



Discover

Ansible Automation Platform 2.6



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1 Discover

What is Ansible Automation Platform

Learn about what you can accomplish with Ansible Automation Platform.

With Ansible Automation Platform, you can create, manage, and scale automation for your organization across users, teams, and regions. Ansible Automation Platform also provides a unified, intuitive user interface (UI) that enables you to interact with each part of the platform so that you can orchestrate a range of automated tasks.

Use cases

Ansible Automation Platform provides a powerful and flexible way for users to automate a wide range of IT tasks. Below are some common use cases illustrating what a typical user can achieve with the platform.

Infrastructure provisioning

Users can automation the entire lifecycle of infrastructure deployment, from bare metal to cloud resources.

Automation goal	Description
Cloud provisioning	Launch and configure virtual machines, storage, and networking across public and private clouds (such as AWS, Azure, GCP, and VMware.)
Virtualization management	Automate the creation, cloning, and decommissioning of virtual machines on platforms like VMware vSphere or Red Hat Virtualization.
Network device configuration	Configure routers, switches, load balancers, and firewalls consistently across the network.

Configuration management

Configuration management is a core use case, ensuring systems are configured and maintained across the environment. Ansible automation platform can manage the following:

- Operating system configuration: Enforce standardized configurations (for example, security settings, user accounts, services) on Linux and Windows servers.

- Application deployment: Manage the deployment and configuration of applications, middleware, and their dependencies (like web servers or databases).
- Configuration drift correction: Automatically detect and remediate unauthorized changes to a system's configuration, bringing it back into compliance.

Application deployment and continuous delivery

Ansible streamlines the process of moving code from development to production environments. Here are some examples how:

- Orchestration of multi-tier applications: Define and execute complex deployment workflows for applications that span multiple servers and services.
- Zero-downtime deployment: Implement strategies like rolling updates or blue/green deployments to ensure application availability during updates.
- Integration with CI/CD tools: Connect with tools like Jenkins or GitLab to trigger automated deployment pipelines.

Security and compliance automation

Leverage Ansible to enforce security policies and automate compliance checks.

Area	Example tasks
Patch management	Automation the scanning, staging, and deployment of security patches across all servers on a regular schedule.
Security policy enforcement	Ensure firewalls are configured correctly, required security agents are running, and SSH settings are compliant.
Auditing and reporting	Collect system configuration data for regular compliance audits and generate reports.

Network automation

Ansible can manage and automate configuration tasks across diverse networking hardware.

For example:

- Automated troubleshooting: Run diagnostics, capture logs, and reset network interfaces automatically in response to alerts.
- OS upgrades: Standardize and automate the upgrade process for network operating systems (such as Cisco IOS or Juniper Junos OS).
- Firewall policy management: Automate the addition or removal of firewall rules based on approved changes.

Enterprise IT automation and orchestration

Enterprise automation and orchestration involves automating complex, end-to-end business processes that can span multiple domains or teams. Users can create a centralized self-service portal for these tasks.

- Self-service IT: Provide end users or teams with a simple interface to request and provision resources without direct access to the underlying structure.
- Service desk integration: Automate tasks triggered by help desk tickets, such as password resets or log collection, thereby reducing the need for manual intervention from a human agent.
- Disaster recovery automation: Automate the failover and failback procedures for applications and infrastructure at a secondary site.

Ansible components

Ansible Automation Platform comprises integrated components that orchestrate the end-to-end automation process. This modular architecture allows teams to build, share, and scale secure workflows across the entire enterprise.

Ansible Automation Platform is structured around three main components:

- Automation execution: where you can deploy, define, operate, scale, and delegate automation across your enterprise.
- Automation content: the central location for your Ansible content, which you can integrate into your automation environment.
- Automation decisions: where you can manage Event-Driven Ansible, an automation engine that listens to your system's event stream and reacts to events that you have specified with targeted automation tasks.

These components are united by the platform gateway, which includes an activity stream that captures changes to platform gateway resources, including the creation or modification of organizations, users, and service clusters, among others.

Automation execution

At the heart of Ansible Automation Platform is a centralized control center for deploying, scaling, and delegating enterprise automation. From one location, you can run playbooks via a web UI, monitor dashboard activity, and use centralized logging to track job execution.

In the automation execution environment, you can use automation controller tasks to build job templates, which standardize how automation is deployed, initiated, and delegated, making it more reusable and consistent.

Inventories

An inventory is a single file, usually in INI or YAML format, containing a list of hosts and groups that can be acted upon using Ansible commands and playbooks. You can use an inventory file to specify your installation scenario and describe host deployments to Ansible. You can also use an inventory file to organize managed nodes in centralized files that give Ansible with system information and network locations.

Policy enforcement

Policy enforcement at automation runtime is a feature that uses encoded rules to define, manage, and enforce policies that govern how your users interact with your Ansible Automation Platform instance. Policy enforcement automates policy management, improving security, compliance, and efficiency. Policy enforcement points can be configured at the level of the inventory, job template, or organization. For more, see **Implementing policy enforcement** .

Related information

[Implement policy enforcement](#)

Automation content

Automation hub is the central location for your Ansible Automation Platform content. In automation hub you can also find content collections that you can download and integrate into your automation environment. You can also create and upload your own content to distribute to your users.

An Ansible Content Collection is a ready-to-use toolkit for automation and can include multiple types of content, including roles, modules, playbooks, and plugins all in one place.

You can access automation hub in one of two ways:

- On the Red Hat-hosted Hybrid Cloud Console, where you can find Red Hat validated or certified content that you can sync to your platform environment.
- On a self-hosted, on-premise private automation hub, where you can curate content for your automation users and manage access to collections and execution environments.

Depending on the way you access automation hub, you may have access to different types of content collections.

There are two types of Red Hat Ansible content:

- Ansible Certified Content Collections, which Red Hat builds, supports, and maintains. Certified collections are included in your subscription to Red Hat Ansible Automation Platform and can be found in automation hub.
- Ansible validated content collections, which are customizable and therefore do not have a support guarantee, but have been tested in the Ansible Automation Platform environment.

Ansible roles

Ansible roles allow you to create reusable automation content that helps teams to work more efficiently and avoid duplicating efforts. With roles, you can group together a broader range of existing automation content, like playbooks, configuration files, templates, tasks, and handlers to create customized automation content that can be reused and shared with others.

You can also make roles configurable by exposing variables that users can set when calling the role, allowing them to configure their system according to their organization's requirements.

Roles are generally included in Ansible content collections.

Ansible playbooks

Playbooks are YAML files that contain specific sets of human-readable instructions, or "plays," that you send to run on a single target or groups of targets. Ansible playbooks are repeatable and reusable configuration management tools designed to deploy complex applications.

You can use playbooks to manage configurations of and deployments to remote machines to sequence multitiered rollouts involving rolling updates. Use playbooks to delegate actions to other hosts, interacting with monitoring servers and load balancers along the way.

Once written, you can use and re-use playbooks for automation across your enterprise. For example, if you need to run a task more than once, write a playbook and put it under source control. Then, you can use the playbook to push out new configuration or confirm the configuration of remote systems.

Ansible playbooks can declare configurations, orchestrate steps of any manually ordered process on many machines in a defined order, or start tasks synchronously or asynchronously.

You can also use Red Hat Ansible Lightspeed, Ansible's generative AI service, to create and develop playbooks to fit your needs.

Related information

[Hybrid Cloud Console](#)

[Getting started as an automation developer](#)

[Getting started with playbooks](#)

Automation decisions

Red Hat Ansible Automation Platform includes Event-Driven Ansible, an automation engine that listens to your system's event stream and reacts to events that you have specified with targeted automation tasks.

Managed through Event-Driven Ansible controller, Ansible rulebooks are the framework for automation decisions. Ansible rulebooks are collections of rulesets, which in turn consist of one or more sources, rules, and conditions. Rulebooks tell the system what events to flag and how to respond to them. From the Automation Decisions section of the platform user interface, you can use rulebooks to connect and listen to event sources, and define actions that are triggered in response to certain events.

Related information

[Rulebook actions](#)

Automation mesh

Automation mesh is an overlay network intended to ease the distribution of automation across a collection of execution nodes using existing connectivity.

Execution nodes are where Ansible Playbooks are actually executed. A node runs an automation execution environment which, in turn, runs the Ansible Playbook.

Automation mesh creates peer-to-peer connections between these execution nodes, increasing the resiliency of your automation workloads to network latency and connection disruptions. This also permits more flexible architectures and provides rapid, independent scaling of control and execution capacity.

Red Hat Ansible Lightspeed

Red Hat Ansible Lightspeed with IBM watsonx Code Assistant is a generative AI service for Ansible developers. It uses natural-language prompts and IBM watsonx models to provide best-practice code recommendations.

Red Hat Ansible Lightspeed with IBM watsonx Code Assistant helps automation teams learn, create, and maintain Red Hat Ansible Automation Platform content more efficiently.

Product Notification Feed

Effective July 2025, the Ansible Automation Platform RSS notification feed will be available. This feed serves as a method for communicating various product updates and changes to customers.

Customers can subscribe to the notifications by visiting Ansible Automation Platform Product Notifications through an RSS feed reader. This feed is updated with events such as Ansible Automation Platform upgrades and system maintenance.

All Ansible Automation Platform customers can subscribe to this content. Messages include categorization tags to specify deployment types: managed, self-managed (on-premise), or a combination. Red Hat is developing a future enhancement to integrate this feature directly into the UI.

Related information

[Ansible Automation Platform Product Notifications](#)

Ansible development tools

Ansible development tools are an integrated and supported suite of capabilities that help IT practitioners at any skill level generate automation content faster than they might with manual coding.

Ansible development tools can help you create, test, and deploy automation content like playbooks, execution environments, and collections quickly and accurately using recommended practices.

Related information

[Develop automation content in your workspace](#)

Ansible Automation Platform installation and configuration

Choose the appropriate installation methods to match your infrastructure and organizational requirements.

Depending on your organization's needs, you can install Red Hat Ansible Automation Platform using one of the following methods, based on your environment:

- [RPM installation](#)
- [Installing on OpenShift Container Platform](#)
- [Cloud environments](#)
- [Containerized installation](#)

Dashboard components

After you install Ansible Automation Platform on your system and log in for the first time, familiarize yourself with the platform dashboard.

Quick starts

Learn about Ansible automation functions with guided tutorials called quick starts. In the dashboard, you can access quick starts by selecting **Quick starts** from the navigation panel, and selecting a quick start tile. Click **Start** and complete the onscreen instructions. You can also filter quick starts by keyword and status.

Resource status

Indicates the status of your hosts, projects, and inventories. The status indicator links to your configured hosts, projects and inventories where you can search, filter, add and change these resources.

Job Activity

View a summary of your current job status. Filter the job status within a period of time or by job type, or click **Go to jobs** to view a complete list of jobs that are currently available.

Jobs

View recent jobs that have run, or click **View all Jobs** to view a complete list of jobs that are currently available, or create a new job.

Projects

View recently updated projects or click **View all Projects** to view a complete list of the projects that are currently available, or create a new project.

Inventories

View recently updated inventories or click **View all Inventories** to view a complete list of available inventories, or create a new inventory.

Rulebook Activations

View the list of recent rulebook activations and their status, display the complete list of rulebook activations that are currently available, or create a new rulebook activation.

Rule Audit

View recently fired rule audits, view rule audit records, and view rule audit data based on corresponding rulebook activation runs.

Decision Environments

View recently updated decision environments, or click **View all Decision Environments** to see a complete list of available inventories, or create a new decision environment.

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