Configuring and using the Red Hat connector feature
Abstract

This guide describes a Technology Preview feature. Technology Preview features are not fully supported, may not be functionally complete, and are not suitable for deployment in production. However, these features are provided to the customer as a courtesy and the primary goal is for the feature to gain wider exposure with the goal of full support in the future. For more information see What does a "Technology Preview" feature mean?. This guide is for Red Hat account users and system administrators who want to use the Red Hat connector feature to register RHEL systems to Red Hat for services hosted at cloud.redhat.com. Providing Feedback: If you have a suggestion to
improve this documentation, or find an error, submit a Bugzilla report at http://bugzilla.redhat.com. Select the Cloud Software Services (cloud.redhat.com) product and use the Documentation component.
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## CHAPTER 4. USING THE RED HAT CONNECTOR FEATURE AND RED HAT CLOUD CONNECTOR

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1.1. INTRODUCTION TO RED HAT CONNECTOR

The Red Hat connector feature unifies the registration experience and registers your RHEL systems to both Red Hat Subscription Management and Red Hat Insights services in a single step. In releases prior to RHEL 8.4, registering your system to connect to Red Hat was a two-step process that required one command to register with Red Hat Subscription Management and a separate CLI command to register with Insights. The unified registration experience makes it easier for you to connect to Red Hat cloud-based services.

1.1.1. Red Hat connector features

The Red Hat connector feature consists of a CLI command line tool for RHEL and a Red Hat connector dashboard accessed through cloud.redhat.com.

When you use the Red Hat connector command line tool, one command can connect your system to Red Hat, which takes advantage of Insights and provides access to your repositories for subscription updates.

Accounts that are direct-connect systems can use the Red Hat Cloud Connector feature to remediate issues across your Red Hat infrastructure separately from Red Hat Satellite. This provides Red Hat Smart Management features without a Satellite subscription. A Red Hat Smart Management subscription is required.

1.1.2. Red Hat connector command line tool

Introduced with RHEL 8.4, the Red Hat connector command line tool, **rhc**, unifies the registration experience for the RHEL administrator or developer.

The **rhc** utility simplifies how you connect to the Red Hat services provided at cloud.redhat.com. This one command replaces the **insights-client** utility and the **subscription-manager** utility. Setting up your RHEL systems to take advantage of Red Hat Subscription Management and Red Hat Insights is done with a single command.

**NOTE**

The **rhc** command line tool is provided with a new RHEL 8.4 installation. If you are upgrading from a prior release to RHEL 8.4, you must install the **rpm** package for Red Hat connector.

After you run the **rhc connect** command, a subscription is attached to your RHEL 8.4 system and it is visible in the Red Hat connector dashboard.

1.1.3. Red Hat connector dashboard

The Red Hat connector dashboard provides centralized control for connecting your RHEL systems to Red Hat Insights and viewing the connector status history.

When you make a change in the dashboard, a playbook is created and pushed to all connected systems. The dashboard provides a log that shows you the playbook runs and all connected systems.
The Insights settings you select in the dashboard are applied to all RHEL systems in your account that have enabled the rhc connect utility. The dashboard settings control the following actions for your connected systems:

- Connect to Red Hat Insights.
- Use OpenSCAP for Compliance policies.
- Enable Cloud Connector to fix issues directly from Insights.

**NOTE**
Cloud Connector requires a Red Hat Smart Management subscription.

### 1.1.4. Information about Red Hat connector and RHEL Insights client

The Red Hat connector command line tool, **rhc**, connects your RHEL system to the Red Hat connector dashboard at cloud.redhat.com. From the dashboard you control all connected RHEL systems and whether to use the Red Hat Insights services. The dashboard provides a master on/off switch for the connection to Insights. With the **rhc** command and the dashboard, there is no granular control over individual system connection and there is no additional control over the data that is packaged on your systems and uploaded to Insights.

To control the type of data that each system provides to Insights, you must use the **insights-client** command. For example, if you want to apply data obfuscation or data redaction to the system information that is sent to Insights, you must configure the obfuscation and redaction values on each system.

**Additional resources**

- For information about configuring the Insights client on your RHEL system and the data that is shared with Red Hat Insights, see *Client Configuration Guide for Red Hat Insights*. 
CHAPTER 2. CONFIGURING THE RED HAT CONNECTOR FEATURES

2.1. CONFIGURING THE RED HAT CONNECTOR FEATURES

The Red Hat connector utility comes pre-installed on all new installations of RHEL 8.4. Configuring Red Hat connector consists of the following tasks.

- Using the Red Hat connector command line tool on each RHEL system that you want to manage through the Red Hat connector dashboard.
  Section 2.2, “Using the CLI to enable Red Hat connector on your RHEL system”
- Registering your RHEL system with the command line tool can be done using a **username** and **password** associated with your account, or by using your **organization-id** and **activation-key**.

  **NOTE**
  Red Hat recommends using organization ID and activation key.

  Creating Red Hat Customer Portal Activation Keys

- Upgrading to RHEL 8.4 from a prior version of RHEL requires that after the upgrade you must install the Red Hat connector utility before you can use it.
  Section 2.4, “Updating the Red Hat connector utility from a pre-8.4 RHEL release”
- Using the Red Hat connector dashboard at cloud.redhat.com to view and manage your RHEL systems and their interaction with Red Hat Insights and Cloud Connector.
  Section 3.1, “Using the Red Hat connector dashboard to connect your RHEL systems to Insights”

2.2. USING THE CLI TO ENABLE RED HAT CONNECTOR ON YOUR RHEL SYSTEM

The Red Hat connector command line tool allows your RHEL system to communicate with the Red Hat connector dashboard and with the Red Hat Subscription Management. An advantage of connecting to the dashboard is that you control all systems in your account and their connection to Red Hat Insights instead of doing so separately for each system.

  **NOTE**
  On a new RHEL 8.4 installation, you must manually install Ansible Engine support for subscription management before you use the Red Hat connector command line tool.
  See Section 2.3, “Updating the Red Hat connector utility with a new 8.4 RHEL release”.

  **NOTE**
  If you have updated to RHEL 8.4 (or later) from a prior release, you must manually install updates.
  See Section 2.4, “Updating the Red Hat connector utility from a pre-8.4 RHEL release”.

2.2.1. Connecting to the dashboard
Connect your RHEL system to the Red Hat connector dashboard. Use this procedure on each RHEL system that you want to add to the Red Hat connector dashboard.

**Prerequisites**

- You must use a RHEL login that has **root** permissions.
- A Red Hat account exists that uses either a **username** and **password** associated with your account, or uses **organization-id** and **activation-key** for your account.

**Procedure**

1. Log in to the RHEL system as **root**.
2. Enter the **rhc connect** command and your account credentials. This example uses Org ID and activation key.

   ```
   # rhc connect -o 5551212 -a fake-21af8-0ee62-f6dff-fake
   Connecting iqge-e2e-rhc-vm-agmwwfvgvct to cloud.redhat.com. This might take a few seconds.
   ```

**2.2.2. Disconnecting from the dashboard**

Disconnect your RHEL system from the Red Hat connector dashboard. Use this procedure on each RHEL system that you want to remove from the Red Hat connector dashboard.

**Prerequisites**

- You must use a RHEL login that has **root** permissions.

**Procedure**

1. Log in to the RHEL system as **root**.
2. Enter the **rhc disconnect** command.

   ```
   # rhc disconnect
   Disconnecting iqge-e2e-rhc-vm-agmwwfvgvct from cloud.redhat.com. This might take a few seconds.
   ```

**2.2.3. Verifying the rhc connect command**

Verify that the Red Hat connector **rhcd** daemon is running on your RHEL system.

**NOTE**

The **rhcd** daemon does not write to a separate log file, but it does put data in the **systemd** journal, located in **/var/log/journal**. Use the **journalctl** command to view the log. Some messages are written to **stdin/stdout**.

**Prerequisites**
You must use a RHEL login that has root permissions.

Procedure

1. Log in to the RHEL system as root.

2. Use any of the following commands to display information.
   a. Enter the rhc status command to show the status.
      
      ```
      # rhc status
      Connection status for iqe-e2e-rhc-vm-agmwwfgvet:
      • Connected to Red Hat Subscription Manager
      • The rhc daemon is active
      See all your connected systems: https://red.ht/connector
      ```
   b. Enter the ps command and pipe through grep to display the connector rhcd daemon process.
      
      ```
      # ps -u root | grep rhc
      PID     TTY        TIME COMMAND
      14992   ?          0:00 /usr/sbin/rhcd
      ```
   c. Enter the systemctl status rhcd command.
      
      ```
      # systemctl status rhcd
      ```

2.2.4. Using additional CLI options

View additional options for the rhc command.

Prerequisites

- You must use a RHEL login that has root permissions.

Procedure

1. Log in to the RHEL system as root.

2. Enter the rhc --help command with no other options.

   ```
   $ rhc --help
   NAME:
   rhc - control the system's connection to cloud.redhat.com

   USAGE:
   rhc [global options] command [command options] [arguments...]

   VERSION:
   0.0.git.310.a47ac17

   COMMANDS:
   ```
connect     Connects the system to cloud.redhat.com
disconnect  Disconnects the system from cloud.redhat.com
facts       Prints information about the system.
status      Prints status of the system's connection to cloud.redhat.com
help, h     Shows a list of commands or help for one command

GLOBAL OPTIONS:
--help, -h       show help (default: false)
--version, -v    print the version (default: false)

2.3. UPDATING THE RED HAT CONNECTOR UTILITY WITH A NEW 8.4 RHEL RELEASE

Update the Red Hat connector utility on your RHEL 8.4 system to make sure you have the latest patches and updates.

NOTE
This procedure is required for a new installation of RHEL 8.4. See Section 2.4, “Updating the Red Hat connector utility from a pre-8.4 RHEL release” if you have updated to RHEL 8.4 from a prior release.

Prerequisites

- You must use a RHEL login that has root permissions.
- [Technical Preview requirement] Your RHEL system must be registered and subscribed to Red Hat Subscription Management.

Procedure

[Technical Preview requirement] In a new installation of RHEL 8.4 the Red Hat Ansible Engine is manually installed as part of the Red Hat connector utility support.

1. Log in to the RHEL system as root.
2. Update the Red Hat connector utility.

   # dnf update rhc-worker-playbook

3. Enable Subscription Management support for Ansible Engine.

   # subscription-manager repos --enable ansible-2.9-for-rhel-8-x86_64-rpms

4. Install Ansible support.

   # dnf install ansible

5. Enter the rhc command to verify the updates.

   # rhc connect
2.4. UPDATING THE RED HAT CONNECTOR UTILITY FROM A PRE-8.4 RHEL RELEASE

Update the Red Hat connector utility on your RHEL system when any of the following situations apply:

- An update to RHEL 8.4 (or later) from a prior version of RHEL.

Prerequisites

- You must use a RHEL login that has root permissions.

- [Technical Preview requirement] Your RHEL system must be registered and subscribed to Red Hat Subscription Management.

Procedure

[Technical Preview requirement] The Red Hat Ansible Engine is manually installed as part of the Red Hat connector utility support.

1. Log in to the RHEL system as root.

2. Install the Red Hat connector updates and Ansible support.

   ```
   # dnf install rhc rhc-worker-playbook
   ```

3. Enable Subscription Management support for Ansible Engine.

   ```
   # subscription-manager repos --enable ansible-2.9-for-rhel-8-x86_64-rpms
   ```

4. Install Ansible support.

   ```
   # dnf install ansible
   ```

5. Enter the rhc command to verify the updates.

   ```
   # rhc connect
   ```
CHAPTER 3. USING THE RED HAT CONNECTOR DASHBOARD TO CONNECT YOUR RHEL SYSTEMS TO INSIGHTS

3.1. USING THE RED HAT CONNECTOR DASHBOARD TO CONNECT YOUR RHEL SYSTEMS TO INSIGHTS

The Red Hat connector dashboard is where you control RHEL system connections to Red Hat Insights. The RHEL systems in your account are visible in the dashboard after the Red Hat connector utility is enabled on each system.

Use an account with Organization Administrator (org admin) privileges to assign users to one of the following role-based access control (RBAC) roles:

- **RHC Administrator.** This role is required to view or modify the settings in the dashboard.
- **RHC Viewer.** This role is required to view the settings in the dashboard.

RHC Administrator and RHC Viewer privileges are assigned through the user access settings at cloud.redhat.com. The org admin can update the user access settings to add additional users to an administrator role that can edit and save dashboard settings, and add users to a viewer role that can view but not change dashboard settings. See *User Access Configuration Guide for Role-based Access Control (RBAC)*.

You can also use an account with org admin privilege to view or modify the settings in the Red Hat connector dashboard.

3.1.1. Opening the Red Hat connector dashboard

Open the Red Hat connector dashboard to view Red Hat connector settings. The dashboard shows the number of connected systems and connection settings.

The first time you open the dashboard, it shows a pane for `rhc` command syntax that you can fill in and copy to simplify command entry on your RHEL systems if they are not already running the Red Hat connector utility. You can close this pane but it cannot be reopened.

### Figure 3.1. RHC connector dashboard, command syntax pane

![Red Hat Connect Dashboard](image)

**Prerequisites**

- You must be in a role that has RHC Administrator or RHC Viewer privileges.
- The Red Hat connector utility is running on the RHEL systems.  
  Section 2.1, “Configuring the Red Hat connector features”

Procedure

1. Log in to your Red Hat organization account at cloud.redhat.com.

2. Click the Settings icon (gear) to open the Settings page.

3. On the Settings page, click on the Red Hat Connector tab to view dashboard. The dashboard shows the number of connected systems and the Red Hat Insights connection settings.

3.1.2. Editing settings in the Red Hat connector dashboard

Open the Red Hat connector dashboard to edit Red Hat connector settings. The dashboard shows the number of connected systems and the current connection settings.

Any changes you make are applied to all connected RHEL systems and all future systems that you connect.

Figure 3.2. Red Hat connector services dashboard

Prerequisites

- To change settings, you must be in a role that has RHC Administrator privileges.

- The Red Hat connector utility is running on the RHEL systems.  
  Section 2.1, “Configuring the Red Hat connector features”

Procedure

1. Log in to your Red Hat organization account at cloud.redhat.com.

2. Click the Settings icon (gear) to open the Settings page.

3. On the Settings page, click on the Red Hat Connector tab to view the dashboard Services tab. This tab shows the number of connected systems and the Red Hat Insights connection settings.
4. Use the slider buttons to select Insights settings for your connected systems.

5. Click the **Save changes** button and follow the prompts to save any updated settings.

6. The saved changes are applied to all connected systems and to all future systems that connect through the Red Hat connector utility.
4.1. USING THE RED HAT CONNECTOR FEATURE AND RED HAT CLOUD CONNECTOR

Red Hat Cloud Connector allows you to remediate your direct-connect RHEL systems from Red Hat Insights when you have the Red Hat connector feature installed on your RHEL 8.4 (or later) system and a Red Hat Smart Management subscription.

See Using Cloud Connector to remediate issues across your Red Hat Satellite infrastructure.