Ansible Automation Platform Quick Setup Guide

Release Automation Controller 4.1.0

Red Hat, Inc.

Feb 10, 2023

CONTENTS

1 Quick Start 2

2 Login as a Superuser 3

3 Import a Subscription 4

4 Examine the Controller Dashboard 8

5 The Settings Page 10

6 Review the Organization 11

7 Create a User 13

8 Create a new Inventory 14
8.1 Groups and Hosts 15

9 Create a Credential 16

10 Setting up a Project 18

11 Create a new Job Template 20

12 Launch it! 22

13 Index 24

14 Copyright © Red Hat, Inc. 25

Index 26

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

The *Automation Controller Quick Setup Guide* covers basic steps for using automation controller and running your first playbook. This document has been updated to include information for the latest release of Automation Controller v4.1.0.

We Need Feedback!

If you spot a typo in this documentation, or if you have thought of a way to make this manual better, we would love to hear from you! Please send an email to: docs@ansible.com

If you have a suggestion, try to be as specific as possible when describing it. If you have found an error, please include the manual's title, chapter number/section number, and some of the surrounding text so we can find it easily. We may not be able to respond to every message sent to us, but you can be sure that we will be reading them all!

Automation Controller Version 4.1.0; December 02, 2021; https://access.redhat.com/

CHAPTER

ONE

QUICK START

Welcome to the Automation Controller Quick Start Guide. At the end of the Quick Start, you will have a functioning controller application that you can use to launch more sophisticated playbooks. You can expect the Quick Start process to take less than thirty minutes.

To begin, you must install Ansible Automation Platform and you must choose a target system where an initial playbook can be deployed (provided by automation controller). Refer to Red Hat Ansible Automation Platform Installation Guide for further instructions.

This first playbook executes simple Ansible tasks, while teaching you how to use the controller, as well as ensuring its proper setup. This can be any sort of system manageable by Ansible, as described in the Managed nodes section of the Ansible documentation.

Note: Ansible Automation Platform is offered on a subscription basis. These subscriptions vary in price and support-levels. For more information about subscriptions and features, see Subscription Types.

CHAPTER

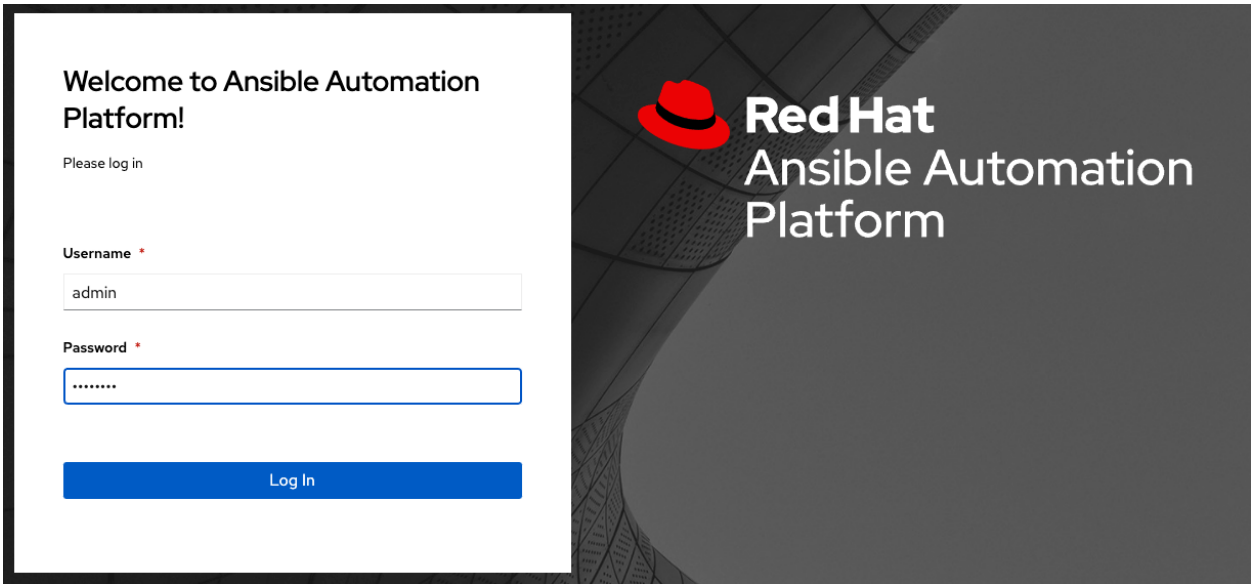
TWO

LOGIN AS A SUPERUSER

Using the login information provided after your installation completed, open a web browser and log in to the controller by browsing to its server URL at: `https://<CONTROLLER_SERVER_NAME>/`

Once the controller UI is accessible, use the credentials specified during the installation process to login. The default username is `admin`. The password for `admin` is the value specified for `admin_password` in your inventory file.

These defaults can be changed later by clicking **Users** from the left navigation bar.



CHAPTER

THREE

IMPORT A SUBSCRIPTION

Available subscriptions or a subscription manifest authorize the use of the automation controller. To obtain your automation controller subscription, you can either:

1. Provide your Red Hat or Satellite username and password on the license page.
2. Obtain a subscriptions manifest from your Subscription Allocations page on the customer portal. See Obtaining a subscriptions manifest in the *Automation Controller User Guide* for more detail.

If you **have** a Red Hat Ansible Automation Platform subscription, use your Red Hat customer credentials when you launch the controller to access your subscription information (see instructions below).

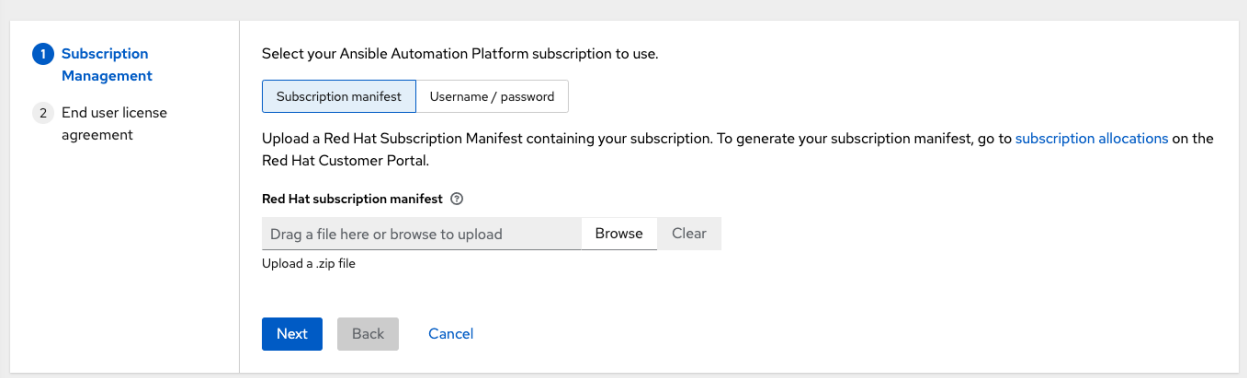
If you **do not** have a Red Hat Ansible Automation Platform subscription, you can request a trial subscription here or click **Request Subscription** and follow the instructions to request one.

Disconnected environments with Satellite will be able to use the login flow on vm-based installations if they have configured subscription manager on the controller instance to connect to their Satellite instance. Recommended workarounds for disconnected environments **without Satellite** include [1] downloading a manifest from access.redhat.com in a connected environment, then uploading it to the disconnected controller instance, or [2] connecting to the Internet through a proxy server.

Note: In order to use a disconnected environment, it is necessary to have a valid automation controller entitlement attached to your Satellite organization's manifest. This can be confirmed by using `hammer subscription list \--organization <org_name>`.

If you have issues with the subscription you have received, please contact your Sales Account Manager or Red Hat Customer Service at https://access.redhat.com/support/contact/customerService/.

When the controller launches for the first time, the Subscription screen automatically displays.



1. By default, the option to retrieve and import your subscription is to upload a subscription manifest you generate from https://access.redhat.com/management/subscription_allocations. See Obtaining a subscriptions manifest

for more detail. Once you have a subscription manifest, you can upload it by browsing to the location where the file is saved (the subscription manifest is the complete .zip file, not its component parts).

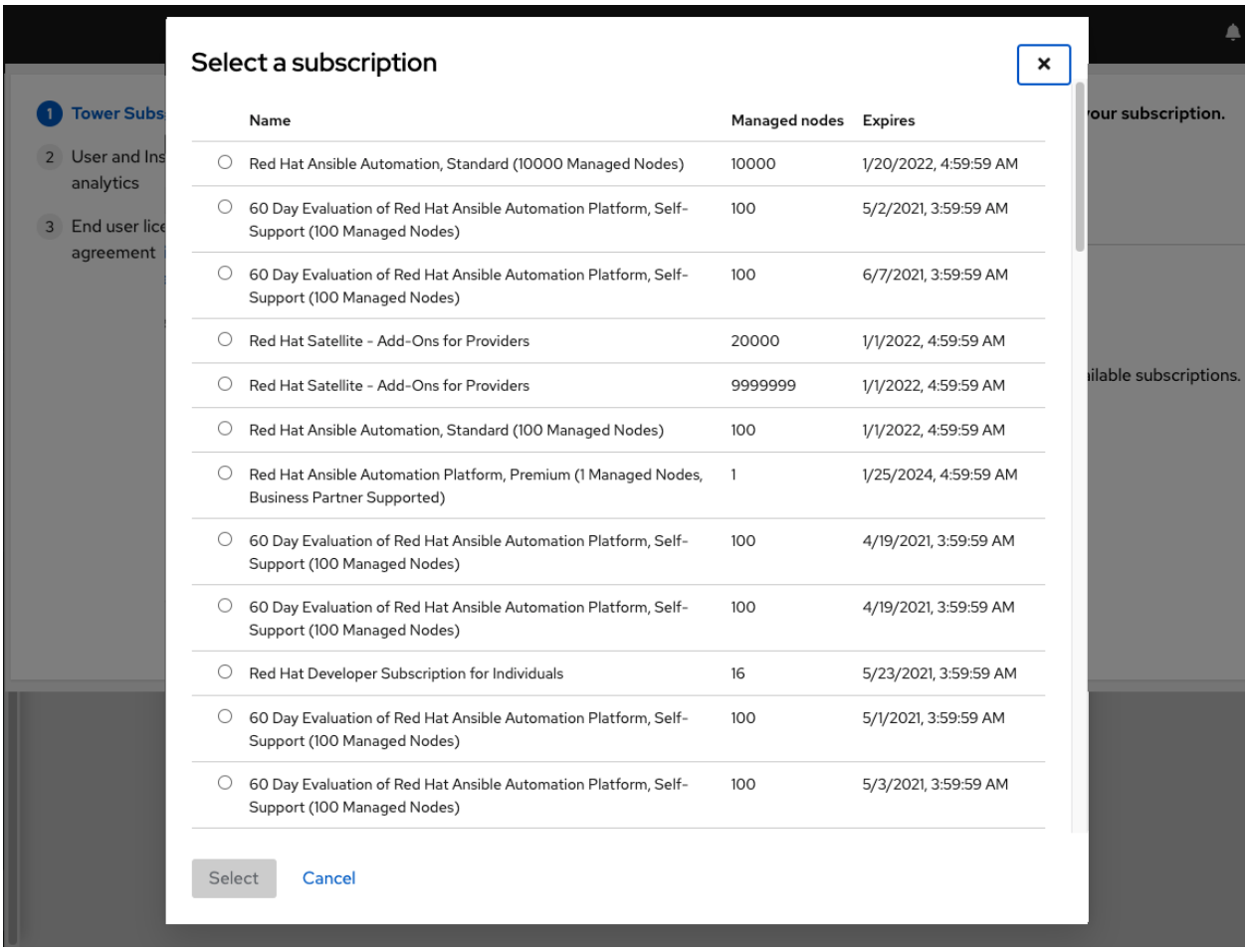
Note: If the **Browse** button in the subscription manifest option is grayed-out, clear the username and password fields to enable the **Browse** button.

Alternatively, you can choose the option to enter your Red Hat customer credentials using your username and password. Use your Satellite username/password if your controller cluster nodes are registered to Satellite via Subscription Manager. Once you entered your credentials, click **Get Subscriptions**.

2. The subscription metadata is then retrieved from the RHSM/Satellite API, or from the manifest provided.

- If it is a subscription manifest, and multiple subscription counts were applied in a single installation, the controller will combine the counts but use the earliest expiration date as the expiry (at which point you will need to refresh your subscription).
- If you entered your credential information (username/password), the controller retrieves your configured subscription service. Then it prompts you to choose the subscription you want to run (the example below shows multiple subscriptions) and entitles the controller with that metadata. You can log in over time and retrieve new subscriptions if you have renewed.

Note: When your subscription expires (you can check this in the Subscription details of the Subscription settings window), you will need to renew it in the controller by one of these two methods.



If you encounter the following error message, you will need the proper permissions required for the Satellite user with which the controller admin uses to apply a subscription.

The Satellite username/password is used to query the Satellite API for existing subscriptions. From the Satellite API, the automation controller gets back some metadata about those subscriptions, then filter through to find valid subscriptions that you could apply, which are then displayed as valid subscription options in the UI.

The following Satellite roles grant proper access:

- Custom with `view_subscriptions` and `view_organizations` filter
- Viewer
- Administrator
- Organization Admin
- Manager

As the *Custom* role is the most restrictive of these, this is the recommend role to use for your controller integration. Refer to the Satellite documentation on managing users and roles for more detail.

Note: The System Administrator role is not equivalent to the Administrator user checkbox, and will not provide sufficient permissions to access the subscriptions API page.

---

3. Click **Next** to proceed to **Tracking and Insights**. Tracking and insights collect data to help Red Hat improve the product by delivering you a much better user experience. For more information about data collection, refer to Usability Analytics and Data Collection. This option is checked by default, but you may opt out of any of the following:

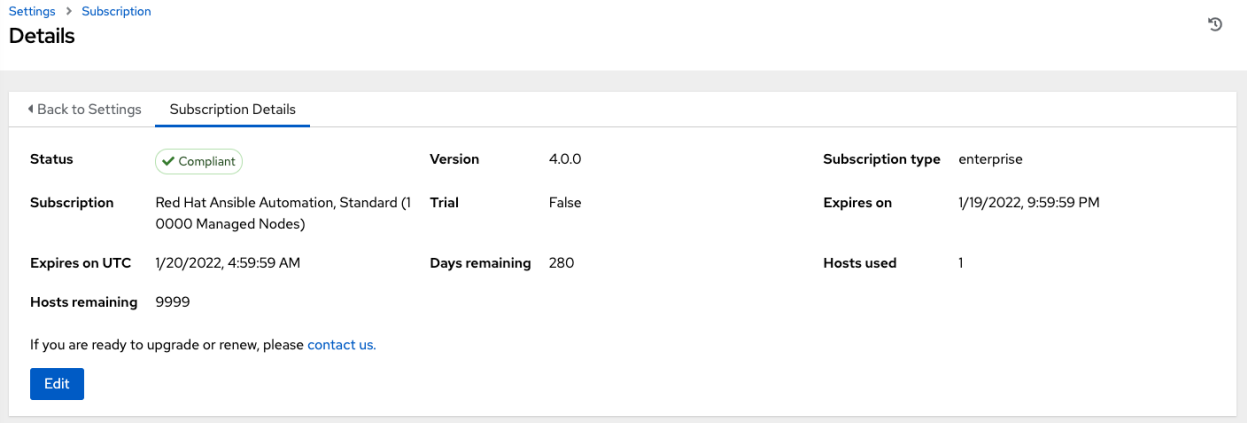
- **User analytics** collects data from the controller User Interface.
- **Insights Analytics** provides a high level analysis of your automation with automation controller, which is used to help you identify trends and anomalous use of the controller. For opt-in of Automation Analytics to have any effect, your instance of automation controller **must** be running on Red Hat Enterprise Linux. See instructions described in the Automation Analytics section. If you select to opt-in for this option, the screen expands and prompts for a username and password to enable Insights, if applicable.

Note: You may change your analytics data collection preferences at any time, as described in the Usability Analytics and Data Collection section.

---

4. After you have specified your tracking and insights preferences, click **Next** to proceed to the End User Agreement.
5. Review and check the **I agree to the End User License Agreement** checkbox and click **Submit**.

Once your subscription has been accepted, the controller briefly displays the subscription details and navigates you to the Dashboard of the automation controller interface. For later reference, you can return to this screen by clicking **Settings** from the left navigation bar and select **Subscription settings** from the Subscription option.



CHAPTER

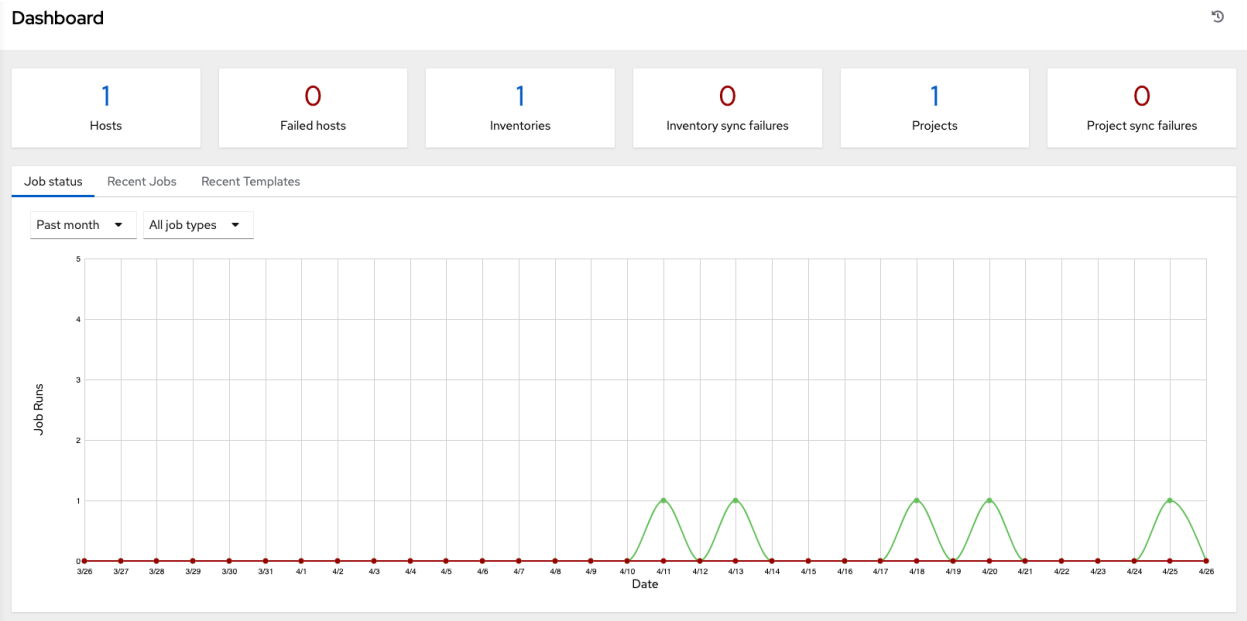
FOUR

EXAMINE THE CONTROLLER DASHBOARD

The Dashboard offers a friendly graphical framework for your IT orchestration needs. Along the left side of the Dashboard is the navigation menu, where you can quickly display different views, navigate to your resources, grant access, and administer certain controller features in the UI.

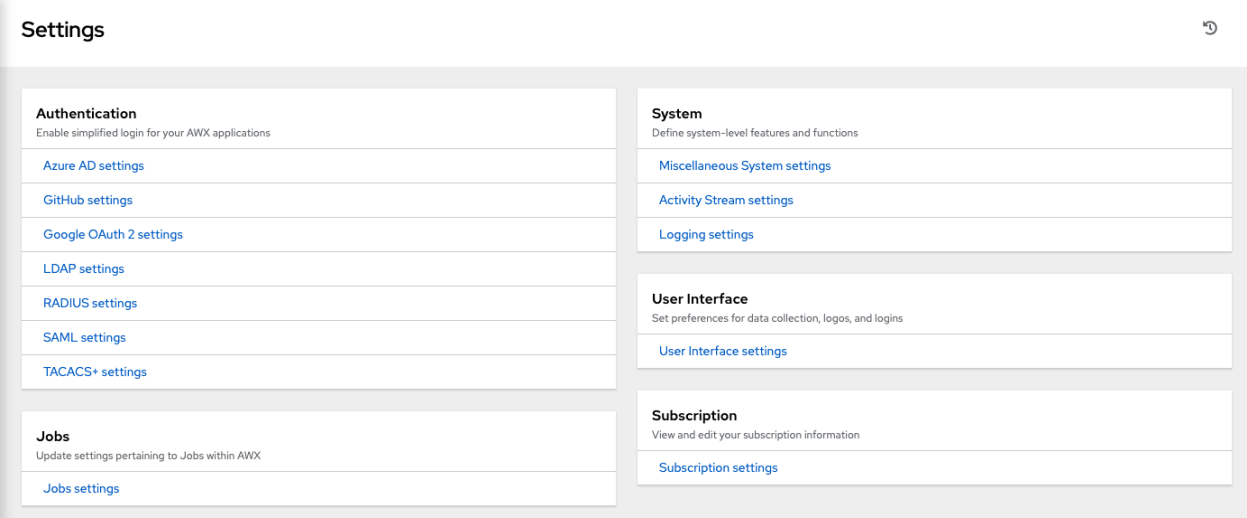
Click on the Menu icon at the top of the left navigation to hide or display the navigation bar.

On the main Dashboard view, a summary appears listing your current **Job Status**. You can filter the job status within a period of time or by job type. Also available in their respective tabs are summaries of **Recent Jobs** ran and **Recent Templates** used. These can be sorted by various attributes.



The very last item in the navigation bar is **Settings**, which provides access to the controller configuration Settings.

The Settings page allows administrators to configure authentication, jobs, system-level attributes, customize the user interface, and product license information. Refer to Controller Configuration section for more detail.



Regardless of the window or action you're performing, the very top of each page next to the your user icon is the About ( ) icon, which provides you the versions of automation controller and Ansible you are currently running.

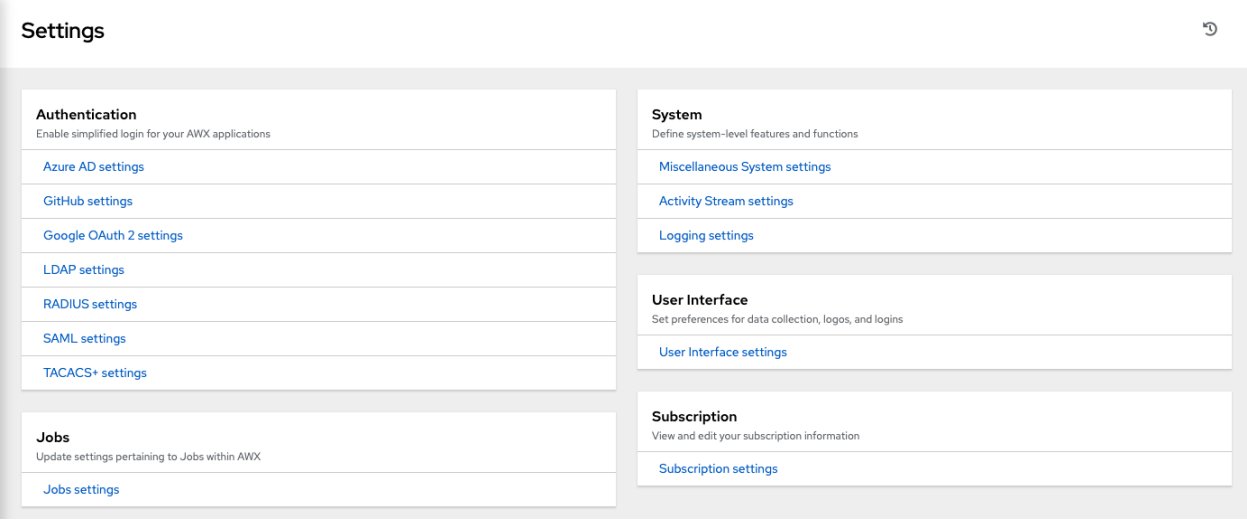
Note: Keep in mind that the goal of this Quick Start is to launch a simple playbook. To do this, a number of configuration options must be setup. Completing the quick start configuration tasks now ensures that the controller is configured properly and allows for easier executions of more involved playbooks later on.

CHAPTER

FIVE

THE SETTINGS PAGE

To enter the Settings window for automation controller, click **Settings** from the left navigation bar. This page allows you to modify your controller's configuration, such as settings associated with authentication, jobs, system, user interface, and view or retrieve your subscription information.



For more information on configuring these settings, refer to Controller Configuration section of the *Automation Controller Administration Guide*.

CHAPTER

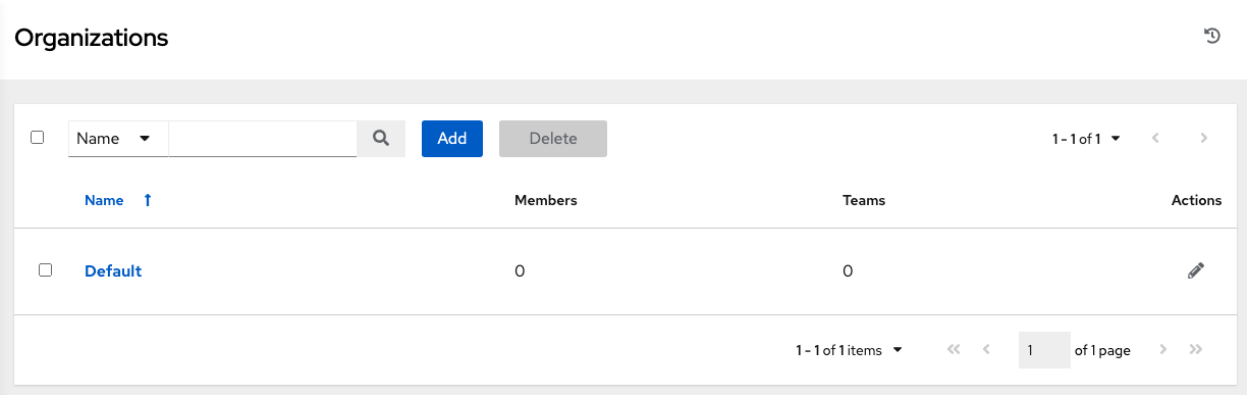
SIX

REVIEW THE ORGANIZATION

An organization is a logical collection of users, teams, projects, and inventories. It is the highest level object in the controller object hierarchy.

From the left navigation bar, click **Organizations**.

Note: The automation controller creates a default organization automatically. Users of Tower with a Self-support level license only have the default organization available and should **not** delete it.

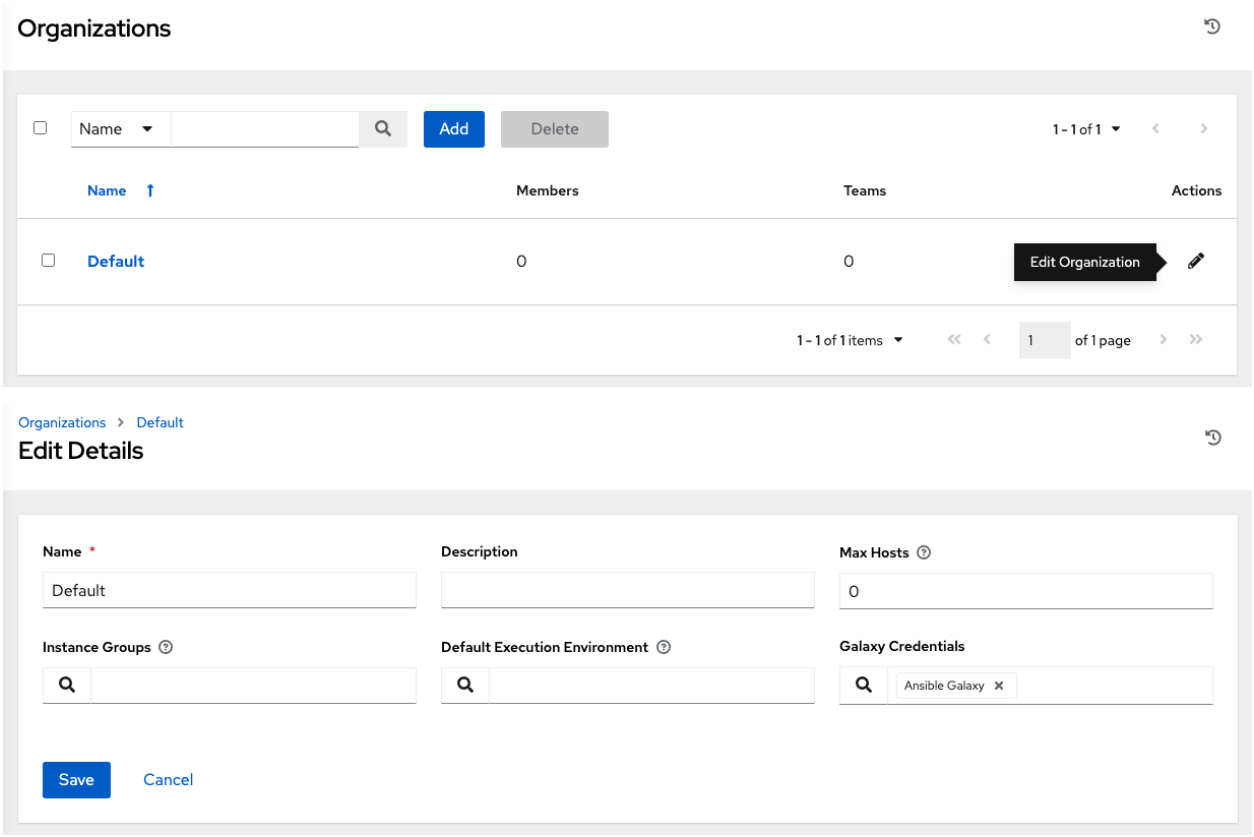


A default organization has been automatically created and is available to all users of the automation controller. It can be used as is or edited later as needed.

For the purpose of this Quick Start Guide, leave the default organization as is.

Note: If you are using the controller with a Basic subscription, you must use the default organization. Only Enterprise or Premium licenses have the ability to add new organizations beyond the default.

To edit the default organization later, expand its properties by clicking the Edit ( ) button and entering the appropriate details, then save your changes.



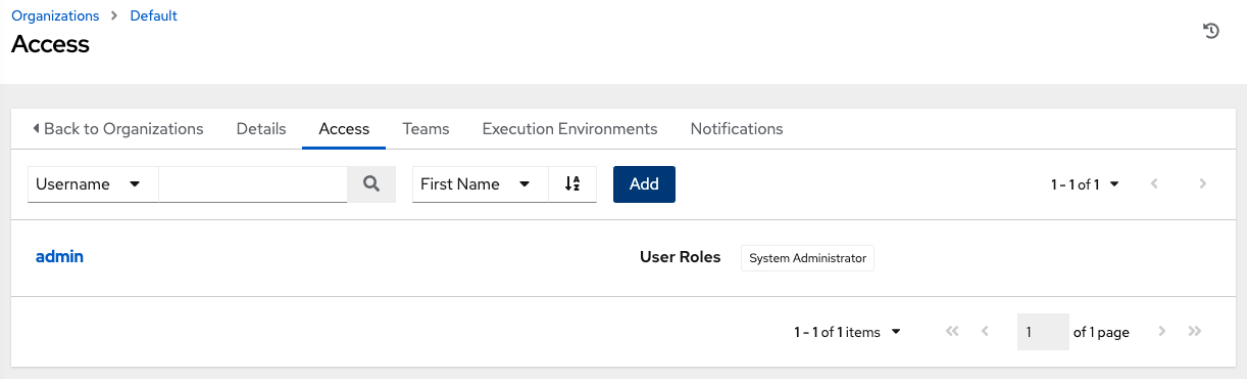
Enterprise and Premium license users who want to add a new organization should refer to the Organizations section in the *Automation Controller User Guide*.

CHAPTER

SEVEN

CREATE A USER

Users associated with an organization are shown in the **Access** tab of the Organization.



A default *admin* user with the role of System Administrator has been automatically created and is available to all users of automation controller. It can be used as is or edited later as needed. You may add other users to an organization, but you must create the user(s) first. Refer to the Users section in the *Automation Controller User Guide* for detail.

For the purpose of this Quick Start Guide, leave the default user as is.

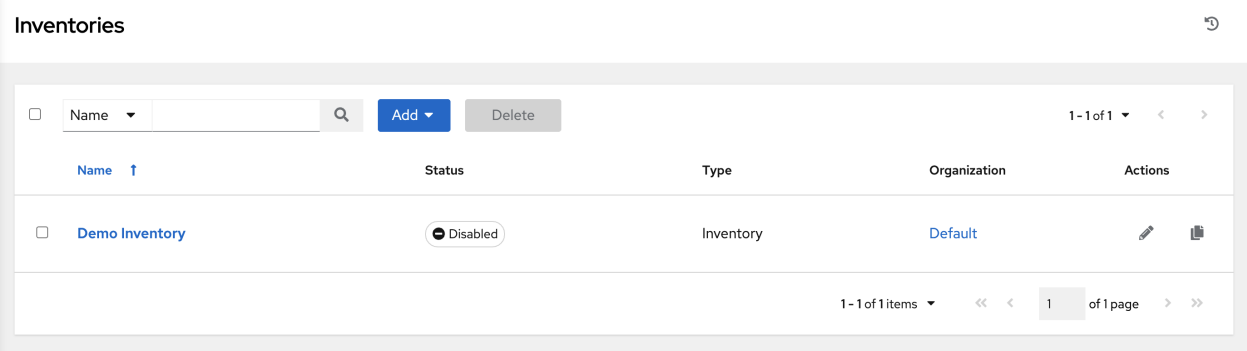
CHAPTER

EIGHT

CREATE A NEW INVENTORY

An inventory is a collection of hosts managed by the controller. Organizations are assigned to inventories, while permissions to launch playbooks against inventories are controlled at the user and/or team level. For more information, refer to Inventories, Users - Permissions, and Teams - Permissions in the *Automation Controller User Guide*.

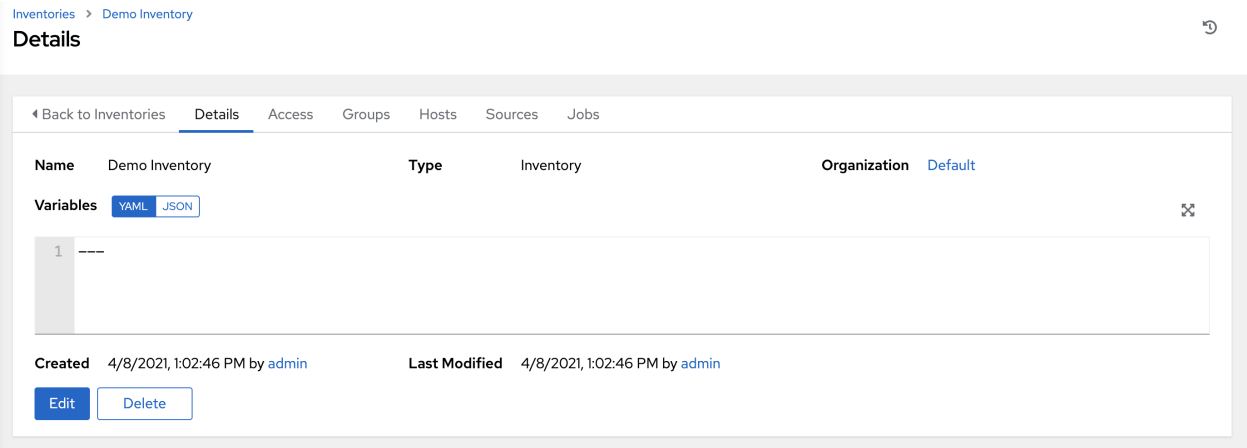
To view existing inventories, click **Inventories** from the left navigation bar.



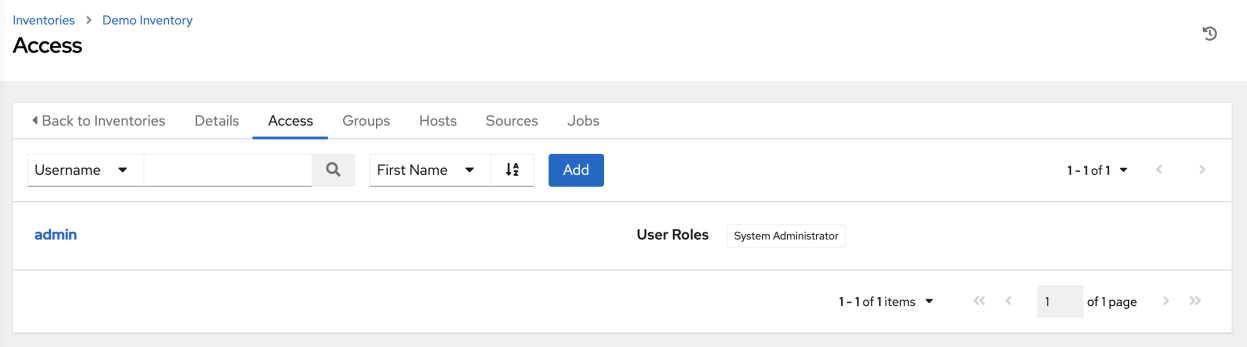
automation controller provides a demo inventory for you to use as you learn how the controller works. It can be used as is or edited later as needed. You may create another inventory if necessary. Refer to Add a new inventory in the *Automation Controller User Guide* for detail.

For the purpose of this Quick Start Guide, leave the default inventory as is.

Click **Demo Inventory** to view its details.



As with organizations, inventories also have associated users and teams that you can view through the **Access** tab.



A default admin user with the role of System Administrator has been automatically populated for this demo inventory.

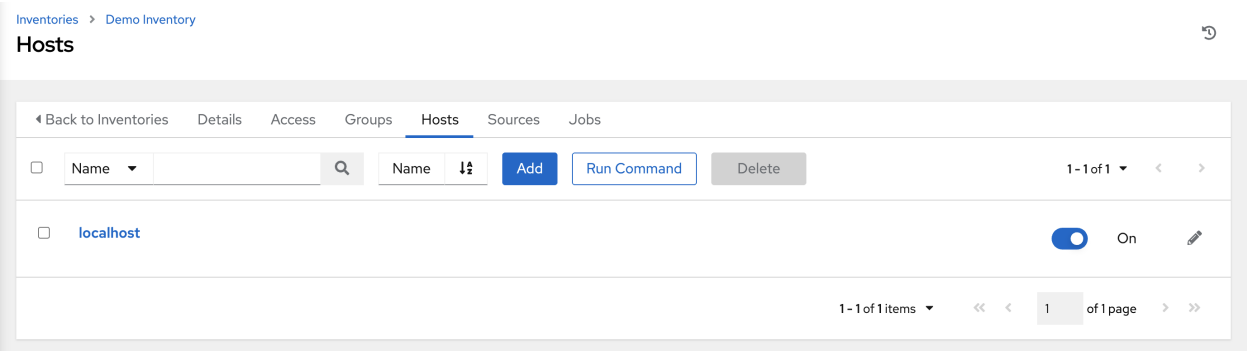
8.1 Groups and Hosts

Note that inventories are divided into groups and hosts. A group might represent a particular environment (e.g. "Datacenter 1" or "Stage Testing"), a server type (e.g. "Application Servers" or "DB Servers"), or any other representation of your environment. The groups and hosts that belong to the Demo inventory are shown in the **Groups** and **Hosts** tabs, respectively.

To add new groups, click the **Add** button in the Groups screen.

Similarly, in the **Hosts** tab, click the **Add** button to add hosts to groups.

For the purposes of this Quick Start and to test that the controller is setup properly, a local host has been added for your use.



Suppose that the organization you created earlier has a group of web server hosts supporting a particular application. To add these hosts to the inventory, create a group and add the web server hosts.

Click **Cancel** (if no changes were made) or use the breadcrumb navigational links at the top of the automation controller browser to return to the Inventories list view. Clicking **Save** does not exit the Details dialog.

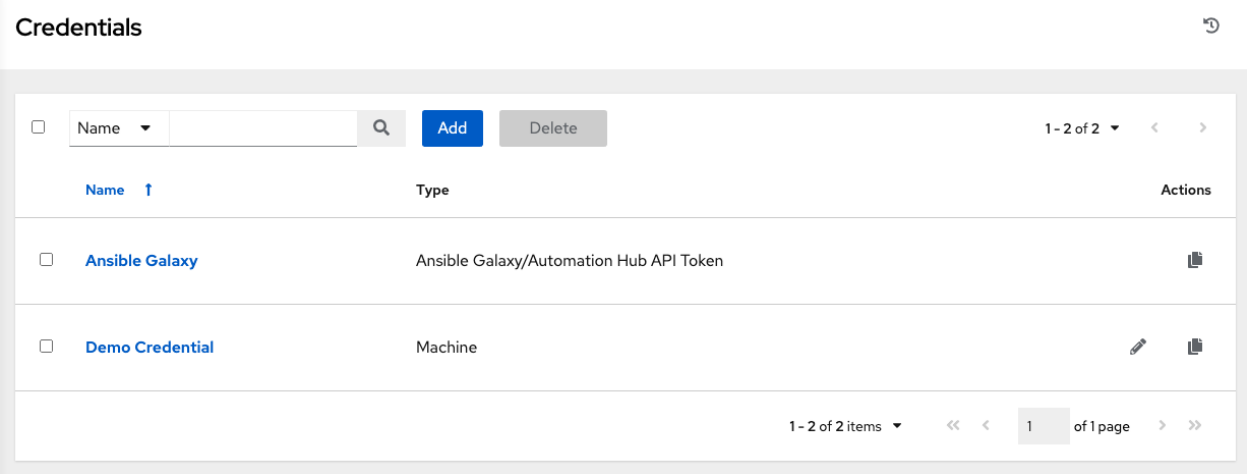
CHAPTER

NINE

CREATE A CREDENTIAL

Credentials authenticate the controller user to launch Ansible playbooks, which can include passwords and SSH keys, against inventory hosts. You can also require the controller user to enter a password or key phrase when a playbook launches using the credentials feature of the controller.

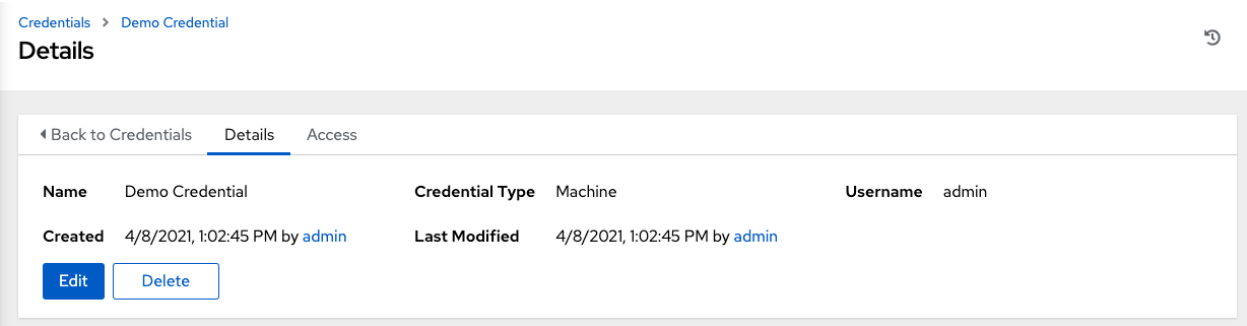
Access the list of credentials by clicking **Credentials** from the left navigation bar.



For the purpose of this Quick Start, a demo credential and a Galaxy credential have been provided for your use. The provided Galaxy credential serves as a template and can only be copied and not edited. You may add more credentials as necessary. Refer to Add a New Credential in the *Automation Controller User Guide* for detail.

Note: When setting up additional credentials, keep in mind that the user you assign must have root access or be able to use SSH to connect to the host machine.

Click **Demo Credential** to view its details.



For the purpose of this Quick Start Guide, leave the default demo credential as is. But to edit the default credential later - from the Details tab, click **Edit**, or from the Credentials list view, click the Edit ( ) button next to the credential name to edit the appropriate details, then save your changes.

CHAPTER

TEN

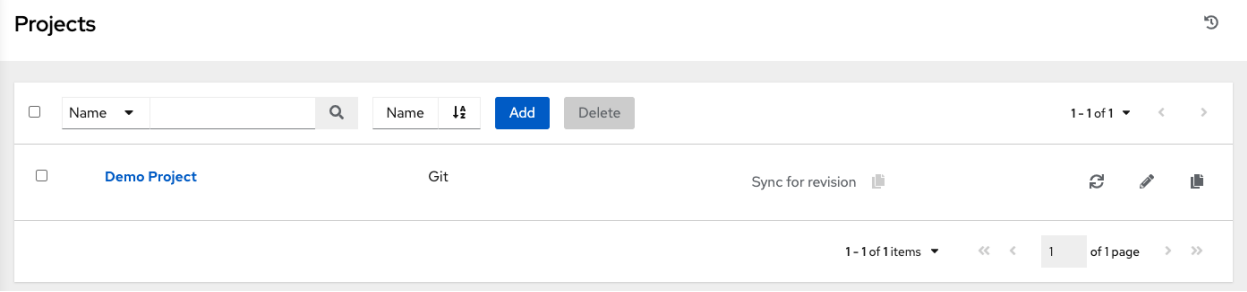
SETTING UP A PROJECT

A Project is a logical collection of Ansible playbooks, represented in the controller.

You can manage playbooks and playbook directories by either placing them manually under the Project Base Path on your controller server, or by placing your playbooks into a source code management (SCM) system supported by the controller, including Git, Subversion, and Mercurial.

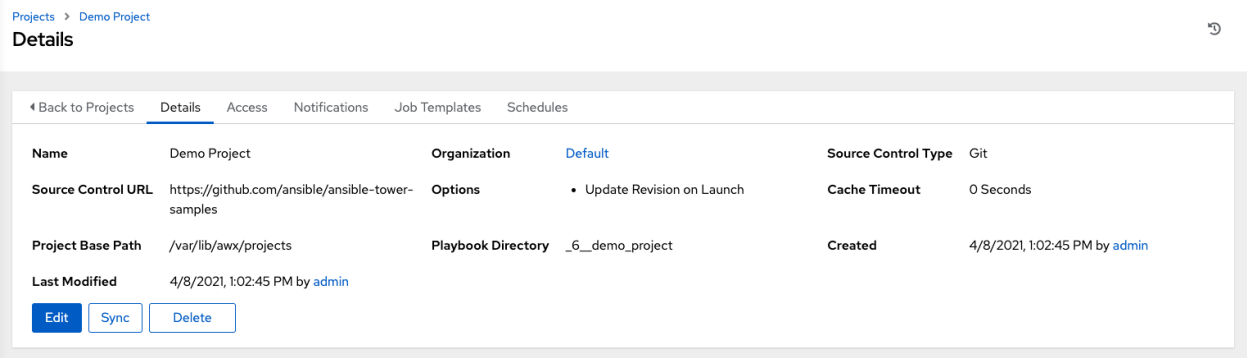
Note: It is recommended that, whenever possible, you use source control to manage your playbooks. This type of best practice provides the ability to treat your infrastructure as code and is in line with DevOps ideals. While this Quick Start Guide uses lightweight examples to get you up and running, we suggest using source control to manage playbook for production purposes.

To review existing projects, click **Projects** from the left navigation bar.



automation controller simplifies the startup process by providing you with a Demo Project to work with initially.

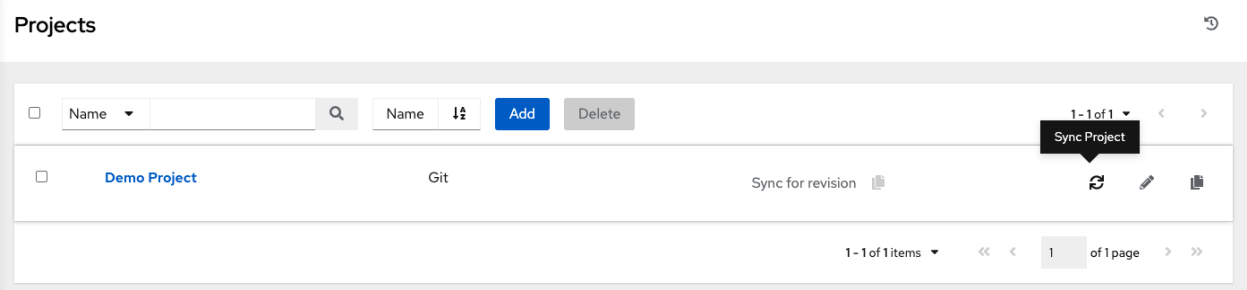
Click on **Demo Project** to view its details.



For the purpose of this Quick Start Guide, leave the default demo project as is. But to edit the default project later - from the Details tab, click **Edit**, or from the Projects list view, click the Edit ( ) button next to the project name

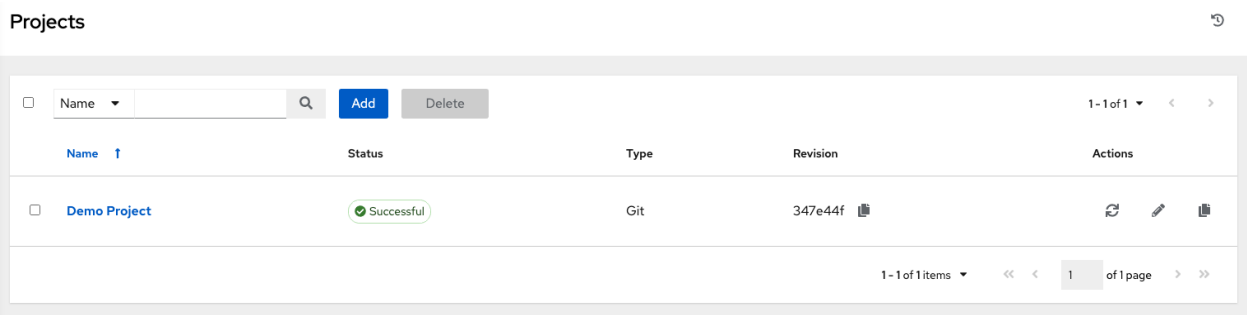
to edit the appropriate details, then save your changes.

Before this project can be used in a job template, you must manually start an SCM sync for this project. Update the SCM-based demo project from the Details tab, click **Sync**, or from the Projects list view, click the Sync ( ) button next to the project name.



Note: Please note that immediately after adding new projects setup to use source control, a "sync" automatically starts that fetches the project details from the configured source control. Because the Demo project is pre-stocked, however, you must manually start the inventory sync in order for this project to be used in a job template.

Notice that the status indicator beside the name of the project and the revision details update once the sync has completed.

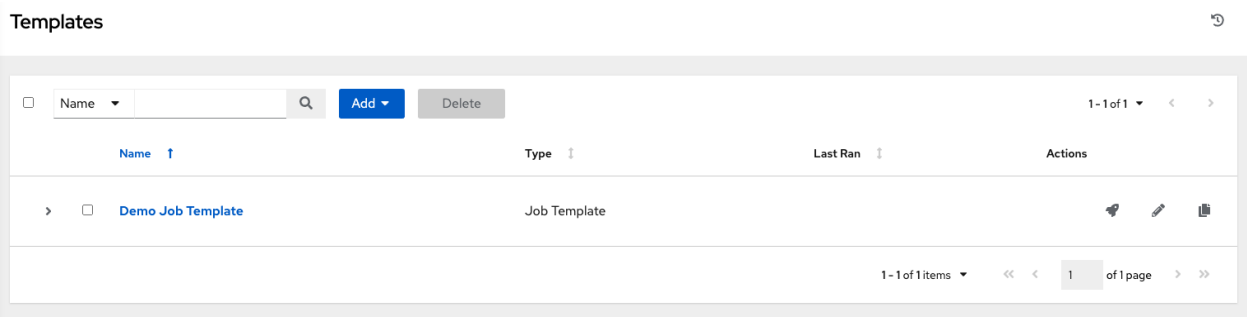


CHAPTER

ELEVEN

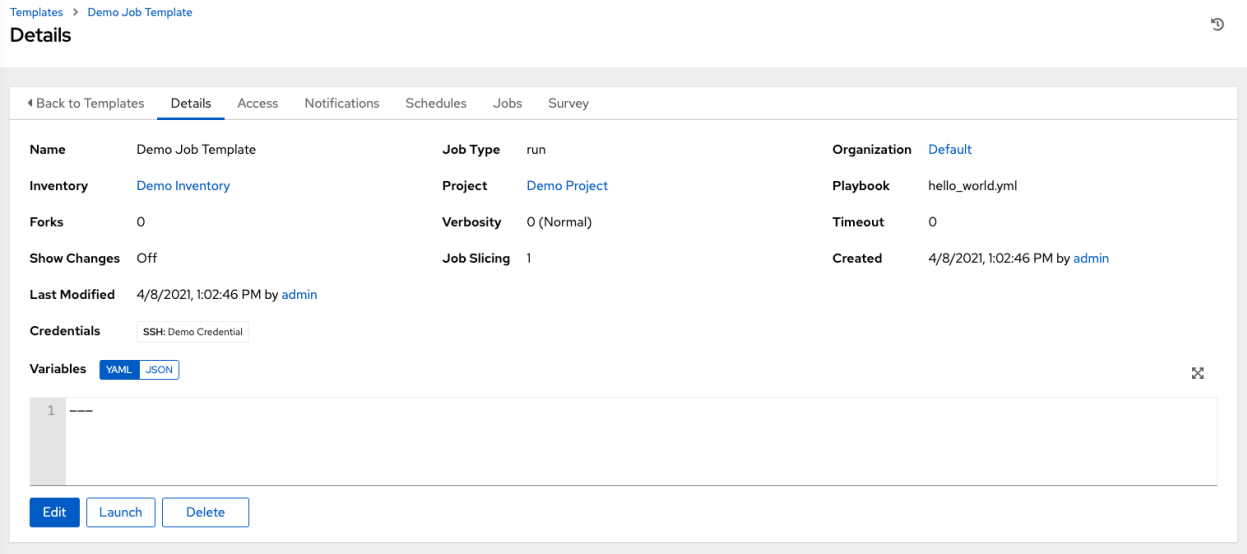
CREATE A NEW JOB TEMPLATE

A job template combines an Ansible playbook from a project and the settings required to launch it. Review existing job templates by clicking **Templates** from the left navigation bar.

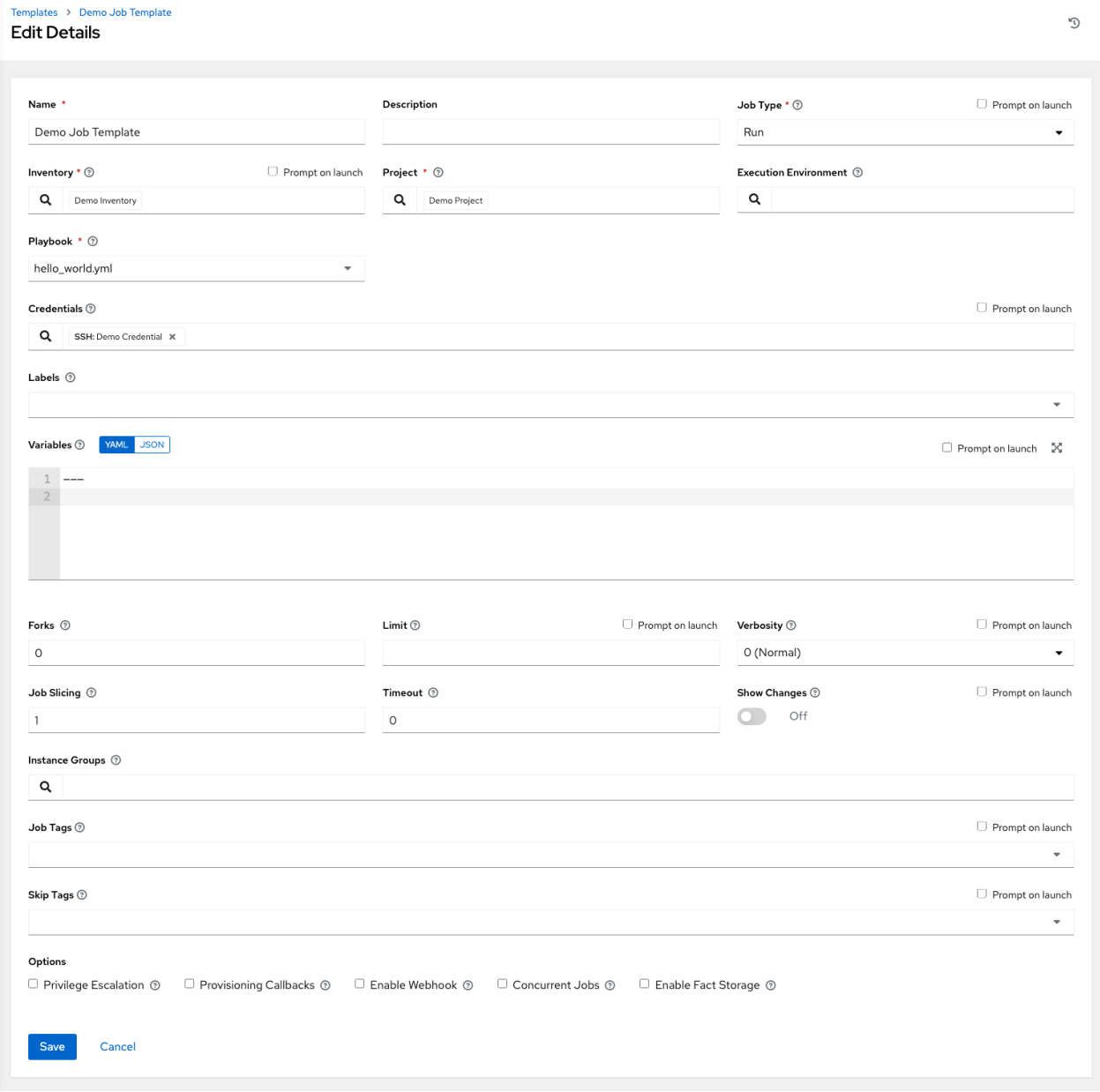


For the purpose of this Quick Start, a Demo Job Template has been created for your initial use.

Click **Demo Job Template** to view its details.



For the purpose of this Quick Start Guide, leave the default demo job template as is. But to edit the default template later - from the Details tab, click **Edit**, or from the Templates list view, click the Edit ( ) button next to the template name to edit the appropriate details, then save your changes.



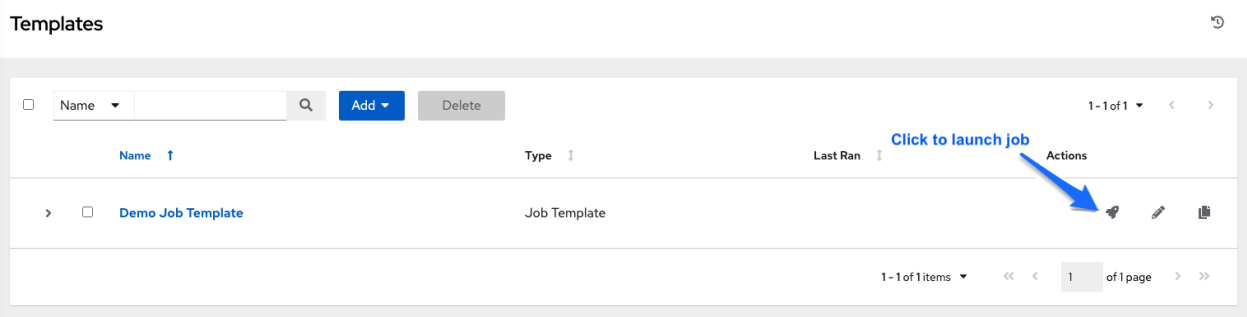
Click **Cancel** (if no changes were made) or use the breadcrumb navigational links at the top of the automation controller browser to return to the Templates list view. Clicking **Save** does not exit the Details dialog.

CHAPTER

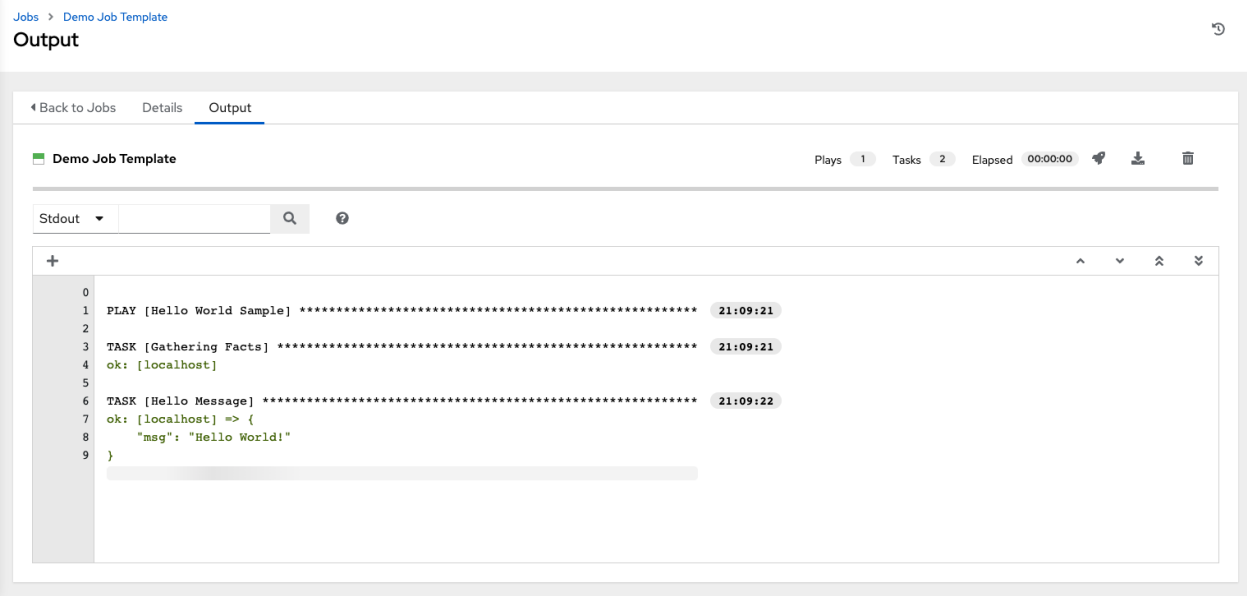
TWELVE

LAUNCH IT!

From the Templates list view, click the Launch ( ) button to run the Demo Job Template.



The initial job launch returns a status page which updates automatically using the controller's Live Event feature until the job is complete. Once complete, the job results look like the following:



For more details on the job results, refer to Jobs.

Congratulations! Your controller installation is officially setup and running properly. To learn more about these controller features or to learn about administration tasks, the controller API, etc., refer to the following documentation sets:

- Automation Controller User Guide

- Red Hat Ansible Automation Platform Installation Guide
- Automation Controller Administration Guide
- Automation Controller API Guide
- Automation Controller Release Notes
- Ansible Documentation

CHAPTER

THIRTEEN

INDEX

- genindex

CHAPTER

FOURTEEN

COPYRIGHT © RED HAT, INC.

Ansible, Ansible Automation Platform, Red Hat, and Red Hat Enterprise Linux are trademarks of Red Hat, Inc., registered in the United States and other countries.

If you distribute this document, or a modified version of it, you must provide attribution to Red Hat, Inc. and provide a link to the original version.

Third Party Rights

Ubuntu and Canonical are registered trademarks of Canonical Ltd.

The CentOS Project is copyright protected. The CentOS Marks are trademarks of Red Hat, Inc. ("Red Hat").

Microsoft, Windows, Windows Azure, and Internet Explore are trademarks of Microsoft, Inc.

VMware is a registered trademark or trademark of VMware, Inc.

Amazon Web Services", "AWS", "Amazon EC2", and "EC2", are trademarks of Amazon Web Services, Inc. or its affiliates.

OpenStack™ and OpenStack logo are trademarks of OpenStack, LLC.

Chrome™ and Google Compute Engine™ service registered trademarks of Google Inc.

Safari® is a registered trademark of Apple, Inc.

Firefox® is a registered trademark of the Mozilla Foundation.

All other trademarks are the property of their respective owners.

INDEX

C

configure the controller
    settings menu, 10
controller
    log in, 3
controller settings menu, 10
credential types
    settings menu, 8
credentials
    create, 16
    settings menu, 8

D

dashboard
    examine, 8

E

examine
    dashboard, 8

H

help about
    settings menu, 8

I

instance groups
    settings menu, 8
inventory
    add to organization, 14
    create new, 14
inventory scripts
    settings menu, 8

J

job templates
    creation, 20
    launch, 22

L

launch
    job templates, 22
license
    import, 4
license, viewing, 10
log in
    controller, 3

M

management jobs
    settings menu, 8

N

notifications
    settings menu, 8

O

organization
    default, 11
    settings menu, 8
organizations, 11

P

projects, 18

Q

quick start, intro, 2

S

settings menu
    configure the controller, 10
    credential types, 8
    credentials, 8
    help about, 8
    instance groups, 8
    inventory scripts, 8
    management jobs, 8
    notifications, 8
    organization, 8
    teams, 8
    users, 8
    view license, 10

T

teams

settings menu, 8

U

users
add new, 13
add to organization, 13
settings menu, 8

V

view license
settings menu, 10