## **Ansible Tower Release Notes**

Release Ansible Tower 3.1.3

Red Hat, Inc.

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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 Release Notes* provides release notes, known issues, and related reference materials. This document has been updated to include information for the latest release of Ansible Tower 3.1.3.

Ansible Tower Version 3.1.3; May 01, 2017; https://access.redhat.com/

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**CHAPTER** 

#### ONE

#### **RELEASE NOTES**

#### 1.1 Release Notes for 3.1.x

#### 1.2 Ansible Tower Version 3.1.3

- Added Spanish translations for Ansible Tower
- Fixed a problem where survey password defaults of a certain length could prevent a job from launching
- Fixed truncation of long job run results causing an excessive number of blank lines
- · Fixed a problem where running two different jobs in parallel from the same project could cause an error
- Fixed a problem where Splunk HTTP event collectors did not send job\_event data
- Fixed a problem where email notifications could send survey password values in plain text in extra\_vars
- Fixed handling of job output from certain modules
- Fixed a problem where setting "Required" for a Multiple Choice (Single Select) survey question could prevent changing the default
- Fixed a problem where provisioning callbacks configured to prompt for extra variables could return an error
- · Fixed a problem where modifying team permissions when using a basic license would return an error
- Fixed a problem in LDAP configuration where adding values to the database caused users to lose permanent access to Tower
- · Fixed an issue where a database restore could fail
- Fixed an issue where setup could fail if there was no firewall installed
- Fixed an issue where Insights projects could cause project syncs to fail
- Fixed an issue applying Tower configuration across cluster nodes
- Added the ability to disable SSL certificate verification for hosted Splunk logging
- Improved Ansible Tower to allow for passing extra\_vars on ad\_hoc commands
- Updated Ansible Tower so that it can process facts output from Ansible 2.3

#### 1.3 Ansible Tower Version 3.1.2

- · Added subpackaging for sever, UI, and setup packages
- · Added support for Red Hat Insights project type

- Added support for explicitly specifying the host descriptor used for RabbitMQ config via rabbitmq\_host
- Adjusted search on the Job Details screen to match the behavior across Tower
- · Adjusted Tower logging to log asynchronously
- Fixed various and minor UI bugs
- Fixed a callback bug which was causing a task\_args leak between job events
- Fixed an issue where jobs were not able to be sorted by descending ID
- · Fixed an issue where, when working with Splunk, the log aggregator type shows as Logstash instead of Splunk
- Fixed an issue where, when a user has two groups in an inventory (one using a VMware script and one using a custom script), clicking *sync* on the custom script group caused the sync icon to link to the wrong inventory sync
- Fixed a problem where users were not able to put multi-line text in a Text Area-type field in a survey
- Fixed a problem where users who had admin access on Workflows, but were not Org level admins, could not add or remove job templates from Workflows
- Fixed a problem with job templates that include a multiple choice survey response, where, even when multiple selections are required, the job template ran with an empty array
- Fixed a problem where surveys were passing a variable as empty instead of null when they included text or a text area field that had a minimum length >0 and was not filled in
- Fixed a problem where Tower jobs hang and do not run when the Splunk server is unresponsive or unavailable
- Fixed a problem where users with admin level permissions on projects could not modify project details
- Fixed a problem in multiple choice survey inputs where, when selecting a string that had similar characters or words at the beginning or end of the string, a similar but smaller version of that string was rendered as the user's selection (even though the correct value was still passed to extra-vars on launch)
- Fixed an issue around Git project updates failing when the username was specified
- Fixed a problem where job templates from mercurial project updates failed to run
- Fixed a problem with provisioning callbacks where they failed with '400' responses when extra\_vars were passed to the API through curl in the callback
- Fixed a problem where running the installer again anytime after successfully creating the rabbitmq user caused the installation program to fail
- Fixed an issue where Windows package scan jobs fail when targeting a Windows 2012R2 host
- · Fixed an issue where users with admin access to Workflow Templates could not modify the workflow
- Fixed an issue where a warning was incorrectly displayed for the output of a canceled job
- Fixed an issue where Mercurial project revisions were not read correctly for Projects
- Fixed an issue where Tower upgrades would fail when applying rabbitmq\_user in a cluster
- Fixed an issue where certain characters in a Project SCM URL would cause updates to fail
- Improved custom inventory scripts support by ensuring that newlines added to the script are not trimmed
- Relaxed the SELinux policy dependency to allow Tower to be installed on older Enterprise Linux 7 releases
- Updated Ansible Tower so that the host config key is marked as required when provisioning callbacks are selected
- Updated Ansible Tower so that PostgreSQL Server is no longer installed on Tower nodes not hosting the database

• Updated Ansible Tower so that Tower shows extra\_vars for ad-hoc commands in the UI

#### 1.4 Ansible Tower Version 3.1.1

- Added a preflight check for password and pre-3.1.0 active/passive (HA) inventory setups prior to installation
- Fixed a problem where, while running a clustered Tower deployment configuration, there were some instances where realtime job event data did not flow through the channel layer
- Fixed a problem with searching where an invalid search term was entered and the error dialog continued to persist
- · Fixed a problem with Slack notifications where they were not emitted if only 'Failure' was selected
- Fixed a problem where logging out via Tower logout button caused subsequent login attempts to fail
- Fixed an issue where, when logging was enabled, a missing logging UUID setting would cause a startup error, making the system unresponsive

#### 1.5 Ansible Tower Version 3.1.0

- Added support for configuring most aspects of Ansible Tower directly from the Tower user interface (and Tower API), rather than editing Tower configuration files
- · Added support for "Scale-Out" Clusters, which replaces the HA/Redundancy method from prior Tower releases
- Added support for Workflows, a chain of job templates executed in order
- Added support for sending event and log messages to various logging services (Elastic, Splunk, Sumologic, Loggly, generic REST endpoint)
- · Added support for a new Tower Search feature which supports GitHub-style "key:value" searching
- Added support for Ubuntu 16.04
- · Added support for a New Project Sync Architecture, where projects are now checked out at job runtime
- · Added support for setting timeouts on job runs
- Added support for internationalization and localization (French and Japanese)
- · Added support for multi-playbook Workflows
- Added /api/v1/settings for Tower managed settings. This corresponds to the in-Tower configuration UI
- Added support for windows scan jobs
- Added support so that the SCM Revision used is now stored on Job
- Added support for API endpoints to now show \_\_\_search filter fields for broader searching of objects
- Added support so that system jobs are now shown in /api/v1/unified\_jobs
- Added support for the new Ansible vmware\_inventory script
- Added support for Job stdout downloads, which may generate and cache on the fly
- Added support for /api/v1/inventory\_updates and /api/v1/project\_updates to view those specific job types
- Added support for user\_capabilities API elements in various places to allow API consumers to know if their user can perform the referenced actions on the object

- Added support for set\_stats for Workflow jobs to persist data between Workflow job runs, support added in ansible core also
- Added support for Tower callbacks so that they can now resolve ansible\_host as well as ansible\_ssh\_host
- Added support for Tower callbacks so that they now filter out ansible\_variables on POST
- · Added support for notifications so that they are emitted on jobs marked as failed by the dead job detector
- Added eu-west-2 and ca-central-1 to the list of supported EC2 regions
- Added support for format=ansi\_download when downloading stdout
- Deprecated support for Rackspace inventories
- Fixed an issue where manual projects could be launched/updated
- · Fixed various unicode issues
- Fixed various issues dealing with self signed certificates value.
- Fixed Jobs so that they now show \$encrypted for these variables, where they previously did not
- Improved performance for viewing job and job template lists
- Improved Tower virtualenv so that it is purged on upgrade
- Improved setup playbook so that it is more tolerant of various iptables/firewalld configurations
- Improved the optimization of PostgreSQL installation to improve overall performance
- Improved database migrations through consolidation to make upgrades/installs faster
- Improved hardening for web server configuration (SSL, HSTS)
- Removed zeromq as a communications channel between dependent services in favor of rabbitmq
- Removed /api/v1/jobs/n/job\_plays and /api/v1/jobs/n/job\_tasks
- Removed proot in favor of bubblewrap for process isolation
- Removed the ability to make POST requests on the /api/v1/jobs/endpoint
- Removed has\_schedules from various endpoints, as it was never populated
- Removed support for Red Hat Enterprise Linux 6/CentOS 6 and Ubuntu 12.04
- Updated surveys so that a blank value for a survey question default value now passes an empty string as a value
- Updated surveys so that previously existing surveys with blank default question values now pass empty strings as an extra variable
- Updated Websockets, moving them from socket.io to django channels and are now served under port 443/80 along with the regular web service. Port 8080 is no longer needed.
- Updated Job results so that they are now driven by job events and thus provides clickable context
- Updated Tower so that it now uses the system time zone by default
- Updated Tower requirements for Ansible–Tower now requires Ansible 2.1 or later
- Updated Ansible inventory plugins to the latest versions
- Updated Web server to NGINX from Apache
- Updated survey passwords so that they are now encrypted when stored in the database
- Updated request\_tower\_configuration.sh

#### 1.6 Release Notes for 3.0.x

#### 1.6.1 Ansible Tower Version 3.0.3

- · Added support for new AWS regions, including an update to the boto version included with Tower
- Fixed various minor UI and API related bugs
- · Fixed a regression with authentication restrictions
- Fixed an issue where restoring the database failed when using the RHEL6 bundled installation method
- Fixed an issue where, when viewing a host, "extra vars" were not initially formatted properly
- Fixed an issue where users were able to relaunch jobs they did not have permission to initially launch
- Fixed an issue where, after editing a Job Template, retrieving Job Templates failed when filtered
- Fixed an issue where Satellite 6 inventory marked all hosts as disabled
- · Fixed an issue where Inventory variables were displayed incorrectly when editing hosts
- Fixed a rendering issue with the Host Event details window
- Fixed an issue where, when launching an inventory update, users were navigated away from the inventory manage view
- Fixed an issue where organization auditors could see the user permissions of other users in their organization
- Fixed an issue where canceling a Windows job in Tower left an orphaned process running on the control machine
- Fixed an issue where empty Host Variable Data produces a 500 error in the API browser after upgrading from 2.4.5
- Fixed an issue when using an Azure Service Principal in conjunction with Microsoft Azure inventory
- Fixed an issue where Inventory syncs fail against a resource group if it contains a non-standard virtual machine size when using Azure
- Fixed an issue where navigating to the admin or users from the organizations view in Tower caused 404 errors
- Fixed an issue where, when updating a Rackspace inventory, TypeError messages appeared
- Improved the run time performance for playbooks in Tower
- Improved support around how YAML is handled with Tower's variable parser
- Improved the population of manual projects in Tower
- Improved Event Summary status badge counts
- Improved PostgreSQL configuration with regard to authentication (CVE-2016-7070)
- Updated PostgreSQL repository location for installation methods

#### 1.6.2 Ansible Tower Version 3.0.2

- Added support for IAM Roles when configuring an EC2 Inventory Sync
- Added support for backing up and restoring Databases created when installing 3.0.x
- Added the display of a "working" indicator when toggling Tower components on/off
- Added the ability to toggle the view of job labels (view less/view more)
- Added the ability to add skip tags to job templates (which may also be prompted for at launch time)

- Added documentation around resetting the Tower URL provided in Notification links
- Fixed an issue where users could not remove inventory or credentials from job template
- Fixed an issue where admins were not properly allowed to copy or edit to Job Templates via the API
- Fixed an issue where Home/Host column views were not sortable
- Fixed the display of schedules to only show those with future activity
- Fixed an error where clicking to a different page number while editing a resource and making a new selections indicated an item other than the one currently selected/being edited
- Fixed an issue where relaunching a job ignored search filters
- Fixed an issue where searching for a user on an inventory permission page queried a project access list URL instead of the inventory access list URL
- Fixed an issue where pressing the Enter key (instead of clicking 'Ok' with your mouse) closes a pop up error message and, unexpectedly, navigates the user back to the Tower home page
- Fixed an issue where system job templates were not being included when viewing unified job template results
- Fixed an issue related to relaunching ad hoc commands
- Fixed an issue preventing projects from being deleted during an SCM update
- Fixed an issue where, when viewing the "Event Summary" field, filtering by task status summary dots returned incorrect tasks information
- Fixed an issue where selecting a host on one page, then going to the next page and selecting another host, did not save the prior selection as expected
- Fixed an issue where processing extra\_vars in a survey caused errors
- Fixed an issue regarding how passwords are stored with surveys
- Fixed an issue where, when running a playbook with an ignored task, the ignored task was incorrectly marked as failing
- · Fixed an issue so that Webhook notifications properly display the host summary information
- Fixed an issue where provisioning callbacks were running multiple times in a row
- Fixed various minor issues related to RBAC permissions and credentials
- Fixed various minor API bugs
- Fixed various minor UI and tooltips bugs
- Fixed an issue related to SAML logins hanging after multiple authorization attempts
- Fixed an issue where the "start date" header and schedule preview do not match what is set by the browser locale
- Fixed an issue where users could not properly edit their profile
- Fixed an issue related to backup/restoring with the setup.sh script
- Improved Tower installer compatibility with RHUI repos on RHEL non-AWS instances
- Improved upon what the auditor role can view (organization auditors can view inventory script contents in their own organizations, view notification templates in the activity stream, team credentials views)
- Improved the consistency of how scheduling is displayed within the Tower UI
- Improved how credentials are handled in that they should only be shareable when the organization field is not "null"
- Improved how teams are displayed for different organizations when viewing permissions

- Improved support for CloudForms and Red Hat Satellite 6 with Tower 3.0.x
- Reorganized activity stream views/access for organization admins and auditors
- · Removed the requirement of needing a password for the network credential when using an SSH key
- Removed the requirement of needing AUTH with Email notifications using SMTP

#### 1.6.3 Ansible Tower Version 3.0.1

- Added a stock schedule job for the 'Cleanup Fact Details' management job
- Fixed an issue with inventory syncs using Red Hat Satellite 6 credentials
- Fixed an issue which incorrectly allowed users assigned to a system auditor role to be able to escalate privileges to teams
- Fixed an issue with Webhook notifications where the content-type was being set incorrectly
- Fixed an issue where canceling a new job failed to change state from "new" to "canceled"
- · Fixed an upgrade and credential migration issue which involved null inventory fields in job templates
- Fixed an upgrade and migration issue where hosts which had previously been deleted were not skipped during the upgrade process
- Fixed an upgrade and migration issue where job templates linked to deleted inventories caused migrations to fail
- · Fixed an upgrade and migration issue where job templates without inventories caused migrations to fail
- · Fixed an error related to the logging of RBAC migration data which caused installations to fail
- Fixed an issue related to license checks
- Fixed other various issues related to upgrading and migration
- Fixed the need for elevated permissions to make changes to job templates under some scenarios
- Fixed an issue where Organization-level admins could not edit scan jobs that were created prior to upgrading to Tower 3.0
- Fixed an issue regarding Software Collections (SCL) installation on EL6
- Fixed a problem with subsequent logins after upgrading to Tower 3.0 when using Google OAuth or SAML authentication
- Discovered an issue with MS Azure inventory imports using new-style credentials being unsupported on distributions that ship python-2.7 (e.g. not EL6)
- Updated the UI to display new jobs in the Jobs overview screen and added a cancellation method for these new jobs

#### 1.6.4 Ansible Tower Version 3.0

- Added a notifications system for Tower which supports services like Slack, HipChat, IRC, etc.
- Added support for the new Azure inventory system and the latest Ansible Azure modules (legacy Azure inventory and credentials are still supported)
  - Azure inventory imports using new-style credentials are only supported on distributions that ship python-2.7 (e.g. not EL6)
- Added support for keystone v3 which supports the latest Openstack versions

- Added counts and more detail to Organization endpoints (API)
- Added prompting for Job Templates
- Added labels for Job Templates
- · Added support for user customization as Ansible tasks now run in their own environment
- Added support for new Ansible Network Credentials
- Added inventory support for Red Hat Cloudforms and Red Hat Satellite 6
- Added SUSE, OpenSuse, and Debian support for scan jobs
- Added a link to the schedule in the job detail view if the job was started as a result of a schedule
- Added survey spec management without requiring that surveys be enabled on job templates
- Added additional strict extra\_vars validation. extra\_vars passed to the job launch API are only honored if one
  of the following is true:
  - they correspond to variables in an enabled survey
  - ask variables on launch is set to True
- Added a deprecation notice for Ubuntu 12 and RHEL 6
- Changed how Projects are linked so that they now tie singularly to an Organization
- Changed how system tracking and scan data are stored—now in postgres. MongoDB dependency removed.
- Discovered an issue with ECDSA credentials—if your Tower server has a version of OpenSSH that predates 5.7, jobs will fail when launched jobs with ECDSA credentials
- Fixed issues with scan jobs on RHEL5
- Fixed an issue with the websocket service when Tower is run on CentOS or RHEL 7.2
- Fixed issues with Ansible's no\_log causing errors or not hiding data when running jobs
- Fixed the way setting a license is done so that it propagates to standby Tower nodes in an HA configuration
- Fixed GCE credential handling and inventory filtering
- Improved (through a complete rewrite to expand and simplify) the Role-Based Access Control system in Tower
- Improved job templates so that multiple invocations of the same job template will only block if the job templates used the same inventory
- Improved the setup playbook so that it now hides potentially sensitive information from stdout and the setup log
- Improved the Setup process now supports installing and configuring postgres on a remote system
- Removed MongoDB and changed view queries to use a Postgres implementation
- Removed soft-deletes: Tower now permanently deletes removed objects and the utilities to manage the cleanup
  of those soft-deleted objects have been removed
- Removed Munin monitoring
- Updated the look and feel of the entire Tower UI for a more approachable and intuitive user experience
- Updated and simplified the Tower setup process so that new Tower installs are now preloaded with Organization, Inventory, Project, and Job Template demo data
- · Updated the setup process to support installing and configuring Postgres on a remote system
- Updated dependencies
- Updated Red Hat Enterprise Linux 6/CentOS 6 to use python 2.7 (for Tower only)

• Updated the minimum open file descriptor check and configuration by raising it from 1024 to 4096

#### 1.7 Release Notes for 2.4.x

#### 1.7.1 Ansible Tower Version 2.4.5

- Corrected an issue where inventory syncs using Rackspace credentials failed
- Corrected an issue where the Host Events display provided different results depending on the version of Ansible used
- Corrected an issue which caused an error when calling the Ansible yum module on ansible-1.9.4 (or newer)
- Improved display for Ansible loops on the job detail page by recognizing new Ansible callback events (v2\_runner\_item\_on\_\*)
- Improved the efficiency of the stdout dump database migration for better memory handling
- Updated the Boto release included with Tower to version 2.39.0

#### 1.7.2 Ansible Tower Version 2.4.4

- Corrected an issue related to Ansible 2.0.0.x job callback events
- Corrected an issue where YAML extra\_vars were ignored when launching a job template
- Corrected an issue where running scan jobs against Red Hat Enterprise Linux 5 inventory failed
- Corrected an issue where the Services tab was not populating in scan jobs on SLES 11 or RHEL 5
- Corrected an issue with log output filtering
- · Corrected an issue where the Rackspace module had caching on by default
- Corrected an issue where Tower was not working properly on Centos 7.2 with Python 2.7.5
- Corrected an issue where OpenStack modules were not running correctly on systems with Python 2.7 (bumping shade and pyrax versions to allow Ansible 2.0 OpenStack modules to run correctly)
- Corrected an issue where the setup/upgrade playbook failed if being run from Ansible 2.X

Note: Ansible 2.0 OpenStack modules will not work on Red Hat Enterprise Linux 6 or CentOS 6.

#### 1.7.3 Ansible Tower Version 2.4.3

- Added sample configurations for LDAP connection options and disable referrals by default, which corrects a problems with queries hanging with AD
- Corrected an issue where the UI does not enable provisioning callbacks properly
- Improved performance of user and group queries though better caching

#### 1.7.4 Ansible Tower Version 2.4.2

- · Corrected a problem with EC2 inventories which were not working correctly when instance filters were in use
- Corrected an issue when accessing Tower using IE11 web browsers
- Corrected an issue where clicking on a job in the activities stream did not show the correct job detail page
- · Corrected an issue where custom login information was not properly displayed at login
- · Corrected an issue with scan jobs against Amazon Linux machines throwing error messages instead of warnings
- Corrected an API-related problem dealing with sparkline data which corrects the ordering of recent jobs as associated with job templates
- Corrected an issue in the UI where cloud credentials associated with an inventory source were not being properly displayed
- Corrected an issue where org admins did not have the proper permissions to delete project updates
- Corrected several small UI issues

#### 1.7.5 Ansible Tower Version 2.4.1

• Resolved a failure that, when not connected to the Internet (such as being behind a restrictive firewall), prevented Tower from functioning

#### 1.7.6 Ansible Tower Version 2.4.0

- · Added custom rebranding support
- Added the ability to enable and disable basic authentication
- Added support for authentication via SAML 2.0 servers, Google Apps, GitHub, and RADIUS
- Added support for session limits
- Added support for EC2 STS tokens
- · Added default schedules for system jobs on new installs
- Added support to allow multiple scheduled system jobs
- Added an example "request\_tower\_configuration.ps1" PowerShell for use with Tower's provisioning callbacks
- · Added analytics and data collection for improving the UI experience of Ansible Tower
- Changed the behavior of config.js handling and introduced support for the local\_settings.json file for specific variable changes
- Changed the way Job Templates work so that they launch using an extra variables hierarchy
- Changed session timeout to be set in session.py and no longer in the UI local\_config.js file
- Changed the local\_config.js file to local\_settings.json and made it more flexible to override configuration settings
- Corrected some Tower features when using Ansible 2.0
- Corrected an issue where 'Overwrite' in an inventory update would imply 'Overwrite Variables'
- Corrected an issue where Tower-cli ignored default answers when trying to launch a job with a survey
- · Corrected an issue that prevented LDAP logging from working correctly

- Corrected an issue where Null errors were returned after deleting an Organization associated with a Custom Inventory Script with an Inventory
- Incorporated a feature which adds an Auth-Token-Timeout to every responses that include a valid user-supplied token
- Noted a known issue where using the strategies feature of Ansible 2.0 in Ansible Tower causes jobs to not display properly (support for the strategies feature will be added in a future release of Tower)
- Removed the ability to delete the default set Organization for Basic-level license users

#### 1.8 Release Notes for 2.3.x

#### 1.8.1 Ansible Tower Version 2.3.1

• Corrected an issue where PRoot being enabled caused jobs to fail on systems using SSH ControlPersist.

**Caution:** If Ansible's Customer Support recommended that you disable PRoot to solve the failing jobs problem (setting AWX\_PROOT\_ENABLED=False), consult with Support to determine if re-enabling PRoot is appropriate for your particular use case.

#### 1.8.2 Ansible Tower Version 2.3.0

- Added support for bundled installations
- Added improvements for preflight free disk space check
- Added Ansible installation support where the Ansible Tower installer now attempts to install Ansible as part of the installation process
- Corrected an issue where launching a JT with a Survey attached failed if you had survey data types other than "text" or "text area"
- Corrected an issue where scan jobs fail on large file scans
- Corrected an issue where projects were not included in system backups
- · Corrected an issue where downloading stdout in text format would return JSON instead
- · Corrected an issue where downloading stdout in text format would incorrectly escape characters
- Corrected a performance issue when accessing jobs and job\_templates

#### 1.9 Release Notes for 2.2.x

#### 1.9.1 Ansible Tower Version 2.2.2

- · Corrected an issue where unicode credential passwords caused migrations to fail
- Corrected a performance issue when Tower redacts sensitive data from job output

#### 1.9.2 Ansible Tower Version 2.2.1

- Fixed performance issues when job stdout was very large
- · Corrected an issue where stdout display in Tower would fail on some unicode output
- Corrected an issue where EC2 inventory sync would fail if instances had blank tags
- Corrected an issue where jobs would not cancel properly on user cancellation (applies to EL6 platforms where PRoot was enabled by default)
- · Corrected an issue when restoring a Tower database backup to a remote PostgreSQL database
- · Added support for newer OpenSSH private key format
- Fixed display of Tower version in 'About Tower'
- Fixed links to Ansible Github repository in dynamic inventory online help

#### 1.9.3 Ansible Tower Version 2.2.0

- Added System Tracking job scan (available for Enterprise and Premium licenses only)
- Simplified Dashboard and Interface with new Setup Menu
- · Added inventory support for OpenStack
- · Added data cleanup and snapshot retention scheduling
- Added Ansible Galaxy integration
- Added support for Remote Command Execution
- Added Status widget for easily viewing the 10 most recent jobs run on a job template
- · Added integration for easier backups and restorations into the Tower setup playbook
- · Adjusted dates to display in the user's locale format
- Simplified password/passphrase entry
- Added more configurable verbosity levels for job templates
- · Assorted other bugfixes and enhancements
- API change: Formatting of extra\_vars attached to Job Template records is preserved. Previously, YAML would be converted to JSON and returned as JSON. In 2.2.0 and newer, YAML is returned as YAML with formatting and comments preserved, and JSON is returned as JSON.

#### 1.10 Release Notes for 2.1.x

#### 1.10.1 Ansible Tower Version 2.1.4

• Corrected Tower's Live Events feature, again. Really.

#### 1.10.2 Ansible Tower Version 2.1.3

- Corrected an issue where Tower Live Events would attempt to endlessly reconnect
- Corrected issues when running with Ansible 1.9.0.1

#### 1.10.3 Ansible Tower Version 2.1.2

- Corrected multiple issues with Tower's Live Events feature
- Corrected an issue where Tower would become stuck if a job was killed due to memory exhaustion
- Improved the response time of Project queries
- Corrected an error that caused users to be unable to relaunch jobs

#### 1.10.4 Ansible Tower Version 2.1.1

- · Multi-tenancy security enabled by default for new installs
- Added support for setting VPC id for RDS instances to EC2 dynamic inventory
- Added the ability for organization admins to create surveys
- Added support for scheduling of custom inventory scripts
- Corrected an error when parsing extra\_vars as YAML
- Corrected an error when configuring a remote database
- Added EULA agreement when updating license
- Corrected the sending of live events in some cases
- · Corrected a potential XSS issue

#### 1.10.5 Ansible Tower Version 2.1.0

- New simplified Portal Mode view for users, access at https://<Tower server name>/portal/
- New surveys on job templates allow easy prompting of users for job parameters
- Tower can now use an external PostgreSQL instance as the Tower database, including Amazon's RDS
- Added support for active/passive High Availability Tower deployments
- · Custom dynamic inventory scripts can be pasted in using the admin user menu
- Limit Amazon EC2 inventory imports into Tower based on tags, keys, and more
- Tower data cleanup jobs can now be scheduled and run directly from the Tower interface versus logging into the Tower instance
- The /etc/awx Tower configuration directory has moved to /etc/tower
- Non-admin api users must now use the /launch endpoint for a job template and can no longer call a job's /start endpoint directly.
- Many assorted improvements and fixes

### 1.11 Release Notes for 2.0.x

#### 1.11.1 Ansible Tower Version 2.0.5

- Ensured websocket connection uses user's RBAC credentials
- Corrected a potential CSRF issue when using the REST API graphical browser

#### 1.11.2 Ansible Tower Version 2.0.4

• Corrected a privilege escalation related to user account levels

#### 1.12 Ansible Tower Version 2.0.2

- Further corrections for job execution with certain 0mq library versions
- Changes to AMI license logic to allow bring-your-own-license usage

#### 1.12.1 Ansible Tower Version 2.0.1

- Corrected a job execution issue due to 0mq library versions on certain platforms
- Reduced logfile verbosity and retention for some Tower subcomponents
- Adjusted setup playbook for the release of EPEL 7

#### 1.12.2 Ansible Tower Version 2.0

- New dashboard that provides at-a-glance status of your Ansible deployment
- Completely redesigned job status page featuring real-time playbook output and progress updates
- Added support for multiple new cloud providers Azure, Google Compute Engine, and VMware vSphere
- · New user interface look and feel
- Integrated monitoring support for checking the health of your Tower install
- Tower now requires a license to run. 10 machine free licenses, as well as free large trial licenses, are available at http://ansible.com/license
- Support added for Red Hat Enterprise Linux 7 and CentOS 7
- Upgrades will reuse password information, not requiring reentry in group\\_vars/all of setup playbook
- Many assorted improvements and fixes

#### 1.13 Release Notes for 1.4.x

#### 1.13.1 Ansible Tower Version 1.4.12

- · Corrected an issue handling Unicode output from ansible-playbook
- · Corrected an issue displaying job details for some jobs

#### 1.13.2 Ansible Tower Version 1.4.11

- Performance improvements to inventory import and deletion
- Groups UI under inventory tab is now paginated
- Updated UI options for moving and copying groups (and host contents)

• Added the ability to optionally prompt for job variables when launching jobs to the job template detail pages

#### 1.13.3 Ansible Tower Version 1.4.10

- Correctly handle schedule creation when browser timezone cannot be detected.
- Corrected pagination on job events page.

#### 1.13.4 Ansible Tower Version 1.4.9

- Corrected a provisioning callback issue on Enterprise Linux.
- Added a sample provisioning callback script.
- Various backend and UI improvements.

#### 1.13.5 Ansible Tower Version 1.4.8

- Scheduling for Jobs, SCM updates, and Inventory synchronization has been added. The UI for each of these objects has changed to accommodate this new scheduling feature.
- The jobs page has been overhauled to show completed, active, queued, and scheduled jobs.
- Inventory and project synchronization jobs are now also shown on the jobs page.
- Added support for Ansible Vault to Credentials. For more information on how to use Ansible Vault, please visit: http://docs.ansible.com/playbooks\_vault.html.

#### **KNOWN ISSUES**

#### **Topics:**

- Errors when editing objects
- Server error when accessing SAML metadata via hostname
- Running in FIPS mode
- Host comparisons against a single host
- Live events status indicators
- VMWare Self-Signed Certs
- · Celery Beat Database on Disk Becomes Corrupted
- · Safari unable to establish connection to web socket
- Ansible Module for set\_stats unavailable until Ansible v2.2.2
- sudo/su not working as expected for local playbooks or playbooks with local\_actions
- Installation program does not enable **su** command support
- Problems when using SSH customization
- Ubuntu unsupported for bundled installations
- Session Limits of 1 minute or less will break your instance of Tower
- Ansible 2.0 strategies
- Reactivating OAuth authentication accounts which have been deleted
- · Jobs fail when using ECDSA credentials
- CloudForms inventory plugin fails

## 2.1 Errors when editing objects

Ansible Tower implements a role based access control system. It may appear that you can edit objects that do not belong to you–like being able to pull up an edit dialog of your teammates, which you have been granted permission to view–but when you try to edit something, you will receive a 403 error and you cannot view any information you should not already have access to as defined in the system.

## 2.2 Server error when accessing SAML metadata via hostname

When Tower is accessed via hostname only (e.g. https://my-little-tower), trying to read the SAML metadata from /sso/metadata/saml/ generates a sp\_acs\_url\_invalid server error.

A configuration in which uses SAML when accessing Tower via hostname only instead of an FQDN, is not supported. Doing so will generate an error that is captured in the tower.log file and in the browser with full traceback information.

## 2.3 Running in FIPS mode

At this time, Tower does not support running when the operating system is configured to operate in FIPS mode.

## 2.4 Host comparisons against a single host

When performing a host comparison against a single host, if there is only one (1) run for the selected date, Tower may display a message saying it could not find any scan job runs in one of the columns.

#### 2.5 Live events status indicators

Live events status dots are either seen as a red or orange dot at the top of the Tower Dashboard when something goes wrong. They are not seen at all when the system is in a healthy state. If you encounter a red or orange live events status indicator, even when your system seems fine, the following suggestions may offer a solution:

- Try manually refreshing/reloading your browser page.
- Try changing web browsers, as Firefox and Safari have been reported to have issues trusting self-signed certificates.
- Try creating a self-signed certificate that matches your DNS and import it into your trust manually.
- Try using an incognito or private browsing session.
- Try disabling your browser plugins to ensure none are blocking the service.
- Try opening port 8080 (on your local machine and also inbound to the Tower machine) and accessing Tower at https://tower-ip:8080/, which should allow you to accept the certificate for the machine.

Live event status dots are used for troubleshooting problems with your Tower instance and the socketio logs can point out anything problematic. You can collect troubleshooting help by running a sosreport. As root, run the command sosreport from your system to automatically generate a diagnostic tar file, then contact Ansible's Support team with the collected information for further assistance.

**Note:** Starting with Ansible Tower 2.2.0, live events status indicators only appear if Tower detects a problem. In earlier releases, a green status dot was shown to indicate a healthy system.

## 2.6 VMWare Self-Signed Certs

If you have a vmware instance that uses a self-signed certificate, then you will need to add the following to the *Source Vars* configuration of the Cloud Group:

"source\_vars": "---\nvalidate\_certs: False",

## 2.7 Celery Beat Database on Disk Becomes Corrupted

If celery is not cleanly shutdown, it leaves a /var/lib/awx/beat.db file on disk.

If you observe the traceback in the initial comment, you must manually delete the /var/lib/awx/beat.db file and restart Tower.

#### 2.8 Safari unable to establish connection to web socket

The following connection error displays in Tower:





Live events: attempting to connect to the Tower server.

This error is the result of Safari silently refusing to establish a connection to a web socket that is using a self-signed certificate. To resolve this issue, you must set Safari to always trust the website upon first visiting it:

- 1. Close the current browser and revisit the site. An error message appears stating Safari can't verify the identity of the website.
- 2. Click Show Certificate.
- 3. Check the **Always trust ... when connecting to ...** checkbox to allow Safari to accept the connection.

If you click **Continue** without checking the checkbox, this error will persist.

## 2.9 Ansible Module for set\_stats unavailable until Ansible v2.2.2

The set\_stats Ansible module is unavailable until Ansible 2.2.2 is released. This module is used by Tower to pass artifacts from one job to another in a workflow. As a workaround, please note that you are able to use artifacts with the devel branch of Ansible.

## 2.10 sudo/su not working as expected for local playbooks or playbooks with local\_actions

Instances have been reported that sudo/su commands do not work when using an entirely local playbook or a playbook with some local\_actions cases. This is likely due to PRoot being enabled. To use sudo/su commands with local playbooks or those with local\_actions, PRoot must be disabled. You can disable PRoot by navigating to

the /etc/tower/settings.py file, setting AWX\_PROOT\_ENABLED=False, then restarting services with the ansible-tower-service restart command.

## 2.11 Installation program does not enable su command support

During the testing of Ansible Tower 2.3.0, it was discovered that the installation program does not handle the option to enable su command support.

When using the Tower installation program to install Tower to a remote system where su access is required, the installation program will not work. To workaround this issue, you should manually run the ansible-playbook command with the --su parameter.

## 2.12 Problems when using SSH customization

The PRoot functionality in Ansible Tower limits which directories on the Tower file system are available for playbooks to see and use during playbook runs. If you are attempting to customize SSH behavior by using a custom SSH configuration in the Tower user's home directory, this directory must be added to the list of directories exposed by PRoot.

For example, to add a custom SSH config in /var/lib/awx/.ssh/config and make it available for Tower jobs, edit the /etc/tower/settings.py file and add that path to the AWX\_PROOT\_SHOW\_PATHS variable:

```
AWX_PROOT_SHOW_PATHS = [ '/var/lib/awx/.ssh/' ]
```

Once the paths you need have been added to settings.py, restart Tower using the admin utility script, ansible-tower-service:

ansible-tower-service restart

## 2.13 Ubuntu unsupported for bundled installations

If you are using the bundled installer for Ansible Tower 2.3.0, note that only Red Hat Enterprise Linux and CentOS are supported at this time. Ubuntu support has not yet been added to the bundled installer. Ubuntu users can continue to use the unbundled installer.

## 2.14 Session Limits of 1 minute or less will break your instance of Tower

Proactive session limits will kick the user out when the session is idle. It is strongly recommended that you do not set the session limit to anything less than 1 minute, as doing so will break your Ansible Tower instance.

## 2.15 Ansible 2.0 strategies

Ansible 2.0 introduces strategies, such as strategy: free, but Ansible Tower support for these new strategies is not yet available in Tower version 2.4.0. This Ansible feature will not be added to Tower until a later release.

If you attempt to use strategy: free in Ansible Tower, jobs will run, but they will not display properly in the Job Detail page.

Refer to the following link for more information: https://docs.ansible.com/ansible/playbooks\_strategies.html

## 2.16 Reactivating OAuth authentication accounts which have been deleted

Once a user who logs in using social authentication has been deleted, the user will not be able to login again or be recreated until the system administrator runs a cleanup\_deleted action with days=0 to allow users to login again. Once cleanup\_deleted has been run, Tower must be restarted using the ansible-tower-service restart command. Accounts which have been deleted prior to having the cleanup\_deleted action run will receive a "Your account is inactive" message upon trying to login.

## 2.17 Jobs fail when using ECDSA credentials

If your Tower server has a version of OpenSSH that predates 5.7, jobs will fail when launched jobs with ECDSA credentials.

If the key is unencrypted, your job will fail with a message similar to:

```
Enter passphrase for /tmp/ansible_tower_RcQweY/tmph9Jote:
```

If the key is encrypted and you have entered the correct passphrase, your job will fail with:

```
Enter passphrase for /tmp/ansible_tower_nYW0SO/tmpgJSimD:
Bad passphrase, try again for /tmp/ansible_tower_nYW0SO/tmpgJSimD:
```

If ECDSA credentials are not working for your use, you could try using ED25519 keys instead.

## 2.18 CloudForms inventory plugin fails

During the testing of Ansible Tower 3.0, it was discovered that the CloudForms inventory plugin has a known failure. This failure is expected to be resolved with the release of CloudForms Management Engine 5.6.1 and Ansible Tower 3.0.2.

#### SUPPORTED LOCALES

Ansible Tower supports the following locales for UTC-friendly date and time information.

Tower automatically sets the locale preference based on the user's browser settings. For Safari, Internet Explorer, and older versions of Chrome as well as FireFox, this is handled automatically.

For newer versions of Chrome (v32 and later) and FireFox (v32 and later), Tower uses the language preferences set from your browser's language settings. The browser lists the user's preferred languages and selects the first in the array as the user's top choice, which Tower uses as the preferred locale. This means that you can change your browser's language and change your Tower locale preferences (although you may need to reload/refresh Tower in your browser to see this change.)

- az Cyrillic
- bg Bulgarian
- bs Bosnian
- ca Catalan
- cs Czech
- da Danish
- de German
- el Greek
- en-gb English (United Kingdom)
- es Spanish
- et Estonian
- eu Basque
- fa Persian
- fi-Finnish
- fo-Faroese
- fr-French
- gl Galician
- he Hebrew
- hr Croatian
- hu Hungarian
- id Indonesian

- is Icelandic
- it Italian
- ja Japanese
- ka Georgian
- lt Lithuanian
- lv Latvian
- mk Macedonian
- nb Norwegian
- nl Dutch
- pl Polish
- pt-br Portuguese (Brazil)
- pt Portuguese
- ro Romanian
- ru Russian
- sk Slovak
- sl Slovenian
- sq Albanian
- sr Serbian
- sv Swedish
- th Thai
- tr Turkish
- uk Ukrainian
- vi Vietnamese
- zh-cn Chinese (simplified)
- zh-tw Chinese (traditional)

# CHAPTER FOUR

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