

# **NIS/LDAP Gateway Release Notes**

**Version 1.0**

**HP 9000 Networking**



**Manufacturing Part Number: J4269-90002**

**E0999**

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## Printing History

The manual printing date and part number indicate its current edition. The printing date will change when a new edition is printed. Minor changes may be made at reprint without changing the printing date. The manual part number will change when extensive changes are made.

Manual updates may be issued between editions to correct errors or document product changes. To ensure that you receive the updated or new editions, you should subscribe to the appropriate product support service. See your HP sales representative for details.

First Edition: September 1999 (HP-UX Release 10.20)

**Table 1**

### Product Numbers

Description	Number
LDAP-UX Integration (NIS/LDAP Gateway server B.01.00 and LDAP-UX Client Administration Tools B.01.00)	J4269AA

## Related Documentation

For additional information, see the following:

- *Installing and Administering NIS/LDAP Gateway* (J4269-90001) available at <http://docs.hp.com/hpux/internet>.
- NIS/LDAP Gateway README file available after you install the product at `/opt/ldapux/README-ypldapd`.
- Client Administration Tools README file available after you install the product at `/opt/ldapux/README-client`.
- *Installing and Administering NFS Services* discusses NIS available at <http://docs.hp.com/hpux/communications>.
- *Netscape Directory Server for HP-UX Administrator's Guide* and other titles available at <http://docs.hp.com/hpux/internet>.
- Manual pages using the `man(1)` command `ypldapd(8)`, `ypserv(1M)`, `ypfiles(4)` and other related NIS man pages.



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# NIS/LDAP Gateway HP-UX Release Notes

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## What's In this Version?

This product consists of two sub-products:

- NIS/LDAP Gateway
- NIS/LDAP Client Administration Tools

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### NOTE

The NIS/LDAP Gateway does not include an LDAP directory server. You can obtain the single-server Netscape Directory Server 4.x for HP-UX - Lite Edition from <http://www.software.hp.com>, or the fully functioning directory server from your local HP sales office. These directories currently only run on HP-UX 11.0. Other directories that support LDAP can also be used with this product.

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## NIS/LDAP Gateway Overview

The NIS/LDAP Gateway helps HP-UX servers and workstations more closely integrate with an LDAP directory. Specifically this product allows an NIS client to use an LDAP directory as its repository for NIS maps. This product provides an NIS to LDAP Gateway which converts NIS rpc requests into LDAP operations.

The main component of the NIS/LDAP Gateway is `ypldapd`, a replacement for `ypserv`, the NIS server. This product caches the NIS data to maintain good performance. This product is compatible with the RFC2307 specification (a schema for storing posix account and administration data in an LDAP directory.)

Because the NIS/LDAP Gateway product emulates a `ypserv`, your NIS clients can start using an LDAP directory without modification. However, with this product you can not modify your LDAP account information from an NIS client (that is, you cannot use `chfn(1)`, `chsh(1)` or `passwd(1)` to change your account information.) To achieve this, install the NIS/LDAP Client sub-product on some or all of your NIS clients.

## **NIS/LDAP Client Administration Tools Overview**

The NIS/LDAP Client Administration Tools help HP-UX servers and workstations more closely integrate with an LDAP directory. Specifically this product allows NIS clients using the NIS/LDAP Gateway to do minimal LDAP directory administration, such as changing a user's password in the LDAP directory. Because NIS clients cannot directly modify an LDAP directory, this product provides tools that allow basic data management in the LDAP directory. This product contains:

- Migration scripts that convert NIS maps or corresponding /etc files into LDIF files that can be imported into an LDAP directory.
- Basic LDAP administration tools, ldapmodify, ldapsearch, ldapdelete and ldappasswd.
- Entry management tools which allow users to create or modify directory entries. These tools are currently not supported.

Because the NIS/LDAP Gateway product emulates an NIS server, your NIS clients can start using an LDAP directory without installing this product. However you may want to install this product on your NIS clients to allow your users to modify their directory data, such as changing their password.



## Compatibility and Installation Requirements

Before installing these products, please read *Installing and Administering NIS/LDAP Gateway*.

### Hardware Requirements

An HP 9000 Computer System.

### Memory Requirements

This product has minimal memory and disk requirements. Your system should have at least 32 MB of main memory, and at least five megabytes of free disk space under /opt.

Depending on the size of your NIS maps and if you wish to cache that data in the NIS/LDAP Gateway server, you will need additional physical main memory, approximately two to three times the total size of your existing NIS maps.

### Operating System Requirement

- HP-UX 10.20

### Patch Requirements

This product has no specific patch requirements.

Patches can be obtained from the HP Electronic Support Center web page at the URL <http://us-support.external.hp.com/> or <http://europe-support.external.hp.com/> or through your HP support representative.

### Installing and Configuring the NIS/LDAP Gateway

This section provides basic instructions for installing the NIS/LDAP Gateway. For complete installation and configuration instructions, see *Installing and Administering NIS/LDAP Gateway*.

## Preparing for Installation

Verify you have at least five megabytes of free disk space under /opt.

## Installing the NIS/LDAP Gateway

Use the SD-UX facility for installation. See the *swinstall(1M)* man page for details.

- Step 1.** Log in to your system as root.
- Step 2.** If a ypldapd server is already running on your system, terminate it with the *kill(1)* command.
- Step 3.** Run *swinstall* and install the NIS/LDAP Gateway server. This installs the product software in /opt/ldapux and /etc/opt/ldapux. No re-boot is required.

## Configuration Quick Start

If your posix data (NIS maps) have been migrated to an LDAP directory, you can set up a ypldapd server with only a few steps. If you have not migrated your NIS maps to the LDAP directory, see *Installing and Administering NIS/LDAP Gateway*.

- If you have already configured other NIS/LDAP Gateway servers on other systems, you can simply duplicate the configuration file /opt/ldapux/ypldapd/etc/ypldapd.conf on the local system.
- Otherwise, copy the file /opt/ldapux/ypldapd/etc/ypldapd.conf.sample to /opt/ldapux/ypldapd/etc/ypldapd.conf and add the appropriate values according to the descriptions in the file. Minimally you will need to update the yppdomain, ldaphost, basedn, binddn and bindcred parameters. If you have a large LDAP database and you are using 11.00 NIS clients, you should set preload\_maps to preload\_maps group. The user you identify in the binddn must be an LDAP directory user that is allowed to read the userpassword attribute.
- If the NIS domain you use is the same as the domain being used by an existing NIS server, you must stop and disable the NIS server. You can do this by changing NIS\_SLAVE\_SERVER and NIS\_MASTER\_SERVER to 0 in the /etc/rc.config.d/namesvrs file. Then execute the command /sbin/init.d/nis.server stop to stop the NIS server.

Once your NIS/Gateway server is running, you can test your setup with a *ypcat(1)* command, such as *ypcat group*. You may need to wait (up to a

minute) as the *ybind*(1M) process attempts to find the new NIS/LDAP Gateway server.

## Installing and Configuring the NIS/LDAP Client Administration Tools

This section provides basic instructions for installing the NIS/LDAP Client Administration Tools. For complete installation and configuration instructions, see *Installing and Administering NIS/LDAP Gateway*.

### Preparing for Installation

Verify you have at least five megabytes of free disk space under /opt.

### Installing the NIS/LDAP Client Administration Tools

Use the SD-UX facility for installation. See the *swinstall*(1M) man page for details.

- Step 1.** Log in to your system as root.
- Step 2.** Run *swinstall* and install the NIS/LDAP Client Administration Tools server. This installs the product software in /opt/ldapux and /etc/opt/ldapux. No re-boot is required.

### Configuration Quick Start

This product does not require any specific configuration. However, once you have installed the product, read the file /opt/ldapux/contrib/bin/README for instructions on how to create configuration files that will simplify LDAP directory administration from your NIS/LDAP Gateway clients.

You may also wish to create a front-end script to the *ldappasswd* command, to hide the LDAP directory from the average HP-UX user. Below are two examples you can cut and paste into a *passwd* shell script:

```
#!/usr/bin/ksh
/opt/ldapux/bin/ldappasswd -b "your_base_DN" -h "ldap_server_host_name" \
-p "ldap_port"

#!/usr/bin/ksh
/opt/ldapux/bin/ldappasswd -b "ou=people,o=hp.com" -h "dirserver.lab.hp.com" \
-p 389
```

## Documentation

The documentation listed below is available for the NIS/LDAP Gateway.

### Where to Find the Documentation

Most of the documentation is available on the HP-UX Documentation web site at <http://docs.hp.com/hpux/internet>.

### Documentation Titles

The following documentation titles are available at the locations given above or as listed.

**Table 1-1**

**Documentation for Netscape Directory Server 4.0 for HP-UX**

Title	Description
<i>Installing and Administering NIS/LDAP Gateway</i>	How to install, configure, administer, tune, and troubleshoot the NIS/LDAP Gateway. (part number J4269-90001)
README files	/opt/ldapux/README-ypldapd briefly describes the NIS/LDAP Gateway. /opt/ldapux/README-client describes the NIS/LDAP Client Administration Tools. /opt/ldapux/contrib/bin/README describes some unsupported tools for LDAP directory administration.
<i>NIS/LDAP Gateway Release Notes</i>	This document (part number J4269-90002).
<i>Installing and Administering NFS Services</i>	Discusses NIS, available at <a href="http://docs.hp.com/hpux/communications">http://docs.hp.com/hpux/communications</a> .
<i>Netscape Directory Server Administrator's Guide</i>	Discusses the Netscape Directory Server for HP-UX.

## Known Problems and Workarounds

This section describes all known problems with the NIS/LDAP Gateway product.

### LDAP Command Utilities

The LDAP command utilities `ldapsearch` and others only work when executed from a working directory under `/opt/ldapux/bin`. Otherwise, the dynamic loader, `dld.sl`, will display an error message indicating it cannot find a library. Resolve this problem by setting your `SHLIB_PATH` environment variable to the contents of the file `/etc/SHLIB_PATH`. For example, execute the following command or add it to your `.profile` or other initialization file: (Defect number JAGaa42521)

```
export SHLIB_PATH=$(</etc/SHLIB_PATH)
```

### ypldapd Aborts on Non-Existent Maps

If you execute `yocat(1)` on a map that isn't served by the NIS/LDAP Gateway, `ypldapd` aborts and creates a core file. If `ypldapd` has `ypldapd.conf` configuration file (which is not recommended), you will have to restart `ypldapd`. See also "Use Preloaded Maps instead of `ypldapd`" on page 14.

### Migration Scripts

You must run the migration scripts in the directory `/opt/ldapux/migrate`. (JABab53883)

### preload\_cache Parameter not Described in `ypldapd(8)` Man Page

The `preload_cache` parameter is not listed in the `ypldapd(8)` man page. For information on `preload_cache` and the other configuration parameters to the NIS/LDAP Gateway, see *Installing and Administering NIS/LDAP Gateway*.

## Limitations in the NIS/LDAP Gateway

The following are limitations in this version of the NIS/LDAP Gateway.

### Crypt Passwords

The NIS/LDAP Gateway product requires that user passwords be stored in the directory server in the same format as stored in an `/etc/passwd` file. This is known as “Unix Crypt” format. If your directory server does not understand the `{crypt}` data type, you can still use the NIS/LDAP Gateway server. However, these users will not be able to authenticate to the directory server. One side effect is that users will not be able to change their own passwords (although a directory administrator could accomplish this on a user’s behalf.) Also, other LDAP enabled applications, may not work correctly.

### Modifying Data in the Directory

You cannot use the `chfn(1)` and `chsh(1)` and `passwd(1)` commands to modify data in the directory.

### NIS and NIS/LDAP Gateway

You cannot run an NIS server (`ypserv`) and an NIS/LDAP Gateway server (`ypldapd`) simultaneously on the same system.

### Shadow Passwords Not Supported

You must set the `hide_passwords` parameter to “no” in the `ypldapd.conf` file because shadow passwords are not supported. See *Installing and Administering NIS/LDAP Gateway* for details.

### Use Preloaded Maps instead of `yall_caching`

You should use the `preload_maps` parameter to preload maps into the cache instead of `yall_caching`. Use of `yall_caching` can cause a performance bottleneck in the `ypldapd` server. For more information, see “Caching” in *Installing and Administering NIS/LDAP Gateway*.

## Limitations in the NIS/LDAP Client Administration Tools

The entry management tools in `/opt/ldapux/contrib`, which allow you to create or modify directory entries, are not currently supported.