Novell eGuide

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Novell, Inc. 404 Wyman Street, Suite 500 Waltham, MA 02451 U.S.A.

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Contents

	About This Guide	9
1	eGuide Product Overview	11
	Product Description	. 11
	Features	. 11
	What's Next	. 12
2	Installing eGuide	13
	System Requirements	13
	Installing eGuide	
	NetWare	
	Open Enterprise Server (Linux).	
	UNIX	
	Windows	
	Uninstalling eGuide	
	What's Next	
3	Upgrading eGuide	17
	System Requirements	
	Upgrade	. 18
4	Configuring eGuide	19
	Running the eGuide Quick Setup Wizard	. 19
	Accessing the eGuide Administration Utility	. 20
	LDAP Data Sources	. 20
	Accessing LDAP Data Sources	. 21
	Configuring LDAP Data Sources	. 23
	Modifying Search Categories	. 28
	Adding a Search Category	. 28
	Removing a Search Category	. 29
	Adding and Removing Schema Classes from a Search Category	. 29
	Configuring Attribute Labels	. 30
	Adding a Resource Bundle	. 30
	Removing a Resource Bundle	. 30
	Improving eGuide Performance	
	Reducing Session Time-Out	
	Increasing Heap Size	
	Running the JVM in Server Mode	
	Configuring the eGuide Display	
	Search Settings	
	Layout and Ordering	
	Skins	
	Advanced	
	Configuring eGuide Security Settings	
	Administration Roles	
	Restrictions	. 33

	Viewing Debug and Mail Configuration Reports.	. 34
	Customizing the eGuide Interface and Usage	
	Appearance	
	Searches	. 36
	Details Panel	
	Labels	
	Setting Up Debug Reports	
	Using Attribute Filtering	. ა9
5	Accessing the eGuide Client	41
6	Adding a Skin or Theme	43
	Adding a Skin	
	Adding a Theme	. 44
7	Using Role-Based Services	45
В	Using eGuide in a Clustered Environment	47
A	Web Servers and Tools	49
В	Settings in the eGuide.cfg File	51
C	Configuring and Using SSL for LDAP Connections	53
	Step One: Download and Set Up the JSSE Package from Sun Microsystems	. 53
	UNIX and Windows	
	Step Two: Set the Provider in the Security Object	
	Step Three: Configure the LDAP Server to Support SSL	
	Step Four: Configure the LDAP Group Object	
	Step Five: Export the Trusted Root Certificate	
	NetWare	
	UNIX	
	Windows	
	Step Seven: Edit the Tomcat Configuration File	
	NetWare	
	UNIX and Windows	
	Step Nine (Optional): Configure eGuide to Use SSL	
_		
D	UI Handlers	57
	UI Handlers Associated by Attribute Name	
	UI Handlers Associated by LDAP Directory Syntax	
	Changing Advanced Properties of an Existing UI Handler	
	Creating a New UI Handler	
	Step 1. Register the UI Handler Information	
	Step 2. Define the Behavior of the UI Handler	. 61
E	eGuide Action Commands	63
	Viewing Action Commands	
	Command Parameters and Examples	
	No Action	
	AuthForm	
	AuthBody	. 65

	Detail.get	65
	DetailEdit	66
	DetailModify	66
	DetailUpdate	66
	eGuideForm	67
	eGuideHeader	68
	eGuide.verifyCredentials	69
	eGuide.verifyNewPassword	69
	eGuide.selectContext	70
	List.get	70
	List.get (Cached list)	71
	List.get (Advanced)	72
	Login	73
	OrgChart	73
	OrgChartUpdate	74
	PasswordModify	76
	PasswordUpdate	76
	PhotoModify	77
F	Documentation Updates	79
•	April 14, 2005 (2.1.2)	
	April 14, 2000 (2.1.2)	7 5

About This Guide

This documentation describes how to create and use Novell® eGuide 2.1.2. The guide is intended for network administrators and is divided into the following sections:

- Chapter 1, "eGuide Product Overview," on page 11
- Chapter 2, "Installing eGuide," on page 13
- Chapter 3, "Upgrading eGuide," on page 17
- Chapter 4, "Configuring eGuide," on page 19
- Chapter 5, "Accessing the eGuide Client," on page 41
- Chapter 6, "Adding a Skin or Theme," on page 43
- Chapter 7, "Using Role-Based Services," on page 45
- Chapter 8, "Using eGuide in a Clustered Environment," on page 47

This guide also includes multiple appendixes that describe specific configuration scenarios:

- Appendix A, "Web Servers and Tools," on page 49
- Appendix B, "Settings in the eGuide.cfg File," on page 51
- Appendix C, "Configuring and Using SSL for LDAP Connections," on page 53
- Appendix D, "UI Handlers," on page 57
- Appendix E, "eGuide Action Commands," on page 63

Documentation Updates

For the most up-to-date version of the Novell eGuide documentation, visit the Novell Documentation (http://www.novell.com/documentation/lg/eguide213) Web site.

Additional Documentation

eGuide works with many Novell products, including Novell eDirectory™ and Novell iManager.

For documentation on installing and running Novell eDirectory and iManager, see the Novell documentation (http://www.novell.com/documentation) Web site.

Documentation Conventions

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

When a single pathname can be written with a backslash for some platforms or a forward slash for other platforms, the pathname is presented with a backslash. Users of platforms that require a forward slash, such as Linux* and UNIX*, should use forward slashes as required by your software.

1

eGuide Product Overview

This section provides the following general overview of the Novell® eGuide 2.1.2 software:

- "Product Description" on page 11
- "Features" on page 11
- "What's Next" on page 12

Product Description

eGuide is a browser-based solution that lets your employees search for people and places regardless of your LDAP data source location.

eGuide looks like an address book. But unlike an ordinary address book, eGuide is platform and application independent. It can be accessed by any user with rights to your Web server via a standard Web browser.

You can use eGuide to search Novell eDirectory™ as well as multiple LDAP data sources at the same time. For example, if your company purchases another company, you can provide a combined white pages view of both companies using eGuide pointing at two separate directories.

eGuide runs on the most widely used platforms and is compatible with e-mail, instant messaging, and real-time collaboration tools, such as Microsoft* NetMeeting* or AOL* Instant Messenger*. When users find the people they are looking for, eGuide lets them launch the type of communication that fits their current needs—e-mail, instant messaging, and even video conferencing. See "Mapping and Enabling Attributes for Instant Messaging and NetMeeting" on page 27.

Features

The following is a list of eGuide features:

- Standards-based display and administration using HTML, XML, and XSL, which provides simple, convenient, and customizable configuration.
- Advanced Searching on any attribute.
- Data handler controls that let you display information the way you prefer.
- Organizational charts that are automatically generated based on eDirectory attributes.
- Anonymous and User Authentication modes, including contextless login, cookies, and support for eDirectory password restrictions.
- Authenticated Searching that use access control lists in eDirectory to determine if a user can access particular attribute information, such as home phone numbers.

- ◆ Functions seamlessly with Novell iChain[®] and Novell exteNd[™] Director[™]. eGuide is also an excellent add-on to DirXML[®] synchronization projects.
- Compatible with eDirectory or any other LDAP-enabled directory service.

What's Next

- To install eGuide, see Chapter 2, "Installing eGuide," on page 13.
- To configure and administer eGuide, see Chapter 4, "Configuring eGuide," on page 19.
- To use the eGuide client, see Chapter 5, "Accessing the eGuide Client," on page 41.

Installing eGuide

This section contains the following topics:

- "System Requirements" on page 13
- "Installing eGuide" on page 14
- "LDAP Data Sources" on page 20
- "Running the eGuide Quick Setup Wizard" on page 19
- "Uninstalling eGuide" on page 16
- "What's Next" on page 16

If you are upgrading your current version of Novell® eGuide to version 2.1, see Chapter 3, "Upgrading eGuide," on page 17.

System Requirements

The following are the minimum system requirements for setting up and using eGuide 2.1.2:

System Component	Minimum Requirement
Operating System	NetWare [®] 6 with Support Pack 3 or later
	• Red Hat* Linux* 7.3
	• Solaris* 8
	 Windows* 2000/XP (recommended) or Windows NT*
	◆ AIX* 5L
Web Server	 Internet Information Server (IIS) 4.0 or later on Windows platforms
	 Apache HTTP server 1.3.26 or later
	For help installing Apache, visit the Apache Documentation (http://httpd.apache.org/docs-2.0/) Web site.

System Component	Minimum Requirement
Web Application Server	Tomcat servlet container version 3.3a, 3.3.1, or 3.3.1a
	NOTE: Tomcat does not perform optimally on Windows NT.
	For help installing Tomcat, visit the Apache Jakarta Web site (http://jakarta.apache.org/tomcat/tomcat-4.1-doc/index.html).
	 Sun* Java* 2 Standard Edition (J2SE) 1.3.1 or later
	IBM* Java 1.3.1 for AIX
Java Virtual Machine (JVM*)	Version 1.4.1 or later
LDAP Directory	Supports LDAP v3
	◆ If you plan to use eGuide with Novell eDirectory TM (formerly called NDS [®]) as your LDAP directory, version 8 or later is the minimum requirement; version 8.5 or later is required to support password security; version 8.6.2 or later is required to support Role-Based Services (version 8.7.1 recommended).
	 Uses clear text passwords for clear text connections; clear text passwords are disabled by default in eDirectory 8.7.1
Browser for eGuide Administration	Netscape* 7 or later
Utility	Internet Explorer 5.5 SP2 or later
Browser for eGuide Client	Netscape 4.78 or later (version 7 recommended)
	Internet Explorer 5.0 or later (version 6 recommended)

Installing eGuide

The installation option you use depends on the platform of the server you are installing eGuide on. eGuide can also be installed as part of a larger package, such as NetWare[®] 6.5.

This section explains the different installation options.

IMPORTANT: If you are upgrading your existing version of eGuide to version 2.1.2, review Chapter 3, "Upgrading eGuide," on page 17.

This section contains the following platform options:

- "NetWare" on page 14
- "UNIX" on page 15
- "Windows" on page 16

NetWare

This section explains how to install eGuide on NetWare. For instructions on installing on other platforms, see the following sections:

• "UNIX" on page 15

- "Windows" on page 16
- **1** Copy the following file to the sys: volume of the NetWare server:

/install/netware/eguideinstall.jar

This path is relative to the directory where you extracted the eGuide files.

2 At the NetWare server console, enter the following command:

java -cp full path/eGuideInstall.jar install

Replace *full_path* with the path to the directory where you downloaded the eguideinstall.jar file

3 Follow the prompts.

Open Enterprise Server (Linux)

This section explains how to install eGuide on Linux. For instructions on installing on other platforms, see the following sections:

- **1** Log in as root on the host.
- **2** Ensure that you have an entry in your path for the JVM.
- **3** Enter the following command in the setup directory:
 - ./eGuideInstall

This launches the eGuide GUI installation, which lets you select the location of your Webapps subdirectory.

NOTE: This installation method might not create the necessary sym link in the /etc/opt/novell/httpd/conf.d directory to the eGuide-apache conf file. If this occurs, enter the following in the /etc/opt/novell/httpd/conf.d as root:

In -s/var/opt/novell/tomcat4/webapps/eGuide/WEB-INF/eGuide-apache.conf/etc/opt/novell/httpd/conf.d/eGuide-apache.conf

UNIX

This section explains how to install eGuide on UNIX. For instructions on installing on other platforms, see the following sections:

- "NetWare" on page 14
- "Windows" on page 16
- **1** Open a shell and change to the /install/unix directory.

This path is relative to the directory where you extracted the eGuide files.

IMPORTANT: For the Install program to run, your PATH environment variable must point to the location of a Java Virtual Machine (for example, /usr/java/bin).

2 Enter the following command:

sh ./eguideinstall.bin

3 Follow the prompts.

Windows

This section explains how to install eGuide on Windows. For instructions on installing on other platforms, see the following sections:

- "NetWare" on page 14
- "UNIX" on page 15
- 1 Using Windows Explorer or Run, run the following file:

\install\win\eguideinstall.exe

This path is relative to the directory where you extracted the eGuide files.

2 Follow the prompts.

Uninstalling eGuide

To uninstall eGuide, delete the eguide directory created during the eGuide install. The default location of this directory relative to where you installed it is ...\webapps\eguide.

What's Next

- To configure and administer the eGuide client, see Chapter 4, "Configuring eGuide," on page 19.
- To use the eGuide client, see Chapter 5, "Accessing the eGuide Client," on page 41.

3

Upgrading eGuide

If you are upgrading to Novell[®] eGuide 2.1.2, you have an option to keep or to overwrite your existing eGuide directory structure.

This section contains the following topics:

- "System Requirements" on page 17
- "Upgrade" on page 18

System Requirements

Before you upgrade to eGuide 2.1.2, you must meet these system requirements:

System Component	Minimum Requirement	
Operating System	NetWare 6 with Support Pack 3 or later	
	Red Hat Linux 7.3	
	Solaris 8	
	 Windows 2000/XP (recommended) or Windows NT 	
	AIX 5L	
Web Server	 Internet Information Server (IIS) 4.0 or later on Windows platforms 	
	 Apache HTTP server 1.3.26 or later 	
	For help installing Apache, visit the Apache Documentation (http://httpd.apache.org/docs-2.0/) Web site.	
Web Application Server	Tomcat servlet container version 3.3a, 3.3.1, or 3.3.1a	
	NOTE: Tomcat does not perform optimally on Windows NT.	
	For help installing Tomcat, visit the Apache Jakarta Web site (http://jakarta.apache.org/tomcat/tomcat-4.1-doc/index.html).	
	 Sun Java 2 Standard Edition (J2SE) 1.3.1 or later 	
	IBM Java 1.3.1 for AIX	
Java Virtual Machine (JVM)	Version 1.4.1 or later	

System Component	Minimum Requirement
LDAP Directory	Supports LDAP v3
	• If you plan to use eGuide with Novell eDirectory™ (formerly called NDS®) as your LDAP directory, version 8 or later is the minimum requirement; version 8.5 or later is required to support password security; version 8.6.2 or later is required to support Role-Based Services (version 8.7.1 recommended).
	 Uses clear text passwords for clear text connections; clear text passwords are disabled by default in eDirectory 8.7.1
Browser for eGuide Administration	Netscape 7 or later
Utility	Internet Explorer 5.5 SP2 or later
Browser for eGuide Client	Netscape 4.78 or later (version 7 recommended)
	Internet Explorer 5.0 or later (version 6 recommended)

Upgrade

To upgrade to eGuide 2.1.2, run the installation program, as detailed in "Installing eGuide" on page 14. During the installation, check the Backup Existing Settings check box. This accomplishes the following:

- Renames the config, plugins, and templates directories to config_old, plugins_old, and templates_old. Creates new versions of the config, plugins, and templates directories.
 - If the config_old, plugins_old, and templates_old directories already exist, the upgrade renames your current versions of the config, plugins, and templates directories to config_old2, plugins_old2, and templates_old2. If *directoryname_*old2 already exists, the files are renamed in sequential order all the way to the number 99. If you are unsure what your newest installation backup directories are, look at the directory time stamp.
- Deletes all serial (*.ser) files in the properties directory.
 - **NOTE:** In eGuide 2.1.x, XML files are being used instead of ser files.
- Merges all new key-value pairs into existing resource bundles contained in the \WEB-INF\classes\com\novell\eguide\language directory.

Make sure you select Backup Existing Settings. Otherwise, your existing properties directory is deleted and the installation continues.

4

Configuring eGuide

Novell[®] eGuide has many options that you can set up to use. To provide these options, you configure the components that eGuide needs, such as LDAP, Search categories, languages, and the eGuide display.

To configure eGuide, use the eGuide Administration utility. For information about accessing this utility, see "Accessing the eGuide Administration Utility" on page 20.

To configure Role-Based Services (RBS), use Novell iManager. For more information, see the iManager documentation (http://www.novell.com/documentation/lg/imanager20).

This section contains these procedures:

- "Running the eGuide Quick Setup Wizard" on page 19
- "Accessing the eGuide Administration Utility" on page 20
- "LDAP Data Sources" on page 20
- "Modifying Search Categories" on page 28
- "Configuring Attribute Labels" on page 30
- "Improving eGuide Performance" on page 30
- "Configuring the eGuide Display" on page 31
- "Configuring eGuide Security Settings" on page 32
- "Viewing Debug and Mail Configuration Reports" on page 34
- "Customizing the eGuide Interface and Usage" on page 34
- "Setting Up Debug Reports" on page 39
- "Using Attribute Filtering" on page 39

Running the eGuide Quick Setup Wizard

Before you can configure and use eGuide, you must run the Quick Setup Wizard.

NOTE: When you run the Quick Setup Wizard, you need to select some security settings. The security option is Secure Sockets Layer (SSL). This setting is also necessary for one of the LDAP data sources. If you are unfamiliar with this security option, see "Transport Layer Security" on page 22 before you run the Quick Setup Wizard.

1 Access the following URL from your browser:

http://web_server:port_number/eGuide/admin/index.html (case sensitive)

Replace web_server with the host name or IP address of the Web server where you installed eGuide.

NOTE: The port number depends on your Web server configuration.

If the Quick Setup Wizard fails to start, you might need to modify the configuration of your Web server or servlet engine in order to make the eGuide application accessible. The configuration requirements vary depending on the Web server. Consult your Web server documentation for details. You might need to restart your Web server and servlet engine after reconfiguring them.

2 Follow the prompts to set up the first LDAP data source you want to search with eGuide.

The Quick Setup Wizard automatically launches the eGuide Administration Utility when it is finished. You can use the Administration Utility to configure and customize eGuide. The remaining sections in this chapter explain how to configure and customize eGuide. For instructions on access the Administration utility, see "Accessing the eGuide Administration Utility" on page 20.

The following circumstances might require additional configuration:

- If the LDAP data source that you configure in the wizard does not contain the same schema classes that eGuide uses by default.
 - eGuide creates a User search catergory and adds the InetOrgPerson, OrganizationalPerson, and Person schema classes to that category. If any of these classes are not in the LDAP data source you configure in the Quick Setup Wizard, you might need to add one or more schema classes to the User search category so eGuide can access all the needed information in the LDAP data source. For details on adding a schema class to a search category, see "Adding and Removing Schema Classes from a Search Category" on page 29.
- If you do not want the authentication credentials that you entered in the wizard used as the default proxy credentials. For details on setting additional proxy credentials in eGuide, see "Editing LDAP Settings" on page 25.

Accessing the eGuide Administration Utility

To access the Administration Utility, do one of the following from a compatible browser (we recommend Netscape 6.2 or later or Internet Explorer 5.5 or later):

- Access the following URL (case sensitive):
 - http://web_server/eGuide/admin/index.html
 - Replace web_server with the hostname or IP address of the Web server where you installed eGuide. The port number might be required as well.
- Log in to the eGuide client as the administrative user you designated in the Quick Setup Wizard, then click the Administration Utility icon.

IMPORTANT: The eGuide Administration Utility icon is available only to authenticated users designated as eGuide administrators. For details, see "Administration Roles" on page 32.

LDAP Data Sources

eGuide is an LDAP client application. It can target data in eDirectory and other LDAP-compliant data sources. For more information about eDirectory, see the eDirectory documentation (http://www.novell.com/documentation/lg/edir873/index.html).

This section explains how to access and configure LDAP data sources.

- "Accessing LDAP Data Sources" on page 21
- "Configuring LDAP Data Sources" on page 23

Accessing LDAP Data Sources

Part of configuring eGuide involves identifying the LDAP data source and specifying how eGuide accesses that data source.

This section provides only a brief explanation of the following data source access methods. You should be familiar with these methods before you configure eGuide:

- "Anonymous Bind" on page 21
- "eGuide Proxy User" on page 21
- "Transport Layer Security" on page 22

Anonymous Bind

LDAP servers can access data sources using an Anonymous bind. A bind is a connection between logical units. You can think of Anonymous as a guest account, where you can access LDAP data without identifying yourself. LDAP servers typically provide limited access to the data when you use Anonymous. This means you can access only some of the objects and only some of the attributes within those objects.

eGuide primarily uses LDAP for search operations. Search operations require Read rights to the attribute being searched. For example, to search for all users with the surname Jones requires that the LDAP connection has Read rights to the attribute surname. The Browse rights provided by the default [Public] object are insufficient for LDAP search operations.

By default, Anonymous has the same rights to objects in the directory as [Public]. When you create a tree, [Public] is automatically granted Browse rights to the root of that tree. These default rights allow Anonymous LDAP connections to navigate through the tree, seeing the list of objects and their names. However, Anonymous LDAP connections are not able to view any of the attributes of those objects.

You can use iManager to specify [Public] as trustee to sections of the tree with specific rights for objects and attributes of those objects. For more information, see the iManager documentation (http://www.novell.com/documentation/lg/imanager20).

You can also specify an LDAP Proxy user. If you do this, Anonymous Bind uses the rights of the Proxy object instead of the rights granted to [Public]. Use iManager to create an LDAP Proxy user, and make that object a trustee for a portion of the tree with specific rights for objects and attributes of those objects. Edit the LDAP Group object to specify the DN of the LDAP Proxy object. The LDAP Proxy object should have a null password.

With eDirectory, Anonymous users have the rights assigned to either the pseudo object named [Public] or the rights of an LDAP Proxy user object. If you are using eDirectory as the LDAP data source, selecting Using Anonymous during the configuration permits eGuide to search the tree using the rights assigned to [Public] or the LDAP Proxy user.

eGuide Proxy User

Another method for accessing an LDAP data source is to create an eGuide Proxy user and make it a trustee for a portion of the tree with specific rights for objects and attributes of those objects. The eGuide Proxy user serves the same function as the LDAP Proxy user except that an LDAP Proxy applies to all LDAP anonymous binds, and the eGuide Proxy user is unique to the eGuide application.

When you configure eGuide, you must specify whether it should bind to the LDAP directory as Anonymous or use an eGuide Proxy user. For information about Anonymous, see "Anonymous Bind" on page 21.

If you are unable to search using eGuide it might be that the account used to grant rights for eGuide has insufficient rights.

Transport Layer Security

Transport Layer Security (TLS) is a protocol that ensures privacy between communicating applications and internet users. TLS is based on Secure Socket Layer (SSL), which is another Internet security protocol. When you configure eGuide to use TSL, you enable the Secure Sockets Layer setting in the Quick Setup wizard, see "Running the eGuide Quick Setup Wizard" on page 19.

As you configure eGuide, you need to understand how the target LDAP system handles secure connections between the eGuide application and the LDAP Service. If the LDAP service is configured to use a secure connection, eGuide must also use a secure connection. This is done by selecting Enable SSL (Secure Sockets Layer) in the eGuide Quick Setup Wizard.

eDirectory 8.7 uses Transport Layer Security (TLS) to provide a secure LDAP connection.

The LDAP Service for eDirectory has two options that apply to TLS:

Option 1: TLS for Simple Binds with Password

By default, eDirectory 8.7 requires TLS for simple binds with password. You can change this setting by editing the LDAP group object for your LDAP service. We recommend that this setting be set to On so that passwords used to bind to the LDAP service are encrypted.

Option 2: Require TLS for All Operations

You can view or modify this option using iManager by editing the LDAP Server object for your LDAP service. When it is On, all LDAP request and reply operations are encrypted. By default, this option is Off.

If TLS option 1 or option 2 is On, and the client application (eGuide in this case) binds to the LDAP service, it must do so using TLS. If the client application attempts to bind without TLS, it receives an error: "Invalid authentication proxy credentials, could not authenticate to the server."

When you configure eGuide using the Quick Setup Wizard, there is a check box labeled Enable SSL. If your LDAP service has either TLS option set, you must also select the Enable SSL check box in the eGuide Quick Setup Wizard.

If you use Anonymous, then a password is not used for the LDAP simple bind, and you are not required to select the Enable SSL check box in the Quick Setup Wizard.

TLS imposes a significant performance impact. If eGuide and eDirectory are both running on servers in the same secure domain, you might consider disabling TLS to get better performance.

Configuring LDAP Data Sources

LDAP can locate information from many sources. Before you use eGuide, you need to configure at least one LDAP data source in order to access the information you need.

This section contains the following LDAP data source configuration options:

- "Adding an LDAP Data Source" on page 23
- "Enabling/Disabling an LDAP Data Source" on page 24
- "Removing an LDAP Data Source" on page 24
- "Changing a Directory's Authentication Settings" on page 24
- "Editing LDAP Data Source Settings and Attributes" on page 25
- "Mapping and Enabling Attributes for Instant Messaging and NetMeeting" on page 27
- "Refreshing the LDAP Schema" on page 28

Adding an LDAP Data Source

When you add an LDAP data source, eGuide creates a User category for the new directory. To create the category, eGuide uses the User attribute settings and mappings in the first directory that was added when you ran the eGuide Setup Wizard. We recommend that you make any desired changes to the initial directory's User attribute settings and mappings before you add other directories. For details, see "Editing LDAP Attributes" on page 26.

You can use directory configurations to increase search performance by taking advantage of eGuide's multithreaded search capability. For example, you can break up a single large directory into multiple directory configurations within eGuide, with each pointing to a different search root. If the directory you are splitting up in this way requires user authentication, be sure to designate each directory configuration as part of the authentication group. For details on the Authentication Group feature, see "Changing a Directory's Authentication Settings" on page 24.

To add an LDAP data source configuration to the list of directories eGuide searches:

- 1 In the Administration utility, click LDAP Data Sources, then click New.
- **2** On the LDAP Settings page, specify at least the directory name, the hostname (DNS name or IP address), and the port number.

All other settings are optional. For details, see "Editing LDAP Settings" on page 25.

IMPORTANT: The directory name can contain only letters, numbers, and the underscore (_) character. This name is used only as an identifier within the Administration utility and cannot be changed after the directory has been added.

3 Click Save.

You must provide the mandatory information and click Save before you can access the Attributes or Advanced page.

4 Click Attributes, then configure the LDAP attributes you want eGuide users to be able to view and search on.

For details, see "Editing LDAP Attributes" on page 26.

- 5 Click Save.
- **6** Click LDAP Data Sources, then make desired changes to the Login Server, Authentication Group, and Enabled settings for the directory you just added.

For details on these settings, see "Changing a Directory's Authentication Settings" on page 24 and "Enabling/Disabling an LDAP Data Source" on page 24.

7 Click Save.

Enabling/Disabling an LDAP Data Source

The Enabled setting determines whether a directory is available for user searches.

- 1 In the Administration utility, click LDAP Data Sources.
- **2** Select or deselect Enabled for the desired directory.

Removing an LDAP Data Source

- 1 In the Administration utility, click LDAP Data Sources.
- **2** Click Remove for the desired directory.

 eGuide does not let you remove the directory designated as the login server.

Changing a Directory's Authentication Settings

- 1 In the Administration utility, click LDAP Data Sources.
- **2** Click Login Server for the directory you want to designate as the login (authentication) server.

The distinguished names and passwords for all users and user administrators who must authenticate to eGuide must reside in the login server directory. Authentication is required, for example, if users or user administrators want to modify editable attributes. You can also choose to require authentication before users can access eGuide. For details, see "Restrictions" on page 33.

WARNING: Changing the login server designation to a different directory could invalidate your Administration Roles settings if the distinguished names of all user administrators and eGuide administrators are not in the newly designated directory.

- **3** (Conditional) If you changed the Login Server designation, complete the following steps:
 - **3a** Click LDAP Data Sources > Edit (for the directory newly designated as the login server) > LDAP Settings.
 - **3b** Make the appropriate changes to the Authentication User Name, Authentication Password, and Authentication Search Root settings, then click Save.
 - For details, see "Editing LDAP Settings" on page 25.
 - **3c** Select General, select a valid User Authentication Key, then click Save.
 - **3d** Click Administration Roles, then make the needed changes to the administrator role lists with users from the new login server.
- **4** Select or deselect Authentication Group for the desired directory.

When Authentication Group is selected, users' authenticated credentials are used for searches in this directory. A directory must be part of the authentication group if you want users and user administrators to be able to modify editable attributes in that directory.

IMPORTANT: Make sure you select Authentication Group for a directory only if intended users' distinguished names and passwords are applicable within both that directory and the login server directory.

If Authentication Group is deselected, the directory's default proxy credentials are used.

5 Click Save.

Editing LDAP Data Source Settings and Attributes

Configuring an LDAP data source for use in eGuide includes adjusting various settings, mapping attributes to template key names, deciding which attributes you want to allow users to search on, and deciding which attributes you want to allow users to modify themselves.

Editing LDAP Settings

- 1 In the Administration utility, click LDAP Data Sources, click Edit (for the desired directory), then click LDAP Settings.
- **2** Make the desired changes as shown in the following table:

Setting	Purpose	
Enabled	Select to make the directory searchable.	
	The Enabled setting also appears on the LDAP Data Sources page.	
Directory Name	Specified when the directory was added and cannot be changed.	
Host Name	Specify either the LDAP server's IP address or DNS hostname.	
	IMPORTANT: You can change the hostname to refer to a different LDAP server after initial configuration if the new server has the same schema configuration. If it does not, remove the current directory and add a new one with the new hostname information.	
Port	Specify the LDAP server's port number.	
Enable SSL	Select to enable SSL.	
	IMPORTANT: Enabling SSL works only if you have already set up SSL on the LDAP server.	
Secure Port	If Enable SSL is selected, specify the secure port number.	
Search Root	Specify the distinguished name of the container you want as the search root (o=acmecorp, for example).	
Search Subcontainers	Specify which subcontainers within the root container to include in searches. Choose one of the following options:	
	One: Includes the root distinguished name and all entries at the search root level.	
	Sub: Includes the root distinguished name and all entries at all levels below it.	
Max Search Entries	Specify the maximum number of search result entries you want returned with each search.	
	For greatest search efficiency, use a setting of 100 to 200. Do not set to more than 1000.	
Proxy User Name	Specify the search proxy distinguished name using LDAP format (for example, cn=admin,o=acmecorp). If you leave this field blank, Novell eGuide uses anonymous credentials or the LDAP server's proxy credentials (if defined) on LDAP queries.	
Proxy Password	Specify the search proxy password.	

Setting	Purpose
Authentication Group	Select to include the directory in the authentication group. eGuide uses the user's authenticated credentials to access directories in the authentication group. For those directories not included in the authentication group, eGuide uses default proxy credentials.
Authentication User Name	Available only when configuring the directory designated as the login server. Specify the distinguished name of the authentication proxy using LDAP format (for example, cn=admin,o=acmecorp). eGuide uses this User object to search for and identify fully distinguished names during a contextless login. If you leave this field blank, eGuide uses anonymous credentials on all contextless login
	attempts. IMPORTANT: The User object assigned as the authentication proxy must have the Read right to all distinguished names and to the attribute designated in eGuide as the user authentication key on the login server. For details on the user authentication key, see "Changing General Customization Settings" on page 35.
Authentication Password	Available only when configuring the directory designated as the login server. Specify the authentication user's password.
Authentication	Available only when configuring the directory designated as the login server.
Search Root	Specify the distinguished name of the container where the authentication credentials search should begin.

3 Click Save.

Editing LDAP Attributes

IMPORTANT: Whenever you make changes to attribute mappings and settings, be sure to check all other eGuide settings where those attributes are referenced, especially in Display Layout.

- 1 In the Administration utility, select the search category you want to edit attributes for.

 Unless you have added a search category (see "Modifying Search Categories" on page 28) only the default User category is available.
- **2** Click LDAP Data Sources, click Edit (for the desired directory), then click Attributes.
- **3** Make the desired changes as shown in the table:

Setting	Purpose	
Enable	Select to add this attribute to the Details panel displayed when a user clicks a search results entry.	
	IMPORTANT: To avoid XSL/browser rendering errors, do not enable attributes containing binary information. For example, the login script attribute is binary. To see the data source type, click More Options on the attribute, and the information type appears in the attribute title. The only exception to this rule is the Photo attribute, which eGuide treats differently than other binary attributes.	

Setting	Purpose
Template Key	Provides a means for eGuide to treat similar attributes from different LDAP directories the same even though they have different names in their respective directories. For example, if one LDAP data source uses LastName and another uses SN for the attribute containing users' last names, you could create a template key name, such as LastName, and map both the LastName and SN attributes to that same key name.
	By default, eGuide uses the Novell eDirectory™ attribute names as the template key names for the User category of the first directory you add when running the eGuide Setup Wizard.
	IMPORTANT: Do not assign the same template key name to more than one attribute.
Searchable	Select to add this attribute to the search filter list, thus allowing users to search on the attribute.
Editable	Available only for directories designated as the login server or as part of the authentication group. For details, see "Changing a Directory's Authentication Settings" on page 24.
	Select if you want to allow users and user administrators to edit this attribute. For details on enabling self-administration, see "Restrictions" on page 33. For details on designating user administrators, see "Administration Roles" on page 32.
	IMPORTANT: Selecting Editable for an attribute in eGuide does not grant users and user administrators the necessary rights within the LDAP data source. You must have already granted those rights at the directory level for this feature to work properly. You must also enable Self Administration if you want users to be able to edit the attribute. For details, see "Restrictions" on page 33.

4 Click Save (at the bottom of the page).

Mapping and Enabling Attributes for Instant Messaging and NetMeeting

If you want users to have the ability to send instant messages and start a NetMeeting directly from the eGuide Details panel, you must map several template key names and enable the associated attributes

By default, the instant messaging attributes are already mapped and you can select these features in the LDAP attributes screen. Mapping template key names is necessary only if you want to display multiple attributes, change attribute data, or display a different attribute.

To map template key names:

- 1 In the Administration utility, click LDAP data sources.
- 2 Locate the user you want to set up instant messaging and NetMeeting for, click Edit, and then click Attributes.
- **3** Specify a key name in the Template field of any LDAP attribute.

You can use any LDAP attribute you want; just change the default setting to the key name you want in the Template Key field next to the attribute. For example, specify InstantMessagingID in the Company attribute Template Key field. You need to ensure that you enter the key name correctly. For example:

- yahooinstantmessagingid
- aolinstantmessaginid
- gwinstantmessaginid
- instantmessagingid
- **4** Click Enable, click Editable, then click Save.
- **5** Return to the Template Key field you changed and click More Options, then click Attribute settings.
- **6** Select the name of the feature you want to display, then click Save.

Refreshing the LDAP Schema

eGuide reads the schema of an LDAP data source only when you first add the directory. If you make a change to the schema (such as adding an attribute to a schema class) and want that change reflected in eGuide, you must refresh the schema.

- 1 In the Administration Utility, click LDAP Data Sources, click Edit (for the desired directory), then click LDAP Settings.
- 2 Click Refresh Schema.

NOTE: eGuide never changes an LDAP data source's schema. You must make the change and refresh the schema.

Modifying Search Categories

A search category is an entity that eGuide uses to represent a combination of LDAP classes. For example, when you add the first directory to eGuide, the User search category is created. By default, it comprises the following classes: InetOrgPerson, OrganizationalPerson, and Person. The attributes within these User classes appear in the Attributes page where you configure how eGuide uses them in the eGuide client. Also, the User category label (Find People) appears in the first search filter drop-down list in the eGuide client.

NOTE: The InetOrgPerson, OrganizationalPerson, and Person classes mentioned above are used only if they existed in the first directory you added.

You can add and remove schema classes within an existing category. You can also add or remove entire search categories.

This section contains the following procedures:

- "Adding a Search Category" on page 28
- "Removing a Search Category" on page 29
- "Adding and Removing Schema Classes from a Search Category" on page 29

Adding a Search Category

- 1 In the Administration utility, click LDAP Data Sources, click Edit (for the desired directory), click Advanced, then click New.
- **2** Specify the name of the new category.
- **3** Add at least one schema class and configure its associated attributes. For details, see "Adding and Removing Schema Classes from a Search Category" on page 29.
- 4 Click Save.

Removing a Search Category

- **1** In the Administration utility, click LDAP Data Sources, click Edit (for the desired directory), then click Advanced.
- **2** Select the category you want to remove.
 - User is a mandatory category; eGuide will not let you remove it.
- **3** Click Remove category name.

Adding and Removing Schema Classes from a Search Category

- 1 In the Administration utility, click LDAP Data Sources, click Edit (for the desired directory), then click Advanced.
- **2** Select the category you want to modify.
- **3** To add a schema class to the category, select the class from the Available box, then click the right-arrow to move it to the Selected box.
- **4** Reverse the process in Step 3 to remove a class.
- **5** Click Save after making all desired changes to this category.
 - If you only removed one or more schema classes, you are done. If you added one or more classes, continue with Step 6.
- **6** Click the Attributes tab and edit the settings and mappings for the attributes of the newly added classes.

For details about attributes, see "Editing LDAP Attributes" on page 26.

IMPORTANT: If you added one or more schema classes to a newly added search category, you must enable at least one attribute and make at least one attribute searchable before users can access that category from the eGuide client.

7 Use Display Layout to indicate what attributes should be displayed in the Search, List, Details, and Org Chart forms in the eGuide client.

For details about the attributes, see the following sections:

- "Attributes" on page 36
- "Advanced Search Settings" on page 36
- "Details Panel" on page 38
- "Information Display" on page 38
- **8** Change the text displayed in the Category drop-down list in the eGuide client.
 - **8a** Click Display Labels, then click Edit (for the desired resource bundle).
 - **8b** Find the Object. category_name. Label template key (where category_name is the name you gave the new category), and enter the text you want displayed.
- 9 Click Save

Configuring Attribute Labels

This option lets you create resource bundles for specific languages and edit the language-specific text labels. A resource bundle contains locale-specific objects. Putting all text into a resource bundle makes it easier to translate into different languages.

This section contains the following procedures:

- "Adding a Resource Bundle" on page 30
- "Removing a Resource Bundle" on page 30

Adding a Resource Bundle

- **1** On the Attribute Labels page, click New.
- **2** (Required) Type the standard two-character language code.
- **3** (Optional) Type the standard two-character country code.

IMPORTANT: Do not use a country code unless you know a user's browser can pass in that country code. The languages you set here must match the codes in the browser of users for this particular language.

- 4 Click Save.
- **5** Make the appropriate changes to the label text on the attribute labels and status labels pages. Click Save at the bottom of the page after making a change.

Novell eGuide checks browser's locale information and uses the resource bundle with the matching language and country code, if available. eGuide uses the U.S. English resource bundle if it cannot find a resource bundle with a matching language and country code.

Removing a Resource Bundle

To remove a resource bundle, click Remove next to the attribute you want to remove.

Improving eGuide Performance

This section provides the following methods for improving the performance of eGuide:

- "Reducing Session Time-Out" on page 30
- "Increasing Heap Size" on page 31
- "Running the JVM in Server Mode" on page 31

Reducing Session Time-Out

If eGuide requests get slower as more users log on, you can reduce the active session time-out setting. This setting determines the length of the users' active sessions.

- 1 Open the eguide.cfg file located in the webapps\eGuide\web-inf\config directory.
- **2** In the security setting, decrease the minutes per session to ten minutes.

Increasing Heap Size

You can increase the heap size on your Web Application server. Heap is an area of pre-reserved storage that processors can use to store data in some variable amount that is unknown until the process is running. For instructions on increasing heap size, see your Web application server documentation.

Running the JVM in Server Mode

Running your JVM in server mode can improve eGuide performance. However, running in this mode requires more memory. Also, on NetWare you cannot simultaneously run one application in server mode and another in client mode. All applications must be in the same mode. For more information about JVM client and server modes, see the Novell JVM for NetWare documentation (http://www.novell.com/documentation/lg/jvm142/jvm enu/data/boe21bs.html).

Configuring the eGuide Display

The eGuide display is the screen appearance and the features that you make available to users.

This section contains the following display options:

- "Search Settings" on page 31
- "Layout and Ordering" on page 32
- "Skins" on page 32
- "Advanced" on page 32

Search Settings

Use this page to specify the number of search rows you want for a normal search and an advanced search (plus sign) in the eGuide client. Click the Help button for more information.

The search settings let you specify the number of search rows that appear for a normal search and when a user does an advanced search (clicks on the plus sign) in the Novell eGuide client. It also lets you modify the list of search constraints users can select from in each search row.

A search row consists of three drop-down lists: one for the search category (such as users), one for the search attribute (such as Last Name), and one for the search contstraint (such as "starts with...").

This section contains the following procedures:

- "Adding a Search Constraint" on page 31
- "Removing a Search Constraint" on page 32

Adding a Search Constraint

- 1 In the Available column, select the search constraint you want.
- **2** Click the right-arrow to move the constraint to the Selected box.
- 3 Click Save.

Removing a Search Constraint

- 1 In the Selected box, select the constraint you want to remove.
- **2** Click the left-arrow to move the constraint to the available box.
- 3 Click Save.

Layout and Ordering

This page presents a list of all search categories from all configured directories. Click Edit, then click Search Form, List Form, Details Form, or Org Chart Form to view and edit a directory's various display settings.

Skins

eGuide comes with a standard set of skins to use. You can also set up customized skins for your organization. For more information, see Chapter 6, "Adding a Skin or Theme," on page 43.

Advanced

Use this page to make additional changes to your eGuide display settings. Click Save when finished.

Configuring eGuide Security Settings

eGuide security features let you specify who has rights to change eGuide configuration and LDAP data source attributes. You can also enforce or remove various security restrictions.

- "Administration Roles" on page 32
- "Restrictions" on page 33

Administration Roles

eGuide supports two administrator roles:

- eGuide administrator sees the Administration Utility icon after logging into eGuide and has full access to all administration features.
- User administrator sees the Edit Information button in the Details panel in the eGuide client.
 After clicking Edit Information to display the Edit panel, a user administrator can edit any attribute that meets the following conditions:
 - Is marked Editable in the Attributes page of the Administration utility
 - Belongs to a directory designated as the login server or as part of the authentication group in the Administration utility
 - Can be modified because Write privileges to this attribute have been granted to the user administrator within the LDAP data source

In the Edit panel, user administrators can see an icon next to the Manager field. Clicking the icon brings up a secondary browse window where the user administrator can search for and select a username to insert that user's distinguished name in the Manager field.

IMPORTANT: For the browse feature to work, the Manager and IsManager attributes in the User category must be designated as both Enabled and Editable in the Administration Utility.

This section contains the following procedures:

- "Adding a User to an Administrator List" on page 33
- "Removing a User from an Administrator List" on page 33

Adding a User to an Administrator List

- 1 Click Administration Roles, then click Edit (for the desired administrator list).
- **2** Enter any portion of the user's login ID, then click Search.
- **3** Click the user's name in the Available box, then click the right-arrow to move the name to the Selected box.
- 4 Click Save List.

Removing a User from an Administrator List

- 1 Click Administrations Roles, then click Edit (for the desired administrator list).
- **2** Click the user's name in the Selected box, then click the left-arrow to move the name to the Available box.
- 3 Click Save List.

Restrictions

The following table gives details on each setting on the Restrictions page:

Setting	Purpose
Allow Save Credentials	Select if you want users to see a Remember Login Information check box on the login page. If a user selects this option, the user's validated credentials are encrypted and stored in a cookie on the user's workstation. The user can then load eGuide multiple times without logging in each time. The cookie is removed when the user clicks the Logout icon or after the cookie expiration time passes.
Cookie Expiration	Specify the number of seconds (86,400 seconds = one day) you want to elapse between login attempts before the login information cookie expires.
Force Users to Authenticate	Select if you want all users to be forced to log in to use eGuide. If this option is not selected, eGuide loads in anonymous mode. A user then has the option of logging in by clicking the eGuide Login icon.
	NOTE: If Allow Save Credentials is on and a login information cookie is available, the user is not forced to reauthenticate.

Setting	Purpose
Show Password Change Link	Select to make the Change Password link available in the Edit panel in the eGuide client. This also allows user administrators to change user passwords.
	IMPORTANT: Allow Self Administration must be selected before users can access the Edit panel.
Allow Self Administration	Select if you want to grant users access to change their editable attributes (those designated as Editable in the Attributes page). When you select Allow Self Administration, the View Personal Information icon in the eGuide client changes to Edit Personal Information.
Show Organizational Chart	Select if you want the Organizational Chart tab activated in the details panel for all users. The organization chart shows the currently selected user's manager and all of that manager's direct reports. For details, see "Organizational Chart Tab Display" on page 38.

Viewing Debug and Mail Configuration Reports

- "Debug" on page 34
- "Mail Configuration" on page 34

Debug

Use this page to have all diagnostic information for the current session of the eGuide servlet written to a log file in the eGuide/web-inf/logs directory.

Mail Configuration

Use this page to specify mail server information so the network administrator receives an e-mail notification when attribute changes are made on the LDAP data sources.

Customizing the eGuide Interface and Usage

The following customization tasks are covered in this section:

- "Appearance" on page 35
- "Searches" on page 36
- "Details Panel" on page 38
- "Labels" on page 38

Appearance

This section explains how to modify the customization settings, including the color scheme.

- "Changing General Customization Settings" on page 35
- "Changing a Color Scheme" on page 35

Changing General Customization Settings

- **1** In the Administration utility, click General.
- **2** Make the desired changes, then click Save.

The following table contains information on each setting:

Setting	Purpose
Current Theme	A theme consists of certain display settings that determine the layout and look and feel of the eGuide client. eGuide includes only the Default theme; however, you can use this theme as a template for creating your own. For details, see Chapter 6, "Adding a Skin or Theme," on page 43.
	Themes you create are added to the Current Theme drop-down list where you can select them.
	NOTE: You can change the colors used within the current theme by using the Colors feature. For details, see "Changing a Color Scheme" on page 35.
User Authentication Key	By default, the CN attribute is used as the user authentication key for the default User category in the first directory you configure. Change this selection if you want to use some other attribute (such as e-mail address) for logging in.
Home Page Link	Specify the URL of the page that you want displayed when users click the Custom Home Link icon in the eGuide client.
Enable Auto-Edit	Select to allow authenticated users and user administrators to directly access the Modify form when clicking a username in a search results list (instead of displaying the usual Details panel).

Changing a Color Scheme

This process explains how to change the colors used for various eGuide display elements.

- **1** In the Administration utility, click Colors.
- **2** Select a color scheme, then click Save.

TIP: For details on downloading and installing additional color schemes and for instructions on how to create your own color scheme, see Appendix 6, "Adding a Skin or Theme," on page 43.

Searches

To search in eGuide, users select one of three search filters (Category, Attribute, Search Constraint), enter the search term, and then click Search.

This section explains how to customize the advanced search settings and search results panel on the three search filters:

- "Category" on page 36
- "Attributes" on page 36
- "Advanced Search Settings" on page 36

Category

The Category filter lists all defined categories. By default, the Find People label is displayed for the mandatory User category in the Category filter list. For categories you add to eGuide, the category name you specify becomes the default label displayed in the Category filter list.

To change the filter labels, use the Display Labels feature. For more information, see "Editing Label Text" on page 39.

Attributes

The Attribute search filter lets users select the attribute (such as Last Name or Department) they want to search on. This filter contains an alphabetized list of searchable attributes with one of the attributes selected by default. All attributes designated as Searchable in the Attributes page appear in the Attribute filter list.

To change what attributes appear in the list, change the attribute Searchable designations. For more information, see "Editing LDAP Attributes" on page 26.

To change the default search attribute:

- 1 In the Administration utility, click Display Layout, click Edit (for the desired category), then click Search Form.
 - If you receive an access error instead of the Search Form page, ensure that at least one attribute has been designated as Searchable in the category you are editing.
- 2 Click the desired attribute, then click the up-arrow until the attribute is at the top of the list.

 IMPORTANT: An attribute must be designated as both Enabled and Searchable in the Attributes page for it to be displayed in the Ordered Search Attributes box.
- **3** Click Save.

The order of the attributes does not affect the order they appear in the Attributes filter drop-down list; they are always listed alphabetically. However, the order does affect Advanced Search, as explained in "Advanced Search Settings" on page 36.

Advanced Search Settings

By default, all search settings (Starts With, Contains, Equals, etc.) are available for searches.

To remove or add a search constraint:

- 1 In the Administration utility, click Search Properties.
- **2** Click a search constraint, then click the appropriate arrow to move it to the other box.

Search constraints in the Selected box appear in the Search Constraint filter and those in the Available box do not.

The following table contains information about setting up additional search options:

Setting	Purpose	
Number of search rows	By default, a normal search contains one row of search criteria (Category, Attribute, and Search Constraint filters). You can add more rows to give users the option of doing an advanced search without selecting Advanced Search (the plus icon). In an advanced search, each successive search criteria row is connected to the previous row with a Boolean (AND, OR) operator.	
	To add rows to a normal search:	
	 In the Administration Utility, click Search Properties, then adjust the number for Default Search Rows. 	
	2. Click Save.	
Advanced Search settings	By default, Advanced Search (accessed by clicking the plus icon) displays three search criteria rows.	
	To modify the number of Advanced Search rows:	
	 In the Administration utility, click Search Properties, then edit the number for Advanced Search rows. 	
	2. Click Save.	
	To change the default Attribute filter in each row:	
	 In the Administration utility, click Display Layout, click Edit (for the desired category), then click Search Form. 	
	Reorder the list by selecting attributes and moving them with the arrows.	
	3. Click Save.	
Search results panel display	IMPORTANT: An attribute must be designated as Enabled in the Attributes page before you can select it as a column heading. For instructions on enabling attributes, see "Editing LDAP Attributes" on page 26.	
	 In the Administration utility, click Display Layout, click Edit (for the desired category), then click List Form. 	
	Select up to four attributes that you want displayed in each column of the Search Results panel.	

Details Panel

The Details panel in the eGuide client consists of the Information page and the Organizational Chart tab. You can customize the information displayed in these pages.

- "Information Display" on page 38
- "Organizational Chart Tab Display" on page 38

Information Display

The Information tab of the Details panel displays an ordered list of attributes (First Name, Last Name, Department, Phone Number, etc.) whenever a user clicks a search result.

All attributes designated as Enabled in the Attributes page are displayed in the Information page. To change what attributes are displayed, change the enabled settings for those attributes. For more information, see "Editing LDAP Attributes" on page 26.

To change the order of attributes displayed in the Information page:

- **1** In the Administration utility, click Display Layout, click Edit (for the desired category), then click Details Form.
- **2** Click an attribute, then click the up-arrow or down-arrow to move it to the desired location in the list.
- **3** After making the desired changes, click Save.

Organizational Chart Tab Display

Organizational (org) chart structure is controlled by the Manager and IsManager attributes. The distinguished name in a user's Manager attribute indicates who that user reports to. A True value in a user's IsManager attribute indicates that the user is a manager and activates the Reports To link (left-arrow icon) for traversing upward in the org chart from manager to manager.

By default, only a user's full name (created by combining the FirstName, MI, and SN attributes) and title (if available) is displayed in the org chart. In addition to the full name, you can display up to four additional attributes (only Title is selected by default) by doing the following:

- 1 In the Administration utility, click Display Attributes, click Edit (for the desired category), then click Org Chart Form.
- **2** Select the attributes you want displayed along with the user's full name. Only attributes designated as enabled in the Attributes page can be selected.
- **3** Click Save.

Labels

You can customize the labels (text strings) associated with LDAP objects and attributes as well as the labels associated with general eGuide client presentation (field labels, buttons, messages, etc.). You can have a full set of labels, called a resource bundle, for each language you need to support in the eGuide client.

- "Adding a Language Resource Bundle" on page 39
- "Editing Label Text" on page 39

Adding a Language Resource Bundle

- 1 In the Administration utility, click Display Labels, then click New.
- **2** (Required) Type the standard two-character language code.
- **3** (Optional) Type the standard two-character country code.

IMPORTANT: Do not specify a country code unless you definitely know that a user's browser can pass in that country code. The language and country codes you set here must exactly match the codes in the browsers of users for this particular language.

4 Click Save.

When the eGuide client is launched, it checks the browser's language and country codes. It then uses the resource bundle with the matching codes, if available. Otherwise, it uses the U.S. English resource bundle

Editing Label Text

- 1 In the Administration utility, click Display Labels, then click Edit (for the desired resource bundle).
- **2** Click Attribute Labels or General Labels.
- **3** Make the desired changes.
- 4 Click Save (at the bottom of the page).

Setting Up Debug Reports

- To have all diagnostic information for the current session of the Novell eGuide servlet written to a log file in the eguide\web\inf\logs directory, click Debug, select Debug, then click Save.
- To have the dynamic XML documents returned from the directory display on the server console and written to the active log file, click Debug, select XML, then click Save.

Selecting XML also forces XSL style sheets to be reloaded from disk upon each client request. This can be helpful when you develop and test customized style sheets.

IMPORTANT: Turning on Debug affects eGuide performance. For best performance, make sure Debug is turned off.

Using Attribute Filtering

The Attribute Filtering tab lets you refine your searches. For example, as an administrator, you might want to exclude all inactive users from eGuide searches. You could accomplish this the following ways:

- **1** In the Administration utility, enable filtering on the employeestatus attribute.
- **2** Set the Search criteria to Equals.
- **3** Set the Search value to Active.

or

- **1** Enable filtering on the employeestatus attribute.
- **2** Set the Search criteria to Does Not Equal.
- **3** Set the Search value to Admin.

As an administrator, you might want to exclude all admin users from eGuide searches.

- Enable filtering on the CN attribute.
- Set the Search criteria to Does Not Equal.
- Set Search value to Admin.

As an administrator, you can also include site-specific users in eGuide searches.

- Enable filtering on the City attribute.
- Set the Search criteria to Equals.
- Set the Search value to the specific site, such as San Jose.

5

Accessing the eGuide Client

If you completed the Quick Setup Wizard and the Administration Utility is currently displayed in your browser, click the Launch Novell eGuide Client icon to access the eGuide client.

To access the eGuide client at any other time, specify the following URL in a browser:

http://web_server/eGuide

Replace web_server with the hostname or IP address of the Web server where you installed eGuide.

IMPORTANT: The eGuide portion of the URL shown above is case sensitive. You must type it exactly as shown (with a capital G and all other letters in lowercase).

6

Adding a Skin or Theme

You can further customize the user interface appearance of the Novell® eGuide client by adding skins or themes.

This section contains the following procedures:

- "Adding a Skin" on page 43
- "Adding a Theme" on page 44

Adding a Skin

A skin is a style sheet that determines the look of your eGuide pages. Additional skin files are available for download on the eGuide Web site. To install a downloaded skin file, place it in the currently selected theme templates folder. By default, this is the eguide\web-inf\templates\xsl\default\browser folder.

You can create your own skin file by copying and modifying an existing one using any text editor. The file contains the XML definitions described in the following table:

Setting	Defines
ImgTheme	A string that can be associated with image files.
	By default, ImgTheme is used to define the Logo_theme_name image file, but can be used for dynamically changing to other files based on the selected skin.
Dominant	The dominant color used for many display elements, including the Search Results pane.
Subordinate	The header background color.
Accent	The color of a selected tab.
DominantHighlight	The highlight color for many displays, including the Search Results pane.
Link	The text links color in the Details pane
ReverseText	The mouse-over text color for header icons

Adding a Theme

A theme is the static portion of eGuide, which often displays a company or organizational logo.

By adding a theme, you can completely customize the look and layout of the eGuide client. You can, for example, create a theme with no frames, a theme with a different layout (placement of display elements), or one that is customized to search on a specific category other than Find People.

If you need to only change the color set, add a skin file. For instructions, see "Adding a Skin" on page 43

IMPORTANT: Customizing the theme requires advanced knowledge of XSLT, HTML, JavaScript*, CSS, and other HTML-related technologies. In addition, Novell cannot support problems related to customized themes (unless the problem is unrelated to the style sheet). Therefore, in order to maintain support you must create a new theme instead of modifying the existing Default theme. This lets you return to the Default theme if you experience problems with the one you created.

A theme consists of several files in a theme directory in two separate locations: \eguide\web-inf\templates\xsl and \eguide\look. Each path is relative to the directory where you installed eGuide.

To add a theme:

- **1** Copy and rename the default directory in the XSL directory.
- **2** Copy and rename the default directory in the LOOK directory.

IMPORTANT: The new theme directories must have exactly the same name in both the XSL and LOOK directories.

After you create the new directories, the directory name appears in the Current Theme drop-down list in the Administration utility. For details on selecting a theme, see "Changing General Customization Settings" on page 35.

WARNING: Never directly modify the contents of the default or adminutil theme directories.

- 3 Modify the template files in the new theme directory in the XSL directory as desired.

 When you modify templates, it is often necessary to view the XML output of the eGuide server. You can turn on XSL debug to view the XML output in both the eGuide server console and in a log file in the \eguide\web-inf\logs folder. For instructions, see "Setting Up Debug Reports" on page 39
- **4** Modify the image, HTML, CSS, and JavaScript files in the new theme directory in the Look directory as desired.

7

Using Role-Based Services

Role-Based Services (RBS) lets users administer their own personal information in Novell[®] eDirectory™ using the Novell iManager utility.

For more information about RBS, see the *iManager 2.0 Administration Guide* (http://www.novell.com/documentation/lg/imanager20/index.html?page=/documentation/lg/imanager20/imanager20/data/am757mw.html).

8

Using eGuide in a Clustered Environment

Although eGuide is a session-based tool that ships without any failover feature, you can run it in a clustered environment. This section explains how to set up eGuide to run in a clustered environment. For more information about Novell[®] Cluster Services[™], see the *Novell Cluster Services 1.7 for NetWare 6.5 Administration Guide* (http://www.novell.com/documentation/nw65/orionenu/data/h4hgu4hs.html).

- 1 Install and configure eGuide on the nodes in the cluster where the virtual IP address moves to during failover (that is, an Active/Active cluster configuration).
 - If the node running eGuide fails, Novell Cluster Services detects the node failure and moves (reloads) the virtual IP address to another node in the cluster.
- **2** Using the Generic_IP_Service template that ships with Novell Cluster Services, create a new cluster resource called eGuide.

For information about the template and where it is located, see the Installation section in the *Novell Cluster Services 1.7 for NetWare 6.5 Administration Guide* (http://www.novell.com/documentation/nw65/orionenu/data/ht05s5vv.html).

The cluster resource you create uses a virtual IP address that moves between nodes in the cluster.

When you create a new cluster resource, a wizard steps you through the creation of a load script and an unload script.

3 Verify the load and unload scripts.

The load script should contain only the following lines (any other lines should be commented out):

```
./opt/novell/ncs/lib/ncsfuncs
exit_on_error add_secondary_ipaddress xxx.xxx.xxx
exit 0
```

The unload script should contain only the following lines:

```
./opt/novell/ncs/lib/ncsfuncs
ignore_error del_secondary_ipaddress xxx.xxx.xxx
exit 0
```

4 Point your Web browser to: http://web server/nps/eGuide.html.

Replace web server with the IP address used in the eGuide cluster resource.

eGuide services are now available; however, any live sessions are not failed over. If a service fails in the middle of a user's session, that user must re-authenticate and restart whatever processes were interrupted.

Because eGuide, Tomcat, and Apache are already running (Active/Active) on the other nodes, there is no load time for these applications if Novell Cluster Services moves the virtual IP to another node.

Although Active/Active mode is the recommended configuration, eGuide can also be run in Active/Passive mode. Active/Passive mode signifies that the software runs on only one node at a time in the cluster. When a server fails, the software starts on another specified node in the cluster, and the cluster volumes that were mounted on the failed server fail over to that other node. This makes Active/Passive mode slower because, in addition to cluster volumes failing over, the software must load on other servers in the cluster before users can access files and directories. For more information about Active/Passive clustering modes, see the *Novell Cluster Services 1.7 for NetWare 6.5 Administration Guide* (http://www.novell.com/documentation/ncs65/treetitl.html).

If you want to configure eGuide as an Active/Passive clustered resource, you need to create a cluster resource that loads and unloads both eGuide and its dependencies (that is, Apache and Tomcat). You need to complete this identical configuration of eGuide on all nodes where you want eGuide highly available.



Web Servers and Tools

 $\mathsf{Novell}^{\circledR}$ eGuide can run on the following Web servers:

- Apache
- Microsoft Internet Information Services (IIS)

For information about Apache, see the Apache Software Foundation Web site (http://www.apache.org).

For information about Microsoft Internet Information Services, see the Microsoft Web site (http://www.microsoft.com).



Settings in the eGuide.cfg File

The following table describes the settings contained in the Novell® eGuide configuration (eguide.cfg) file.

The eguide.cfg file is located in the ...\webapps\eGuide\web-inf\config directory.

IMPORTANT: Both load balancing settings must be in the file and active (not commented) for either one to work.

Setting	Specifies
Load Balancing	
Load.Max.Users=n	Maximum number (n) of concurrent eGuide sessions allowed.
Load.Redirect.URL=URL	URL to the next eGuide server
Logging	
Log.Console.Enable= true/false	Whether console logging is enabled (true = enabled).
Log.Enable=true/false	Whether file logging is enabled (true = enabled).
Log.Language=language_code	Language (two-character ISO language code) of the log file.
Log.Level=level_name	Logging level.
	Valid level names are normal, verbose, and diagnostic.
Log.Max.Age=n	Number of days (<i>n</i>) that log files should be kept.
Log.Max.Size=n	Maximum combined size (<i>n</i> in kilobytes) of all files in the log directory.
	The oldest file is deleted when the maximum size is exceeded.
Log.Path=path	Path to the directory where log files are written.
Log.TimeStamp=date/time format	Time format for stamping log file entries.
	Refer to SimpleDateFormat in your Java documentation for details on defining a date/ time format.

Setting	Specifies
Security	
Security.Timeout=n	Number of minutes of inactivity before a user session is dropped
Security.UseClientIP.Enabled=true/false	Whether user client's IP address is used in constructing how the servlet identifies the user's browser session.
	The default setting is true. Set it to false only if experiencing invalid hash errors.
	IMPORTANT: You must set it to false if you are using Novell iChain [®] with eGuide.
Other	
CharSet.Default=character_set	Default character set
	This setting overrides character sets detected by the browser. User only for the UTF-8 character set. All other settings are autodetected.
Config.Update.Check=n	Time in minutes between eGuide checks of the eguide.cfg file for changes
	This prevents the administrator from needing to bring down the eGuide servlet to make configuration changes.
WebApp.Home.Path	Full pathname from the root to the Web application's context.



Configuring and Using SSL for LDAP Connections

Follow these instructions if you want to use SSL connections between Novell® Web-based applications (for example, iManager and eGuide) and an LDAP data source rather than plain-text or clear-text connections.

IMPORTANT: SSL connections are slower than plain-text or clear-text connections. Using SSL might result in a noticeable degradation in performance.

- "Step One: Download and Set Up the JSSE Package from Sun Microsystems" on page 53
- "Step Two: Set the Provider in the Security Object" on page 54
- "Step Three: Configure the LDAP Server to Support SSL" on page 54
- "Step Four: Configure the LDAP Group Object" on page 54
- "Step Five: Export the Trusted Root Certificate" on page 54
- "Step Six: Import the Trusted Root Certificate" on page 54
- "Step Seven: Edit the Tomcat Configuration File" on page 55
- "Step Eight: Modify the eMFrame.cfg File" on page 56
- "Step Nine (Optional): Configure eGuide to Use SSL" on page 56

This procedure varies depending on the server platform you are using. The specific platform is indicated under each step.

NOTE: The steps in this section apply to all platforms unless specified.

Step One: Download and Set Up the JSSE Package from Sun Microsystems

UNIX and Windows

If you have NetWare[®] 6 or later, JDK* version 1.4, or iManager 1.5, you have the necessary software.

- 1 Verify whether you have Java Secure Socket Extension (JSSE) package on your server.

 To download the JSSE, access the java.sun.com (http://java.sun.com/products/jsse) Web site.
- **2** Add the following files to Java's jre\lib\ext folder:
 - jsse.jar
 - jnet.jar
 - jcert.jar

Step Two: Set the Provider in the Security Object

Setting the provider in the security object can be done statically in the security properties file (jre\lib\security\java.security).

To set this provider statically, find the following line in the security properties file:

```
security.provider.1=sun.security.provider.Sun
```

Add the following line immediately after the line you just located:

```
security.provider.x=com.sun.net.ssl.internal.ssl.Provider
```

where *x* is equal to the next sequential number (for example, security.provider.2=com.sun.net.ssl.internal.ssl.Provider).

IMPORTANT: Both of these lines are required in order for SSL to work correctly.

Step Three: Configure the LDAP Server to Support SSL

- 1 In iManager, select Roles and Tasks, select LDAP Management, select LDAP Overview, select View LDAP Servers, select the desired LDAP Server, then select Connections.
- 2 Select an SSL Certificate object in the Server Certificate field.

 These objects were created at the time Novell eDirectory™ was installed.
- **3** Make note of the SSL port (typically 636).
- 4 Save your changes.
- **5** Access the LDAP server's properties again and click Refresh on the Information tab.

Step Four: Configure the LDAP Group Object

- 1 In iManager, select Roles and Tasks, select LDAP Management, select LDAP Overview, select View LDAP Groups, select the desired LDAP Group, and then select Information.
- **2** To require TLS, select the Require TLS for Simple Binds with Password check box.

Step Five: Export the Trusted Root Certificate

- 1 In ConsoleOne[®], access the properties for the SSL Certificate object you just configured.
- **2** Click Certificates, then click Trusted Root Certificate.
- **3** Click Export, then save the file in binary DER format (the filename is typically trustedrootcert.der).

Step Six: Import the Trusted Root Certificate

For this step, you need a JDK to use . If a JRE was installed with iManager, you need to download a JDK.

You now need to import the Trusted Root Certificate into your cacerts or issecacerts trust store file.

1 Find the cacerts or issecacerts file in the lib\security folder (relative to your Java home folder).

2 Find keytool in the \bin folder (relative to your Java home folder).

IMPORTANT: You must use keytool that comes with JVM 1.3 or later.

- **3** Execute one of the following platform-specific keytool commands as appropriate:
 - "NetWare" on page 55
 - "UNIX" on page 55
 - "Windows" on page 55

NetWare

keytool -import -alias *alias_name* -file *full_path*trustedrootcert.der -keystore sys:javalibsecuritycacerts -storepass changeit -noprompt

UNIX

keytool -import -alias *alias_name* -file *full_path*/trustedrootcert.der -keystore *full_path*/jre/lib/security/cacerts

Replace [alias_name] with a unique name for this certificate and make sure you include the full path to trustedrootcert.dir and cacerts.

Windows

keytool -import -alias *alias_name* -file *full_path*\trustedrootcert.der -der -keystore keystore *full_path*\jre\lib\security\cacerts

```
keytool -import -alias [alias_name] -file
[full_path]\trustedrootcert.der -keystore keystore
[full_path]\jre\lib\security\cacerts
```

IMPORTANT: You will be prompted for a keystore password. If you haven't changed it, the default is changeit.

Step Seven: Edit the Tomcat Configuration File

- "NetWare" on page 55
- "UNIX and Windows" on page 55

NetWare

This step is not required on NetWare

UNIX and Windows

To configure a secure (SSL) HTTP connector for Tomcat, verify that it is activated in the \$tomcat_home/conf/server.xml file (the standard version of this file, as shipped with Tomcat, contains a simple example that is commented out by default).

Syntax for Tomcat 3.3:

```
<Http10Connector
  port="8443"
  secure="true"
  keystore="/usr/java/jre/lib/security/cacerts"
clientAuth="false" />
```

Step Eight: Modify the eMFrame.cfg File

- **1** Open the eMFrame.cfg file, located in the eMFrame\web-inf directory on the web/middleware server where iManager was installed.
- **2** Find the following statement:
 - Provider.emFrame.ssl=false
- **3** Replace *false* with *true*.
- 4 Save and exit the file.
- **5** Restart Tomcat and your Web server.

Step Nine (Optional): Configure eGuide to Use SSL

- 1 From a Web browser, open the Novell eGuide Administration utility.
- **2** Click LDAP Data Sources, click Edit (for the appropriate directory), then click LDAP Settings.
- **3** Select Enable SSL.
- **4** For Secure Port, type the LDAP server port number you made note of when configuring the LDAP server.
- **5** Click Save.

If you receive an error message or the machine hangs when you click Save, go through all of the SSL configuration steps again to make sure the configuration is completely correct. The following are two examples of bad settings that will cause eGuide to hang:

- Trying to communicate with an SSL port using a plain-text connection
- Trying to communicate with a plain-text port using an SSL connection



UI Handlers

This section describes the User Interface (UI) handlers used in Novell® eGuide. UI handlers display information from the LDAP data source in a specific or customized fashion.

UI handlers can also be created and customized to meet individual needs. For example, one company might want to display a user's e-mail address as a clickable link while another company might want to display the information as static text.

eGuide comes with a base set of UI handlers. UI handlers can be associated with either the Attribute Name itself or the LDAP directory syntax.

- "UI Handlers Associated by Attribute Name" on page 57
- "UI Handlers Associated by LDAP Directory Syntax" on page 58
- "Using a UI Handler" on page 60
- "Changing Advanced Properties of an Existing UI Handler" on page 60
- "Creating a New UI Handler" on page 60

UI Handlers Associated by Attribute Name

NOTE: An asterisk (*) indicates the default handler for the attribute.

Name	Description	Association by Attribute Name
URL Project Link	Edits and displays project links. A project link consists of a Label and a URL. It is stored in LDAP using Labeled URI format. This handler has a View mode, which displays the label as a clickable link to the URL. The editing attributes associated with this handler prompt for the Label and the URL in separate text boxes.	LABELEDURI
Email Link	Displays attributes as clickable links using the HTML mailto: tag. This tag launches the default eMail client.	EMAIL* CELLPHONEEMAIL*
Text Area Entry	Can be used to place a description or summary of the object. The attribute information displays in the header of the object's details. The text area is similar to an HTML text editor.	DESCRIPTION*
Textbox (Single-Value, Edit Only)	Hides attributes unless the UI handler is in edit mode. If in edit mode, it allows only single-value strings to be entered via HTML TextBox.	GIVENNAME* INITIALS* LASTNAME* TITLE*
Yahoo IM Launcher (via Browser)	Displays the Instant Messaging link to launch Yahoo's Internet Client (via browser).	YAHOOIMID

Name	Description	Association by Attribute Name
AOL AIM Launcher (via Application)	Displays the Instant Messaging link to launch the AOL Instant Messaging (AIM) Application. This handler assumes the AIM client is installed.	INSTANTMESSAGINGID
Combined US Address and Map Link	Displays address attributes in the standard U.S. envelope mail format. If POSTALCODE is populated, this handler creates a map link to the address. This handler is sorted by the STREET attribute (edit mode only). Related attributes CITY, ST, POSTALCODE, and CO should use this handler if displaying them is desired.	STREET ST CITY POSTALCODE CO
Hidden Attribute	Hides selected attributes. This is useful when you want to use the attribute in the detail.xsl document, but you do not want to display the attribute in the list. If you do not need the attribute, we recommend that you completely disable the attribute instead of using this handler.	USERPASSWORD* CN* PHOTOAGREE*
Combined Name	Combines the editing of a person's full name, which is broken into GIVENNAME, INITIALS, and LASTNAME. We recommend that you enable all these attributes and make them editable. Ordering is controlled by the LASTNAME Template Key. The combined name attribute hides attributes when they are not being edited, so they can be displayed only in the detail header.	GIVENNAME INITIALS LASTNAME
Binary Photo File	Displays PHOTO in the header of the object details. When being edited, this handler lets you browse the file. This handler also lets you specify the file store location (such as LDAP or FILE), maximum file size, and maximize the file store path when applicable. These changes can be made in UIHandlers.XML.	PHOTO*
Binary Video File	Displays VIDEO in the header of the object details. When being edited, the handler allows for browsing the file. This handler also allows specifying file store location (LDAP or FILE), maximum file size, and file store path when applicable. These changes can be made in UIHandlers.XML.	VIDEO*
Binary Audio File	Plays the AUDIO attribute in the object details. When being edited, the handler allows for browsing the file. This handler also allows specifying file store location (LDAP or FILE), maximum file size, and file store path when applicable. These changes can be made in UIHandlers.XML.	AUDIO*

UI Handlers Associated by LDAP Directory Syntax

NOTE: An asterisk (*) indicates the default handler for the attribute.

Name	Description	Association by LDAP Directory Syntax
Expanding Textbox	Uses the Expanding Textbox control when possible. This control is available only on Internet Explorer 5.5 and later. When this browser is not available, eGuide uses the standard controls.	Directory String*

Name	Description	Association by LDAP Directory Syntax
True/False Selector	Displays a True/False selector. If attribute is not currently True or False, this handler creates an additional option that is the current value.	Boolean
Distinguished Name Selector	Displays Distinguished Names (DNs) abstractly using the Display-Attributes, defined in the UIHandlers.xml file. By default these attributes are GIVENNAME, INITIALS, and LASTNAME. When in edit mode, eGuide allows users to be specified using List Attributes, defined in the eGuide Administration Utility - Display Settings.	DN*
Single-Value Distinguished Name Selector	Displays and edits single-value Distinguished Names (DN) abstractly using the Display-Attributes defined in the UIHandlers.xml file. By default these attributes are GIVENNAME, INITIALS, and LASTNAME. When in edit mode, eGuide allows users to be specified using the List Attributes, defined in the eGuide Administration Utility - Display Settings.	DN
Multi-Value US Phone Number	Ensures that telephone numbers are entered in a specific format. By default this format is (012) 345-6789, but it can be changed in the UIHandlers.xml file.	Telephone Number
Single-Value US Phone Number	Ensures that a single-value telephone number is entered in a specific format. By default this format is (012) 345-6789, but can be changed in the UIHandlers.xml file.	Telephone Number*
Single-Value International Phone Number	Ensures that a single-value telephone number is entered in a specific format. By default this format is +0123456789 (optionally followed by additional digits), but it can be changed in the UIHandlers.xml file.	Telephone Number
Single-Value Australia Phone Number	Ensures that a single-value telephone number is entered in a specific format. By default this format is (01) 2345 6789, but it can be changed in the UIHandlers.xml file.	Telephone Number
True/False Selector (Edit Only)	Displays a True/False selector. If the attribute is not currently True or False, this handler creates an additional option that is the current value. The attribute is hidden unless in edit mode.	Boolean*
Textbox	Shows basic Display Format and Edit Format controls.	Directory String
Textbox (Single-Value)	In edit mode, allows only a single string to be entered.	Directory String
Binary File	Creates a link to launch a specified file from object details. This handler also allows specifying file store location (such as LDAP or FILE), maximum file size, and file store path when applicable. These changes can be made in UIHandlers.xml.	Octet String*
Generic Control	Available for all attributes regardless of syntax or attribute key name. It treats the attribute as a string and shows multivalue controls as appropriate.	All other syntaxes

Using a UI Handler

IMPORTANT: Before you can use a UI handler, you must have eGuide configured and running.

- 1 In the Administration utility, click LDAP Data Sources.
 For information about the Administration utility, see "Accessing the eGuide Administration Utility" on page 20.
- **2** Select Edit for the desired LDAP Data Source.
- **3** On the Attributes tab, find the attribute you want to modify, then click More Options.
- **4** Select the desired UI handler.
- **5** Select the UI handler, then click OK.

Changing Advanced Properties of an Existing UI Handler

To see or modify working examples of UI handler properties, explore the UIHandlers.xml file located in the \eGuide\WEB-INF\plugins\eGuide directory.

Although most UI handlers must be selected only from the Administration utility, the advanced properties section contains useful configuration settings.

These advanced settings are specific to each UI handler's Data handler. Data handlers are beyond the scope of this document, but you don't always need to understand Data handlers to use their features. The basic idea is that each UI handler has a corresponding Data handler. The Data handler knows how to store and retrieve information to the LDAP data source. The advanced properties section allows administrators to change some of the storing and retrieving behaviors.

For example, you might want to apply a different set of attributes to your LDAP DN display. These Abstracted attributes are stored on the object that the DN specifies (not on the object where the DN attribute is located); therefore, you must specify the attributes for which eGuide should do an additional read, in order to display the attributes.

Creating a New UI Handler

There are two basic steps to creating your own UI handler:

- "Step 1. Register the UI Handler Information" on page 60
- "Step 2. Define the Behavior of the UI Handler" on page 61

Step 1. Register the UI Handler Information

When you start the eGuide server, it searches the \plugins\eGuide directory for XML files. The files located in this directory define what UI handlers are available in the Administration utility. See "Accessing the eGuide Administration Utility" on page 20. Therefore, you can create or modify existing UI handlers by adding or editing the files in this directory. The file can have any name but must have the xml extension

You need to define the UI handler, an ID, a name, and a description. You also need to specify the association to the Template Key or attribute syntax. To do this, use the attribute-name or syntax-name tags.

You can also specify which clients can use this handler. By using the Administration utility you can easily tell if the handler is capable of running various devices. See "Accessing the eGuide Administration Utility" on page 20. You can also specify multi-valued-enabled, single-valued-enabled, read-write-enabled, and read-only-enabled.

You need to define the class name for the Data handler. Data handlers let you use Java classes to change the way the information is retrieved and stored. For example, you could query a separate database to retrieve some information. However, most of the time you specify the Default Data Handler as shown in the example below.

Use the following handler definition as sample data to create the User Type handler. These examples can be found in the Customuihandler.xml document located in the \eGuide\web-inf\plugins\eGuide folder. You only need to uncomment the lines and restart eGuide to make them work:

After you define the same information in the XML file, restart the eGuide server. At this point, you can select the custom UI handler. However, when viewing the handler in the client, a warning message for the associated attribute displays. You need to complete the next step ("Step 2. Define the Behavior of the UI Handler" on page 61) to complete the process.

Step 2. Define the Behavior of the UI Handler

You use HTML, JavaScript, CSS, and other browser languages to define the way your information is displayed and edited by using.

For this example, uncomment the following xsl from the UIHandlers.xsl file located in the eGuide\web-inf\templates\xsl\default\browser directory:

```
<option value="Contract"><xsl:if test="value = 'Contract'"><xsl:attribute</pre>
name="selected">true</xsl:attribute></xsl:if>Contract</option>
                   <option value="Full Time"><xsl:if test="value = 'Full Time'"><xsl:attribute</pre>
name="selected">true</xsl:attribute></xsl:if>Full Time</option>
                         <option value="Internship"><xsl:if test="value =</pre>
'Internship'"><xsl:attribute name="selected">true</xsl:attribute></xsl:if>Internship</option>
                   <option value="Part Time"><xsl:if test="value = 'Part Time'"><xsl:attribute</pre>
name="selected">true</xsl:attribute></xsl:if>Part Time</option>
                         <option value=""><xsl:if test="value = ''"><xsl:attribute</pre>
name="selected">true</xsl:attribute></xsl:if>(None)</option>
                    </select>
                </xsl:when>
            <xsl:otherwise>
                <xsl:call-template name="MSV_GenericTextShowTD"/>
            </xsl:otherwise>
        </xsl:choose>
    </xsl:when>
```

NOTE: In order for changes to occur in a currently running system, you must either restart the server or enable XML Debug from the Administration utility under the Reporting - Debug settings. You use XML Debug for two reasons: to disable caching of the templates, and to cause the XML output of eGuide to be written to the console screen as well as the log files. These debug features slow down the server.

You can now select the UI handler for the EMPLOYEETYPE attribute, or any attribute with the Template Key mapped to EMPLOYEETYPE.



eGuide Action Commands

This section describes the parameters that supply actions to the Novell® eGuide servlet. These commands can also be used by other applications to communicate with the eGuide servlet.

- "Viewing Action Commands" on page 63
- "Command Parameters and Examples" on page 63

Viewing Action Commands

- 1 In the Administration utility, click Debug.
 - For information about the Administration utility, see "Accessing the eGuide Administration Utility" on page 20.
- **2** On the Debug page, check the Debug check box.
- **3** In the eGuide log file or the application server console, look for the term *Key*:.

For every action, the values passed in from the URL or through a Post form are displayed with the Key: Name=value.

Command Parameters and Examples

- "No Action" on page 64
- "AuthForm" on page 64
- "AuthHeader" on page 65
- "AuthBody" on page 65
- "Detail.get" on page 65
- "DetailEdit" on page 66
- "DetailModify" on page 66
- "DetailUpdate" on page 66
- "eGuideForm" on page 67
- "eGuideHeader" on page 68
- "eGuide.verifyCredentials" on page 69
- "eGuide.verifyNewPassword" on page 69
- "eGuide.selectContext" on page 70
- "List.get" on page 70
- "List.get (Cached list)" on page 71

- "List.get (Advanced)" on page 72
- "Login" on page 73
- "OrgChart" on page 73
- "OrgChartUpdate" on page 74
- "PasswordModify" on page 76
- "PasswordUpdate" on page 76
- "PhotoModify" on page 77

No Action

When no action is submitted on the command line and in Anonymous mode, the eGuideForm action is initiated. If eGuide is in Forced Authentication mode, AuthForm is loaded.

Parameter

There are no parameters for this command.

Example

http://www.domainname.com/eGuide/servlet/eGuide

AuthForm

The default action when eGuide is in Forced Authenticated mode. It sets up the initial frames for the login pages and uses authform.xsl, which initiates the action to AuthHeader and AuthBody.

Parameters

Parameters	Description
Action=AuthForm	Action
User.context=rypxSbuoirAi	A blank User.context that creates a new session

Examples

Forced Authentication mode:

http://www.domainname.com/eGuide/servlet/eGuide

Only Forced Authentication Mode:

http://www.domainname.com/eGuide/servlet/eGuide?Action=AuthForm

NOTE: When creating a theme without frames, remove the links in authform.xsl that go to AuthHeader and AuthBody. Because the authentication process loads the authbody.xsl by default, authform.xsl and authbody.xsl need to contain the same information.

AuthHeader

Called after AuthForm to finish setting up the frames. The authheader.xsl file is loaded by default.

Parameters

Parameter	Description
Action=AuthHeader	Action
User.context=rypxSbuoirAi	A blank User.context that creates a new session

Example

Only Forced Authentication mode:

eGuide?Action=AuthHeader&User.context=rgyadiof

AuthBody

Called to set up the main authentication HTML page. It can be accessed when eGuide is in Anonymous mode by using the Login action. The authbody.xsl file is loaded by default.

Parameters

Parameter	Description
Action=AuthBody	Action
User.context=rypxSbuoirAi	A blank User.context that creates a new session

Examples

Only Forced Authentication mode:

eGuide?Action=AuthBody&User.context=rgyadiof

Anonymous mode:

eGuide?Action=Login&User.context=rgyadiof

Detail.get

Displays the details of the LDAP entry from a specified directory.

Parameter	Description
Action=Detail.get	Action
User.dn=cn=name,ou=name2,o=novell	Distinguished name of the entry

Parameter	Description
Directory.uid= <i>DirectoryName</i>	Ask your eGuide system administrator for this name
Object.uid=USER	The category in which the entry is defined

Optional Parameter	Description
User.context=	Session control
stsh=other	Specify a style sheet other than the default
	NOTE: For all actions that use the stsh parameter, do not include the file extension (.xsl). For example, if the stylesheet name is mysheet.xsl, make the parameter be stsh=mysheet.
RecurseDN=false	Read the DN and return info defined in the DN

eGuide?User.context=rytuUjkhhkAi&Action=Detail.get&User.dn=cn=userid,ou=org,o=Novell&Directory.uid=Extensive&Object.uid=USER'

DetailEdit

See "Detail.get" on page 65 and replace the action with the desired actions. The only difference is that the XML document has additional information for these actions.

DetailModify

See "Detail.get" on page 65 and replace the action with the desired actions. The only difference is that the XML document has additional information for these actions.

DetailUpdate

Updates the LDAP entry in the directory and returns the results.

NOTE: The attributes being modified are returned to eGuide with the Key Name of the Attribute and the value. The value is to be created in XML format and should be wrapped with the CDATA tag. If the key word nochange is found for the value, then the attribute is ignored and not updated.

Parameter	Description
Action=DetailUpdate	Action
User.dn=cn=name,ou=name2,o=novell	Distinguished name of the entry
Directory.uid= <i>DirectoryName</i>	Ask your eGuide system administrator for this name

Parameter	Description
Object.uid=USER	The category in which the entry is defined
AttributeKeyName= <undefined><value><!--[CDA TA[new value]]</value--></value></undefined>	N/A

Optional Parameter	Description
User.context=	Session control
stsh=other	Specify a style sheet other than the default style sheet
	NOTE: For all actions that use the stsh parameter, do not include the file extension (.xsl). For example, if the stylesheet name is mysheet.xsl, make the parameter be stsh=mysheet.
RecurseDN=false	Replaces the DN with user info. The default is True.

eGuideForm

The default action when in Anonymous mode or after the authentication process in Forced Authentication mode.

Parameter	Description
Action= eGuideForm	Action
User.context=rypxSbuoirAi	A blank User.context that creates a new session

Optional Parameter	Description
stsh=otherform	Used to specify style sheet other than the default style sheet
	NOTE: For all actions that use the stsh parameter, do not include the file extension. For example, if the stylesheet name is mysheet.xsl, make the parameter be stsh=mysheet.

Anonymous mode:

eGuide

or

eGuide? Action = eGuide Form & User.context = rgyadiof & stsh = other form

eGuideHeader

Called from the eguideform.xsl file and sets up the eGuide search categories and attributes.

Parameters

Parameter	Description
Action=eGuideHeader	Action
User.context=rypxSbuoirAi	A blank User.context that creates a new session
Search.rows=1	The number of Search rows to display by default

Optional Parameter	Description
stsh=otherform	Used to specify a style sheet other than the default style sheet
	NOTE: For all actions that use the stsh parameter, do not include the file extension. For example, if the stylesheet name is mysheet.xsl, make the parameter be stsh=mysheet.

Example

eGuide

or

 $\verb"eGuide?Action=eGuideForm\&User.context=rgyadiof\&stsh=otherform"$

eGuide.verifyCredentials

Used in the authentication process to make an authenticated connection to the directory and verify the user's credentials.

Parameters

Parameter	Description
Action=eGuide.verifyCredentials	Action
User.context=rypxSbuoirAi	A blank User.context that creates a new session
Value1=	The user's DN to authenticate
Value2=	The password

Optional Parameter	Description
RememberUserInfo=True	When True, stores credentials as a cookie in the browser

Example

eGuide?eGuide.verifyCredentials&User.context=rypxSbuoirAi&DN=cn=Admin,o=novell

eGuide.verifyNewPassword

Used when the password needs to be reset.

Parameters

Parameter	Description
Action=eGuide.verifyNewPassword	Action
User.context=rypxSbuoirAi	A blank User.context that creates a new session
OldPassword=	The old password
Value1=	The password
Value2=	The password

Example

eGuide?Action=eGuide.verifyNewPassword&User.context=rypxSbuoirAi&OldPassword=old &Value1=new psswrd&Value2=new psswrd

eGuide.selectContext

Used in the authentication process when multiple users are found with the same login ID.

Parameters

Parameter	Description
Action=eGuide.selectContext	Action
User.context=rypxSbuoirAi	A blank User.context that creates a new session
DN=cn=name,o=container	The selected DN to authenticate

Example

eGuide?eGuide.selectContext&User.context=rypxSbuoirAi&DN=cn=Admin,o=novell

List.get

A search request with a specified filter. The result set is a list. The search filter is searched against any or all directories configured in the eGuide Administration Utility. Use the max key to cache list results larger than the value set, then see the next List.get action for cached lists.

Parameter	Description
Action=list.get	Action
val1=value	Value searching for
attr1=attribute	Attribute key name
crit1=sw	The criteria used to evaluate the value
Object.uid=USER	The search category
Search.attributes=attr1,attr2,attr3,	The attributes returned from a search

Optional Parameter	Description
User.context=rypxSbuoirAi	A blank User.context that creates a new session
Primary.sortkey=attr1	The first attribute used to determine the sort order of the list
Secondary.sortkey=attr2	The second attribute used to determine the list's sort order
max=20	The number to display on the browser at any one time; this speeds up the request to the end user

Optional Parameter	Description
stsh=otherform	Specifies a style sheet other than the default
	NOTE: For all actions that use the stsh parameter, do not include the file extension. For example, if the stylesheet name is mysheet.xsl, make the parameter be stsh=mysheet.

```
<form action="eGuide?&Action=List.get&Object.uid=USER&User.context=" method="post" >
<input name="Search.attributes" type="hidden" value="GIVENNAME, LASTNAME, DEPARTMENT">
 <input name="Primary.sortkey" type="hidden" value="LASTNAME">
 <input name="Secondary.sortkey" type="hidden" value="GIVENNAME">
<select name="crit1">
 <option value="co">contains</option>
 <option value="eq">equals</option>
 <option selected="true" value="sw">starts with</option>
</select>
<select name="attr1">
 <option value="GIVENNAME">First Name</option>
 <option selected="true" value="LASTNAME">Last Name</option>
</select>
<input size="20" type="text" name="val1">
<input type="Submit">
</form>
```

List.get (Cached list)

When using max and start parameters, this action retrieves information from a previously cached list. The end user sees a significant increase in performance by using a cached list. The original list get request must use the max parameter to cache the results in the user's session. Then the start value tells eGuide where to start in the cached list. Use the prev and next values in the XML file to determine what value to start with.

Parameter	Description
Action=list.get	Action
start=100	The next starting point on the list
max=20	The number to display on the browser at any one time; this speeds up the request to the end user

Optional Parameter	Description
stsh=otherform	Specifies a style sheet other than the default
	NOTE: For all actions that use the stsh parameter, do not include the file extension. For example, if the stylesheet name is mysheet.xsl, make the parameter be stsh=mysheet.
User.context=rypxSbuoirAi	A blank User.context that creates a new session

eGuide?Action=list.get&max=20&start=20&User.context=rypxSbuoirAi

List.get (Advanced)

A search request with a specified filter, and the resultant set is a list. The difference between the list and advanced list action is that there can be any number of values and attributes sent in the query to define the search filter. For any number of values (parameter val1,val2,val3...) submitted there must be the same number of attributes (attr1,attr2,attr3...) and supporting criteria (crit1,crit2,crit3...) submitted. Each set of attributes, criteria, and values (attr1,crit1,val1), (attr2,crit2,val2) must be separated by a Boolean value (aoval1).

Parameter	Description
Action=list.get	Action
val1=valu1&val2=val2&val3=value3	N/A
attr1=attribute&attr2=attribute&attr3=a ttribute3	N/A
crit1=sw&crit2=cq&crit3=sw	N/A
Object.uid=USER	The search category
Search.attributes=attr1,attr2,attr3,	The attributes returned from the search

Optional Parameter	Description
User.context=rypxSbuoirAi	A blank User.context that creates a new session
Primary.sortkey=attr1	The first attribute used to determine the sort order of the list
Secondary.sortkey=attr2	The second attribute used to determine the sort order of the list
aoval1=and	For advanced searches when defining more than one value to search on

Optional Parameter	Description
max=20	Specifies the number to display on the browser at any one time; this speeds up the request to the end user
stsh=otherform	Specifies a style sheet other than the default
	NOTE: For all actions that use the stsh parameter, do not include the file extension. For example, if the stylesheet name is mysheet.xsl, make the parameter be stsh=mysheet.

Login

Usually called to authenticate when eGuide is in Anonymous mode. It starts the authentication process and the authbody.xsl style sheet is loaded.

Parameters

Parameter	Description
Action=Login	Action

Optional Parameter	Description
User.context=rypxSbuoirAi	A blank User.context that creates a new session

Example

eGuide?Action=Login&User.context=rypxSbuoirAi

OrgChart

A combination of the List and Details actions. It retrieves the manager information from a specified directory but the subordinates can be retrieved from multiple directories.

Parameter	Description
Action=Org.Chart	Action
Directory.uid= <i>DirectoryName</i>	N/A
Manager.dn=cn=userid,o=org,o=novell	N/A
attr1=Manager	N/A
crit1=eq	N/A
val1=cn=userid,o=org,o=novell	N/A
Search.attributes=GIVENNAME,LASTNAME,ORGCHARTPARENTDN,ORGCHARTISPARENT	N/A

Parameter	Description
Object.uid=USER	N/A
User.dn=cn=userid,ou=org,o=novell	N/A

Optional Parameter	Description
User.context=rypxSbuoirAi	A blank User.context that creates a new session
stsh=other	Specifies a style sheet other than the default
	NOTE: For all actions that use the stsh parameter, do not include the file extension. For example, if the stylesheet name is mysheet.xsl, make the parameter be stsh=mysheet.
RecurseDN=false	Returns User info. The default is true.

eGuide?User.context=rytuUjkhhkAi&Action=Org.Chart&Directory.uid=Extensive&U ser.dn=cn=nbjensen,ou=eGuide,ou=Demo,o=Novell&Object.uid=USER&Search.attrib utes=GIVENNAME,INITIALS,LASTNAME,EMAIL,TITLE,ORGCHARTPARENTDN,ORGCHARTISPAR ENT,&attr1=MANAGER&crit1=eq&Manager.dn=cn=Bgarrett,ou=eGuide,ou=Demo,o=Nove ll&val1=cn=Bgarrett,ou=eGuide,ou=Demo,o=Novell

OrgChartUpdate

Used to update the attribute mapped to the key ORGCHARTPARENT.

Parameter	Description
Action=Org.Chart	Action
Directory.uid=DirectoryName	N/A
Manager.dn=cn=userid,o=org,o=novell	N/A
attr1=Manager	N/A
crit1=eq	N/A
val1=cn=userid,o=org,o=novell	N/A
Search.attributes=GIVENNAME,LASTNAME,ORGCHARTPARENTDN,ORGCHARTISPARENT	N/A
Object.uid=USER	N/A
TargetDN=cn=userid,ou=org,o=novell	User modifying
AttrTargetValue=cn=admin,o=novell	The value we want to change

Parameter	Description
AttrTargetName=ORGCHARTPARENTDN	The attribute key name to update

Optional Parameter	Description
User.context=rypxSbuoirAi	A blank User.context that creates a new session
stsh=other	Specifies a style sheet other than the default
	NOTE: For all actions that use the stsh parameter, do not include the file extension. For example, if the stylesheet name is mysheet.xsl, make the parameter be stsh=mysheet.
RecurseDN=false	Returns User info. The default is true

See "OrgChart" on page 73, but add TargetDN, AttrTargetValue, and AttrTargetName as parameters.

PasswordModify

Sets up the page view to modify the password. The end user receives a view based on his or her role. A user administrator (set up in the eGuide Administration utility. See "Accessing the eGuide Administration Utility" on page 20.) or a user with the role to modify other's passwords is given two input fields. A normal end user is given three.

Parameters

Parameter	Description
Action=PasswordModify	Action
User.dn=cn=name,ou=name2,o=novell	Distinguished name of the entry
Directory.uid= <i>DirectoryName</i>	Ask your eGuide system administrator for this name
Object.uid=USER	The category in which the entry is defined

Optional Parameter	Description
User.context=rypxSbuoirAi	A blank User.context that creates a new session

PasswordUpdate

Sets up the page view to update the password.

Parameter	Description
Action=PasswordUpdate	Action
User.dn=cn=name,ou=name2,o=novell	Distinguished name of the entry
Directory.uid=DirectoryName	Ask your eGuide system administrator for this name
Object.uid=USER	The category in which the entry is defined
Value1=	The new password
Value2=	The new password
OldPassword=	The old password

Optional Parameter	Description
User.context=rypxSbuoirAi	A blank User.context that creates a new session

PhotoModify

Creates the page view that lets the end user add or remove a photo and accept a photo agreement.

Parameters

Parameter	Description
Action=PhotoModify	Action
User.dn=cn=name,ou=name2,o=novel	Distinguished Name of the entry
Directory.uid=DirectroyName	Ask your eGuide system administrator for this name
Object.uid=USER	The category in which the entry is defined

Optional Parameter	Description
User.context=	Session control
RecurseDN=false	Returns User info. The default is True.

NOTE: The User.context keeps track of the current user's session. When making an initial request, the User.context can be omitted, but any pages to follow must contain the User.context parameter.



Documentation Updates

This section contains information on documentation content updates that have been made in the eGuide Administration Guide for Policy and Distribution Services since the initial release of eGuide. The information in this section keeps you current on updates to the documentation.

The information is grouped according to the date the documentation updates were published. Within a dated section the updates are alphabetically listed by the names of the main table of contents sections for Policy and Distribution Services.

The documentation is provided on the Web in two formats: HTML and PDF. The HTML and PDF documentation are both kept current with the documentation updates listed in this section.

If you need to know whether the copy of the PDF documentation you are using is the most recent, the PDF document contains the date it was published in the Legal Notices section immediately following the title page.

This document was updated on the following dates:

April 14, 2005 (2.1.2)

Location	Update
Using eGuide in a Clustered Environment	New section that explains how to set up eGuide to run in a clustering environment.

79