HP-UX Directory Server Version 8.1 (B.08.10.05) Release Notes

HP-UX 11i v3

Abstract

This document describes enhancements and new features with the current release of the product, migration tips, known problems fixed in the current release, limitations and restrictions, and known issues.

Trademark Acknowledgments

UNIX is a registered trademark of The Open Group.

Contents

HP secure development lifecycle

Starting with HP-UX 11i v3 March 2013 update release, HP secure development lifecycle provides the ability to authenticate HP-UX software. Software delivered through this release has been digitally signed using HP's private key. You can now verify the authenticity of the software before installing the products, delivered through this release.

To verify the software signatures in signed depot, the following products must be installed on your system:

- `B.11.31.1303` or later version of SD (Software Distributor)
- `A.01.01.07` or later version of HP-UX Whitelisting (`WhiteListInf`)

To verify the signatures, run: `/usr/sbin/swsign -v -s <depot_path>`

For more information, see *Software Distributor documentation* at: http://www.hp.com/go/sd-docs.

NOTE: Ignite-UX software delivered with HP-UX 11i v3 March 2014 release or later supports verification of the software signatures in signed depot or media, during cold installation. For more information, see *Ignite-UX* documentation at: http://www.hp.com/go/ignite-ux-docs.

1 HP-UX Directory Server features

The HP-UX Directory Server 8.1 product replaces the Red Hat Directory Server for HP-UX (RHDS) product line. The HP-UX Directory Server is based on the same open source software as RHDS and includes a straightforward migration process from RHDS. HP-UX Directory Server (HPDS) provides an industry-standard, centralized directory service on which to build your intranet or extranet. Your HP-UX servers and other directory-enabled applications use the directory service as a common, network-accessible location for storing shared data such as user and group identification, server identification, and access control information. In addition, you can extend the HP-UX Directory Server to support your entire enterprise with a global directory service that enables centralized management of all enterprise resource information. Features of this product include:

- **LDAP Directory** – A powerful directory server specifically designed for LDAP (Lightweight Directory Access Protocol).

- **Administration Console** – A powerful server and directory management tool with a graphical interface. Logging in from any system connected to your network, you can configure a remote server or manage data in a centralized directory. The included Administration Server allows for remote operation (startup, shutdown, log viewing, SSL certificate management) of the directory server. The improved management console includes a new dialog that facilitates replication configuration.

- **Command-line tools** – Enables you to use customized scripts to update and modify your directory server and its contents.

- **Schema management interface** – Enables you to create custom object classes and attributes to define entries specific to your enterprise needs.

- **On-line import and export LDIF files** – Helps you manage directory entries, enabling you to add, modify, and delete multiple entries.

- **On-line backup and restore database** – Enables you to make backups of the directory database and to restore from the backups to protect against data loss.

- **SSL/TLS** – Provides secure communications over the network including ciphers with up to 168-bit encryption.

  ○ Simple passwords - High level application integration

  ○ SASL DIGEST-MD5 - Secure challenge and response

  ○ SASL EXTERNAL - Client-side certificates and integration in Public Key frameworks

  ○ SASL GSSAPI - Kerberos integration

- **Multi-master replication** – Provides a highly available directory service for both read and write operations.

- **Support for SNMP** – Permits you to monitor your directory server in real time using the Simple Network Management Protocol (SNMP).

- **Chaining and referrals** – Increase the power of the directory by storing a complete logical view of the directory on a single server while maintaining data on a large number of directory servers, transparently to clients. These features enable limitless scalability for the size of the directory database. Chaining is an enhancement over referrals. Where referrals inform clients where to look for requested data, chaining handles referrals for the client, freeing clients of the responsibility for finding the location of the requested data.

- **Multiple databases** – Provides a simple way of splitting your directory data across multiple databases to simplify the implementation of replication and chaining in your directory service.

- **Password policy and account lockout** – Enables you to define a set of rules that govern how passwords and accounts are managed in the directory server.
- **Plug-in API** – The Directory Server Plug-In API is fully supported for customer use. You can extend the functionality of the Directory Server by writing your own plug-in functions. HP provides a Directory Server Plug-In Programmer's Guide for end-user development to further enhance the directory server for your needs.
- **64-bit versions of the server** – HPDS uses 64-bit architecture, enabling you to configure very large caches. Server scalability is limited only by available memory and storage.
- **Roles and class of service** – A feature that provides a flexible mechanism for dynamically grouping and sharing attributes between entries.
- **Database encryption** – HPDS supports encryption of selected attributes within a database.
- **Windows user and group synchronization** – HPDS supports Windows Sync, which synchronizes changes in groups and user entries (including passwords) between HPDS and Microsoft Active Directory.

2 Software requirements addendum

This section lists software requirements that are not documented in *HP-UX Directory Server Installation Guide*.

HP-UX Apache-based Web Server

The Administration Server uses the Apache web server v2.0 or v2.2 for its operation. HP recommends that v2.2 be used because v2.0 will be deprecated for the next release. The following versions of HP-UX Apache-based Web Server are supported:

- B.2.0.50.01 and higher, except version B.2.0.59.00 (this version contains a known compatibility problem)
- B.2.2.15.01 and higher

To check the versions of any HP-UX Apache-based Web Server installed on the system, use the following command:

```
# /usr/sbin/swlist -l product | grep -e hpuxwsAPACHE -e hpuxws22APACHE
```

If both v2.0 and v2.2 are installed, then the Administration Server will use v2.2 by default. The symbolic link `/opt/dirsrv/lib/apache` controls which version of Apache is in use. For example, to force the use of Apache v2.0, stop the Administration Server by using the `/opt/dirsrv/sbin/stop-ds-admin` command, and then recreate the symbolic link using the following command:

```
# ln -sf /opt/hpws/apache /opt/dirsrv/lib
# ln -sf /opt/hpws22/apache /opt/dirsrv/lib
```

3 What is new in HP-UX Directory Server 8.1?

B.08.10.05 release of HP-UX Directory Server 8.1 includes new features and fixes to several existing problems. For more information about fixes, see Table 1 (page 12).

The following new and changed features are introduced for HP-UX 11i v3 HP Integrity system (B.08.10.05):

- **In-memory debug logging**—This feature has the following functionalities:

  ○ Enables the capturing of debug log messages in the memory instead of in a file in the production environment when issues are encountered.

  ○ Captures custom debug logs directly to the memory buffer.

  ○ Gets diagnostics images quickly when issues are encountered.

  ○ Can be enabled or disabled by changing configuration parameter in `dse.ldif` file.

  ○ Performs relatively better compared to error logging, due to lesser I/O operations.

- **Integration of migration related files**—Integrated migration related files as part of depot.

The following new and changed features are introduced with HP-UX Directory Server 8.1 (B.08.10.04):

- **Subtree rename and Entry Move**—This feature provides the following functionalities:

  Ability to rename a node that has children
  Ability to move a node, with or without children to another parent node

- **Syntax Validation Check**—The current version of Directory Server does not perform any sort of syntax validation, but this release addresses this issue by providing the capability to enforce the syntax validation. Syntax validation checks every modification to attributes to make sure that the new value has the required syntax for that attribute type.

- **Strict DN Syntax Enforcement**: A new configurable parameter `nsslapd-dn-validate-strict` is introduced to enable strict DN parsing as described in RFC 4514.

- Upgrade to new DN format.

- **Support additional standard attribute syntaxes**—Additional standard attribute syntaxes supported in this release are:

  ○ Numeric String

  ○ Bit String

  ○ Delivery Method

  ○ Enhanced Guide

  ○ Facsimile Telephone Number

  ○ Fax, Guide, Name and Optional UID

  ○ Printable String

  ○ Teletex Terminal Identifier

  ○ Telex Number

- **Thread Aware Regex**—A new thread aware library is included to improve the throughput of complex regex searches.

- **Ability to shut off anonymous access**—This feature adds a new config switch in `cn=config, nsslapd-allow-anonymous-access` that allows you to restrict all anonymous access.

- **Resource limits for anonymously bound clients**—Enables to set resource limits (sizelimit, timelimit, lookthroughlimit) specifically for anonymous connections.

- **Requiring Secure Binds**—A new configuration attribute named `nsslapd-require-secure-binds`, when enabled, allows a simple bind over a secure transport (SSL/TLS or a SASL privacy layer).

- **Access based on the security strength of the connection**—Based on how secure the connection is, a new ACI keyword `minssf` allows to set access control and a new global server setting in `cn=config, nsslapd-minssf` allows to reject operations.

- **Linked attributes**—This feature provides the ability to link two attributes bidirectionally together across entries, so that when one attribute in one entry is altered, a corresponding attribute on a related entry is automatically updated.

- **Entry USN (Update Sequence Number)**—This feature adds the USN to each updated entry. update includes add, modify, modrdn and delete operations. Replicated operation is also considered as update. The USN Plug-in provides a way for LDAP clients to know that the database has been updated.

- **Named pipe log script**—This feature allows the server to send the log output to a named pipe instead of a log file. The named pipe log script has the following characteristics:

  ○ Logs only certain events

  ○ Logs only lines that match a certain pattern

  ○ Sends a notification when a certain event is detected

  ○ Logs only the last N lines attached to a script, which is useful for enabling full error log debug levels in production environments

- **Simple paged results**—A simple paged results control allows to set the number of entries to be displayed at a time. The results can be scrolled through a page at a time, which makes the results easier to digest. This feature is supported only for OpenLDAP clients.

- **Move change log**—The replication changelog is now moved into the main server database environment. When backup or restore of the main DB is done, the changelog DB is also included with the main DB.

- **Dereferencing control**—This control is intended to provide a concise means to collect extra information related to cross-links present in entries returned as part of search responses. This control is only appropriate for the search operation. This feature is supported only for OpenLDAP clients.

- **Plug-in ordering**—This feature allows you to define the execution order of plug-ins within the same plug-in type. It will be useful to plug-in developers to define an order for plug-in execution.

The following enhancements were introduced with the release (B.08.10.02):

- Support in the Administration Server for Apache 2.2 in addition to Apache 2.0. For use of Apache 2.2, Apache B.2.2.8.06 or higher is required.

- Additional support for migrating from Sun Java System Directory Server.

- Support for configuration of the HP-UX Directory Server 8.1 in an HP Serviceguard package. The primary means of providing high availability continues to be the HP-UX Directory Server multi-master replication feature. For information about configuring HP-UX Directory Server in

a Serviceguard package, see the HP Serviceguard documentation, available at the following location:

http://www.hp.com/go/hpux-serviceguard-docs

The following new and changed features were introduced with HP-UX Directory Server 8.1 (B.08.10.00):

- **Support for LDAP via UNIX sockets**—While RHDS only used TCP sockets for communication with LDAP clients, HPDS now also supports using UNIX sockets by allowing LDAP via IPC (LDAPI). This is intended for applications that run on the same host as the Directory Server.

- **DNA plug-in provides automatic numeric attribute assignment**—A new plug-in automates the assignment of numeric IDs, such as the values for uidNumber and gidNumber for POSIX account entries. The plug-in supports assignment with no risk of collisions in multi-master replication topologies.

- **memberOf plug-in provides a list of group memberships held by each user**—Provides a list of groups in multiple memberOf attributes in each user entry. The new plug-in simplifies determining what groups a user belongs to. The memberOf attribute can greatly simplify access control in applications by simplifying verification of a user's group membership.

- **Additional options for secure communication between servers**—Server to server connections, such as those used in replication, are enhanced to support SASL/Digest-MD5 and SASL/GSSAPI (Kerberos) authentication, and encryption with Start TLS.

- **More flexibility in schema management**: Schema can be deployed or modified on-disk and then reloaded using a new task-based mechanism. Previously, dynamic schema changes could only be performed via LDAP which offered less control over the organization of the schema in its persistent on-disk storage.

- **Improved Get Effective Rights operation**—Whereas the GER operation in RHDS only showed effective rights for attributes that already existed in an entry, with HPDS, the operation can now display any effective rights for potential attributes as well (operational attributes, and those that currently do not exist in the entry but are allowed by schema).

- **More tuning for Windows synchronization**—In previous releases, the interval at which the Directory Server checked the Active Directory Server for updates was fixed at five minutes. This interval is now configurable.

- **Option to disallow unauthenticated bind operations**—A new configuration attribute allows the administrator to deny access to LDAP clients that do not provide a password. This allows improved compatibility with server applications that might misinterpret a Directory Server's success response to bind operations that lack a password.

- **Account policy plug-in provides control over inactive accounts**—The new account policy plug-in tracks login time stamps and provides the administrator with the option to lock accounts based on the duration of inactivity since the last login time.

- **Replication agreements can be prioritized**—The multi-master replication plug-in has been enhanced to allow prioritization of replication agreements. This allows the administrator to control the order in which multiple replicas are updated. This may be useful, for example, when you require that a backup master replica be updated completely before updating one or more read-only replicas accessible by client applications.

4 Upgrade and migration notes

For information about migration (upgrade) paths, see *Migration (Upgrade) from Netscape or RedHat or HP Directory Server to HP-UX Directory Server 8.10.05 or later* at http://www.hp.com/go/hpux-security-docs —> HP-UX Directory Server.

5 Defect fixes

HP-UX Directory Server B.08.10.05 release for HP-UX 11i v3

The following defects are fixed in the HP-UX Directory Server B.08.10.05 release for HP-UX v3 HP Integrity system:

Table 1 Fixes in HP-UX Directory Server B.08.10.05

Defect	Description
QXCR1001272195	HPDS 8.10.04 reports "No such file or directory" if `id2entry.db4` is greater than 2 GB.
QXCR1001210702	The Replication Update Vector (RUV) details are not updated in database or memory when HUB is promoted to supplier role.
QXCR1001225471	Experiences a delay in replication.
QXCR1001250401	The search with server side sort key returns invalid result.
QXCR1001279559	Cannot change the user password on multi master replication when user is replicated.

HP-UX Directory Server B.08.10.04 release

The following defects are fixed in the HP-UX Directory Server B.08.10.04 release for HP-UX 11i v2 and v3:

Table 2 Fixes in HP-UX Directory Server B.08.10.04

Defect	Description of corrected problem
QXCR1001179927	Issue of null valued attributes getting added by ldapModify replace in replication environment.
QXCR1001175156	ns-slapd process creates a core when a new operation is initiated before cleanup of previous operation is completed on the same connection object.
QXCR1001168613	'db2ldif' adds extra 'ou' to the 'dn' when data is migrated from RHDS to HPDS.
QXCR1001168383	HPDS 8.10.03 Replication problems updating from RHDS 7.0.10.50
QXCR1001179380	ns-slapd process crashes when put in to readonly mode while updates are happening.

HP-UX Directory Server B.08.10.03 release

The following defects are fixed in the HP-UX Directory Server B.08.10.03 release for HP-UX 11i v2 and v3:

Table 3 Fixes in HP-UX Directory Server B.08.10.03

Defect	Description of corrected problem
QXCR1001065568	With audit logging enabled, under certain circumstances an information leak might occur.
QXCR1001063264	If a supplier changelog is trimmed of changes and a stale LDIF is loaded into a consumer replica, an inconsistent replication state might occur.
QXCR1001047835	Running the setup script `setup-ds-admin.pl` with the `-k` option (which saves a temporary configuration setup cache file that can be reused for a silent setup) results with an invalid `admin` value in the cache file. Attempts to use this file to provide configuration settings for a new directory server instance will fail.

HP-UX Directory Server B.08.10.02 release

The following defect is fixed in the HP-UX Directory Server B.08.10.02 release for HP-UX 11i v2 and v3:

Table 4 Fixes in HP-UX Directory Server B.08.10.02

Defect	Description of corrected problem
QXCR1000977427	The log `rotationinfo` file is corrupted at startup. As a result, log files that were created before the restart are not removed after they expire.

HP-UX Directory Server B.08.10.01 release

The following defects are fixed in the HP-UX Directory Server B.08.10.01 release for HP-UX 11i v2 and v3:

Table 5

Defect	Description of corrected problem
QXCR1000968533	The values of any `createTimestamp`, `creatorsName`, `modifyTimestamp`, and `modifiersName` attributes specified in an LDIF file that is being imported are replaced instead of retained as expected. The `creatorsName` and `modifiersName` values are replaced with empty strings, and the `createTimestamp` and `modifyTimestamp` values are replaced with the current time. This issue also affects migration when performed using LDIF exports (for example, when migrating from Netscape Directory Server 6.*x*). The account policy plug-in uses the `createTimestamp` value to determine the account inactivity limit if a `loginTimestamp` is not found. Thus, users imported using LDIF and lacking a `loginTimestamp` might experience unexpected inactivity limits if account inactivity policies are created.
QXCR1000972292	During the upgrade of an operating environment (OE) that includes the Red Hat Directory Server product, a non-fatal error message appears when HP-UX boots.
QXCR1000974779	During the upgrade to HP-UX Directory Server 8.1 from a Red Hat Directory Server 8.0 product installed with only the RedHatDirSvr.DirSvr subproduct (without Admin Server), a non-fatal error is recorded in the `swinstall` log. The error indicates that the `chmod` command could not be applied to the configuration backup archive.

HP-UX Directory Server B.08.10.00 release

The following defects are fixed in the HP-UX Directory Server B.08.10.00 release for HP-UX 11i v2 and v3:

Table 6

Defect	Description of corrected problem
QXCR1000927785	When migrating to HP-UX Directory Server 8.1, the ownership of certain legacy instance files might not be retained. For example, legacy files with group ownership `other` end up after migration with group ownership `sys`
QXCR1000938062	The migration script creates empty backend databases for missing or empty LDIF export files.
QXCR1000910157	If the **User must change password after reset** (`passwordMustChange`) policy is enabled, adding new entries that contain the attributes `passwordExpirationTime` or `passwordAllowChangeTime` will fail with an object class violation error.
QXCR1000928721	When the Administration Server is configured to use SSL (LDAP with TLS/SSL) to communicate with the Configuration Directory Server, authenticating with the Administration Console fails. The Administration Console cannot connect and will freeze during initialization.
QXCR1000834844	Setting the HTTP accepted language can cause Administration Server CGIs to fail.

Table 6 *(continued)*

Defect	Description of corrected problem
QXCR1000555503	In some steps of the **Certificate Request Wizard** in the Directory Server Console, clicking **Help** fails to display the help information. An error page is displayed instead.
QXCR1000936776	Replicas might be inconsistent if a master experiences a disorderly shutdown while being updated. In particular, when the master is started again and resumes replication, it might fail to transmit the last change before the shutdown occurred.
QXCR1000899423	When a replica with a changelog is started up after a disorderly shutdown, it fails to send changelog updates that occur before the shutdown until a new update is received. This delays the replication process.
QXCR1000965721	A Directory Server crash might occur after the changelog is moved to a new location on the disk (either by use of the console or by modifying the `nsslapd-changelogdir` attribute in the `cn=changelog5,cn=config` entry).
QXCR1000553583	Tombstone (deleted) entries that were part of an LDIF import are not detected during the purge cycle and so are not removed from replicas.
QXCR1000577664	When a value is deleted from an attribute in a replica and then added back using a different letter case, the value reverts to the original case. For example, if the deleted value for `cn` is `example`, and you add the value back as `EXAMPLE`, a subsequent search indicates that the original lowercase value has been retained.
QXCR1000894779	The value of the `nsslapd-ssl-check-hostname` attribute is not displayed correctly when retrieved using an LDAP search; for example, it might be displayed as `on` when it is actually set to `off`.
QXCR1000555514	The Directory Server might return entries that do not match a search filter. This involves substring searches in which one or more entries contain an attribute with an empty value.
QXCR1000541131	When HP-UX boots up, a Directory Server with SSL enabled might not be auto-started.
QXCR1000566493	When the Directory Server processes SASL bind requests, the Directory Server fails to call preoperation plug-ins.
QXCR1000958633	The expected access mode is not set on log files created at startup. Attributes can be set to establish the access mode of the three types of log files (access, audit, and errors). However, if the Directory Server needs to create new log files at startup, the Directory Server fails to establish the specified access mode of these log files.
QXCR1000965717	Logs might expire earlier or later than the configured period when the configuration attributes are listed in a particular order in `dse.ldif`. For example, if the Directory Server is configured to perform log rotation every day and to keep logs for 30 days before they are purged, some of the old log files might be purged prior to the 30th day.
QXCR1000872398	Attempts to set the `nsslapd-timelimit` to `-1` are rejected, although the setting is valid.

6 Limitations and restrictions

This section lists problems and limitations known to HP at the time of publication.

- Windows Sync is not qualified for B.08.10.04

- **To enable core file dumps of ns-slapd and related processes when aborting, system changes are required prior to installation**

  By default for security reasons, processes that acquire a higher user privilege, such as the `ns-slapd` daemon, are not dumped to a core file when aborting. (A process's privilege escalation is evident by presence of the `PS_CHANGEDPRIV` flag in the `pst_status` structure returned from `pstat_proc()`.) To enable generation of core files when such processes abort abnormally, you must manually adjust HP-UX system parameters prior to installing the HP-UX Directory Server.

  On HP-UX 11i v3 systems, use the `coreadm` tool, as documented in the *coreadm*(1M) and *coreadm*(2) man pages. This tool enables (and disables) core file writing by `setuid` process.

  On HP-UX 11i v2 systems, use the following command to enable the process to dump to a core file:

  ```
  $ echo 'dump_all/W 1' | adb -w -o /stand/vmunix /dev/kmem
  ```
  This results in the following output:

  ```
  dump_all: 0 = 1
  ```
  On HP-UX 11i v2 systems, after the core file is generated, you should disable processes from being dumped to a core file. Use the following command:

  ```
  $ echo 'dump_all/W 0' | adb -w -o /stand/vmunix /dev/kmem
  ```
  This results in the following output:

  ```
  dump_all: 1 = 0
  ```
  If you forget to reset `dump_all`, it will be reset to zero at the next system reboot. On HP-UX 11i v3 systems, you need not reset `dump_all`. Because the `dump_all` is set on the process, the setting returns to the default once the process is gone.

- **The Administration Server cannot run with the user ID `root`.**

  The value you enter for the System User in the `setup-ds-admin.pl` script dialog sets the user ID for the Directory Server and the Administration Server. If you configure `root` for the System User name, the Administration Server cannot run. The Administration Server runs as a component of the Apache server; the HP-UX Apache-based Web Server does not allow the Apache server to run with the user ID `root`.

  The System User name in the `setup-ds.pl` script dialog is not affected by this restriction. The `setup-ds.pl` script configures the user ID for the Directory Server but not for the Administration Server. However, HP recommends that you do not run the Directory Server with the user ID `root`.

- **Selecting the Configuration tab results in Java exception errors.**

  When a nonprivileged user logs into the Directory Console and selects the **Configuration** tab, the Directory Console displays Java exception errors.

7 Issues and workarounds

Issues known at time of publication include the following:

- On HP-UX 11i v3, the PHCO_42326 patch, which is a pthread library patch, is required to address pthread issues.

- QXCR1001038153: If the `nsslapd-accesslog-logexpirationtime`, `nsslapd-auditlog-logexpirationtime`, or `nsslapd-errorlog-logexpirationtime` attribute is missing from `dse.ldif`, the Admin console incorrectly displays the value of the attribute as set to `1`. This is incorrect, the default of these attributes is `-1` (disabled).

- When exporting a replica to LDIF using the `db2ldif -r` command, debug messages might be seen, similar to the following:

```
0: if ( userdn = ldap:///uid=admin,ou=Administrators,ou=TopologyManagement,o=NetscapeRoot ) TRUE else
FALSE
Parsed authorization.
```

  These are insignificant and can be ignored.

- `passwordGraceUserTime` attribute is automatically added when passwords are changed

  When a user's password changes, the `passwordGraceUserTime` attribute is automatically added with a value of `0`. This attribute is added whether the password expiration policy setting is enabled or not. The presence of this attribute should not interfere with the operation of the Directory Server but could appear as an inconsistency to third-party applications accessing the Directory Server.

Workaround

Remove the `passwordGraceUserTime` attribute from the user entry, but it returns the next time the user's password is changed.

- **Running LDAP command-line utilities results in " Unsatisfied data symbol 'GSS_C_NT_USER_NAME'" error in `syslog`**

  When the LDAP command-line utilities are run, the error "Unsatisfied data symbol 'GSS_C_NT_USER_NAME'" appears in `syslog`.

Workaround

The command-line utilities attempt to resolve symbols that are located in the Kerberos client libraries. Old releases of the Kerberos client libraries do not contain these symbols. To prevent the error from being logged, download and install KRB5CLIENT (version 1.6.2 or later) from the following location:

http://www.hp.com/go/softwaredepot

- **Files in the log directory and the backup configuration file `dse.ldif.startOK` are not assigned the correct primary group after setup**

  After setup completes, the files in the log directory and the backup configuration file `dse.ldif.startOK` are not set to the right group.

Workaround

Use the `chgrp` command to set the correct group for the relevant files. For example:

```
# chgrp other /var/opt/dirsrv/slapd-example/log/*
# chgrp other /etc/opt/dirsrv/slapd-example/dse.ldif.startOK
```

- **The Administration Console Help button does not function properly**

  Clicking **Help** in the Administration Console fails and the console displays the error `interpreter "/usr/dt/bin/dtksh" not found`.

  The Administration Console uses the Firefox web browser (or the Mozilla web browser, if Firefox is not available from the user's search path) to display help text. When Firefox and Mozilla web browsers start the first time, they attempt to display licensing text in a graphical window. This fails if the system does not have the Common Desktop Environment (CDE) installed.

  ## Workaround

  Use one of the following workarounds:

  - Install CDE.

  - Before running the Administration Console, force the web browser to display the licensing text in text mode. Do this by logging in as the user who will run the console and then starting the Firefox or Mozilla web browser from the shell in the foreground. This causes the browser to display the licensing information in text mode. The default locations for the web browsers are `/opt/firefox/firefox` and `/opt/mozilla/mozilla`.

    You must perform this procedure once for each user running the Administration Console, and repeat it anytime you upgrade or reinstall the web browser.

- **Disabling the TLS ciphers using the console fails**

  The Administration Server Console is hard-coded to set all TLS ciphers to `enabled`. If you disable the TLS ciphers using the console, your change is not saved. When you restart the Administration Server, the ciphers are still enabled.

  ## Workaround

  Do not edit the Administration Server ciphers using the console. Instead, edit the `/etc/opt/dirsrv/admin-serv/console.conf` file directly.

- **Importing or exporting a database using a remote console fails**

  Attempting an import or export database operation from the **Tasks** tab when using a remote console might fail with the following error:

  ```
  Cannot write to file
  /var/opt/dirsrv/slapd-instance_name/ldif/file.ldif
  ```

  ## Workaround

  If you use the **on console machine** option on the **Import Databases** or **Export Databases** dialog box (accessed from the **Tasks** tab) to import or export an LDIF file, specify an absolute path for the file. If you do not specify an absolute path, the console uses the default server machine path `/var/opt/dirsrv/slapd-instance_name/ldif`, which may not be valid on the console machine (a Windows laptop, for example). You can also use the **Browse** button to locate an appropriate path on the console machine.

  NOTE: If you are importing or exporting an LDIF on the local server system, you can specify the file using a relative path.

- **Console cannot access the CRL file**

  When using the console to install a CRL, the console returns an error if the CRL is placed in the `/etc/opt/dirsrv/slapd-instance_name` directory.

Workaround

Place the CRL in the Administration Server directory `/etc/opt/dirsrv/admin-serv`. The console can access the CRL file there.

- **The `nsslapd-saslpath` attribute is not migrated**

  If you migrate a Directory Server instance to HP-UX Directory Server 8.1, the `nsslapd-saslpath` attribute is not migrated with the `dse.ldif` file on the new Directory Server instance. The SASL libraries cannot be loaded.

Workaround

After you migrate the Directory Server to version 8.1, use the `ldapmodify` utility to edit the `cn=config` directory entry. Set the `nsslapd-saslpath` attribute value to match the value used in the previous version. Alternatively, you can shut down the version 8.1 Directory Server instance and edit the `nssldapd-saslpath` attribute value in the `dse.ldif` file.

- **Directory Server does not replicate all attributes**

  By default, the Directory Server does not automatically replicate all attributes to consumers in the multi-master replication environment, including several password-associated attributes, such as `passwordRetryCount`, `retryCountResetTime` and `accountUnlockTime`.

Workaround

To replicate these attributes, use the `ldapmodify` utility to set the `passwordIsglobalPolicy` attribute to `1` in the `cn=config` entry. For example:

```
dn: cn=config
changetype: modify
replace:passwordIsGlobalPolicy
PasswordIsGlobalPolicy: 1
```

- **The Windows Synchronization Service (Windows Sync) does not function correctly after migrating from Red Hat Directory Server 7.1**

  After migrating from Red Hat Directory Server 7.1, the Windows Synchronization Service fails to synchronize updates between Windows and HP-UX Directory Server.

Workaround

Follow these steps when you upgrade Window Sync services on a Windows server from Directory Server 7.1 to HP-UX Directory Server 8.1:

1. Reboot the Windows system.
2. Perform a full resynchronization.

   Use the following procedure to manually synchronize the Active Directory and Directory Server. For more information, refer to the *HP-UX Directory Server administrator guide*.

   a. Open the Directory Console.
   b. In the **Configuration** tab, expand the **Replication** folder.
   c. Expand the database name for which you enabled Windows synchronization.
   d. Right-click the Windows synchronization agreement and select **Initiate Full Re-synchronization**.

- **QXCR1001267956**: **Running the** `setup-ds-admin.pl -u` **command with multiple instances fails while upgrading from B.08.10.03 to B.08.10.05.**

  Upgrading from B.08.10.03 to B.08.10.05 fails when any of the instances are created from the adminserver console using the cn=Directory Manager user login.

Workaround

Use any of the following workarounds:

○ When you run the `setup-ds-admin.pl -u` command, by default it uses the following user account: `uid=admin, ou=Administrators, ou=TopologyManagement, o=NetscapeRoot`.

Instead of the default user account, if the `cn=Directory manager` user account and credentials are used, the upgrade works fine.

○ Stop the instances created by `cn=Directory Manager` and then, modify the `aci` by changing the uid from `directory manager` to `admin` in the `/etc/opt/dirsrv/slapd-<instancename>/dse.ldif` file.

Example:

Error aci

```
aci: (targetattr="*")(version 3.0; acl "Configuration
Administrator"; allow (a ll) userdn="ldap:///uid=directory
manager, ou=Administrators, ou=TopologyMan agement,
o=NetscapeRoot";)
```

corrected aci

```
aci: (targetattr="*")(version 3.0; acl "Configuration
Administrator"; allow (a ll) userdn="ldap:///uid=admin,
ou=Administrators, ou=TopologyManagement, o=N etscapeRoot";)
```

• QXCR1001290470: You might see schema error when downgrading to older version.

Workaround

When downgrading from HPDS 8.10.0x to 8.10.0x, you may encounter schema error. To avoid this problem, the schema directories must be emptied before the older version software is reloaded.

• **QXCR1001293940**: Replication may not work during migration if the instances have space in the directory suffix.

Workaround

When migrating from HPDS 8.10.03 to 8.10.0x, in the replication environment, replication may not work . After upgrading to newer version of HPDS 8.10.0x and creation of replication agreement, you must delete the space in the suspicious replica entry in the `dse.ldif` file.

For example:

Find the `cn=replica` entry as shown below:

```
grep -E '^dn:\ cn=replica.*cn=.*cn=mapping\ tree.*cn=config'
/etc/opt/dirsrv/ slapd-instance_name/dse.ldif
```

Replica entry with space :

```
dn: cn=replica,cn=dc\3Dxxx\2C dc\3Dyyy\2C dc\3Dzzz,cn=mapping
tree,cn=config
```

Replica entry without space :

```
dn: cn=replica,cn=dc\3Dxxx\2Cdc\3Dyyy\2Cdc\3Dzzz,cn=mapping
tree,cn=config
```

8 Support and other resources

Information to collect before contacting HP

Be sure to have the following information available before you contact HP:

- Software product name
- Hardware product model number
- Operating system type and version
- Applicable error message
- Third-party hardware or software
- Technical support registration number (if applicable)

How to contact HP

Use the following methods to contact HP technical support:

- In the United States, see the Customer Service / Contact HP United States website for contact options:

  http://welcome.hp.com/country/us/en/contact_us.html

- In the United States, call 1-800-HP-INVENT (1-800-474-6836) to contact HP by telephone. This service is available 24 hours a day, 7 days a week. For continuous quality improvement, conversations might be recorded or monitored.

- In other locations, see the Contact HP Worldwide website for contact options:

  http://welcome.hp.com/country/us/en/wwcontact.html

Subscription service

HP recommends that you register your product at the Subscriber's Choice for Business website: http://www.hp.com/country/us/en/contact_us.html After registering, you will receive email notification of product enhancements, new driver versions, firmware updates, and other product resources.

Related information

HP-UX Directory Server documentation set

- *HP-UX Directory Server release notes*

  The release notes contain important information on new features, fixed bugs, known issues and workarounds, and other important information for this specific version of the HP-UX Directory Server.

- *HP-UX Directory Server administrator guide*

  This guide contains information and procedures you need to perform to maintain your Directory Server.

- *HP-UX Directory Server administration server guide*

  The Administration Server is a support server that drives access to the Directory Server Console , provides a web server for Directory Server web applications, and stores some Directory Server configuration. This guide covers how to manage the Administration Server through the Console, through the command line, and through the web services. It also covers basic Administration Server concepts.

- *HP-UX Directory Server configuration, command, and file reference*

  This document provides reference information on the command line scripts, configuration attributes, and log files shipped with the Directory Server.

- *HP-UX Directory Server console guide*

  This guide covers the basic structure of the Console for both the Directory Server and the Administration Server and provides an overview of how to use the main Console to manage users and access within the Console.

- *HP-UX Directory Server deployment guide*

  This guide covers the basic considerations that should be addressed before deploying the Directory Server. The decisions made during this phase can have a significant and lasting affect on the effectiveness, efficiency, and scalability of your Directory Server. You should have a good understanding of your Directory Server requirements before moving on to the installation phase.

- *HP-UX Directory Server installation guide*

  This manual contains information and procedures for installing your Directory Server as well as procedures for migrating from Netscape Directory Server 6.21 or Red Hat Directory Server 7.1.

- *HP-UX Directory Server plug-in reference*

  This reference document describes server plug-ins, as well as how to write server plug-ins in order to customize and to extend the capabilities of the HP-UX Directory Server.

- *HP-UX Directory Server schema reference*

  This reference provides an overview of some of the basic concepts of the directory schema, including lists and descriptions of default schema files, and descriptions of object classes, attributes, object identifiers (OIDs), schema checking, and extending server schema.

- *HP-UX Directory Server web applications guide*

  This guide provides information on Directory Server web applications that are installed separately from the Directory Server.

For the latest information about HP-UX Directory Server, including current release notes, complete product documentation, technical notes, and white papers, as well as other HP Internet and Security products, see the HP-UX Directory Server documentation site at http://www.hp.com/go/hpux-security-docs

HP-UX documentation set

For the latest information about the HP-UX operating system, including current release notes, complete product documentation, technical notes, and white papers, see the HP-UX Operating Environments documentation sites for the version of HP-UX you use:

- HP-UX 11i v3 Operating Environments at http://www.hp.com/go/hpux-core-docs —> HP-UX 11i v3

- HP-UX 11i v2 Operating Environments at http://www.hp.com/go/hpux-core-docs —> HP-UX 11i v2

Troubleshooting resources

- You can search a technical knowledge database available on the HP Support Center (HPSC) website at [Support Center](#)

- To seek solutions to problems, you can post messages on the ITRC Forums page at the following website (select the HP-UX area in the Areas of peer problem solving section) at http://h20566.www2.hp.com/portal/site/hpsc?

Typographic conventions

This document uses the following typographical conventions:

`$, #`	A percent sign represents the C shell system prompt. A dollar sign represents the system prompt for the Bourne, Korn, and POSIX shells. A number sign represents the superuser prompt.
`Command`	A command name or qualified command phrase.
`Computer output`	Text displayed by the computer.
`|`	Separates items in a list of choices.
NOTE	A note contains additional information to emphasize or supplement important points of the main text.

9 Documentation feedback

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Include the document title and manufacturing part number in your message. All submissions become the property of HP.