Red Hat Satellite 6.14

Updating Red Hat Satellite

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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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 6.14.0 to 6.14.1, 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.

Prerequisite

- 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-6.14-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 6.14.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 6.14.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-6.14-for-rhel-8-x86_64-rpms
   - satellite-maintenance-6.14-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=0
   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-6.14-for-rhel-8-x86_64-rpms]
   ```
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-6.14-for-rhel-8-x86_64-rpms \
   --repoid satellite-6.14-for-rhel-8-x86_64-rpms \
   -n \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
   ```

**Procedure on the disconnected Satellite Server**


2. Extract the archive to anywhere accessible by the root user. In the following example /root is the extraction location.
   
   ```
   # tar zxf 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-6.14-for-rhel-8-x86_64-rpms]
   name=Red Hat Satellite 6 for RHEL 8 Server RPMs x86_64
   baseurl=file:///root/Satellite-repos/satellite-6.14-for-rhel-8-x86_64-rpms
   enabled=1

   [satellite-maintenance-6.14-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-6.14-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 6.14.2
   --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 6.14.7\n--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. Ensure that the Satellite Maintenance repository is enabled:

   # subscription-manager repos --enable \
   satellite-maintenance-6.14-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:

   # satellite-maintain upgrade check --target-version 6.14.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/capsule.log file to check if the process completed successfully.

5. Perform the update:

   # satellite-maintain upgrade run --target-version 6.14.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