

# Novell Identity Manager Fan-Out Driver

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NETWARE® INTERCEPT AND API  
ADMINISTRATION GUIDE



Novell®

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The authors of this software are Glenn Fowler, David Korn and Kiem-Phong Vo.

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Novell, Inc.  
404 Wyman Street, Suite 500  
Waltham, MA 02451  
U.S.A.  
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# About This Guide

This guide provides you with the information you need to install, configure, administer, and troubleshoot Novell® Identity Manager Fan-Out driver Platform Services on NetWare® platforms. This guide assumes that you have knowledge of eDirectory™ and NetWare, and that you are familiar with the concepts and facilities of the driver. It is also assumed that you have reviewed the *Platform Services Planning Guide and Reference* and have completed the planning phase described therein.

This guide contains the following sections:

- ♦ Chapter 1, “Installing Platform Services,” on page 9
- ♦ Chapter 2, “Configuring and Administering Platform Services,” on page 13
- ♦ Chapter 3, “Troubleshooting Platform Services,” on page 15

## Additional Documentation

The following publications contain information about the Identity Manager Fan-Out driver. These publications are available at the [Identity Manager Driver Web site \(http://www.novell.com/documentation/dirxmldrivers\)](http://www.novell.com/documentation/dirxmldrivers).

*Concepts and Facilities Guide*

*Core Driver Administration Guide*

*Platform Services Planning Guide and Reference*

*Platform Services Administration Guide for Linux and UNIX*

*Platform Services Administration Guide for MVS*

*Platform Services Administration Guide for OS/400*

*NetWare Intercept and API Administration Guide*

*API Developer Guide*

*Messages Reference*

*Core Driver Quick Start Guide for Linux and Solaris*

*Core Driver Quick Start Guide for NetWare*

*Core Driver Quick Start Guide for Windows*

*Platform Services Quick Start Guide for AIX*

*Platform Services Quick Start Guide for FreeBSD, HP-UX, Linux, and Solaris*

*Platform Services Quick Start Guide for MVS CA-ACF2*

*Platform Services Quick Start Guide for MVS CA-Top Secret*

*Platform Services Quick Start Guide for MVS RACF*

*Platform Services Quick Start Guide for OS/400*

*NetWare Intercept and API Quick Start Guide*

Documentation for related products, such as Identity Manager and eDirectory, is available at the [Novell Documentation Web site \(http://www.novell.com/documentation\)](http://www.novell.com/documentation).

## Documentation Updates

For the most recent versions of -Identity Manager Fan-Out driver documentation, see the [Identity Manager Driver Web site \(http://www.novell.com/documentation/dirxmldrivers\)](http://www.novell.com/documentation/dirxmldrivers).

## **Documentation Conventions**

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

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 UNIX\*, should use forward slashes as required by your software.

## **User Comments**

We want to hear your comments and suggestions about this manual and the other documentation included with the driver. To contact us, send e-mail to [namdoc@novell.com](mailto:namdoc@novell.com).



# Installing Platform Services

# 1

The Novell® Identity Manager Fan-Out driver must be informed of changes made to passwords in order to support password replication. The NetWare® Password Intercept captures password information from changes made by applications using the eDirectory™ application programming interface (API) on NetWare servers. If you do not use Universal Password, you must install and run the NetWare Password Intercept on all NetWare servers that run NDK applications to change passwords.

You can install the AS Client API on a NetWare server and write your own programs to use it. For details about using the AS Client API, see the *API Developer Guide*.

The installation and setup of Platform Services includes tasks performed on the platform, and core driver administration tasks. This section describes the installation tasks that are performed on the platform system. For details about platform configuration and administration tasks, see [Chapter 2, “Configuring and Administering Platform Services,” on page 13](#).

The core driver tasks include defining Platform Sets and Platform objects. These tasks must be completed before you can use Platform Services. For more information about these tasks, see the *Core Driver Administration Guide*.

After the planning process has been completed, installation of Platform Services for NetWare by experienced system programmers familiar with the local environment and the Identity Manager Fan-Out driver should take about half an hour.

Topics in this section are

- ♦ [Section 1.1, “About Platform Services for NetWare,” on page 9](#)
  - ♦ [“The Platform Services Process” on page 10](#)
  - ♦ [“The System Intercept” on page 10](#)
- ♦ [Section 1.2, “Platform Services Installation Procedure,” on page 10](#)

## 1.1 About Platform Services for NetWare

Platform Services for NetWare consists of two major components.

- ♦ **Platform Services Process:** The Platform Services Process receives requests from other processes and manages communications with one or more core drivers for Authentication Services.
- ♦ **System Intercept:** The System Intercept provides password change information to the core driver.

Platform Services also provides an application programming interface (API) that you can use for your own applications. For information about using the API, see the *API Developer Guide*.

There is no Platform Services Identity Provisioning component for NetWare. You can use the Nsure Identity Manager Driver for eDirectory to synchronize objects and attributes between eDirectory trees.

### 1.1.1 The Platform Services Process

The Platform Services Process provides a high-performance interface for the System Intercept and the AS Client API to one or more core drivers for Authentication Services.

If you do not plan to use the AS Client API heavily, you might prefer to use the `DIRECTTOAUTHENTICATION` statement in your platform configuration file and not run the Platform Services Process. For details about the platform configuration file, see the *Platform Services Planning Guide and Reference*.

The NetWare Platform Services Process performs the following tasks:

- ♦ Handles password check and change requests
- ♦ Communicates with core drivers for Authentication Services
- ♦ Redirects requests to other core drivers if a core driver is unreachable or returns an unexpected error
- ♦ Gathers and logs performance statistics

The Platform Services Process communicates with core drivers using Secure Sockets Layer (SSL).

Start the Platform Services Process during system startup and stop it during system shutdown.

The Platform Services Process reads its configuration information from the platform configuration file, `sys:asam\data\asamplat.conf`. For details about the platform configuration file, see the *Platform Services Planning Guide and Reference*.

The NetWare Platform Services Process logs messages to the NetWare console.

### 1.1.2 The System Intercept

The NetWare Password Intercept captures password changes made by NDK applications on NetWare servers.

If you do not use Universal Password, you must install and run the NetWare Password Intercept on all NetWare servers that run NDK applications to change passwords.

The NetWare Password Intercept can access core drivers directly by the use of the `DIRECTTOAUTHENTICATION` statement in the platform configuration file, or it can use the Platform Services Process. When used with the `DIRECTTOAUTHENTICATION` statement, the intercept uses server-side certificate SSL. No platform certificate is required with server-side certificate SSL. For details about the platform configuration file, see the *Platform Services Planning Guide and Reference*.

## 1.2 Platform Services Installation Procedure

You can install one or both of the following:

- ♦ The NetWare Password Intercept
- ♦ The AS Client API

If your needs warrant it, install and run the Platform Services Process to provide a high-performance interface to the core drivers for the intercept and API. Otherwise, use the `DIRECTTOAUTHENTICATION` statement in the platform configuration file.

For detailed step-by-step instructions for installing Platform Services, see the *NetWare Intercept and API Quick Start Guide*.



# Configuring and Administering Platform Services

# 2

The topics in this section provide information about managing Novell® Identity Manager Fan-Out driver Platform Services.

- ♦ [Section 2.1, “Platform Certificate Management,” on page 13](#)
- ♦ [Section 2.2, “Managing the Platform Services Process for NetWare,” on page 13](#)

## 2.1 Platform Certificate Management

Connections between Platform Services and core drivers use Secure Sockets Layer (SSL). SSL connections are authenticated through the use of certificates.

The certificates used by the Identity Manager Fan-Out driver are minted by the Certificate Services component of the core driver. When you install and configure Platform Services, you obtain a certificate.

To obtain a new certificate, run the Platform Services Process with the -s command line parameter.

Platform certificates are stored in the `asam\data\platformservices\certs` directory. Ensure that access to the `certs` directory is limited to the appropriate users.

When used with the `DIRECTTOAUTHENTICATION` statement, the intercept uses server-side certificate SSL. No platform certificate is required for server-side certificate SSL.

## 2.2 Managing the Platform Services Process for NetWare

The Platform Services Process provides the interface to core drivers for the AS Client API and the NetWare® Password Intercept. It establishes and maintains connections to core drivers and provides load balancing and failover among them.

### 2.2.1 Starting and Stopping the Platform Services Process

Start the Platform Service Process upon system startup and stop the Platform Services Process during system shutdown.

To start the Platform Services Process, enter

```
load sys:asam\bin\platformservices\platformservicesprocess\asampsp.nlm
```

To stop the Platform Services Process, enter

```
unload asampsp
```

## 2.2.2 Platform Services Process Command Line Parameters

Option	Argument	Explanation
-a	Configuration File Path	Specifies the platform configuration file to use.  If you do not specify this option, the default is sys:asam\data\asamplat.conf.
-s	None	Obtain a security certificate for the Platform and end.  This is needed only during the initial configuration process.

## 2.2.3 Maintaining Files Used by the Platform Services Process

### The Platform Configuration File

The Platform Services Process reads the platform configuration file to locate core drivers and to obtain other configuration information. For information about the platform configuration file, see the *Platform Services Planning Guide and Reference*.

The default NetWare platform configuration file is sys:asam\data\asamplat.conf.

### Log Files

The NetWare Platform Services Process writes its log messages to the NetWare console. Log messages are documented in the *Messages Reference*.

# Troubleshooting Platform Services

# 3

Novell® Identity Manager Fan-Out driver components record messages to their Audit Log, Operational Log, and their host system log. Examining these should be foremost in your troubleshooting efforts.

The Audit and Operational logs of core driver components are maintained in their logs directory.

The NetWare® Platform Services Process writes log messages to the NetWare console.

By its very nature, the Identity Manager Fan-Out driver is highly dependent upon the proper operation of your network and eDirectory™. If you are having problems with the driver, ensure that the various driver components are able to communicate with one another and that eDirectory is functioning properly.

For information pertaining to Identity Manager Fan-Out driver performance issues, see Planning in the *Core Driver Administration Guide*.

---

**IMPORTANT:** Make sure you upgrade the driver, including all of your platforms, when new versions or support packs become available.

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## 3.1 Obtaining Debugging Output

Identity Manager Fan-Out driver components support the option to produce extensive debugging output. Although this output is intended primarily for use by Novell Technical Support, you might find it useful for your own troubleshooting efforts.

Because debugging mode adversely affects performance, it should not be used for routine operations.

To obtain debugging information for the NetWare Platform Services Process:

- 1 Add a `DEBUGLOGFILE` statement or `DEBUGTOSTDOUT` statement to the platform configuration file.

For details about the platform configuration file, see the *Platform Services Planning Guide and Reference*.

- 2 Specify the debugging command line parameter when you start the Platform Services Process.

To obtain full debugging output, specify `-d *` on the command line.

To obtain debugging output limited to messages exchanged with core drivers, specify the `-d dom` parameter.

## 3.2 Troubleshooting Authentication Services

If a user cannot authenticate through the driver but can log in through eDirectory, ensure that the user is present in the Census and is not marked as being inactive. If the user is not present and active in the Census, review your Census Search object specifications.

Ensure that the user name and password conform to the character set and length restrictions imposed by the platform operating system.

### 3.3 Troubleshooting Network Issues

Although the details of network troubleshooting are beyond the scope of this document and depend on a number of factors particular to your environment, the purpose of this section is to determine if the various Identity Manager Fan-Out driver components can communicate with one another.

To verify IP connections between driver platforms and core drivers using the ping command:

- 1 From a command prompt on MVS\*, OS/400\*, UNIX, or Windows\*, enter `ping ipaddr` , where *ipaddr* is the IP address of the remote computer.
- 2 From a NetWare console, enter `LOAD TPING ipaddr` , where *ipaddr* is the IP address of the remote computer.

If your installation uses router filters to prevent the use of ping, consult with those responsible for managing your network for information on how to verify connectivity.

You can use other NetWare utilities, such as MONITOR, CONFIG, INETCFG, and TCPCON to examine and change other aspects of server status that pertain to networking. Refer to your NetWare documentation for further details. The *Utilities Reference*, *Basic Protocol Configuration Guide*, and *Advanced Protocol Configuration and Management Guide* provide detailed information on using these and other NetWare utilities.