**.

IMPORTANT: The Server Management Console URL is case sensitive.

For more information, see the next section, [Using the Server Management Console](#).

Using the Server Management Console

In order to access the iFolder user account information, you must log in to the Server Management Console with your administrative username and password. Once you are logged in, you can view and modify iFolder accounts as well as set specific policies for your iFolder clients and server.

You can perform the following tasks in the Server Management Console:

- ◆ View general server information
- ◆ View LDAP settings
- ◆ View user account information

As an administrator, you can remove a user account, change a user's disk storage quota on the iFolder server, and set specific policies for individual users.

- ◆ View iFolder client connections
- ◆ Configure user policies

You can determine what policies will be applied to the iFolder clients. For example, you can enforce policies so that your iFolder users do not have the option to change them.

You can also hide certain iFolder client options. For example, if you enforce and hide the option to request encryption of the iFolder data, the data will be encrypted and the user will be unaware of the transaction. Things that are hidden do not appear the iFolder client dialog boxes.

- ◆ Configure server policies

You can regulate server behavior, such as how much disk space will be allotted to each iFolder client or how much time will pass before a session times out.

For instructions about specific administrative tasks in the Server Management Console, see the following:

- ◆ [“Removing an iFolder Account” on page 39](#)
- ◆ [“Restoring a User’s Folder” on page 39](#)
- ◆ [“Changing LDAP Settings” on page 39](#)

Removing an iFolder Account

- 1 Click User Accounts.
- 2 Select the user ID that you want to remove and then click Remove.

Restoring a User's Folder

If a user wants to recover data from a deleted or corrupted file, you can restore his folder to a secondary iFolder server and from there he can access his files.

- 1 At the Server Management Console, click User Accounts.
- 2 Roll your mouse over the user's ID and look at the ID that appears in the bottom of your browser.
- 3 Restore this folder from a backup tape to a secondary iFolder server that the user can attach to and restore the files.

Changing LDAP Settings

- 1 For NetWare 5.1, modify the HTTPD_NW_ADDITIONS.CONF file located in SYS:Apache\iFolder\Server directory.

For Windows NT 4/2000, from the registry go to HKLM > System > CurrentControlSet > Services > W3SVC > iFolderServer.

Optimizing Your iFolder Server

You can optimize the performance of your iFolder server in the following ways:

- ◆ Add more RAM to your server.
- ◆ Increase the threads. (This only applies to Apache Web Servers running on NetWare.)

For optimal performance, we recommend one thread per client; however, in terms of scalability, iFolder has been tested up to 25 clients per thread.

- ◆ Change the amount of disk space allotted to your iFolder users.

Be careful; allotting large amounts of disk space to users could decrease the iFolder server's performance.

- ◆ Change the default sync delay parameters if you have thousands of users and you need to improve the iFolder server performance.

Current defaults:

- ◆ 5-second delay after file activity
- ◆ 20-second delay after server polling interval

To improve performance, make the following changes:

- ◆ 30-second delay after file activity
- ◆ 1-minute delay after server polling interval