## Migrating from RHEL 7 to RHEL 9: A Comprehensive Guide

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Migrating from Red Hat Enterprise Linux 7 (RHEL 7) to Red Hat Enterprise Linux 9 (RHEL 9) is a crucial step for organizations to ensure they remain supported, secure, and benefit from the latest features and improvements. This guide outlines the necessary steps and considerations to successfully transition from RHEL 7 to RHEL 9.

Understanding the Migration Path

Directly upgrading from RHEL 7 to RHEL 9 is not supported due to significant changes in system architecture and underlying technologies. Therefore, the migration typically involves an intermediary step:

- 1. Upgrade from RHEL 7 to RHEL 8.
- 2. Upgrade from RHEL 8 to RHEL 9.

Prerequisites

**Backup Your System** 

Before beginning any migration, ensure that you have a complete backup of your system, including important configuration files and data. This step is crucial to avoid data loss in case something goes wrong during the migration process.

**Review System Requirements** 

Verify that your hardware meets the requirements for RHEL 8 and RHEL 9. Check Red Hat's official documentation for the latest hardware compatibility lists.

**Assess Installed Applications** 

Evaluate the compatibility of your applications with RHEL 8 and RHEL 9. Some applications might require updates or replacements to function correctly on the newer operating system versions.

Update RHEL 7

Ensure your RHEL 7 system is fully updated. Run the following commands to update all packages:

sudo yum update -y

sudo reboot

Step-by-Step Migration Process

Step 1: Upgrade from RHEL 7 to RHEL 8

1. Install the leapp utility: The Leapp utility helps automate the upgrade process.

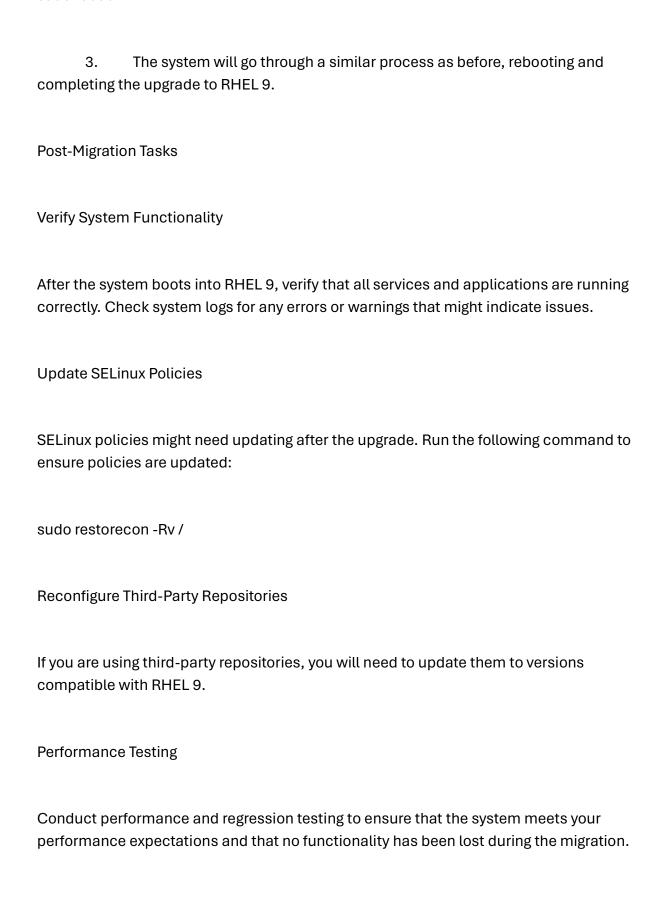
sudo yum install leapp-upgrade

2. Review Pre-Upgrade Report: Leapp generates a report that identifies potential issues that could affect the upgrade. Run the pre-upgrade command:

sudo leapp preupgrade

2.	Review the report located at /var/log/leapp/leapp-preupgrade.log.
_	Address Issues: Resolve any issues identified in the pre-upgrade report. nvolve updating configurations, replacing unsupported packages, or manual interventions.
4. process:	Perform the Upgrade: Once all issues are addressed, start the upgrade
sudo leapp	upgrade
sudo reboo	t
4. some time,	The system will reboot and begin the upgrade process. This might take and the system will reboot again once the upgrade is complete.
Step 2: Upgrade from RHEL 8 to RHEL 9	
1.	Install the leapp utility:
sudo dnf install leapp-upgrade	
2.	Review Pre-Upgrade Report:
sudo leapp	preupgrade
2. identified is	Check the report at /var/log/leapp/leapp-preupgrade.log and address any ssues.
3.	Perform the Upgrade:
sudo leapp	upgrade

sudo reboot



## Conclusion

Migrating from RHEL 7 to RHEL 9 involves a two-step upgrade process that requires careful planning, thorough testing, and a keen eye on compatibility issues. By following this comprehensive guide, organizations can successfully transition to RHEL 9, ensuring their systems remain secure, supported, and capable of leveraging the latest advancements in enterprise Linux technology.