



Red Hat Enterprise Linux 8

Converting from an RPM-based Linux distribution to RHEL

Instructions for a conversion from Alma Linux, CentOS Linux, Oracle Linux, or Rocky Linux to Red Hat Enterprise Linux 7 and Red Hat Enterprise Linux 8

Red Hat Enterprise Linux 8 Converting from an RPM-based Linux distribution to RHEL

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Abstract

This document provides instructions on how to convert your operating system from Alma Linux, CentOS Linux, Oracle Linux, or Rocky Linux to RHEL 7 and RHEL 8.

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PREFACE

This document provides instructions on how to convert your operating system from the following Linux distributions to Red Hat Enterprise Linux (RHEL) 7 or RHEL 8:

- Alma Linux
- CentOS Linux
- Oracle Linux
- Rocky Linux

The conversion is performed by the **Convert2RHEL** utility.



NOTE

The conversion from Scientific Linux to RHEL is not currently supported by Red Hat. For information about an unsupported conversion, see [How to perform an unsupported conversion from a RHEL-derived Linux distribution to RHEL](#).

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](#).

PROVIDING FEEDBACK ON RED HAT DOCUMENTATION

We appreciate your feedback on our documentation. Let us know how we can improve it.

Submitting comments on specific passages

1. View the documentation in the **Multi-page HTML** format and ensure that you see the **Feedback** button in the upper right corner after the page fully loads.
2. Use your cursor to highlight the part of the text that you want to comment on.
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Submitting feedback through Jira (account required)

1. Log in to the [Jira](#) website.
2. Click **Create** in the top navigation bar
3. Enter a descriptive title in the **Summary** field.
4. Enter your suggestion for improvement in the **Description** field. Include links to the relevant parts of the documentation.
5. Click **Create** at the bottom of the dialogue.

KEY MIGRATION TERMINOLOGY

While the following migration terms are commonly used in the software industry, these definitions are specific to Red Hat Enterprise Linux (RHEL).

Update

Sometimes called a software patch, an update is an addition to the current version of the application, operating system, or software that you are running. A software update addresses any issues or bugs to provide a better experience of working with the technology. In RHEL, an update relates to a minor release, for example, updating from RHEL 8.1 to 8.2.

Upgrade

An upgrade is when you replace the application, operating system, or software that you are currently running with a newer version. Typically, you first back up your data according to instructions from Red Hat. When you upgrade RHEL, you have two options:

- **In-place upgrade:** During an in-place upgrade, you replace the earlier version with the new version without removing the earlier version first. The installed applications and utilities, along with the configurations and preferences, are incorporated into the new version.
- **Clean install:** A clean install removes all traces of the previously installed operating system, system data, configurations, and applications and installs the latest version of the operating system. A clean install is ideal if you do not need any of the previous data or applications on your systems or if you are developing a new project that does not rely on prior builds.

Operating system conversion

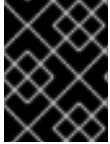
A conversion is when you convert your operating system from a different Linux distribution to Red Hat Enterprise Linux. Typically, you first back up your data according to instructions from Red Hat.

Migration

Typically, a migration indicates a change of platform: software or hardware. Moving from Windows to Linux is a migration. Moving a user from one laptop to another or a company from one server to another is a migration. However, most migrations also involve upgrades, and sometimes the terms are used interchangeably.

- **Migration to RHEL:** Conversion of an existing operating system to RHEL
- **Migration across RHEL:** Upgrade from one version of RHEL to another

CHAPTER 1. SUPPORTED CONVERSION PATHS



IMPORTANT

Red Hat recommends that you seek the support of [Red Hat Consulting services](#) to ensure that the conversion process is smooth.

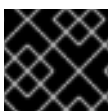
Currently, it is possible to convert your systems from the following Linux distributions, architectures, and versions to the corresponding minor version of RHEL listed in Table 1.1.

Table 1.1. Supported conversion paths

Source OS	Source version	Target OS and version	Architecture	Product Variant
Alma Linux	8.8	RHEL 8.8	64-bit Intel	N/A
	8.6	RHEL 8.6	64-bit Intel	N/A
CentOS Linux	8.5	RHEL 8.5	64-bit Intel	N/A
	7.9	RHEL 7.9	64-bit Intel	Server
Oracle Linux	8.8	RHEL 8.8	64-bit Intel	N/A
	7.9	RHEL 7.9	64-bit Intel	Server
Rocky Linux	8.8	RHEL 8.8	64-bit Intel	N/A
	8.6	RHEL 8.6	64-bit Intel	N/A

Because the last available minor version of CentOS Linux is CentOS Linux 8.5, it is not possible to convert from CentOS Linux 8 directly to the latest available minor version of RHEL 8.

In addition to the above supported conversion paths, it is also possible to perform an unsupported conversion from Scientific Linux to RHEL. For information about unsupported conversions, see [How to perform an unsupported conversion from a RHEL-derived Linux distribution to RHEL](#).



IMPORTANT

Conversions from CentOS Stream to RHEL are not currently possible.

For information about Red Hat's support policy for Linux distribution conversions, see [Convert2RHEL Support Policy](#).



NOTE

If you are converting to RHEL 8.5, it is recommended to update your system to the latest version of RHEL after the conversion.

CHAPTER 2. CONVERSION METHODS

Depending on your requirements, you can convert to RHEL by using one of the following methods:

- **Converting by using the command-line interface** - Use this method to convert a small number of servers, or to convert a large number of servers at scale by using custom automation.



NOTE

If you have a Satellite subscription but plan to convert by using the command-line interface, you can access the required RHEL packages through Satellite instead of using the Red Hat Content Delivery Network (CDN).

For more information about how to convert by using the command-line interface, see [Planning a RHEL conversion](#).

- **Converting by using Satellite** - Use this method to convert a large number of servers at scale. To convert by using Satellite, you must have a Satellite subscription. For more information about how to convert by using Satellite, see [Converting a Host to Red Hat Enterprise Linux](#) .

CHAPTER 3. PLANNING A RHEL CONVERSION

The automated conversion process is performed on a running system. The **Convert2RHEL** utility replaces all RPM packages from the original Linux distribution by their RHEL version. At the end of the process, it is necessary to restart the system to boot the RHEL kernel.

Packages that are available only in the original distribution and do not have corresponding counterparts in RHEL repositories, and third-party packages, which originate neither from the original Linux distribution nor from RHEL, are not affected by the conversion. Red Hat does not provide support for third-party packages that are left unchanged during the conversion process. See the [Red Hat policy on supporting third-party software](#).



NOTE

The **Convert2RHEL** utility does not directly affect local users and their data in the `/home` and `/srv` directories. However, **Convert2RHEL** cannot control actions that RPM package scriptlets perform during the conversion process.

You should consider the following before converting your system to RHEL:

- **Architecture** - The source OS must be installed on a system with 64-bit Intel architecture. It is not possible to convert with other system architectures.
- **Security** - Systems in FIPS mode are not supported for conversion.
- **Kernel** - Systems using kernel modules that do not exist in RHEL kernel modules are not currently supported for conversion. Red Hat recommends disabling or uninstalling foreign kernel modules before the conversion and then enabling or reinstalling those kernel modules afterwards. Unsupported kernel modules include:
 - Kernel modules for specialized applications, GPUs, network drivers, or storage drivers
 - Custom compiled kernel modules built by DKMS
- **Public clouds** - Conversions on public clouds are supported in the following situations:
 - Alma Linux, CentOS Linux, and Rocky Linux - Using RHSM for the following:
 - Bring Your Own Subscription instances on Amazon Web Services (AWS), Microsoft Azure, and Google Cloud
 - User-provided custom images on all public clouds
 - Oracle Linux - Using RHSM for user-provided custom images on all public clouds. **Convert2RHEL** is unable to access RHEL packages through Red Hat Update Infrastructure (RHUI) during the conversion of both CentOS Linux and Oracle Linux.
- **High Availability** - Systems using high availability cluster software by Red Hat or third parties are not currently tested or supported for conversion to RHEL. Red Hat recommends migrating to newly installed RHEL systems to ensure the integrity of these environments.
- **Identity Management** - Performing an in-place conversion of a FreeIPA server is not supported. For more information about how to migrate a FreeIPA deployment to IdM, see [Migrating to IdM on RHEL 7 from FreeIPA on non-RHEL Linux distributions](#) and [Migrating to IdM on RHEL 8 from FreeIPA on non-RHEL Linux distributions](#).

CHAPTER 4. PREPARING FOR A RHEL CONVERSION

This procedure describes the steps that are necessary before performing the conversion from Alma Linux, CentOS Linux, Oracle Linux, or Rocky Linux to Red Hat Enterprise Linux (RHEL).

Prerequisites

- You have verified that your system is supported for conversion to RHEL. See [Supported conversion paths](#) for more information.
- You have stopped important applications, database services, and any other services that store data to reduce the risk of data integrity issues.
- You have temporarily disabled antivirus software to prevent the conversion from failing.
- You have disabled or adequately reconfigured any configuration management system (such as Salt, Chef, Puppet, Ansible) to not attempt to restore the original system.
- The **sos** package is installed. You must use this package to generate an **sosreport** that is required when opening a support case for the Red Hat Support team.

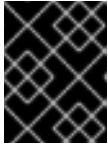
Procedure

1. Back up your system and verify that you can restore your system.
2. Check [Known issues and limitations](#) and verify that your system is supported for conversion. Apply workarounds where applicable.
3. Ensure that the standard kernel is the booted kernel:
 - Alma Linux: the standard Alma Linux Kernel
 - CentOS Linux: the standard CentOS Linux kernel
 - Oracle Linux: the Red Hat Compatible Kernel (RHCK)
 - Rocky Linux: the standard Rocky Linux KernelIf the kernel your system is booted into is not the standard kernel, for example CentOS realtime kernel or Oracle Linux Unbreakable Enterprise Kernel (UEK), change the default kernel to the standard kernel and reboot your system.
4. If converting from CentOS Linux 8, remove any CentOS Stream packages from your system. CentOS Stream is not currently supported for conversion, and the conversion might fail if any packages are present on the system.
5. If you are converting with a firewall, using Red Hat Satellite, or through a proxy server, ensure that you have access to the following connections:
 - <https://ftp.redhat.com>
 - <https://cdn-ubi.redhat.com>
 - <https://cdn.redhat.com>
 - <https://subscription.rhsm.redhat.com> - required only for systems with firewalls
 - https://*.akamaiedge.net - required only for systems with firewalls

- <https://static.redhat.com>

6. If converting from CentOS Linux 8, update the CentOS repository URLs:

```
# sed -i 's/^mirrorlist/#mirrorlist/g' /etc/yum.repos.d/CentOS-*
# sed -i 's|#baseurl=http://mirror.centos.org|baseurl=https://vault.centos.org|g'
/etc/yum.repos.d/CentOS-*
```



IMPORTANT

CentOS Linux 8 has reached end of life. For more information, see [CentOS Linux EOL](#).

7. Install **Convert2RHEL**:

- a. Download the Red Hat GPG key:

```
# curl -o /etc/pki/rpm-gpg/RPM-GPG-KEY-redhat-release
https://www.redhat.com/security/data/fd431d51.txt
```

- b. Download the SSL certificate of the <https://cdn.redhat.com> server, which contains the **Convert2RHEL** repositories:

```
# curl --create-dirs -o /etc/rhsm/ca/redhat-uep.pem
https://ftp.redhat.com/redhat/convert2rhel/redhat-uep.pem
```

- c. Install the **Convert2RHEL** repository file:

```
# curl -o /etc/yum.repos.d/convert2rhel.repo
https://ftp.redhat.com/redhat/convert2rhel/<version_number>/convert2rhel.repo
```

Replace *version_number* with the appropriate major version of the OS, for example **7** or **8**.



NOTE

You must perform the conversion with the latest version of the **Convert2RHEL** repository file. If you had previously installed an earlier version of the repository file, remove the earlier version and install the current version.

- d. Install the **Convert2RHEL** utility:

```
# yum -y install convert2rhel
```

8. Ensure you have access to RHEL packages through one of the following methods:

- Red Hat Content Delivery Network (CDN) through Red Hat Subscription Manager (RHSM). You must have a Red Hat account and an appropriate RHEL subscription to access RHSM. Note that the OS will be converted to the corresponding minor version of RHEL per Table 1.1.
- Red Hat Satellite in a version that has Full or Maintenance support. For more information, see [Red Hat Satellite Product Life Cycle](#).

**NOTE**

Ensure that the Satellite server meets the following conditions:

- Satellite has a subscription manifest with RHEL repositories imported. For more information, see the Managing Subscriptions chapter in the Content Management Guide for the particular version of [Red Hat Satellite](#), for example, for [version 6.10](#).
- All required repositories are enabled and synchronized with the latest target OS updates and published on Satellite. Enable at minimum the following repositories for the appropriate major version of the OS:
 - Red Hat Enterprise Linux 7 Server RPMs x86_64 7Server
 - Red Hat Enterprise Linux 8 for x86_64 - AppStream RPMs <target_os>
 - Red Hat Enterprise Linux 8 for x86_64 - BaseOS RPMs <target_os>

Replace *target_os* with **8.5** for CentOS Linux conversions and **8.8** or **8.6** for Alma Linux, Oracle Linux, or Rocky Linux conversions.

- c. Custom repositories configured in the `/etc/yum.repos.d/` directory and pointing to a mirror of the target OS repositories. Use custom repositories for systems that have access to only local networks or portable media and therefore cannot access Red Hat CDN through RHSM. Make sure that the repositories contain the latest content available for that RHEL minor version to prevent downgrading and potential conversion failures. For more information, see [Creating a Local Repository and Sharing With Disconnected/Offline/Air-gapped Systems](#).

**NOTE**

RHEL 8 content is distributed through two default repositories, BaseOS and AppStream. If you are accessing RHEL packages through custom repositories, you must configure both default repositories for a successful conversion. When running the **Convert2RHEL** utility, make sure to enable both repositories using the **--enablerepo** option. For more information about RHEL 8 repositories, see [Considerations in adopting RHEL 8](#).

9. If you are accessing RHEL packages through a Red Hat Satellite server, download the consumer RPM to the `/usr/share/convert2rhel/subscription-manager/` directory:

```
# curl --insecure --output /usr/share/convert2rhel/subscription-manager/katello-ca-consumer-latest.noarch.rpm https://<satellite.example.com>/pub/katello-ca-consumer-latest.noarch.rpm
```

Replace *satellite.example.com* with the hostname of your Satellite server.

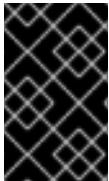
10. Temporarily disable antivirus software to prevent the conversion from failing.
11. If you are accessing RHEL packages by using custom repositories, disable these repositories. The **Convert2RHEL** utility enables the custom repositories during the conversion process.
12. Update the original OS to the minor version supported for conversion as specified in Table 1.1 and then reboot the system.

You must perform the conversion with the latest packages from the minor version of the OS that is supported for conversion to use the rollback feature in case the conversion fails. For more information, see [Conversion rollback](#).

CHAPTER 5. REVIEWING THE PRE-CONVERSION ANALYSIS REPORT

To assess whether your systems can be converted to RHEL, run the RHEL pre-conversion analysis. The pre-conversion analysis generates a report that summarizes potential problems and suggests recommended solutions. The report also helps you decide whether it is possible or advisable to proceed with the conversion to RHEL.

Always review the entire pre-conversion analysis report, even when the report finds no inhibitors to the conversion. The pre-conversion analysis report contains recommended actions to complete before the conversion to ensure that the converted RHEL system functions correctly.



IMPORTANT

The pre-conversion analysis report cannot identify all inhibiting problems with your system. As a result, issues might still occur during the conversion even after you have reviewed and remediated all problems in the report.

Prerequisites

- You have completed the steps listed in [Preparing for a RHEL conversion](#).

Procedure

1. On your Alma Linux, CentOS Linux, Oracle Linux, or Rocky Linux system, run the pre-conversion analysis:

```
# convert2rhel analyze
```

2. The pre-conversion analysis runs a series of tests to determine whether your system can be converted to RHEL. After the analysis is complete, review the status and details of each completed test in the pre-conversion report in the terminal. Non-successful tests contain a description of the issue, a diagnosis of the possible cause of the issue, and, if applicable, a recommended remediation.

Each test results in one of the following statuses:

- **Success** - The test was successful and there are no issues for this component.
- **Error** - The test encountered an issue that would cause the conversion to fail because it is very likely to result in a deteriorated system state. This issue must be resolved before converting.
- **Overridable** - The test encountered an issue that would cause the conversion to fail because it is very likely to result in a deteriorated system state. This issue must be either resolved or manually overridden before converting.
- **Warning** - The test encountered an issue that might cause system and application issues after the conversion. However, this issue would not cause the conversion to fail.
- **Skip** - Could not run this test because of a prerequisite test failing. Could cause the conversion to fail.
- **Info** - Informational with no expected impact to the system or applications.
For example:

===== Warning (Review and fix if needed) =====

(WARNING) PACKAGE_UPDATES::PACKAGE_NOT_UP_TO_DATE_MESSAGE -

Outdated packages detected

Description: Please refer to the diagnosis for further information

Diagnosis: The system has 4 package(s) not updated based on the enabled system repositories.

List of packages to update: openssh-server openssh openssh-clients.

Not updating the packages may cause the conversion to fail.

Consider updating the packages before proceeding with the conversion.

Remediation: [No further information given]

3. After reviewing the report and resolving all reported issues, repeat steps 1-2 to rerun the analysis and confirm that there are no issues outstanding.

CHAPTER 6. CONVERTING TO A RHEL SYSTEM

This procedure describes the steps necessary to convert your system from Alma Linux, CentOS Linux, Oracle Linux, or Rocky Linux to Red Hat Enterprise Linux (RHEL).



NOTE

By default, Red Hat collects conversion-related data, such as the conversion start and end times and whether the conversion was successful, for utility usage analysis. To disable data collection, set the **CONVERT2RHEL_DISABLE_TELEMETRY** environment variable to **1**.

If you are accessing RHEL packages using Red Hat CDN or Satellite through RHSM, there are two methods of registering and subscribing your system during the conversion:

- Provide the organization ID and activation key. This method is preferred when converting many systems or when automating the conversion process using scripts. You must be the organization administrator to create an activation key. You must use this method if you are accessing RHEL packages using Satellite through RHSM.
- Provide the Red Hat Account username and password. Any user who is accessing RHEL packages using Red Hat CDN through RHSM can use this method.

Prerequisites

- You have completed the steps listed in [Preparing for a RHEL conversion](#) and [Reviewing the pre-conversion analysis report](#).
- If you are providing the organization ID and activation key to register and subscribe your system, you have created an activation key in Satellite or RHSM. For more information, see [Managing activation keys](#) in Satellite documentation and [RHSM documentation](#).
- If you are providing the Red Hat Account username and password to register and subscribe your system, you have enabled [Simple Content Access](#) (SCA). Red Hat accounts created after July 15, 2022 have SCA enabled by default.

Procedure

1. If you are converting by using RHSM, update the **/etc/convert2rhel.ini** file.
 - If you are providing your organization ID and activation key, update the **/etc/convert2rhel.ini** file to include the following data:

```
[subscription_manager]
org = <organization_ID>
activation_key = <activation_key>
```

Replace *organization_id* and *activation_key* with the organization ID and activation key from the Red Hat Customer Portal if you are using Red Hat CDN or the Satellite web UI if you are using Red Hat Satellite.

- If you are providing your Red Hat Account username and password, update the **/etc/convert2rhel.ini** file to include the following data:

```
[subscription_manager]
username = <username>
password = <password>
```

Replace *username* and *password* with your Red Hat Account username and password credentials.

2. Start the **Convert2RHEL** utility:

```
# convert2rhel
```

- To display all available options, use the **--help (-h)** option.
- If you are converting by using custom repositories instead of RHSM, add the **--no-rhsm** and **--enablerepo <RHEL_RepoID1> --enablerepo <RHEL_RepoID2>** options. Replace *RHEL_RepoID* with your custom repository configured in the `/etc/yum.repos.d/` directory, for example, **rhel-7-server-rpms** or **rhel-8-baseos** and **rhel-8-appstream**.

3. Before **Convert2RHEL** starts replacing packages from the original distribution with RHEL packages, the following warning message is displayed:

```
The tool allows rollback of any action until this point.
By continuing, all further changes on the system will need to be reverted manually by the
user, if necessary.
```

Changes made by **Convert2RHEL** up to this point can be automatically reverted. Confirm that you wish to proceed with the conversion process.

4. Wait until **Convert2RHEL** installs the RHEL packages and finishes successfully.
5. *Recommended:* If you used custom repositories for the conversion, register and subscribe your RHEL system. For more information, see [How to register and subscribe a system offline to the Red Hat Customer Portal?](#).
6. At this point, the system still runs with the original distribution kernel loaded in RAM. Reboot the system to boot the newly installed RHEL kernel.

```
# reboot
```

7. Remove third-party packages from the original OS that remained unchanged (typically packages that do not have a RHEL counterpart). To get a list of these packages, use:

```
# yum list extras --disablerepo="*" --enablerepo=<RHEL_RepoID>
```

Replace *RHEL_RepoID* with your repository.

8. Optional: If you converted to RHEL 8.5, update your system to the latest minor version:

```
# yum update -y
```

9. Optional: Perform an in-place upgrade to RHEL 9 to ensure your system is updated with the latest enhancements, security features, and bug fixes. For more information, see the [Upgrading from RHEL 7 to RHEL 8](#) and [Upgrading from RHEL 8 to RHEL 9](#) guides. Note that if you have

converted to RHEL 7, you must first perform the in-place upgrade from RHEL 7 to RHEL 8, and then from RHEL 8 to RHEL 9.

Verification

- Verify that your system operates as expected. If necessary, reconfigure system services after the conversion and fix dependency errors. For more information, see [Fixing dependency errors](#).

CHAPTER 7. CONVERSION ROLLBACK

The **Convert2RHEL** utility provides a limited rollback functionality under the following conditions:

- If **Convert2RHEL** has been run in the analyze mode, the utility performs a rollback of all changes it made.
- If the utility fails or is stopped by the user, only changes performed until **Convert2RHEL** starts replacing packages from the original distribution with RHEL packages can be reverted. This moment is indicated by the warning message:

The tool allows rollback of any action until this point.
By continuing all further changes on the system will need to be reverted manually by the user, if necessary.

followed by a question whether you wish to continue with the process.



NOTE

If the **-y** option is used with the **convert2rhel** command, the question indicating the moment after which the automated rollback is no longer possible is skipped.



WARNING

If the conversion process is canceled or fails after **Convert2RHEL** has started the package replacement phase, the system can become dysfunctional. In such a case, manual fixes will be needed. Please contact [Red Hat Consulting services](#) for assistance.

CHAPTER 8. TROUBLESHOOTING CONVERSIONS

This chapter lists troubleshooting resources and tips.

8.1. TROUBLESHOOTING RESOURCES

To help you troubleshoot issues that can occur during the conversion process, review the log messages that are printed to the console and log files.

Console Output

By default, only info, warning, error, and critical log level messages are printed to the console output by the **Convert2RHEL** utility. To also print debug messages, use the **--debug** option with the **convert2rhel** command.

Logs

- The **/var/log/convert2rhel/convert2rhel.log** file lists debug, info, warning, error, and critical messages.
- The **/var/log/convert2rhel/rpm_va.log** file lists all package files on the unconverted system that a user has modified. This output is generated by the **rpm -Va** command, which is run automatically unless the **--no-rpm-va** option is used with the **convert2rhel** command.

8.2. FIXING DEPENDENCY ERRORS

During a conversion from a different Linux distribution to RHEL, certain packages might be installed without some of their dependencies.

Prerequisites

- You have successfully completed the conversion to RHEL. See [Converting to a RHEL system](#) for more information.

Procedure

1. Identify dependencies errors:

```
# yum check dependencies
```

If the command displays no output, no further actions are required.

2. To fix dependency errors, reinstall the affected packages. During this operation, the **yum** utility automatically installs missing dependencies. If the required dependencies are not provided by repositories available on the system, install those packages manually.

8.3. KNOWN ISSUES AND LIMITATIONS

The following issues and limitations are known to occur during the conversion:

- The conversion stops if any files are mounted directly to the **/mnt/** directory or if the **/sys/** directory is mounted as read-only.

- Systems that connect to the Internet using an HTTP proxy server cannot convert using Red Hat CDN or Satellite through RHSM. To work around this problem, enable HTTP proxy for yum and then configure the HTTP proxy for RHSM:
 1. Configure yum to use an HTTP proxy as described in [How to enable proxy settings for yum command on RHEL?](#)
 2. Configure a repository as described in [Configuring Yum and Yum Repositories](#) pointing to one of the following URLs:
 - For CentOS Linux and Oracle Linux 7: https://cdn-public.redhat.com/content/public/addon/dist/client-tools/server/7/7Server/x86_64/os/
 - For Alma Linux, CentOS Linux, Oracle Linux, and Rocky Linux 8: https://cdn-public.redhat.com/content/public/addon/dist/client-tools8/8/x86_64/os/
 3. Install the **subscription-manager** package from the repository you configured..
 4. Configure HTTP proxy for RHSM as described in [How to configure HTTP Proxy for Red Hat Subscription Management](#).
 5. Perform the conversion to RHEL.
([BZ#1965487](#))
- UEFI systems with Secure Boot enabled are not supported for conversion. To work around this issue, disable Secure Boot before the conversion and then re-enable after the conversion is complete. ([BZ#2057229](#))
- If you are registered to RHSM and are using RHSM credentials to convert, the system is re-registered and the original RHSM registration is not restored if a rollback is performed during the conversion. To work around this issue, register your system again with RHSM after the rollback.

8.4. OBTAINING SUPPORT

If you experience problems during the conversion, notify Red Hat so that these problems can be addressed.



IMPORTANT

If you are experiencing problems during the conversion, raise a Support case of Severity 3 or Severity 4 level only. For more details, see [Production Support Terms of Service](#).

Prerequisites

- The **sos** package is installed. You must use this package to generate an **sosreport** that is required when opening a support case for the Red Hat Support team.

Procedure

- To obtain support, perform either of the following steps:
 - Open a support case:
 - Select RHEL 7 or RHEL 8 as the product, and provide an **sosreport** from your system.

- Generate an **sosreport** on your system:

```
# sosreport
```

Note that you can leave the case ID empty.

- Submit a [bug report](#):
 - Open a bug, select RHEL 7 or RHEL 8 as the product, and select **convert2rhel** as the component.

For details on generating an **sosreport**, see the solution [What is an sosreport and how to create one in Red Hat Enterprise Linux?](#).

For more information about opening and managing a support case on the Customer Portal, see the article [How do I open and manage a support case on the Customer Portal?](#) .

For information about Red Hat's support policy for Linux distribution conversions, see [Convert2RHEL Support Policy](#).

CHAPTER 9. ADDITIONAL RESOURCES

- [How to perform an unsupported conversion from a RHEL-derived Linux distribution to RHEL](#)
- [Red Hat Enterprise Linux technology capabilities and limits](#)
- [Red Hat Enterprise Linux documentation](#)
- [Migration planning guide - migration to RHEL 7](#)
- [Considerations in adopting RHEL 8](#)
- [Upgrading from RHEL 7 to RHEL 8](#)
- [Convert2RHEL FAQ \(Frequently Asked Questions\)](#)