Red Hat Directory Server 11

Release Notes

Highlighted features and updates related to Red Hat Directory Server 11 (11.4)

Red Hat Directory Server 11 Release Notes

Highlighted features and updates related to Red Hat Directory Server 11 (11.4)

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Abstract

The release notes provide high-level coverage of the improvements and additions that have been implemented in Red Hat Directory Server 11 and document known problems in this release, as well as notable bug fixes, technology previews, deprecated functionalities, and other details.

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MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see our CTO Chris Wright's message .

CHAPTER 1. GENERAL INFORMATION

This chapter contains general information about Red Hat Directory Server 11, independent of the minor version.

1.1. DIRECTORY SERVER SUPPORT POLICY AND LIFE CYCLE

For details, see the Red Hat Directory Server Errata Support Policy document.

1.2. SOFTWARE CONFLICTS

Directory Server cannot be installed on any system that has a Red Hat Enterprise Linux Identity Management (IdM) server installed. Likewise, no Red Hat Enterprise Linux IdM server can be installed on a system with a Directory Server instance.

1.3. NOTES ABOUT MIGRATING TO DIRECTORY SERVER 11

This section provides information for users who want to migrate an existing Directory Server 10 environment to Directory Server 11.

Migration procedure
For a procedure about migrating Directory Server 10 to Directory Server 11, see the corresponding chapter in the *Red Hat Directory Server Installation Guide*.

New command-line utilities in Directory Server 11
Directory Server 11 provides new command line utilities to manage server instances and users. These utilities replace the Perl scripts used for management tasks in Directory Server 10 and earlier versions.

For a list of commands in previous versions and their replacements in Directory Server 11, see the Command-line utilities replaced in Red Hat Directory Server 11 appendix in the *Red Hat Directory Server Installation Guide*.

> **IMPORTANT**
>
> The Perl scripts used for management tasks in Directory Server 10 and earlier versions are still available in the **389-ds-base-legacy-tools** package. However, Red Hat only supports the new **dsconf**, **dsctl**, **dscreate**, and **dsidm** command-line utilities.

CHAPTER 2. RED HAT DIRECTORY SERVER 11.4

2.1. SYSTEM REQUIREMENTS

This section contains information related to installing Directory Server 11.4, including prerequisites and platform requirements.

2.1.1. Supported platforms for Directory Server

Red Hat supports Directory Server 11.4 only on Red Hat Enterprise Linux 8.5.

Directory Server 11.4 is supported running on a Red Hat Enterprise Linux virtual guest on a certified hypervisor. For details, see the Which hypervisors are certified to run Red Hat Enterprise Linux? solution article.

2.1.2. Supported platforms for the Directory Server user interface in Cockpit

Red Hat supports the browser-based Directory Server user interface in Cockpit in the following environments:

Operating system	Browser
Red Hat Enterprise Linux 8.5	- Mozilla Firefox 78.14 and later - Chrome 85 and later
Windows Server 2016 and 2019:	- Mozilla Firefox 78.14 and later - Chrome 85 and later
Windows 10	- Mozilla Firefox 78.14 and later - Microsoft Edge 85 and later - Chrome 85 and later

2.1.3. Supported platforms for the Windows Synchronization utility

Red Hat supports the Windows Synchronization utility for Active Directory running on:

- Microsoft Windows Server 2019
- Microsoft Windows Server 2016

2.2. HIGHLIGHTED UPDATES AND NEW FEATURES

This section documents new features and important updates in Directory Server 11.4.

Directory Server rebased to version 1.4.3.27

The **389-ds-base** packages have been upgraded to upstream version 1.4.3.27, which provides a number of bug fixes and enhancements over the previous version. For a complete list of notable changes, read the upstream release notes before updating:

- https://directory.fedoraproject.org/docs/389ds/releases/release-1-4-3-24.html

- https://directory.fedoraproject.org/docs/389ds/releases/release-1-4-3-23.html

- https://directory.fedoraproject.org/docs/389ds/releases/release-1-4-3-22.html

- https://directory.fedoraproject.org/docs/389ds/releases/release-1-4-3-21.html

- https://directory.fedoraproject.org/docs/389ds/releases/release-1-4-3-20.html

- https://directory.fedoraproject.org/docs/389ds/releases/release-1-4-3-19.html

- https://directory.fedoraproject.org/docs/389ds/releases/release-1-4-3-18.html

- https://directory.fedoraproject.org/docs/389ds/releases/release-1-4-3-17.html

Highlighted updates and new features in the 389-ds-base packages

Features in Red Hat Directory Server, that are included in the **389-ds-base** packages, are documented in the Red Hat Enterprise Linux 8.5 Release Notes:

- Directory Server now supports temporary passwords

- Directory Server supports the **entryUUID** attribute

- The **dnaInterval** configuration attribute is now supported

- Directory Server can exclude attributes and suffixes from the retro changelog database

- Directory Server provides monitoring settings that can prevent database corruption caused by lock exhaustion

- Added a new message to help set up **nsSSLPersonalitySSL**

2.3. BUG FIXES

This section describes bugs fixed in Directory Server 11.4 that have a significant impact on users.

The **dsconf** utility no longer fails when using LDAPS URLs

Previously, the **dsconf** utility did not correctly resolve TLS settings for remote connections. As a consequence, even if the certificate configuration was correct, using **dsconf** with a remote LDAPS URL failed with an **certificate verify failed** error. The **dsconf** connection code has been fixed. As a result, using remote LDAPS URLs with **dsconf** now works as expected.

Bug fixes in the 389-ds-base packages

Bug fixes in Red Hat Directory Server, that are included in the **389-ds-base** packages, are documented in the Red Hat Enterprise Linux 8.5 Release Notes:

- The database indexes created by plug-ins are now enabled

- The replication session update speed is now enhanced

2.4. KNOWN ISSUES

This section documents known problems and, if applicable, workarounds in Directory Server 11.4.

Directory Server settings that are changed outside the web console's window are not automatically visible

Because of the design of the Directory Server module in the Red Hat Enterprise Linux 8 web console, the web console does not automatically display the latest settings if a user changes the configuration outside of the console's window. For example, if you change the configuration using the command line while the web console is open, the new settings are not automatically updated in the web console. This applies also if you change the configuration using the web console on a different computer. To work around the problem, manually refresh the web console in the browser if the configuration has been changed outside the console's window.

The Directory Server Web Console does not provide an LDAP browser

The web console enables administrators to manage and configure Directory Server 11 instances. However, it does not provide an integrated LDAP browser. To manage users and groups in Directory Server, use the **dsidm** utility. To display and modify directory entries, use a third-party LDAP browser or the OpenLDAP client utilities provided by the **openldap-clients** package.

Known issues in the `389-ds-base` packages

Known issues in Red Hat Directory Server, that are included in the **389-ds-base** packages, are documented in the Red Hat Enterprise Linux 8.5 Release Notes:

- The **default** keyword for enabled ciphers in the NSS does not work in conjunction with other ciphers

CHAPTER 3. RED HAT DIRECTORY SERVER 11.3

3.1. SYSTEM REQUIREMENTS

This section contains information related to installing Directory Server 11.3, including prerequisites and platform requirements.

3.1.1. Supported platforms for Directory Server

Red Hat supports Directory Server 11.3 on the following platforms:

- Red Hat Enterprise Linux 8.4

> **NOTE**
>
> Directory Server 11.3 is supported running on a Red Hat Enterprise Linux virtual guest on a certified hypervisor. For details, see the Which hypervisors are certified to run Red Hat Enterprise Linux? solution article.

3.1.2. Supported platforms for the Directory Server user interface in Cockpit

Red Hat supports the browser-based Directory Server user interface in Cockpit in the following environments:

Operating system	Browser
Red Hat Enterprise Linux 8.4	- Mozilla Firefox 78.7 and later - Chrome 58 and later
Windows Server 2016 and 2019:	- Mozilla Firefox 78.7 and later - Chrome 58 and later
Windows 10	- Mozilla Firefox 78.7 and later - Microsoft Edge 16 and later - Chrome 58 and later

3.1.3. Supported platforms for the Windows Synchronization utility

Red Hat supports the Windows Synchronization utility for Active Directory running on:

- Microsoft Windows Server 2019

- Microsoft Windows Server 2016

3.2. HIGHLIGHTED UPDATES AND NEW FEATURES

This section documents new features and important updates in Directory Server 11.3.

Directory Server rebased to version 1.4.3.16
The **389-ds-base** packages have been upgraded to upstream version 1.4.3.16, which provides a number of bug fixes and enhancements over the previous version. For a complete list of notable changes, read the upstream release notes before updating:

- https://www.port389.org/docs/389ds/releases/release-1-4-3-16.html

- https://www.port389.org/docs/389ds/releases/release-1-4-3-15.html

- https://www.port389.org/docs/389ds/releases/release-1-4-3-14.html

- https://www.port389.org/docs/389ds/releases/release-1-4-3-13.html

- https://www.port389.org/docs/389ds/releases/release-1-4-3-12.html

- https://www.port389.org/docs/389ds/releases/release-1-4-3-11.html

- https://www.port389.org/docs/389ds/releases/release-1-4-3-10.html

- https://www.port389.org/docs/389ds/releases/release-1-4-3-9.html

Highlighted updates and new features in the 389-ds-base packages
Features in Red Hat Directory Server, that are included in the **389-ds-base** packages, are documented in the Red Hat Enterprise Linux 8.4 Release Notes:

- Directory Server can now reject internal unindexed searches

- Directory Server supports setting replication agreement bootstrap credentials

- The dsidm utility supports renaming and moving entries

- Directory Server now logs the work and operation time in **RESULT** entries

3.3. BUG FIXES

This section describes bugs fixed in Directory Server 11.3 that have a significant impact on users.

The lib389 library no longer fails to delete entries discovered by the Account object
Previously, the **_protected** flag of the **Account** object in the **lib389** Directory Server library was enabled. As a consequence, **delete** operations failed. This update sets the flag to **False**. As a result, the library no longer fails if you delete or rename entries discovered by the **Account** object.

Bug fixes in the 389-ds-base packages
Bug fixes in Red Hat Directory Server, that are included in the **389-ds-base** packages, are documented in the Red Hat Enterprise Linux 8.4 Release Notes:

- Creating replication agreements with certificate-based authentication now works as expected

3.4. KNOWN ISSUES

This section documents known problems and, if applicable, workarounds in Directory Server 11.3.

Directory Server settings that are changed outside the web console's window are not automatically visible
Because of the design of the Directory Server module in the Red Hat Enterprise Linux 8 web console, the web console does not automatically display the latest settings if a user changes the configuration outside of the console's window. For example, if you change the configuration using the command line while the web console is open, the new settings are not automatically updated in the web console. This applies also if you change the configuration using the web console on a different computer. To work around the problem, manually refresh the web console in the browser if the configuration has been changed outside the console's window.

The Directory Server Web Console does not provide an LDAP browser
The web console enables administrators to manage and configure Directory Server 11 instances. However, it does not provide an integrated LDAP browser. To manage users and groups in Directory Server, use the **dsidm** utility. To display and modify directory entries, use a third-party LDAP browser or the OpenLDAP client utilities provided by the **openldap-clients** package.

CHAPTER 4. RED HAT DIRECTORY SERVER 11.2

4.1. SYSTEM REQUIREMENTS

This section contains information related to installing Directory Server 11.2, including prerequisites and platform requirements.

4.1.1. Supported platforms for Directory Server

Red Hat supports Directory Server 11.2 on the following platforms:

- Red Hat Enterprise Linux 8.3

> **NOTE**
>
> Directory Server 11.2 is supported running on a Red Hat Enterprise Linux virtual guest on a certified hypervisor. For details, see the Which hypervisors are certified to run Red Hat Enterprise Linux? solution article.

4.1.2. Supported platforms for the Directory Server user interface in Cockpit

Red Hat supports the browser-based Directory Server user interface in Cockpit in the following environments:

Operating system	Browser
Red Hat Enterprise Linux 8.3	- Mozilla Firefox 68.9 and later - Chrome 58 and later
Windows Server 2016 and 2019:	- Mozilla Firefox 68.9 and later - Chrome 58 and later
Windows 10	- Mozilla Firefox 68.9 and later - Microsoft Edge 16 and later - Chrome 58 and later

4.1.3. Supported platforms for the Windows Synchronization utility

Red Hat supports the Windows Synchronization utility for Active Directory running on:

- Microsoft Windows Server 2019

- Microsoft Windows Server 2016

4.2. HIGHLIGHTED UPDATES AND NEW FEATURES

This section documents new features and important updates in Directory Server 11.2.

Directory Server rebased to version 1.4.3.8

The **389-ds-base** packages have been upgraded to upstream version 1.4.3.8, which provides a number of bug fixes and enhancements over the previous version. For a complete list of notable changes, read the upstream release notes before updating:

- https://www.port389.org/docs/389ds/releases/release-1-4-3-8.html

- https://www.port389.org/docs/389ds/releases/release-1-4-3-7.html

- https://www.port389.org/docs/389ds/releases/release-1-4-3-6.html

- https://www.port389.org/docs/389ds/releases/release-1-4-3-5.html

- https://www.port389.org/docs/389ds/releases/release-1-4-3-4.html

- https://www.port389.org/docs/389ds/releases/release-1-4-3-3.html

- https://www.port389.org/docs/389ds/releases/release-1-4-3-2.html

- https://www.port389.org/docs/389ds/releases/release-1-4-3-1.html

Highlighted updates and new features in the 389-ds-base packages

Features in Red Hat Directory Server, that are included in the **389-ds-base** packages, are documented in the Red Hat Enterprise Linux 8.3 Release Notes:

- Directory Server exports the private key and certificate to a private name space when the service starts

- Directory Server now supports the pwdReset operation attribute

- Directory Server can now turn an instance to read-only mode if the disk monitoring threshold is reached

- Directory Server now logs the work and operation time in RESULT entries

4.3. BUG FIXES

This section describes bugs fixed in Directory Server 11.2 that have a significant impact on users.

Bug fixes in the 389-ds-base packages

Bug fixes in Red Hat Directory Server, that are included in the **389-ds-base** packages, are documented in the Red Hat Enterprise Linux 8.3 Release Notes:

- Directory Server no longer leaks memory when using indirect COS definitions

4.4. KNOWN ISSUES

This section documents known problems and, if applicable, workarounds in Directory Server 11.2.

Directory Server settings that are changed outside the web console's window are not automatically visible

Because of the design of the Directory Server module in the Red Hat Enterprise Linux 8 web console, the web console does not automatically display the latest settings if a user changes the configuration outside of the console's window. For example, if you change the configuration using the command line while the web console is open, the new settings are not automatically updated in the web console. This applies also if you change the configuration using the web console on a different computer. To work around the problem, manually refresh the web console in the browser if the configuration has been changed outside the console's window.

The Directory Server Web Console does not provide an LDAP browser

The web console enables administrators to manage and configure Directory Server 11 instances. However, it does not provide an integrated LDAP browser. To manage users and groups in Directory Server, use the **dsidm** utility. To display and modify directory entries, use a third-party LDAP browser or the OpenLDAP client utilities provided by the **openldap-clients** package.

CHAPTER 5. RED HAT DIRECTORY SERVER 11.1

5.1. SYSTEM REQUIREMENTS

This section contains information related to installing Directory Server 11.1, including prerequisites and platform requirements.

5.1.1. Supported platforms for Directory Server

Red Hat supports Directory Server 11.1 on the following platforms:

- Red Hat Enterprise Linux 8.2

> **NOTE**
>
> Directory Server 11.1 is supported running on a Red Hat Enterprise Linux virtual guest on a certified hypervisor. For details, see the Which hypervisors are certified to run Red Hat Enterprise Linux? solution article.

5.1.2. Supported platforms for the Directory Server user interface in Cockpit

Red Hat supports the browser-based Directory Server user interface in Cockpit in the following environments:

Operating system	Browser
Red Hat Enterprise Linux 8.2	- Mozilla Firefox 68.3 and later - Chrome 58 and later
Windows Server 2016 and 2019:	- Mozilla Firefox 68.3 and later - Chrome 58 and later
Windows 10	- Mozilla Firefox 68.3 and later - Microsoft Edge 16 and later - Chrome 58 and later

5.1.3. Supported platforms for the Windows Synchronization utility

Red Hat supports the Windows Synchronization utility for Active Directory running on:

- Microsoft Windows Server 2019

- Microsoft Windows Server 2016

5.2. HIGHLIGHTED UPDATES AND NEW FEATURES

This section documents new features and important updates in Directory Server 11.1.

Directory Server rebased to version 1.4.2.4

The **389-ds-base** packages have been upgraded to upstream version 1.4.2.4, which provides a number of bug fixes and enhancements over the previous version. For a complete list of notable changes, read the upstream release notes before updating:

- https://directory.fedoraproject.org/docs/389ds/releases/release-1-4-2-4.html

- https://directory.fedoraproject.org/docs/389ds/releases/release-1-4-2-3.html

- https://directory.fedoraproject.org/docs/389ds/releases/release-1-4-2-2.html

- https://directory.fedoraproject.org/docs/389ds/releases/release-1-4-2-1.html

A health check feature has been added to Directory Server

This enhancement adds a health check feature to Directory Server. The **dsctl healthcheck** command performs read-only operations on a Directory Server instance and reports, for example, if the instance is configured properly or if replication agreements are working correctly.

Highlighted updates and new features in the 389-ds-base packages

Features in Red Hat Directory Server, that are included in the **389-ds-base** packages, are documented in the Red Hat Enterprise Linux 8.2 Release Notes:

- Certain legacy scripts have been replaced in Directory Server

- Directory Server sets the sslVersionMin parameter based on the system-wide crypto policy

5.3. BUG FIXES

This section describes bugs fixed in Directory Server 11.1 that have a significant impact on users.

Bug fixes in the 389-ds-base packages

Bug fixes in Red Hat Directory Server, that are included in the **389-ds-base** packages, are documented in the Red Hat Enterprise Linux 8.2 Release Notes:

- Directory Server instance names can now have up to 103 characters

- The dsctl utility no longer fails to manage instances with a hyphen in their name

5.4. KNOWN ISSUES

This section documents known problems and, if applicable, workarounds in Directory Server 11.1.

Directory Server settings that are changed outside the web console's window are not automatically visible

Because of the design of the Directory Server module in the Red Hat Enterprise Linux 8 web console, the web console does not automatically display the latest settings if a user changes the configuration outside of the console's window. For example, if you change the configuration using the command line while the web console is open, the new settings are not automatically updated in the web console. This applies also if you change the configuration using the web console on a different computer. To work around the problem, manually refresh the web console in the browser if the configuration has been changed outside the console's window.

The Directory Server Web Console does not provide an LDAP browser

The web console enables administrators to manage and configure Directory Server 11 instances. However, it does not provide an integrated LDAP browser. To manage users and groups in Directory Server, use the **dsidm** utility. To display and modify directory entries, use a third-party LDAP browser or the OpenLDAP client utilities provided by the **openldap-clients** package.

Known issues in the 389-ds-base packages

Known issues in Red Hat Directory Server, that are included in the **389-ds-base** packages, are documented in the Red Hat Enterprise Linux 8.2 Release Notes:

- Directory Server warns about missing attributes in the schema if those attributes are used in a search filter

5.5. REMOVED FUNCTIONALITY

This section documents features that have been removed from Directory Server 11.1.

The nunc-stans framework has been removed

The **nunc-stans** framework has been removed from Directory Server, and the server now uses the improved core connection handling mechanism in Directory Server.

If you previously enabled the framework manually, Directory Server logs the following warning:

WARN - slapd_daemon - cn=config: nsslapd-enable-nunc-stans is on. nunc-stans has been deprecated and this flag is now ignored.
WARN - slapd_daemon - cn=config: nsslapd-enable-nunc-stans should be set to off or deleted from cn=config.

To prevent Directory Server from logging this warning, remove the **nsslapd-enable-nunc-stans** from the **cn=config** entry:

$ ldapmodify -D "cn=Directory Manager" -W -p 389 -h server.example.com -x
dn: cn=config
changetype: modify
delete: nsslapd-enable-nunc-stans

CHAPTER 6. RED HAT DIRECTORY SERVER 11.0

6.1. SYSTEM REQUIREMENTS

This section contains information related to installing Directory Server 11.0, including prerequisites and platform requirements.

6.1.1. Supported platforms for Directory Server

Red Hat supports Directory Server 11.0 on the following platforms:

- Red Hat Enterprise Linux 8.1

> **NOTE**
>
> Directory Server 11.0 is supported running on a Red Hat Enterprise Linux virtual guest on a certified hypervisor. For details, see the Which hypervisors are certified to run Red Hat Enterprise Linux? solution article.

6.1.2. Supported platforms for the Directory Server user interface in Cockpit

Red Hat supports the browser-based Directory Server user interface in Cockpit in the following environments:

Operating system	Browser
Red Hat Enterprise Linux 8.1	- Mozilla Firefox 52 and later - Chrome 57 and later
Windows Server 2016	- Mozilla Firefox 52 and later - Microsoft Internet Explorer 11 - Chrome 57 and later
Windows 10	- Mozilla Firefox 52 and later - Microsoft Edge 16 and later - Microsoft Internet Explorer 11 - Chrome 57 and later

6.1.3. Supported platforms for the Windows Synchronization utility

Red Hat supports the Windows Synchronization utility for Active Directory running on:

- Microsoft Windows Server 2016

6.2. HIGHLIGHTED UPDATES AND NEW FEATURES

This section documents new features and important updates in Directory Server 11.0.

Directory Server introduces new command-line utilities to manage instances

Red Hat Directory Server 11.0 introduces the **dscreate**, **dsconf**, and **dsctl** utilities. These utilities simplify managing Directory Server using the command line. For example, you can now use a command with parameters to configure a feature instead of sending complex LDIF statements to the server.

The following is an overview of the purpose of each utility:

- Use the **dscreate** utility to create new Directory Server instances using the interactive mode or an INF file. Note that the INF file format is different from the one the installer used in previous Directory Server versions.

- Use the **dsconf** utility to manage Directory Server instances during run time. For example, use **dsconf** to:

    - Configure settings in the **cn=config** entry

    - Configure plug-ins

    - Configure replication

    - Back up and restore an instance

- Use the **dsctl** utility to manage Directory Server instances while they are offline. For example, use **dsctl** to:

    - Start and stop an instance

    - Re-index the server database

    - Back up and restore an instance

These utilities replace the Perl and shell scripts marked as deprecated in Directory Server 10. The scripts are still available in the unsupported **389-ds-base-legacy-tools** package, however Red Hat only supports managing Directory Server using the new utilities.

Note that configuring Directory Server using LDIF statements is still supported, but Red Hat recommends using the utilities.

For further details about using the utilities, see the Red Hat Directory Server 11 Documentation .

Directory Server now provides a browser-based user interface

This enhancement adds a browser-based interface to Red Hat Directory Server that replaces the Java-based Console used in previous versions. As a result, administrators can now use the Red Hat Enterprise Linux web console to manage Directory Server instances using a browser.

For further details, see the Red Hat Directory Server 11 Documentation .

Note that the browser-based user interface does not contain an LDAP browser.

The default value of the nsslapd-unhashed-pw-switch parameter is now off

In certain situations, for example when synchronizing passwords with Active Directory (AD), a Directory Server plug-in must store the unencrypted password on the hard disk. The **nsslapd-unhashed-pw-switch** configuration parameter determines whether and how Directory Server stores unencrypted

passwords. To improve the security in scenarios that do not require plug-ins to store unencrypted passwords, the default value of the **nsslapd-unhashed-pw-switch** parameter has been changed in Directory Server 11.0 from **on** to **off**.

If you want to configure password synchronization with AD, manually enable **nsslapd-unhashed-pw-switch** on the Directory Server instance that has the Windows synchronization agreement configured:

```
# dsconf -D "cn=Directory Manager" ldap://server.example.com config replace nsslapd-unhashed-pw-switch=on
```

Highlighted updates and new features in the 389-ds-base packages

Features in Red Hat Directory Server, that are included in the **389-ds-base** packages, are documented in the Red Hat Enterprise Linux 8.1 Release Notes:

- New password syntax checks in Directory Server

- Directory Server now provides improved internal operations logging support

6.3. KNOWN ISSUES

This section documents known problems and, if applicable, workarounds in Directory Server 11.0.

Directory Server settings that are changed outside the web console's window are not automatically visible

Because of the design of the Directory Server module in the Red Hat Enterprise Linux 8 web console, the web console does not automatically display the latest settings if a user changes the configuration outside of the console's window. For example, if you change the configuration using the command line while the web console is open, the new settings are not automatically updated in the web console. This applies also if you change the configuration using the web console on a different computer. To work around the problem, manually refresh the web console in the browser if the configuration has been changed outside the console's window.

The Directory Server Web Console does not provide an LDAP browser

The web console enables administrators to manage and configure Directory Server 11 instances. However, it does not provide an integrated LDAP browser. To manage users and groups in Directory Server, use the **dsidm** utility. To display and modify directory entries, use a third-party LDAP browser or the OpenLDAP client utilities provided by the **openldap-clients** package.

APPENDIX A. REVISION HISTORY

Note that revision numbers relate to the edition of this manual, not to version numbers of Red Hat Directory Server.

Version	Date and change	Author
11.4-1	Nov 10 2021: Red Hat Directory Server 11.4 release of this document	Marc Muehlfeld
11.3-1	May 11 2021: Red Hat Directory Server 11.3 release of this document	Marc Muehlfeld
11.2-1	Nov 03 2020: Red Hat Directory Server 11.2 release of this document	Marc Muehlfeld
11.1-1	Apr 28 2020: Red Hat Directory Server 11.1 release of this document	Marc Muehlfeld
11.0-1	Nov 05 2019: Red Hat Directory Server 11.0 release of this document	Marc Muehlfeld