

Sun Java™ System Directory Server Release Notes

Version 5.2 2004Q2

Part Number 817-5216

These Release Notes contain important information available at the time of release of Sun Java™ System Directory Server 5 2004Q2. New features and enhancements, known issues and limitations, and other information are addressed here. Read this document before you begin using Directory Server 5 2004Q2.

The most up-to-date version of these release notes can be found at:

http://docs.sun.com/coll/DirectoryServer_04q2 Check the web site prior to installing and setting up your software and then periodically thereafter to view the most up-to-date release notes and manuals.

These release notes contain the following sections:

- [Release Notes Revision History](#)
- [About Sun Java System Directory Server 5 2004Q2](#)
- [Bugs Fixed in This Release](#)
- [Important Information](#)
- [Known Issues and Limitations](#)
- [Redistributable Files](#)
- [How to Report Problems and Provide Feedback](#)
- [Additional Sun Resources](#)

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

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Release Notes Revision History

Table 1 Revision History

Date	Description of Changes
May, 2004	<ul style="list-style-type: none">Initial release of these Directory Server only release notes (Administration Server items have been moved into a separate set of <i>Administration Server Release Notes</i>Major Updates to Bugs Fixed in This Release and Known Issues and Limitations sections.

About Sun Java System Directory Server 5 2004Q2

In some parts of the documentation and on Directory Server Console, the version number of the product is referred to as 5.2. Directory Server 5 2004Q2 is a maintenance release of Directory Server 5.2.

Sun Java System Directory Server 5 2004Q2 is a powerful and scalable distributed directory server based on the industry-standard Lightweight Directory Access Protocol (LDAP). Directory Server is part of the Sun Java Enterprise System enterprise infrastructure software system that delivers an integrated, core set of industry-leading enterprise network services that virtually all businesses need today.

This section includes:

- [What's New in This Release](#)
- [Software Requirements](#)

What's New in This Release

- Support for RPM Linux packages for Red Hat Advanced Server 2.1 Update 2
- Increased certificate length support
- Improved CoS cache management resulting in enhanced CoS performance

- Additional password policy functionality allowing you to track when the entry's password was last changed
- Support for Sun Cluster on Solaris 9 x86
- Improved product documentation

The 5.2 documentation set includes the following new guides:

- *Directory Server Technical Overview*
- *Directory Server Installation and Migration Guide*
- *Directory Server Performance Tuning Guide*

Important updates to the existing documentation include:

- Reworked Administration Guide and Deployment Planning Guides
- Reworked Administration Server documentation. Administration Server now has its own separate set of release notes and what was formerly called the *Server Console Management Guide* is now called the *Administration Server Administration Guide*.

For information regarding both the standalone Directory Server 5.2 release and the 5.2 release packaged with the 2003Q4 release of Sun Java™ Enterprise System see the *Sun ONE Directory Server 5.2 Release Notes*.

Due to architectural changes made in Directory Server 5.2, some features that were available in Directory Server 4.x are no longer included. These are:

- *Database Backend Plug-in Interface*. The enhanced pre-operation interfaces may be used instead of the database backend plug-in interface, to implement plug-ins that are designed to provide access to alternative directory data stores.
- In addition, the distribution plug-in architecture and functionality will change substantially in a future release of Directory Server.

Software Requirements

The following software is required for this release of Directory Server.

CAUTION Before installing Directory Server on Solaris 8 Ultra SPARC® and Solaris 9 Ultra SPARC®, you must ensure that the required OS patches have been installed. These patches can be obtained in the form of a patch cluster or as individual patches from <http://sunsolve.sun.com>. The required OS patch cluster includes an installation script that installs the patches in the correct order. The clusters are updated periodically as new patch revisions are released. Select the "Patches" link on the SunSolve site and follow the links to obtain the required OS patch clusters.

Table 2 Solaris SPARC Software Requirements

Component	Platform Requirement
Operating System	Solaris 8 Ultra SPARC® Platform Edition with patches required for Java Enterprise System (Sun Cluster 3.1 Release 04/04 has been qualified to run on Solaris 8 02/02 (with the recommended patches installed) and Solaris 8 HW 05/03 (PSR 2)) Solaris 9 Ultra SPARC® Platform Edition with patches required for Java Enterprise System (Sun Cluster 3.1 Release 04/04 has been qualified to run on Solaris 9 04/04)
RAM	256 Mbytes for evaluation purposes and 1 Gbyte as a recommended minimum
Disk space	3 Gbytes recommended Note that: - this figure is based on a sample production deployment with between 10 000 and 250 000 entries - DS binaries and default logs account for 1.2 Gbytes per Directory Server instance - for an evaluation (i.e. minimum data stored in the directory) 1.4 Gbytes should suffice

Table 3 Solaris x86 Software Requirements

Component	Platform Requirement
Operating System	Solaris 9 x86 Platform Edition (Sun Cluster 3.1 Release 04/04 has been qualified to run on Solaris 9 04/04 x86 Platform Edition)
RAM	256 Mbytes for evaluation purposes and 1 Gbyte as a recommended minimum
Disk space	3 Gbytes recommended Note that: - this figure is based on a sample production deployment with between 10, 000 and 250, 000 entries - DS binaries and default logs account for 1.2 Gbytes per Directory Server instance - for an evaluation (i.e. minimum data stored in the directory) 1.4 Gbytes should suffice

Table 4 Linux Software Requirements

Component	Platform Requirement
Operating System	RedHat Advanced Server 2.1 Update 2

Table 4 Linux Software Requirements

Component	Platform Requirement
Patches or service packs	None
Additional software	None

NOTE Sun Java System Directory Server 5.2 has been validated with Sun Cluster 3.1.

Specific operating system patches may need to be installed before Directory Server 5.2 can be installed. For further information, refer to the *Directory Server Installation and Tuning Guide* issued with the initial release of Directory Server 5.2. You can obtain Solaris patches from <http://sunsolve.sun.com>

Bugs Fixed in This Release

The tables below describe the bugs fixed in Directory Server 5.2 in the following areas:

- [Installation, Uninstallation, and Migration Related Bugs Fixed in Directory Server 5.2](#)
- [Replication Related Bugs Fixed in Directory Server 5.2](#)
- [Console Related Bugs Fixed in Directory Server 5.2](#)
- [Database Related Bugs Fixed in Directory Server 5.2](#)
- [Security Related Bugs Fixed in Directory Server 5.2](#)
- [LDAP Access Related Bugs Fixed in Directory Server 5.2](#)
- [Performance Related Bugs Fixed in Directory Server 5.2](#)
- [Conformance Related Bugs Fixed in Directory Server 5.2](#)
- [Java Related Bugs Fixed in Directory Server 5.2](#)
- [Miscellaneous Bugs Fixed in Directory Server 5.2](#)

Table 5 Installation, Uninstallation, and Migration Related Bugs Fixed in Directory Server 5. 2

Bug Number	Description
4944732	The <code>unconfigure</code> subcommand of the <code>directoryserver</code> command hung due to a shared <code>ServerRoot</code> directory.

Table 6 Replication Related Bugs Fixed in Directory Server 5. 2

Bug Number	Description
4719793	ACIs on <code>cn=schema</code> branch of the <code>cn=config</code> tree were not replicated.
4863943	When a master replica was disabled, the replica ID changed, and the replica then brought back online, two replica IDs continued to co-exist which resulted in duplicate error messages when setting referrals.
4870522	If there was a link failure on the network for more than 5 minutes then the replication session timed out.
4881004	The change log was not purged by default.
4887252	In the knowledge that operations are grouped before the RUV is updated, If: <ul style="list-style-type: none"> - a replication session had executed an <code>ldapmodify</code> delete attribute operation, - then, on the same entry, had executed any other type of <code>ldapmodify</code> operation (which would have resulted in the attribute state information being purged from the entry), - and finally, the same replication session was aborted abruptly before all operations which would normally have triggered a RUV update had been executed, then a subsequent replication session would attempt to replay the same operations as it would have no RUV record of them having already been executed. On attempting to replay the <code>ldapmodify</code> delete attribute operation, the replication session would fail as it would have no record that the attribute it was trying to delete had in fact ever existed.
4891228	The server sometimes crashed if change log trimming was enabled.
4892676	The replication monitoring tool <code>repldisc</code> did not function correctly when multiple Directory Server instances were installed on the same machine.
4911678	At startup time the RUV object was sometimes NULL, which caused the server to crash.
4923860	Certain long (>240 characters) DN's containing "," or ";" characters caused Directory Server to crash.
4976819	If there was a link failure on the network for more than 5 minutes then the consumer did not recover its state when the network returned to normal, which resulted in the replicas not being synchronized.
4976981	Using the retro change log trimming functionality, sometimes resulted in server crash.

Table 6 Replication Related Bugs Fixed in Directory Server 5.2 (*Continued*)

Bug Number	Description
4987825	In a multi-master replication topology comprising either two masters or one master and one hub replica and with password expiration enabled, one of the masters generated incorrect error messages concerning all of the data being replicated. Sometimes additional replication session difficulties were also encountered.
5014310	Modifying schema on a supplier sometimes caused a consumer to hang.

Table 7 Console Related Bugs Fixed in Directory Server 5. 2

Bug Number	Description
4726158	The Browse dialog box loaded from the password policy interface or from the Class of Service (CoS) interface did not display all existing password policies.
4840960	Large lists of managed roles in the Directory Server console were rendered very slowly and consumed large amounts of CPU.
4868083	Creating a new group with new members caused an LDAP exception error.
4959414	Time format problems in the Time tab of the ACI editor.
4959500	Directory Server Console did not display access logs when their size exceeded 60 Mbytes and a filter was used.
4951377	The Directory Server port number was incorrectly displayed in the console despite having been changed as per instructions.

Table 8 Database Related Bugs Fixed in Directory Server 5. 2

Bug Number	Description
4912664	All attribute subtypes were deleted from an index if they had the same values.
4960904	bak2db failed when databases were placed under other database directories.
4889077	db2ldif produced unexpected errors when sub-suffixes were specified by the <code>-s</code> option

Table 9 Security Related Bugs Fixed in Directory Server 5. 2

Bug Number	Description
4529541	Directory Server did not correctly parse ACI target entry DNs containing quotes.
4882699	Under certain circumstances, it was possible to hijack the Directory Server listen port.

Table 9 Security Related Bugs Fixed in Directory Server 5.2 (Continued)

Bug Number	Description
4908443	Password expiration did not always completely prevent users from binding.
4899320	Incorrect ACI syntax errors occurred after migration from Netscape Directory Server 4.x to Directory Server 5.x.
4918912	The <code>DENY</code> macro ACI applied to entries that were not supposed to be impacted.
4925205	Directory Server crashed when attempting to modify an entry with at least one long (for example .jpg) attribute value, governed by an ACL.
4937356	Access Control functionality did not support extra blank spaces (for example in a <code>dn</code>).
4947083	If the password history functionality was enabled, and if an entry contained the <code>passwordHistory</code> attribute, Directory Server crashed when a new password was checked against the <code>passwordHistory</code> length value of 0.
4957404	SSL initialization was not thread safe, and caused the server to crash, when done in parallel with <code>start_tls</code> sessions.

Table 10 LDAP Access Related Bugs Fixed in Directory Server 5. 2

Bug Number	Description
4857614	An <code>ldapmodify</code> operation on consumers with the <code>managedsait</code> control returned an "unwilling to perform" error instead of a referral.
4903368	Running an <code>ldapmodify</code> delete operation on more than 5 values of a multi-valued attribute, resulted in all values being deleted.
4934977	Certain <code>ldapsearch</code> operations that either started or ended with a wildcard failed.
4935077	When importing large entries Directory Server sometimes crashed.
4941327	Server stopped responding when LDAP search requests containing too many attributes are sent.
4960638	<code>ldapmodify</code> operation failed when the modify request (a) contained an OID (as opposed to an attribute name) and (b) also failed when an <code>OID;subtype</code> combination was used.
4981702	Directory Server crashed when importing LDIF that contained encrypted values.

Table 11 Performance Related Bugs Fixed in Directory Server 5. 2

Bug Number	Description
4819535	Search performance was slow when there were large numbers of static groups.
4961502	Sustained modify operations consumed all available memory and caused Directory Server to crash.

Table 12 Conformance Related Bugs Fixed in Directory Server 5.2

Bug Number	Description
4819710	There were issues when both LDAPv2 and LDAPv3 applications were using certificate related attributes. See “Issues arose when both LDAP v2 and LDAPv3 applications use certificate related attributes (#4819710)” on page22 for further detail regarding this bug fix.

Table 13 Java Related Bugs Fixed in Directory Server 5. 2

Bug Number	Description
4873123	The ACI name text field in the ACI editor accepted carriage returns which generated incorrect LDIF in the ACIs.
4924528	The Times tab in the ACI editor did not function correctly.
4942406	The online help window in the Add Host Filter dialog box of the ACI editor needed to be closed twice.

Table 14 Miscellaneous Bugs Fixed in Directory Server 5.2

Bug Number	Description
4666007	Setting the <code>nsslapd-ds4-compatible-schema</code> attribute to on caused the server process to fail to start.
4815733	Transaction logs were not deleted if the <code>db2bak</code> command-line utility terminated prematurely.
4826843	The Audit log was not always rotated as per its configuration.
4845622	The pass-through authentication (PTA) plug-in could not be configured to accept multiple authenticating Directory Servers with the same suffix.
4846332	Access log rotation did not occur when the server was restarted.
4877307	VLV indexes did not work correctly on SPARC 64.
4877894	Merging VLV indexes with no entries after importing data did not work correctly.
4884562	The <code>ieee802Device</code> and <code>bootableDevice</code> object classes were not backward compatible.
4893427	Directory Server crashed while creating a browsing index (vlv index).
4895652	The subtree plug-in logged superfluous post-operation error warning messages.
4897068	Documentation did not state that <code>db2bak</code> and <code>bak2db</code> (both shell and perl scripts) require an absolute path.
4899710	The Referential Integrity plug-in did not allocate sufficient space for internal searches.

Table 14 Miscellaneous Bugs Fixed in Directory Server 5.2 (*Continued*)

Bug Number	Description
4909592	An erroneous reverse-DNS request was issued at server startup.
4924002	The location of J2SE as used by the Java Enterprise System and its components was not the same as the J2SE location used by Directory Server.
4928129	The <code>nsslapd-accesslog-logminfreediskspace</code> attribute did not function as expected.
4934942	Running a wildcard search on a single character attribute value did not function correctly in Directory Server.
4935063	Under certain circumstances the <code>suffix2instance</code> command caused Directory Server to crash.
4942286	Use of “-” characters in the subtype of the <code>telephonenumber</code> attribute (typically used as a separator in certain countries) failed.
4969832	Significant memory leaks happened on Directory Server 5.1 on Solaris
4973806	Directory Server crashed when attribute uniqueness plug-in was activated.
4980054	Directory Server returned an entry that did not match a wildcard filter criteria (on Linux only).
4981785	If the Referential Integrity plug-in time interval exceeded 6 hours, referential integrity checks did not necessarily respect the configured time interval.
5002956	Directory Server sometimes crashed on receipt of an invalid PDU.

Important Information

This section contains the latest information that is not contained in the core product documentation. This section covers the following topics:

- [Installation Notes](#)
- [Compatibility Notes](#)
- [Documentation Notes](#)

Installation Notes

This topic contains important patch requirement and general installation information, and is divided into the following subsections:

- [Patch Requirement Information](#)
- [General Installation Information](#)

Patch Requirement Information

If you have Directory Server 5.2 installed from Solaris packages and wish to bring it in line with Directory Server as delivered in Java Enterprise System 2004Q2, install the following patches with at least the given version number or more, available at <http://sunsolve.sun.com>

CAUTION To avoid breaking product dependencies, it is mandatory to install the patches in the order provided in the following tables.

Table 15 Directory Server 5.2 Java Enterprise System 2004Q2 Alignment Patches Required For Solaris 8 (SPARC)

Patch Number	Patch Description
116103-03	SunOS 5.8: International Components for Unicode Patch
114045-03	SunOS 5.8: Netscape Portable Runtime(4.1.4)/Network Security System(3.3.4)
115924-08	SunOS 5.8: NSPR4.1.6 / NSS 3.3.6 / JSS 3.1.2.5
115328-01	SunOS 5.8: Simple Authentication and Security Layer (2.01)
115610-09	SunOS 5.9_sparc: Sun ONE AdminServer 5.2 patch Note that this patch is also valid for Solaris 8
115614-07	SunOS 5.9 : Sun ONE Directory Server 5.2 patch Note that this patch is also valid for Solaris 8

Table 16 Directory Server 5.2 Java Enterprise System 2004Q2 Alignment Patches Required For Solaris 9 (SPARC)

Patch Number	Patch Description
114677-06	SunOS 5.9: International Components for Unicode Patch
114049-04	SunOS 5.9: Netscape Portable Runtime(4.1.4)/Network Security System(3.3.4)
115926-08	SunOS 5.9: NSPR4.1.6 / NSS 3.3.6 / JSS 3.1.2.5
115342-01	SunOS 5.9: Simple Authentication and Security Layer (2.01)
115610-09	SunOS 5.9_sparc: Sun ONE AdminServer 5.2 patch
115614-10	SunOS 5.9 : Sun ONE Directory Server 5.2 patch

Table 17 Directory Server 5.2 Java Enterprise System 2004Q2 Alignment Patches Required For Solaris 9 (x86)

Patch Number	Patch Description
114678-06	SunOS 5.9_x86: International Components for Unicode Patch
114050-04	SunOS 5.9_x86: Netscape Portable Runtime(4.1.4)/Network Security System(3.3.4)
115927-08	SunOS 5.9_x86: NSPR4.1.6 / NSS 3.3.6 / JSS 3.1.2.5
115611-09	SunOS 5.9_x86 : Sun ONE AdminServer 5.2 patch
115615-10	SunOS 5.9_x86: Sun ONE Directory Server 5.2 patch

For more information on the Sun Java Enterprise System, see <http://www.sun.com/software/learnabout/enterprisesystem/index.html>

General Installation Information

- The `idsktune` utility may reference patches which have since been rendered obsolete by newer patch versions. Refer to SunSolve <http://sunsolve.sun.com> to ensure you have the latest versions.
- On Solaris systems, the `SUNWnisu` package is required for installation to succeed. Note that the presence of `SUNWnisu` does not imply that you must use NIS.
- Installation paths that contain space characters are not supported. Do not use space characters in your installation path.
- When installing Directory Server 5.2 from Solaris Packages, it is recommended that you do not specify a symbolic link as the *ServerRoot*. The *ServerRoot* (the path from which you access the shared binary files of Directory Server, Administration Server, and the command line tools.) If you do specify a symbolic link as the *ServerRoot*, and then attempt to start the Administration Server as someone other than the root user, the following error is output:

```
You must be root to run this command
```
- In Directory Server 5.2, the schema file `11rfc2307.ldif` has been altered to conform to `rfc2307`. This file corresponds to `10rfc2307.ldif` (for 5.1 zip installations) and to `11rfc23.ldif` (for 5.1 Solaris packages). Applications using the deprecated 5.1 version of this schema may be affected by this change. A summary of the modifications follows:
 - The `automount` and `automountInformation` attributes have been removed.

- The list of allowed attributes of the `ipHost` objectclass no longer includes `o` `$ ou` `$ owner` `$ seeAlso` `$ serialNumber`.
- The list of mandatory attributes for the `ieee802Device` objectclass no longer includes `cn`.
- The list of allowed attributes for the `ieee802Device` objectclass no longer includes `description` `$ l` `$ o` `$ ou` `$ owner` `$ seeAlso` `$ serialNumber`.
- The list of mandatory attributes for the `bootableDevice` objectclass no longer includes `cn`.
- The list of allowed attributes for the `bootableDevice` objectclass no longer includes `description` `$ l` `$ o` `$ ou` `$ owner` `$ seeAlso` `$ serialNumber`.
- The OID of the `nisMap` objectclass is now `1.3.6.1.1.1.2.9`.

When migrating from Directory Server 5.1 to 5.2, the old version of this file is migrated to avoid potential inconsistency between the schema and the database. If you have not customized this file, and if your database does not refer to the schema contained within it, you can remove it from your 5.1 schema before performing the migration. This will enable you to have a version of the file that conforms to `rfc2307`.

If you have customized this file, or if your database refers to the schema contained within it, perform the following steps:

- For zip installations, remove the `10rfc2307.ldif` file from the 5.1 schema directory and copy the `5.2 11rfc2307.ldif` file to the 5.1 schema directory. (5.1 Directory Server Solaris packages already include this change.)
- Copy the following files from the 5.2 schema directory into the 5.1 schema directory, overwriting the 5.1 copies of these files:
`11rfc2307.ldif`, `50ns-msg.ldif`, `30ns-common.ldif`,
`50ns-directory.ldif`, `50ns-mail.ldif`, `50ns-mlm.ldif`, `50ns-admin.ldif`,
`50ns-certificate.ldif`, `50ns-netshare.ldif`, `50ns-legacy.ldif`, and
`20subscriber.ldif`.

NOTE: This issue also impacts replication. See the [Replication](#) section for more information.

- To use SASL Kerberos authentication on Solaris platforms, you must ensure that DNS is configured.
- On Linux systems, the combined configured cache values should not exceed 600MB.

Compatibility Notes

- Note that the LDAP utility manpages on Sun Solaris platforms do not document the Sun Java System version of the LDAP utilities `ldapsearch`, `ldapmodify`, `ldapdelete` and `ldapadd`. For information regarding these utilities, refer to the *Directory Server Resource Kit Tools Reference*.

Documentation Notes

- In some parts of the documentation and on the Directory Server Console, the version number of the product is referred to as 5.2. Directory Server 5 2004Q2 is a maintenance release of Directory Server 5.2.
- The Directory Server Resource Kit documentation has been updated. Follow the links to the *Directory Server Resource Kit Tools Reference*, *Directory Server Resource Kit LDAP SDK for C*, *Directory Server Resource Kit LDAP SDK for Java* under http://docs.sun.com/coll/DirectoryServer_04q2.
- Localized documentation is posted to <http://docs.sun.com/> as it becomes available.
- In a legacy replication context, the *Directory Server Administration Guide* did not explicitly state that you could *not* use an existing DN or the default replication manager used in 5.x replication when configuring a 5.2 Directory Server as a consumer of a 4.x Directory Server. The procedure has been now been updated. See the fourth bullet of the Configuring Directory Server 5.2 as a consumer of a 4.x Directory Server section for details (#5009629)
- The `directoryserver nativetoascii` command is still documented in the *Directory Server Administration Reference* despite the fact that it is no longer supported (#5038174)

Known Issues and Limitations

This section contains a list of the known problems and issues with Directory Server 5.2. The following product areas are covered:

- [Installation, Uninstallation, and Migration](#)
- [Security](#)
- [Replication](#)
- [Conformance](#)

- [Directory Server Console](#)
- [Core Server](#)
- [Directory Server Plug-ins](#)
- [Miscellaneous](#)

Installation, Uninstallation, and Migration

Multibyte characters at installation cause configuration problems (#4882927)

At installation, using multibyte characters for anything other than the suffix name causes Directory Server and Administration Server configuration to fail.

Workaround

Use monobyte characters for all fields other than the suffix name.

Multibyte characters cannot be used in the suffix name during installation of the traditional Chinese (zh_TW) version (#4882801)

If multibyte characters are entered as the suffix name during installation of the traditional Chinese (zh_TW) version, the suffix name does not display correctly in the console. This issue is restricted to 32-bit and 64-bit installations from Solaris packages on SPARC processors.

Workaround

1. Create a monobyte suffix at installation. Once installation is complete, create the desired multibyte suffix using the console.
2. Upgrade your JRE to version 1.4.1 or later.

Harmless error message occurs on installation (#4820566)

After a successful installation, the following error is logged:

```
ERROR<5398> - Entry - conn=-1 op=-1 msgId=-1 - Duplicate value addition in attribute "aci"
```

This error is harmless and can be ignored.

A root suffix cannot contain spaces (#4526501)

Workaround

If your root suffix contains space characters, correct the suffix generated at installation time to remove the spaces:

1. In the Sun Java System Server console, select the top directory entry in the left-hand navigation pane of the Servers and Applications tab.

2. Click Edit and modify the suffix in the User directory subtree field.
3. Click OK to save the change.

Error message with migrateInstance5 (#4529552)

When running the `migrateInstance5` script with error logging disabled, a message is displayed indicating that the migration procedure is attempting to restart the server while the server is already running.

If error logging is *disabled*, you can ignore this error message.

If this message appears when error logging is *enabled*, consult the error log for more information.

User enters into a loop if an incorrect password is entered during command-line installation (#4885580)

Workaround

When prompted for the password again, type "<" to return to the previous input item, and then press return to keep the previous choice. When the password is requested again, enter the correct password.

Running the `pkgrm` command does not remove all the Directory Server distribution packages (#4911028)

Installation failure occurs if the administration domain of the remote directory being used to configure Directory Server does not exactly match the administration domain in the setup procedure. (#4931503)

Workaround

During installation use the exact same administration domain as defined in the remote configuration directory.

The `startconsole` command may fail to start certain servers if the user running the command does not have write access to the `ServerRoot` directory (#5008600)

To access certain servers Server Console may have to download JAR files into the *ServerRoot* directory. If the user running the `startconsole` command does not have write access to the *ServerRoot* directory, the console will refuse to open the servers in question.

Workaround

Either run the `startconsole` command as the user who owns the *ServerRoot* directory or install and configure the server packages on the host running Server Console.

Only use the restart-admin command on the active node in a cluster-enabled environment (#4862968)

Cannot remove patch ID 115614-08 (Directory Server patch) from all nodes on a cluster (#5035139)

The `patchrm` command for patch ID 115614-08 on a cluster will only work correctly when removing the patch from the first node. On attempting to remove the patch from the second and subsequent nodes, the following error message is displayed:

The backout of data cannot occur because the sync-directory binary is missing. Please contact your Sun support

Workaround

Once you have successfully removed the patch from the first node in your cluster, and if you have received the above error message, create a symbolic link in `ServerRoot/shared/bin` to point to the sync-directory binary as follows:

```
ln -s /usr/ds/v5.2/sbin/sync-directory ServerRoot/shared/bin
```

Then reapply the procedure to remove the patch.

Directory Server installation is partial and will not remove all installed files (#4845960)

The slapd process does not restart after adding patch ID 115614-10 on a cluster enabled environment (#5042440)

Workaround

1. Stop the `slapd` process and the Administration Server prior to applying patches on cluster
2. Patch all nodes in the cluster irrespective of whether `ns-slapd` fails to start or not
3. When all nodes are patched start the `slapd` process
4. Run the `directoryserver sync-cds` command for the Administration Server and `slapd`

When migrating from 4.x to 5.x some plug-ins may not be migrated (#4942616)

Workaround

Edit the 4.x `slapd.ldbm.conf` configuration file and insert quotation marks around the plug-in path for the plug-in to be migrated. For example the plug-in post-operation on referential integrity post-operation which appears as `/mydirectory/ds416/lib/referint-plugin.so<.....>` needs to be edited to `"/mydirectory/ds416/lib/referint-plugin.so"<.....>`

Cannot restart the Administration Server from the Console on a Solaris 9 x86 in a cluster enabled environment (#4974780)

During an initial installation of Directory Server, if a base DN value contains a blank space, for example `o=example east`, the `directoryURL` entry will be incorrectly parsed for the user directory global preferences. As a result entries will not be found in the Users and Groups tab of Server Console (#5040621)

Workaround

Modify the base DN value either by correcting the `nsDirectoryURL` attribute in the console to reflect the correct base DN or by performing an `ldapmodify` on the `nsDirectoryURL` attribute and an `ldapdelete` on the `nsDirectoryFailoverList` attribute via the command line.

When migrating from a 5.1 Directory Server to a 2004Q2 Directory Server any modifications you made to the set of default indexes will not be migrated (#5037580)

The SUNWasha and SUNWsdha files should not be relocated (#5035882)

Duplicate value error is logged in the Configuration Directory Server when ACI is added to the server group entry during a new server installation (#4841576)

During Directory Server configuration an ACI on the server group entry for each new server installation is added. If the entry already exists and this ACI value already exists on the entry (which is the case when Administration Server is installed after Directory Server), then the following benign duplicate value error is logged in the Configuration Directory Server:

```
[07/May/2004:16:52:29 +0200] - ERROR<5398> - Entry - conn=-1 op=-1msgId=-1 - Duplicate value addition in attribute "aci" of entry "cn=Server Groups, cn=sorgho.france.sun.com, ou=france.sun.com,o=NetscapeRoot"
```

Security

DNS keyword in ACIs (#4725671)

If the `DNS` keyword is used in an ACI, any DNS administrator can access the directory by modifying a PTR record, and can thereby provide the privileges granted by the ACI.

Workaround

Use the `IP` keyword in the ACI, to include all IP addresses in the domain.

Incorrect error message in error logs, when `passwordisglobalpolicy` attribute is enabled (#4964523)

When the `passwordisglobalpolicy` attribute is enabled on both masters in a 2-master multi-master replication topology it works correctly but may generate the following incorrect error message:

```
[03/Dec/2003:11:32:54 -0500]ERROR<5897> - Schema - conn=-1 op=-1 msgId =-1 - User
error: Entry "cn=Password Policy,cn=config", attribute "passwordisglobalpolicy" is not
allowed
[03/Dec/2003:11:32:54 -0500] - Sun-ONE-Directory/5.2 B2003.143.0020 (64-bit) starting
up
```

Workaround

Ignore the incorrect error message.

ldapmodify update operations over SSL that are referred to a master replica from a consumer replica do not succeed (#4922620)

Invalid value accepted for passwordMinLength attribute when configuring an individual password policy (#4969034)

Using the attribute encryption functionality may result in generating duplicate values for the UID attribute (#4997578)

The insync replication monitoring tool prints the password on UNIX when “-” is entered for the -w option (#4902013)

Account lockout after password change (#4527623)

Account lockout remains in effect after a user password has been changed. If users forget their passwords and are locked out of the directory, the rootDN or entry entitled to change the user password can reset the account lock.

Replication

Additional documentation required on using referential integrity plug-in with legacy replication (#4956596)

When replicating from a 4.x master to a 5.x consumer, with referential integrity enabled, you must reconfigure the referential integrity plug-in on the 4.x master to write referential integrity changes to the 4.x change log. This enables referential integrity changes to be replicated. If you do not reconfigure the plug-in, referential integrity will not work correctly.

Workaround

To reconfigure the referential integrity plug-in in this environment:

1. Stop the 4.x server.
2. Open the `slapd.ldbm.conf` file located in `ServerRoot/slapd-ServerID/config/`.
3. Locate the line that begins:

```
plugin postoperation on "referential integrity postoperation"
```

4. Modify this line by changing the argument that appears just before the list of attributes from **0** to **1**.

For example, change:

```
plugin postoperation on "referential integrity postoperation"  
"ServerRoot/lib/referint-plugin.dll" referint_postop_init 0  
"ServerRoot/slapd-serverID/logs/referint" 0 "member" "uniquemember" "owner" "seeAlso"
```

to

```
plugin postoperation on "referential integrity postoperation"  
"ServerRoot/lib/referint-plugin.dll" referint_postop_init 0  
"ServerRoot/slapd-serverID/logs/referint" 1 "member" "uniquemember" "owner" "seeAlso"
```

5. Save the `slapd.ldbm.conf` file.
6. Restart the server.
7. Reinitialize the 5.x consumer from the 4.x supplier.

The `insync` command-line tool has no concept of partial replication (#4856286)

The `insync` command-line tool has no concept of fractional replication which may result in the reported delays being inaccurate if fractional replication is configured.

Multi-master replication over SSL (#4727672)

In a multi-master replication scenario, if replication is enabled over SSL using simple authentication, it is not possible to enable replication between the same servers over SSL using certificate-based client authentication.

Workaround

To enable replication over SSL using certificate-based client authentication, restart at least one of the servers.

Aborting a total update (#4741320)

If a total update is aborted while in progress, it is not possible to launch another total update, or to re-enable replication on the suffix.

Workaround

Do not abort a total update while it is in progress.

Replication monitoring tools and literal IPv6 addresses (#4702476)

The replication monitoring tools (`entrycmp`, `insync` and `repldisc`) do not support LDAP URLs containing literal IPv6 addresses.

Local schema modifications may be overwritten when a consumer database is created (#4537230)**Note**

The replication monitoring tools rely on read access to `cn=config` to obtain the replication status. This should be taken into account particularly when replication is configured over SSL.

Note

In Directory Server 5.2, the schema file `11rfc2307.ldif` has been altered to conform to `rfc2307`. If replication is enabled between 5.2 servers and 5.1 servers, the `rfc2307` schema **MUST** be corrected on the 5.1 servers, or replication will not work correctly. To ensure correct replication between a 5.2 server and a 5.1 server:

- For zip installations, remove the `10rfc2307.ldif` file from the 5.1 schema directory and copy the 5.2 `11rfc2307.ldif` file to the 5.1 schema directory. (5.1 Directory Server Solaris packages already include this change.)
- Copy the following files from the 5.2 schema directory into the 5.1 schema directory, overwriting the 5.1 copies of these files:
`11rfc2307.ldif`, `50ns-msg.ldif`, `30ns-common.ldif`, `50ns-directory.ldif`,
`50ns-mail.ldif`, `50ns-mlm.ldif`, `50ns-admin.ldif`, `50ns-certificate.ldif`,
`50ns-netshare.ldif`, `50ns-legacy.ldif`, and `20subscriber.ldif`.
- Restart the 5.1 server.
- In the 5.2 server, set the `nsslapd-schema-repl-useronly` attribute under `cn=config` to on.
- Configure replication on both servers.
- Initialize the replicas.

Initially, certain schema attributes may be replicated between the servers as they synchronize other schema elements but this is benign and will not cause any problems. See the [Installation Notes](#) for details on how the schema has changed.

Schema modifications are not replicated immediately if there are no non-schema modifications to replicate (#4868960)

If you modify the schema and do not make any other non-schema related modifications, your schema modifications will not be replicated immediately.

Workaround

Either wait 5 minutes for your schema modifications to be replicated or use the Send Updates Now option in Directory Service Console to force replication.

For replication to function after the set of attributes to be replicated by fractional replication has been modified, the consumer needs to be re-initialized twice (#4977320)

If you modify the set of attributes to be replicated by fractional replication, then replication will not work unless you re-initialize the consumer twice.

Workaround

Either re-initialize the consumer twice or make the necessary changes to the replication agreement in two stages, that is first remove the existing fractional replication filter and save the replication agreement. Then set the new fractional replication filter and save the replication agreement. This two-step procedure prevents you from having to initialize the consumer twice (which is a preferable workaround if you are working with large databases).

Adding an entry with objectClass=nstombstone may cause replication to fail (#5021269)

Workaround

Avoid adding entries with objectClass=nstombstone

Using the scheduled replication functionality may result in erratic replication behavior (#4999132)

Workaround

Avoid using scheduled replication and configure replication to always be in sync.

In a multi-master replication configuration (with at least 3 master replicas) where the masters are being updated simultaneously with heavy traffic loads, you may experience latency peaks (#5006198)

Benign error message written to the error log during replication sessions (#5029597)

During replication sessions the following benign error message may be written frequently to the error log thus increasing the error log file size:

```
[09/Apr/2004:06:47:45 +0200] - INFORMATION - conn=-1 op=-1 msgId=-1 -  
csngen_adjust_time: remote offset now 33266 sec
```

This error message can be ignored.

Conformance

Issues arose when both LDAP v2 and LDAPv3 applications use certificate related attributes (#4819710)

This bug has been fixed but has resulted in the creation of a new configuration attribute `nsslapd-binary-mode` under `cn=config`, as yet undocumented.

Previously the LDAPv2 protocol specified that the attribute should be `xxxxx` (where `xxxxx` is one of: `UserCertificate`, `CACertificate`, `CertificateRevocationList`, `AuthorityRevocationList`, or `CrossCertificatePair`.) whereas the LDAPv3 protocol specifies that the attribute should be `xxxxx;binary`. Directory Server considered the values associated with `xxxxx;binary` and `xxxxx` as two different values. In practice, this was not always what was required.

The new configuration attribute `nsslapd-binary-mode` has been created to change this behavior and can have one of the following three values:

compat51 is the default value and provides the original behavior. `xxxxx` and `xxxxx;binary` refer to distinct values (where `xxxxx` is one of: `UserCertificate`, `CACertificate`, `CertificateRevocationList`, `AuthorityRevocationList`, or `CrossCertificatePair`.)

auto implies that the server considers `xxxxx` and `xxxxx;binary` as the same attribute. Searches return either the attribute specifically requested or `xxxxx` in LDAPv2 and `xxxxx;binary` in LDAPv3.

strict is the same as *auto* except that requests that do not conform are rejected with an INVALID PROTOCOL error (reject `;binary` subtype in an LDAPv2 request or without subtype in an LDAPv3 request.)

DN normalization puts everything in lower case, by not taking attribute syntax and the associated matching rule into account, thus restricting user entry possibilities (#4933500)

When the `nsslapd-rewrite-rfc1274` attribute is turned on, the translation of `userCertificate;binary` and `caCertificate;binary` attributes is done from LDAP v2 to LDAP v3 instead of from v3 to v2 (#4861499)

Directory Server Console

The console does not support passwords containing a colon (#4535932)

The console does not support passwords containing a colon (:).

Workaround

Do not use colons in passwords.

The console and external security devices (#4795512)

The console does not support the management of external security devices, such as Sun Crypto Accelerator 1000 Board.

Workaround

External security devices must be managed via the command line.

Trailing spaces are not preserved during a remote console import operation (#4529532)

Trailing spaces are preserved during both local console and `ldif2db` import operations.

Incorrect sorting of German entries in Directory Server Console (#4889951)

In certain search contexts internal search mechanisms cause Directory Server Console to display a yellow warning flag (#4983539)

In certain search contexts a yellow warning flag may be displayed, indicating that Directory Server internal search mechanisms have encountered an All IDs Threshold / Sorting issue. This flag does not highlight a user issue and should not, therefore, be cause for concern.

NOTE We recommend creating a browsing index (VLV index) to prevent this situation from occurring.

Referral information is not displayed correctly in the Directory Server Console (#4969992)

When certain multi-byte characters are entered into the text field of the Directory Server's Online Help Search Index, additional characters are prepended and an `ArrayOutOfBoundsException` exception error is displayed. (#5025653)

Workaround

Although this error does not cause the online help system to crash, users may prefer to use the online help contents list as an alternative search method.

On a Directory Server cluster node (active or not) Browse buttons in the Directory Server console are grayed out (#5044629)

Workaround

Ensure you are running the console on the active cluster node, and use the node name (as opposed to the logical host name) to connect to the Administration Server.

Copyright information in Online Help contains different years for different languages (#5046691)

In the French Online Help the copyright is 2002 and 2003, in the English, German, and Spanish Online Help 2003 and 2004. This issue may also apply to other languages.

French and German Online Help content sometimes displays html tags instead of rendered characters (#5046714)

Missing symbolic links for Online Help in EMEA languages other than English (#5045854)

When you try to open the help content in Spanish, French, or German via the Directory Server Console menu it opens in English. If you try to open the Online Help Index via the Directory Server Console menu, it displays an empty window and the terminal window issues a 404 Not Found error. The Help buttons in certain Directory Server Console windows also sometimes fail to display help content in Spanish, French, or German. These problems are caused by the fact that the help directories do not contain symbolic links to the `slapd` directory.

Workaround

Create the missing symbolic link using the `ln` command as follows:

```
ln -s /usr/sadm/mps/admin/v5.2/manual/lang/slapd /var/opt/mps/serverroot/manual/lang/slapd
```

Error when loading Online Help in the Directory Server Login dialog box in non-English locales (#5046970)

The path to the help `.htm` file for the Directory Server Login dialog box in non-English locales, for example in Korean, is incorrect: `manual/ko/console/help/help/login.htm`

Workaround

Apply the following workaround which takes the Korean locale as an example:

1. Close Directory Server Console
2. Change directory to the `/usr/sadm/mps/console/v5.2/java` directory
3. Extract the `mcc52_ko.jar` file using for the `jar xvf mcc52_ko.jar` command
4. Remove the `mcc52_ko.jar` file
5. Open a text editor and edit the `com/netscape/management/client/console/console_ko.properties` file by changing the `login-help=manual/ko/console/help/help/login.htm` path to `login-help=manual/ko/console/help/login.htm`
6. Recreate the following `mcc52_ko.jar META-INF/* com/* jar` file using the `jar cvf mcc52_ko.jar META-INF/* com/*` command
7. Restart Directory Server Console

Core Server

Stopping the server during export, backup, restore, or index creation may cause it to crash (#4678334)

Database becomes unavailable if the LDIF file is inaccessible during import (#4884530)

If a non-existent file is specified for an online import, the server still deletes the existing database.

Chained suffixes return mixed case DN's in lower case (#4917152)

A mixed case DN retrieved using `getDN` will be returned exactly as originally specified. If the DN is retrieved using a chaining suffix, the DN will be returned all lower case.

When exporting a subtree using the `db2ldif -s` option, an error message may be generated despite the operation having been successful (#4925250)

When using the `-s` option of the `db2ldif` script to export a subtree, the following incorrect error message may be generated and can therefore be discounted:

```
Failed to fetch subtree lists (error -30991) DB_NOTFOUND: No
matching key/data pair found
```

Incorrect error message if the transaction log directory is missing (#4938877)

If you try to start Directory Server with a custom transaction log directory and that directory either does not exist or is not writable, then the server will not be able to start. The error log indicates erroneously that the database home directory is the cause.

Backend instances (databases) called "Default" will not function (#4966365)

Workaround

Do not name your database "Default" as it will not function correctly. Should you need to rename your database you can do so by selecting the Options button in the New Suffix panel and then enter your database name in the Use custom text field of the Database Information section.

Installing 64-bit packages locks out the 32-bit Directory Server databases (#4786900)

Running `db2ldif` with the `-r` option results in a disorderly shutdown of the database (#4869781)

Deleting an attribute subtype value deletes all attribute values (#4914303)

If you create an entry with an attribute which has, for example, 3 values, one of which has a subtype tag on it, and you then delete the attribute with the subtype tag, every value of that attribute is deleted.

Searches based on a substring filter for the telephonenumber attribute fail if the filter contains a blank space directly after the '*' substring (#4866642)

db2ldif produces unexpected errors when sub-suffixes are given in the -s option (#4889077)

When indexes are configured with nsMatchingRule, db2ldif and ldif2db issue an “unknown index rule” warning which means that the index created does not include the matching rule (#4995127)

Workaround

Use `db2ldif.pl` and `ldif2db.pl` instead of `db2ldif` and `ldif2db` as they do not issue “unknown index rule” warnings and create the index with the matching rule.

Unless an output file is defined as an absolute path, the db2ldif command (and the db2ldif option of the directoryserver command) creates the output file under /installdir/bin/slapd/server/sparcv9 as opposed to under /ServerRoot/slapd-serverID as stated in the Directory Server Administration Guide (#5029598)

Directory Server Plug-ins

If two entries with duplicate uids are added to Directory Server simultaneously, then UID uniqueness is not enforced (#4987124)

If the plug-in configuration entry attribute values in the dse.ldif end with extra blank spaces, Directory Server will either fail to start or behave in unexpected ways (#4986088)

When the Pass-Through Authentication plug-in (PTA plug-in) detects that a suffix configured for pass-through authentication is local to the machine, the plug-in is not automatically disabled (#4938821)

If you have two Directory Server instances DS1 and DS2 with your Configuration Directory Server installed on DS1, and you subsequently replicate the `o=NetscapeRoot` configuration information to DS2, as opposed to automatically disabling the PTA plug-in will continue to point to DS1 for any `o=NetscapeRoot` relevant searches despite the fact that the information is now local.

When running a search on a non-existent base DN, the post-operation plug-in function is not called (#5032637)

Product documentation states that post-operation plug-ins are called after a client request has been processed whether or not the operation completes successfully. However when performing a search on a non-existent base DN, this does not happen.

Miscellaneous

Statistics for SNMP subagents (#4529542)

On UNIX platforms, statistics are generated only for the last SNMP subagent that is started. This implies that you can monitor only one Directory Server instance at a time with SNMP.

Changing the maximum size of the transaction log file has no effect if log files already exist in the database directory (#4523783)

Workaround

Stop the server, modify the `nsslapd-db-logfile-size` attribute in the `dse.ldif` configuration file manually, remove all `log.*` files from the database directory, and restart the server.

ldapsearch on Linux systems (#4755958)

On Linux systems, an `ldapsearch` operation without a host name, such as

```
ldapsearch -D ... -w ... -h -p 389
```

returns an error 91 (`ldap_simple_bind: Can't connect to the LDAP server - No route to host`). On other platforms, an error 89 (`LDAP_PARAM_ERROR`) is returned. This is because on Linux systems, it is possible to resolve a host such as `"-p"`, so the connect function attempts to do so, and fails.

International substring search on unaccented characters returns only unaccented characters (#4955638)

Instead of returning the unaccented character *and* all of its possible accented variants, which would seem to be the logical approach, a search on an unaccented character only returns the unaccented character in question. Searching for an accented character however, returns not only that character but all other variants.

SSL does not start for a Directory Server with the instance name "test-cert" (#4971699)

Workaround

Avoid naming your Directory Server instance "test-cert".

Modifying the port or secure port number of your user directory server does not make the necessary port number changes to certain scripts and requires that these scripts be modified manually. (#5029807)

If you modify the port or secure port number of your user directory server, the following scripts remain hard-coded to the original port number:

```
bak2db.pl, schema_push.pl, db2bak.pl, check-slapd, db2index.pl, db2ldif.pl, monitor,  
ldif2db.pl, ns-accountstatus.pl, ldif2ldap, ns-activate.pl, ns-inactivate.pl
```

If you want to use these scripts after a port modification you will need to edit them manually. Note that the script names given here are the standalone tool names and that the `check-slapd` command is not documented as it is not part of the publicly exposed API. For more information see Chapter 1 “Command-Line Tools Reference” of the *Directory Server Administration Reference*.

Audit, Access and Error Logs are all limited to 2 Gbytes each (#4976129)

Directory Server hangs when performing both a VLV browsing index update during add operations and a VLV search operation (#4973380)

When creating a new chained suffix with an IPv6 address using the New Chained Suffix window of the console a “Testing connection parameters” popup window does not close automatically. However, although the local configuration of the chained suffix succeeds, the validity check of the IPv6 address is not performed which may lead to problems in the event of anything being incorrect (#5019414)

Certain error messages reference a database error guide which does not exist (#4979319)

With Directory Server and Administration Server installed and configured to run as root, when the console is used to create another instance of Directory Server which you specify to run as a user other than root, that instance is successfully created but many of the files pertaining to that instance are not owned by the same user (#4995286)

Workaround

Change the ownership of the files and directories manually.

The `directoryserver monitor` command-line tool does not work on non-active nodes in a cluster enabled environment (#5005446)

When the `ldapsearch sizelimit` option is hit on a chained suffix an error message is issued and the access number of entries count is incorrect (#5029026)

Redistributable Files

Sun Java System Directory Server 5.2 2004Q2 does not contain any files which you can redistribute.

How to Report Problems and Provide Feedback

If you have problems with Sun Java System Directory Server, contact Sun customer support using one of the following mechanisms:

- Sun Software Support services online at
<http://www.sun.com/service/sunone/software>

This site has links to the Online Support Center, and ProductTracker, as well as to maintenance programs and support contact numbers.

- The SunSolve support website at
<http://sunsolve.sun.com>

This site includes patches, support documents, security information, and the Sun System Handbook.

- The telephone dispatch number associated with your maintenance contract

So that we can best assist you in resolving problems, please have the following information available when you contact support:

- Description of the problem, including the situation where the problem occurs and its impact on your operation
- Machine type, operating system version, and product version, including any patches and other software that might be affecting the problem
- Detailed steps on the methods you have used to reproduce the problem
- Any error logs or core dumps

You might also find it useful to subscribe to the following interest groups, where Sun Java System Directory Server topics are discussed:

<http://swforum.sun.com>

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Please provide the full document title and part number in the appropriate fields. The part number can be found on the title page of the book or at the top of the document, and is usually a seven or nine digit number. For example, the part number of these Directory Server 5.2 Release Notes is 817-5216.

Additional Sun Resources

Useful Sun Java System information can be found at the following Internet locations:

- **Sun Java System Documentation**
<http://docs.sun.com/db/prod/entsys.04q2>
- **Java Enterprise System Software Services**
<http://www.sun.com/service/products/software/javaenterprisesystem>
- **Sun Java System Software Products and Service**
<http://www.sun.com/software>
- **Sun Java System Support and Knowledge Base**
<http://sunsolve.sun.com>
- **Sun Support and Training Services**
<http://www.sun.com/supporttraining>
- **Sun Java System Consulting and Professional Services**
<http://www.sun.com/service/products/software/javaenterprisesystem>
- **Sun Developer Information**
<http://developers.sun.com>
- **Sun Developer Support Services**
<http://www.sun.com/developers/support>
- **have Sun Software Data Sheets**
<http://www.sun.com/software>
- **Directory Server Certified Engineer Training Program**
http://training.sun.com/US/certification/middleware/dir_server.html

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