



## Red Hat Satellite 6.15

### Updating Red Hat Satellite

Update Satellite Server and Capsule to a new minor release



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Update Satellite Server and Capsule to a new minor release

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## Abstract

Update Red Hat Satellite Server and Capsule Server regularly to ensure optimal performance and security.

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## MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. Because of the enormity of this endeavor, these changes are being updated gradually and where possible. 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.

Use the **Create Issue** form in Red Hat Jira to provide your feedback. The Jira issue is created in the Red Hat Satellite Jira project, where you can track its progress.

## Prerequisites

- Ensure you have registered a [Red Hat account](#).

## Procedure

1. Click the following link: [Create Issue](#). If Jira displays a login error, log in and proceed after you are redirected to the form.
2. Complete the **Summary** and **Description** fields. In the **Description** field, include the documentation URL, chapter or section number, and a detailed description of the issue. Do not modify any other fields in the form.
3. Click **Create**.



# CHAPTER 1. UPDATING SATELLITE TO THE NEXT MINOR VERSION

You can update your Satellite Server and Capsule Server to a new minor release version, such as from 6.15.0 to 6.15.1, using the Satellite maintain tool. The minor releases are non-disruptive to your operating environment and often fast.

Red Hat recommends performing updates regularly, because the minor releases patch security vulnerabilities and minor issues discovered after code is released.

## CHAPTER 2. UPDATING SATELLITE SERVER

Update your connected Satellite Server to the next minor version. For information to update a disconnected Satellite setup, see [Chapter 3, Updating a disconnected Satellite Server](#).

### Prerequisites

- Back up your Satellite Server. For more information, see [Backing Up Satellite Server and Capsule Server](#) in *Administering Red Hat Satellite*.



### WARNING

If you customize configuration files, manually or using a tool such as Hiera, these changes are overwritten when the maintenance script runs during upgrading or updating. You can use the **--noop** option with the `satellite-installer` to test for changes. For more information, see the Red Hat Knowledgebase solution [How to use the noop option to check for changes in Satellite config files during an upgrade](#).

### Procedure

1. Ensure the Satellite Maintenance repository is enabled:

```
# subscription-manager repos --enable \  
satellite-maintenance-6.15-for-rhel-8-x86_64-rpms
```

2. Check the available versions to confirm the next minor version is listed:

```
# satellite-maintain upgrade list-versions
```

3. Use the health check option to determine if the system is ready for upgrade. On first use of this command, **satellite-maintain** prompts you to enter the hammer admin user credentials and saves them in the `/etc/foreman-maintain/foreman-maintain-hammer.yml` file.

```
# satellite-maintain upgrade check --target-version 6.15.z
```

Review the results and address any highlighted error conditions before performing the upgrade.

4. Because of the lengthy update time, use a utility such as **tmux** to suspend and reattach a communication session. You can then check the upgrade progress without staying connected to the command shell continuously.

If you lose connection to the command shell where the upgrade command is running, you can see the logged messages in the `/var/log/foreman-installer/satellite.log` file to check if the process completed successfully.

5. Perform the upgrade:

```
# satellite-maintain upgrade run --target-version 6.15.z
```

6. Determine if the system needs a reboot:

```
# dnf needs-restarting --reboothint
```

7. If the previous command told you to reboot, then reboot the system:

```
# reboot
```

### Additional resources

- To restore the backup of the Satellite Server or Capsule Server, see [Restoring Satellite Server or Capsule Server from a Backup](#)

## CHAPTER 3. UPDATING A DISCONNECTED SATELLITE SERVER

Update your air-gapped Satellite setup where the connected Satellite Server, which synchronizes content from CDN, is air gapped from a disconnected Satellite Server, to the next minor version.

### Prerequisites

- Back up your Satellite Server. For more information, see [Backing Up Satellite Server and Capsule Server](#) in *Administering Red Hat Satellite*.
- Install **reposync** that is required for the updating procedure:

```
# dnf install 'dnf-command(reposync)'
```

### Procedure on the connected Satellite Server

1. Ensure that you have synchronized the following repositories in your connected Satellite Server:
  - rhel-8-for-x86\_64-baseos-rpms
  - rhel-8-for-x86\_64-appstream-rpms
  - satellite-6.15-for-rhel-8-x86\_64-rpms
  - satellite-maintenance-6.15-for-rhel-8-x86\_64-rpms
2. Download the debug certificate of the organization and store it locally at **/etc/pki/katello/certs/org-debug-cert.pem** or a location of your choosing. For more information, see [Creating an Organization Debug Certificate](#) in *Administering Red Hat Satellite*.
3. Create a Yum configuration file under **/etc/yum.repos.d**, such as **satellite-disconnected.repo**, with the following contents:

```
[rhel-8-for-x86_64-baseos-rpms]
name=Red Hat Enterprise Linux 8 for x86_64 - BaseOS (RPMs)
baseurl=https://satellite.example.com/_pulp/content/_My_Organization_/Library/content/dist/rhel8/8/x86_64/baseos/os
enabled=1
sslclientcert = /etc/pki/katello/certs/org-debug-cert.pem
sslclientkey = /etc/pki/katello/certs/org-debug-cert.pem
sslcacert = /etc/pki/katello/certs/katello-server-ca.crt
sslverify = 1

[rhel-8-for-x86_64-appstream-rpms]
name=Red Hat Enterprise Linux 8 for x86_64 - AppStream (RPMs)
baseurl=https://satellite.example.com/_pulp/content/_My_Organization_/Library/content/dist/rhel8/8/x86_64/appstream/os
enabled=1
sslclientcert = /etc/pki/katello/certs/org-debug-cert.pem
sslclientkey = /etc/pki/katello/certs/org-debug-cert.pem
sslcacert = /etc/pki/katello/certs/katello-server-ca.crt
sslverify = 1

[satellite-6.15-for-rhel-8-x86_64-rpms]
```

```

name=Red Hat Satellite 6.15 for RHEL 8 RPMs x86_64
baseurl=_https://satellite.example.com/_pulp/content/_My_Organization_/Library/content/dist/lay
ered/rhel8/x86_64/satellite/6.15/os
enabled=1
sslclientcert = /etc/pki/katello/certs/org-debug-cert.pem
sslclientkey = /etc/pki/katello/certs/org-debug-cert.pem
sslcacert = /etc/pki/katello/certs/katello-server-ca.crt
sslverify = 1

```

```

[satellite-maintenance-6.15-for-rhel-8-x86_64-rpms]
name=Red Hat Satellite Maintenance 6.15 for RHEL 8 RPMs x86_64
baseurl=_https://satellite.example.com/_pulp/content/_My_Organization_/Library/content/dist/lay
ered/rhel8/x86_64/sat-maintenance/6.15/os
enabled=1
sslclientcert = /etc/pki/katello/certs/org-debug-cert.pem
sslclientkey = /etc/pki/katello/certs/org-debug-cert.pem
sslcacert = /etc/pki/katello/certs/katello-server-ca.crt
sslverify = 1

```

4. In the configuration file, complete the following steps:

- For the **sslclientcert** and **sslclientkey** options, replace **/etc/pki/katello/certs/org-debug-cert.pem** with the location of the downloaded organization debug certificate.
- For the **baseurl** option, replace **satellite.example.com** with the correct FQDN of your connected Satellite Server.
- For the **baseurl** option, replace **My\_Organization** with your organization label.

5. Obtain the organization label:

```
# hammer organization list
```

6. Enter the **reposync** command:

```

# dnf reposync \
--delete \
--disableplugin=foreman-protector \
--download-metadata \
--repoid rhel-8-for-x86_64-appstream-rpms \
--repoid rhel-8-for-x86_64-baseos-rpms \
--repoid satellite-maintenance-6.15-for-rhel-8-x86_64-rpms \
--repoid satellite-6.15-for-rhel-8-x86_64-rpms \
-n \
-p ~/Satellite-repos

```

This downloads the contents of the repositories from the connected Satellite Server and stores them in the directory **~/Satellite-repos**.

7. Verify that the RPMs have been downloaded and the repository data directory is generated in each of the sub-directories of **~/Satellite-repos**.

8. Archive the contents of the directory:

```
# tar czf Satellite-repos.tgz -C ~ Satellite-repos
```

9. Use the generated **Satellite-repos.tgz** file to upgrade in the disconnected Satellite Server.

### Procedure on the disconnected Satellite Server

1. Copy the generated **Satellite-repos.tgz** file to your disconnected Satellite Server.
2. Extract the archive to anywhere accessible by the **root** user. In the following example **/root** is the extraction location.

```
# tar xzf Satellite-repos.tgz -C /root
```

3. Create a Yum configuration file under **/etc/yum.repos.d** with the following repository information:

```
[rhel-8-for-x86_64-baseos-rpms]
name=Red Hat Enterprise Linux 8 for x86_64 - BaseOS (RPMs)
baseurl=file:///root/Satellite-repos/rhel-8-for-x86_64-baseos-rpms
enabled=1

[rhel-8-for-x86_64-appstream-rpms]
name=Red Hat Enterprise Linux 8 for x86_64 - AppStream (RPMs)
baseurl=file:///root/Satellite-repos/rhel-8-for-x86_64-appstream-rpms
enabled=1

[satellite-6.15-for-rhel-8-x86_64-rpms]
name=Red Hat Satellite 6 for RHEL 8 Server RPMs x86_64
baseurl=file:///root/Satellite-repos/satellite-6.15-for-rhel-8-x86_64-rpms
enabled=1

[satellite-maintenance-6.15-for-rhel-8-x86_64-rpms]
name=Red Hat Satellite Maintenance 6 for RHEL 8 Server RPMs x86_64
baseurl=file:///root/Satellite-repos/satellite-maintenance-6.15-for-rhel-8-x86_64-rpms
enabled=1
```

4. In the configuration file, replace the **/root/Satellite-repos** with the extracted location.
5. Check the available versions to confirm the next minor version is listed:

```
# satellite-maintain upgrade list-versions
```

6. Use the health check option to determine if the system is ready for upgrade. On first use of this command, **satellite-maintain** prompts you to enter the hammer admin user credentials and saves them in the **/etc/foreman-maintain/foreman-maintain-hammer.yml** file.

```
# satellite-maintain upgrade check \
--target-version 6.15.z \
--whitelist="check-upstream-repository,repositories-validate"
```

7. Review the results and address any highlighted error conditions before performing the upgrade.
8. Due to the lengthy update time, use a utility such as **tmux** to suspend and reattach a communication session. You can then check the upgrade progress without staying connected to the command shell continuously.

If you lose connection to the command shell where the upgrade command is running, you can see the logged messages in the `/var/log/foreman-installer/satellite.log` file to check if the process completed successfully.

9. Perform the upgrade:

```
# satellite-maintain upgrade run \  
--target-version 6.15.z \  
--whitelist="check-upstream-repository,repositories-setup,repositories-validate"
```

10. Determine if the system needs a reboot:

```
# dnf needs-restarting --reboothint
```

11. If the previous command told you to reboot, then reboot the system:

```
# reboot
```

### Additional resources

- To restore the backup of the Satellite Server or Capsule Server, see [Restoring Satellite Server or Capsule Server from a Backup](#)

## CHAPTER 4. UPDATING CAPSULE SERVER

Update Capsule Servers to the next minor version.

### Procedure

1. Synchronize the **satellite-capsule-6.15-for-rhel-8-x86\_64-rpms** repository in the Satellite Server.
2. Publish and promote a new version of the content view with which the Capsule is registered.
3. Ensure that the Satellite Maintenance repository is enabled:

```
# subscription-manager repos --enable \  
satellite-maintenance-6.15-for-rhel-8-x86_64-rpms
```

4. Check the available versions to confirm the next minor version is listed:

```
# satellite-maintain upgrade list-versions
```

5. Use the health check option to determine if the system is ready for upgrade:

```
# satellite-maintain upgrade check --target-version 6.15.z
```

Review the results and address any highlighted error conditions before performing the upgrade.

6. Because of the lengthy update time, use a utility such as **tmux** to suspend and reattach a communication session. You can then check the upgrade progress without staying connected to the command shell continuously.

If you lose connection to the command shell where the upgrade command is running, you can see the logged messages in the **/var/log/foreman-installer/capsule.log** file to check if the process completed successfully.

7. Perform the update:

```
# satellite-maintain upgrade run --target-version 6.15.z
```

8. Determine if the system needs a reboot:

```
# dnf needs-restarting --reboothint
```

9. If the previous command told you to reboot, then reboot the system:

```
# reboot
```