



# Red Hat Ansible Automation Platform 2.4

## Using Ansible plug-ins for Red Hat Developer Hub

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## Abstract

This guide describes how to use Ansible plug-ins for Red Hat Developer Hub to learn about Ansible, explore curated collections, and create playbook projects.

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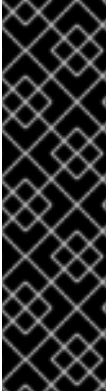
## PREFACE

Thank you for your interest in Red Hat Ansible Automation Platform. Ansible Automation Platform is a commercial offering that helps teams manage complex multi-tier deployments by adding control, knowledge, and delegation to Ansible-powered environments.

This guide describes how to use Ansible plug-ins for Red Hat Developer Hub. This document has been updated to include information for the latest release of Ansible Automation Platform.

## PROVIDING FEEDBACK ON RED HAT DOCUMENTATION

If you have a suggestion to improve this documentation, or find an error, you can contact technical support at <https://access.redhat.com> to open a request.



### IMPORTANT

Ansible plug-ins for Red Hat Developer Hub is a Technology Preview feature only. Technology Preview features provide early access to upcoming product features, enabling customers to test functionality and provide feedback during the development process. Technology Preview features are not supported with Red Hat production service level agreements (SLAs) and might not be functionally complete. Red Hat does not recommend using them in production.

For more information about the support scope of Red Hat Technology Preview features, see [Technology Preview Features Support Scope](#).



# CHAPTER 1. USING THE ANSIBLE PLUG-INS

You can use Ansible plug-ins for Red Hat Developer Hub (RHDH) to learn about Ansible, create automation projects, and access opinionated workflows and tools to develop and test your automation code. From the Red Hat Developer Hub UI, you can navigate to your Ansible Automation Platform instance, where you can configure and run automation jobs.

This document describes how to use the Ansible plug-ins for Red Hat Developer Hub. It presents a worked example of developing a playbook project for automating updates to your firewall configuration on RHEL systems.

## 1.1. DASHBOARD NAVIGATION

When you log in to Red Hat Developer Hub (RHDH), the main RHDH menu and dashboard are displayed.

To view the dashboard for Ansible plug-ins for Red Hat Developer Hub, click **Ansible** in the Red Hat Developer Hub navigation panel.

The screenshot shows the Red Hat Developer Hub dashboard for Ansible plug-ins. On the left is a dark navigation sidebar with the Red Hat Developer Hub logo and a search bar. Below the search bar are menu items: Home, Catalog, APIs, Learning Paths, Create..., Ansible (highlighted with a red dot), Tech Radar, Docs, Clusters, Administration, and Settings. The main content area has a title 'Welcome to the Ansible plug-ins for Red Hat Developer Hub' and a subtitle 'This Ansible out-of-the-box experience accelerates content creation and meets you where you are in the development process.' Below the title are tabs for 'Overview', 'My Items', 'Create', and 'Learn'. The 'Overview' tab is active and displays a list of six steps: 1. LEARN, 2. DISCOVER EXISTING COLLECTIONS, 3. CREATE, 4. DEVELOP, 5. OPERATE, and 6. USEFUL LINKS. To the right of this list is a 'Starred Ansible Items' section with a star icon and the text 'Click the star beside an Ansible entity name to add it to this list!'. At the bottom right of the dashboard is a blue 'FEEDBACK' button.

The plug-in dashboard illustrates the steps you need to take from learning about Ansible to deploying automation jobs from Ansible Automation Platform:

- **Overview** displays the main dashboard page.
- **Learn** provides links to resources curated by Red Hat that introduce you to Ansible and provide step-by-step examples to get you started. For more information, see [Learning about Ansible](#).
- **Discover existing collections** links to private automation hub, if configured in the plug-ins, or to automation hub hosted on the Red Hat Hybrid Cloud Console. Automation hub stores existing collections and execution environments that you can use in your projects. For more information, see [Discovering existing collections](#).
- **Create** creates new projects in your configured Source Control Management platforms such as GitHub. For more information, see [Creating a project](#).
- **Develop** links you to OpenShift Dev Spaces, if configured in the Ansible plug-ins installation.

OpenShift Dev Spaces provides on-demand, web-based Integrated Development Environments (IDEs), where you can develop automation content. For more information, see [Developing projects](#).

- **Operate** connects you to Ansible Automation Platform, where you can create and run automation jobs that use the projects you have developed. For more information, see [Setting up a controller project to run your playbook project](#).

## 1.2. LEARNING ABOUT ANSIBLE

To learn more about getting started with automation, click **Learn** from the **Overview** page of the plug-in dashboard. The **Learn** page provides the following options for learning:

- **Learning Paths** lists a curated selection of learning tools hosted on developers.redhat.com that guide you through the foundations of working with Ansible, the Ansible VS code extension, and using YAML.  
You can select other Ansible learning paths from the **Useful links** section.
- **Labs** are self-led labs that are designed to give you hands-on experience in writing Ansible content and using Ansible developer tools.

## 1.3. DISCOVERING EXISTING COLLECTIONS

From the **Overview** page in the Ansible plug-ins dashboard on Red Hat Developer Hub, click **Discover Existing Collections**.

The links in this pane provide access to the source of reusable automation content collections that you configured during plug-in installation.

If you configured private automation hub when installing the plug-in, you can click **Go to Automation Hub** to view the collections and execution environments that your enterprise has curated.

If you did not configure a private automation hub URL when installing the plug-in, the **Discover existing collection** pane provides a link to Red Hat automation hub on console.redhat.com. You can explore certified and validated Ansible content collections on this site.

## 1.4. CREATING A PROJECT

### Prerequisite

- Ensure you have the correct access (RBAC) to view the templates in Red Hat Developer Hub. Ask your administrator to assign access to you if necessary.

### Procedure:

1. Log in to your Red Hat Developer Hub UI.
2. Click the Ansible **A** icon in the Red Hat Developer Hub navigation panel.
3. Navigate to the **Overview** page.
4. Click **Create**.
5. Click **Create Ansible Git Project**. The **Available Templates** page opens.

6. Click **Create Ansible Playbook project**
7. In the **Create Ansible Playbook Project** page, enter information for your new project in the form.  
You can see sample values for this form in the Example project.

Field	Description
Source code repository organization name or username	The name of your source code repository username or organization name
Playbook repository name	The name of your new Git repository
Playbook description (Optional)	A description of the new playbook project
Playbook project's collection namespace	The new playbook Git project creates an example collection folder for you. Enter a value for the collection namespace.
Playbook project's collection name	The name of the collection
Catalog Owner Name	The name of the Developer Hub catalog item owner. This is a Red Hat Developer Hub field.
Source code repository organization name or username	The name of your source code repository username or organization name
Playbook repository name	The name of your new Git repository
Playbook description (Optional)	A description of the new playbook project
System (Optional)	This is a Red Hat Developer Hub field

8. Click **Review**.

## 1.5. VIEWING YOUR PROJECTS

To view the projects that you have created in the plug-in, navigate to the **Overview** page for the Ansible plug-in and click **My Items**.

## 1.6. DEVELOPING PROJECTS

### 1.6.1. Developing projects on Dev Spaces

[OpenShift Dev Spaces](#) is not included with your Ansible Automation Platform subscription or the Ansible plug-ins for Red Hat Developer Hub.

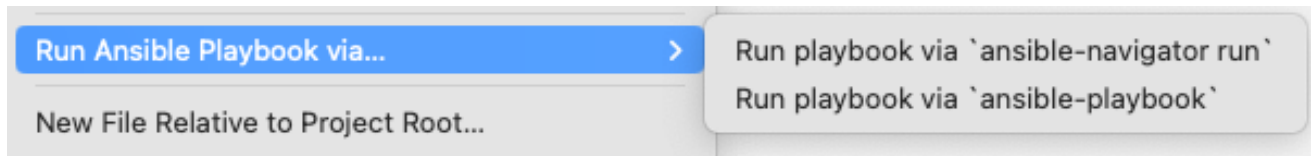
The plug-ins provide context-aware links to edit your project in Dev Spaces.

The Dev Spaces instance provides a default configuration that installs the Ansible VS Code extension and provides the Ansible command line tools. You can activate Ansible Lightspeed in the Ansible VS Code extension. For more information, refer to the [Red Hat Ansible Lightspeed with IBM watsonx Code Assistant User Guide](#).

## 1.6.2. Executing automation tasks in Dev Spaces

The default configuration for Dev Spaces provides access to the Ansible command line tools.

To execute an automation task in Dev Spaces from the VSCode user interface, right-click a playbook name in the list of files and select **Run Ansible Playbook via ansible-navigator run** or **Run playbook via ansible-playbook**.



## 1.7. SETTING UP A CONTROLLER PROJECT TO RUN YOUR PLAYBOOK PROJECT

### Procedure

1. The Ansible plug-ins provide a link to Ansible Automation Platform.
2. Log in to your Red Hat Developer Hub UI.
3. Click the Ansible **A** icon in the Red Hat Developer Hub navigation panel.
4. Click **Operate** to display a link to your Ansible Automation Platform instance.  
If automation controller was not included in your plug-in installation, a link to the product feature page is displayed.
5. Click **Go to Ansible Automation Platform** to open your platform instance in a new browser tab.  
Alternatively, if your platform instance was not configured during the Ansible plug-in installation, navigate to your automation controller instance in a browser and log in.
6. Log in to automation controller.
7. Create a project in Ansible Automation Platform for the GitHub repository where you stored your playbook project. Refer to the [Projects](#) chapter of the *Automation controller user guide*.
8. Create a job template that uses a playbook from the project that you created. Refer to the [Job Templates](#) chapter of the *Automation controller user guide*.

## CHAPTER 2. PROVIDING FEEDBACK IN THE ANSIBLE PLUG-INS

The Ansible plug-ins provide a feedback form where you can suggest new features and content, as well as general feedback.

1. Click the Ansible **A** icon in the Red Hat Developer Hub navigation panel.
2. Click the **Feedback** icon to display the feedback form.

### Share Your Valuable Feedback

Type of feedback  
General Sentiment ▼

---

How was your experience?\*

★ ★ ★ ★ ★

---

Tell us why?\*

Please fill in this field.

I understand that feedback is shared with Red Hat.

Red Hat uses your feedback to help improve our products and services.  
For more information, please review [Red Hat's Privacy Statement](#) ↗

SUBMIT

3. Enter the feedback you want to provide.
4. Tick the **I understand that feedback is shared with Red Hat** checkbox.
5. Click **Submit**.



**NOTE**

To ensure that Red Hat receives your feedback, exclude your Red Hat Developer Hub URL in any browser ad blockers or privacy tools.

## CHAPTER 3. EXAMPLE: AUTOMATE RED HAT ENTERPRISE LINUX FIREWALL CONFIGURATION

This example demonstrates how the Ansible plug-ins can help Ansible users of all skill levels create quality Ansible content.

As an infrastructure engineer new to Ansible, you have been tasked to create a playbook to configure a Red Hat Enterprise Linux (RHEL) host firewall.

The following procedures show you how to use the Ansible plug-ins and Dev Spaces to develop a playbook.

### 3.1. LEARNING MORE ABOUT PLAYBOOKS

The first step is to learn more about Ansible playbooks using the available learning paths.

1. Click the Ansible **A** icon in the Red Hat Developer Hub navigation panel.
2. Click **Learn** and select the **Getting Started with Ansible Playbooks** learning path. This redirects you to the Red Hat Developer website.
3. If you are prompted to log in, create a Red Hat Developer account, or enter your details.
4. Complete the learning path.

### 3.2. DISCOVERING EXISTING ANSIBLE CONTENT FOR RHEL SYSTEM ROLES

Red Hat recommends that you use trusted automation content that has been tested and approved by Red Hat or your organization.

Automation hub is a central repository for discovering, downloading, and managing trusted content collections from Red Hat and its partners. Private automation hub provides an on-premise solution for managing content collections.

1. Click on the Ansible **A** icon in the Red Hat Developer Hub navigation panel.
2. Click **Discover existing collections**.
3. Click **Go to Automation Hub**
  - If private automation hub has been configured in the Ansible plug-ins, you are redirected to your **PrivateHubName** instance.
  - If private automation hub has not been configured in the Ansible plug-ins installation configuration, you will be redirected to the Red Hat Hybrid Console (RHCC) automation hub.

In this example, you are redirected to the RHCC automation hub.

4. If you are prompted to log in, provide your Red Hat Customer Portal credentials.
5. Filter the collections with the **rhel firewall** keywords.  
The search returns the **rhel\_system\_roles** collection.

The RHEL System Roles collection contains certified Ansible content that you can reuse to configure your firewall.

### 3.3. CREATE A NEW PLAYBOOK PROJECT TO CONFIGURE A FIREWALL

Use the Ansible plug-ins to create a new Ansible Playbook project.

1. Click the Ansible **A** icon in the Red Hat Developer Hub navigation panel.
2. From the **Create** dropdown menu on the landing page, select **Create Ansible Git Project**
3. Click **Choose** in the **Create Ansible Playbook Project** software template.
4. Fill in the following information in the **Create Ansible Playbook Project** page:

Field	Required	Description	Example value
Source code repository organization name or username	Yes	The name of your source code repository username or organization name.	<b>my_github_username</b>
Playbook repository name	Yes	The name of your new Git repository.	<b>rhel_firewall_config</b>
Playbook description	No	A description of the new playbook project.	<b>This playbook configures firewalls on Red Hat Enterprise Linux systems</b>
Playbook project's collection namespace	Yes	The new playbook Git project creates an example collection folder for you. Enter a value for the collection namespace.	<b>my_galaxy_username</b>
Playbook project's collection name	Yes	This is the name of the example collection.	<b>rhel_firewall_config</b>
Catalog Owner Name	Yes	The name of the Developer Hub catalog item owner. It is a Red Hat Developer Hub field.	<b>my_rhdh_username</b>
System	No	This is a Red Hat Developer Hub field.	<b>my_rhdh_linux_system</b>

5. Click **Review**.
6. Click **Create** to provision your new playbook project.
7. Click **Open in catalog** to view your project.



## 3.4. CREATING A NEW PLAYBOOK TO AUTOMATE THE FIREWALL CONFIGURATION

Create a new playbook and use the RHEL System Role collection to automate your Red Hat Enterprise Linux firewall configuration.

1. In your Dev Spaces instance, click **File** → **New File**.
2. Enter **firewall.yml** for the filename and click **OK** to save it in the root directory.
3. Add the following lines to your **firewall.yml** file:

```
---
- name: Open HTTPS and SSH on firewall
  hosts: rhel
  become: true
  tasks:
    - name: Use rhel system roles to allow https and ssh traffic
      vars:
        firewall:
          - service: https
            state: enabled
            permanent: true
            immediate: true
            zone: public
          - service: ssh
            state: enabled
            permanent: true
            immediate: true
            zone: public
      ansible.builtin.include_role:
        name: redhat.rhel_system_roles.firewall
```



### NOTE

You can use Ansible Lightspeed with IBM watsonx Code Assistant from the Ansible VS Code extension to help you generate playbooks. For more information, refer to the [Ansible Lightspeed with IBM watsonx Code Assistant User Guide](#) .

## 3.5. EDITING YOUR FIREWALL PLAYBOOK PROJECT

The Ansible plug-ins integrate OpenShift Dev Spaces to edit your Ansible projects. OpenShift Dev Spaces provides on-demand, web-based Integrated Development Environments (IDEs).

Ansible Git projects provisioned using the Ansible plug-ins include best practice configurations for OpenShift Dev Spaces. These configurations include installing the Ansible VS Code extension and providing access from the IDE terminal to Ansible development tools, such as Ansible Navigator and Ansible Lint.



### NOTE

OpenShift Dev Spaces is optional and it is not required to run the Ansible plug-ins. It is a separate Red Hat product and it is not included in the Ansible Automation Platform or Red Hat Developer Hub subscription.

This example assumes that OpenShift Dev Spaces has been configured in the Ansible plug-ins installation.

### Procedure

- In the **catalog item** view of your playbook project, click **Open Ansible project in OpenShift Dev Spaces**.

A VS Code instance of OpenShift Dev Spaces opens in a new browser tab. It automatically loads your new Ansible Playbook Git project.