Novell NetWare® 6

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USER ACCESS LICENSING FOR NETWARE

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

www.novell.com

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Overview

Novell® Licensing Services (NLS) supports a User Access License (UAL) model. User objects gain access to network services by connecting to the network instead of to servers. These User objects receive a permanent license unit that lets them to access network services at any time and from any workstation attached to the network.

This documentation

- Provides information on the NetWare 6 User Access Licensing model.
- Assumes that you understand eDirectory™ and NLS.

  To review basics on eDirectory, see the*Novell eDirectory 8.6 Administration Guide*.

  To review information on the licensing service concepts and how NLS works, see Understanding Novell Licensing Services in *NLS Administration.* Other chapters in *NLS Administration* explain how to install NLS, how to manage license units, and how to troubleshoot the licensing service.

For information on terms and concepts that relate to the User Access Licensing model, see Chapter 1, “Overview of the User Access Model,” on page 9.

For information on installing User Access Licensing certificates, see Chapter 2, “Setting Up,” on page 13.

Documentation Conventions

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

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1 Overview of the User Access Model

NetWare® 6 includes Novell® Licensing Services (NLS), which supports a User Access License model. In a User Access License model, User objects gain access to network services by connecting to the network instead of to servers. These User objects receive a permanent license unit that lets them access network services at any time and from any workstation attached to the network. This chapter describes how a policy manager works with NetWare 6 in the User Access License model.

User Access Licensing Model Concepts

The following concepts and terms describe how NLS supports the User Access License (UAL) model.

- **Search for a license unit—**A function that the License Service Provider (LSP) performs when an NLS client requests a license unit

  When an NLS client requests a license unit in the User Access Licensing model, the license service provider first searches the *User object's* context for an available license unit. If the license service provider doesn't find a license unit, it searches up the eDirectory™ tree for one.

  Licensed User object— A User object that has successfully logged in to the network and obtained a license

- **Unlicensed User object—**A User object that does not have a license unit

  Scenario: You install licenses for 100 users. The company hires 10 more employees, and you create network accounts for them. Even though 110 user accounts exist, only the first 100 users that log in, can gain access to the network until 10 more licenses are added to accommodate the 10 unlicensed users.

- **Hard stop—**A feature that prevents a user from accessing an application or service when there are no more licenses available

  Scenario: You install licenses for 25 users. All 25 license units are in use when the 26th user attempts to log in. Because no license units are available, the user will not be granted network access.

  Solution: To allow the 26th user to log in to the network, you must install additional licenses or release a license that is currently in use. Releasing a license that is in use revokes network access for the User object that had the license, the next time the user attempts to log in.

Understanding User Access Licensing

In previous licensing implementations, users were granted access to network services on a server basis. This meant users consumed a license on each server to that they logged in to.This is known as the Server Connection License model.

In NetWare 6, the User Access Model grants users access to the network, allowing them access to all network services that they have rights to. This means a user obtains only one license regardless of the number of servers he logs in to.

Within the Server Connection model (SCL), you purchased licenses for the total concurrent users on each NetWare server. With the User Access Licensing model, you purchase licenses for the total number of User objects that will login to the network. When a User object logs in to the network, it obtains a license unit. That license unit is reserved for that user. If the user does not log in for more than 90 days, then the license is automatically released and made available to the next user that needs it.

Since managing the network usage is now a network administrator's priority, Novell has released a new NetWare Usage tool that lets you see a statistic of the total number of licenses consumed and generate a report of users' last network access. See "Using the NetWare Usage Tool" on page 14 for more information.

In the User Access Model, non-User objects like printers and ZENworks™ do not consume user licenses.

User Access Licensing Coexisting with Server Connection Licensing

User Access Licensing can coexist on a network that is using Server Connection licenses. Depending on the resources being accessed, a user might consume a User Access License and a Server Connection License simultaneously.

For example, a company has 3 NetWare 5.1 servers, each with a 10 user license. The company has 30 network users. The company upgrades one of the 10 servers to NetWare 6. When a user logs in to the network, he will consume one User Access License Unit which will let him log in to any number of NetWare 6 servers. For each NetWare 5 server he logs in to he will also obtain a NetWare 5.1 Server Connection License unit, the same as he always has.

License Types

The User Access License model allows for the following two license types:

License Agreement Licenses

Large companies that require many user licenses sign a License Agreement (for example MLA, CLA, and etc.) with Novell. The License agreement stipulates the number of license units that can be consumed before additional licenses need to be purchased. To assist companies in complying with their license agreements, a NetWare Usage tool is provided. See “Using the NetWare Usage Tool” on page 14 for more information.

Retail Licenses

Companies that purchase a copy of NetWare through the Novell distribution channel receive a licensing diskette with the product. If a you need more licenses, you can purchase additional licenses.

Comparing Licensing Models

The following table shows the differences between the Server Connection Licensing Model and the User Access Licensing model.

Feature	User Access Licensing Model	Server Connection Licensing Model
License packaging	Server and user license certificates available together or separately.	Server and user license contained in same license envelope.
Search	Search starts at the user's context and goes up the tree.	Search starts at the server's context and goes up the tree.
Context of licenses	Install license certificates relative to users' contexts.	Install license certificates relative to servers' context.
License released when user logs out	No.	Yes.
Connection-oriented objects (like Printer and ZENworks objects) consume a user or connection license	No.	Yes, until the current Support Pack is installed. To download a Support Pack, see Novell Support Connection (http://support.novell.com).

2 Setting Up

When you install a NetWare® 6 server, the installation program automatically installs Novell® Licensing Services (NLS) on that server. During the installation you can install license certificates.

If you install Novell Cluster Services™, you are licensed to create a two node cluster. You can purchase licenses for additional nodes.

Guidelines for Installing License Certificates

Use the following guidelines below when installing your license certificates in the eDirectory™ tree:

- Place user license certificates in or above the *users'* eDirectory context. In the User Access Licensing model, NLS searches for a license certificate starting at the user's context.
- Place server licenses in the server's eDirectory context.
- Smaller companies can place license certificates at the topmost Organization container. Companies with more complex eDirectory trees should place license certificates lower in the tree, closer to the Organizational Unit that contains the User objects.
- If you want users in two different contexts to use the same license certificate, the certificate must be placed in a common container above the users' contexts.

  Scenario: A company has 10 users split across three organizational units: Accounting, Research, and Purchasing. In order for the 10 users to access the licenses, the licenses should be placed high enough in the tree for NLS to find it, typically in a container common to all of the organizational units or distributed through the three organizational units.

- Except for licenses provided to large companies with License Agreement contracts with Novell, a license cannot be installed in more than one container.
- If you have a remote site and a WAN link, place a license certificate in the remote site's context.

Using the NetWare Usage Tool

The NetWare Usage tool generates a statistic or a report of the number of users that logged in to the network over a specified period of time. If you are managing license agreement contracts, you will find this tool helpful as you prepare for audits.

To access NetWare Usage information, do the following:

1. Log in to NetWare Remote Manager.

   See the *NetWare Remote Manager Administration Guide* for more information.

2. Under NetWare Usage, click Usage Information and follow the on-screen steps.

   To set configuration options, see "Setting Configuration Options" on page 15.

Understanding How NetWare Usage Information is Gathered

Each server gathers information regarding authentications and saves the information in a database. A server is then assigned to be the collection server and the authentication information is passed to this server. The collection server gathers this information and displays it when the NetWare Usage tool is executed. You can specify the collection server. See "Setting Configuration Options" on page 15 for more information.

The NetWare Usage tool uses NWUSAGE.NLM and NLSLRUP.NLM to gather the usage information. Other NLM™ programs that support these modules include CONNAUD.NLM, NLSMETER.NLM, and NLSADAPT.NLM.

NLSLRUP.NLM gathers information in its database only for NetWare 6 servers running in the same tree. Information is not available from NetWare 5 or NetWare 4 servers.

Setting Configuration Options

The Configuration page lets you determine how NetWare Usage is used on your network.

1. Log in to NetWare Remote Manager.

   See the *NetWare Remote Manager Administration Guide* for more information.

2. Under NetWare Usage, click Configuration.

3. Modify the settings and then click Update.

   Collector Server: By default, the first server that you retrieve statistics from using the NetWare Usage option of NetWare Remote Manager, becomes the collector server.

   Servers Push Usage Information up to the Collector: Lets you specify how often servers push the information in their databases to the collector server.

   Servers Enroll with the Collector: Lets you specify how often servers advertise themselves to the collector server that they are available to participate in usage information collection and forwarding.

   Servers Communicate on IP Ports: Lets you specify the IP port to communicate on.

   Default Date Range for Reports is: Lets you set the time period to be used when generating NetWare Usage reports.

HINT: These parameters can also be set at the server console. Use the command **NLSLRUP HELP** to display the commands for setting the configuration options at the server console.