
Ansible Tower Release Notes

Release Ansible Tower 3.0

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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 3.0.

Ansible Tower Version 3.0; July 19, 2016; <https://access.redhat.com/>

RELEASE NOTES

1.1 Release Notes for Ansible Tower Version 3.0.x

1.1.1 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)
- 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. Removed utilities to manage the cleanup of those soft-deleted objects
- 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 RHEL 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

1.2 Release Notes for 2.4.x

1.2.1 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

1.2.2 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.

1.2.3 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

1.2.4 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

1.2.5 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

1.2.6 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

1.3 Release Notes for 2.3.x

1.3.1 Ansible Tower Version 2.3.1

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

<p>Caution: If Ansible’s Customer Support recommended that you disable PRoot to solve the failing jobs problem (setting <code>AWX_PROOT_ENABLED=False</code>), consult with Support to determine if re-enabling PRoot is appropriate for your particular use case.</p>

1.3.2 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

1.4 Release Notes for 2.2.x

1.4.1 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

1.4.2 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

1.4.3 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.

1.5 Release Notes for 2.1.x

1.5.1 Ansible Tower Version 2.1.4

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

1.5.2 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

1.5.3 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

1.5.4 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

1.5.5 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

1.6 Release Notes for 2.0.x

1.6.1 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

1.6.2 Ansible Tower Version 2.0.4

- Corrected a privilege escalation related to user account levels

1.6.3 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

1.6.4 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

1.6.5 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

1.7 Release Notes for 1.4.x

1.7.1 Ansible Tower Version 1.4.12

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

1.7.2 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

1.7.3 Ansible Tower Version 1.4.10

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

1.7.4 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.

1.7.5 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*
- *Running in FIPS mode*
- *Host comparisons against a single host*
- *Live events status indicators*
- *Use of Custom Certificates with Live Events*
- *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 Running in FIPS mode

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

2.3 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.

2.4 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.

2.5 Use of Custom Certificates with Live Events

When using a custom SSL certificate with Live Events, you must:

- use the default `/etc/tower/tower.cert` and `/etc/tower/tower.key` paths
- use an unencrypted `/etc/tower/tower.key` keyfile.

If a custom location or encrypted keyfile is used, the Live Events service will not function properly.

2.6 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.

2.7 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.

2.8 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
```

2.9 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.

2.10 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.

2.11 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

2.12 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.

2.13 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/tmp9Jote:
```

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.

2.14 CloudForms inventory plugin fails

During the testing of Ansible Tower 3.0, it was discovered that the CloudForms inventory plugin has a known failure with the current release of the CloudForms Management Engine (CFME), version 5.6. This failure is expected to be resolved with the release of CFME 5.6.1.

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)

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