



Edge management 1-latest

Working with systems in the Insights Inventory
application

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Abstract

You can group systems and choose which ones receive updates.

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PREFACE

After you create your OSTree images, install the RHEL for Edge images on your devices, and register these systems with the Red Hat Insights application, you can organize systems into groups. With that, you can manage multiple systems simultaneously, and perform various tasks, such as vulnerability assessment. You can also check for vulnerabilities. If Common Vulnerabilities and Exposures (CVEs) are identified, you can use the Insights Inventory application to update the image and simultaneously deploy the update to multiple systems.

- If you are using [Edge management](#):
 - To be able to edit, delete, or to display host's details, you must have the **Inventory Hosts Administrator** role assigned to your account.
 - If you just want to be able to display host's details, but no access to actions you must have at least the **Inventory Hosts Viewer** role assigned to your account.
- If you are using [Inventory](#) under Red Hat Insights:
 - If you want to use **Inventory groups** access, see the [User access to inventory groups](#) documentation to learn more on how to manage groups access.
 - If you do not want to use granular **Inventory groups** access, you must have at least the **Inventory Hosts Administrator** and the **Inventory Groups Administrator** roles assigned to your account.



WARNING

If you want your non-org administrator users to be able to see or manage their Inventory groups, you must add one of the Inventory Groups roles to the Default Access RBAC group. Otherwise, non-org administrator users will not be able to see or manage the Inventory Groups.

Inventory groups support role-based access (RBAC). By using RBAC, you can set custom permissions on inventory groups according to the user role. See [User access to inventory groups](#) for more details.

CHAPTER 1. CREATING A SYSTEM GROUP TO MANAGE MULTIPLE SYSTEMS

In the Insights inventory groups application, you can consolidate multiple systems into groups, simplifying their management. For example, you can easily mitigate vulnerabilities and update systems that are alike.

Prerequisites

- You have a Red Hat Hybrid Cloud Console account.
- You have [registered the systems](#) you plan to group with the Insights Inventory application.

Procedure

1. Access [Red Hat Hybrid Cloud Console](#) platform and log in.
2. From the console dashboard, navigate to **Red Hat Insights > RHEL > Inventory**
3. In the dashboard menu, click **Inventory > Groups**.
4. On the **Groups** page, click **Create group**.
5. In the **Create Group** dialog, add a group name that describes your group, for example **retail-north-america**. Click **Create**.
6. On the **Inventory > Groups** page, use the search box to find the group you just created and click the group name, for example **retail-north-america**, from the group list.

Verification

- If the group creation was successful, you can see the group name on the page for your group.

CHAPTER 2. ADDING A SINGLE SYSTEM TO A GROUP

In the Insights inventory groups application, you can add a single system to a group to manage it more easily. For example, you can easily mitigate vulnerabilities and update systems that are alike. With the Insights inventory group application, you can add a system to only one group.

Prerequisites

- You have a Red Hat Hybrid Cloud Console account.
- You have registered the systems you plan to group with the Insights Inventory application.

Procedure

1. Access [Red Hat Hybrid Cloud Console](#) platform and log in.
2. From the console dashboard, navigate to **Red Hat Insights > RHEL > Inventory > Systems**
3. On the **System** page, add a single system to a group: Click the options icon (**⋮**) near the image and click **Add to group**. The **Add to group** window open:
 - a. Select one of the options:
 - Add to an existing group: Select an existing group and click **Add**.
 - Create a new group: Click the **Create group** button. Click **Add**.

Verification

- If adding systems to the group was successful, you can see the systems added to the group on the page for your group.

CHAPTER 3. ADDING MULTIPLE SYSTEMS TO A GROUP

In the Insights Inventory application, you can add several systems to a group to manage them more easily. For example, you can easily mitigate vulnerabilities and update systems that are alike.

Prerequisites

- You have a Red Hat Hybrid Cloud Console account.
- You have registered the systems you plan to group with the Insights Inventory application.

Procedure

1. Access [Red Hat Hybrid Cloud Console](#) platform and log in.
2. From the console dashboard, navigate to **Red Hat Insights > RHEL > Inventory > Systems**
3. On the **System** page:
 - a. Search for the systems you want to add from the Inventory and select the ones you want to add to your group.
 - b. Click the options icon (**⋮**) and click **Add to group**. The **Add to group** window open:
 - Add to an existing group: Select an existing group and click **Add**.
 - Create a new group: Click the **Create group** button. Click **Add**.

Verification

- If adding the multiple systems to the group was successful, you can see the systems added to the group on the page for your group.

CHAPTER 4. ADDING SYSTEMS TO A GROUP FROM THE GROUP DETAILS VIEW

In the Insights Inventory application, you can add several systems to a group from the Group details view. This allows you to manage the systems simultaneously, along with the other members in the group. For example, you can easily update systems that have an update available.

Prerequisites

- You have a Red Hat Hybrid Cloud Console account.
- You have [registered the systems](#) you plan to group with the Insights Inventory application.

Procedure

1. Access [Red Hat Hybrid Cloud Console](#) platform and log in.
2. From the console dashboard, navigate to **Red Hat Insights > RHEL > Inventory > Groups**
3. In the **Groups** page:
 - a. Click the group to which you want to add systems from the Inventory. The group page opens, showing the current systems.
 - b. Click **Add systems**. The Add systems window opens.
 - c. From the **Immutable (OSTree)** tab, select the systems that you want to add.
 - d. Click **Add systems**. A popup alert informs you that the action was successful.

Verification

- If adding the multiple systems to the group was successful, you can see the systems that were added to the group.

CHAPTER 5. REMOVING A SYSTEM FROM A GROUP

If you no longer want a system in a group in the Insights Inventory application, you can remove it. For example, if a system no longer needs to be managed with other systems of a group, you can remove it.

Prerequisites

- You have a Red Hat Hybrid Cloud Console account.
- You have already grouped systems registered with the Insights Inventory application.

Procedure

1. Access [Red Hat Hybrid Cloud Console](#) platform and log in.
2. From the console dashboard, navigate to **Red Hat Insights > RHEL > Inventory > Groups**
3. On the **Groups** page, use the **Filter by name** search box to find the group you want to modify, and then click the name of the group.
4. Select the systems you want to remove.
5. In the **Group** toolbar, click the **Actions for group details** menu, which is three vertical dots.
6. Click **Remove from group**. Then, confirm and click **Remove**.

CHAPTER 6. REMOVING SYSTEMS IN A GROUP FROM THE GROUP DETAILS VIEW

If you no longer want a system in a group in the Insights Inventory application, you can remove it by using the Group details view. For example, if a system no longer needs to be managed with the other systems in a group, you can remove it.

Prerequisites

- You have a Red Hat Hybrid Cloud Console account.
- You have [registered the systems](#) you plan to group with the Insights Inventory application.

Procedure

1. Access [Red Hat Hybrid Cloud Console](#) platform and log in.
2. From the console dashboard, navigate to **Red Hat Insights > RHEL > Inventory > Groups**
3. In the **Groups** page:
 - a. Click the group from which you want to remove systems from the Inventory. The **Group** page opens, showing the current systems.
 - b. From the **Immutable (OSTree)** tab, select the systems that you want to remove.
 - c. Click the **More options (⋮)** icon and choose **Remove from group**.
A window alert asks that you confirm that you want to remove the system from the group.
 - d. Click **Remove**. A popup alert informs you that the action was successful.

Verification

- Check that the system is no longer part of the group.

CHAPTER 7. VULNERABILITIES

You can use the Insights Inventory application to check for vulnerabilities and update systems if necessary to address those vulnerabilities identified by the system.

7.1. CHECKING A SYSTEM FOR VULNERABILITIES

You can use the Insights Inventory application to check for CVEs or other vulnerabilities in systems you have registered with the Insights Inventory application.

Prerequisites

- You have a Red Hat Hybrid Cloud Console account
- You have a system registered with the Insights Inventory application.

Procedure

1. Access [Red Hat Hybrid Cloud Console](#) platform and log in.
2. From the dashboard, navigate to **Red Hat Insights > RHEL > Inventory > Security > Systems**
3. Check for vulnerabilities for one of your systems. Click the name of the system, then navigate to the system details page and click the **Vulnerability** tab.

If there are Common Vulnerabilities and Exposures (CVEs) present in your system, you can address them immediately in the **Vulnerability** tab. See [Addressing vulnerabilities in a system](#) .

7.2. ADDRESSING VULNERABILITIES IN A SYSTEM

After you check for vulnerabilities, if a CVE is found, you can remediate it by updating the image from the **Vulnerabilities** tab.

Prerequisites

- You have a Red Hat Hybrid Cloud Console account.
- You have a system registered with the Insights Inventory application.

Procedure


1. Access [Red Hat Hybrid Cloud Console](#) platform and log in.
2. From the console dashboard, navigate to **Red Hat Insights > RHEL > Inventory > Security > Systems**.
3. In the edge management menu, click **Inventory > Security > Systems**
4. Click the name of the system, then click the **Vulnerability** tab.
5. Click **Update Image** and follow the prompts.
 - a. Review the details about the update and click **Update Image** to build an updated image. The build might take a few minutes.

6. After the update completes, the status column shows that an update is available. You can now send the update to the system.
 - a. In the edge management menu, click **Inventory** > **Systems**.
 - b. Click the name of the system you want to update.
 - c. On the system details page, click **Vulnerabilities** > **Update system**.
7. Review the information about the update and then click **Update system**.

Verification

If the update was successful, after your system reboots, it automatically sends confirmation to the Insights Inventory application. Check the system status on the system details page. While the system is updating, the system status is **Updating**. If the update was successful, the status column for the system is **Up to date**. If there is an **Error** status, click **Error** to check the reason. You can click **Retry** to attempt to update your system again.

CHAPTER 8. UPDATING SYSTEMS IN A GROUP

If you have several systems using the same image in the edge management application, you can update several systems in a group simultaneously after you update the image. Use the **More options icon** (), select the images that you plan to update. You will be able to choose the package version to update your images.



WARNING

Using RHEL for Edge customized images that were created using the on-site version of RHEL image builder is not supported by the edge management application.

There is no support for updating an Edge system by using the CLI. You can only update your Edge systems by using the Red Hat Hybrid Cloud Console.

Prerequisites

- You have a Red Hat Hybrid Cloud Console account.
- You have the systems registered with Remote Host Configuration and Management.
- You have an updated image that contains the changes you want to push to your systems. For more information, see [Updating an image](#).

Procedure

1. Go to the [edge management](#) application in the Red Hat Hybrid Cloud Console platform and log in.
2. In the edge management menu, click **Inventory** > **Groups**.
3. Select the group from the list that contains several systems you want to update.
4. Select the systems in the group that have the **Update available** status and that use the same image. You can check the image each system uses in the **Image** column.
5. In the **Group** toolbar, click the **Actions for group details** menu, which is three vertical dots.
6. Click **Update selected**.
7. Review the information about the update. Click **Update system**.

Verification

Check **Inventory** > **Groups** and click the group from which the updates were triggered. If the update was sent to the system, the system status is **Up to date**.

Additional resources

- [How to start the upgrade process of an Edge Management deployed system](#) .

- [Edge Management supportability.](#)

CHAPTER 9. MANAGING CUSTOM REPOSITORIES

Custom repositories extend the images you build in the edge management application to packages beyond those that Red Hat provides. You can customize the images with custom repositories and custom packages that fit your specific business case. For example, you can add packages from the Extra Packages for Enterprise Linux (EPEL), or any compatible package list. You can update your existing images by adding or removing packages from these custom repositories. You can also remove repositories, and also add repositories from the popular repositories.

9.1. ADDING A CUSTOM REPOSITORY

To add packages from the third-party repository to your customized images, you must first define your repository with third-party information.

Prerequisites

- You have a RHEL subscription.
- You have administrator access to the Red Hat Hybrid Cloud Console web user interface or **repository administrator** role.
- You have the URL for your custom repository.

Procedure

1. Access [Hybrid Cloud Console](#).
2. Click **Red Hat Insights > RHEL > Content > Repositories**
The **Custom repositories** dashboard appears.
3. Click **Add repositories**. The **Add custom repositories** wizard opens.
4. Enter the following information:
 - a. **NAME** - mandatory.
 - b. **URL** - mandatory.
 - c. In the **Restrict architecture** drop-down menu, select an architecture. You can allow all the architectures or restrict one to your system architecture to prevent incorrect repositories availability.
 - d. In the **Restrict OS version** drop-down menu select an operating system (OS). You can allow all the RHEL versions or select one for your system version to prevent incorrect repositories being available.
 - e. **GPG key** - upload the **.txt** file with a GPG key or paste the URL or value of an existing GPG key. The GPG key verifies the signed packages of a repository. If you do not provide the GPG key for a repository, your system cannot perform the verification.
5. If you want to add another repository, click the **Add another repository** button and repeat step 3.
6. Click **Save**. The Red Hat Hybrid Cloud Console validates the project status. If your repository is marked as **Invalid**, check the repository URL that you added.

Verification

- Open the list of custom repositories and verify that the repository you added is listed.

Troubleshooting

- If your repository is marked as **Invalid**, check the repository URL that you added.

9.2. ADDING A CUSTOM REPOSITORY TO AN IMAGE

You can add a custom repository and the associated packages to an image after it has been created.

Prerequisites

- You have a Red Hat Hybrid Cloud Console account.
- You have built an image in the Red Hat Hybrid Cloud Console and registered it with `rhc` client that contains custom repositories.
- You have added one or more custom repositories. See [Adding a custom repository](#) for more information.

Procedure

1. Access [Hybrid Cloud Console](#).
2. Click **Red Hat Insights > RHEL > Inventory > Images**
The Insights Image Builder dashboard appears.
3. Click the **Immutable (OSTree)** tab.
4. Click the name of the image you want to update.
5. On the image details page, click **Actions > Create new version**. The **Update image** wizard opens.
6. Click **Next** on both the **Details** and **Options** page to view the custom repositories that have been added to the image.
7. On the **Content** page, perform the following actions:
 - a. On the **Custom repositories** page, select the linked custom repositories you want to add.
 - b. Click **Next**.
 - c. On the **Additional custom packages** page, search and choose the packages you want to add from the repository. If you are using the Fedora example repository https://dl.fedoraproject.org/pub/archive/fedora/linux/releases/29/Everything/x86_64/os/, enter **waf-python3** to add the package.
 - d. Click **Next**.
8. On the **Review** page, review your changes and click **Update image**.

Next step

After the image update completes, you can update systems that are using that image. See [Updating a system](#) for more information.

9.3. REMOVING A CUSTOM REPOSITORY FROM AN IMAGE

You can remove custom repositories and the associated packages from an image after it has been created. When you remove a custom repository, the packages associated with that custom repository will also be removed from the image.

Prerequisites

- You have a Red Hat Hybrid Cloud Console account.
- You have built an image in the Red Hat Hybrid Cloud Console and registered it with Remote Host Configuration and Management that contains custom repositories.
- You have added one or more custom repositories. See [Adding a custom repository to the edge management application](#) for more information.

Procedure

1. Access [Hybrid Cloud Console](#).
2. Click the **Settings icon (⚙)** in the top right and, from the menu, select **Settings**.
3. On the **Settings** menu, select **Repositories**.
4. From the **Your repositories** tab, select the **Custom**.
5. From the available repositories, select the repository to delete.
 - a. Click the **More options (⋮)** icon and choose **Delete**.
 - b. From the **Remove repository** window, confirm that you want to delete the repository by clicking **Remove**.