Ansible Tower Quick Setup Guide

Release Ansible Tower 3.6.3

Red Hat, Inc.

Nov 12, 2021

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

The *Ansible Tower Quick Setup Guide* covers basic steps for using Ansible Tower and running your first playbook. This document has been updated to include information for the latest release of Ansible Tower 3.6.3.

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!

Ansible Tower Version 3.6.3; February 20, 2020; https://access.redhat.com/

CHAPTER

ONE

QUICK START

Welcome to the Ansible Tower Quick Start Guide. At the end of the Quick Start, you will have a functioning Tower 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 Tower and you must choose a target system where an initial playbook can be deployed (provided by Ansible Tower). This first playbook executes simple Ansible tasks, while teaching you how to use Tower, as well as ensuring its proper setup. This can be any sort of system manageable by Ansible, as described at: http://docs.ansible.com/intro_installation.html.

Note: Ansible Tower is available in Standard and Premium license types. These licenses vary in price and support-levels. For more information about licenses and features, refer to Licensing, Updates, and Support in the Tower Installation and Reference Guide.

CHAPTER

TWO

LOGIN AS A SUPERUSER

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

Refer to The Setup Playbook in the *Tower Installation and Reference Guide* for more information.

Note: Tower installs a self-signed certificate for HTTPS communication which may require acceptance in your browser. Refer to the General Installation Notes in the *Tower Installation and Reference Guide* for help with replacing this certificate if needed.

Log in using the username and password set during the installation process. By default, this is username: *admin* and password: *password*.

These defaults can be changed later by clicking the Users ( ) icon from the left navigation bar.

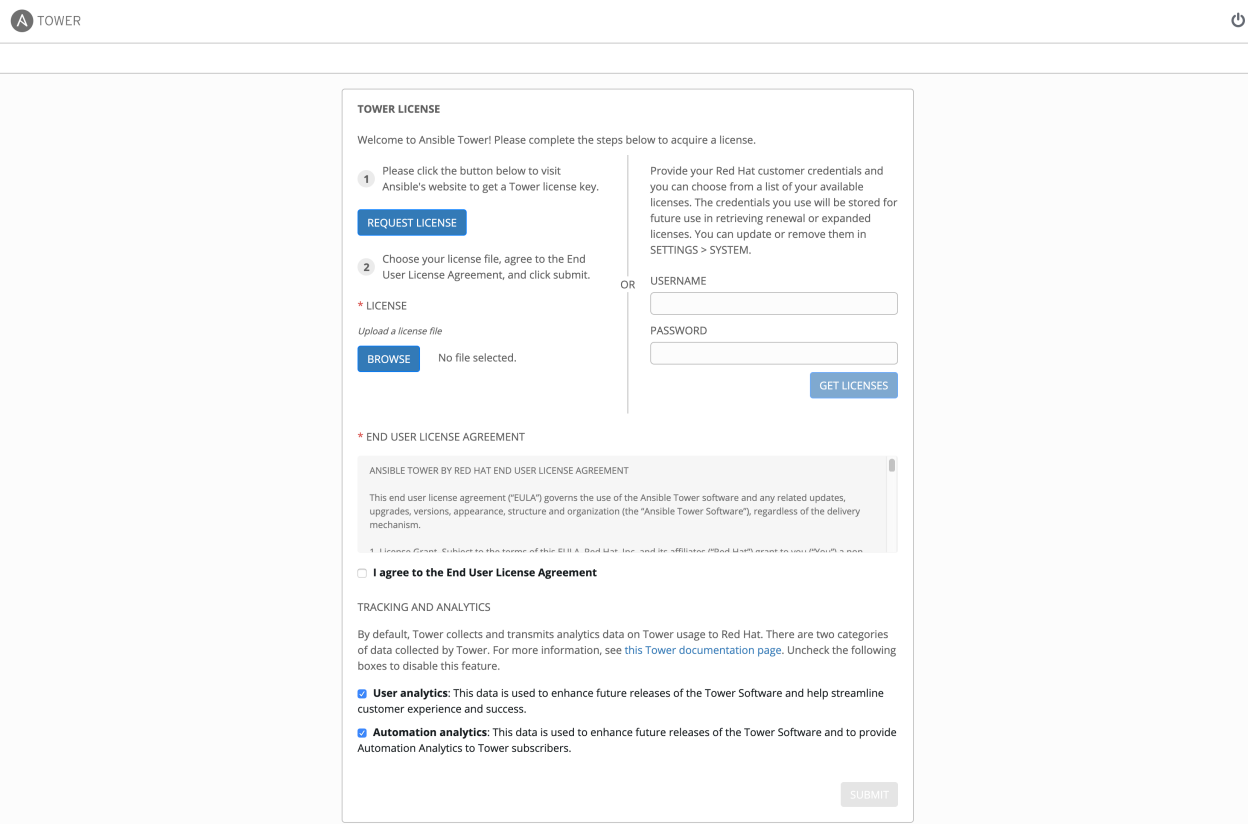
CHAPTER

THREE

IMPORT A LICENSE

Tower requires a valid subscription to run. If you do not already have one, request one from the initial screen when you launch Tower. If you have issues with your subscription, contact Red Hat via the Red Hat Customer portal at https://access.redhat.com/.

Note: To successfully add your license, you must be logged on as the Superuser. Otherwise, the operation will fail.



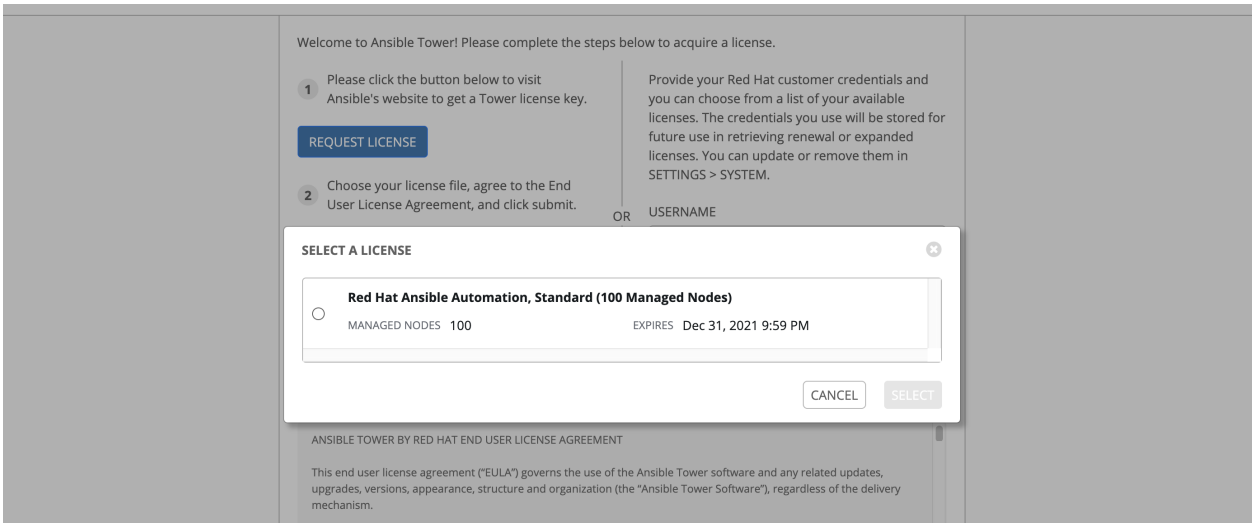
When Tower launches for the first time, the license screen automatically displays. Use your Red Hat credentials to retrieve and import your subscription, or import the license key you received from Red Hat:

1. Enter your Red Hat customer credentials on the right side of the screen. Alternatively, if you have a license file, click the **Browse** button and navigate to the location where the license file is saved to upload it. The uploaded license may be a plain text file or a JSON file, and must include properly formatted JSON code.

Note: The license import will work for Tower nodes with RHEL only. For non-RHEL (e.g. CentOS based Tower nodes), activate the license using the license file instead. When using Red Hat customer credentials, you must use your Red Hat username and password, not your Red Hat account email address and password.

2. If you entered your credential information, click **Get Licenses**.

Once your credential information (or license) is recognized, and you are on RHEL 7 and later, you will see a prompt with your Red Hat subscription(s). Choose the subscription you want to run (the example below has only one subscription). You can log in over time and retrieve new subscriptions if you have renewed.



Other non-RHEL subscribers, after uploading the license file, proceed by checking the **End User License Agreement**.

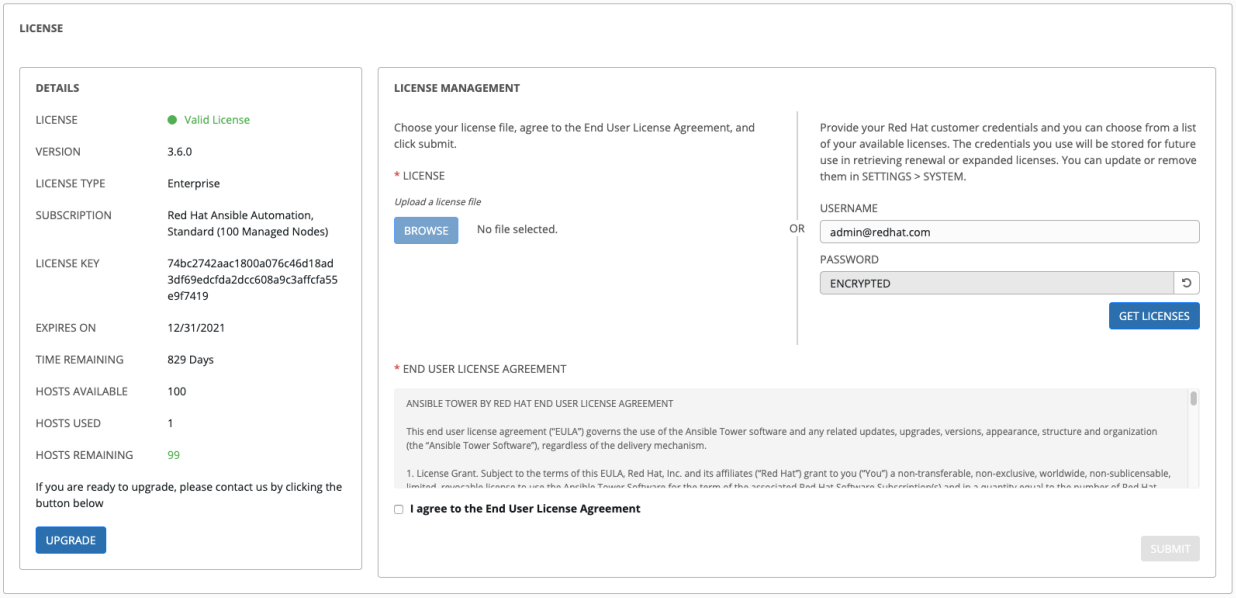
3. The bottom half of the license screen involves analytics data collection. This helps Red Hat improve the product by delivering you a much better user experience. For more information about data collection, refer to Usability Analytics and Data Collection. This option is checked by default, but you may opt out of any of the following:

- **User analytics** collects data from the Tower User Interface.
- **Automation analytics** provides a high level analysis of your automation with Ansible Tower, which is used to help you identify trends and anomalous use of Tower. For opt-in of Automation Analytics to have any effect, your instance of Ansible Tower **must** be running on Red Hat Enterprise Linux. See instructions described in the Automation Analytics section.

Note: At this time, Automation Insights is not supported when Ansible Tower is running in the OpenShift Container Platform. 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 analytics preferences, click **Submit**.

Once your license has been accepted, Tower briefly displays the license screen and navigates you to the Dashboard of the Ansible Tower interface (which you can access by clicking on the Ansible Tower logo at the top left of the screen as well).



For later reference, you can return to the license screen by clicking the Settings ( ) icon from the left navigation bar and select the **License** tab from the Settings screen.

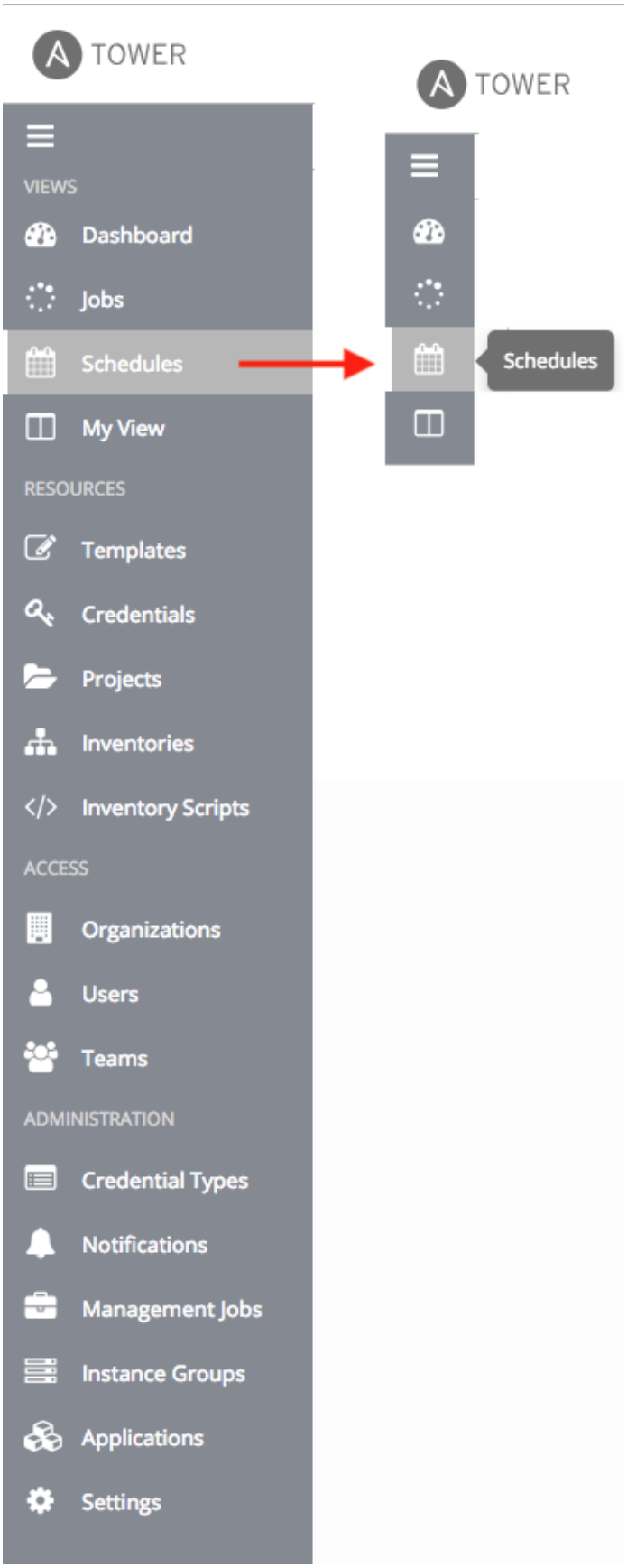
CHAPTER

FOUR

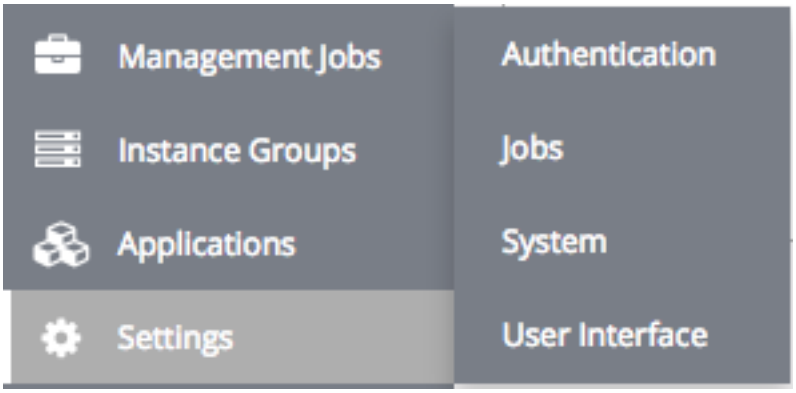
EXAMINE THE TOWER DASHBOARD

The Tower Dashboard offers a friendly graphical framework for your IT orchestration needs. Along the left side of the Tower Dashboard is the navigation menu, where you can quickly navigate to your **Projects**, **Inventories**, **Job Templates**, and **Jobs**. Access to these elements are no longer in the settings ( ) menu.

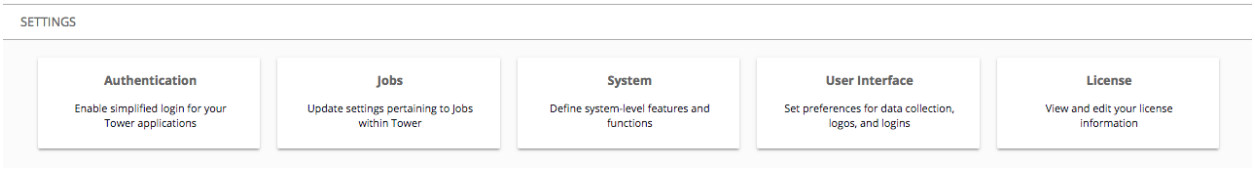
Click on the Menu icon at the top of the left navigation and the navigation bar expands to show icons and labels; and collapses to show only the icons. View the labels without expanding the menu by hovering over the icons.


TOWER
VIEWS
Dashboard
Jobs
Schedules
My View
RESOURCES
Templates
Credentials
Projects
Inventories
Inventory Scripts
ACCESS
Organizations
Users
Teams
ADMINISTRATION
Credential Types
Notifications
Management Jobs
Instance Groups
Applications
Settings
TOWER
Schedules

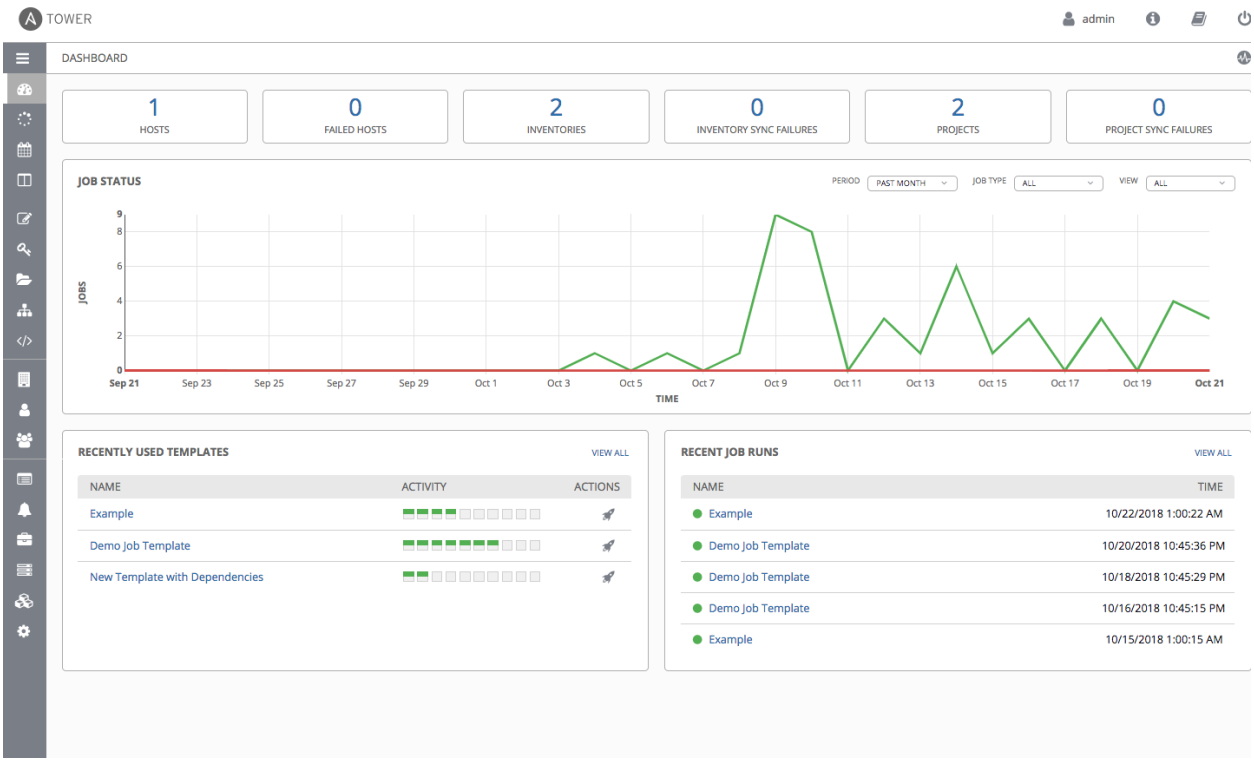
The very last item in the navigation bar is the Settings ( ) icon, which provides access to the Tower configuration Settings.



The Settings page allows administrators to configure authentication, jobs, system-level attributes and customize the user interface. Previous versions of Ansible Tower (3.2.x and older) provide the Settings menu at the top of the interface next to the user and logout buttons. Refer to Tower Configuration section for more detail. Additionally, you can now access the product license information from this page.



On the main Tower Dashboard screen, a summary appears listing your current **Job Status**. Also available for review are summaries of **Recently Used Templates** and **Recent Job Runs**.



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 Ansible Tower and Ansible you are currently running.

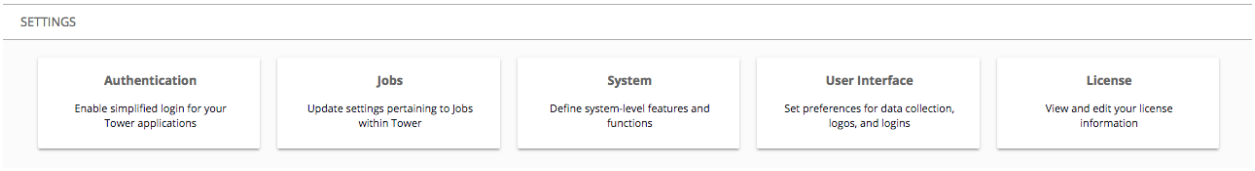
Note: Keep in mind that the goal of this Quick Start is to launch a simple playbook. To do this, a number of configuration options must be setup. Completing the quick start configuration tasks now ensures that Tower is configured properly and allows for easier executions of more involved playbooks later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

CHAPTER

FIVE

THE SETTINGS PAGE

To enter the Settings window for Ansible Tower, click the Settings icon at the bottom of the left navigation bar. This page allows you to modify your Tower's configuration, such as settings associated with authentication, jobs, system, user interface, and view or import your license.



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

CHAPTER

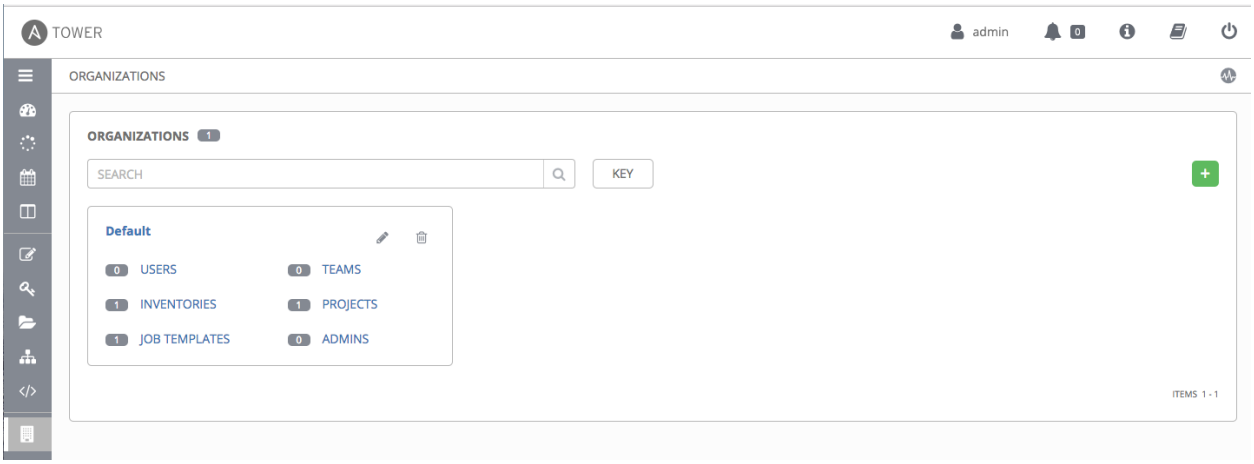
SIX

REVIEW THE ORGANIZATION

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

From the left navigation bar, click the Organizations ( ) icon.

Note: Ansible Tower 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. Users of older versions of Tower (prior to 2.2) will not see this default organization.

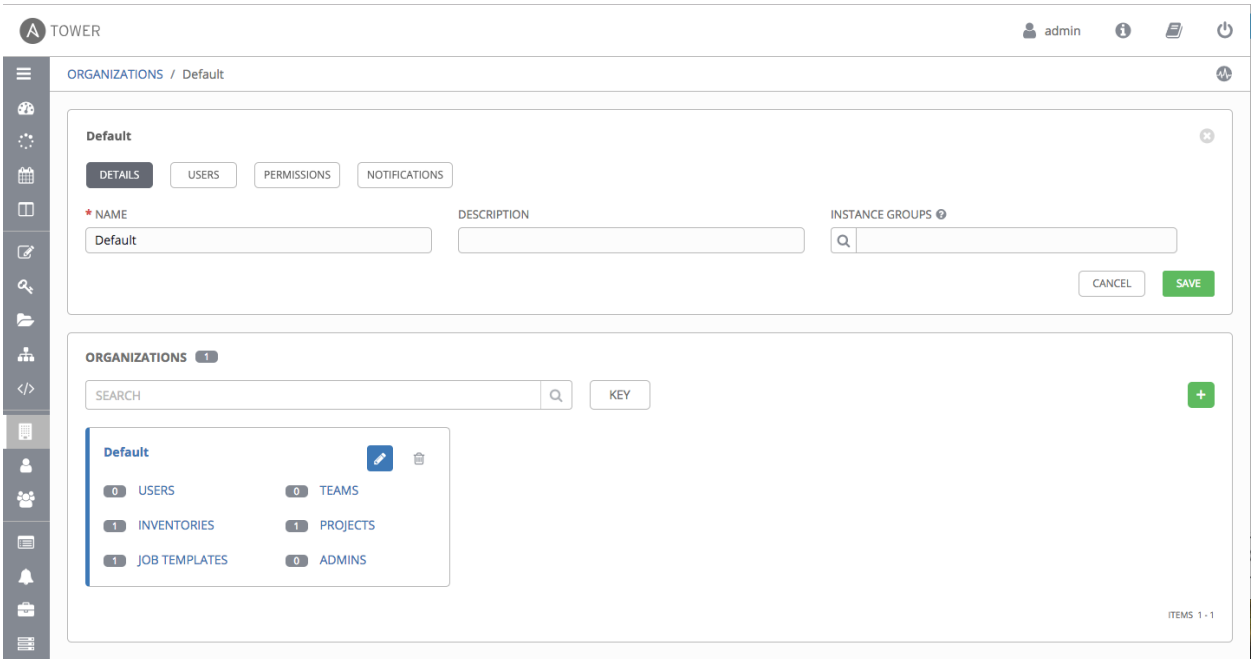


A default organization has been automatically created and is available to all users of Ansible Tower. It can be used as is or edited later as needed.

For the purpose of this Quick Start Guide, leave the default organization as is and click **Save**.

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

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



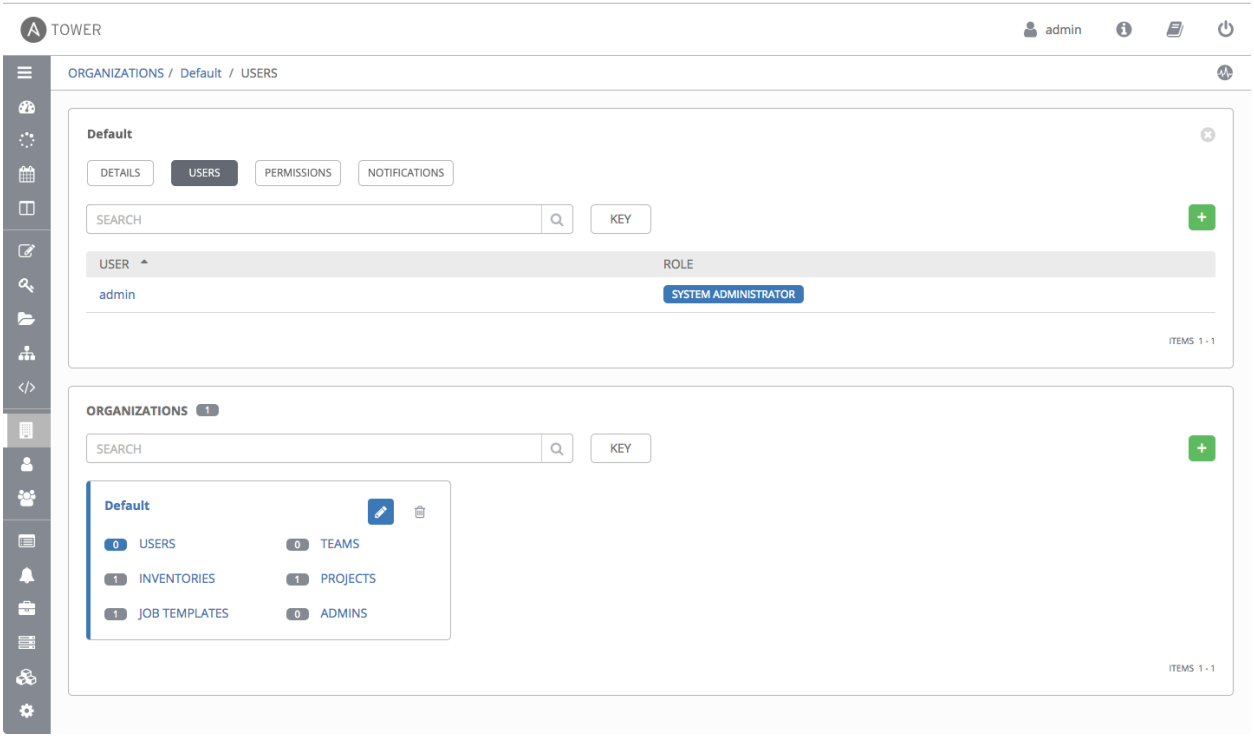
Enterprise and Premium Tower license users who want to add a new organization should refer to the Organizations section in the Tower User Guide.

CHAPTER

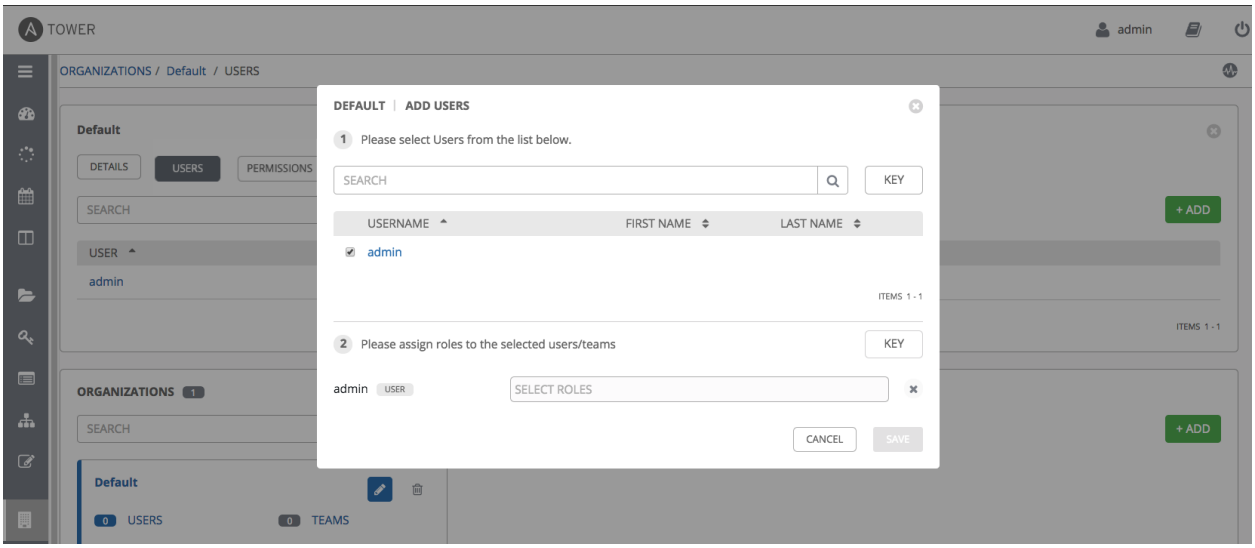
SEVEN

ADD A USER TO THE ORGANIZATION

Expand the Users details by clicking on the **Users** tab of the default organization you just saved (not from the left navigation bar).

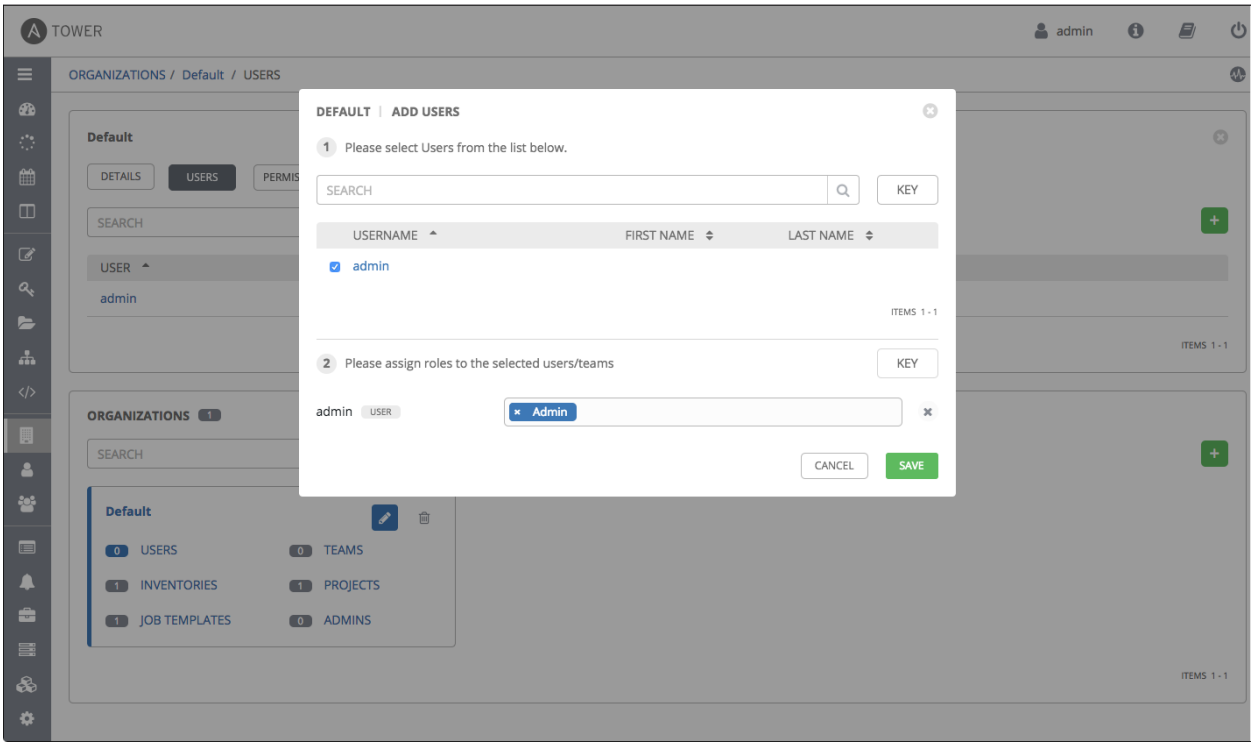


1. To add a user, click the button.
2. Since other users have not yet been created, the “admin” user is the only user listed. Select the checkbox beside the “admin” user to select it for this organization. Doing so expands the lower part of the Wizard to assign roles to the selected user.



3. Click from the drop-down menu to select one or more roles for that user.

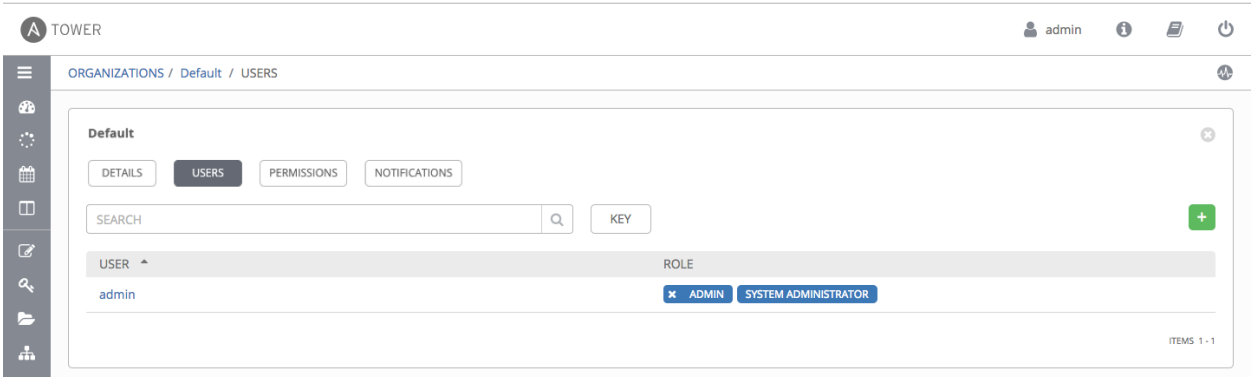
Note: For help on what the roles mean, click the **Key** button. For more information, refer to the Roles section of this guide.



In this example, the admin user has been selected and assigned the admin role within this organization.

4. When done, click **Save**.

After saving, the organization's user information becomes available for viewing and the new user you created appears on the list.


TOWER
admin
ORGANIZATIONS / Default / USERS
Default
DETAILS
USERS
PERMISSIONS
NOTIFICATIONS
SEARCH
KEY
USER
ROLE
admin
ADMIN
SYSTEM ADMINISTRATOR
ITEMS 1 - 1

CHAPTER

EIGHT

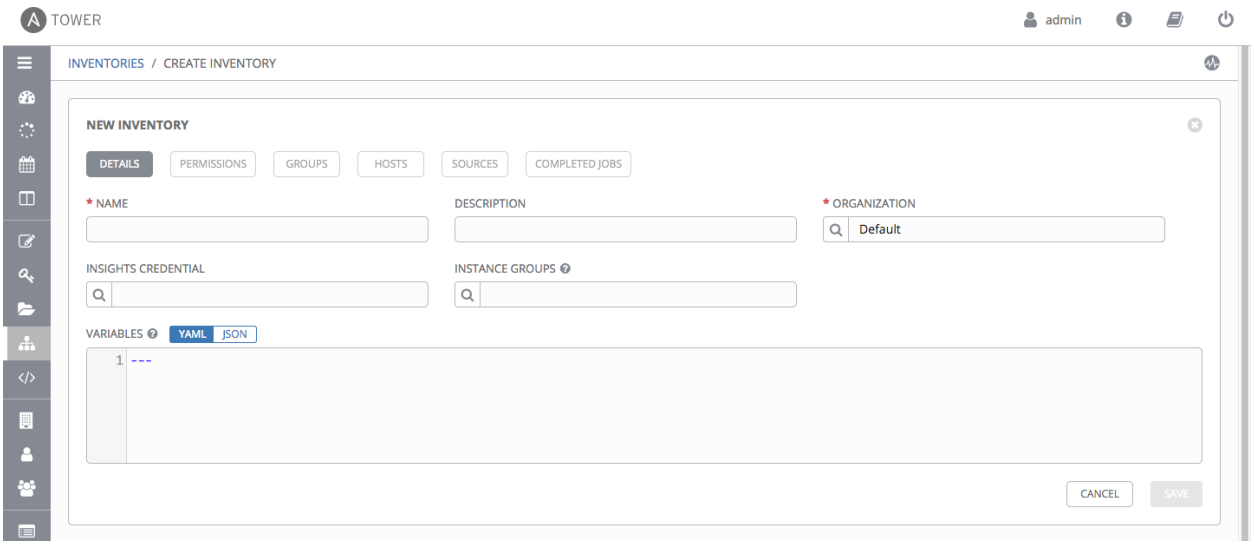
CREATE A NEW INVENTORY AND ADD IT TO THE ORGANIZATION

An inventory is a collection of hosts managed by Tower. Inventories are assigned to organizations, 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 *Ansible Tower User Guide*.

To review existing inventories:

1. Click the Inventories ( ) icon from the left navigation bar.

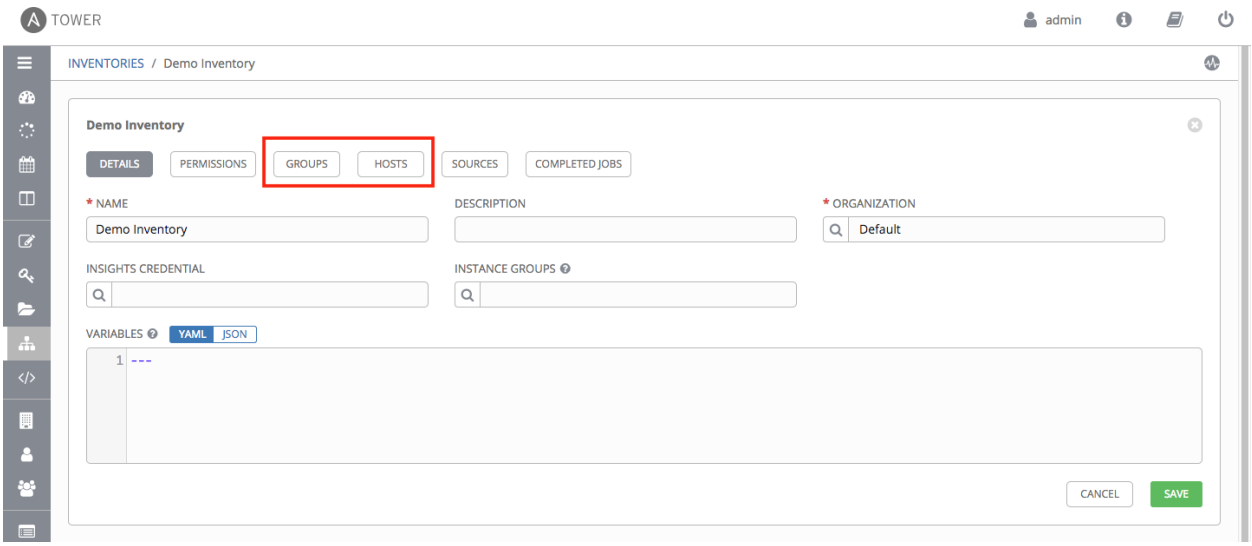
2. Click the button and select **Inventory** from the drop-down menu list. Smart Inventories are described in further detail in Smart Inventories.



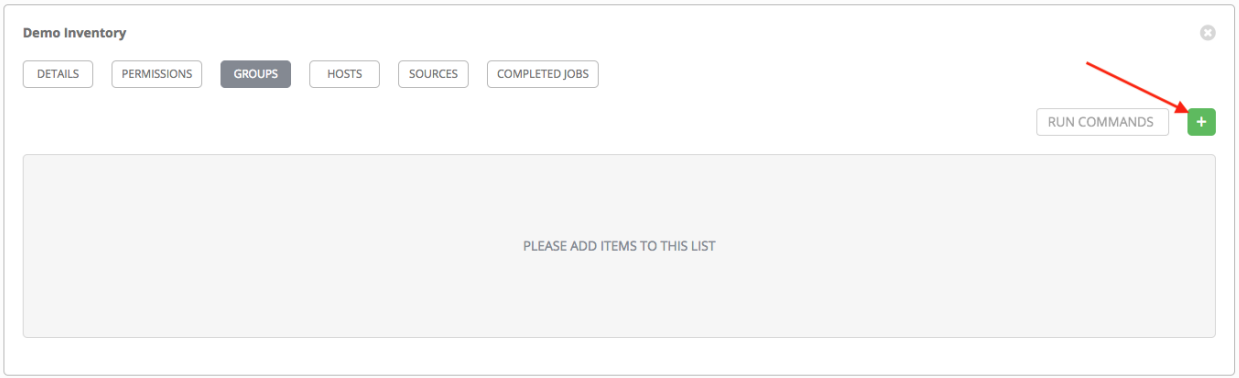
Ansible Tower provides a demo inventory for you to use as you learn how Tower works. Click on the “Demo Inventory” link for the stock inventory provided by Ansible Tower.

8.1 Groups and Hosts

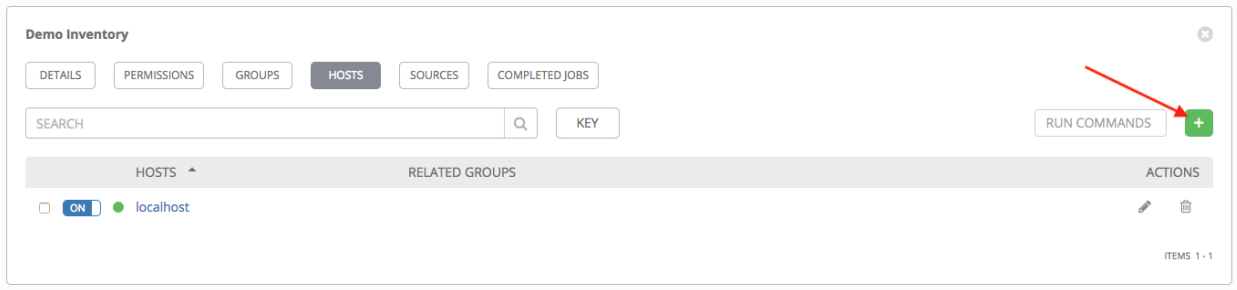
Note that inventories are divided into groups and hosts. A group might represent a particular environment (e.g. "Datacenter 1" or "Stage Testing"), a server type (e.g. "Application Servers" or "DB Servers"), or any other representation of your environment. The groups and hosts that belong to the Demo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



1. In the **Groups** tab, click the button to add groups to the inventory.



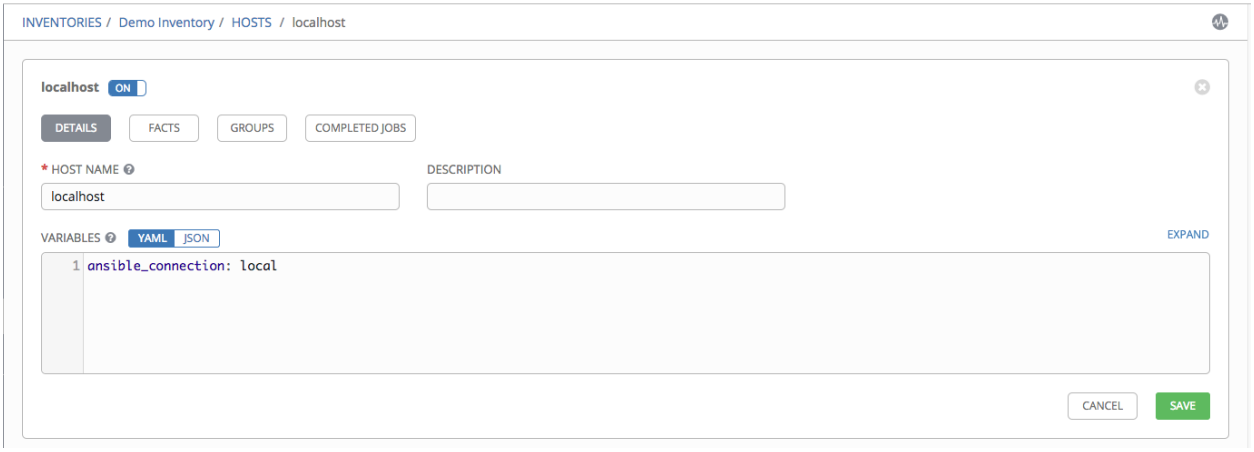
2. Similarly, in the **Hosts** tab, click the button to add hosts to groups.



Note: Prior to Ansible Tower 2.2, hosts could not be added to the Web Servers inventory before adding a group. If you are using an older version of Tower, click the "Plus" button above the 'Groups' section to add a group before adding a host.

For this example, suppose that the organization you created earlier has a group of web server hosts supporting the corporate CMS application. To add these hosts to the Web Servers inventory, create a "CMS Web" group. Click the **Save** button to create the group.

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



Click **Cancel** (if no changes were made) or use the breadcrumb navigational links at the top of the Ansible Tower browser to return to the Inventories overview screen. Clicking **Save** does not exit the edit dialog.

CHAPTER

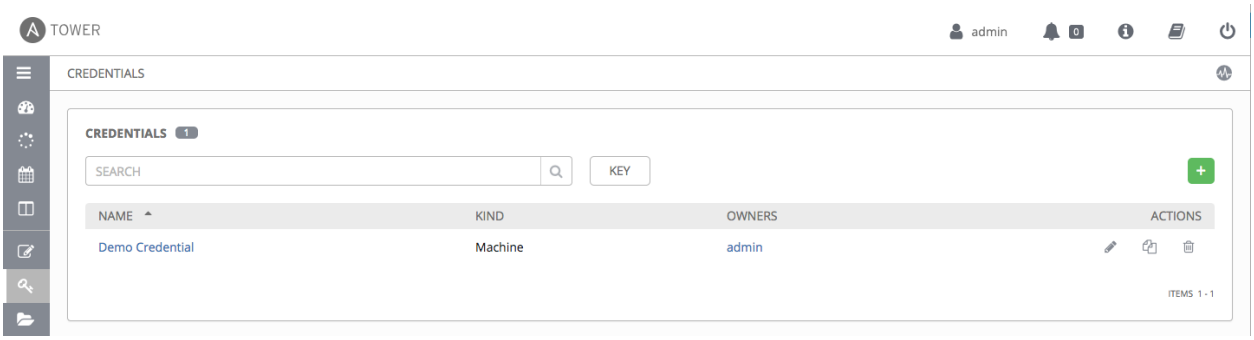
NINE

CREATE A CREDENTIAL

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

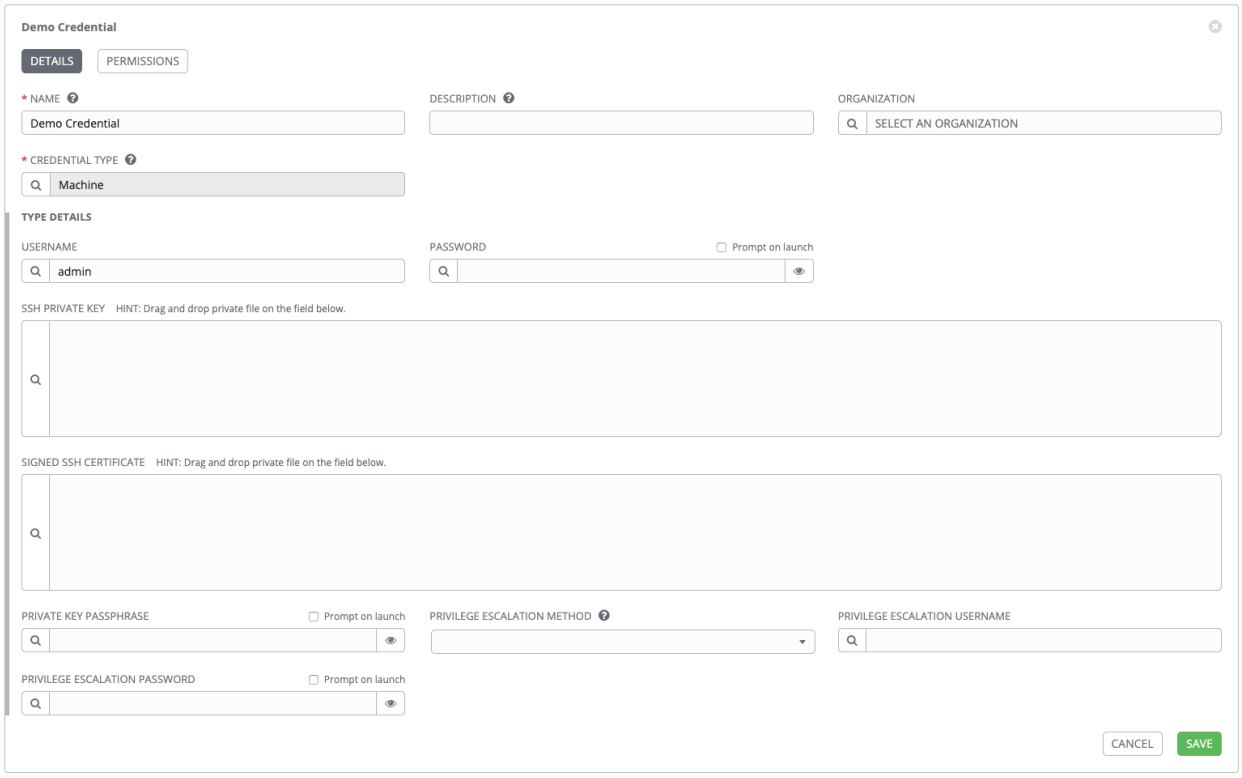
Create a new credential by clicking the Credentials ( ) icon from the left navigation bar.

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.



For the purpose of this Quick Start, a demo credential has been provided for your use.

Click on the "Demo Credential" link name or the Edit ( ) button to review or edit this credential.


Demo Credential
DETAILS
PERMISSIONS
* NAME
Demo Credential
DESCRIPTION
ORGANIZATION
SELECT AN ORGANIZATION
* CREDENTIAL TYPE
Machine
TYPE DETAILS
USERNAME
admin
PASSWORD
Prompt on launch
SSH PRIVATE KEY HINT: Drag and drop private file on the field below.
SIGNED SSH CERTIFICATE HINT: Drag and drop private file on the field below.
PRIVATE KEY PASSPHRASE
Prompt on launch
PRIVILEGE ESCALATION METHOD
PRIVILEGE ESCALATION USERNAME
PRIVILEGE ESCALATION PASSWORD
Prompt on launch
CANCEL
SAVE

CHAPTER

TEN

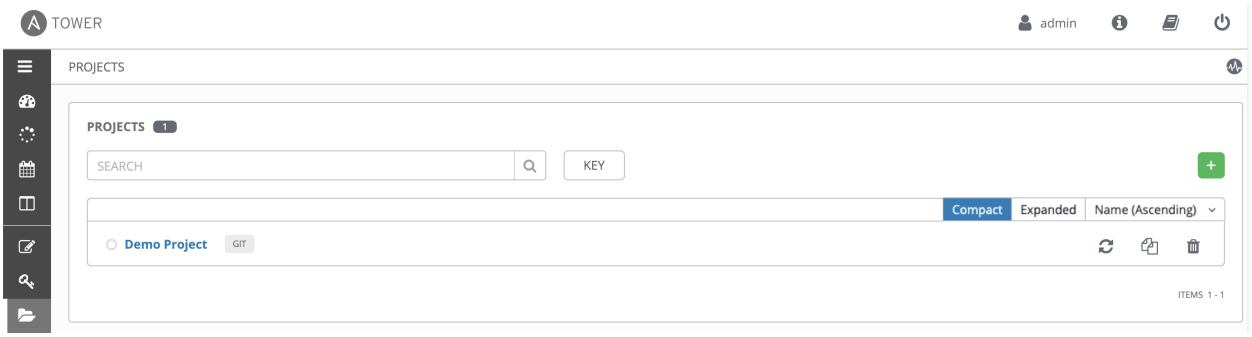
SETTING UP A PROJECT

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

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

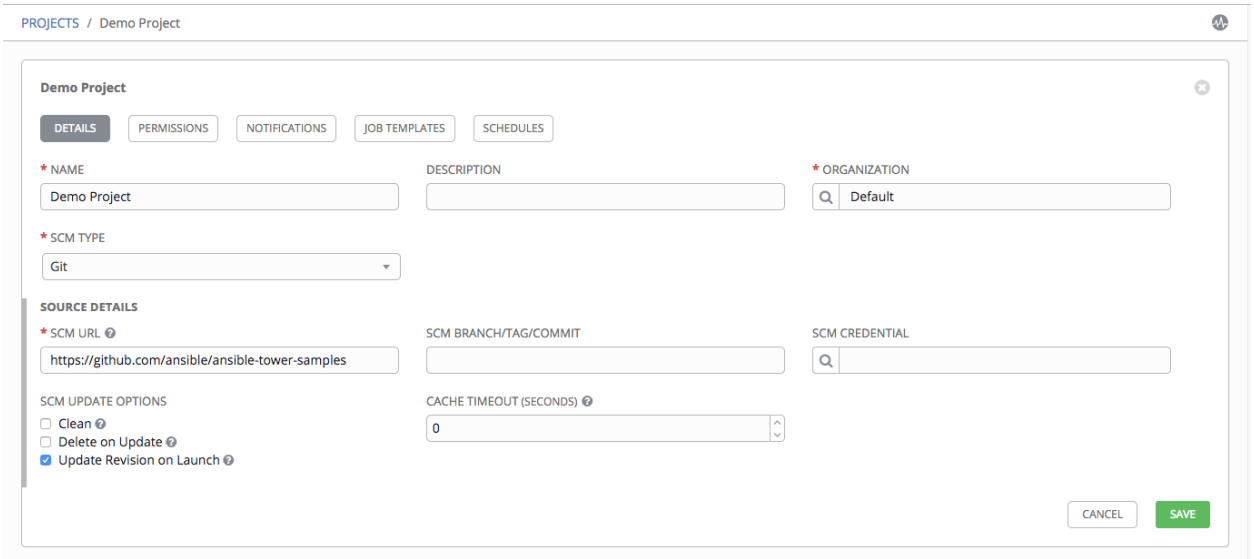
Note: It is recommended that, whenever possible, you use source control to manage your playbooks. This type of best practice provides the ability to treat your infrastructure as code and is in line with DevOps ideals. While this Quick Start Guide uses lightweight examples to get you up and running, we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

To review existing projects or to create a new one, click the Projects ( ) icon from the left navigation bar.



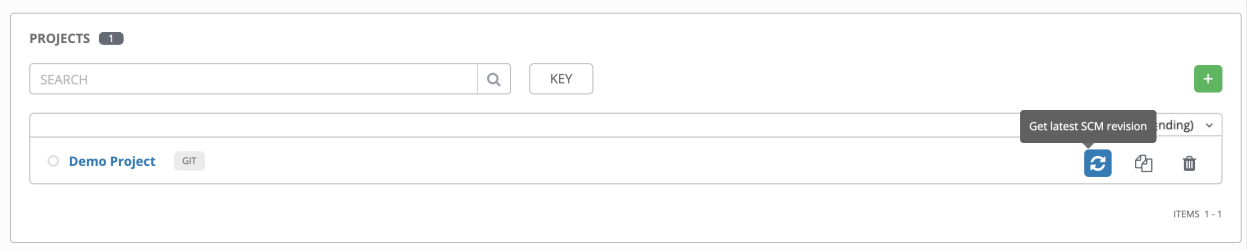
Ansible Tower simplifies the getting started process by providing you with a Demo Project to work with initially.

Click on the “Demo Project” name link or click on the Edit ( ) button to review the stock project provided by Ansible Tower.



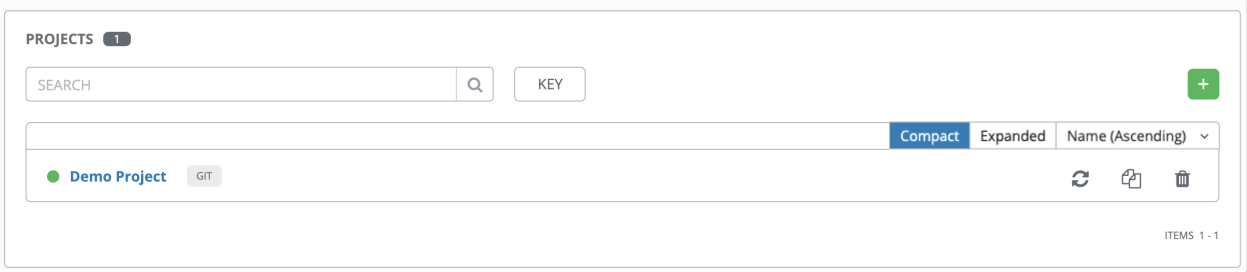
Click **Cancel** (if no changes were made) or use the breadcrumb navigational links at the top of the Ansible Tower browser to return to the Inventories overview screen. Clicking **Save** does not exit the edit dialog.

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 by clicking the button under the project's available Actions:



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 dot beside the name of the project, the revision, and the last run information updates once the sync has completed.

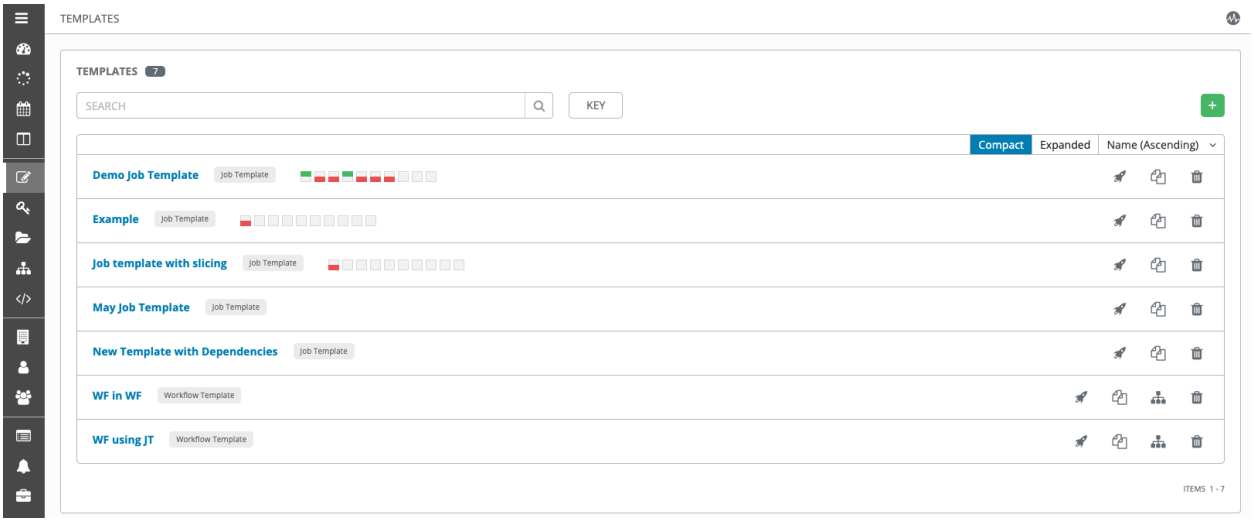


CHAPTER

ELEVEN

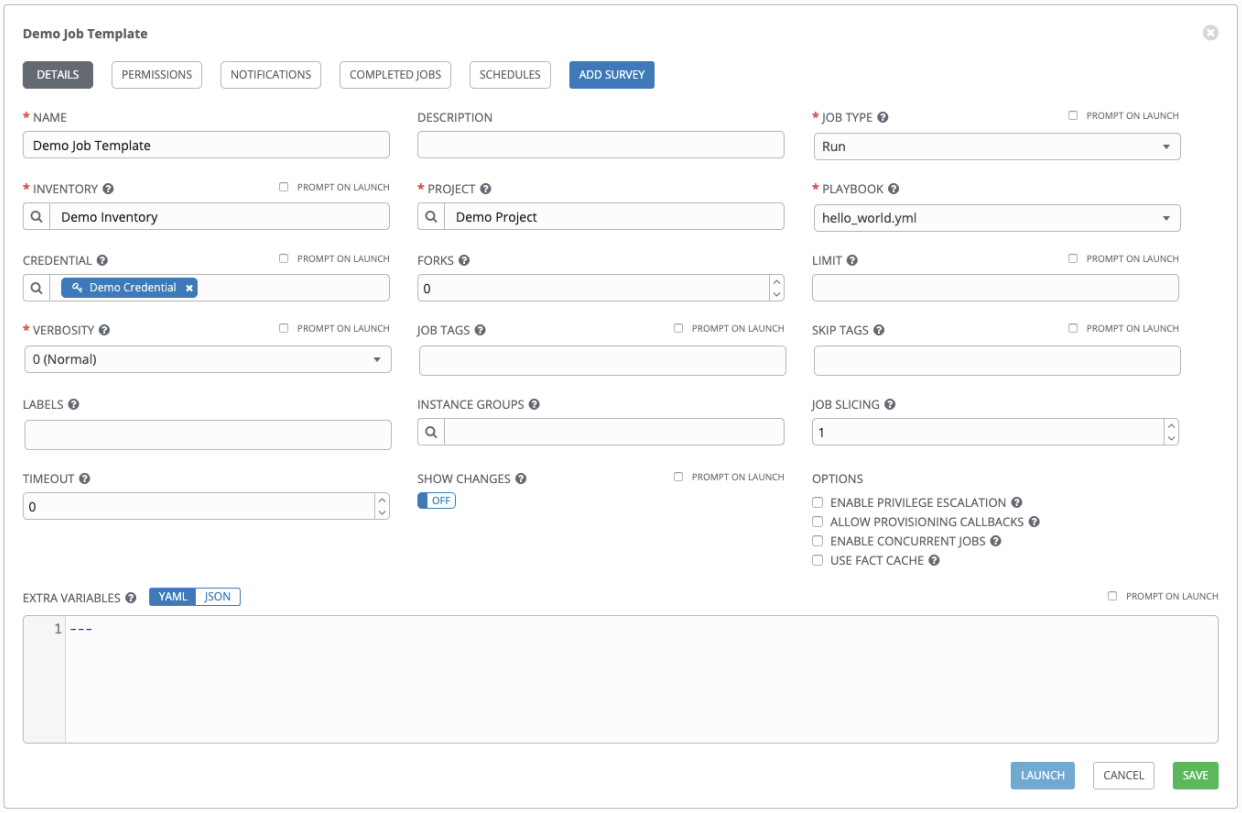
CREATE A NEW JOB TEMPLATE

A job template combines an Ansible playbook from a project and the settings required to launch it. Review existing jobs or create a new job template by clicking the Templates ( ) icon from the left navigation bar.



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

Click on the “Demo Job Template” name link or click on the Edit ( ) button to review the stock job template provided by Ansible Tower.



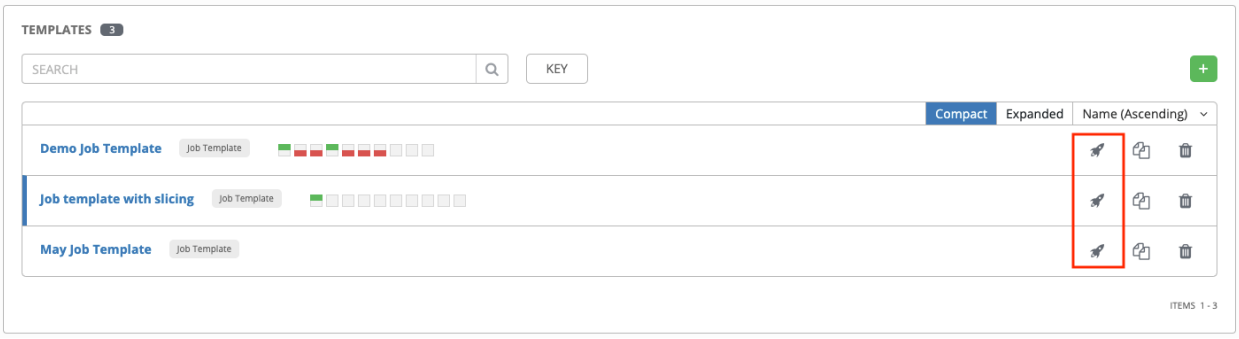
Click **Cancel** (if no changes were made) or use the breadcrumb navigational links at the top of the Ansible Tower browser to return to the Templates overview screen. Clicking **Save** does not exit the edit dialog.

CHAPTER

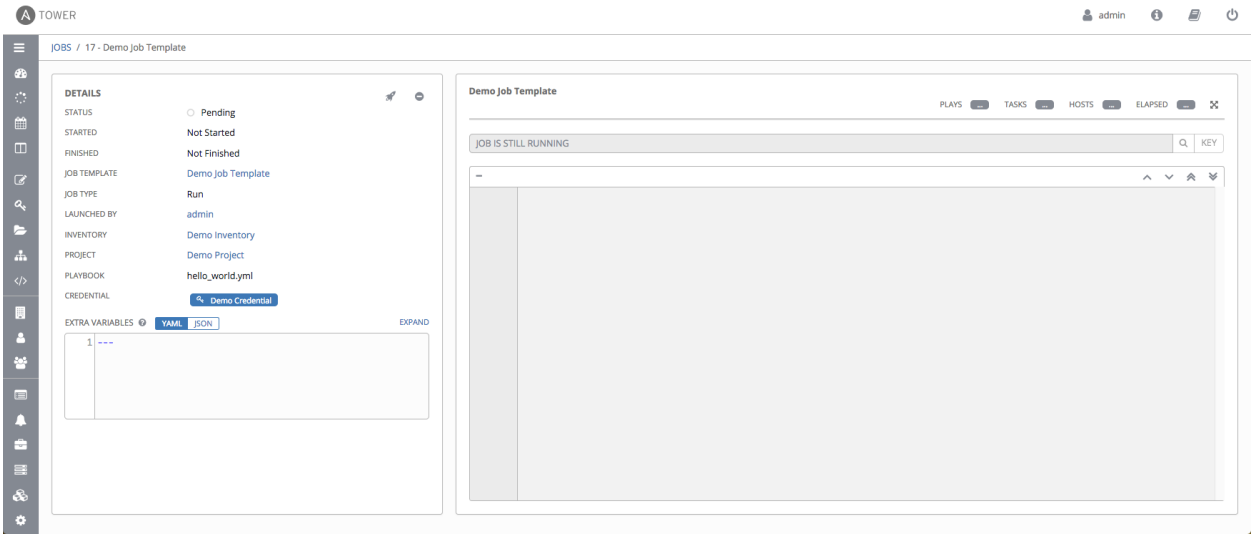
TWELVE

LAUNCH IT!

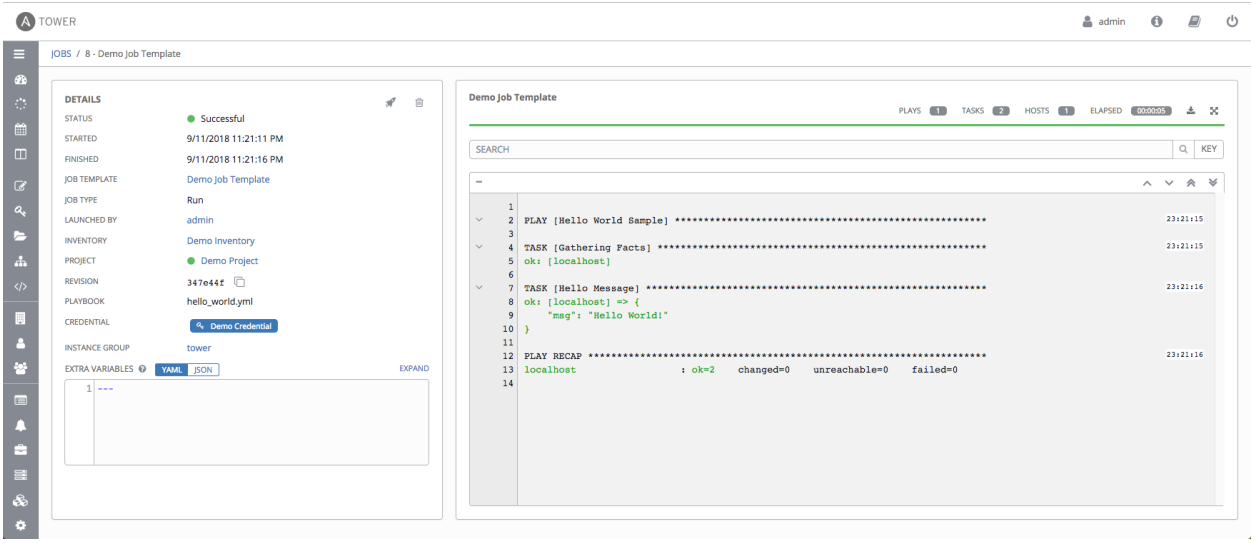
From the Job Templates overview screen, click the Launch ( ) button to run this Job Template.



The initial job launch returns a status page which updates automatically using Tower'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 Tower installation is officially setup and running properly. To learn more about these Tower features or to learn about administration tasks, the Tower API, etc., refer to the following documentation sets:

- Ansible Tower User Guide
- Ansible Tower Installation and Reference Guide
- Ansible Tower Administration Guide
- Ansible Tower API Guide
- Ansible Tower Release Notes
- Ansible Documentation.

CHAPTER

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