Sun Java System Directory Server Enterprise Edition 6.3 Release Notes



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

Chapter 2, "Installation Notes," covers topics related to installation, including hardware and software requirements.

Chapter 3, "Directory Server Bugs Fixed and Known Problems," covers fixes and issues for Directory Server.

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

Chapter 5, "Identity Synchronization for Windows Bugs Fixed and Known Problems," covers fixes and issues for Identity Synchronization for Windows.

Chapter 6, "Directory Editor Bugs Fixed and Known Problems," covers fixes and issues for Directory Editor.

Chapter 7, "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.

Directory Server Enterprise Edition Documentation Set

This Directory Server Enterprise Edition documentation set explains how to use Sun Java System 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/1224.4.

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

TABLE P-1 Directory Server Enterprise Edition Documentation

Document Title	Contents
Sun Java System Directory Server Enterprise Edition 6.3 Release Notes	Contains the latest information about Directory Server Enterprise Edition, including known problems.
Sun Java System Directory Server Enterprise Edition 7.0 Documentation Center	Contains links to key areas of the documentation set.
Sun Java System Directory Server Enterprise Edition 6.3 Evaluation Guide	Introduces the key features of this release. Demonstrates how these features work and what they offer in the context of a fictional deployment that you can implement on a single system.
Sun Java System Directory Server Enterprise Edition 6.3 Deployment Planning Guide	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.
Sun Java System Directory Server Enterprise Edition 6.3 Installation Guide	Explains how to install the Directory Server Enterprise Edition software. Shows how to select which components to install, configure those components after installation, and verify that the configured components function properly.
	For instructions on installing Directory Editor, go to http://docs.sun.com/coll/DirEdit_05q1.
	Make sure you read the information in <i>Sun Java System Directory Server Enterprise Edition 6.3 Release Notes</i> concerning Directory Editor before you install Directory Editor.
Sun Java System Directory Server Enterprise Edition 6.3 Migration Guide	Provides migration instructions from the earlier versions of Directory Server, Directory Proxy Server, and Identity Synchronization for Windows.
Sun Java System Directory Server Enterprise Edition 6.3 Administration Guide	Provides command-line instructions for administering Directory Server Enterprise Edition.
	For hints and instructions on using the Directory Service Control Center, DSCC, to administer Directory Server Enterprise Edition, see the online help provided in DSCC.
	For instructions on administering Directory Editor, go to <pre>http://docs.sun.com/coll/DirEdit_05q1.</pre>
	For instructions on installing and configuring Identity Synchronization for Windows, see Part II, "Installing Identity Synchronization for Windows," in Sun Java System Directory Server Enterprise Edition 6.3 Installation Guide.
Sun Java System Directory Server Enterprise Edition 6.3 Developer's Guide	Shows how to develop directory client applications with the tools and APIs that are provided as part of Directory Server Enterprise Edition.

Document Title	Contents
Sun Java System Directory Server Enterprise Edition 6.3 Reference	Introduces the technical and conceptual foundations of Directory Server Enterprise Edition. Describes its components, architecture, processes, and features. Also provides a reference to the developer APIs.
Sun Java System Directory Server Enterprise Edition 6.3 Man Page Reference	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.
Sun Java System Directory Server Enterprise Edition 6.3 Troubleshooting Guide	Provides information for defining the scope of the problem, gathering data, and troubleshooting the problem areas 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. The Identity Synchronization for Windows product is still at version 6.0.

Related Reading

The SLAMD Distributed Load Generation Engine is a JavaTM application that is designed to stress test and analyze the performance of network-based applications. It 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) technology 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/.

Directory Server Enterprise Edition can be licensed as a standalone product, as a component of Sun Java Enterprise System, as part of a suite of Sun products, such as the Sun Java Identity Management Suite, or as an add-on package to other software products from Sun. Java Enterprise System is a software infrastructure that supports enterprise applications distributed across a network or Internet environment. If Directory Server Enterprise Edition was licensed as a component of Java Enterprise System, you should be familiar with the system documentation at http://docs.sun.com/coll/1286.3.

Identity Synchronization for Windows uses Message Queue with a restricted license. Message Queue documentation is available at http://docs.sun.com/coll/1307.2.

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 the documentation, and gives the 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 the following product documentation.

- Chapter 14, "Directory Server File Reference," in *Sun Java System Directory Server Enterprise Edition 6.3 Reference*
- Chapter 25, "Directory Proxy Server File Reference," in Sun Java System Directory Server Enterprise Edition 6.3 Reference
- Appendix A, "Directory Server Resource Kit File Reference," in Sun Java System Directory Server Enterprise Edition 6.3 Reference

TABLE P-2 Default Paths

Placeholder	Description	Default Value
install-path	Represents the base installation directory for Directory Server Enterprise Edition software. The software is installed in directories below this base <i>install-path</i> . For example, Directory Server software is installed in <i>install-path</i> /ds6/.	When you install from a zip distribution using dsee_deploy(1M), the default install-path is the current directory. You can set the install-path using the -i option of the dsee_deploy command. When you install from a native package distribution, such as you would using the Java Enterprise System installer, the default install-path is one of the following locations: Solaris systems - /opt/SUNWdsee/. Red Hat systems - /opt/sun/. Windows systems - C:\Program Files\Sun\JavaES5\DSEE.

TABLE P-2 Default Paths (Continued)

Placeholder	Description	Default Value
instance-path	Represents the full path to an instance of Directory Server or Directory Proxy Server. The documentation uses /local/ds/	No default path exists. Instance paths must nevertheless always be found on a <i>local</i> file system. The following directories are recommended:
	for Directory Server and /local/dps/ for Directory Proxy Server.	/var on Solaris systems /global if you are using Sun Cluster
serverroot	Represents the parent directory of the Identity Synchronization for Windows installation location	Depends on your installation. Note the concept of a serverroot no longer exists for Directory 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 logs 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 logs	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	Java ES, Native Package Distribution	Zip Distribution
cacaoadm	Solaris -	Solaris -
	/usr/sbin/cacaoadm	install-path/dsee6/
	Red Hat -	cacao_2/usr/sbin/cacaoadm
		Red Hat, HP-UX -
	/opt/sun/cacao/bin/cacaoadm	<pre>install-path/dsee6/ cacao_2/cacao/bin/cacaoadm</pre>
	Windows -	Windows -
	<pre>install-path\share\ cacao 2\bin\cacaoadm.bat</pre>	<pre>install-path\ dsee6\cacao_2\bin\cacaoadm.bat</pre>
certutil	Solaris -	install-path/dsee6/bin/certutil
-	/usr/sfw/bin/certutil	1
	Red Hat -	
	/opt/sun/private/bin/certutil	
dpadm(1M)	install-path/dps6/bin/dpadm	install-path/dps6/bin/dpadm
dpconf(1M)	install-path/dps6/bin/dpconf	install-path/dps6/bin/dpconf
dsadm(1M)	install-path/ds6/bin/dsadm	install-path/ds6/bin/dsadm
dsccmon(1M)	install-path/dscc6/bin/dsccmon	install-path/dscc6/bin/dsccmon
dsccreg(1M)	install-path/dscc6/bin/dsccreg	install-path/dscc6/bin/dsccreg
dsccsetup(1M)	install-path/dscc6/bin/dsccsetup	install-path/dscc6/bin/dsccsetup
dsconf(1M)	install-path/ds6/bin/dsconf	install-path/ds6/bin/dsconf
${\sf dsee_deploy}(1{ m M})$	Not provided	<pre>install-path/dsee6/bin/dsee_deploy</pre>
$dsmig(1\mathrm{M})$	install-path/ds6/bin/dsmig	install-path/ds6/bin/dsmig
entrycmp(1)	<pre>install-path/ds6/bin/entrycmp</pre>	install-path/ds6/bin/entrycmp
fildif(1)	install-path/ds6/bin/fildif	install-path/ds6/bin/fildif
idsktune(1M)	Not provided	At the root of the unzipped zip distribution
insync(1)	install-path/ds6/bin/insync	install-path/ds6/bin/insync
ns-accountstatus(1M)	install-path/ds6/bin/ns-accountstatus	install-path/ds6/bin/ns-accountstatus
ns-activate(1M)	install-path/ds6/bin/ns-activate	install-path/ds6/bin/ns-activate
ns-inactivate(1M)	<pre>install-path/ds6/bin/ns-inactivate</pre>	install-path/ds6/bin/ns-inactivate

TARIED_3	Command Loc	ations	(Con	tinued)	

Command	Java ES, Native Package Distribution	Zip Distribution
repldisc(1)	install-path/ds6/bin/repldisc	install-path/ds6/bin/repldisc
${\sf schema_push}(1M)$	<pre>install-path/ds6/bin/schema_push</pre>	<pre>install-path/ds6/bin/schema_push</pre>
smcwebserver	Solaris, Linux - /usr/sbin/smcwebserver	This command pertains only to DSCC when it is installed using native packages distribution.
	Windows - install-path\share\ webconsole\bin\smcwebserver	
wcadmin	Solaris, Linux - /usr/sbin/wcadmin Windows -	This command pertains only to DSCC when it is installed using native packages distribution.
	<pre>install-path\share\ webconsole\bin\wcadmin</pre>	

Typographic Conventions

The following table describes the typographic changes 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	computer output	machine_name% su
		Password:
AaBbCc123	A placeholder to be replaced 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 User's Guide.
	emphasized (note that some emphasized items appear bold online)	A <i>cache</i> is a copy that is stored locally.
		Do <i>not</i> save the file.

Shell Prompts in Command Examples

The following table shows default system prompts and superuser prompts.

TABLE P-5 Shell Prompts

Shell	Prompt
C shell on UNIX and Linux systems	machine_name%
C shell superuser on UNIX and Linux systems	machine_name#
Bourne shell and Korn shell on UNIX and Linux systems	\$
Bourne shell and Korn shell superuser on UNIX and Linux systems	#
Microsoft Windows command line	C:\

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 Sun web site provides information about the following additional resources:

- Documentation (http://www.sun.com/documentation/)
- Support(http://www.sun.com/support/)
- Training (http://www.sun.com/training/)

Third-Party Web Site References

Third-party URLs are referenced in this document and provide additional, related information.

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Searching Sun Product Documentation

Besides searching for Sun product documentation from the docs.sun.com web site, you can use a search engine of your choice by typing the following syntax in the search field:

search-term site:docs.sun.com

For example, to search for Directory Server, type the following:

"Directory Server" site:docs.sun.com

To include other Sun web sites in your search, such as java.sun.com, www.sun.com, and developers.sun.com, use sun.com in place of docs.sun.com in the search field.

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◆ ◆ ◆ CHAPTER 1

Compatibility Issues

This chapter covers 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 includes the following sections:

- "Platform Support" on page 17
- "Administration Server and Console" on page 18
- "Directory Server Changes" on page 19
- "Directory Proxy Server Changes" on page 20
- "Identity Synchronization for Windows Changes" on page 20
- "Directory Server Resource Kit Changes" on page 20

Classifications of interface stability are provided per manual page entry in *Sun Java System Directory Server Enterprise Edition 6.3 Man Page Reference*.

Platform Support

In future releases of Directory Server Enterprise Edition, support for Windows 2000, Red Hat Advanced Server 3.0, and J2SE platform 1.4 may be removed. Support for the native install package releases for platforms other than the Solaris operating system might be removed. Support for 32–bit versions of the software might be discontinued for some platforms. To be prepared, plan the transition to 64–bit versions of the software and to newer versions of the supported operating systems. See "Operating System Requirements" on page 25 for details of the newer versions of supported operating systems.

Directory Server Enterprise Edition 6.3 supports Logical Domains, (LDoms), on the SPARC platform for Solaris 10 Update 3 and later versions. For more information about LDoms, see the *Logical Domains (LDoms)* 1.0.1 Administration Guide.

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. Sun performs testing of its Sun Java System products on select system virtualization and OS combinations to help validate that the Sun Java System products continue to function on properly sized and configured virtualized environments as they do on non-virtualized systems. For information about Sun support for Sun Java System products in virtualized environments, see http://docs.sun.com/doc/820-4651.

For this release, Sun Microsystems supports any OS running on the VMware technology provided that the OS is already supported natively for the Directory Server Enterprise Edition 6.3 software. Sun Microsystems does not certify every combination of OS and hardware, but relies on the underlying VMware technology implementation. Full deployment of the Directory Server Enterprise Edition 6.3 software on the VMware technology is not recommended.

For details on supported hardware platforms for this release of Directory Server Enterprise Edition, see "Hardware Requirements" on page 23.

For details on supported operating systems and OS versions for this release of Directory Server Enterprise Edition, see "Operating System Requirements" on page 25.

Administration Server and Console

Administration Server and the Java Swing-based Console used for remote graphical administration of Identity Synchronization for Windows may be replaced in a future release. Directory Service Control Center has been implemented to allow full browser-based service management, with easier configuration for access through a firewall.

Note – Directory Proxy Server and Directory Server already use Directory Service Control Center. *Directory Proxy Server and Directory Server no longer use the serverroot architecture, but instead the new administration framework.*

Directory Service Control Center is not yet supported with Identity Synchronization for Windows.

As a result, the following commands may not be included in a future release, even for Identity Synchronization for Windows:

- start-admin
- stop-admin
- startconsole

In addition, everything in o=NetscapeRoot, may change. In particular, o=NetscapeRoot might no longer be present. The serverroot architecture may be replaced by the new administration framework.

Furthermore, Directory Server chaining cannot be configured through Directory Service Control Center.

Directory Server Changes

The legacy command-line tools for managing Directory Server instances are deprecated.

The following tools might be removed from a future release.

- bak2db
- db2bak
- db2ldif
- ldif2db
- restart-slapd
- start-slapd
- stop-slapd

New command line tools, dsadm and dsconf, and other commands replace the functionality provided by the tools listed. See "Command Line Changes" in *Sun Java System Directory Server Enterprise Edition 6.3 Migration Guide* for details.

For a detailed discussion of administration related Directory Server changes, see Chapter 5, "Architectural Changes in Directory Server," in *Sun Java System Directory Server Enterprise Edition 6.3 Migration Guide*.

Before migrating a replicated server topology, review Chapter 4, "Migrating a Replicated Topology," in *Sun Java System Directory Server Enterprise Edition 6.3 Migration Guide*. Support for legacy replication with Directory Server 4 has been removed from this release. Sun Microsystems ended support for Directory Server 4 in January 2004.

When you create a Directory Server instance, password policy is configured initially backwards-compatible. After upgrading, you change the compatibility mode to enable richer password policy configuration. Directory Server manages the conversion. In a future release, the backwards-compatible password policy configuration might be removed.

Also, when you create a Directory Server instance, support for the modify DN operation is disabled. After upgrade all 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.

Directory Server chaining is deprecated and might be removed in a future release. Chaining is not configurable through Directory Service Control Center, nor is chaining configurable through the new command line tools. Most deployments enabled by chaining are now enabled using features of Directory Proxy Server. For example, data distribution, global account lockout across an entire replication topology, and merging directory information trees can be done with Directory Proxy Server. For legacy applications that continue to rely on chaining, you can

configure the chained suffix plug-in with the ldapmodify command to set attributes for chaining. The attributes are listed in dse.ldif(4).

Chapter 2, "Changes to the Plug-In API Since Directory Server 5.2," in *Sun Java System Directory Server Enterprise Edition 6.3 Developer's Guide* and Chapter 3, "Changes to the Plug-In API From Directory Server 4 to Directory Server 5.2," in *Sun Java System Directory Server Enterprise Edition 6.3 Developer's Guide* detail plug-in API changes. Interfaces identified there as deprecated might be removed in a future release.

Directory Proxy Server Changes

To access Directory Proxy Server 6.0, 6.1 and 6.2 instances using the Directory Proxy Server 6.3 commands, no migration is required. All Directory Proxy Server 5.x instances need to be migrated before using with the Directory Proxy Server 6.3 commands. See Chapter 6, "Migrating Directory Proxy Server," in *Sun Java System Directory Server Enterprise Edition 6.3 Migration Guide* for details.

Identity Synchronization for Windows Changes

The Identity Synchronization for Windows product is still at version 6.0.

Future releases of Identity Synchronization for Windows might discontinue support for all versions and service packs of Microsoft Windows NT. Microsoft ended support for Windows NT in June 2004.

Before upgrading Identity Synchronization for Windows, read Chapter 7, "Migrating Identity Synchronization for Windows," in *Sun Java System Directory Server Enterprise Edition 6.3 Migration Guide*.

Directory Server Resource Kit Changes

"About Directory Server Resource Kit" on page 81 explains what is provided in this release of 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 delivered with Directory Server Enterprise Edition. The commands might no longer be delivered separately on Solaris systems, but instead integrated with the commands provided by the operating system in a future version. See *Sun Java System Directory Server Enterprise Edition 6.3 Man Page Reference* for the manual pages for the LDAP client tools.

Directory Editor

Directory Editor might be deprecated in a future release.

Chapter 6, "Directory Editor Bugs Fixed and Known Problems," explains more about this release of Directory Editor.



Installation Notes

This chapter tells you where to download Directory Server Enterprise Edition software, and lists primary installation requirements.

This chapter includes the following sections:

- "Support Services and Licenses" on page 21
- "What's New in Directory Server Enterprise Edition 6.3" on page 22
- "Getting the Software" on page 23
- "Hardware Requirements" on page 23
- "Operating System Requirements" on page 25
- "Software Dependency Requirements" on page 29
- "Installation Privileges and Credentials" on page 33
- "Installation Notes for Identity Synchronization for Windows" on page 36

Support Services and Licenses

Before you start with the product installation, make sure you read the support and licensing information thoroughly.

Support Services

Sun Software Service Standard, Premium and Premium Plus plan offerings are available for Sun Java System Directory Server Enterprise Edition and can be purchased either through a Sun sales representative, an authorized Sun reseller, or online at

http://www.sun.com/sales/index.jsp. These service plans include telephone and online technical support, on-demand software updates, online system administration resources, support notification services and one-stop interoperability assistance (Premium and Premium Plus plans only). In addition, the Premium Plus plan features a customer advocate and a customer-focused support team.

For complete feature set information, visit:

http://www.sun.com/service/serviceplans/software/overview.xml

You may access the service lists describing all Sun service program offerings at: http://www.sun.com/servicelist

Licenses for Directory Server Enterprise Edition Managed Entries

Licenses are provided based on the number of entries you plan to manage using Directory Server Enterprise Edition. After a license is provided, you can replicate the entries as many times as required to get maximum flexibility out of your directory implementation. The only condition is that you do not change any of the replicated entries and store all of the replicated entries on the same operating system. If the replicated entries are stored on any other operating system, you must purchase a license for those entries.

Previous Solaris licences provided 200,000 free entries for Directory Server. In this case, the licences covered only the core directory server component, not the other Directory Server Enterprise Edition components. You can still purchase an upgrade from core directory server component to full Directory Server Enterprise Edition. To get support for those 200,000 Directory Server entries, a Software Service Plan for Directory Server can be purchased. The Solaris Service Plan does not cover those entries.

You can review the latest license for a given version of a product before downloading it from http://www.sun.com/software/products/directory srvr ee/get.jsp.

What's New in Directory Server Enterprise Edition 6.3

Directory Server Enterprise Edition 6.3 is a patch release that adds the following new features to the Directory Server Enterprise Edition 6.2 release:

- Improved performance for some specific deployments. For example, deletion of a suborganization is now faster after a restart of the Directory Server, (RFE 6522419).
- Support for the SuSE 10 operating system. See "Operating System Requirements" on page 25 for details.
- Support for HP-UX 11.23 (PA-RISC). See "Operating System Requirements" on page 25 for details.
- Increased flexibility and security for deployments, with the Directory Service Control
 Center registry allowing port change and listening on addresses defined by an IP address.
- Reduced disk space used, by purging replication metadata using a new purge-csn option in the dsadm command.
- Improved interoperability with other products through the Directory Proxy Server, with improved LDAP control support.
- The Directory Proxy Server allows bind operations to multiple data sources including Active Directory and to Sun Java System Directory Server. Bad password attempts now block users from multiple data sources, increasing security.
- Install the zip distribution as any user on Windows.

Getting the Software

You can download Sun Java System Directory Server Enterprise Edition 6.3 software from the following location.

http://www.sun.com/software/products/directory srvr ee/get.jsp

The download page serves as a starting point to direct you to the proper downloads depending on the distribution type you need to download. Directory Server Enterprise Edition 6.3 is available in the following distributions.

- Native package distribution
- Zip distribution

Identity Synchronization for Windows is not delivered in the Directory Server Enterprise Edition native package distribution.

Directory Server Enterprise Edition 6.3 is available in the following forms.

- Native patch patches to upgrade Directory Server Enterprise Edition 6.0, 6.1 and 6.2 native packages installed using the Java ES installer.
- Zip based distribution standalone delivery to install Directory Server Enterprise Edition
 6.3 or upgrade Directory Server Enterprise Edition
 6.0 and
 6.1 and
 6.2 zip installations.

Note – The patch release for native installations of Directory Server Enterprise Edition 6.3 on the Microsoft Windows platform is now available. You can download the Directory Server Enterprise Edition 6.3 patch for Windows and upgrade your Directory Server Enterprise Edition installation.

To apply the Directory Server Enterprise Edition 6.3 patch on the native installations on Windows, the minimum required Windows installer version is 3.1.

For information on patch numbers, see "Software Installation" in Sun Java System Directory Server Enterprise Edition 6.3 Installation Guide.

For the detailed information on what you need to install based on your current installation, refer to the "Installation Procedure Quick Reference" in *Sun Java System Directory Server Enterprise Edition 6.3 Installation Guide*.

Hardware Requirements

This section covers hardware requirements for Directory Server Enterprise Edition component products.

- "Directory Server Hardware Requirements" on page 24
- "Directory Proxy Server Hardware Requirements" on page 24

- "Identity Synchronization for Windows Hardware Requirements" on page 25
- "Directory Editor Hardware Requirements" on page 25

Directory Server Hardware Requirements

Directory Server software requires the following hardware.

Component	Platform Requirement
RAM	1-2 GB for evaluation purposes
	Minimum 2 GB for production servers
Local disk space	400 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 Hardware Requirements

Directory Proxy Server software requires the following hardware.

Component	Platform Requirement
RAM	1-2 GB for evaluation purposes
	Minimum 2GB for production servers

Component	Platform Requirement
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 per server instance is sufficient to hold server logs when the default configuration is used.
	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.

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 MB disk space for minimal installation alongside Directory Server.

Directory Editor Hardware Requirements

Make sure you read Chapter 6, "Directory Editor Bugs Fixed and Known Problems," in these release notes before you install Directory Editor.

Also, see the Directory Editor documentation at http://docs.sun.com/coll/DirEdit_05q1 for details.

Operating System Requirements

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

Directory Server, Directory Proxy Server, and Directory Server Resource Kit Operating System Requirements

Directory Server, Directory Proxy Server, and Directory Server Resource Kit share the same operating system requirements. The Directory Server Enterprise Edition software has been 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, Directory Proxy Server, and Directory Server Resource Kit	Additional Required Software and Comments	
Solaris 10 Operating System for SPARC*, 32-bit x86, Intel x64, and AMD x64 architectures	Patches: (SPARC) 118833, 119689, 119963, 122032, and 119254 or substitute patches, in addition to 127111	
	■ (x86/x64) 118855, 119964, 121208, 122033, and 119255 or substitute patches, in addition to 127954	
Solaris 9 Operating System for SPARC and x86 architectures	Patches: (SPARC) 111711, 111712, 111722, 112874, 112963, 113225, 114344, 114370, 114371, 114372, and 114373 or substitute patches, in addition to 112960–56 or later.	
	• (x86) 111713, 111728, 113986, 114345, 114427, 114428, 114429, 114430, 114432, 116545, and 117172 or substitute patches, in addition to 114242–41 or later.	
Red Hat Enterprise Linux Advanced Server AS and ES 3.0 Update 4 for x86 and AMD x64	No additional software is required. On 64-bit Red Hat systems, Directory Server runs in 32-bit mode but Directory Proxy Server runs in 64-bit mode.	
Red Hat Enterprise Linux Advanced	The following compatibility libraries are recommended:	
Server AS and ES 4.0 Update 2 for x86 and AMD x64	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/.	
	On 64–bit Red Hat systems, Directory Server runs in 32–bit mode but Directory Proxy Server runs in 64–bit mode.	
SuSE Linux Enterprise Server 10 for x86	Service Pack 1	
and AMD x64	Supported only for the zip distribution of Directory Server Enterprise Edition.	
	On 64-bit SuSE systems, Directory Server runs in 32-bit mode but Directory Proxy Server runs in 64-bit mode.	

Supported OS Versions for Directory Server, Directory Proxy Server, and Directory Server Resource Kit	Additional Required Software and Comments
SuSE Linux Enterprise Server 9 for x86	Service Pack 4
and AMD x64	Supported only for the zip distribution of Directory Server Enterprise Edition.
	On 64-bit SuSE systems, Directory Server runs in 32-bit mode but Directory Proxy Server runs in 64-bit mode.
Microsoft Windows 2000 Server	Service Pack 4
Microsoft Windows 2000 Advanced Server	Service Pack 4
Microsoft Windows 2003 Server Standard Edition	Service Pack 1
Microsoft Windows 2003 Server Enterprise Edition	Service Pack 1
Hewlett Packard HP-UX 11iV2	(11.23) PA-RISC 64-bit
	Supported only for the zip distribution of Directory Server Enterprise Edition.

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.

To avoid downloading most individual patches, obtain Solaris patch clusters . To obtain Solaris patch clusters, follow these steps:

- Go to the SunSolve patch page at http://sunsolve.sun.com/pub-cgi/show.pl?target=patchpage.
- 2. Click the Recommended Patch Clusters link.
- 3. Download the patch cluster for your Solaris OS and Java ES versions.

Note that installations on SuSE Linux Enterprise Server require you to reset several Java environment variables. See *Sun Java System Directory Server Enterprise Edition 6.3 Installation Guide* for more details.

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 SPARC, x86, and AMD x64 architectures	Patches: (SPARC) 118833, 119689, 119963, 122032, and 119254 or substitute patches (x86/x64) 118855, 119964, 121208, 122033, and 119255 or substitute patches	
Solaris 9 Operating System for SPARC and x86 architectures	Patches: (SPARC) 111711, 111712, 111722, 112874, 112963, 113225, 114344, 114370, 114371, 114372, and 114373 or substitute patches	
	• (x86) 111713, 111728, 113986, 114345, 114427, 114428, 114429, 114430, 114432, 116545, and 117172 or substitute patches	
Red Hat Enterprise Linux Advanced Server 3.0 Update 4 for x86 and AMD x64	No additional software is required.	
Red Hat Enterprise Linux Advanced	The following compatibility libraries are recommended:	
Server 4.0 Update 2 for x86 and AMD x64	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 2000 Server	Service Pack 4	
Microsoft Windows 2000 Advanced Server	Service Pack 4	
Microsoft Windows 2003 Server Standard Edition	Service Pack 1	
Microsoft Windows 2003 Server Enterprise Edition	Service Pack 1	
Microsoft Windows NT 4.0 Server Primary Domain Controller, x86 architectures	Service Pack 6A	

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

Directory Editor Operating System Requirements

Make sure you read Chapter 6, "Directory Editor Bugs Fixed and Known Problems," in these release notes before you install Directory Editor.

Also, see the Directory Editor documentation at http://docs.sun.com/coll/DirEdit_05q1 for details.

Software Dependency Requirements

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, Directory Server requires ActivePerl software to use account activation and manual schema replication commands. Directory Server Enterprise Edition does not provide ActivePerl. The dependency concerns the following commands.

- ns-accountstatus(1M)
- ns-activate(1M)
- ns-inactivate(1M)
- schema_push(1M)

On Microsoft Windows systems, you must disable the pop-up blocker to make Directory Service Control Center work properly.

The Directory Service Control Center supports the following application servers:

- Sun Java System Application Server 8.2.
- Tomcat 5.5.

For more information, see "Installing Directory Service Control Center From Zip Distribution" in Sun Java System Directory Server Enterprise Edition 6.3 Installation Guide.

Directory Proxy Server requires a Java runtime environment, JRE, version of at least 1.5.0_09 on Solaris, Red Hat and Windows systems. The zip distribution installs JRE. When you install from the zip distribution with the JAVA_HOME environment variable set, the Java runtime environment specified by JAVA_HOME is used. Ensure that the JAVA_HOME environment variable is set to use the Java 5 runtime environment, (Java 1.5). The Directory Proxy Server may hang on some systems when running in a Java 6 runtime environment, (Java 1.6).

Directory Proxy Server will work with any LDAPv3 compliant directory servers, but it is tested only with Sun Java System Directory Server.

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
JavaDB 10.2.2.0	Apache Derby Network Client JDBC Driver
	10.2.2.0
MySQL 5.0	MySQL-AB JDBC Driver
	mysql-connector-java-5.0.4
Oracle 9i Database	Oracle JDBC driver
Oracle 10g Database	10.2.0.2.0

On Microsoft Windows systems, the dsee_deploy command cannot properly register software with the Common Agent Container, cacao, when you run the command from an MKS shell. This can occur when your MKS PATH does not include the *system-drive:*\system32 folder. Alternatively, run the command on the Microsoft Windows native command line.

On Solaris 10, rc.scripts are deprecated so commands like dsadm autostart are not supported. Instead use 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.

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.
 Identity Synchronization for Windows installer requires J2SE or JRE 1.5.0_09.
 Identity Synchronization for Windows requires JRE 1.5.0_09 on Windows NT.
- The Identity Synchronization for Windows bundle for this release includes Message Queue 3.6 with a license restricted in the context of Directory Server Enterprise Edition.

When installing Identity Synchronization for Windows, you must specify the path to the version of Message Queue to use. 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.

On Windows systems, Identity Synchronization for Windows supports only Message Queue 3.6. You therefore install Message Queue 3.6 provided with the Identity Synchronization for Windows bundle.

Message Queue 3.7 is, however, installed as a Java Enterprise System shared component. On Windows systems by default you can therefore end up with both Message Queue 3.6 and Message Queue 3.7 installed. If you install Java Enterprise System components alongside Identity Synchronization for Windows on a Windows system, be sure Message Queue 3.7 is not selected.

On Windows systems, the JRE installed with Console and Administration Server does not include fixes for daylight savings time changes. You must apply fixes for daylight savings time changes after installation. To fix the JRE, use the tzupdater tool, described at http://java.sun.com/javase/tzupdater_README.html. The JRE to fix is found after installation under ServerRoot/bin/base/jre/ where you installed the Console and Administration Server.

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.

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.

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)	$Net scape^{TM} \ Communicator \ 7.1, \ Mozilla^{TM} \ 1.7.12, \ and \\ Fire fox \ 1.0.7, \ 1.5, \ and \ 2.0$
Red Hat Linux 4, Red Hat Linux 3 and SuSE Linux	Mozilla 1.7.12 and Firefox 1.0.7, 1.5, and 2.0
Windows XP	Netscape Communicator 8.0.4, Microsoft Internet Explorer 6.0SP2, Mozilla 1.7.12, and Firefox 1.0.7, 1.5, and 2.0
Windows 2000/2003	Netscape Communicator 8.0.4, Microsoft Internet Explorer 6.0 SP1, Mozilla 1.7.12, and Firefox 1.0.7, 1.5, and 2.0

Installation Privileges and Credentials

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

- "Directory Server, Directory Proxy Server, Directory Service Control Center, and Directory Server Resource Kit Privileges" on page 33
- "Identity Synchronization for Windows Installation Privileges and Credentials" on page 36

Directory Server, Directory Server, Directory Service Control Center, and Directory Server Resource Kit Privileges

You must have the following privileges when installing Directory Server, Directory Proxy Server, or Directory Service Control Center from the Java Enterprise System native package based distribution.

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

You can install Directory Server, Directory Proxy Server, and Directory Server Resource Kit from the zip distribution without special privileges. See the *Sun Java System Directory Server Enterprise Edition 6.3 Installation Guide* for details.

Before You Upgrade

You must consider the following points before applying the Directory Server Enterprise Edition 6.3 patch.

 Native package based distribution. All Directory Server and Directory Proxy Server instances, including the DSCC registry, must be stopped before the Directory Server Enterprise Edition 6.3 patch is applied.

If you apply the patch without stopping the server instances, the instances might crash the next time you restart them.

Note – On Windows, the following dsadm command fails to stop the DSCC registry.

dsadm.exe stop C:\Program Files\Sun\JavaES5\DSEE\var\dscc6\dcc\ads

As a workaround, kill the bin_slapd. exe process using Task Manager and login as Administrator. You can now start and stop the DSCC registry successfully. The owner of the DSCC registry remains the same, that is, SYSTEM.

For native package based distribution: after applying patches to upgrade Directory Server Enterprise Edition, you must restart Sun Web Console using the following command:

smcwebserver restart

To use the localized console, apply the Directory Server Enterprise Edition 6.3 patch before the Directory Server Enterprise Edition 6.3 localized patch. Then run the following commands in the specified order.

dsccsetup console-unreg

dsccsetup console-reg

For more information, see bug 6583131 in "Known Directory Server Issues in 6.3" on page 41.

- Zip based distribution. All Directory Server and Directory Proxy Server instances must be stopped before the Directory Server Enterprise Edition 6.3 zip distribution is applied on top of one of the applicable zip installations:
 - Directory Server Enterprise Edition 6.0
 - Directory Server Enterprise Edition 6.1
 - Directory Server Enterprise Edition 6.2

This check is done by the dsee_deploy command itself, but is not performed on the Microsoft Windows 2000 platform. For more information, see 6660462 in "Known Directory Server Issues in 6.3" on page 41.

If you apply the patch without stopping the server instances, the instances might crash the next time you restart them.

Note that the patchzip is not applied to the Directory Service Control Center until you undeploy and then redeploy the WAR file. This requirement is related to bug 6583131 in "Known Directory Server Issues in 6.3" on page 41.

Upgrading Directory Server Enterprise Edition Native Distribution to version 6.3 on Windows

This section contains the procedure to upgrade the Directory Server Enterprise Edition native distribution to version 6.3 on Windows and to downgrade to the previous version.

▼ To Upgrade Directory Server Enterprise Edition Native Distribution to version 6.3 on Windows

- 1 Upgrade Common Agent Container patch to the latest version using the following steps.
 - a. Download the patch 126183-07 and check instructions in the patch README.
 - b. Run the following commands in the same order as listed below:

```
cacaoadm prepare-uninstall
126183-07.exe
cacao-install-path\share\cacao_2\configure.bat
cacao-install-path\share\cacao 2\bin\cacaoadm rebuild-dependencies
```

- 2 Upgrade the Directory Server Enterprise Edition installation to version 6.3.
 - a. Stop all the running Directory Server and Directory Proxy Server instances.
 - b. Stop the DSCC registry.
 - c. Add patch 125311-07.
 - d. Run the following commands:

```
dsccsetup console-unreg
dsccsetup console-reg
```

- e. Start Web console and Common Agent Container.
- f. Start the DSCC registry.

See Also For more information, see Sun Java System Directory Server Enterprise Edition 6.3 Installation Guide

Downgrading the Directory Server Enterprise Edition 6.3 Native Distribution on Windows

General information about the downgrade process can be found at Chapter 2, "Uninstalling Directory Server Enterprise Edition 6.3," in *Sun Java System Directory Server Enterprise Edition 6.3 Installation Guide*. More precisely, to downgrade the Directory Server Enterprise Edition 6.3 native distribution on Windows, apply the following steps:

- 1 Downgrade the Directory Server Enterprise Edition 6.3 installation.
 - a. Stop all the running Directory Server and Directory Proxy Server instances.

- b. Dismantle DSCC with the dsccsetup dismantle command.
- c. Double-click Uninstall_125311-07. bat to remove the patch. The Uninstall 125311-07. bat file is stored in the folder where the patch is saved.
- 2 Downgrade Common Agent Container. See the uninstallation steps in the 126183-07 patch README.
 - a. Run the cacaoadm prepare-uninstall command.
 - b. Double-click Uninstall 126183-07.bat to remove the patch.

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 "Installing Core" in Sun Java System Directory Server Enterprise Edition 6.3 Installation 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

Before installing fresh bits of Identity Synchronization for Windows, be sure to read Chapter 4, "Preparing for Installation," in *Sun Java System Directory Server Enterprise Edition 6.3 Installation Guide.*

Using Windows 2003 Server and Identity Synchronization for Windows

On Windows 2003 Server, the default password policy enforces strict passwords, which is not the default password policy on Windows 2000.



Directory Server Bugs Fixed and Known Problems

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

This chapter includes the following sections:

- "Bugs Fixed in Directory Server 6.3" on page 37
- "Known Problems and Limitations in Directory Server" on page 39

Bugs Fixed in Directory Server 6.3

6642430

This section lists the bugs fixed since the last release of Directory Server.

	corruption is seen as zeroed pages within the Sleepycat database files.	
	This bug fix prevents new corruptions, but does not prevent corruptions that have already occurred. If you find corrupted index files, upgrade to the latest version of Directory Server and reinitialize your database to take advantage of this bug fix and to prevent future corruptions.	
6547406	The output of dpconf help-properties is not localized.	
6541523	The ds conf command in Directory Server allows you to set the	

Importing large ldif files using db2ldif results in corrupted index files. Database

- The dsconf command in Directory Server allows you to set the repl-accept-client-update-enabled property to 'off'. If you use the dsconf command to configure an instance of Directory Server 6.0, the 'off' value is rejected and a message asks you to upgrade your version of Directory Server.
- 6533281 Idle connections are not closed until there is some network activity.

The idle timeout is now always correctly computed.

The Directory Server dumps core when the amadmin command (for Access Manager 6.3 with 119465-11 and 119466-11) is run to update the directory.

6627860	In a search operation where ACIs have userattr and userdn with common target attributes, crashes can occur.
6625993	In an internal search ${\tt isMemberOf}$ search, a comma included in the DN name is not masked.
6623504	\boldsymbol{A} deadlock occurs when a changelog trimming operation removes several records with different IDs.
6604342	The Directory Server Retro Change Log may generate records with invalid changes.
6586770	The ns-slapd process produces a memory leak when acting on consumers during various operations such as SSL replication agreements.
6583362	The dsmig command fails to migrate nested suffixes.
6586724	Memory leak on a master with the retrochangelog enabled.
2153997	Replication metadata growth unacceptable over time.
2154845	Crash with dn cache/hashtable and dn normalization.
6568770	Memory leak when performing substring searches.
6574902	Error when you force a log rotation.
2149741	The CoS Fastlookup implementation can enter into an infinite loop when processing multiple specifiers.
2150672	The Directory Server crashes when a filter with 1006 filter elements is played.
6518034	The ds conf command does not properly handle suffix with escaped characters.
6575696	Wizard hangs when trying to create an instance using the zip web console on SuSE.
6618547	The Directory Server crashes while initializing a replication management agreement if there is a missing replica object in the configuration file.
6630297	On SuSE 64-bit installations, the dsadm create command fails.
6582831	On Solaris, the instances registered as a service might not start after restarting the system.
6590558	On Linux, the Directory Server instances do not start at system restart if the maximum number of files are specified in the /etc/security/limits.conf file.
6577314	If you apply the Directory Server Enterprise Edition 6.3 patch without stopping the server instances, the dsadminfo and dsadm stop will display that a server is down while the server is running.

6573440	If you configure the uniqueness plug-in to work across multiple attributes in Directory Server, an error is displayed during the Directory Server startup.
6547923	$\label{lem:prise} \mbox{Directory Server Enterprise Edition Windows service fails to start more than one server instances when the system restarts.}$
6490762	After creating or adding a new certificate, Directory Server must be restarted for the change to take effect.
6448572	Directory Service Control Center fails to generate a self-signed certificate when you specify the country.
6582716	create-repl-agmt fails if an IPv6 address is specified as repl-dest HOST.
	This bug has been fixed, and you can now declare an IPv6 address. You can

optionally use square brackets, []. Note that if you choose to use square brackets to declare the IPv6 address, add a backslash before each square bracket. Thus the following two commands are equivalent:

```
dsconf create-repl-agmt -p 5566 dc=com 1234:123d:aeff:9dc9:222:4fff:fe3a:5bb2:5389
dsconf create-repl-agmt -p 5566 dc=com \[1234:123d:aeff:9dc9:222:4fff:fe3a:5bb2\]:5389
```

Known Problems and Limitations in Directory Server

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

Directory Server 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 Sun 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.

Database cache may be outdated after failover on Sun Cluster.

The Directory Server supports Sun Cluster 3.2. When Directory Server runs on Sun Cluster, and nsslapd-db-home-directory is set to use a directory that is not shared, multiple instances share database cache files. After a failover, the Directory Server instance on the new node uses its potentially outdated database cache files.

To work around this limitation, either use a directory for nsslapd-db-home-directory that is shared, or systematically remove the files under nsslapd-db-home-directory at Directory Server startup.

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 cacaoadmenable 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 property max-thread-per-connection-count does not apply for Windows systems.

A Microsoft Windows bug shows service startup type as disabled.

A Microsoft Windows 2000 Standard Edition bug

(http://support.microsoft.com/kb/287516/en-us) causes the Directory Server service to appear as disabled after the service has been deleted from Microsoft Management Console.

Console does not allow administrator login on Windows XP

Console does not allow administrator to logon to the 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 13, "Directory Server Indexing," in *Sun Java System Directory Server Enterprise Edition 6.3 Administration Guide* for details.

Known Directory Server Issues in 6.3

This section lists the known issues that are found at the time of Directory Server 6.3 release.

6583131

The Directory Service Control Center is not patched correctly after applying the 6.3 patch releases.

To use a localized Directory Service Control Center, apply the Directory Server Enterprise Edition 6.3 patch before the Directory Server Enterprise Edition 6.3 localized patch, then run the following commands in the specified order.

dsccsetup console-unreg

dsccsetup console-reg

There is no need to run the dsccsetup console-unreg and console reg commands if you apply the Directory Server Enterprise Edition 6.3 localized patch before the Directory Server Enterprise Edition 6.3 patch.

	For zip based installation, the Directory Server Enterprise Edition 6.3 localized patch is not automatically applied to the Directory Service Control Center. As a workaround, undeploy and then redeploy the WAR file.
6630897	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.
6630924	The output of the dsadm show-*-log command is not correct if some lines in the log contain more than 1024 characters.
2155981	Some ACI searches can expose the values of restricted attributes. This can enable some users to make incremental guesses at restricted values.
2156184	When performing a backup against a running Directory Server instance using db2ldif, if the db2ldif process is terminated prematurely by issuing 'Ctrl-C' the process may not release the locks held within the DB. If a subsequent MOD is attempted against a locked page it will block indefinitely and prevent the server from process any further MODs.
6637242	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_jspjspService
6640755	In Windows, in the Korean locale, the dsadm start command does not display the nsslapd error log when ns-slapd fails to start.
2157291	Following the instructions for "Setting the Sun Java System Directory Server to Use the DES Algorithm" when configuring "Digest Authentication" for Sun Web Proxy 4.0 may cause replication to fail upon first modification of the iplanetReversiblePassword attribute.
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.
6650105	On the Windows 2000 zip distribution, with the Tomcat 5.5 Application Server and using Internet Explorer 6, in the "Step 3: Assign Access Rights" of the "New DS Access Control Instruction" wizard in Directory Service Control Center, clicking on the "Delete" button of the "Assign Rights to Specified Users: "listbox, can produce an exception similar to the following:

The following error has occurred:
Handler method "handleAssignACIToDeleteButtonRequest" not implemented,
or has wrong method signature
Show Details
Hide Details

com.iplanet.jato.command.CommandException: Handler method

"handleAssignACIToDeleteButtonRequest" not implemented, or has wrong method signature

 $\verb|com.iplanet.jato.view.command.DefaultRequestHandlingCommand.execute| \\$

(DefaultRequestHandlingCommand.java:167)

 $\verb|com.iplanet.jato.view.RequestHandlingViewBase.handleRequest|$

(RequestHandlingViewBase.java:308)

com.iplanet.jato.view.ViewBeanBase.dispatchInvocation(ViewBeanBase.java:802)

6660462

Before upgrading from Directory Server Enterprise Edition 6.2 to Directory Server Enterprise Edition 6.3, the ntservice for each instance of Directory Server or the Directory Proxy Server must be manually stopped, but the dsee_deploy command fails to identify running instances of Directory Server or the Directory Proxy Server on the Microsoft Windows 2000 platform.

On the zip distribution of Microsoft Windows 2000, when upgrading, the dsee_deploy command can fail. The error message is as follows:

error: cannot delete old

C:/local/upg6263/./dsee6/lib/bin/dsee_ntservice.exe

This indicates that an instance of the Directory Server or the Directory Proxy Server is still running. To stop the instance or instances, in Microsoft Windows 2000, select on Start > Settings > Control Panel, and choose Adminstrative Tools, then Services. For each service of the Directory Server or the Directory Proxy Server displayed in the right column, right click the instance and select Stop.

6663685

In the Directory Service Control Center, the Copy Suffix Configuration operation can produce erroneous pop-up windows.

6559825

If you modify the port number using DSCC on a server that has replicated suffixes, problems arise when setting replication agreement between servers.

6634397

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 SSL port only and secure-listen-address setup with Directory Server Enterprise Edition 6.3, 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.

6654030

During a replication from a master running Directory Server 5.1 SP4 to a consumer running Directory Server 6.x, nsds50ruv is not updated properly on the consumer side. This results in a broken replication, with accompanying error messages in the access logs.

6653574

Replication does not work from a master running Directory Server 6.3 to a master running Directory Server 5.1.

6645742 / 2158692

If a known user attempts to log in with an incorrect password during a replication operation from Directory Server 5.2 to Directory Server 6.3, replication fails.

Error messages on the Directory Server 5.2 side are similar to the following:

```
[20/Dec/2007:11:49:55 -0800] - INFORMATION -
NSMMReplicationPlugin - conn=-1 op=-1 msgId=-1 -
ruv_init_from_bervals: malformed RUV element ({replica 1})
```

[20/Dec/2007:11:49:55 -0800] - ERROR<8221> - Incremental Protocol - conn=-1 op=-1 msgId=-1 - Failed and requires administrator action [280R:3891]

Error messages on the Directory Server 6.x side are similar to the following:

```
[20/Dec/2007:11:38:55 -0800] - INFORMATION - NSMMReplicationPlugin - conn=-1 op=-1 msgId=-1 - Replica (dc=bcbsm,dc=com) has been initialized by total protocol as full replica
```

```
[20/Dec/2007:11:45:02 -0800] - INFORMATION - NSMMReplicationPlugin - conn=-1 op=-1 msgId=-1 - csnplCommit: can't find csn 476ac63e000000010000
```

```
[20/Dec/2007:11:45:02 -0800] - INFORMATION - NSMMReplicationPlugin - conn=-1 op=-1 msgId=-1 - ruv_update_ruv: cannot commit csn 476ac63e000000010000
```

[20/Dec/2007:11:45:02 -0800] - INFORMATION -NSMMReplicationPlugin - conn=-1 op=-1 msgId=-1 replica update ruv: unable to update RUV for replica dc=bcbsm, dc=com, csn = 476ac63 e000000010000[20/Dec/2007:11:45:02 -0800] - ERROR<8221> - Incremental Protocol - conn=-1 op=-1 msqId=-1 - Failed and requires administrator action [280R:389] 6541040 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. 6643813 In a topology containing 150 masters, an invalid RUV results, with occurrences of a missing ldap://host:port. The replication cannot be monitored using the Directory Service Control Center. All masters are reported as "Not initialized". 6650749 / 2158694 Applying CLEANRUV in a Directory Server 6.3 topology where Directory Server 5.2 databases were used to initialize the Directory Server 6.3 masters causes the Directory Server 6.3 servers to improperly close the changelogs and forces database recovery on restart. 6643692 On Microsoft Windows native installations, during a patch upgrade from Directory Server Enterprise Edition 6.0 to 6.3, the Directory Service Control Center does not get upgraded. As a workaround, if you have never applied patch 125311-05, apply it. If you have applied patch 125311-05, remove this patch first, and then apply patch 125311-06. If you have already applied patch 125311-06 over patch 125311-05, remove both patches and then re-apply 125311-06 only. 6595805 For encoding other than UTF-8, and when the install path contains non-ASCII characters, then the dsee deploy tool fails to set up the Java Enterprise System Monitoring Framework inside the common agent container. 6593775 Not all suffixes are displayed on the suffix usage page of DSCC.

	cache' table and click refresh, only the selected appears. Other suffixes should also appear but do not.
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.
6579286	The ds-repair tool does not execute successfully on zip installations on Microsoft Windows. Possible error messages delivered by the Microsoft Windows system include:
	dsrepair.exe - Unable to Locate Component. This application has failed to start because NSLDAP32(version number).dll was not found. Re-installing the application may fix this problem.
6579820	On zip installations on Microsoft Windows, the replcheck.exe file does not locate the dsrepair.exe file, resulting in the failure of replcheck fix. Possible error messages delivered by the Microsoft Windows system include:
	dsrepair tool not foundbe sure to install it before starting replck
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.
6536770	The Directory Service Control Center is unable to display very long ACIs. Possible error messages in your browser as a result of this problem include:
	Your browser sent a message this server could not understand
	The requested URL could not be retrieved. While trying to retrieve the URL: [no URL] The following error was encountered: The request or reply is too large. If you are making a POST or PUT request, then your request body (the thing you are trying to upload) is too large. If you are making a GET request, then the reply body (what you are trying to download) is too large. These limits have been established by the Internet Service Provider who operates this cache. Please contact them directly if you feel this is an error.
2151022	If certificates contain localized names, the certificate cannot be deleted

properly. They also cannot be listed properly.

In the Suffix Usage tab, if you select a suffix in 'index access database in

2129151 The Directory Server hangs when running the stop-slapd command. 6461602 The ds repair fix-entry does not work if the source is a tombstone and if the target is an entry (DEL not replicated). Workaround: Use the dsrepair delete-entry command to explicitly delete the entry. Then use the dsrepair add-entry command to add the tombstone. 6594285 The Directory Service Control Center has no RBAC capability. 2113177 Directory Server has been seen to crash when the server is stopped while performing online export, backup, restore, or index creation. 2133169 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. 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 Sun support. 6488284 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 Sun Java System *Directory Server Enterprise Edition 6.3 Man Page Reference.* From that location, you can download a PDF of all Directory Server Enterprise Edition man pages. 6358392 When removing software, the dsee_deploy uninstall command does not stop or delete existing server instances.

To work around this limitation, follow the instructions in the *Sun Java System Directory Server Enterprise Edition 6.3 Installation Guide*.

6401484

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
```

- 3. 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.

6412131

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.

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.

6539650

Directory Server instance with multi-byte characters in its path may fail to be created in DSCC, to start or perform other regular tasks.

Some of these issues can be resolved by using the charset that was used to create the instance. Set the charset using the following commands:

```
# cacaoadm list-params | grep java-flags
  java-flags=-Xms4M -Xmx64M

# cacaoadm stop
# cacaoadm set-param java-flags="-Xms4M -Xmx64M -Dfile.encoding=utf-8"
# cacaoadm start
```

Use only the ASCII characters in the instance path to avoid these issues.

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.

6428448

The dpconf command has been seen to display the Enter "cn=Directory Manager" password: prompt twice when used in interactive mode.

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 *install-dir*\share\lib.

6449828 Directory Service Control Center does not properly display

userCertificate binary values.

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.db

1b/mps/64/libnssckbi.so -nocertdb -dbdir /instance-path/alias -dbprefix stapd- -secmod.db

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.

6469154 On Windows, the output of dsadm and dpadm commands, and help messages are not localized in Simplified and Traditional Chinese languages.

6469296 Although the Directory Service Control Center allows you to copy the

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.

6478568 The dsadm enable-service command does not work correctly with

Sun Cluster.

6480753 The dsee_deploy command has been seen to hang while registering the

Monitoring Framework component into the Common Agent

Container.

The supported SSLCiphers attribute on the root DSE lists NULL

encryption ciphers not actually supported by the server.

6483290	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.
6638990 / 6641357	The ldapmodify bulk import command can damage existing data. Specifying the option -B <i>suffix</i> causes all the existing data in the suffix to be removed.
	The ldapmodify man page is therefore incorrect when it states that bulk import using the ldapmodify command does not erase entries that already exist.
6485560	Directory Service Control Center does not allow you to browse a suffix that is configured to return a referral to another suffix.
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.
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 dsadmautostart 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.
6497053	When installing from the zip distribution, the dsee_deploy command does not provide an option to configure SNMP and stream adaptor ports.
	To workaround this issue,
	1. Enabled Monitoring Plug-in using the web console or dpconf.
	2. Using cacaoadm set-param, change snmp-adaptor-port, snmp-adaptor-trap-port and commandstream-adaptor-port.
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.
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.
6506019	On HP-UX, detaching the gdb from a running process of ns-slapd, kills the process and generates core dump.
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.

6542857

When you use Service Management Facility (SMF) in Solaris 10 to enable a server instance, the instance might not start when you reboot your system.

As a workaround, provided that the command dsadm enable service has never been called, add the following lines which are marked with + to/opt/SUNWdsee/ds6/install/tmpl smf.manifest.

If the dsadm enable service command has previously been called, the workaround is as follows:

1. Create a file containing the following content:

```
select ds
addpg nameservice dependency
setprop nameservice/grouping = astring: require_all
setprop nameservice/restart_on = astring: none
setprop nameservice/type = astring: service
setprop nameservice/entities = fmri: "svc:/milestone/name-services"
```

2. Execute the following command on the file:

```
svccfg -f file
```

If there are some instances in the maintenance state, run these commands:

```
svcadm clear svc:-application-sun-ds:ds-{instancepath}
```

6547992

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

6550543	You might encounter an error when DSCC is used with the combination of Tomcat 5.5 and JDK 1.6.
	As a workaround, use JDK 1.5 instead.
6551672	Sun Java System Application Server bundled with Solaris 10 cannot create SASL client connection for authenticated mechanism and does not communicate with common agent container.
	As a workaround, change the JVM used by application server by editing the <i>appserver-install-path</i> /appserver/config/asenv.conf file and replace the AS_JAVA entry with AS_JAVA="/usr/java". Restart your Application Server domain.
6551685	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.
6557480	On Solaris 9 and Windows, when you access the online help from the console configured using Web archive file (WAR), it displays an error.
6571672	If unzip is unavailable on the system, dsee_deploy does not install any product.
6658483	In traditional Chinese, in the Directory Service Control Center the translation of the string "Initialize Suffix with Data" in the Replication Settings tab of a suffix is confusing.
6644161	In the Korean locale, clicking the Remove Attribute button in Encrypted Attributes Section of the Directory Service Control Center shows the following incomplete error message:
	You have chosen to remove
	The message should be as follows:

You have chosen to remove {0} from the list of encrypted attributes. In order for the database files to reflect the configuration and to work properly you must Initialize the Suffix.

Do you want to continue?

+ + + CHAPTER 4

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 Directory Proxy Server 6.3" on page 55
- "Known Problems and Limitations in Directory Proxy Server" on page 56

Bugs Fixed in Directory Proxy Server 6.3

This section lists the bugs fixed since the last release of Directory Proxy Server.

6666615	In some cases, a client connection based on the bind DN criteria can be badly classified and an incorrect policy may be applied.
6359601	When ACIs are configured, Directory Proxy Server has been seen not to return the same results as a search directly on the LDAP data source. The Directory Proxy Server does not return any entries if the search filter contains an attribute to which access is denied.
6561078	Cannot use ldapmodify to delete a JDBC attribute if the attribute description is case-sensitive.
6490847	Established connections not kept alive.
6631652	Configuring a join-data-view with a filter join rule does not work.
6618078	When configuring a maximum connection count (max-client-connections) per client IP in the Directory Proxy Server, the number of simultaneous connections is not counted correctly.
6614510	The first request after a database stop gives no result and no error message.
6599352	The Directory Proxy Server does not start when a remote data source port is unreachable.

6560473	The Directory Proxy Server does not support object creation in SQL during a modify operation.
6597589	Adding a JDBC attribute to an entry that does not exist in JDBC does not add the entry to JDBC table.
6527869	Search doesn't work on a join view if using attributes from secondary view in the search filter.
6357160	The dpconf command does not reject new line and line feed characters in property values. Avoid using new line and line feed characters when setting property values.
6500298	When using the jvm-args flag of the dpadm command and restarting the server, you cannot successfully allocate more than 2 GB memory for the Java virtual machine.
6570523	Directory Proxy Server does not proxy the Password Modify Extended operation, which is required by the ldappasswd command to reset user passwords.

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 Sun 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.

Known Directory Proxy Server Issues in 6.3

This section lists the known issues that are found at the time of Directory Proxy Server 6.3 release.

For a join-data-view operation that joins an LDAP and a JDBC data

001010//0013101	view, when adding, replacing or modifying an attribute with a value that is too long for the database to store, the value gets truncated and the following data source specific problems are triggered:
	 In mySQL, the database row the attribute belongs appears twice.
	 In DB2, certain database tables become unavailable until the Directory Proxy Server is restarted.
6609603	When a new data source is added to a data source pool, server restart is required.
6607075	For a join view of both LDAP and JDBC, with a uid in the join rule, and where the JDBC view contains an extra attribute, an ldapsearch operation for that attribute returns not one but all entries from the server.
6640597	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.
6637608	When running a large number of searches through the Directory Server Enterprise Edition, there is stress on the Directory Proxy Server, and ArrayIndexOutOfBounds and NegativeArraySize exceptions can occur.
6659381	The Directory Proxy Server may hang when used with Java 1.6 in 64-bit mode. Using the Java 1.5 removes this risk. For more information, see "Software Dependency Requirements" on page 29.
6597598	When performing modifications using the modrate tool against a joint view, with both LDAP and JDBC, nullpointer exceptions occur when using more than 1 thread. The errors are similar to the following:

java.lang.NullPointerException com.sun.directory.proxy.server.JoinDataView. processModifyRequest(JoinDataView.java:916) com.sun.directory.proxy.server.JoinDataViewOpContext.processModifyRequest (JoinDataViewOpContext.java:243) com.sun.directory.proxy.server.ModifyOperation. processOperation(ModifyOperation.java:502 com.sun.directory.proxy.server .WorkerThread.runThread(WorkerThread.java:150)

6646107 / 6643181

com.sun.directory.proxy.util.DistributionThread.run
(DistributionThread.java:225)

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 thesecure-port option. Connection by Start TLS (default) or by clear connection (theunsecured option) are still possible.
6642559	Writing virtual transformations does not work for the remove-attr-value transformation model.
6642578	Writing virtual transformations does not work as expected when an entry is modified.
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.
6356465	Directory Proxy Server can reject ACIs that specify subtypes to the target attribute, such as (targetattr = "locality; lang-fr-ca").
6360059	Directory Proxy Server cannot resume the JDBC data source connection that is restored after the data source connection failure. Directory Proxy Server can resume the connection only after restarting the Directory Proxy Server instance.
6383532	Directory Proxy Server must be restarted when the authentication mode configuration is changed.
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.
6649984	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.
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.
6547755	Directory Proxy Server instance with multi-byte characters in its path may fail to be created in DSCC, to start or perform other regular tasks.
	Some of these issues can be resolved by using the charset that was used

some of these issues can be resolved by using the charset that was used to create the instance. Set the charset using the following commands:

[#] cacaoadm start

	Use only the ASCII characters in the instance path to avoid these issues.
6439604	After configuring alerts, you must restart Directory Proxy Server for the change to take effect.
6461510	In Directory Proxy Server, referral hop limit does not work.
6447554	Directory Proxy Server fails to rename an entry moving to another data view when numeric or lexicographic data distribution is configured.
6458935	When working with join data views, Directory Proxy Server does not take data distribution algorithms in the views that make up the join.
	To work around this issue, configure data distribution at the level of the join data view when using joins and data distribution together.
6469154	On Windows, the output of dsadm and dpadm commands, and help messages are not localized in Simplified and Traditional Chinese languages.
6469780	Creation of JDBC data source entries is not dynamically detected. If you create a JDBC server before creating a JDBC data view, the data view is ignored until the next restart of the server. After configuring a JDBC data source, therefore, you must restart Directory Proxy Server for the change to be detected.

[#] cacaoadm list-params | grep java-flags java-flags=-Xms4M -Xmx64M

[#] cacaoadm stop

[#] cacaoadm set-param java-flags="-Xms4M -Xmx64M -Dfile.encoding=utf-8"

6486578 For JDBC object classes, where one class, A, uses a table as secondary and another class, B, uses that same table as its only primary, then requests on B do not work. The Directory Proxy Server fails to ignore the filter-join-rule property when it is used in a primary table. 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 6490763 Access Manager, when accessing Directory Server through Directory Proxy Server, has been seen to encounter caching problems related to persistent searches after Directory Server is restarted. To work around this issue, restart either Access Manager or Directory Proxy Server after restarting Directory Server. For further fine tuning, you can increase the number of and delay between Access Manager attempts to reestablish persistent search connections. You can increase these parameters by changing the following properties in the AMConfig. properties file. Increase com.iplanet.am.event.connection.num.retries, which represents the number of attempts. The default is 3 attempts. Increase com.iplanet.am.event.connection.delay.between.retries, which represents the number of milliseconds delay between attempts. The default is 3000 milliseconds. 6490853 If you run a search using JDBC data view configured with DB2 database and there are large number of entries to be returned in the search result, an error might occur after returning 1,344 entries. To overcome this limitation, increase the number of large packages by setting the value of the CLI/ODBC configuration keyword CLIPkg to a value up to 30. Even then the search result is limited to maximum of 11,712 Entries. For more information, see DB2 documentation.

When creating a self-signed certificate using Directory Service Control Center, do not use multi-byte characters for the certificate names.

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6491845	The default LDAP controls allowed through Directory Proxy Server are not displayed by Directory Service Control Center.
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.
6510583	Unlike previous versions, as stated in the manual page allowed-ldap-controls(5dpconf), Directory Proxy Server does not allow the server side sort control by default.
	You can enable Directory Proxy Server support for the server side sort control by adding server-side-sorting to the list of allowed LDAP

controls specified by the allowed-ldap-controls property.

```
$ dpconf set-server-prop \
allowed-ldap-controls:auth-request \
allowed-ldap-controls:chaining-loop-detection \
allowed-ldap-controls:manage-dsa \
 allowed-ldap-controls:persistent-search \
allowed-ldap-controls:proxy-auth-v1 \
 allowed-ldap-controls:proxy-auth-v2 \
 allowed-ldap-controls:real-attributes-only \
 allowed-ldap-controls:server-side-sorting
```

Notice that you must repeat the existing settings. Otherwise, only the server side sort control is allowed.

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,the resulting 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 IDBC data source, set db-name: MYINST. On the IDBC 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 IDBC 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 6527010 Directory Proxy Server cannot write JDBC attributes implying many-to-many (N:N) relationship between tables in the JDBC database. 6539650 Directory Proxy Server instances with multi-byte DN and created using DSCC, fail to start on Linux. 6542857 When you use Service Management Facility (SMF) in Solaris 10 to enable a server instance, the instance might not start when you reboot

your system.

As a workaround, provided that the command dsadm enable service has never been called, add the following lines which are marked with + to /opt/SUNWdsee/ds6/install/tmpl smf.manifest.

When you use Service Management Facility (SMF) in Solaris 10 to enable a server instance, the instance might not start when you reboot your system.

As a workaround, provided that the command dsadm enable service has never been called, add the following lines which are marked with + to/opt/SUNWdsee/ds6/install/tmpl smf.manifest.

If the dsadm enable service command has previously been called, the workaround is as follows:

1. Create a file containing the following content:

```
select dps
addpg nameservice dependency
setprop nameservice/grouping = astring: require_all
setprop nameservice/restart_on = astring: none
setprop nameservice/type = astring: service
setprop nameservice/entities = fmri: "svc:/milestone/name-services"
```

2. Execute the following command on the file:

svccfg -f file

If there are some instances in the maintenance state, run these commands:

svcadm clear svc:/application/sun/dps:dps-{instancepath}

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.

Console does not retrieve the backend status of the Directory Proxy Server instance if a machine has multiple host names.

If duplicate entries are present in RDBMS table matching a DN pattern found in JDBC object class, then duplicate subtree (non-leaf) nodes would be returned by Directory Proxy Server when search is performed against the JDBC data view. For example, if there is a DN pattern ou in a JDBC object class and there are duplicate entries (say, sales) present in the RDBMS column mapped to JDBC attribute ou, then there would be duplicate nodes like ou=sales present in the search result.

To resolve this issue, do the following:

- 1. Create an RDBMS view by taking the values from the table that contains the column mapped to ou JDBC attribute in such a way that there are no duplicated entries.
- Replace the RDBMS table name with the RDBMS view name in the JDBC object class with the DN pattern ou. The limitation of this approach is that since RDBMS views are read-only, no values for the JDBC attribute ou could be added through Directory Proxy Server.

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.

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.

The pop-up windows prompting the confirmation for stopping or unregistering servers display the doubled apostrophes in the French locale.

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Identity Synchronization for Windows Bugs Fixed and Known Problems

This chapter contains important, product-specific information available at the time of release of Identity Synchronization for Windows.

This chapter includes the following sections:

- "Bugs Fixed in Identity Synchronization for Windows" on page 65
- "Known Problems and Limitations in Identity Synchronization for Windows" on page 65

Bugs Fixed in Identity Synchronization for Windows

This section lists the bugs fixed since the last release of Identity Synchronization for Windows.

6600668/6611925	The Directory Server connector is unable to go to SYNCING mode if Identity Synchronization for Windows 6.0 is installed on an x86/AMD system.
6557128	The Identity Synchronization for Windows plugin causes the host Directory Server to crash when the plugin attempts to log events using a stale connection.
6595244	The debug log throws error when setting debug logging in the WatchList.properties file.

Known Problems and Limitations in Identity Synchronization for Windows

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

Identity Synchronization for Windows Limitations

This section lists product limitations. Limitations are not always associated with a change request number.

Identity Synchronization for Windows requires sun-sasl-2.19-4.i386.rpm to install successfully.

On Linux, before installing Identity Synchronization for Windows, make sure that the sun-sasl-2.19-4.i386.rpm package is installed on your system. Otherwise the Identity Synchronization for Windows installation would fail. You can get the SASL package from the shared components of the JES 5 distribution or later.

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.

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

No failover for the Identity Synchronization for Windows core service.

If you loose the system where Identity Synchronization for Windows core services are installed, you need to install it again. There is no failover for the Identity Synchronization for Windows core service.

Take a backup of ou=services (configuration branch of Identity Synchronization for Windows DIT) in LDIF format and use this information while reinstalling Identity Synchronization for Windows.

Change in authentication behavior on Microsoft Windows 2003 SP1.

When you install Windows 2003 SP1, by default users are allowed one hour to access their accounts using their old passwords.

As a result, when users change their passwords on Active Directory, the on-demand sync attribute dspswvalidate is set to true, and the old password can be used to authenticate against Directory Server. The password synchronized on Directory Server is then the prior, old password, rather than the current Active Directory password.

See the Microsoft Windows support documentation (http://support.microsoft.com/?kbid=906305) for details on how to turn off this functionality.

Remove serverroot.conf before you remove Administration Server

To uninstall Administration Server, remove

/etc/mps/admin/v5.2/shared/config/serverroot.conf before you remove the Administration Server package.

Mention the admin jars path in CLASSPATH

CLASSPATH should contain the location of the admin jars, otherwise a noClassDefFound error is displayed during resynchronization.

Performing Data Recovery When System or Application Fails

After hardware or application failure, you might have to restore the data from backup in some of the synchronized directory sources.

After completing the data recovery, however, you must perform an additional procedure to ensure that the synchronization can proceed normally.

The connectors generally maintain information about the last change that was propagated to the message queue.

This information, which is called the connector state, is used to determine the subsequent change that the connector has to read from its directory source. If the database of a synchronized directory source is restored from a backup, then the connector state might no longer be valid.

Windows-based connectors for Active Directory and for Windows NT also maintain an internal database. The database is a copy of the synchronized data source. The database is used to determine what has changed in the connected data source. The internal database is no longer be valid once the connected Windows source is restored from a backup.

In general, the idsync resync command can be used to repopulate the recovered data source.

Note – Resynchronization cannot be used to synchronize passwords with one exception. The -i ALL_USERS option can be used to invalidate passwords in Directory Server. This works if the resynchronization data source is Windows. The SUL list must also include only Active Directory systems.

Use of the idsync resync command, however, might not be an acceptable option in every situation.



Caution – Before executing any of the steps detailed that follow, make sure that synchronization is stopped.

Bidirectional Synchronization

Use the idsync resync command with the appropriate modifier settings, according to the synchronization settings. Use the recovered directory source as the target of the resync operation.

Unidirectional Synchronization

If recovered data source is a synchronization destination, then the same procedure can be followed as for bidirectional synchronization.

If recovered data source is a synchronization source, then idsync resync can still be used to repopulate the recovered directory source. You need not change the synchronization flow settings in the Identity Synchronization for Windows configuration. The idsync resync command allows you to set synchronization flow independent of the configured flows with the -o Windows | Sun option.

Consider the following scenario as an example.

Bidirectional synchronization is setup between Directory Server and Active Directory.

- The database of a Microsoft Active Directory server has to be recovered from a backup.
- In Identity Synchronization for Windows, this Active Directory Source is configured for the SULAD.
- Bidirectional synchronization for modifies, creates and deletes is setup between this Active Directory Source and a Sun Directory Server Source.

▼ To Perform Unidirectional Synchronization

1 Stop synchronization.

```
idsync stopsync -w - -q -
```

2 Resynchronize Active Directory Source. Also, resynchronize modifies, creations, and deletes.

```
idsync resync -c -x -o Sun -l AD -w - -q -
```

3 Restart synchronization.

```
idsync startsync -w - -q -
```

Directory Source Specific Recovery Procedures

The following procedures correspond to specific directory sources.

Microsoft Active Directory

If Active Directory can be restored from a backup, then follow the procedures in the sections covering either bidirectional, or unidirectional synchronization.

You might, however, have to use a different domain controller after a critical failure. In this case, follow these steps to update the configuration of the Active Directory Connector.

▼ To Change the Domain Controller

- 1 Start the Identity Synchronization for Windows management console.
- 2 Select the Configuration tab. Expand the Directory Sources node.
- 3 Select the appropriate Active Directory Source.
- 4 Click Edit controller, and then select the new domain controller.

Make the selected domain controller the NT PDC FSMO role owner of the domain

5 Save the configuration.

- **Stop the** Identity Synchronization service on the host where the Active Directory Connector is running.
- 7 Delete all the files except the directories, under ServerRoot/isw-hostname/persist/ADPxxx. Here, xxx is the number portion of the Active Directory Connector identifier.

For example, 100 if the Active Directory Connector identifier is CNN100.

- 8 Start the Identity Synchronization service on the host where the Active Directory Connector is running.
- 9 Follow the steps according to your synchronization flow in the unidirectional or the bidirectional synchronization sections.

Fail Over and Directory Server

Either the Retro Changelog database, or the database with synchronized users, or both can be affected by a critical failure.

▼ To Manage Directory Server Fail Over

1 Retro Changelog Database.

Changes that the Directory Server connector could not process might have occurred in the Retro Changelog database. Restoration of the Retro Changelog database only makes sense if the backup contains some unprocessed changes. Compare the most recent entry in the <code>ServerRoot/isw-hostname/persist/ADPxxx/accessor.state</code> file with the last changenumber in the backup. If the value in accessor. state is greater than or equal to the changenumber in the backup, do not restore the database. Instead, recreate the database.

After the Retro Changelog database is recreated, make sure that you run idsync prepds. Alternatively, click Prepare Directory Server from the Sun Directory Source window in the Identity Synchronization for Windows management console.

The Directory Server connector detects that the Retro Changelog database is recreated and log a warning message. You can safely ignore this message.

2 Synchronized Database.

If no backup is available for the synchronized database, then the Directory Server connector has to be reinstalled.

If the synchronized database can be restored from a backup, then follow the procedures in either the bidirectional or the unidirectional synchronization sections.

Known Identity Synchronization for Windows Issues

This section lists known issues. Known issues are associated with a change request number.

- 6388815 Active Directory connectors and Directory Server connectors crash when an attempt is made to synchronize nested groups as such synchronization is not currently supported.
- On machines running Microsoft Windows, with a domain controller installed, authentication fails while creating new server or registering an existing server with Webconsole. As a workaround, specify the userID with the domain name for the domain controller.
- 4997513 On Windows 2003 systems, the flag that indicates the user must change his password at the next login is set by default. On Windows 2000 systems, the flag is not set by default.

When you create users on Windows 2000 and 2003 systems with the user must change pw at next login flag set, users are created on Directory Server with no password. The next time the users log into Active Directory, the users must change their passwords. The change invalidates their passwords on Directory Server. The change also forces on-demand synchronization the next time those users authenticate to Directory Server.

Until users change their password on Active Directory, users are not able to authenticate to Directory Server.

- Problems can occur when attempting to view the Identity Synchronization for Windows console with PC Anywhere 10 with Remote Administration 2.1. PC Anywhere version 9.2 has been seen not to cause errors. If problems persist, remove the remote administration software. Alternatively, VNC can be used. VNC is not known to cause any issues when displaying the Identity Synchronization for Windows console.
- 5097751 If you install Identity Synchronization for Windows on a Windows system that is formatted with FAT 32 system, then no ACLs are available. Furthermore, no access restrictions are enforced for the setup. To ensure security, use only Windows NTFS system to install Identity Synchronization for Windows.
- When Directory Server plug-in is configured on the consumers with command-line, the plug-in does not create a new subcomponent ID for the consumers. The plug-in configuration does not create new IDs for consumers.
- The password synchronization plug-in for Identity Synchronization for Windows tries to bind to the Active Directory for accounts that have not been synchronized even before checking the accountlock and passwordRetryCount.

To resolve this issue, enforce a password policy on the LDAP server. Also, configure Access Manager to use the following filter on user search:

```
(| (!(passwordRetryCount=*) ) (passwordRetryCount <=2) )</pre>
```

	This workaround, however, throws a user not found error when too many login attempts are made over LDAP. The workaround does not block the Active Directory account.
6331956	$Identity\ Synchronization\ for\ Windows\ console\ fails\ to\ start\ if\ o={\tt NetscapeRoot}\ is\ replicated.$
6332197	Identity Synchronization for Windows throws errors when groups, with user information of users not yet created, are synchronized on Directory Server.
6336471	Identity Synchronization for Windows plug-in cannot search through chained suffixes. As a result, the modify and bind operations cannot be performed on the Directory Server instance.
6337018	Identity Synchronization for Windows should support exporting the Identity Synchronization for Windows Configuration to an XML file.
6386664	Identity Synchronization for Windows synchronizes user and group information between Active Directory and Directory Server when group synchronization feature is enabled. The synchronization should ideally happen only after issuing the resync command from the command line.
6452425	If you install Identity Synchronization for Windows on a Solaris system where the SUNWtls package version 3.11.0 is installed, the Administration Server might not launch. To resolve this, uninstall the SUNWtls package before you install Identity Synchronization for Windows.
6251334	User deletion synchronization cannot be stopped even after changing the Active Directory source. Deletion synchronization therefore continues when the Synchronized Users List has been mapped to a different organizational unit, 0U, in the same Active Directory Source. The user appears to have been deleted on the Directory Server instance. The user appears as deleted even if the user is deleted from the Active Directory source which does not have a SUL mapping.
6335193	You might try to run the resynchronization command to synchronize users from Directory Server to Active Directory. The creation of the group entity fails if unsynchronized users are added to an unsynchronized group.
	To resolve this issue, you should run the resync command twice for the synchronization to happen correctly.
6339444	You can specify the scope of synchronization with the Synchronization Users List using the Browse button on the Base DN pane. When you specify the scope, the subsuffixes are not retrieved.

To work around this issue, add ACIs to permit anonymous access for reads and

searches.

During the upgrade of core components of Identity Synchronization for Windows to version 1.1 SP1 on Windows systems, the updateCore. bat file contains a hard-coded incorrect reference to Administration Server. As a result, the upgrade process does not complete successfully.

To resolve this problem, replace two instances of references to Administration Server in the upgrade script.

Replace the following instructions on lines 51 and 95 of the upgrade script. Change lines as follows.

net stop "Sun Java(TM) System Administration Server 5.2"

Instead, the lines should read as follows:

net stop admin52-serv

After making the specified changes, rerun the upgrade script.

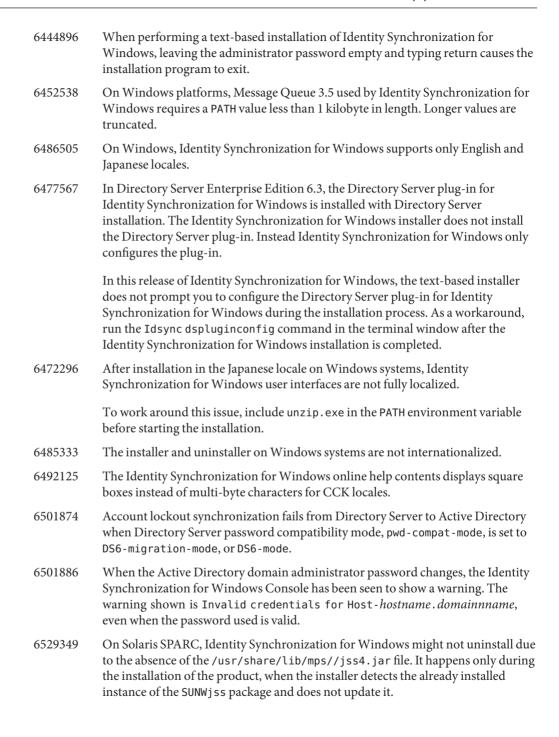
- For Windows Creation Expressions in a Directory Server to Active Directory, the flow cn=%cn% works both for users and groups. For every other combination, Identity Synchronization for Windows shows errors during synchronization.
- 6332183 Identity Synchronization for Windows might log exceptions stating that a user already exists, if the Add action flows from Directory Server to the Active Directory before the Delete can. A race condition might occur where the add operation is performed before the delete operation during synchronization, thus cause Active Directory to log an exception.

For example, if a user, dn: user1, ou=isw_data, is added to an existing group, dn: DSGroup1, ou=isw_data, when the user is deleted from the group, the uniquemember of the group is modified. If the same user is added to a group that has the same DN, (for userdn: user1, ou=isw_data), an Add operation is performed. At this point, Identity Synchronization for Windows might log exceptions stating that the user already exists.

The Identity Synchronization for Windows uninstallation program is not localized. WPSyncResources_X.properties files fail to be installed in the /opt/sun/isw/locale/resources directory.

To work around this issue, copy the missing WPSyncResources X. properties files from the installer/locale/resources directory by hand.

6444878 Install and set up Java Development Kit version 1.5.0_06 before running Administration Server.



As a workaround, while installing the product, add /usr/share/lib/mps/secv1/jss4.jar in the Java class path.

```
$JAVA_EXEC -Djava.library.path=./lib \
-classpath "${SUNWjss}/usr/share/lib/mps/secv1/jss4.jar:\
${SUNWjss}/usr/share/lib/mps/jss4.jar:\
${SUNWxrcsj}/sfw/share/lib/xerces-200.jar:./lib/installsdk.jar:\
./lib/ldap.jar:./lib/webstart.jar:\
${SUNWiquc}/usr/share/lib/jms.jar:.:./lib/install.jar:\
./resources:./locale/resources:./lib/common.jar:\
./lib/registry.jar:./lib/ldapjdk.jar:./installer/registry/resources" \
-Djava.util.logging.config.file=./resources/Log.properties \
-Djava.util.logging.config.file=../resources/Log.properties \
-Dcom.sun.directory.wps.logging.redirectStdout=false \
uninstall ISW Installer $1
```

6572575 For the group synchronization to work successfully during resync, both the user and group should reside at the same level in the synchronization scope. Otherwise, it displays an error.



Directory Editor Bugs Fixed and Known Problems

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

This chapter includes the following sections:

- "Bugs Fixed in Directory Editor" on page 75
- "Known Problems and Limitations in Directory Editor" on page 75

Bugs Fixed in Directory Editor

This section lists the bugs fixed since the last release of Directory Editor.

When creating a new form for a user object class, a form is generated, presenting the object class attributes. The multivalued field is unchecked by default for multivalued attributes.

Known Problems and Limitations in Directory Editor

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

Directory Editor Limitations

This section lists product limitations. Limitations are not always associated with a change request number.

The following configuration requirements exist for using Directory Editor through Directory Proxy Server.

When configuring Directory Editor to access data through Directory Proxy Server, you must observe the following constraints.

■ The Directory Editor configuration directory must be an instance of Directory Server, not Directory Proxy Server.

You specify the Directory Editor configuration directory when initially configuring Directory Editor through the Startup Properties page. The configuration directory must contain the entry with Bind DN and Password you provide in the Startup Properties page. The configuration directory must also already have the Configuration Suffix whose DN you select in the drop down list of the Startup Properties page.

 All Directory Proxy Server instances through which you access data using Directory Editor must be configured with a data view to allow access to search the directory schema. Schema are stored under cn=schema for Directory Server.

For example, the following command configures a schema view into the Directory Server instances in My Pool.

```
$ dpconf create-ldap-data-view -h localhost -p 1390 "schema view" \
   "My Pool" cn=schema
Enter "cn=Proxy Manager" password:
$
```

• All Directory Proxy Server instances through which you access data using Directory Editor must be configured to provide access through to the data sources. In particular, the Directory Proxy Server instances must have data views configured to allow the users logging in to Directory Editor at least to bind to the Directory Server data sources.

For example, the following command configures Directory Proxy Server to allow all LDAP operations through to the attached data source, My DS in My Pool.

```
$ dpconf set-attached-ldap-data-source-prop -h localhost -p 1390 \
   "My Pool" "My DS" add-weight:1 bind-weight:1 compare-weight:1 delete-weight:1 \
   modify-dn-weight:1 modify-weight:1 search-weight:1
Enter "cn=Proxy Manager" password:
$
```

Known Directory Editor Issues

This section lists known issues. Known issues are associated with a change request number.

Directory Editor displays a configurable number of results for a search, with the default being 25. If a search returns more entries than the maximum number to display, refine the search to return fewer results.

When deploying on Sun Java Enterprise System Application Server 8, an error file is written. Also, login fails.

To work around this issue, ensure the following grant statement is included in the Server. policy file:

```
grant codeBase "file:${de.home}/-" {
  permission javax.security.auth.AuthPermission "getLoginConfiguration";
  permission javax.security.auth.AuthPermission "setLoginConfiguration";
  permission javax.security.auth.AuthPermission "createLoginContext.SunDirectoryLogin";
  permission javax.security.auth.AuthPermission "modifyPrincipals";
  permission java.lang.RuntimePermission "createClassLoader";
}:
```

Use the grant statement shown here. The grant statement shown in *Sun Java System Directory Editor 1 2005Q1 Installation and Configuration Guide* is incorrect.

6397929 When deploying on Tomcat 5.5, login fails due to a missing JAAS configuration file.

To work around this issue, first create *tomcat-install-path/bin/setenv*.sh containing the following line:

JAVA OPTS="-Djava.security.auth.login.config=\$CATALINA HOME/conf/jaas.conf"

Next create *tomcat-install-path/*conf/jaas.conf. Edit the file to contain the following lines:

```
SunDirectoryLogin {
  com.sun.dml.auth.SunDirectoryLoginModule required;
}:
```

Directory Editor does not retain changes made to the Default User Form, Create. The issue occurs when the application container, where Directory Editor runs, is restarted before the changes have been validated.

To work around this limitation, do not restart the application container after restoring the configuration. Instead login, validate the Managed Directory setup under the Configure tab, save, and login again.

An application error appears after you save and continue beyond the startup page when running Directory Editor on Application Server in a locale other than English.

To work around this issue, start Application Server in the English locale on UNIX systems. On Windows systems, try restarting Application Server several times.

6456576 When you click the Help button in Directory Editor deployed in Application Server, the wrong help content is displayed.

To work around this issue, edit WEB-INF/sun-web.xml to correspond to the following, and then restart Application Server.

Installation of Directory Editor using the install.sh script has been seen to fail on HP-UX systems.

To work around this issue, install Directory Editor first on another system, then deploy the resulting de.war file in the web application container on your HP-UX system.

When deployed in Application Server running in a locale other than English, Directory Editor does not render English for en or en US browser settings.

To work around this issue, issue the following commands.

- # cd /var/opt/SUNWappserver/domains/domain1/applications/j2ee-modules/de/config
- # cp DMLMessages.properties DMLMessages en.properties DMLMessages en US.properties
 - When logged in as a user having multi-byte characters in the user ID, you cannot edit your directory information. When you click Edit My Directory Information, you are presented with a blank page.
 - 6488644 When you login to Directory Editor running in a locale other than English as a generic user, the Home and Change My Directory Password pages are not localized.
 - When you install Directory Editor in a locale other than English on Apache Tomcat on Windows, error pages are shown during configuration, save, and refresh operations.
 - 6490590 When you install Directory Editor in a locale other than English, installer labels are not displayed properly.

To work around this issue, change to the English locale on UNIX systems before running the installer. On Windows systems, switch the locale to English using Control Panel > Regional Options before running the installer.

- When accessing Directory Editor through Internet Explorer 6 running in the Spanish locale, garbage characters appear in the online help.
- 6493975 Directory Editor does not allow you to view multiple suffixes through the same instance.

To work around this issue, install additional instances of Directory Editor either in additional application servers or in separate domains on the same application server.



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:

- "About Directory Server Resource Kit" on page 81
- "Bugs Fixed in Directory Server Resource Kit" on page 83
- "Known Problems and Limitations in Directory Server Resource Kit" on page 83

About Directory Server Resource Kit

This section provides an overview of Directory Server Resource Kit components.

Directory Server Resource Kit gives you tools for working with directory services in the laboratory, during deployment, and in the data center.

Directory Subtree Deletion

Use the ldapsubtdel(1) tool to delete an entire directory subtree over LDAP with one command.

DSML v2 Access

Use the following tools to test directory access through DSML v2 when designing, developing, and testing web applications:

- The dsmlmodify(1) command to add, delete, modify, rename, and move entries
- The dsmlsearch(1) command to find and read entries

LDAP Performance Measurements

Use the following tools to measure bind, read, and write performance when accessing the directory over LDAP:

- The authrate(1) command to measure LDAP bind performance
- The modrate(1) command to measure LDAP write performance

The searchrate(1) command to measure LDAP read performance

LDIF Generation and Transformation

Use the following tools to generate sample LDIF for sizing and tuning. Use the tools also to transform, sort, and filter LDIF for interoperability:

- The ldifxform(1) command to transform, sort, and filter LDIF
- The makeldif(1) command to generate sample LDIF

Service Tuning

Use the logconv(1) command to examine how clients use directory services and to generate recommendations for indexing.

You can decide to set up and run Directory Server Resource Kit tools on the same system as your directory server, or on another system. The decision depends on your work environment. The decision also depends on the stage of deployment you have reached. The following questions and answers help you decide where to use Directory Server Resource Kit.

Question: Are you working to evaluate or to demonstrate directory technology prior to developing directory services?

Answer: For convenience, install and use Directory Server Resource Kit on the same system as your directory.

Question: Are you working to develop directory client applications or plug-ins?

Answer: For convenience, install and use Directory Server Resource Kit on the same system as your directory.

Question: Are you working to test directory performance characteristics?

Answer: The only command that you must run on the system that provides directory services is the idsktune command, which generates system-specific tuning recommendations.

Answer: Avoid perturbing the system that you measure by installing Directory Server Resource Kit and running commands, except for idsktune, on other systems.

Get accurate directory performance measurements by running clients such as authrate, modrate, and searchrate on separate systems. You can improve accuracy by carefully controlling the processes that run on the system you measure. You can also improve accuracy by controlling the sample data that you store in the directory. You can generate controlled data with makeldif.

Question: Have you already deployed your directory into the data center?

Answer: Avoid perturbing the deployed system by installing Directory Server Resource Kit and running commands on other systems.

Run analysis with logconv, LDIF conversions with ldifxform, and other operations from other systems as well.

Bugs Fixed in Directory Server Resource Kit

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

The idsktune command does not recognize the /etc/release file in the Solaris 10 Update 3 release.

Known Problems and Limitations in Directory Server Resource Kit

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

6565893	The idsktune command does not support SuSE Enterprise Linux 10.
5081543	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 ${\tt dsmlsearch}$ command ${\tt -D}$ 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.
6379087	NameFinder has been seen to fail to deploy in Application Server on Windows systems.
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.