Ansible Tower Quick Setup Guide

Release Ansible Tower 3.1.4

Red Hat, Inc.

Jul 12, 2017

CONTENTS

1 Quick Start 2

2 Login as a Superuser 3

3 Import a License 5

4 Examine the Tower Dashboard 7

5 The Settings Menu 8

6 Review the Organization 9

7 Add a User to the Organization 11

8 Create a new Inventory and add it to the Organization 14

9 Create a Credential 16

10 Setting up a Project 18

11 Create a new Job Template 20

12 Configure Authentication 22

13 Launch it! 23

14 Index 25

15 Copyright © 2017 Red Hat, Inc. 26

Index 27

Thank you for your interest in Ansible Tower by Red Hat. 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 3.1.4.

Ansible Tower Version 3.1.4; July 10, 2017; 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 several license types: Self-Support, Enterprise: Standard, and Enterprise: Premium. These licenses vary in price, support-levels, and features. Enterprise: Standard and Enterprise: Premium license users will have access to some extended Tower features that Self-Support users will not have available. For more information about licenses and features, refer to Licensing, Updates, and Support in the Tower Installation and Reference Guide.

This Quick Start Guide covers setting up with a Self-Support level license in mind. Features only available to Enterprise: Standard or Enterprise: Premium license users are noted as you go along.

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 on the Settings ( ) Menu button and selecting the Users navigational link.

ANSIBLE
TOWER
by Red Hat
Welcome to Ansible Tower! Please sign in.
USERNAME
admin
PASSWORD
SIGN IN

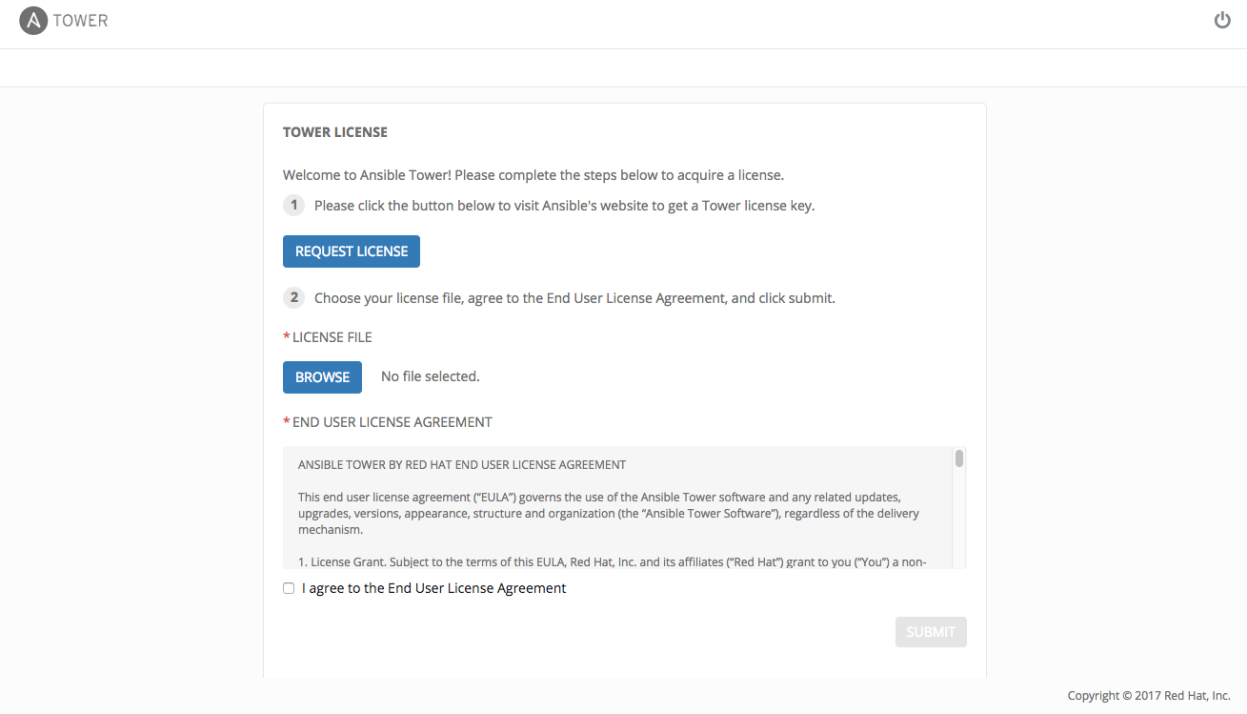
CHAPTER

THREE

IMPORT A LICENSE

Tower requires a valid license to run. If you did not receive a license from Ansible directly or via email, or have issues with the license you received, refer to http://www.ansible.com/license for free and paid license options (including free trial licenses) or contact Ansible 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.

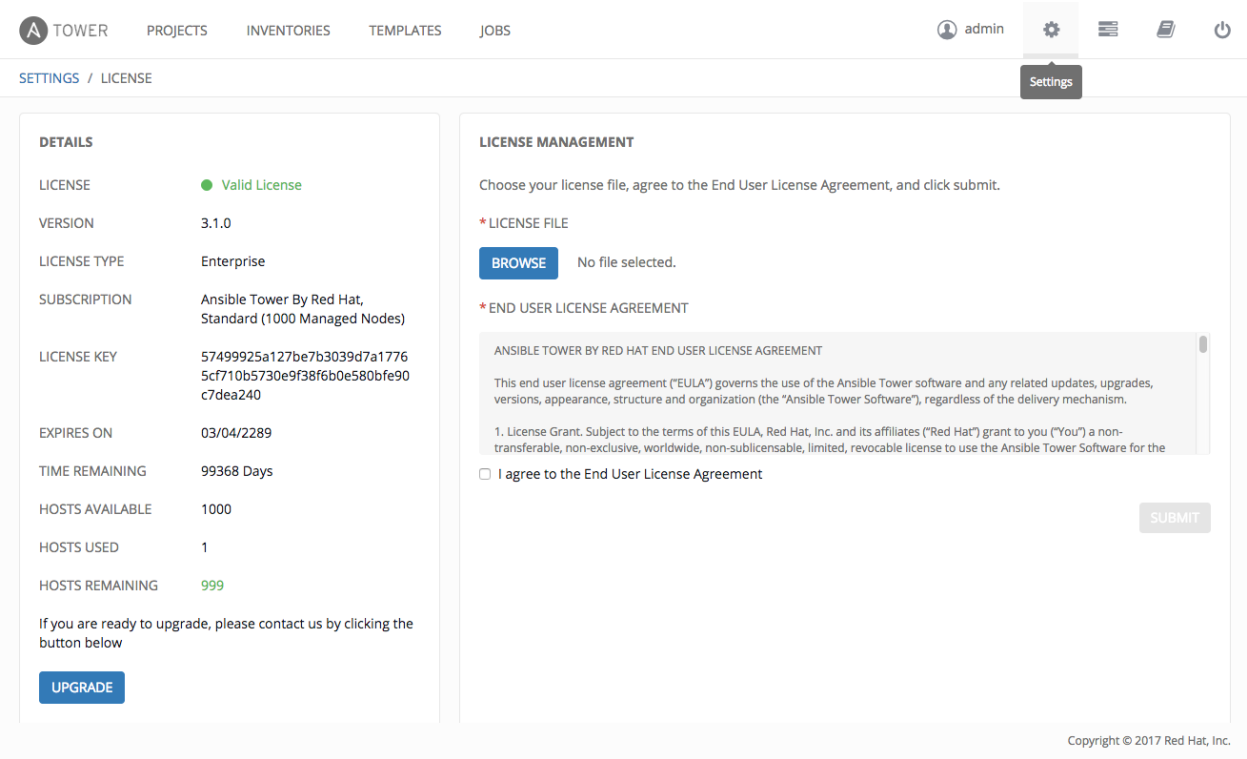


To add your license:

1. Save your license (or save the license contents to a text file locally, if needed).
2. 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.
3. Once uploaded, check to agree to the End User License Agreement and click **Submit**.

Once your license has been accepted, Tower navigates you to the main Ansible interface for the Dashboard (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 view this license from the Settings ( ) Menu's 'VIEW YOUR LICENSE' link.



CHAPTER

FOUR

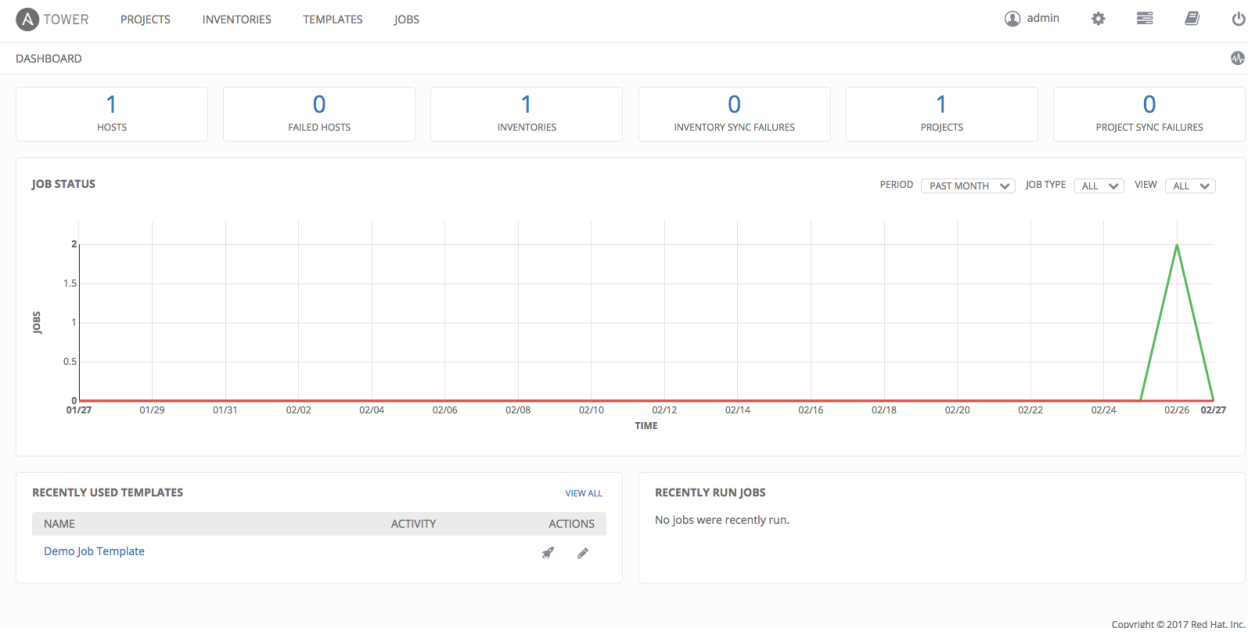
EXAMINE THE TOWER DASHBOARD

Note: Ansible Tower 3.0 provides a streamlined interface, with the Settings ( ) button offering access to administrative configuration needs. Users of older versions of Ansible Tower (2.4.5 or older) can access most of these through the top-level navigational menu or from their "Setup" menu button.

The Tower Dashboard offers a friendly graphical framework for your IT orchestration needs. Across the top-left side of the Tower Dashboard, administrators can quickly navigate to their **Projects**, **Inventories**, **Job Templates**, and **Jobs**.

Across the top-right side of this interface, administrators can access the tools they need to configure organizations, users, groups, and permissions.

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



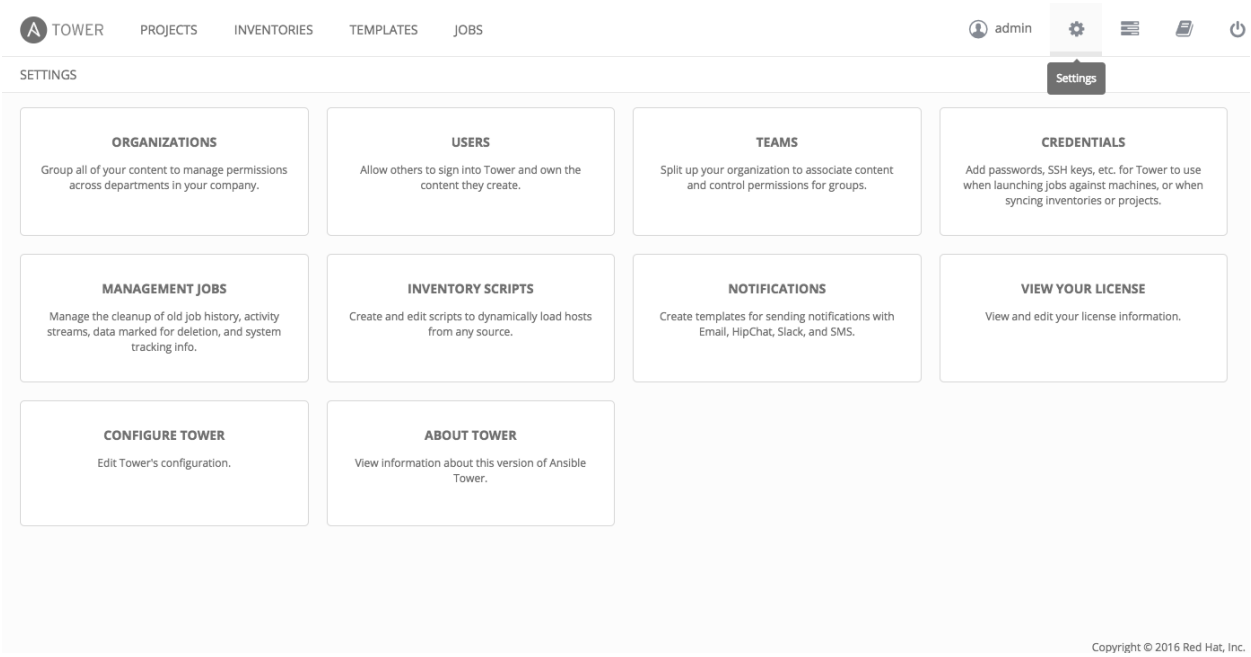
Note: Keep in mind that the goal of this Quick Start is to launch a simple playbook. To do this, a number of configuration options must be setup. Completing the quick start configuration tasks now ensures that Tower is configured properly and allows for easier executions of more involved playbooks later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

CHAPTER

FIVE

THE SETTINGS MENU

To enter the Settings Menu screen for Ansible Tower, click the button. This screen allows you to create your organizations, add credentials, add users and teams, schedule management jobs, modify your Tower's configuration, and more. You can also view your license from the Settings Menu's 'View Your License' link.



CHAPTER

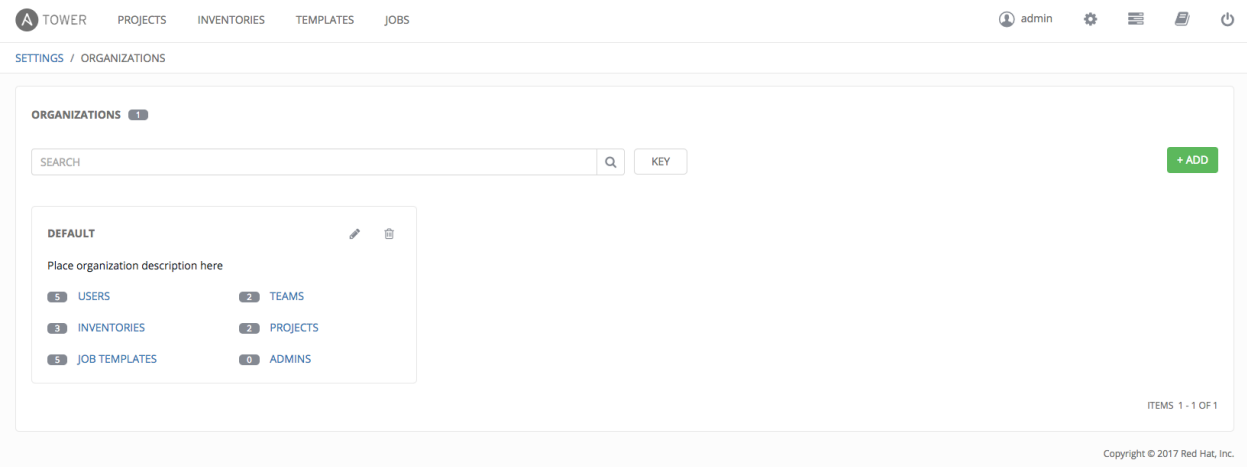
SIX

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 Settings ( ) Menu screen, click on **Organizations**.

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.

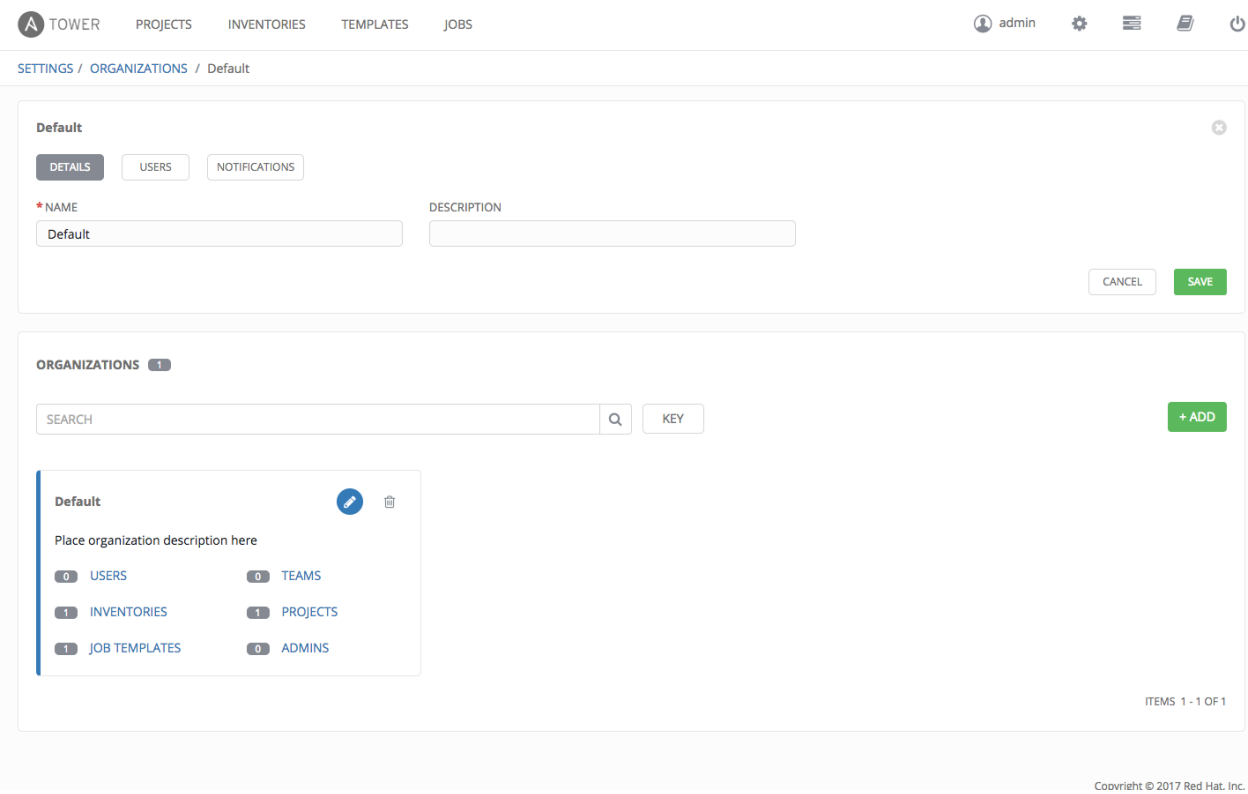


A default organization has been automatically created and is available to all users of Ansible Tower. It can be used as is or edited later as needed.

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.



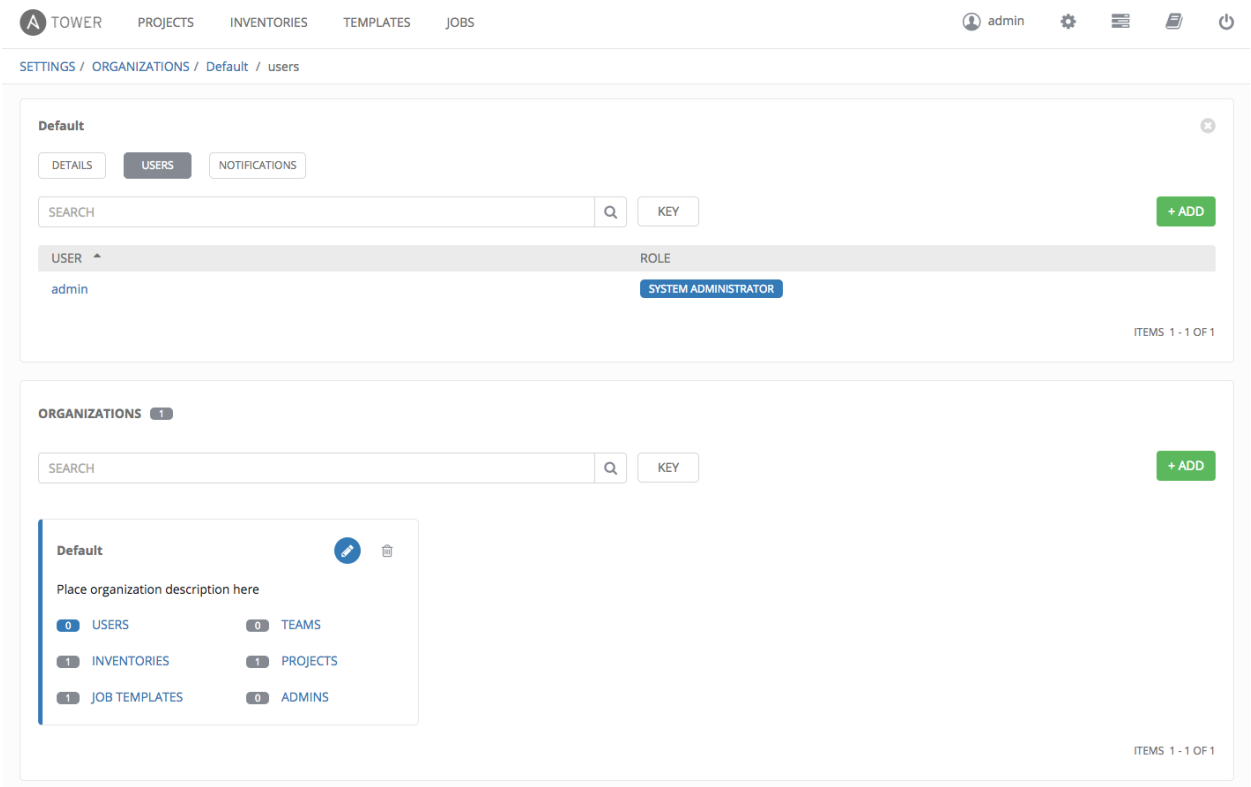
Enterprise and Premium Tower license users who want to add a new organization should refer to the Organizations section in the Tower User Guide.

CHAPTER

SEVEN

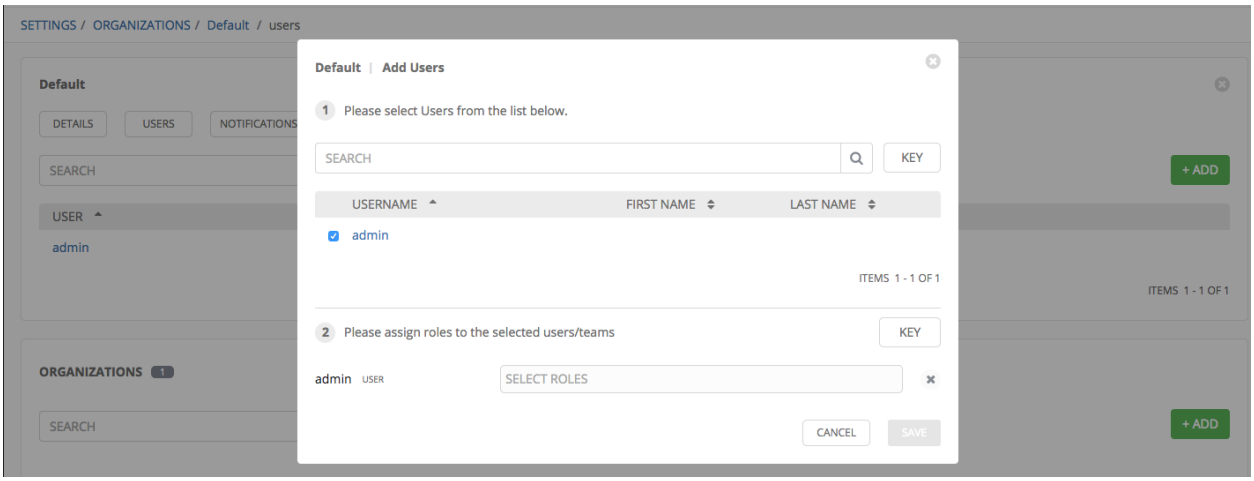
ADD A USER TO THE ORGANIZATION

Expand the Users details by clicking on the **Users** tab of the default organization you just saved (not from the Setting [ ] menu's User menu item).



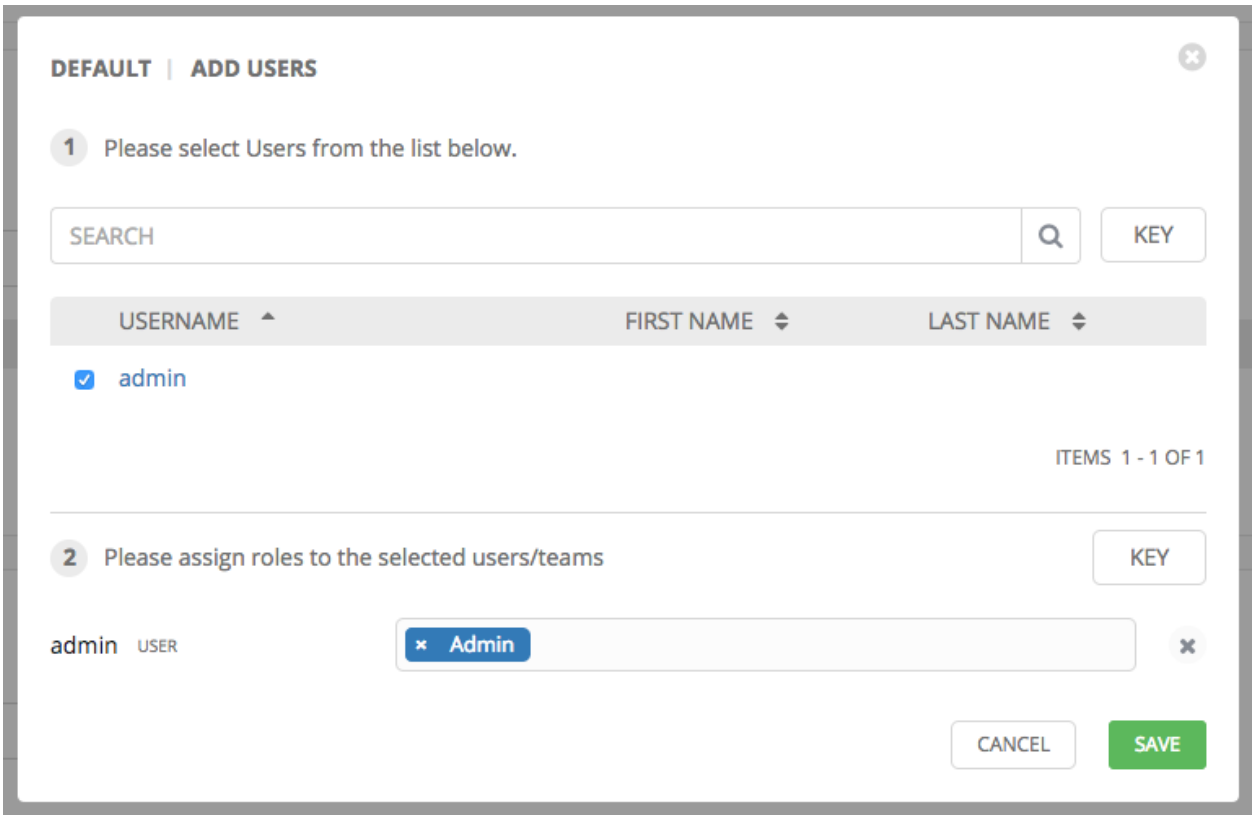
1. To add a user, click the button.

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.

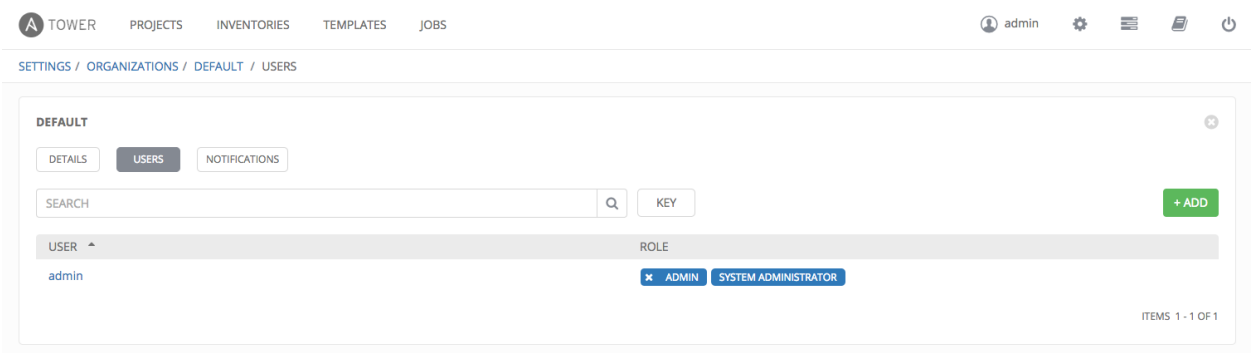
Note: For help on what the roles mean, click the **Key** button. For more information, refer to the Roles section of this guide.



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
PROJECTS
INVENTORIES
TEMPLATES
JOBS
admin
SETTINGS / ORGANIZATIONS / DEFAULT / USERS
DEFAULT
DETAILS
USERS
NOTIFICATIONS
SEARCH
KEY
+ ADD
USER
ROLE
admin
ADMIN
SYSTEM ADMINISTRATOR
ITEMS 1 - 1 OF 1

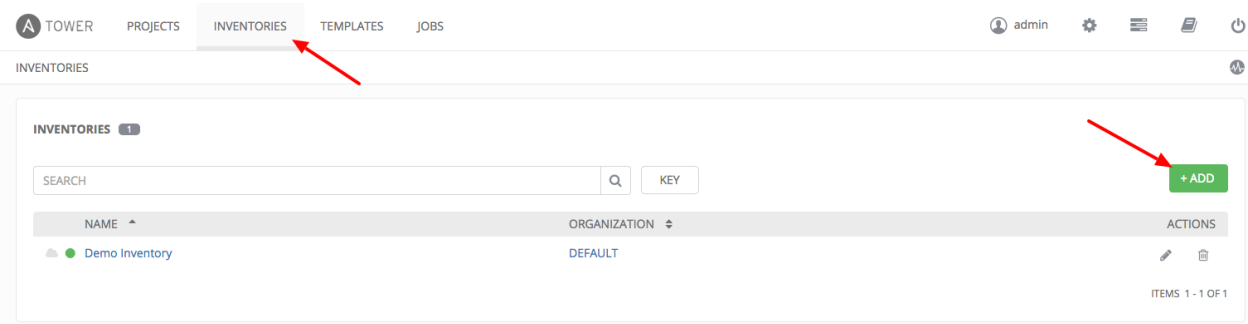
CHAPTER

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 *Tower User Guide*.

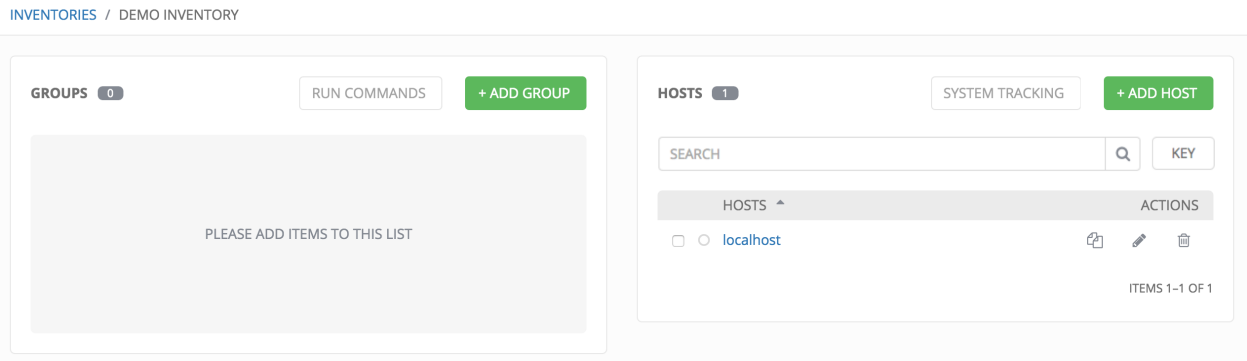
To review existing inventories, navigate to the **Inventories** main link. To create a new inventory, click the + ADD button.



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.

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 left side of the screen displays the groups that belong to the Demo inventory. The right side displays hosts.

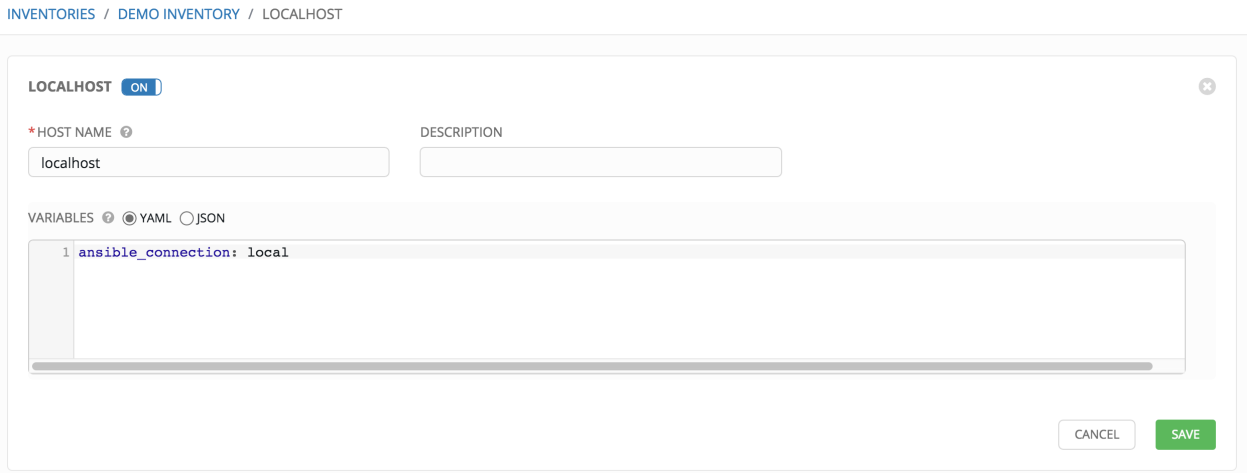


Note: Prior to Ansible Tower 2.2, hosts could not be added to the Web Servers inventory before adding a group. If you are using an older version of Tower, click the "Plus" button above the 'Groups' section to add a group before

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

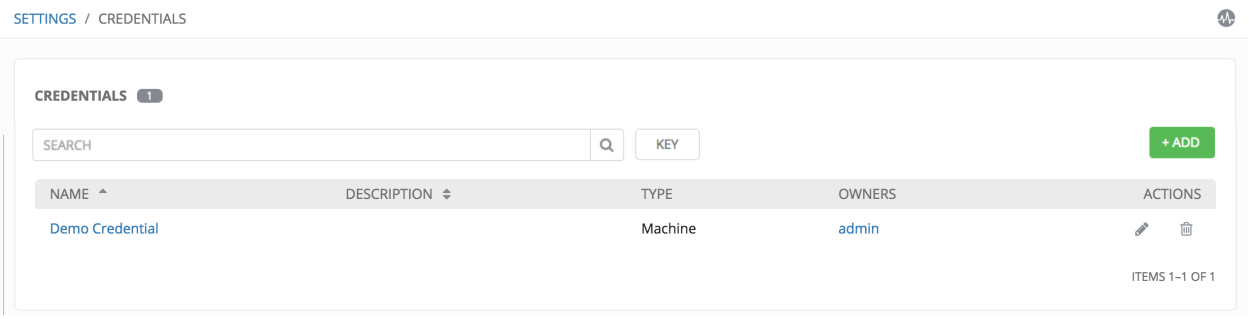
NINE

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.

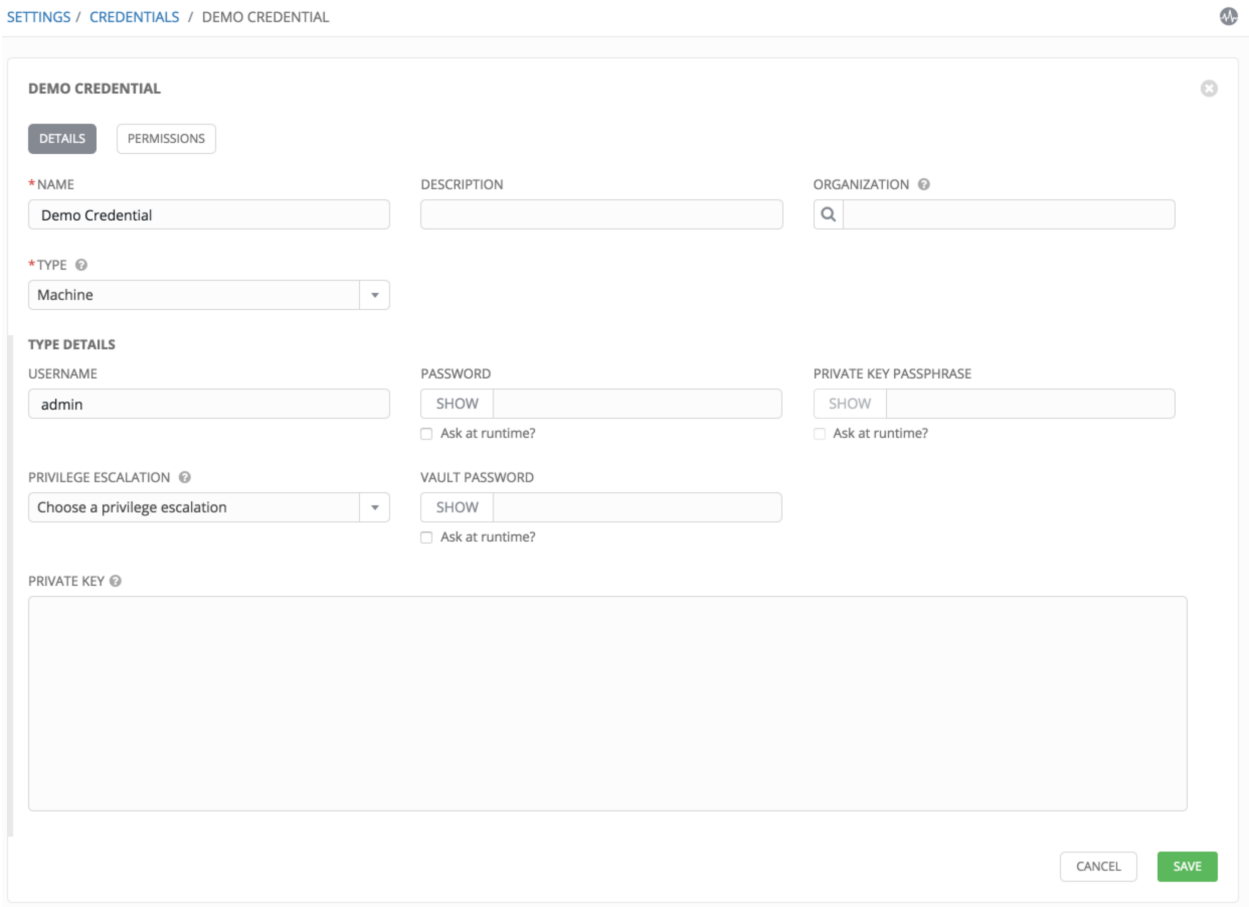
Create a new credential by browsing to and clicking on the **Credentials** link from the Settings ( ) button.

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.


SETTINGS / CREDENTIALS / DEMO CREDENTIAL
DEMO CREDENTIAL
DETAILS
PERMISSIONS
*NAME
Demo Credential
DESCRIPTION
ORGANIZATION
*TYPE
Machine
TYPE DETAILS
USERNAME
admin
PASSWORD
SHOW
Ask at runtime?
PRIVATE KEY PASSPHRASE
SHOW
Ask at runtime?
PRIVILEGE ESCALATION
Choose a privilege escalation
VAULT PASSWORD
SHOW
Ask at runtime?
PRIVATE KEY
CANCEL
SAVE

CHAPTER

TEN

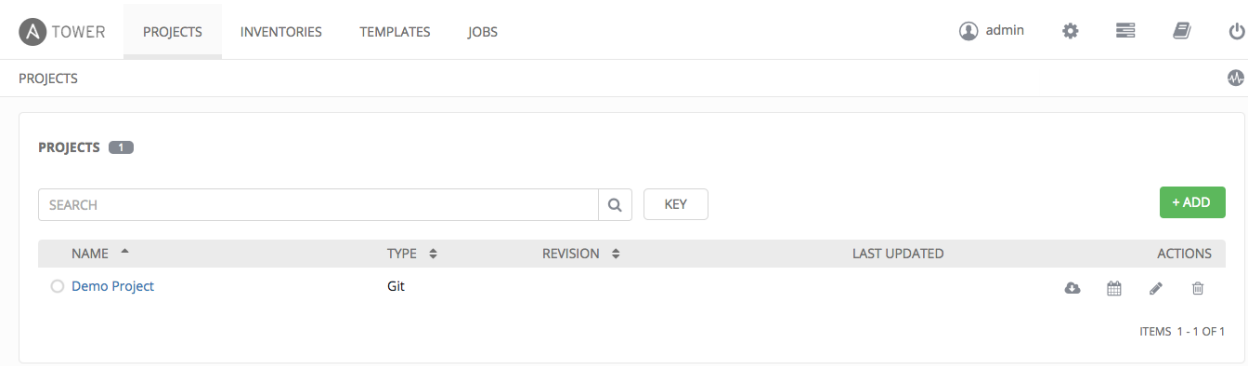
SETTING UP A PROJECT

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.

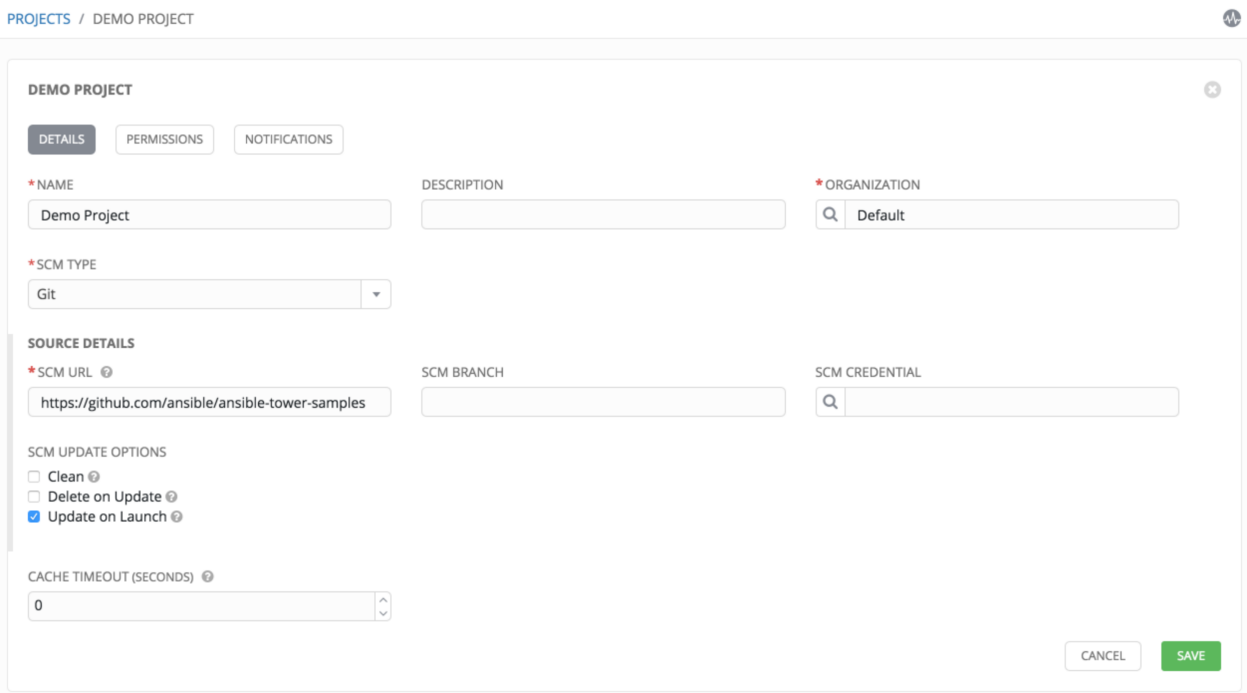
Note: It is recommended that, whenever possible, you use source control to manage your playbooks. This type of best practice provides the ability to treat your infrastructure as code and is in line with DevOps ideals. While this Quick Start Guide uses lightweight examples to get you up and running, we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

To review existing projects or to create a new one, navigate to the **Projects** main link.



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.

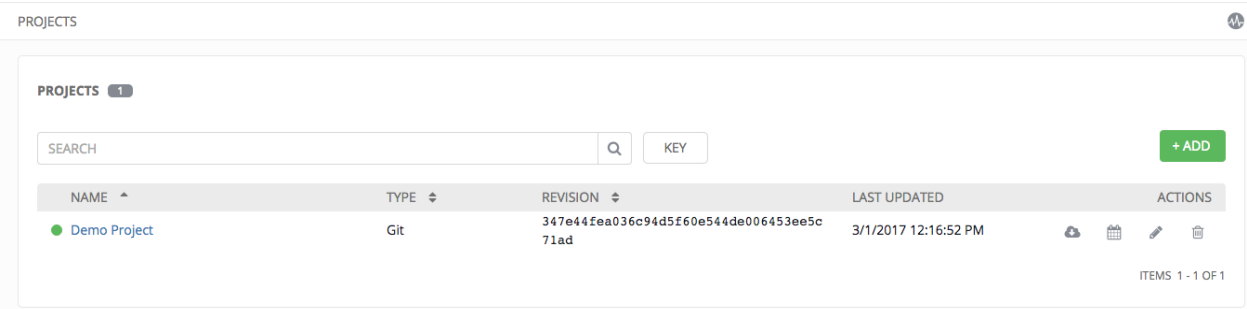


Click **Cancel** (if no changes were made) or use the breadcrumb navigational links at the top of the Ansible Tower browser to return to the Inventories overview screen. Clicking **Save** does not exit the edit dialog.

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 updates once the sync has run.

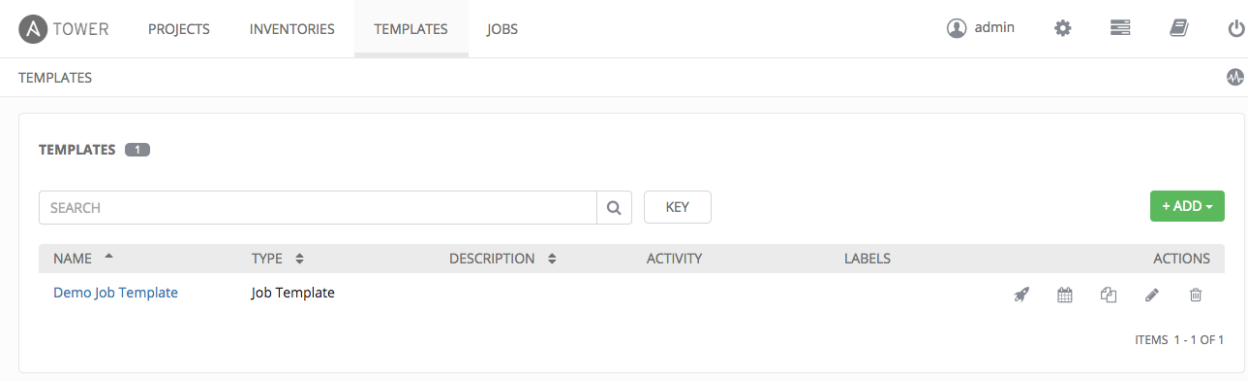


CHAPTER

ELEVEN

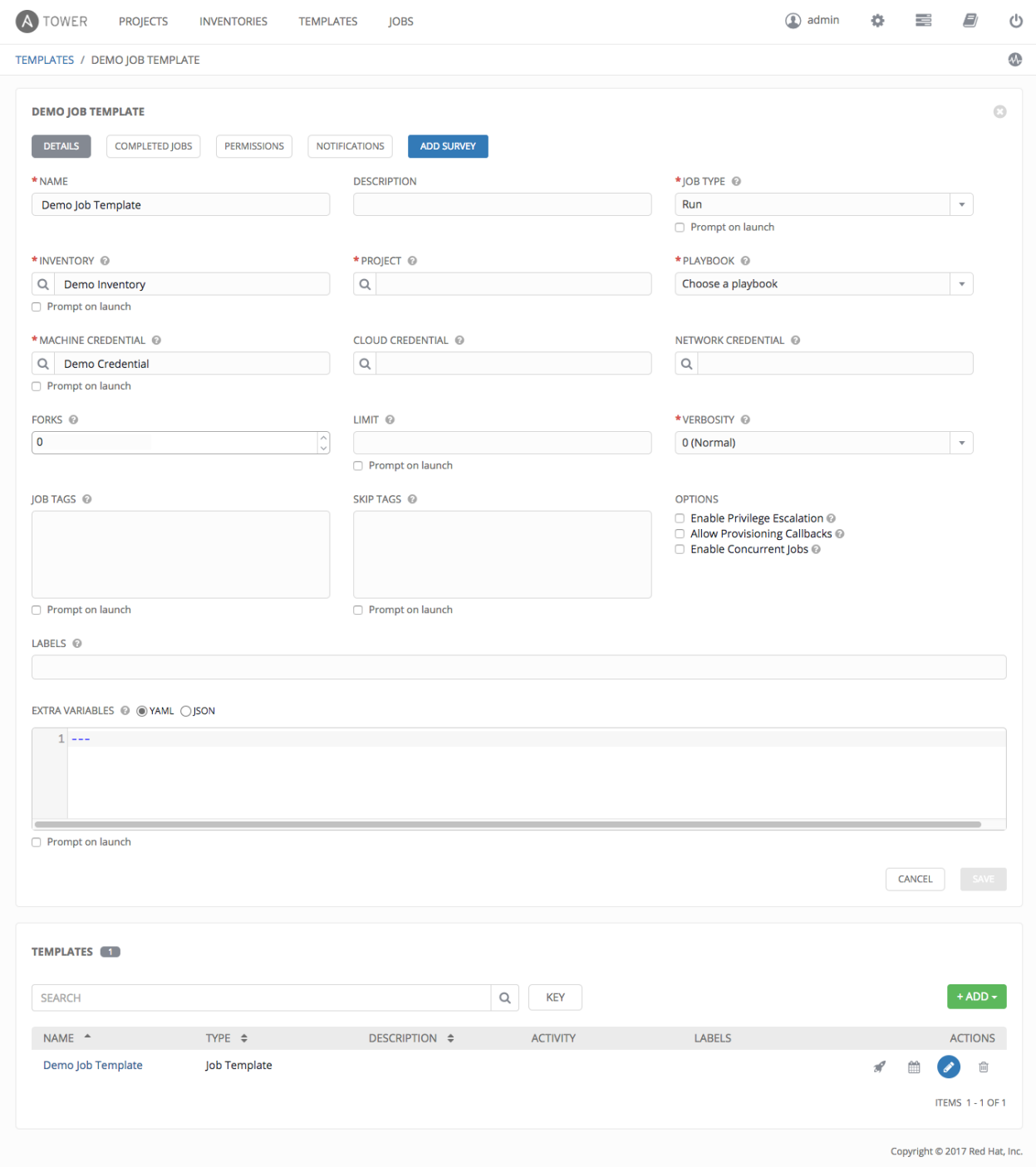
CREATE A NEW JOB TEMPLATE

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 browsing to **Templates**.



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.

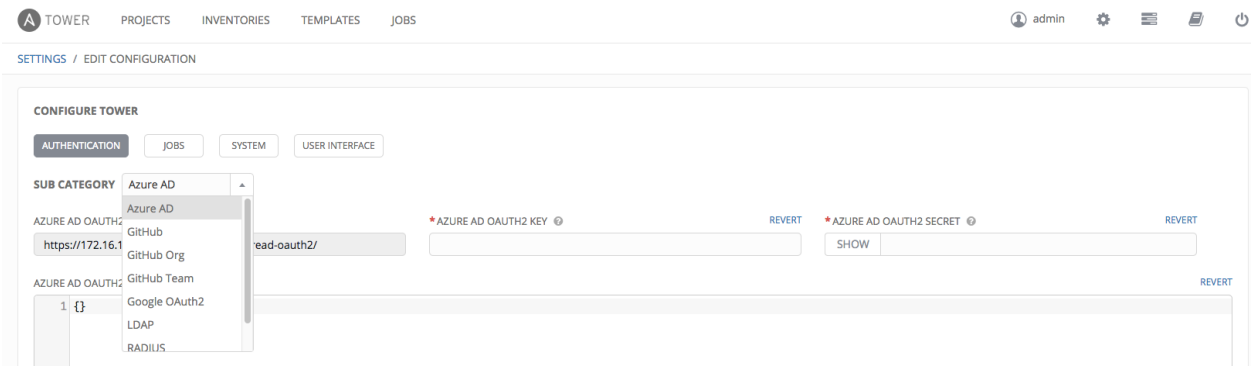
CHAPTER

TWELVE

CONFIGURE AUTHENTICATION

Through the Tower user interface, you can set up a simplified login through various authentication types: GitHub, Google, LDAP, RADIUS, and SAML. After you create and register your developer application with the appropriate service, you can set up authorizations for them. Since configuration files are now saved to the postgres DB in Ansible Tower 3.1 instead of flat files, setting up authorizations in the Ansible Tower User Interface is the recommended method.

1. From the Settings ( ) Menu screen, click **Configure Tower**.
2. The Authentication tab displays initially by default. Select the appropriate authentication type from the drop-down list.



Different authentication types require you to enter different information. Be sure to include all the information as required.

Note: For more detail about each authentication type, refer to the Setting Up Authentication section of the Administration Guide.

---

3. Click **Save** to apply the settings or **Cancel** to abandon the changes.

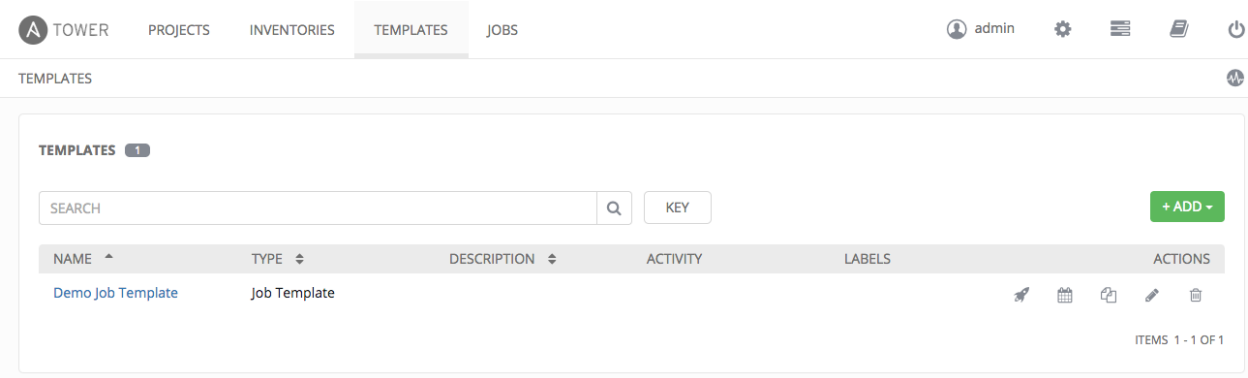
For details on configuring other components of Tower, if needed, refer to the Tower Configuration section of the Administration Guide.

CHAPTER

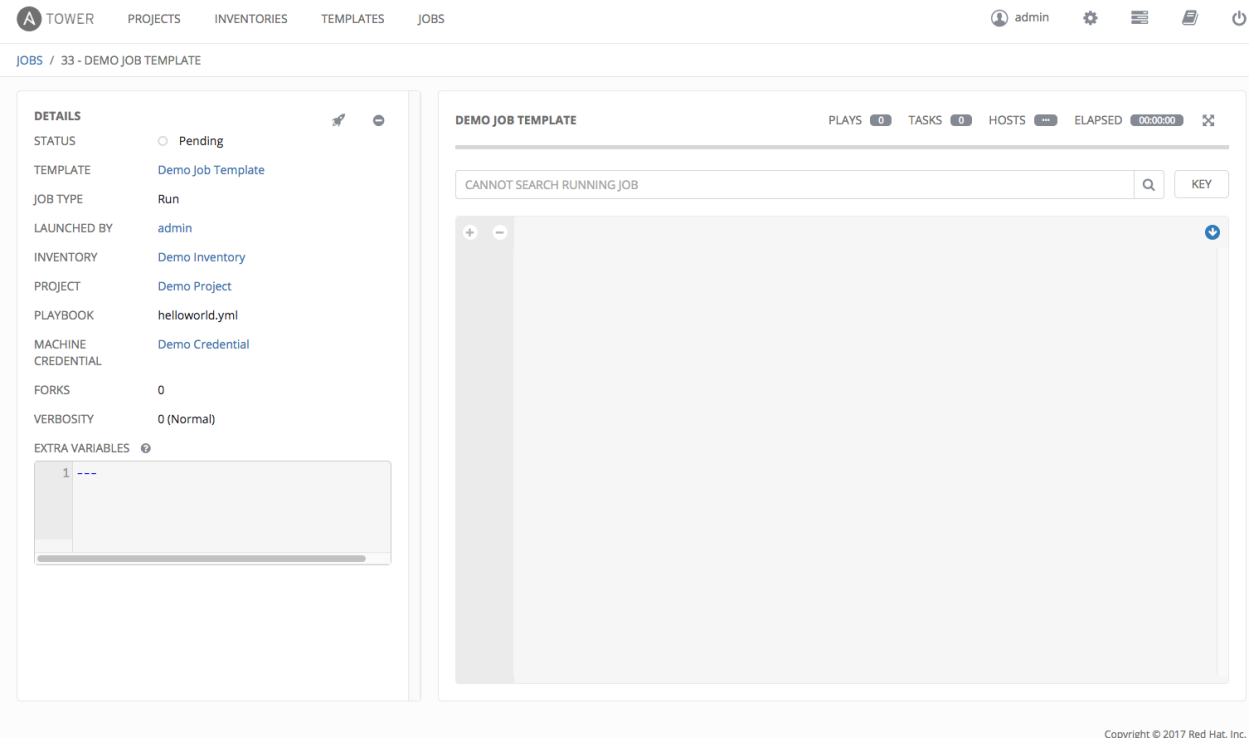
THIRTEEN

LAUNCH IT!

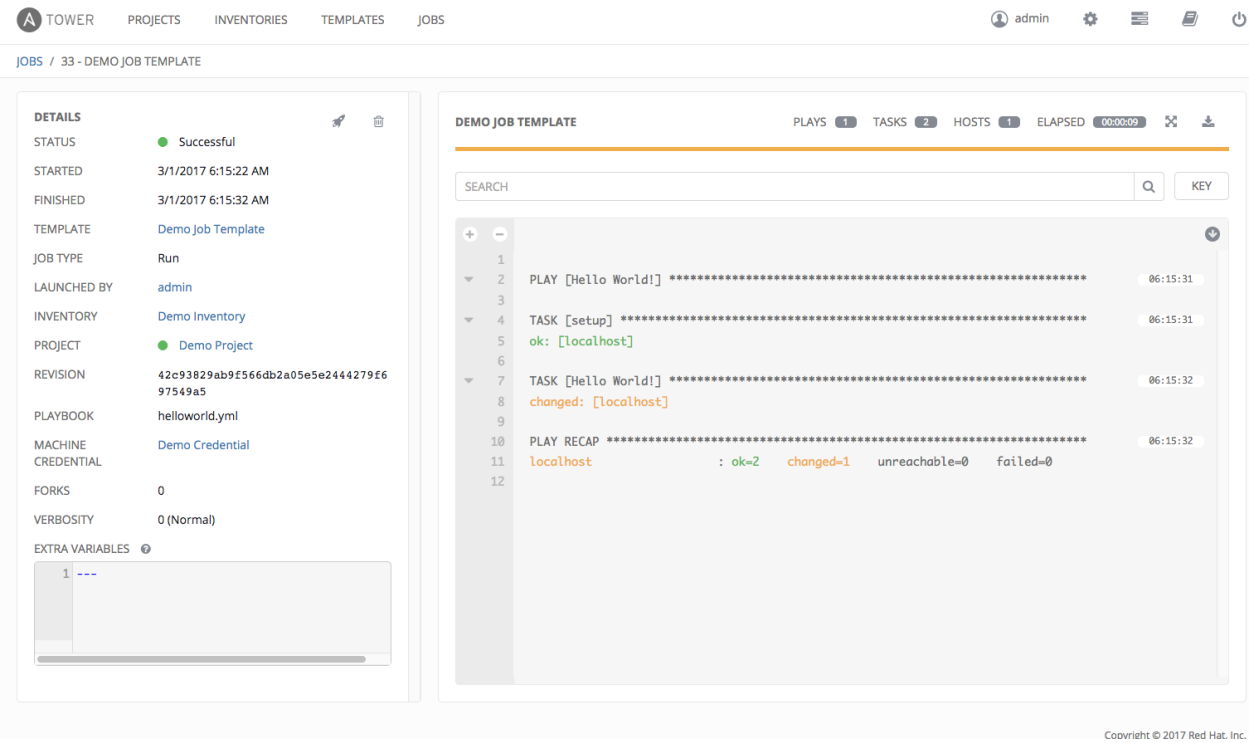
From the Job Templates overview screen, click the Launch ( ) button (under Actions) to run this Job Template.



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

FOURTEEN

INDEX

- genindex

CHAPTER

FIFTEEN

COPYRIGHT © 2017 RED HAT, INC.

Ansible, Ansible Tower, 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.

Rackspace trademarks, service marks, logos and domain names are either common-law trademarks/service marks or registered trademarks/service marks of Rackspace US, Inc., or its subsidiaries, and are protected by trademark and other laws in the United States and other countries.

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

A

about Tower
    settings menu, 8

C

configure Tower
    settings menu, 8
credentials
    create, 16
    settings menu, 8

D

dashboard, Tower
    examine, 7

I

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

J

job templates
    creation, 20
    launch, 23

L

launch
    job templates, 23
license
    import, 5
license, viewing, 8
log in
    Tower, 3

M

management jobs
    settings menu, 8

O

organization
    default, 9
    settings menu, 8
organizations, 9

P

projects, 18

Q

quick start, intro, 2

S

settings menu
    about Tower, 8
    configure Tower, 8
    credentials, 8
    inventory scripts, 8
    management jobs, 8
    organization, 8
    teams, 8
    users, 8
    view license, 8

T

teams
    settings menu, 8
Tower
    log in, 3
Tower settings menu, 8

U

users
    add new, 11
    add to organization, 11
    settings menu, 8

V

view license
    settings menu, 8