Oracle® Fusion Middleware Release Notes for Oracle Directory Server Enterprise Edition

11*g* Release 1 (11.1.1)



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Contents

	Preface	7
1	New Features in Oracle Directory Server Enterprise Edition 11g Release 1 (11.1.1)	1.7
•		
	What's New in Oracle Directory Server Enterprise Edition 11g Release 1 (11.1.1)	
	New Features in Directory Server	
	New Features in Directory Proxy Server	
	Behavioral Changes in Directory Server Enterprise Edition	
	Change in Product Layout	21
	Replica Update Vector in LDIF	21
	Load Libraries for Sun Microsystems Plug-in From the Installation Directory	21
	Optimized Import	21
	Compliance with RFC 4522	21
	Compliance with RFC 4511	21
	New Administrative Commands and Functionality	22
	Binary Backup	22
	Faster Re-indexing	22
	Index State	23
	Enabled SSL Ciphers in Root DSE	23
2	Compatibility Issues	25
	Platform Support	25
	System Virtualization Support	26
	Software Support	
	Removed Software Components	
	Changes in the Directory Service Control Center	
	Compatibility Notes	

3	Installation Notes	31
	Getting the Software	31
	Hardware Requirements	32
	Directory Server Enterprise Edition Hardware Requirements	33
	Identity Synchronization for Windows Hardware Requirements	33
	Operating System Requirements	34
	Directory Server Enterprise Edition Operating System Requirements	34
	Identity Synchronization for Windows Operating System Requirements	36
	Software Dependency Requirements	37
	Directory Server Enterprise Edition Software Dependency Requirements	38
	Supported Application Servers for Directory Service Control Center	38
	Supported JDBC Data Sources	39
	Supported Browsers for Directory Service Control Center	39
	Identity Synchronization for Windows and Directory Server Plug-in Requirements in Firewall Environment	
	Identity Synchronization for Windows Software Dependency Requirements	40
	Identity Synchronization for Windows Requirements in a Firewall Environment	40
	Installation Privileges and Credentials	42
	Directory Server Enterprise Edition Privileges	42
	Identity Synchronization for Windows Installation Privileges and Credentials	42
	Installation Notes for Identity Synchronization for Windows	43
4	Directory Server Bugs Fixed and Known Problems	45
	Bugs Fixed in This Release	45
	Known Problems and Limitations in Directory Server	55
	Directory Server Limitations	55
	Known Directory Server Issues in 11g Release 1 (11.1.1)	57
5	Directory Proxy Server Bugs Fixed and Known Problems	67
	Bugs Fixed in This Release	67
	Known Problems and Limitations in Directory Proxy Server	75
	Directory Proxy Server Limitations	75
	Known Directory Proxy Server Issues in 11g Release 1 (11.1.1)	76

6	Directory Server Resource Kit Bugs Fixed and Known Problems		
	Bugs Fixed in Directory Server Resource Kit	. 83	
	Known Problems and Limitations in Directory Server Resource Kit	. 83	

Preface

These release notes contain important information available at the time of release. New features and enhancements, known limitations and problems, technical notes, and other information are addressed here. Read this document before you begin using Directory Server Enterprise Edition.

How This Book Is Organized

This book includes the following chapters.

Chapter 2, "Compatibility Issues," addresses compatibility with previous component product versions, and with potential upcoming changes to Directory Server Enterprise Edition software.

Chapter 3, "Installation Notes," covers topics related to installation, including hardware and software requirements.

Chapter 4, "Directory Server Bugs Fixed and Known Problems," covers fixes and issues for Directory Server.

Chapter 5, "Directory Proxy Server Bugs Fixed and Known Problems," covers fixes and issues for Directory Proxy Server.

Chapter 6, "Directory Server Resource Kit Bugs Fixed and Known Problems," introduces Directory Server Resource Kit. This chapter also covers fixes and issues for Directory Server Resource Kit.

Oracle Directory Server Enterprise Edition Documentation Set

This documentation set explains how to use Oracle Directory Server Enterprise Edition to evaluate, design, deploy, and administer directory services. In addition, it shows how to develop client applications for Directory Server Enterprise Edition. The Directory Server Enterprise Edition documentation set is available at http://docs.sun.com/coll/1819.3.

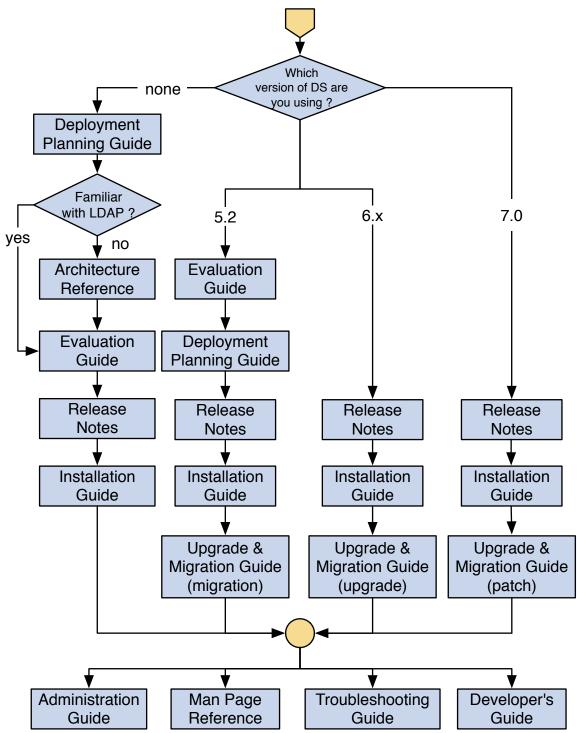
The following table lists the documents that make up the Directory Server Enterprise Edition documentation set.

TABLE P-1 Directory Server Enterprise Edition Documentation

DocumentTitle	Contents
Oracle Fusion Middleware Release Notes for Oracle Directory Server Enterprise Edition	Contains the latest information about Directory Server Enterprise Edition, including known problems.
Oracle Fusion Middleware Documentation Center for Oracle Directory Server Enterprise Edition	Contains links to key areas of the documentation set that help you to quickly locate the key information.
Oracle Fusion Middleware Evaluation Guide for Oracle Directory Server Enterprise Edition	Introduces the key features of this release. Demonstrates how these features work and what they offer in the context of a deployment that you can implement on a single system.
Oracle Fusion Middleware Deployment Planning Guide for Oracle Directory Server Enterprise Edition	Explains how to plan and design highly available, highly scalable directory services based on Directory Server Enterprise Edition. Presents the basic concepts and principles of deployment planning and design. Discusses the solution life cycle, and provides high-level examples and strategies to use when planning solutions based on Directory Server Enterprise Edition.
Oracle Fusion Middleware Installation Guide for Oracle Directory Server Enterprise Edition	Explains how to install the Directory Server Enterprise Edition software. Shows how to configure the installed software and verify the configured software.
Oracle Fusion Middleware Upgrade and Migration Guide for Oracle Directory Server Enterprise Edition	Provides upgrade instructions to upgrade the version 6 installation and migration instructions to migrate version 5.2 installations.
Oracle Fusion Middleware Administration Guide for Oracle Directory Server Enterprise Edition	Provides command-line instructions for administering Directory Server Enterprise Edition.
	For hints and instructions about using the Directory Service Control Center, DSCC, to administer Directory Server Enterprise Edition, see the online help provided in DSCC.
Oracle Fusion Middleware Reference for Oracle Directory Server Enterprise Edition	Introduces technical and conceptual foundations of Directory Server Enterprise Edition. Describes its components, architecture, processes, and features.
Oracle Fusion Middleware Man Page Reference for Oracle Directory Server Enterprise Edition	Describes the command-line tools, schema objects, and other public interfaces that are available through Directory Server Enterprise Edition. Individual sections of this document can be installed as online manual pages.
Oracle Fusion Middleware Troubleshooting Guide for Oracle Directory Server Enterprise Edition	Provides information for defining the scope of the problem, gathering data, and troubleshooting the problem areas by using various tools.
Sun Java System Identity Synchronization for Windows 6.0 Deployment Planning Guide	Provides general guidelines and best practices for planning and deploying Identity Synchronization for Windows.
Sun Java System Identity Synchronization for Windows 6.0 Installation and Configuration Guide	Describes how to install and configure Identity Synchronization for Windows.
Installation Instructions for Identity Synchronization for Windows 6.0 Service Pack 1	Provides installation instructions for Identity Synchronization for Windows 6.0 SP1.

Document Title	Contents
Oracle Fusion Middleware Developer's Guide for Oracle Directory Server Enterprise Edition 11 g Release 1 (11.1.1)	Shows how to develop directory client applications with the tools and APIs that are provided as part of Directory Server Enterprise Edition. This guide is not provided as part of the documentation set, but is bundled, with all sample code files, in an example.zip file, available at (http://www.oracle.com/technology/sample_code/products/oid/index.html).

For an introduction to Directory Server Enterprise Edition, review the following documents in the order in which they are listed.



Related Reading

The SLAMD Distributed Load Generation Engine is a Java application that is designed to stress test and analyze the performance of network-based applications. This application was originally developed by Sun Microsystems, Inc. to benchmark and analyze the performance of LDAP directory servers. SLAMD is available as an open source application under the Sun Public License, an OSI-approved open source license. To obtain information about SLAMD, go to http://www.slamd.com/. SLAMD is also available as a java.net project. See https://slamd.dev.java.net/.

Java Naming and Directory Interface (JNDI) supports accessing the Directory Server using LDAP and DSML v2 from Java applications. For information about JNDI, see http://java.sun.com/products/jndi/. The *JNDI Tutorial* contains detailed descriptions and examples of how to use JNDI. This tutorial is at http://java.sun.com/products/jndi/tutorial/.

Identity Synchronization for Windows uses Message Queue with a restricted license. Message Queue documentation is available at http://docs.sun.com/coll/1307.6.

Identity Synchronization for Windows works with Microsoft Windows password policies.

- Information about password policies for Windows 2003, is available in the Microsoft documentation online.
- Information about the Microsoft Certificate Services Enterprise Root certificate authority, is available in the Microsoft support documentation online.
- Information about configuring LDAP over SSL on Microsoft systems, is available in the Microsoft support documentation online.

Redistributable Files

Directory Server Enterprise Edition does not provide any files that you can redistribute.

Default Paths and Command Locations

This section explains the default paths used in documentation, and provides locations of commands on different operating systems and deployment types.

Default Paths

The table in this section describes the default paths that are used in this document. For complete descriptions of the files installed, see Chapter 1, Directory Server Enterprise Edition File Reference.

TABLE P-2 Default Paths

Placeholder	Description	Default Value
install-path	Represents the base installation directory for Directory Server Enterprise Edition software.	When you install from a zip distribution using unzip, the install-path is the current-directory/dsee7. When you install from a native package distribution, the default install-path is /opt/SUNWdsee7.
instance-path	Represents the full path to an instance of Directory Server or Directory Proxy Server. Documentation uses /local/dsInst/ for Directory Server and /local/dps/ for Directory Proxy Server.	No default path exists. Instance paths must nevertheless always be found on a <i>local</i> file system. On Solaris systems, the /var directory is recommended:
serverroot	Represents the parent directory of the Identity Synchronization for Windows installation location	Depends on your installation. Note that the concept of a serverroot no longer exists for Directory Server and Directory Proxy Server.
isw-hostname	Represents the Identity Synchronization for Windows instance directory	Depends on your installation
/path/to/cert8.db	Represents the default path and file name of the client's certificate database for Identity Synchronization for Windows	current-working-dir/cert8.db
serverroot/isw-hostname/ logs/	Represents the default path to the Identity Synchronization for Windows local log files for the System Manager, each connector, and the Central Logger	Depends on your installation
serverroot/isw-hostname/ logs/central/	Represents the default path to the Identity Synchronization for Windows central log files	Depends on your installation

Command Locations

The table in this section provides locations for commands that are used in Directory Server Enterprise Edition documentation. To learn more about each of the commands, see the relevant man pages.

TABLE P-3 Command Locations

Command	Native Package Distribution	Zip Distribution
cacaoadm	/usr/sbin/cacaoadm	Solaris, Linux, HP—UX —
		<pre>install-path/bin/cacaoadm</pre>
		Windows -
		<pre>install-path\bin\cacaoadm.bat</pre>
certutil	/usr/sfw/bin/certutil	<pre>install-path/bin/certutil</pre>
dpadm(1M)	install-path/bin/dpadm	install-path/bin/dpadm
dpconf(1M)	install-path/bin/dpconf	install-path/bin/dpconf
dsadm(1M)	install-path/bin/dsadm	install-path/bin/dsadm
dsccmon(1M)	install-path/bin/dsccmon	install-path/bin/dsccmon
dsccreg(1M)	install-path/bin/dsccreg	install-path/bin/dsccreg
dsccsetup(1M)	install-path/bin/dsccsetup	<pre>install-path/bin/dsccsetup</pre>
dsconf(1M)	install-path/bin/dsconf	install-path/bin/dsconf
dsmig(1M)	install-path/bin/dsmig	install-path/bin/dsmig
dsutil(1M)	install-path/bin/dsutil	install-path/bin/dsutil
entrycmp(1)	install-path/bin/entrycmp	<pre>install-path/bin/entrycmp</pre>
fildif(1)	install-path/bin/fildif	install-path/bin/fildif
idsktune(1M)	Not provided	At the root of the unzipped zip distribution
insync(1)	install-path/bin/insync	install-path/bin/insync
ldapsearch(1)	install-path/dsrk/bin/ldapsearch	install-path/dsrk/bin/ldapsearch
repldisc(1)	install-path/bin/repldisc	install-path/bin/repldisc

Typographic Conventions

The following table describes the typographic conventions that are used in this book.

TABLE P-4 Typographic Conventions

Typeface	Meaning	Example
AaBbCc123	The names of commands, files, and directories, and onscreen computer output	Edit your . login file.
		Use ls -a to list all files.
		machine_name% you have mail.
AaBbCc123	What you type, contrasted with onscreen	machine_name% su
	computer output	Password:
aabbcc123	Placeholder: replace with a real name or value	The command to remove a file is rm <i>filename</i> .
AaBbCc123	Book titles, new terms, and terms to be	Read Chapter 6 in the <i>User's Guide</i> .
	emphasized	A <i>cache</i> is a copy that is stored locally.
		Do <i>not</i> save the file.
		Note: Some emphasized items appear bold online.

Shell Prompts in Command Examples

The following table shows the default UNIX system prompt and superuser prompt for shells that are included in the Solaris OS. Note that the default system prompt that is displayed in command examples varies, depending on the Solaris release.

TABLE P-5 Shell Prompts

Shell	Prompt
Bash shell, Korn shell, and Bourne shell	\$
Bash shell, Korn shell, and Bourne shell for superuser	#
C shell	machine_name%
C shell for superuser	machine_name#

Symbol Conventions

The following table explains symbols that might be used in this book.

TABLE P-6 Symbol Conventions

Symbol	Description	Example	Meaning
[]	Contains optional arguments and command options.	ls [-l]	The -l option is not required.
{ }	Contains a set of choices for a required command option.	-d {y n}	The -d option requires that you use either the y argument or the n argument.
\${ }	Indicates a variable reference.	\${com.sun.javaRoot}	References the value of the com.sun.javaRoot variable.
-	Joins simultaneous multiple keystrokes.	Control-A	Press the Control key while you press the A key.
+	Joins consecutive multiple keystrokes.	Ctrl+A+N	Press the Control key, release it, and then press the subsequent keys.
\rightarrow	Indicates menu item selection in a graphical user interface.	$File \rightarrow New \rightarrow Templates$	From the File menu, choose New. From the New submenu, choose Templates.

Documentation, Support, and Training

The following additional resources are provided:

- Documentation (http://docs.sun.com)
- Support (http://www.sun.com/support/)
- Training (http://education.oracle.com) Click the Sun link in the left navigation bar.

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◆ ◆ ◆ CHAPTER 1

New Features in Oracle Directory Server Enterprise Edition 11g Release 1 (11.1.1)

These release notes provide current information on the date they are published. If the English version of the release notes has a more recent publication date, it might be updated with more current information that is not provided in other language versions. Consult the English version of the release notes for the most current information.

This section contains the following information:

- "What's New in Oracle Directory Server Enterprise Edition 11g Release 1 (11.1.1)" on page 17
- "Behavioral Changes in Directory Server Enterprise Edition" on page 20

What's New in Oracle Directory Server Enterprise Edition 11*g* Release 1 (11.1.1)

Oracle Directory Server Enterprise Edition 11g Release 1 (11.1.1) is a rebranded release of Sun Directory Server Enterprise Edition 7.0. This release is equivalent to a patch release. It contains no new functionality but does fix important security issues and certain other issues that have been integrated in previously released patches and hot fixes. For more information, see Chapter 4, "Directory Server Bugs Fixed and Known Problems," Chapter 5, "Directory Proxy Server Bugs Fixed and Known Problems," and "Bugs Fixed in Identity Synchronization for Windows 6.0 Service Pack 1" in *Installation Instructions for Identity Synchronization for Windows 6.0 Service Pack 1*.

This release also aligns the list of supported platforms with most other Oracle Fusion Middleware products. For details of the changes to supported platforms, see "Platform Support" on page 25, "System Virtualization Support" on page 26, and "Operating System Requirements" on page 34.

You can configure an Oracle Virtual Directory LDAP adaptor to work with Oracle Directory Server Enterprise Edition 11g Release 1 (11.1.1). For more information, see "LDAP Adapter Templates" in the *Administrator's Guide for Oracle Virtual Directory*.

Oracle Directory Server Enterprise Edition 11g Release 1 (11.1.1) can also be synchronized with other directory servers by using the Oracle Directory Integration Platform. For more information see "Configuring Directory Synchronization" in the *Administrator's Guide for Oracle Directory Integration Platform*.

This release incorporates the NSS 3.12.6 library, which fixes an important security bug around SSL renegotiation of security parameters. NSS 3.12.6 is, however, incompatible with previous versions of NSS regarding the renegotiation fix. Therefore, to take advantage of the safe renegotiation fix, you must upgrade to NSS 3.12.6 on all servers in your topology. A topology with mixed NSS versions will function as expected, provided renegotiation is not used. If safe renegotiation is requested in a mixed topology, however, encrypted traffic will be stopped between servers that have different versions of the NSS library.

In some instances, both in the documentation and in the product, you might still see references to Sun Microsystems. These can be read to mean Oracle Corporation in most cases. You might also see references to version 7.0.1. This was the internal version of the product, which can be read to mean 11g Release 1 (11.1.1) or version 11.1.1.3.0 in all cases.

Note – These Release Notes no longer list the known issues in Identity Synchronization for Windows. For a complete list of known issues, and for a description of bugs fixed in the latest service pack, see "Known Issues and Limitations" in *Installation Instructions for Identity Synchronization for Windows 6.0 Service Pack 1*.

The remainder of this section refers to new features that were provided in Sun Directory Server Enterprise Edition 7.0.

New Features in Directory Server

This section describes the new features that were provided in Directory Server 7.0.

New DB Entry Format

To reduce the database entry size, the existing database entry format is changed. The internal representation of an entry changed from an ASCII LDIF format to a tagged binary format. The data stored in the database does not have the characteristic starting of dn: anymore, the first byte of an entry being a value bigger than 0xE0 (hence all values 0xE0 to 0xFF are to be considered reserved for internal use).

For compatibility reasons entries can be a mix of LDIF and binary representations, but any modification will write the entry in binary format.

Suffix entries data can be compressed when written to disk to minimize their disk footprint. Compression is enabled according to the settings of the compression-mode and compression-entries properties,

For additional information, refer to the Chapter 8, "Writing Entry Store and Entry Fetch Plug-Ins," in *Oracle Fusion Middleware Developer's Guide for Oracle Directory Server Enterprise Edition*.

Copyless Restore

To save disk space, you can restore a server by moving files in place of copying them. You can perform the copyless restore by setting a flag with the restore command.

For more information, see "Binary Restore" in Oracle Fusion Middleware Administration Guide for Oracle Directory Server Enterprise Edition

IPv6 Support on Windows

Server instances installed on Windows systems now support Internet Protocol version 6, as do instances installed on other supported operating systems.

New Command for Account Management

The dsutil command now performs the functions formerly provided by the ns-activate, ns-inactivate, and ns-accountstatus commands.

New Backup Feature

Backup operations perform a database verify on archived data when the --flags verify-db option is specified.

Index Filter Analyzer

The index filter analyzer identifies index lists where the number of entries exceeds the maximum number of indexable entries (the ALLID threshold) and monitors user searches using such index lists. To enable the index filter analyzer, use the dsconf enable-index-filter-analyzer command.

New Features in Directory Proxy Server

This section describes the new features that were provided in Directory Proxy Server 7.0.

Entry Aggregation

Entry aggregation enables the following:

- Optimization of queries to a secondary data view
- Searching on a secondary data view first, if required
- Improved handling of large result sets (VLV control)

Request grouping to secondary data source

JDBC Data View

The JDBC data view now supports Date and Blob.

Optimized Monitoring and Logging

Directory Proxy Server now uses a new logging engine implementation that performs more efficiently on multi-core systems.

Connection Handlers

- New criteria based on LDAP groups
- Management of the maximum throughput per second

Coordinator Data View

New type of data view to address more use cases, for example, company mergers.

For more information, see "Creating and Configuring Coordinator Data Views" in *Oracle Fusion Middleware Administration Guide for Oracle Directory Server Enterprise Edition*.

Distribution Algorithm

An enhanced regex distribution algorithm is added, as described in "Configuring Pattern Matching Distribution Algorithm" in *Oracle Fusion Middleware Administration Guide for Oracle Directory Server Enterprise Edition*.

Join Data View Searches

To optimize the performance of searches of a join data view, Directory Proxy Server makes use of Virtual List View (vlv) indexes. It helps you to avoid the scenario where search hits the size limits due to the lots of entries from one data source and very few from the others. To use VLV indexes, see "Browsing Index" in *Oracle Fusion Middleware Reference for Oracle Directory Server Enterprise Edition*.

Behavioral Changes in Directory Server Enterprise Edition

This section describes the behavioral changes that were made in Sun Directory Server Enterprise Edition 7.0.

Change in Product Layout

The Directory Server Enterprise Edition product layout changed as follows:

- All commands are available in install-path/dsee7/bin.
- The plug-ins are available in *install-path*/dsee7/lib.

For a complete list of file locations, see "Software Layout for Directory Server Enterprise Edition" in *Oracle Fusion Middleware Reference for Oracle Directory Server Enterprise Edition*.

Replica Update Vector in LDIF

Starting with Directory Server 7.0, the export process (dsadmexport) always places the Replica Update Vector (RUV) as the last entry in the exported LDIF file.

Load Libraries for Sun Microsystems Plug-in From the Installation Directory

Directory Server loads the libraries for Sun Microsystems plug-ins from the path where the software is installed. The libraries are no longer loaded from the path mentioned in the LDIF.

Optimized Import

Global Import Process

A new threading model improves import performance on multi-core machines.

Parallel Merging

If an import is multi-pass, merging of the indexes happens in parallel if there is enough memory for holding the index and its temporary files. The parallel merging of indexes results in improved performance.

Compliance with RFC 4522

When a search operation returns attributes whose syntax requires binary transfer, it appends the ; binary qualifier to the attribute name. To disable compliance with RFC 4522, set the compat-flag property to no-rfc4522.

Compliance with RFC 4511

New in Oracle Directory Server Enterprise Edition 11g Release 1 (11.1.1).

LDAP's RFC 4511 states that an "and" filter choice evaluates to TRUE if all its constituent (SET OF) filters evaluate to TRUE. In practice, the result for an "and" filter choice is the set of entries that match each and every constituent filter applied on its own.

In previous versions of Directory Server, filters of the form (&(attr>=v1) (attr<=v2)) were interpreted as entries with values in the range v1...v2. This interpretation is too restrictive when the attribute is multi-valued, because an entry might have values that match both constituent filters but the values themselves might be smaller than v1 and bigger than v2.

The Directory Server now implements the RFC 4511 behavior by default, unless compat-flag is set to no-rfc4511.

New Administrative Commands and Functionality

This sections describes changes in the behavior of administrative commands.

- The dsadm and dpadm commands provide the new list-running-instances and stop-running-instances options for listing and stopping locally running servers.
- The dsadm and dpadm commands provide new options for managing certificates,
 -validity and --keysize, described in dsadm(1M) and dpadm(1M).
- The dsadm command also provides additional options for managing certificates, --sigalg,
 --phone, --email, and --dns described in dsadm(1M).
- The dpadm set-flags command supports two new flags, jvm-path and server-umask, described in dpadm(1M).
- Several commands were available in previous versions of Directory Server Enterprise
 Edition but whose functions are now provided by other commands, as described in
 "Command Line Changes" in Oracle Fusion Middleware Upgrade and Migration Guide for
 Oracle Directory Server Enterprise Edition
- Some commands were removed from Directory Server Enterprise Edition, as described in "Command Line Changes" in Oracle Fusion Middleware Upgrade and Migration Guide for Oracle Directory Server Enterprise Edition.

Binary Backup

A binary backup modifies the backup files running a database recovery and flushes backup transaction logs to the backup databases. To leave the backup as is, use the --flags no-recovery option.

Faster Re-indexing

Re-indexing is performed more efficiently, reusing some recent import techniques and speed improvements.

Index State

The dsconf info command reports which attributes need to be re-indexed (for example, after a configuration change).

Enabled SSL Ciphers in Root DSE

The root DSE contains the list of supported ciphers as reported by the security library. In release 7.0, the root DSE also contains the ciphers that are available for SSL negotiation under the enabledSSLCiphers attribute, and it is by default a subset of all the supported ciphers.



Compatibility Issues

This chapter describes the features that have been deprecated or removed from Directory Server Enterprise Edition component products. This chapter also covers features that are susceptible to removal, and functionality that is susceptible to deprecation for Directory Server Enterprise Edition component products.

This chapter covers the following topics:

- "Platform Support" on page 25
- "Software Support" on page 27
- "Compatibility Notes" on page 28

Classifications of interface stability are provided per manual page entry in *Oracle Fusion Middleware Man Page Reference for Oracle Directory Server Enterprise Edition*.

Platform Support

In Directory Server Enterprise Edition 11*g* Release 1 (11.1.1), support for the following platforms is removed:

- Open Solaris 2009.06
- Windows 2000
- Red Hat Advanced Server 3.0
- J2SE platform 1.4 and 1.5
- SUSE 9
- Solaris 10 x86 32-bit
- Native package installation for Windows
- Native package installation for Red Hat
- Native package installation for HP-UX

Native package installation for Solaris is still supported.

If you have Directory Server Enterprise Edition installed on a platform that is no longer supported, upgrade your operating system to the version outlined in the following table:

Previous Operating System Version	$\label{lem:minimum} Minimum Operating System Version Required to Install Directory Server Enterprise Edition 11 g Release 1 (11.1.1)$
Red Hat Enterprise Linux 3 x86	Red Hat Enterprise Linux 4 x86
Red Hat Enterprise Linux 3 x64	Red Hat Enterprise Linux 4 x64 or Oracle Enterprise Linux 4 x64
SUSE Linux Enterprise Server 9 32-bit	SUSE Linux Enterprise Server 10 32-bit
SUSE Linux Enterprise Server 9 x64	SUSE Linux Enterprise Server 10 x64
Microsoft Windows 2000 Server	Microsoft Windows 2003 Server R2
Microsoft Windows 2008 Server	Microsoft Windows 2008 Server R2
Hewlett Packard HP-UX 11.11	Hewlett Packard HP-UX 11.23

Support for the following new platforms is provided in this release:

- Oracle Enterprise Linux 4 Operating System for x64
- Oracle Enterprise Linux 5 U3 Operating System for x64
- Red Hat Enterprise Linux 5 U3 Operating System for x64

For details of all the supported operating systems, see "Operating System Requirements" on page 34.

System Virtualization Support

System virtualization is a technology that enables multiple operating system (OS) instances to execute independently on shared hardware. Functionally, software deployed to an OS hosted in a virtualized environment is generally unaware that the underlying platform has been virtualized. Some testing has been performed on selected system virtualization and OS combinations to help validate that the products continue to function on properly sized and configured virtualized environments as they do on non-virtualized systems.

For this release, support is provided for any OS running on the Oracle VM technology, provided that the OS is already supported natively for the Directory Server Enterprise Edition 11g Release 1 (11.1.1) software. Certification is not provided for every combination of OS and hardware, and support relies on the underlying Oracle VM technology implementation. Production deployment of the Directory Server Enterprise Edition 11g Release 1 (11.1.1) software on the Oracle VM technology has not been extensively tested.

For details about supported hardware platforms for this release of Directory Server Enterprise Edition, see "Hardware Requirements" on page 32.

For details about supported operating systems and OS versions for this release of Directory Server Enterprise Edition, see "Operating System Requirements" on page 34.

Directory Server Enterprise Edition 11g Release 1 (11.1.1) supports Logical Domains, (LDoms), on the SPARC platform for Solaris 10 Update 5. For more information about LDoms, see the *Logical Domains (LDoms)* 1.0.1 Administration Guide.

Note – Installation of Identity Synchronization for Windows in a virtualized environment is not supported.

Software Support

Removed Software Components

The following Directory Server Enterprise Edition components are no longer provided:

- Directory Editor
- Agent for Sun Cluster support
- Sun Java Web Console (Lockhart)

Changes in the Directory Service Control Center

This section describes changes in the behavior of the Directory Service Control Center (DSCC)

- The DSCC is now supported on Sun Web Server 7, GlassFish 3.x, Tomcat 6.x, Oracle WebLogic, and Oracle iPlanet 7.0.9. Support for Tomcat 5.5 has been removed.
- The DSCC is now available in internationalized versions.
- The DSCC is no longer supported on Sun Java Web Console.
- The DSCC is no longer supported on Sun Java System Application Server.

Compatibility Notes

This section lists the features that have been removed or deprecated in this release and also mentions the features or commands that will be removed in the next release:

- In the password policy, the DS5-compatible-mode interoperability mode is deprecated. In this version, you must use the DS6-mode interoperability mode.
- Some version 5.2 commands are removed in Directory Server 11g Release 1 (11.1.1), as
 described in "Command Line Changes" in Oracle Fusion Middleware Upgrade and
 Migration Guide for Oracle Directory Server Enterprise Edition
- The following legacy scripts have been replaced with the new commands:

Legacy Script	New Command
start-slapd	dsadm start
ldif2db	dsadm import
db2ldif	dsadm export
bak2db	dsadm restore
db2bak	dsadm archive
restart-slapd	dsadm restart
stop-slapd	dsadm stop

For more information, see "Command Line Changes" in *Oracle Fusion Middleware Upgrade* and *Migration Guide for Oracle Directory Server Enterprise Edition*.

- Before migrating a replicated server topology, review Chapter 7, "Migrating a Replicated Topology," in Oracle Fusion Middleware Upgrade and Migration Guide for Oracle Directory Server Enterprise Edition.
- When you create a Directory Server instance in a replicated topology, password policy is configured initially backwards-compatible to assist with migrating the topology. After upgrading, you change the compatibility mode to enable richer password policy configuration. Directory Server manages the conversion. For more information, see "Migrating a Deployment to Directory Server 11g Release 1 (11.1.1)" in Oracle Fusion Middleware Administration Guide for Oracle Directory Server Enterprise Edition. In a future release, the backwards-compatible password policy configuration might be removed.
- When you create a Directory Server instance, support for the modify DN operation is disabled. After upgrading all the server instances in your replication topology, the modify DN operation can be replicated properly. At that point, you can enable support for the modify DN operation on each server instances. Use the dsconf set-server-prop moddn-enabled: on command for this purpose.

This feature is provided for version 5.2 compatibility.

- The db-path suffix property (dsconf set-suffix-prop *suffix-name* db-path:/new/directory and dsconf create-suffix --db-path) is deprecated and might be removed in a future release. Use the db-path server property to store all the suffixes in a different directory than the instance directory.
- Work is currently being done to resolve issues with the stability of the dsadm repack subcommand under stress. As a safety measure, the dsadm repack subcommand has been disabled temporarily for the 11g Release 1 (11.1.1) release.

If you run the dsadm repack subcommand, the following message is displayed:

```
:[19/Oct/2009:11:51:50 \pm0200] - WARNING<99999> - conn=-1 op=-1 msgId=-1 - The repack function is temporarily disabled for the 7.0 release.
```

■ The Oracle Fusion Middleware Developer's Guide for Oracle Directory Server Enterprise Edition 11g Release 1 (11.1.1) describes plug-in API changes. Interfaces identified there as deprecated might be removed in a future release.

Note – This guide is no longer provided as part of the documentation set. All sample code files have also been removed from the product distribution. The *Developer's Guide* and the sample code files are bundled in an example.zip file that is available at http://www.oracle.com/technology/sample code/products/oid/index.html.

- Oracle Directory Server Enterprise Edition 11g Release 1 (11.1.1) includes an update to Identity Synchronization for Windows. Identity Synchronization for Windows 6.0 SP1 is bundled with Oracle Directory Server Enterprise Edition.
 - Before upgrading Identity Synchronization for Windows, read Chapter 10, "Migrating Identity Synchronization for Windows," in *Oracle Fusion Middleware Upgrade and Migration Guide for Oracle Directory Server Enterprise Edition*.
- Directory Server Enterprise Edition 11*g* Release 1 (11.1.1) does not provide any changes to Directory Server Resource Kit.
- The LDAP utility manual pages on Sun Solaris systems do not document the version of the LDAP utilities ldapsearch, ldapmodify, ldapdelete, and ldapadd that are delivered with Directory Server Enterprise Edition. The commands might no longer be delivered separately on Solaris systems, but instead integrated with the commands that are provided by the operating system in a future version. See *Oracle Fusion Middleware Man Page Reference for Oracle Directory Server Enterprise Edition* for the manual pages for the LDAP client tools.



Installation Notes

This chapter provides information about downloading the Directory Server Enterprise Edition software, and lists the primary installation requirements.

This chapter covers the following topics:

- "Getting the Software" on page 31
- "Hardware Requirements" on page 32
- "Operating System Requirements" on page 34
- "Software Dependency Requirements" on page 37
- "Installation Privileges and Credentials" on page 42
- "Installation Notes for Identity Synchronization for Windows" on page 43

Getting the Software

You can download the Oracle Directory Server Enterprise Edition 11*g* Release 1 (11.1.1) software from the Oracle E-Delivery site as follows:

- Point your browser to the Oracle E-Delivery site at http://edelivery.oracle.com.
- 2. Select the required language and click Continue.
- 3. Complete the Export Validation form and click Continue.
- 4. On the Media Pack Search page:
 - a. Select Oracle Fusion Middleware from the Select a Product Pack list.
 - b. Select the required platform and click Go.
- 5. Select Oracle Fusion Middleware 11g Media Pack and click Continue.
- 6. Select Oracle Directory Server Enterprise Edition 11g Release 1 (11.1.1.3.0) and click Download.

Directory Server Enterprise Edition 11g Release 1 (11.1.1) is available in the following distributions.

- Native package distribution (for Solaris only)
- Zip distribution (for all platforms)

Note – Identity Synchronization for Windows version 6.0 SP1 is bundled with Oracle Directory Server Enterprise Edition 11g Release 1 (11.1.1).

Before you install Identity Synchronization for Windows version 6.0 SP1, you *must* read Installation Instructions for Identity Synchronization for Windows 6.0 Service Pack 1.

Hardware Requirements

This section covers hardware requirements for Directory Server Enterprise Edition software.

- "Directory Server Enterprise Edition Hardware Requirements" on page 33
- "Identity Synchronization for Windows Hardware Requirements" on page 33

Directory Server Enterprise Edition Hardware Requirements

Directory Server Enterprise Edition software requires the following hardware.

Component	Platform Requirement
RAM	1-2 GB for evaluation purposes
	Minimum 4 GB for production servers
Local disk space	$400~\mathrm{MB}$ disk space for binaries. By default, binaries installed from native packages are placed in /opt on UNIX systems. For evaluation purposes, an additional 2 GB local disk space for server software might be sufficient.
	If you are using Directory Server, consider that entries stored in Directory Server use local disk space. Directory Server does not support logs and databases installed on NFS-mounted file systems. Sufficient space should be provided for the database on a local file system in, for example, /var/opt or /local. For a typical production deployment with a maximum of 250,000 entries and no binary attributes such as photos, 4 GB might be sufficient.
	Directory Server may use more than 1.2 GB of disk space for its log files. This should be taken into account that 4 GB storage space is only for the databases, not the logs.
	Directory Server supports SAN disk storage. Before using SAN disk, you need to understand the layout and the design of the disk because the write performance of the system is affected if many applications simultaneously access data from the same disk.
	Directory Proxy Server does not support installation on NFS-mounted file systems. Sufficient space should be provided for the instance, and for all files used by the instance on a local file system in, for example, /var/opt or /local.
	Directory Proxy Server can use more than 1.2 GB of disk space for its log files.

Identity Synchronization for Windows Hardware Requirements

Identity Synchronization for Windows software requires the following hardware.

Component	Platform Requirement	
RAM	$512\mathrm{MB}$ for evaluation purposes wherever components are installed. More memory is preferred.	
Local disk space	$400~\mathrm{MB}$ disk space for minimal installation alongside Directory Server.	

Operating System Requirements

This section covers operating systems, patches and service packs required to support Directory Server Enterprise Edition component products.

Directory Server Enterprise Edition Operating System Requirements

The Directory Server Enterprise Edition software is validated with full installations of the operating systems listed here, not with reduced "base", "End User", or "core" installations. Certain operating systems require additional service packs or patches as shown in the following table.

Supported OS Versions for Directory Server Enterprise Edition	Distribution Type Supported	Additional Required Software and Comments
Solaris 10 U5+ Operating System for SPARC 64-bit and x64	Native packages and zip distribution	The recommended patch clusters available at these sites: For SPARC, the recommended patch cluster available at http://sunsolve.sun.com/pdownload.do?target=10_Recommended.zip For x64, the recommended patch cluster available at http://sunsolve.sun.com/pdownload.do?target=10_x86_Recommended.
Solaris 9 U9+ Operating System for SPARC 64-bit and x86	Native packages and zip distribution	The recommended patch clusters available at these sites: For SPARC, the recommended patch cluster available at http://sunsolve.sun.com/pdownload.do?target=9_Recommended.zip For x86, the recommended patch cluster available at http://sunsolve.sun.com/pdownload.do?target=9_x86_Recommended.z

Supported OS Versions for Directory Server Enterprise Edition	Distribution Type Supported	Additional Required Software and Comments
Solaris 10 U5+ Trusted Extension Operating System for SPARC 64-bit and x64	Native packages and zip distribution	The recommended patch clusters available at these sites: For SPARC, the recommended patch cluster available at http://sunsolve.sun.com/pdownload.do?target=10_Recommended.zip For x64, the recommended patch cluster available at http://sunsolve.sun.com/pdownload.do?target=10_x86_Recommended.zip
Red Hat Enterprise Linux 5 UL3+ Operating System for x64	Zip distribution	No additional patches required.
Red Hat Enterprise Linux 4 UL8+ Operating System for x64 and x86	Zip distribution	No additional patches required.
Oracle Enterprise Linux 5 UL3+ Operating System for x64	Zip distribution	No additional patches required.
SUSE Linux Enterprise Server 10 SP2+ Operating System for x86 and x64	Zip distribution	pam-32bit-9-yyyymmddhhmm.rpmisa prerequisite for cacao to start on x64 systems.
SUSE Linux Enterprise Server 11 Operating System for x64	Zip distribution	pam-32bit-9-yyyymmddhhmm.rpm is a prerequisite for cacao to start.
HP-UX 11i(11.23) PA-RISC 64-bit	Zip distribution	No additional patches required.
Microsoft Windows Server 2003 R2+ for x86 and x64	Zip distribution	No additional patches required.
Microsoft Windows Server 2008 R2 for x86 and x64	Zip distribution	No additional patches required.

- For all supported versions of Microsoft Windows, Directory Server and Directory Proxy Server run only in 32-bit mode, and the filesystem type must be NTFS.
- Oracle Directory Server Enterprise Edition 11*g* Release 1 (11.1.1) 32-bit is not supported on 64-bit platforms except Microsoft Windows.
- If a new service pack or update for a supported platform is released, Oracle Directory Server Enterprise Edition 11*g* Release 1 (11.1.1) supports that service pack or update.

 Identity Synchronization for Windows is not supported on HP-UX and SUSE or Windows 2008, although you can use Identity Synchronization for Windows to synchronize with a Windows 2008 system.

Note – Installations on SUSE Linux Enterprise Server require that you reset several Java environment variables. For more information, see *Oracle Fusion Middleware Installation Guide for Oracle Directory Server Enterprise Edition*.

Oracle Directory Server Enterprise Edition 11g Release 1 (11.1.1) delivers and supports Java 1.6.

Identity Synchronization for Windows Operating System Requirements

Identity Synchronization for Windows components run on the operating system versions listed here. Certain operating systems require additional service packs or patches as shown in the following tables.

Supported OS Versions for Identity Synchronization for Windows	Additional Required Software and Comments
Solaris 10 Operating System for SPARCand x86 architectures	Patches: For SPARC, the recommended patch cluster available at http://sunsolve.sun.com/ pdownload.do?target=10_Recommended.zip For x64, the recommended patch cluster available at http://sunsolve.sun.com/ pdownload.do?target=10_x86_Recommended.zip
Solaris 9 Operating System for SPARC and x86 architectures	Patches: For SPARC, the recommended patch cluster available at http://sunsolve.sun.com/ pdownload.do?target=9_Recommended.zip For x86, the recommended patch cluster available at http://sunsolve.sun.com/ pdownload.do?target=9_x86_Recommended.zip

Supported OS Versions for Identity Synchronization for Windows	Additional Required Software and Comments
Red Hat Enterprise Linux Advanced	The following compatibility libraries are recommended:
Server 4.0 Update 2 for x86	compat-gcc-32-3.2.3-47.3.i386.rpm
	compat-gcc-32-c++-3.2.3-47.3.i386.rpm
	The following compatibility library is required:
	compat-libstdc++-33-3.2.3-47.3.rpm
	Even when running Red Hat on a 64-bit system, 32-bit system libraries are installed.
	These compatibility libraries are available from Red Hat media or https://www.redhat.com/rhn/rhndetails/update/.
Microsoft Windows 2003 Server Standard Edition	Service Pack 1
Microsoft Windows 2003 Server Enterprise Edition	Service Pack 1

Note - Identity Synchronization for Windows is not supported on SUSE or HP-UX systems.

Software Dependency Requirements

- "Directory Server Enterprise Edition Software Dependency Requirements" on page 38
- "Supported Application Servers for Directory Service Control Center" on page 38
- "Supported JDBC Data Sources" on page 39
- "Supported Browsers for Directory Service Control Center" on page 39
- "Identity Synchronization for Windows and Directory Server Plug-in Requirements in a Firewall Environment" on page 40
- "Identity Synchronization for Windows Software Dependency Requirements" on page 40
- "Identity Synchronization for Windows Requirements in a Firewall Environment" on page 40

Directory Server Enterprise Edition Software Dependency Requirements

The key software dependency requirements are as follows:

- Directory Server relies on the Network Security Services, NSS, layer for cryptographic algorithms. NSS has been validated to work with the Sun cryptographic framework provided on Solaris 10 systems, which supports cryptographic acceleration devices.
- On Microsoft Windows systems, you must disable the pop-up blocker to make Directory Service Control Center work properly.
- Directory Proxy Server will work with any LDAPv3-compliant directory server, but has been tested only with the directory server component of Directory Server Enterprise Edition.
- In Solaris 10, rc.scripts are deprecated so commands like dsadm autostart are not supported. Instead use the Solaris 10 Service Management Facility (SMF) to handle these types of requests. For example, dsadm enable-service. For more information on SMF, see the Solaris operating system documentation.

Supported Application Servers for Directory Service Control Center

The Directory Service Control Center supports the following application servers:

- GlassFish 3.x
- Tomcat 6.0+
- Sun Java System Web Server 7.0+
- Oracle WebLogic Server 10.3.3
- Oracle iPlanet Web Server 7.0.9

For more information, see Appendix A, "Deploying the DSCC WAR File," in *Oracle Fusion Middleware Installation Guide for Oracle Directory Server Enterprise Edition*.

Supported JDBC Data Sources

For virtualization, Directory Proxy Server has been validated with the following JDBC data sources, using the drivers mentioned below. Though Directory Proxy Server works with all the JDBC 3 compliant drivers.

JDBC Data Source	JDBC Driver
DB2 v9	IBM DB2 JDBC Universal Driver Architecture 2.10.27
Microsoft SQL Server 2005	sqljdbc.jar 1.2.2323.101
MySQL 5.x	MySQL-AB JDBC Driver mysql-connector-java-5.0.4
Oracle 10g Database	Oracle JDBC driver 10.2.0.2.0 (See "Directory Proxy Server Limitations" on page 75 for more information.)
JavaDB 10.5.3.0	Apache Derby Network Client JDBC Driver 10.5.3.0

Supported Browsers for Directory Service Control Center

The following table displays the browsers for each operating system that supports Directory Service Control Center.

Operating System	Supported Browser
Solaris 10 and Solaris 9 (SPARC and x86)	Firefox 3.5+
Red Hat Linux and SUSE Linux	Firefox 3.5+
HP-UX	Firefox 3.5+
Windows 2003/2008	Microsoft Internet Explorer 7 and 8, and Firefox 3.5+

Identity Synchronization for Windows and Directory Server Plug-in Requirements in a Firewall Environment

Each Directory Server plug-in must be able to reach the Directory Server connector's server port, which was chosen when the connector was installed. Plug-ins that run in Directory Server Master replicas must be able to connect to Active Directory's LDAP, port 389, or LDAPS, port 636. The plug-ins that run in other Directory Server replicas must be able to reach the master Directory Server LDAP and LDAPS ports.

Identity Synchronization for Windows Software Dependency Requirements

Before you can install Identity Synchronization for Windows, you must install the prerequisite Sun Java System software components, including JRE and Message Queue.

- No JRE is provided with Identity Synchronization for Windows.
 The Identity Synchronization for Windows installer requires J2SE or JRE 1.5.0_09. For more information, go to http://java.sun.com.
- Identity Synchronization for Windows requires the installation and configuration of Message Queue 4.3, which is available from Oracle Software Downloads. Select Sun Downloads A-Z Listing and navigate to Message Queue 4.3.
 - Message Queue 3.7 (delivered as a Java Enterprise System shared component) is also supported.

When you install Identity Synchronization for Windows, you must specify the path to the correct version of Message Queue. The Identity Synchronization for Windows installation program then installs a required broker into Message Queue, so that Identity Synchronization for Windows can use Message Queue for synchronization.

Identity Synchronization for Windows Requirements in a Firewall Environment

You can run Identity Synchronization for Windows in a firewall environment. The following sections list the server ports that you must expose through the firewall.

Message Queue Requirements

By default, Message Queue uses dynamic ports for all services except for its port mapper. To access the Message Queue broker through a firewall, the broker should use fixed ports for all services.

After installing the core, you must set the imq.<service_name>.<protocol_type>.port broker configuration properties. Specifically, you must set the imq.ssljms.tls.port option. Refer to the Message Queue documentation for more information.

Installer Requirements

The Identity Synchronization for Windows installer must be able to communicate with the Directory Server acting as the configuration directory.

- If you are installing an Active Directory connector, the installer must be able to contact Active Directory's LDAP port, 389.
- If you are installing a Directory Server connector or a Directory Server plug-in (subcomponent), the installer must be able to contact the Directory Server LDAP port, default 389.

Core Component Requirements

The Message Queue, system manager, and command line interface must be able to reach the Directory Server where the Identity Synchronization for Windows configuration is stored.

Console Requirements

The Identity Synchronization for Windows console must be able to reach the following:

- Active Directory over LDAP, port 389, or LDAPS, port 636
- Active Directory Global Catalog over LDAP, port 3268, or LDAPS, port 3269
- Each Directory Server over LDAP or LDAPS
- Administration Server
- Message Queue

Connector Requirements

All connectors must be able to communicate with Message Queue.

In addition, the following connector requirements must be met.

- The Active Directory connector must be able to access the Active Directory Domain Controller over LDAP, port 389, or LDAPS, port 636.
- The Directory Server connector must be able to access Directory Server instances over LDAP, default port 389, or LDAPS, default port 636.

Installation Privileges and Credentials

This section covers privileges or credentials required for installation of Directory Server Enterprise Edition component products.

- "Directory Server Enterprise Edition Privileges" on page 42
- "Identity Synchronization for Windows Installation Privileges and Credentials" on page 42

Directory Server Enterprise Edition Privileges

When installing Directory Server Enterprise Edition from a native package distribution on Solaris systems, you must install as root.

You can install Directory Server Enterprise Edition from the zip distribution without special privileges. For more information, see the *Oracle Fusion Middleware Installation Guide for Oracle Directory Server Enterprise Edition*.

Identity Synchronization for Windows Installation Privileges and Credentials

To install Identity Synchronization for Windows, you must provide credentials for the following.

- Configuration Directory Server.
- Directory Server being synchronized.
- Active Directory.

See Chapter 3, "Installing Core," in Sun Java System Identity Synchronization for Windows 6.0 Installation and Configuration Guide for details.

In addition, you must have the following privileges to install Identity Synchronization for Windows.

- On Solaris and Red Hat systems, you must install as root.
- On Windows systems, you must install as Administrator.

Note – When you enter passwords by using the text-based installer, the program automatically masks the passwords so passwords are not echoed in the clear. The text-based installer is supported on Solaris and Red Hat systems only.

Installation Notes for Identity Synchronization for Windows

Installation of Identity Synchronization for Windows in a virtualized environment is not supported.

On Windows 2003 Server, the default password policy enforces strict passwords.

Before you install Identity Synchronization for Windows, please read Chapter 2, "Preparing for Installation," in *Sun Java System Identity Synchronization for Windows 6.0 Installation and Configuration Guide* and Installation Instructions for Identity Synchronization for Windows 6.0 Service Pack 1.



Directory Server Bugs Fixed and Known Problems

This chapter contains important, product-specific information available at the time of release of Directory Server 11*g* Release 1 (11.1.1).

This chapter covers the following topics:

- "Bugs Fixed in This Release" on page 45
- "Known Problems and Limitations in Directory Server" on page 55

Bugs Fixed in This Release

This section lists the bugs fixed in Directory Server 7.0 and Directory Server 11*g* Release 1 (11.1.1).

TABLE 4-1 Bugs Fixed in Directory Server 11g Release 1 (11.1.1)

Bug ID	Description
4987124	UIDs for entries are not required to be unique.
5087249	Network connections remain established regardless of the settings of the tcp_keepalive_interval and tcp_ip_abort_interval attributes.
6181237	The message WARNING<1028> $-$ Replay of an already seen operation occurs frequently in the error log.
6192090	The insync command cannot parse a host specification provided to it if the host specification contains an at sign (@).
6250000	Non-unique values of nsuniqueid can be added to a replication topology and cause replication to fail.
6283810	Using the ldapmodify command to delete an attribute can cause replication to fail.

TABLE 4-1	Bugs Fixed in Directory Server 11g Release 1 (11.1.1) (Continued)
Bug ID	Description
6292310	Modifying an entry's RDN at the same time as modifying an attribute value of the entry's parent puts the directory server in deadlock.
6295323	A memory leak occurs in searches that return virtual attributes.
6299664	Performing a modify operation using replace with a value of 0 for the first time on an attribute results in a NULL value.
6340125	If a change log is created and read simultaneously, the directory server can fail.
6341382	Read errors can occur when SASL security is enabled.
6356373	$The indirect \ Class \ of \ Service \ feature \ does \ not \ support \ multiple \ templates \ as \ documented.$
6374916	The start-tls operation sometimes causes a server crash.
6382134	The ldapcompare command can fail if a Class of Service is configured.
6386671	ou=groups can contain duplicate data.
6479754	Replication can fail after SSL is configured as documented.
6490419	The ldapsearch command can return inconsistent results.
6497556	On Windows installations, the ${\tt dsadminfo}$ command can display the incorrect owner of ${\tt ns\textsc{-slapd}}.$
6498501	On HP-UX installations, the $\tt dsadm\ stop\ and\ restart\ commands\ can\ behave\ inconsistently\ when\ the\ monitoring\ plug-in\ is\ enabled.$
6499077	The warning message for an unregistered suffix contains extra characters.
6500908	$Certificates\ with\ names\ that\ contain\ localized\ characters\ cannot\ be\ listed\ or\ deleted\ correctly.$
6504891	The dsadm autostart command can return incorrect error messages.
6506019	On HP-UX installations, the directory server can fail when the GNU debugger (GDB) releases the ${\tt ns\textsc{-slapd}}$ process.
6536777	On UNIX installations, the JVM of the Application Server must be started with -Djava.awt.headless=true to enable replication topology rendering.
6542953	Multiple ZIP installations do not manage all CACAO ports correctly.
6548467	The DSCC cannot be accessed through its URL when a previous connection is still open.
6550543	DSCC can return errors when run with Java 1.6.
6551672	The Application Server returns an Unable to create SASL client conn for auth mechanism message and cannot communicate with CACAO.
6557499	Registering and deploying JESMF creates defunct processes.

TABLE 4-1	Bugs Fixed in Directory Server 11g Release 1 (11.1.1) (Continued)
Bug ID	Description
6561787	DSCC parses dsinstancemain.confirmreadonly incorrectly.
6562921	Data passed to Windows service management must maintain the correct character case.
6572853	The Class of Service statistics monitor reports results incorrectly.
6579286	On Windows installations, the ${\tt dsrepair}$ command fails because of a missing directory in the PATH environment variable.
6579820	On Windows installations, the plcheck command fails.
6582585	$DSCC\ cannot\ access\ the\ log\ files\ when\ the\ instance\ path\ contains\ multi-byte\ characters.$
6586725	A memory leak occurs in multi-master replication over SSL.
6593775	DSCC does not display all suffixes.
6594285	DSCC fails to support RBAC.
6617936	When the repldisc command encounters an error connecting to a replica over SSL, its credentials are not properly handled.
6620846	$The \ repldisc\ command \ in \ interactive \ mode \ should \ not \ request \ the \ host \ name \ and \ port \ number.$
6620851	The repldisc command in interactive mode should not request replicas that cannot be connected.
6634048	External use of the reversible password plug-in can cause replication to fail.
6640285	No trimming occurs when $dsconf$ is used to set the $nsslapd$ -change log are the retro change log .
6640806	Re-indexing requires too much time to complete.
6641259	The DSCC displays a message that describes the Replication Settings tab incorrectly.
6642364	Some password policy updates appear in replicated audit logs but not in the local audit log.
6644137	The DSCC displays a message that describes the Promote/Demote Suffix function incorrectly.
6644368	The repldisc command fails to compare host names correctly.
6645742	Replication stops between servers of different versions after a failed login of a known user with an incorrect password.
6646794	$The DSCC ACI wizard produces invalid ACIs when multiple {\tt targetattr} values are selected.$
6650039	A replication master can fail when replication stops normally.
6651645	$Passwords\ cannot\ be\ changed\ through\ proxied\ authorization\ when\ pwdReset\ is\ set\ to\ true.$
6659728	Performance can be degraded when the access log is enabled.

TABLE 4-1	Bugs Fixed in Directory Server 11g Release 1 (11.1.1) (Continued)
Bug ID	Description
6662669	The dsconf set-log-prop command does not change permissions on log files in a timely manner.
6663324	Time-based log rotation stops when the machine time is set back.
6663553	Extra spaces in an ACI string can cause incorrect ACI evaluations.
6670977	The DSCC fails to display a long ACI.
6675384	Complex Class-of Service deployments can cause the directory server to fail.
6680142	Several text files require correction.
6680718	Rotation can become deadlocked.
6683182	$A user \ password \ can \ become \ expired \ even \ if \ password \ MaxAge \ is \ set \ to \ a \ high \ value.$
6683870	The DSCC can corrupt entries with binary attributes during modification.
6684993	$Under certain circumstances, the password policy attribute pwd \\ \texttt{MinLength} is not enforced.$
6686131	The DSCC displays some links incorrectly.
6686199	$The \ directory \ server \ can \ fail \ if \ the \ uniqueness-among-attribute-set \ plug-in \ is \ configured.$
6686632	The directory server fails if a pre-op plug-in performs an access control check on an entry before deleting it.
6687304	$Changes \ to \ client \ authentication \ made \ with \ the \ DSCC \ do \ not \ become \ effective \ until \ the \ directory \ server \ is \ restarted.$
6688454	Pass-through authentication can prevent the directory server from stopping correctly.
6688891	The audit log contains old passwords.
6689290	$DSCC\ can\ display\ incorrect\ message\ text\ when\ starting\ and\ stopping\ the\ directory\ server.$
6689454	Errors can occur if a database is restored and the backup has a very large change log.
6690684	A server instance bound to a specific IP address can fail to become registered.
6700232	The directory server can become deadlocked when accessing the change log.
6704259	Replication operations require too much time.
6704261	A multiple-pass LDIF import operation can produce an incorrect index.
6704754	The Logging property ${\tt rotation-time}$ cannot be set to undefined even though it is listed as an allowed value
6705319	DSCC does not disable a referral completely.
6706009	The DSCC does not handle subtype attributes correctly when editing entries.

TABLE 4-1	Bugs Fixed in Directory Server 11g Release 1 (11.1.1) (Continued)
Bug ID	Description
6707089	The directory server can fail when evaluating an ACI.
6707164	A binary restore of the database recreates the replication change log.
6708194	The DSCC cannot set the time-base log rotation and deletion policy to Do Not Automatically Rotate/Delete.
6708615	The directory server fails when stopping the server when indexing is active.
6711123	Backup and export files can become invalid if infrequently updated masters receive updates.
6712614	The starttls command runs slowly.
6715303	The directory server fails when fetching values of a virtual attribute.
6715911	The directory server can fail when creating a new suffix in the Top entry if the name of the suffix contains a back slash $(\)$.
6716661	The repl-schedule property should be multivalued.
6717507	Enabling replication can incorrectly update VLV indexes
6718308	The DSCC does not log all messages when restoring the database.
6721412	Certain substring filters do not work when searching localized attributes.
6723208	The DSCC corrupts mailSieveRuleSource when it updates a user.
6726890	The change log is not always trimmed correctly.
6731941	$The \ number \ of \ simultaneous \ pass-through \ authentications \ cannot \ be \ limited.$
6735966	On W indows in stall at ions, the directory server can fail under load when encryption is disabled.
6736172	$The \ directory \ server \ can \ add \ the \ cACertificate \ and \ crossCertificate Pair \ properties \ twice.$
6737227	The directory server can fail under load during DN normalization.
6737235	The targets cope keyword is sometimes handled incorrectly for anonymous ACIs.
6739300	The retro change log can grow very large when managing large static groups.
6740791	A memory leak can occur in the directory server when binding users whose password policy is assigned in a Class of Service.
6742347	In Windows installations, the directory server does not stop during shutdown when registered as a service.
6746125	The ldapsearch command can return incorrect results for a search of certificateRevocationList with non-existent subtypes.
6746574	When set to on, $nsslapd$ -return-exact-case does not work correctly for certificateRevocationList.

TABLE 4-1	Bugs Fixed in Directory Server 11g Release 1 (11.1.1) (Continued)
Bug ID	Description
6748713	The directory server can close a connection before idletimeout has elapsed.
6750238	In Windows installations, the first attempt of the directory server to restart after the system is rebooted can fail with System Event ID 7022.
6750240	des-plugin.so is not signed.
6751358	Prioritized replication does not work as designed.
6751952	Replication stops and restarts when a send update now operation occurs.
6752586	Identity Synchronization for Windows plug-in does not start.
6752738	An exported LDIF can include an entry's Replica Update Vector.
6753742	Upgrading a multi-master replication topology can fail.
6755852	The directory server cannot be installed on some Japanese Windows systems.
6756240	The directory server can fail because of polling issues.
6759200	directory server can fail because of binding with SASL.
6759886	$DEL\ operations\ are\ replicated\ in\ a\ multi-master\ topology, \verb modifiersname \ is\ logged\ incorrectly\ in\ the\ audit\ log\ of\ the\ consumer.$
6763091	The password policy assigned to a user entry through a role is not effective until the directory server is restarted.
6764616	Replication can fail if the suffix name contains a space.
6768405	The dsconf command does not correctly handle a hyphen (-).
6771728	Replication can fail if a MOD CSN (Change Sequence Number) is smaller than the previous ADD CSN.
6772760	The directory server can fail if it is stopped immediately after it is started.
6772870	$A\ consumer\ can\ become \ unsynchronized\ when\ ds\ - polling\ - thread\ - count\ is\ greater\ than\ 1.$
6772918	The dsconf info command does not always detect the directory server's version number.
6773132	The dsconf export command does not log an error when it fails because the target file system is full.

Bug ID Description 6774167 Unable to replace an SHA-encoded userpassword attribute value. Although this issue is fixed in this release, the fix is not complete until all Directory Server instances in your topology have been upgraded to version 11g R1 (11.1.1). Until all Directory Server instances have been upgraded, you must delete the userpassword attribute and then add it again before you attempt to add a new value or values. (You cannot simply delete an existing value if you do not know the unencrypted value of the attribute.) To delete the userpassword attribute and all password values, use the following command: \$ /opt/dsee7/dsrk/bin/ldapmodify -D cn=admin, cn=Administrators, cn=config -w - Enter bind password: dn: uid=Aaron.Atrc,ou=People,dc=example,dc=com **Men you have deleted the userpassword attribute, you can add it again with the password values that you wanted to keep. \$ /opt/dsee7/dsrk/bin/ldapmodify -D cn=admin,cn=Administrators,cn=config -w - Enter bind password: dn: uid=aaron.Atrc,ou=People,dc=example,dc=com changetype: modify add: userpassword userpassword: dn: uid=aaron.Atrc,ou=People,dc=example,dc=com changetype: modify add: userpassword userpassword: fn=uid=aaron.Atrc,ou=People,dc=example,dc=com \$ 777643 The insync operation can fail. 7779940 The dsconf matching-rule property for indexes should be multi-valued. 7789465 The searchrate command cannot index collation plug-in matching rules. 778470 Substring searches are unindexed if an equality index is not present. 7885664 Running the server as a Windows service is not completely compliant with Microsoft requirements.	TABLE 4-1	Bugs Fixed in Directory Server 11g Release 1 (11.1.1) (Continued)
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that you wanted to keep. \$ /opt/dsee7/dsrk/bin/ldapmodify -D cn=admin,cn=Administrators,cn=config -w - Enter bind password: dn: uid=Aaron.Atrc,ou=People,dc=example,dc=com changetype: modify add: userpassword userpassword: {SSHA}F/F+lmDvsWnS5XIpblmgtExK8Ve2flhjWn6kVQ== modifying entry uid=Aaron.Atrc,ou=People,dc=example,dc=com \$ The insync operation can fail. The dsconf matching-rule property for indexes should be multi-valued. The dsadm export command cannot index collation plug-in matching rules. The searchrate command can fail when processing a complex filter. Substring searches are unindexed if an equality index is not present. Running the server as a Windows service is not completely compliant with Microsoft requirements.		\$
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requirements.	6784701	Substring searches are unindexed if an equality index is not present.
6789448 An error can occur when the pwd-accept-hashed-pwd-enabled property is set.	6785664	
	6789448	An error can occur when the pwd-accept-hashed-pwd-enabled property is set.

TABLE 4-1	Bugs Fixed in Directory Server 11g Release 1 (11.1.1) (Continued)
Bug ID	Description
6790060	ACI evaluation during unindexed searches can require too much time.
6791372	The directory server can fail when the authrate command is running.
6793557	The directory server can fail when the DSML plug-in receives a corrupted DSML message.
6796266	The directory server can fail when it is stopped if the member of plug-in is not completely preloaded.
6797187	The dsadm add-self sign-cert command adds self-inconsistent certificates to the database.
6798026	On Windows installations, the directory server can crash during search operations.
6802840	On Solaris systems, log rotation stops after running ds conf with the rotate-log-now option.
6806271	In multi-master replication topologies, the directory server can fail to detect duplicate values for attributes with more than eight values.
6809149	Recovery from a database failure can cause the heap to be corrupted.
6821219	ACI evaluation incorrectly uses cached results.
6821682	The dsconf command does not handle the dsml-min-parser-count and dsml-max-parser-count properties correctly.
6827661	On some Windows installations, the ${\tt dsadm}$ stop command does not stop the directory server.
6834291	The sequence of plug-in operation should be reordered.
6834783	With VLV indexes configured, VLV errors are seen shortly after an import operation.
6835539	The DSCC can encounter an error when creating or modifying a specialized password policy.
6835550	In multi-master replication topologies, replication can fail after importing a replica.
6836463	The retro change log reports a large number of error 32 errors after a server restart.
6837200	The change log trimming thread can cause the directory server to fail at startup.
6837808	ACI evaluation during a modify operation can corrupt the heap.
6838287	On Windows systems, dsadm and DSCC logs are an hour behind during daylight savings time.
6844176	Memory leaks can occur when using CoS.
6846588	On Windows systems, the server stops responding to SSL requests under certain NSS/NSPR version conditions.
6846693	The directory server can crash after importing new entries.
6846934	ACIs with the ip keyword are not always evaluated correctly.
6848272	Macro ACIs do not handle DNs that include brackets.

TABLE 4-1	Bugs Fixed in Directory Server 11g Release 1 (11.1.1) (Continued)
Bug ID	Description
6849485	The server crashes during a DSML search if the bind password needs to be changed.
6849658	The Uniqueness plug in does not handle subtypes during add operations.
6849928	Importing can fail to create a replica correctly.
6850042	The ZIP distribution of the directory server should use non-default port numbers.
6850537	Search requests should return binary attributes in accordance with RFC 4522.
6851491	The directory server can crash during Class of Service operations.
6852119	A memory leak can occur when importing an LDIF with replication meta-data.
6852500	When a uniquemember is deleted from a group, the deleted group member is not displayed in the retro change log entry.
6853884	The ${\tt dsmigmigrate-config}$ command logs a configuration warning for the Strong Password Check plug-in.
6853981	The first $pwdFailureTime\ value\ is\ deleted\ when\ the\ pwdLockoutDuration\ has\ passed.$
6856557	The passwordexpirationtime attribute should be ignored by the password policy when the server is in DS6-mode.
6859942	A strong password policy handles extended ASCII incorrectly.
6861340	Inconsistent search results are produced when searching multi-valued attributes with a range filter, if an equality index exists.
6867669	Running a dsmlmodify operation causes the server to crash.
6867812	ACIs that include wild cards do not work correctly in certain cases.
6873828	Stopping a server instance using a dsadm command from a different installation does not work.
6878311	The UID Uniqueness plug in cannot handle more than one + symbol in a dn or uid.
6881605	A deadlock situation can occur on server shutdown when SMF is used.
6887642	Proxy authorization does not recognize grace logins for password changes.
6892914	A memory leak occurs in the CoS plug in.
6894059	Under certain conditions, fractional replication only evaluates updates from a subset of replicas.
6896757	The \min minimum-search-filter-substring-length of a resource limit policy does not work on complex search filters.
6900781	Performing a restore by using dsadm should place the database in referral mode.
6900955	Consecutive password changes cause the passwordexpirationtime attribute to be removed from the second master in a two-way multimaster topology.

TABLE 4-1	Bugs Fixed in Directory Server 11g Release 1 (11.1.1) (Continued)
Bug ID	Description
6902119	A memory leak occurs in the mapping tree code.
6902127	A memory leak occurs in the id2entry code.
6904986	dsccsetup —V returns unexpected null in output.
6902477	No recovery is performed when the server is restarted after a crash.
6905595	Frozen mode does not return referrals as expected.
6906234	The audit log does not contain the entire change when binary attributes are modified.
6908622	The insync command dumps core if uppercase characters are used in the hostname, with the option -S.
6908942	In a replicated topology with DSEE $6.x$ servers, the server sometimes crashes when replaying certain operation to the DSEE $6.x$ servers.
6912294	The RUV cannot be updated for the first change on a master.
6915746	When sending specifically crafted LDAP messages, the server can crash.
6918089	Running a dsadm reindex on the vlv attribute can cause the server to crash.
6920416	When modifying entries under cn=config, a comma is appended after the etime.
6920520	Bind DNs in cn=config can cause a deadlock in the server.
6920573	Running a reindex can leave the entryDN and parentID indexes in an inconsistent state.
6921014	Memory leaks can occur in the retro change log.
6921222	The state information for the change of an rdn attribute is missing in certain cases.
6923243	Running a vlv reindex operation does not work as expected.
6927120	Reindexing a VLV index hangs.
6927881	Running the directory server as a Windows service can disable other services.
6939218	$The server \ crashes \ if \ a synchronous \ searches \ are \ performed \ after \ a \ GSSAPI \ SASL \ bind.$
6940840	On Windows systems, the server crashes when running multiple root DSE searches.
6944409	In the $zh_{-}CN$ locale, an exception is generated when attempting to view the error, access, or audit logs.
6949107	Setting the ds-gather-filter-stats property to on can crash the server.
6949854	The command dsadm—A 1d does not return the most recent logs.
6950645	When deploying DSCC on a machine with no default locale, several log messages stating couldn't set locale correctly are generated.

TABLE 4-1	Bugs Fixed in Directory Server 11g Release 1 (11.1.1)	(Continued)
Bug ID	Description	
6960494	The server occasionally crashes when filter statistics are edifferent filter elements is used.	enabled and a filter with more than three

Known Problems and Limitations in Directory Server

This section lists known problems and limitations at the time of release.

Directory Server Limitations

Number of servers that can be managed using DSCC

The Directory Service Control Center (DSCC) enables centralized administration of Directory Server and Directory Proxy Server instances. The current version of DSCC has been tested successfully in an environment of 42 server instances, supporting most common configurations.

Do not change file permissions by hand.

Changes to file permissions for installed Directory Server Enterprise Edition product files can in some cases prevent the software from operating properly. Only change file permissions when following instructions in the product documentation, or following instructions from Oracle support.

To workaround this limitation, install products and create server instances as a user having appropriate user and group permissions.

Do not replicate the cn=changelog suffix.

Although nothing prevents you from setting up replication for the cn=changelog suffix, doing so can interfere with replication. Do not replicate the cn=changelog suffix. The cn=changelog suffix is created by the retro changelog plug-in.

The wrong SASL library is loaded when LD_LIBRARY_PATH contains /usr/lib.

When LD_LIBRARY_PATH contains /usr/lib, the wrong SASL library is used, causing the dsadm command to fail after installation.

Use the LDAP replace operation to change cn=config attributes.

An LDAP modify operation on cn=config can only use the replace sub-operation. Any attempt to add or delete an attribute will be rejected with DSA is unwilling to perform, error 53. While Directory Server 5 accepted adding or deleting an attribute or attribute value, the update was applied to the dse.ldif file without any value validation, and the DSA internal state was not updated until the DSA was stopped and started.

Note – The cn=config configuration interface is deprecated. Where possible use the dsconf command instead.

To work around this limitation, the LDAP modify replace sub-operation can be substituted for the add or delete sub-operation. No loss in functionality occurs. Furthermore, the state of the DSA configuration is more predictable following the change.

On Windows systems, Directory Server does not allow Start TLS by default.

This issue affects server instances on Windows systems only. This issue is due to performance on Windows systems when Start TLS is used.

To work around this issue, consider using the -P option with the dsconf command to connect using the SSL port directly. Alternatively, if your network connection is already secured, consider using the -e option with the dsconf command. The option lets you connect to the standard port without requesting a secure connection.

Replication update vectors may reference retired servers.

After you remove a replicated Directory Server instance from a replication topology, replication update vectors can continue to maintain references to the instance. As a result, you might encounter referrals to instances that no longer exist.

The Common Agent Container is not started at boot time.

To work around this issue when installing from native packages, use the cacaoadm enable command as root.

To work around this issue on Windows, choose Log On from the properties of Common Agent Container service, enter the password of the user running the service, and press Apply. If you have not already done this setting, you will receive a message stating that the account user name has been granted the Log On As A Service right.

max-thread-per-connection-count is not useful on Windows systems.

The Directory Server configuration properties max-thread-per-connection-count and ds-polling-thread-count do not apply for Windows systems.

Console does not allow administrator login on Windows XP

The console does not allow administrators to log in to a server running Windows XP.

As a workaround to this problem, the guest account must be disabled and the registry key $HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Lsa\ForceGuest must be set to 0.$

Changing Index Configurations on the Fly

If you change an index configuration for an attribute, all searches that include that attribute as a filter are treated as not indexed. To ensure that searches including that attribute are properly processed, use the dsadm reindex or dsconf reindex commands to regenerate existing indexes every time you change an index configuration for an attribute. See Chapter

12, "Directory Server Indexing," in *Oracle Fusion Middleware Administration Guide for Oracle Directory Server Enterprise Edition* for details.

Number of connections and operations are not enforced on PTA servers

The maximum number of connections (maxconns) and the maximum number of operations (maxops) are not enforced on PTA servers.

When installed with the ZIP distribution, Directory Server uses port 21162 as the default of the Common Agent Framework (CACAO).

The default port of the Common Agent Framework (CACAO) is 11162. When installed with the native distribution, Directory Server uses this default port. However, when installed with the ZIP distribution, Directory Server uses port 21162 by default. Be sure to specify the right port number when creating or registering a server instance with DSCC.

The console does not allow you to create a Directory Server or Directory Proxy Server instance if the Directory Manager's password contains a space character. (6830908)

If the Directory Manager's password contains a space character, the Directory Manager account cannot create a directory server or directory proxy server instance by using the console.

Due to the same issue, the command dsccsetup ads-create —w *password-file* fails if the password file contains a space character.

Known Directory Server Issues in 11*g* Release 1 (11.1.1)

This section lists the issues that are known at the time of the Directory Server 11*g* Release 1 (11.1.1).

- Directory Server has been seen to crash when the server is stopped while performing online export, backup, restore, or index creation.
- 4979319 Some Directory Server error messages refer to the *Database Errors Guide*, which does not exist. If you cannot understand the meaning of a critical error message that is not documented, contact Oracle support.
- When entries are imported from LDIF, Directory Server does not generate createTimeStamp and modifyTimeStamp attributes.

LDIF import is optimized for speed. The import process does not generate these attributes. To work around this limitation, add rather than import the entries. Alternatively, preprocess the LDIF to add the attributes before import.

- 6245092 The Directory Server hangs when running the stop-slapd command.
- After changing the schema definition of an attribute from multi-valued to single-valued, modify replace operations on that attribute are refused.

To avoid potential problems after making such a change, do the following:

- 1. Export the additional data, without replication (dsadm export -Q ...).
- 2. Reimport the data from the resulting LDIF file.

Be aware that their might be skipped entries if the resulting entry is no longer compatible with the schema.

3. Reinitialize the other replicas in the topology.

The dsconf accord-repl-agmt command cannot align authentication properties of the replication agreement when SSL client authentication is used on the destination suffix.

To work around this issue, store the supplier certificate in the configuration on the consumer, following these steps. The examples command shown are based on two instances on the same host.

1. Export the certificate to a file.

The following example shows how to perform the export for servers in /local/supplier and /local/consumer.

```
$ dsadm show-cert -F der -o /tmp/supplier-cert.txt \
  /local/supplier defaultCert
$ dsadm show-cert -F der -o /tmp/consumer-cert.txt \
  /local/consumer defaultCert
```

2. Exchange the client and supplier certificates.

The following example shows how to perform the exchange for servers in /local/supplier and /local/consumer.

```
$ dsadm add-cert --ca /local/consumer supplierCert \
  /tmp/supplier-cert.txt
$ dsadm add-cert --ca /local/supplier consumerCert \
  /tmp/consumer-cert.txt
```

- Add the SSL client entry on the consumer, including the supplierCert certificate on a usercertificate; binary attribute, with the proper subjectDN.
- 4. Add the replication manager DN on the consumer.
 - \$ dsconf set-suffix-prop *suffix-dn* repl-manager-bind-dn:*entryDN*
- 5. Update the rules in /local/consumer/alias/certmap.conf.
- 6. Restart both servers with the dsadm start command.
- Directory Service Control Center sorts values as strings. As a result, when you sort numbers in Directory Service Control Center, the numbers are sorted as if they were strings.

An ascending sort of 0, 20, and 100 results in the list 0, 100, 20. A descending sort of 0, 20, and 100 results in the list 20, 100, 0.

- The certificate names containing multi-byte characters are shown as dots in the output of the dsadm show-cert *instance-path valid-multibyte-cert-name* command.
- 6416407 Directory Server does not correctly parse ACI target DNs containing escaped quotes or a single escaped comma. The following example modifications cause syntax errors.

```
dn:o=mary\"red\"doe,o=example.com
changetype:modify
add:aci
aci:(target="ldap:///o=mary\"red\"doe,o=example.com")
  (targetattr="*")(version 3.0; acl "testQuotes";
allow (all) userdn ="ldap:///self";)
dn:o=Example Company\, Inc.,dc=example,dc=com
changetype:modify
add:aci
aci:(target="ldap:///o=Example Company\, Inc.,dc=example,dc=com")
  (targetattr="*")(version 3.0; acl "testComma";
allow (all) userdn ="ldap:///self";)
```

Examples with more than one comma that has been escaped have been observed to parse correctly, however.

- 6446318 On Windows, SASL authentication fails due to the following two reasons:
 - SASL encryption is used.

To workaround the issue caused by the SASL encryption, stop the server, edit dse.ldif, and reset SASL to the following.

```
dn: cn=SASL, cn=security, cn=config
  dssaslminssf: 0
  dssaslmaxssf: 0
```

■ The installation is done using native packages.

To workaround the issue caused by the native packages installation, set SASL PATH to <code>install-dir</code>\share\lib.

- 6449828 Directory Service Control Center does not properly display userCertificate binary values.
- 6468074 It is not clear from the name of the passwordRootdnMayBypassModsCheck configuration attribute that the server now allows any administrator to bypass password syntax checking when modifying another user's password, when the attribute is set.
- On Windows, the output of dsadm and dpadm commands, and help messages are not localized in Simplified and Traditional Chinese languages.

Although the Directory Service Control Center allows you to copy the configuration of an existing server, it does not allow you to copy the plug-in configuration.

On Windows systems, the dsconf command has been seen to fail to import LDIF with double-byte characters in the LDIF file name.

To work around this issue, change the LDIF file name so that it does not contain double-byte characters.

Neither Directory Service Control Center nor the dsconf command allows you to configure how Directory Server handles invalid plug-in signatures. Default behavior is to verify the plug-in signatures, but not to require that they are valid. Directory Server logs a warning for invalid signatures.

To change the server behavior, adjust the ds-require-valid-plugin-signature and ds-verify-valid-plugin-signature attributes on cn=config. Both attributes take either on or off.

- Directory Service Control Center does not allow you to browse a suffix that is configured to return a referral to another suffix.
- After installation and after server instance creation on Windows systems, the file permissions to the installation and server instance folder allow access to all users.

To work around this issue, change the permissions on the installations and server instance folders.

- For the HP-UX platform, Directory Server Enterprise Edition man pages for the following sections cannot be accessed from the command line:
 - man5dpconf.
 - man5dsat.
 - man5dsconf.
 - man5dsoc.
 - man5dssd.

To workaround this issue, access the man pages at *Oracle Fusion Middleware Man Page Reference for Oracle Directory Server Enterprise Edition*. From that location, you can download a PDF of all Directory Server Enterprise Edition man pages.

- An attempt to enter an invalid CoS Template results in a crash in versions of Directory Server 6.
- 6490653 When enabling referral mode for Directory Server by using Directory Service Control Center through Internet Explorer 6, the text in the confirm referral mode window is truncated.

To work around this issue, use a different browser such as Mozilla web browser.

6491849	After upgrading replica, and moving servers to new systems, you must recreate replication agreements to use new host names. Directory Service Control Center lets you delete the existing replication agreements, but does not allow you to create new agreements.
6492894	On Red Hat systems, the dsadm autostart command does not always ensure that the server instances start at boot time.
6494997	The dsconf command does not prompt for the appropriate dsSearchBaseDN setting when configuring DSML.
6495004	On Windows systems, Directory Server has been seen to fail to start when the base name of the instance is ds.
6497894	The dsconf help-properties command is set to work properly only after instance creation. In addition, the correct list of values for the dsml-client-auth-mode command should be client-cert-first http-basic-only client-cert-only.
6500936	In the Native patch delivery, the miniature calendar that is used to pick dates for filtering access logs is not properly localized in Traditional Chinese.
6501320	When creating an index on custom schema, a suffix level change of the <i>all-ids-threshold</i> is not permeated completely by the DSCC.
6503509	Some output displayed by the dsccmon, dsccreg, dsccsetup, and dsccrepair commands is not localized.
6503546	Changing the locale of the system and starting DSCC, does not display the pop-up window message in the locale that you selected.
6504180	On Solaris 10, the password verification fails for instances with multi-byte characters in their DN on English and Japanese locales.
6504549	The discovery of an instance of the Directory Server by the Java Enterprise System Monitoring Framework is not successful if the ns-slapd process was started remotely using rsh.
6507312	On HP-UX systems, applications using NSPR libraries crash and dump core after investigation with gdb. The problem occurs when you attach gdb to a running Directory Server instance, then use the gdb quit command.
6520646	Clicking Browse DSCC online help does not display the online help when you are using Internet Explorer.
6527999	The Directory Server plug-in API includes slapi_value_init()(), slapi_value_init_string()(), and slapi_value_init_berval()() functions.
	These functions all require a "done" function to release internal elements. However, the public API is missing a slapi_value_done()() function.

When modifying the password policy using the Directory Service Control Center, attributes that have not changed may be unknowingly reset.

Using the Directory Service Control Center to manage the default password policy does not causes any error. However, using the Directory Service Control Center to manage specialized password policies can cause unchanged attributes to be reset.

6542857 When you use the Service Management Facility (SMF) on Solaris 10 to enable a server instance, the instance might not start when you reboot the system and return the following error:

svcadm: Instance "svc:/instance_path" is in maintenance state.

To work around this problem, use a local user to create Directory Server and Directory Proxy Server servers (that is, a user that is defined locally on the machine rather than an NIS user.)

On HP-UX, the dsadm and dpadm commands might not find libicudata.sl.3 shared library.

As a workaround to this problem, set the SHLIB PATH variable.

env SHLIB_PATH=\${INSTALL_DIR}/dsee6/private/lib dsadm

The dsadm autostart can make native LDAP authentication to fail when you reboot the system.

As a workaround, reverse the order of reboot scripts. The default order is /etc/rc2.d/S71ldap.client and /etc/rc2.d/S72dsee directory.

- On Solaris 9 and Windows, when you access the online help from the console configured using Web archive file (WAR), it displays an error.
- If you modify the port number using DSCC on a server that has replicated suffixes, problems arise when setting replication agreement between servers.
- For servers registered in DSCC as listening on all interfaces (0.0.0.0), attempting to use dsconf to modify the listen-address of the servers results in DSCC errors.

To have an SSL port only and secure-listen-address setup with Directory Server Enterprise Edition, use this workaround:

1. Unregister the server from DSCC:

dsccreg remove-server /local/myserver

2. Disable the LDAP port:

dsconf set-server-prop ldap-port:disabled

3. Set up a secure-listen-address:

\$ dsconf set-server-prop secure-listen-address: IPaddress

- \$ dsadm restart /local/myserver
- 4. Register the server using DSCC. In the Register Server wizard, specify the server's IP address. This operation cannot be undone.
- Directory Service Control Center and the dsadm command from versions 6.1 or later do not display built-in CA certificates of Directory Server instances that were created with the dsadm command from version 6.0.

To workaround this issue:

Add the 64-bit module with 64-bit version of modutil:

```
$ /usr/sfw/bin/64/modutil -add "Root Certs 64bit" \
-libfile /usr/lib/mps/64/libnssckbi.so -nocertdb \
-dbdir /instance-path/alias -dbprefix slapd- -secmod secmod.db
```

- The output of the dsadm show-*-log l command does not include the correct lines. It can include the last lines of a previously rotated log.
- The output of the dsadm show-*-log command is not correct if some lines in the log contain more than 1024 characters.
- After deploying the WAR file, the View Topology button does not always work. A Java exception sometimes occurs, which is based on org.apache.jsp.jsp.ReplicationTopology_jsp._jspService
- In Windows, in the Korean locale, the dsadm start command does not display the nsslapd error log when ns-slapd fails to start.
- 6648240 Changing or deleting an attribute in the Additional Indexes table of the Indexes tab in the Directory Service Control Center can lead to stale information being displayed until the browser is refreshed.
- On UNIX systems, an attempt to change the path of any log file with dsconf set-log-prop or DSCC fails if the new path of the log file does not already exist.
- 6750837 Specification of network drives on Microsoft Windows is case-sensitive. Because of this, using both C:/ and c:/, for example, in DSEE administrative commands can cause replication to fail after the masters are restarted. As a workaround, use the dsconf accord-repl-agmt command to correct the replication agreement.
- 6751354 Specification of network drives on Microsoft Windows is case-sensitive. Because of this, using both C:/ and c:/, for example, in DSEE administrative commands can produce various error messages, such as the following:

```
WARNING<4227> - Plugins - conn=-1 op=-1 msgId=-1 - Detected plugin paths from another install, using current install
```

To avoid these warnings, be sure to use C:/ consistently.

Online help in DSCC might link to unknown web pages. In particular, some wizard menus might suggest the following:

For more information about data source configuration, see the "Oracle Directory Server Enterprise Edition Reference."

Selecting the link to the Directory Server Enterprise Edition Reference document produces an error message.

To work around this problem, select the link with the third mouse-button and choose the Open Link in New Window command from the pop-up menu. The selected document appears in the new browser window.

The DSCC Agent cannot be registered in CACAO on Solaris 9. If the SUNWxcu4 package is missing from the system, then the command DSEE_HOME/dscc6/bin/dsccsetup cacao-reg fails with the error, Failed to configure Cacao.

To fix this issue, install the missing SUNWxcu4 package on your system.

- The -f option does not work with the ldapcompare command.
- 6845087 On Windows, CLI displays garbage characters.
- 6853393 DSCC does not support host synonyms. When replicating the DSCC suffix, the host name in the replication agreement must match the host name in the DSCC registry.
- When logs are rotated according to rotation-time or rotation-interval, the exact time at which the rotation occurs depends on several variables, including the following:
 - the values of the rotation-time, rotation-interval, rotation-now, and rotation-size properties
 - scheduling of the housekeeping thread
 - the effective size of the log file when the rotation condition is satisfied

The *timestamp* in the rotated log file (for example, access. *timestamp*) can therefore not be guaranteed.

6876315 If the user running the dsmig command does not own the target directory server instance, the command fails because it does not have adequate permission to generate and access migrated files.

The dsmig command can run successfully if it is run by the user who owns the target directory server and has at least read access to the source directory server. If these conditions cannot be met, perform the migration by exporting the database and importing it to the new directory server.

The man page for hosts_access incorrectly states that IPv6 is not supported on

		Windows systems.
	6891486	Some debug messages and Error #20502, Serious failure during database checkpointing, err=2 (No such file or directory), can sometimes be logged right before the import processing starts. Such messages can be ignored, as they refer to the old suffix data being deleted.
	6894136	If you set the idle timeout to a very small value, for example, 2s on a server instance, DSCC might display connection errors and prevent some operations that take long time to complete (like rotating logs). Make sure you set the idle timeout to at least 10s or 20s, and adjust the idle timeout according to your network latency.
	6953929	The server occasionally crashes when running the dsadm show-access-log or dsadm show-error-log commands, if the command is launched while a log rotation is in progress.
	6955408	On Windows systems, running the dsccsetup dismantle command does not completely remove the CACAO Windows service.
		Workaround. After you have run the dsccsetup dismantle command, run cacaoadm prepare-uninstall before you uninstall Directory Server Enterprise Edition. This removes the CACAO Windows service.
	6962704	A side effect of the new "Compliance with RFC 4511" on page 21 is that some searches might be slower than with previous versions of Directory Server, when using multi-valued attributes. To alleviate this, either set compat-flag to no-rfc4511 or declare the user attribute as SINGLE-VALUE in the schema.
	6962704 6966010	searches might be slower than with previous versions of Directory Server, when using multi-valued attributes. To alleviate this, either set compat-flag to
repl-fractional-ex	6966010	searches might be slower than with previous versions of Directory Server, when using multi-valued attributes. To alleviate this, either set compat-flag to no-rfc4511 or declare the user attribute as SINGLE-VALUE in the schema. The command dsconf help-properties inverts the description for the fractional
repl-fractional-ex	6966010	searches might be slower than with previous versions of Directory Server, when using multi-valued attributes. To alleviate this, either set compat-flag to no-rfc4511 or declare the user attribute as SINGLE-VALUE in the schema. The command dsconf help-properties inverts the description for the fractional replication properties. The following output: Replicate only the specified set of attributes
repl-fractional-ex repl-fractional-in repl-fractional-ex	6966010 cclude-attr cclude-attr	searches might be slower than with previous versions of Directory Server, when using multi-valued attributes. To alleviate this, either set compat-flag to no-rfc4511 or declare the user attribute as SINGLE-VALUE in the schema. The command dsconf help-properties inverts the description for the fractional replication properties. The following output: Replicate only the specified set of attributes Do not replicate the specified set of attributes

6885178



Directory Proxy Server Bugs Fixed and Known Problems

This chapter contains important, product-specific information available at the time of release of Directory Proxy Server.

This chapter includes the following sections:

- "Bugs Fixed in This Release" on page 67
- "Known Problems and Limitations in Directory Proxy Server" on page 75

Bugs Fixed in This Release

This section lists the bugs fixed in Directory Proxy Server 7.0 and Directory Proxy Server 11*g* Release 1 (11.1.1).

Bug ID	Description
6351249	The dpcfg command does not validate the values of properties that it handles.
6417166	The directory server does not observe the resource limit policy's minimum-search-filter-substring-length property.
6446600	The directory server does not always handle ACI notification changes coming from an LDAP source.
6468142	Attribute names are stored differently in virtual view and in LDIF.
6468198	The directory server should apply a default value to any virtual attribute that does not have a value set.
6468593	All monitoring elements should have a value set for the statusDescription property.
6468694	Search operations do not return complete information when an entry does not exist.
6469976	The dpadm split-ldif command should provide more statistics, such as the number of entries skipped.

Bug ID	Description
6475156	For some properties, the dpcfg command changes the property's value and sets is-restart-required to false, although the directory server must be restarted for the change to take effect.
6489771	Connection handlers bind anonymous binds incorrectly.
6491133	Multibyte certificate attributes are not handled correctly.
6491845	The DSCC does not display default values for Controls Allowed Through Proxy.
6492447	$The {\tt dpconf} command should not be able to set the {\tt scriptable-alerts-command} attribute.$
6495493	The dpadm command logs a SUNWdsee 7-config is not installed message if SUNWdsee 7-config is relocated.
6520362	$\label{thm:config} The {\tt dpconf} {\tt get-jdbc-data-source-prop} commands should support connection number properties.$
6527010	$eq:Directory Proxy Server cannot write JDBC attributes implying many-to-many (N:N) \ relationship between tables in the JDBC database.$
6527837	The proxy server should open fewer initial connections to LDAP servers.
6536823	The proxy server closes client connections too frequently.
6537654	The proxy server opens new connections to JDBC back ends too frequently.
6539650	On Linux installations, the proxy server cannot create a multibyte DN.
6547755	The DSCC does not create multibyte certificate names correctly.
6550554	In the zh_cn/ja locale, the DSCC cannot create a multibyte proxy server instance.
6554232	The proxy server cannot get the full list of attributes using the asterisk character (*) on a joined data view.
6561139	The proxy server cannot roll back a JDBC transaction after an SQL exception.
6562213	The proxy server can log the wrong operation number when using virtual groups.
6562601	The DSCC does not display a certificate's properties.
6567644	The proxy server submits incorrect requests to the database.
6573259	When the $ldapsearch$ command fails on a joined view, its returns internally mapped DNs in its error output
6573264	The ldapsearch command should return error 32 when the base-DN does not exist in a JDBC source.
6590816	$Setting \ the \ connection \verb IdleTimeOutInSec property in the LDAP \ listener \ causes \ the \ DSCC \ to \ fail.$
6592394	In Windows installations, the dpadm create command accepts an invalid DN.

Bug ID	Description
6594076	Mod operations fail when a DN is mapped for an LDAP data view.
6596223	An incorrect filter-join-rule causes an SQL error to be returned in the LDAP result.
6596876	The value of the $connectionIdleTimeOutInSec$ attribute should be measured in seconds and not milliseconds.
6597598	Null pointer exceptions can occur during modification operations.
6597608	LDAP transactions can succeed only partially.
6599118	Modifying a non-string column with a string value returns SQL error messages.
6599722	The proxy server can store incorrect values.
6616197	Write operations to a secondary table fail when an attribute in filter-join-rule is non-numeric.
6616898	The object class attribute cannot be stored in a secondary data view.
6618968	Optimization for a join view should not occur when one entry is returned from a secondary view.
6622852	Virtual transformation of def-value on a DN does not work as expected.
6630730	$A \ null \ pointer \ exception \ occurs \ in \ {\tt FailoverLoadBalancingAlgorithm.getSearchConnection}.$
6637173	An entry's DN is no returned when no access rights exist on requested secondary attributes.
6637608	$\label{lem:arrayIndexOutOfBoundsException} A real Negative Array Size Exception\ errors\ can\ occur\ under heavy load.$
6638374	An entry cannot be added through a join view if its UID attribute contains capital letters.
6639044	An incorrect return code occurs when attempting to mod-delete an attribute without its value mapped to a single-row table.
6639635	A modify-replace operation fails on an unset attribute mapped to a single-row table.
6640879	The proxy server should return error 32 when using the source of an ${\tt attr-name-mapping}$ in the base of a search.
6640884	The proxy server should not forward a search implying the source of attr-name-mapping to the directory server back end.
6641888	Search operations return entries that contain attributes not present in viewable-attr.
6641925	An add operation through a join view always creates the entry on a secondary JDBC data source.
6642559	Write virtual transformations do not always work correctly.
6642578	Writing virtual transformations do not work as expected when an entry is modified.
6642686	remove-attr-value read virtual transformations do not work correctly if attribute is multi-valued

Bug ID	Description
6643121	The ldapmodify command fails when the foreign key is a VARCHAR.
6643181	Problems can occur with JDBC data sources if string attributes are too long.
6643701	$\label{thm:continuous} The \text{maxOperationPerInterval} and \text{operationRateCheckInterval} properties do not work as expected.$
6646107	An ADD operation can fail when using a value longer than the column size.
6648665	The max-client-connections property does not work if no operation is performed on the connection.
6649071	Translated GUI text should be consistent.
6651837	User DNs are not correctly normalized, causing ACIs to fail.
6652476	Add operations can fail when schema checking is enabled if objectclass: top or a naming attribute is missing.
6653253	$A\ race\ condition\ in\ {\tt FailoverLoadBalancingAlgorithm}\ can\ cause\ the\ proxy\ server\ to\ fail.$
6653453	Persistent Searches over SSL via the proxy server to the directory server fail to return expected data.
6654625	Existing connections are disconnected when garbage collection is triggered to run
6656324	The proxy server always converts DN values into lower case in ADD operations.
6659381	The proxy server JVM fails under high search load using JDK 1.6.
6661001	Reject operations are forwarded to the backend server.
6661375	Sockets can remain in the CLOSE_WAIT state.
6661474	The proxy server can miscalculate the connection numbers in connection pools.
6661981	$The \verb attr-name-mappings property cannot be set if \verb source-attr is a substring of \verb client-attr .$
6663112	In Linux 64-bit installations, the proxy server cannot be started in 32-bit mode.
6665983	Modifying an attribute that is not part of object-class does not work properly.
6670752	The proxy server can throw this exception: java.io.IOException: Timeout when waiting to read from input stream $$
6671579	Virtualization fails to resolve a virtually mapped base within a search filter.
6676073	Incorrect attribute handling can cause modify operations in join data view to be routed incorrectly.
6676076	Null pointer exceptions can occur in modify operations in join data view.
6678386	Bind connections are not released and no more binds can be made when the maximum number of binds is reached.

Bug ID	Description
6680717	StringIndexOutOfBoundsException can occur when omitting the join-rule in a join view.
6681502	Memory monitoring is disabled by default.
6681932	A remove-attr-value write virtual transformation does not work correctly.
6682004	The rule for a write remove-attr-value virtual transformation should be set on view-attribute-value.
6686099	A server exception occurs when an ACI is stored in LDAP and the LDAP source is not available.
6688180	An entry is duplicated under cn-monitor and incorrect values are stored for numDroppedOperations and receivedOperations.
6688187	The time-resolution attribute does not become effective until the server is restarted.
6689377	The default referral policy is set to discard.
6689466	The dpconf command does not access the cert-search-bind-dn and cert-search-bind-pwd properties.
6689577	A client cannot connect to the proxy server in the clear when ssl-policy is set to client in the data source.
6691341	$Monitoring\ with\ average-traffic-sampling-interval\ does\ not\ work\ correctly.$
6692090	The operationPerIntervalPeak property is specified in operations per interval while operationPerIntervalLastAverage property is specified in operations per second.
6692627	An error can occur when decoding a search filter when using an LDAP browser.
6692693	The proxy server does not use max-op-count-per-interval correctly.
6697494	Shared attributes cannot be deleted through a join view when an entry is absent.
6702095	When jdbc-attr is added to a table of existing object-class, its meta-data is not retrieved dynamically.
6702169	Attribute value mapping of a DN does not work correctly if the entry is not one level below the data view's base DN.
6706567	Join optimization does not work correctly with DN join rules when the primary and secondary view base are different.
6707006	Filter join rules are not handled correctly in join data view.
6707110	Search operations fail when a search filter contains attributes that are not part of jdbc-object-class.
6711054	The proxy server does not support the SQL Server SQL type smalldatetime.
6711320	One-level scope searches on some nonexistent cn=monitor child entries return incorrect search results.

Bug ID	Description
6713382	DN normalization fails to translate the sequences \dd or %dd found in attributes values.
6714425	The ldapsearch command does not handle a quoted asterisk correctly.
6714448	The ldapsearch command can incorrectly handle non-numeric characters in integer searches.
6714856	Exceptions can occur in join data view.
6717836	Replacing an attribute found in a multi-row primary table can set other attributes in that table to null.
6717943	The default size limit for properties is set incorrectly.
6720614	An error message is displayed when the proxy server starts.
6721702	A JDBC search can fail when the primary table is not a single-row table.
6723858	The proxy server bypasses requires-bind-password settings on a back end directory server.
6724559	The proxy server should filter out requests that contain disallowed controls.
6727763	Deleting an attribute found in a multi-row primary table deletes the matching entry.
6728378	A null pointer exception can occur in a join data view during an add operation when no DN/object class rule is specified.
6728746	The proxy server can not add an entry containing more than two object classes to a JDBC source.
6730825	An attribute hiding rule does not return the filter attribute in the rule.
6731666	The proxy server ignores the {\tt process-bind} attribute value on data views.
6734365	Attribute mapping is not cleared by use of another data view.
6734438	The proxy server fails at startup if a mail alert is configured and the mail transfer agent is not available.
6734559	Virtual DN mapping fails when depending on a virtual attribute.
6734722	Backend connections remain in the CLOSE_WAIT state.
6735304	An attribute with a null value cannot be hidden.
6736621	The bind DN is rejected when a transformation fails.
6737084	DNs can be mapped incorrectly.
6739414	The proxy server changes the case of characters in attribute names.
6739456	The configuration and log files should be accessible by groups.
6739974	The proxy server returns attribute name mappings in lower case only.
6741401	An ldapmodify add operation fails if the foreign key is stored in a multi-row primary table.

Bug ID	Description
6741403	The Idapsearch command can fail because of in incorrect join in a SELECT statement.
6741410	The TYPE_OR_VALUE_ALREADY_EXISTS message should be returned when an existing value is added to an attribute.
6742935	The NO_SUCH_ATTRIBUTE message should be returned when a delete operation is performed on a multi-valued attribute.
6743357	A search operation with attribute filtering and multiple conditionals in the search filter returns error 1 .
6748387	The proxy server should log a message when an operation changes state.
6750354	The proxy server should support requests for certificates with a keylength of 2048 bits.
6751692	$The {\tt dpadm start command fails when using the {\tt MaxTenuringThreshold Java argument}.$
6752963	Exception messages can be logged incorrectly.
6754091	$A\ join\ view\ operation\ with\ a\ filter\ - join\ - rule\ returns\ StringIndexOutOfBounds Exception.$
6757759	The proxy server can fail because of an incorrect JVM memory state.
6758244	A search operation on a JDBC source with a base scope and a DN filter on glue entries should not return all attributes.
6758812	The enabled-admin-alert property should accept a value of none and not accept a value of all.
6759391	The instance path in cn=monitor should be normalized.
6760526	The dppadm start command should create a DPS.pid file.
6760951	$The configuration schema \ contains \ an inconsistency \ with \ the \ directory \ configuration \ schema.$
6761017	A worker thread deadlock can occur.
6761032	The searchMode property is defined incorrectly.
6761875	High CPU use can occur, requiring that the proxy server be restarted.
6764073	The proxy server can fail when configured to use proxied authentication.
6766175	$The \ ldapsearch\ command\ does\ not\ return\ an\ attribute\ with\ an\ empty\ value\ from\ a\ JDBC\ source.$
6767244	The proxy server fails to bind to the secondary view when using a join view.
6767776	The proxy server cannot use DN mapping on the root DSE.
6768924	The proxy server does not recognize a split macro in a virtual transformation as a macro.
6778090	A compare operation does not work correctly on a virtual attribute in a join view.
6778091	A compare operation does not work correctly on a secondary attribute in a join view.
6782659	The SO_KEEPALIVE option is not set when a socket is created.

Bug ID D	Description
6784464 T	The dpconf command should support the useTcpKeepAlive attribute.
6794720 C	One-level searches on a data view from a JDBC source returns an unexpected error.
6795597 S	Search performance on a join data view is poor when the primary view candidate list is large.
6797952 I	ON mapping does not work as expected.
6801024 A	A warning message at startup should provide more information about the cause of the warning.
6802371 T	The acceptBacklog property is ignored for channel-based listeners.
6807446 A	A join view can return case-sensitive attribute values twice.
6808701 I	nactivity heartbeats are not sent often enough for backend connections.
6808704 I	nactivity heartbeats are not sent for bound backend connections.
6808706 B	Backend server checks might not occur often enough because of last server activity.
6809099 1	dapsearch queries on the cn=monitor branch of the proxy server produce inconsistent output.
	The proxy server must be restarted for changes to monitoring-interval and nonitoring-bind-timeout to take effect.
6818788 T	The proxy server should provide the backend heartbeat more reliably.
	A null pointer exception occurs when searching on cn=monitor when defining a failover pool with no source.
6819752 P	Persistent Search clients might not receive entry change notifications.
6821752 F	Resources used by a persistent search are not cleaned up after the client disconnects.
	The proxy server can return error 1 when no backend servers are available, and it should return error 52.
	Client affinity should not be enabled when useAffinity=false and affinityPolicy are explicitly set
6832498 Т	The proxy server should not use MD5 as the signature algorithm in signed certificates.
	The dpconf command does not correctly handle attributes with a value of a single letter for attribute/Entry Hiding.
6845410 F	Renaming an attribute can break some BIND DNs.
6847524 I	ONs with special characters are not written correctly in the configuration file.
	During attribute mapping, if the operator + is part of the DN, the proxy server ignores the symbol and replaces it with a comma (,).
6870956 A	A memory leak occurs when adding or removing a data view.
6870963 A	A memory leak occurs when adding or removing a connection handler.

Bug ID	Description
6870998	The proxy server ignores the filtering policy for bind requests when moving to another connection handler.
6877916	An Idapcompare operation fails for attributes that exist in the secondary data view.
6889269	Attribute renaming breaks when a compound filter is used.
6911538	Proactively monitoring a JDBC database can consume all available database cursors.
6924686	When a virtual transformation is used that impacts a DN, search entries are dropped because the search filter does not take the transformation into account.
6933728	Attribute mapping does not work correctly when the dataview view base ${\rm DN}$ is mapped to a referral.

Known Problems and Limitations in Directory Proxy Server

This section lists known problems and limitations at the time of release.

Directory Proxy Server Limitations

This section lists product limitations.

Do not change file permissions by hand.

Changes to file permissions for installed Directory Server Enterprise Edition product files can in some cases prevent the software from operating properly. Only change file permissions when following instructions in the product documentation, or following instructions from Oracle support.

To workaround this limitation, install products and create server instances as a user having appropriate user and group permissions.

Self-signed server certificates cannot be renewed.

When creating a self-signed server certificate, make sure you specify a validity long enough that you do not have to renew the certificate.

Directory Proxy Server does not ensure atomicity with the join data view write operations. To ensure atomicity, do not use the join data view for write operations. If you perform write operations on join data view, use an external mechanism to prevent or detect inconsistencies. You can monitor inconsistencies by monitoring Directory Proxy Server error log.

Wrong default value in man pages

The log-buffer-size (5dpconf) man page displays the wrong default size of the access log buffer. The default buffer size for access log is 1M.

The man pages for pattern matching distribution algorithm incorrectly show the respective properties as single-valued. The properties are multi-valued.

When Oracle is the JDBC source, the ldapsearch command does not return an attribute with an empty value.

Oracle handles an empty string as NULL. The empty string and NULL are both valid values for an LDAP entry, but it is not possible to distinguish the two in Oracle. This issue was corrected for other JDBC sources in issue 6766175, as noted in "Bugs Fixed in This Release" on page 67.

Known Directory Proxy Server Issues in 11*g* Release 1 (11.1.1)

This section lists the known issues that are found at the time of Directory Proxy Server 11g Release 1 (11.1.1) release.

5042517	The modify DN operation is not supported for LDIF, JDBC, join and access control data views.
6355714	Currently, getEffectiveRight control is supported only for LDAP data views and does not yet take into account ACIs local to the proxy.
6386073	After generation of a CA-Signed Certificate request, when you refresh, the certificate is displayed as a self-signed certificate.
6388022	If the SSL port used by Directory Proxy Server is incorrect, after a secure search request on that port Directory Proxy Server may close all connections.
6390118	Directory Proxy Server fails to count the number of referral hops properly when configured to use authentication based on the client application credentials rather than proxy authorization.
6390220	It is possible to specify the base-dn property when creating a data view, but it is not possible to set the base-dn property to "", the root dse, after creating the data view.
6410741	Directory Service Control Center sorts values as strings. As a result, when you sort numbers in Directory Service Control Center, the numbers are sorted as if they were strings.
	An ascending sort of 0, 20, and 100 results in the list 0, 100, 20. A descending sort of 0, 20, and 100 results in the list 20, 100, 0.
6439604	After configuring alerts, you must restart Directory Proxy Server for the change to take effect.
6447554	Directory Proxy Server fails to rename an entry moving to another data view when numeric or lexicographic data distribution is configured.

- 6461510 In Directory Proxy Server, referral hop limit does not work. 6469154 On Windows, the output of dsadm and dpadm commands, and help messages are not localized in Simplified and Traditional Chinese languages. 6488197 After installation and after server instance creation on Windows systems, the file permissions to the installation and server instance folder allow access to all users. To work around this issue, change the permissions on the installations and server instance folders. 6488297 On Windows, DSCC initialization can only be performed by Administrator user 6493349 Directory Service Control Center removes commas when changing the DN for an existing excluded subtree, or alternate search base. 6494540 After enabling or disabling non secure LDAP access for the first time, you must restart Directory Proxy Server for the change to take effect. 6497547 Time limit and size limit settings work only with LDAP data sources. 6497992 After using the command dpadm set-flags cert-pwd-store=off, Directory Proxy Server cannot be restarted using Directory Service Control Center. 6501867 The dpadm start command has been seen to fail when used with a server instance name combining both ASCII and multi-byte characters. 6505112 When setting the data-view-routing-custom-list property on an existing connection handler, an error occurs with data view names containing characters that must be escaped, such as commas. To work around this issue, do not give data views names that contain characters that must be escaped. For example, do not use data view names containing DNs. 6511264 When using the DN renaming feature of Directory Proxy Server, notice that repeating DN components are renamed to only one replacement component. Consider for example that you want to rename DNs that end in o=myCompany.com
 - to end in dc=com. For entries whose DN repeats the original component, such as uid=userid,ou=people,o=myCompany.com,o=myCompany.com,theresulting

renamed DN is uid=userid, ou=people, dc=com, and not uid=userid,ou=people,o=myCompany.com,dc=com.

6520368 The JDBC connection configuration to access Oracle 9 through Directory Proxy Server is not exactly as described in the documentation.

> Consider the following configuration, with an Oracle 9 server listening on host myhost, port 1537 with the instance having system identifier (SID) MYINST. The instance has a database MYNAME. MYTABLE.

Typically, to configure access through to MYTABLE, set the following properties.

- On the JDBC data source, set db-name: MYINST.
- On the JDBC data source, set db-url:jdbc:oracle:thin:myhost:1537:.
- On the JDBC table, set sql-table: MYNAME. MYTABLE

If these settings do not work, configure access through to MYTABLE with the following settings.

- On the JDBC data source, set db-name:(CONNECT_DATA=(SERVICE_NAME=MYINST)))
- On the JDBC data source, set db-url:jdbc:oracle:thin:@(DESCRIPTION= (ADDRESS LIST=(ADDRESS=(PROTOCOL=TCP)(HOST=myhost)(PORT=1537)))
- On the JDBC table, set sql-table: MYNAME. MYTABLE
- When you use the Service Management Facility (SMF) on Solaris 10 to enable a server instance, the instance might not start when you reboot the system and return the following error:

svcadm: Instance "svc:/instance_path" is in maintenance state.

To work around this problem, use a local user to create Directory Server and Directory Proxy Server servers.

- On HP-UX, if you access DSCC with multiple browser sessions set to different locales, DSCC might display some strings in a locale that is different from the locale set in the browser.
- 6551076 Console does not retrieve the backend status of the Directory Proxy Server instance if a machine has multiple host names.
- 6573439 In DSCC, in the More View Options of an instance, the date shown under the Access Logs, Error Logs, and Audit Logs tabs is not localized.
- When you create a data source by using DSCC, the value of useTCPNoDelay is set to false by default. However, the default value of use-tcp-no-delay is set to true when you create a data source by using dpconf create-ldap-data-source.
- In DSCC configured using Tomcat server, the title of the Help and Version pop-up windows displays the multi-byte strings garbled.
- The string owner in the output of the dpadm show-cert *dps-instance-path* command is not translated in Simplified Chinese and Traditional Chinese.
- 6639674 If the Directory Proxy Server configuration property allow-bind-operations is set to false, it is not possible to connect on an SSL port using the dpconf command line argument with the --secure-port option. Connection by Start TLS (default) or by clear connection (the --unsecured option) are still possible.

Directory Proxy Server does not change the DN of an ADD operation when the operation follows a referral in which the basedn is different from that of the original machine. Attempting an ADD against a Directory Proxy Server instance that has a Directory Server instance that is set to follow referrals, as opposed to just forwarding referrals, results in the ADD being rejected on the referred server because of an incorrect basedn.

Using the ldapmodify command to executing the ADD directly against the Directory Server instances allows the ADD to work.

- No warning is issued when you set a password of insufficient length for the certificate database. If the password is too short, it is accepted by the Directory Service Control Center. Issuing the dpadm command with cert subcommands can then result in the commands hanging.
- The error message that is displayed after a failed attempt to set use-cert-subject-as-bind-dn to false contains incorrect property names.
- 6696857 If a Directory Proxy Server instance has only secure-listen-socket/port enabled through DSCC, and if the server certificate is not the default (for example, if it is a certificate-Authority-signed certificate), DSCC cannot be used to manage the instance.

To work around this problem, unregister the proxy server instance and then register it again. Alternatively, update the userCertificate information for the proxy server instance in the DSCC registry, using the server certificate.

- The proxy server bypasses the requires-bind-password property on the backend directory server.
- The dpadm list-running-instances command does not list all the instances that are started from the current installation but lists the only instances that belong to the current user.
- On OpenSolaris, when alerts are raised, Directory Proxy Server does not log them in syslog.
- 6874624 An obsolete definition remains in the 28pilot.ldif file.

To work around this issue, add the following alias specification to the 28pilot.ldif file:

objectClasses: (0.9.2342.19200300.100.4.4 NAME ('newPilotPerson' 'pilotPerson') DESC <...>)

The uidObject objectclass is missing from the schema.

To work around this issue, add the following object lass to the <code>00core.ldif</code> file:

objectClasses: (1.3.6.1.1.3.1 NAME 'uidObject' SUP top AUXILIARY MUST uid X-ORIGIN 'RFC 4519')

6889439 Directory Proxy Server reports a schema violation on attributes timeResolutionMode and timeResolutionInMillisec.

This message is harmless. To work around it, use the following steps:

- 1. Make sure that you have access to the jar program. This program is shipped with any JDK installation.
- 2. Stop the Directory Proxy Server instance.
- 3. Change the current directory to the Directory Server installation directory.
- 4. Run the following command to extract the schema file from the Directory Proxy Server archive

\$ jar xvf dsee7/lib/jar/dps.jar com/sun/directory/proxy/config/config_schema.ldif

- Use a text editor to edit the schema file, com/sun/directory/proxy/config/config_schema.ldif and make these changes.
 - a. Delete the attribute attributeTypes containing the string NAME ('useNanoTimeforEtimes').
 - b. Add a new attribute attributeTypes with the following content:

```
attributeTypes: ( "" NAME ( 'timeResolutionInMilliSec' ) DESC '' \ SYNTAX 1.3.6.1.4.1.1466.115.121.1.15 SINGLE-VALUE X-ORIGIN 'DPS' )
```

Make sure to delimit parentheses with spaces.

- Search for the attribute objectClasses containing the string NAME 'topConfigEntry'.
- d. In this attribute line, search for the string useNanoTimeforEtimes and rename it as timeResolutionMode
- e. Save the file and close it.
- 6. Run the following command to apply the changes done to the schema file to the Directory Proxy Server archive:
- \$ jar uvf dsee7/lib/jar/dps.jar com/sun/directory/proxy/config/config schema.ldif
 - 6954350 For bind operations, the Directory Proxy Server currently works correctly only with Directory Server data stores.
 - 6955510 If you do not provide a subject DN when creating a certificate request (using dpadm request-cert or DSCC), the default subject DN is cn=value, cn=value. The certificate request is issued without a warning, but the request is not accepted by most certificate authorities.

Similarly, if you do not provide a valid ISO 3166 country code when creating a certificate request (using dpadm request - cert or DSCC), the certificate request is issued without a warning, but the request is not accepted by the certificate

authority.



Directory Server Resource Kit Bugs Fixed and Known Problems

This chapter contains important, product-specific information available at the time of release of Directory Server Resource Kit.

This chapter includes the following sections:

- "Bugs Fixed in Directory Server Resource Kit" on page 83
- "Known Problems and Limitations in Directory Server Resource Kit" on page 83

Bugs Fixed in Directory Server Resource Kit

This section lists the bug fixed since the last release of Directory Server Resource Kit.

6379087	NameFinder has been seen to fail to deploy in Sun Java System Application Server
	on Windows systems.

6565893 The idsktune command does not support SuSE Enterprise Linux 10.

Known Problems and Limitations in Directory Server Resource Kit

This section lists known problems and limitations at the time of release.

5081543	${\tt searchrate}\ crashes\ on\ Windows\ systems\ when\ using\ multiple\ threads.$
5081546	modrate crashes on Windows systems when using multiple threads.
5081549	authrate crashes on Windows systems when using multiple threads.
5082507	The dsmlsearch command -D option takes an HTTP user ID rather than a bind DN.

	To work around this issue, provide the user ID that is mapped to a DN in Directory Server.
6393554	NameFinder has been seen to throw a page not found error after deployment.
	To work around this issue, rename nsDSRK/nf to nsDSRK/NF.
6393586	Cannot add more than two users to My Selections list in NameFinder.
6393596	NameFinder search should fetch entries for values other than Last Name, First Name, Email, and Given Name.
6393599	NameFinder search should allow searches for groups.
6576045	Killing modrate and searchrate launcher does not kill actual modrate and searchrate processes respectively.
6754994	The idsktune command reports system limits incorrectly with ${\tt getrlimit}()$. The following warning messages appear:
	WARNING: processes are limited by RLIMIT_DATA to 2047 MB in size. WARNING: processes are limited by RLIMIT_VMEM to 2047 MB in size. WARNING: processes are limited by RLIMIT_AS to 2047 MB in size.