Automation Controller Release Notes

Release Automation Controller 4.3.0

Red Hat, Inc.

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CONTENTS

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

The *Automation Controller Release Notes* provides release notes, known issues, and related reference materials. This document has been updated to include information for the latest release of Automation Controller v4.3.0.

We Need Feedback!

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

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

Automation Controller Version 4.3.0; November 29, 2022; https://access.redhat.com/

CHAPTER

ONE

RELEASE NOTES

Refer to the latest Product Documentation for Red Hat Ansible Automation Platform for the complete Automation Platform documentation.

1.1 Automation Controller Version 4.3

New Features

- Added the ability for control nodes to peer out to remote execution nodes (on a Kubernetes deployment only)
- Introduced peers detail tab for instances
- Introduced the ability to create and remove instances in the controller UI
- Updated nodes/links in the Topology Viewer of the controller UI to support new states
- Enabled health checks to be run on remote execution nodes on a Kubernetes deployment
- Added the ability for Kubernetes users to create instance groups
- Added project/playbook signature verification functionality to the controller, enabling users to supply a GPG key and add a content signing credential to a project, automatically enabling content signing for that project
- Introduced `ansible-sign`, a content signing and verification utility that provides a unified way to sign content across the Ansible eco-system
- Support for schedules with the `awx-cli import` and `awx-cli export` features
- Surfaced database connections in `/api/v2/metrics`

Additions

- Topology viewer now shows new node and link states
- Mesh topology shows directionality of links between nodes
- The ability to pass variable value from a nested workflow job template to a job template or workflow job template using the `set_stats` module
- Added **Prompt on Launch** options on all parameters of the job template and workflow job templates
- Added Job and Skip tags on workflow job templates and accompanying **Prompt on Launch** options
- Configurable timeout settings for the receptor
- Added missing security headers to application URLs
- Metrics added for Support Engineers and customers to analyze, problem solve performance-related issues with lags in job events

- The controller now polls the job endpoint to determine exactly when events are done processing and the UI displays a message when it has finished processing events for the job
- Include forks on job and/or job template data for Automation Analytics
- Forks information no longer missing in running job details
- Schedules now allow date exceptions
- Optimized/cache information about preferred instance groups
- Control for capacity decisions and task worker availability
- Survey wizard now handles multiple choice/multi-select question-answers in both array and string form (formerly only strings were supported)
- Surveys can now auto-complete in multiple choice input fields
- Added options for setting the priority class on the control plane and PostgreSQL pods
- Subscription Details indicating whether the customer is in or out-of-compliance with their subscriptions
- Added the ability for Receptor Ansible collection to provision receptor node(s)
- Added the ability to deprovision external execution nodes
- Added playbook with all the required variables for provisioning new remote execution nodes
- Pop-up help text added to Details fields of job templates, workflow job templates, credentials, projects, inventories, hosts, organizations, users, credential types, notifications, instance groups, applications, and execution environments
- Extra variables added to workflow approval notifications

Updates or Fixes

- Topology Viewer links, nodes, legend, list view "Status" updated to reflect new states
- Updated the Topology viewer to show more node detail
- Topology Viewer no longer fails to populate when launched
- Updated the controller to handle asynchronous health checks on an instance
- Nodes are now moved to a deprovisioning state when removing from the controller UI
- Increased the number of allowed characters for the `job_tags` (Job Tags field) in a template
- Job schedules are no longer missing from the Schedules view when sorting by type
- Schedules now prompting for job or skip tags
- Browser timezone automatically set as default when creating a schedule
- Fixed issue with adding a schedule to an inventory source
- LDAP / LDAPS connections no longer stay open after a user has logged out
- Refactored LDAP backend to be more efficient, including reduced initial login time after increasing list of LDAP mappings
- Job launch failure error now contains more succinct and informative messaging in the event that content signature validation fails
- Users with Admin permissions on a workflow are able to assign an inventory to the workflow job template
- Approval node toolbar buttons updated to improve the Workflow approval user experience
- Workflow approval templates are now exportable

- Admin users can now copy a workflow job template
- Node rejoins cluster as expected after connection to PostgreSQL is lost
- Workflow or sliced jobs no longer blocked or fails when ran
- Sliced jobs no longer produce *500* errors when performing a `GET` operation while launching more than 500 slices
- Jobs no longer fails if Job Slicing and Fact Storage are enabled together
- Adhoc command jobs no longer result in error when ran
- Fixed error that resulted from relaunching an adhoc command with password
- Advanced search updated to only allow users to select valid or logical match types to avoid unnecessary *500* errors
- Included updates and enhancements to improve performance associated with the Task Manager in the handling of scaling jobs, mesh and cluster sizes
- Job output performance improvements
- Job output screen user experience improvements
- Job timeout details showing in the Job Output as expected
- Job Settings page updated to no longer produce *404* errors and other various warnings
- First Run / Next Run values of the job schedule fixed to no longer change to one day before the date entered in the Edit/Add page of the schedule settings
- Job template with concurrent jobs launches as expected if capacity allows the controller to run more jobs
- `awx-cli import` and `awx-cli export` now produce an error message and provide appropriate exit codes when an imported or exported operation fails
- Default cleanup schedules no longer only run once
- Updated SAML adapter to not remove System Administrator and System Auditor flags
- Lookup modals refresh when opened
- Twilio notifications can now be sent from the controller from behind a proxy
- Custom credential type creation works as expected
- Updated strings for translation
- The Demo Project will now initially show a status of "successful" and will not update on launch, whereas before it showed "never updated" and updated on launch
- Inventory updates based on an SCM source now provides the revision of the project it used
- Removing hosts from inventories no longer fails with "Out of Shared Memory" error
- Manually gathering analytics from CLI no longer results in a unicode error
- Filter websockets related to sync jobs on jobs list(s) when refreshed, these jobs will be filtered again from the Jobs view
- The `GOOGLE_APPLICATION_CREDENTIALS` environment variable is now being set from a Google Compute Engine (GCE) credential type
- Fixes some stability issues with ansible-runner worker processes and related logging slowdowns in the Dispatcher task processing

Deprecations

None in this release.

Removals

- Removed the **Update on Project Update** field (`update_on_project_update`) in projects. This is intended to be replaced by ordinary "Update on Launch" behavior, because they chain from inventory to project. So if this option was previously set on the inventory source, it is recommended that both inventory and project are set to "Update on Launch".
- The Credential Permissions page no longer allows Credential Admin or Org Admins to manage access operations for a credential that does not belong to any organization
- Fallback behavior removed when an instance group is defined on a job template or inventory

1.2 Automation Controller Version 4.2.1

Automation Controller fixes:

- Node alias is now saved when job template is changed in the workflow
- Improved error messages in the API `job_explanation` field for specific error scenarios, (e.g., runner worker process is killed), or certain failure scenarios (e.g., shutdown)
- Fixed the Task Manager to fully account for the job's control process capacity for jobs running in container groups
- **Fixed a few bugs that caused delays in task processing by adding the following file-based settings:**
  - `JOB_WAITING_GRACE_PERIOD` increases the threshold for marking jobs stuck in the "waiting" status as failed
  - `CLUSTER_NODE_MISSED_HEARTBEAT_TOLERANCE` to allow the heartbeat to be more tolerant to clock skew and other problems
  - `K8S_POD_REAPER_GRACE_PERIOD` to allow more time before pod cleanup executes its last attempt to delete pods used by jobs
  - `TASK_MANAGER_TIMEOUT` to allow more time in the unlikely event that the Task Manager fails to finish normally
- Jobs no longer fail for nested submodules in an SCM (git) project and the `.git` folder will be omitted
- Added more logs to help debug database connectivity problems and cluster resource limits
- Removed the `current_user` cookie which was not used by the UI
- Updated controller to send FQCN data for tasks to analytics
- Fixed the metrics endpoint (`/api/v2/metrics`) to no longer produce erroneous `500` errors
- Added `remove_superuser` and `remove_system_auditors` to the SAML user attribute map
- Added the ability to allow multiple values in the `SOCIAL_AUTH_SAML_USER_FLAGS_BY_ATTR.is_*_[value|role]` settings
- Unwanted Galaxy credentials are no longer added to the Organization while logging in through SAML
- awx-cli now allows for multiple `--extra_vars` parameters
- Receptor no longer fails in FIPS mode

- If an OCP node's record is deleted (either by the `awx-manage` command or by the heartbeat task), it will re-register itself
- Upgrading and changing `node_type` from `execution` to `control` or `hybrid` no longer causes cleanup errors

Execution Environment fixes:

None for this release

Automation Controller UI fixes:

- The controller UI properly displays job output when `strategy: free` is set in the playbook
- Fixed the pagination displays within the main lists, i.e., Resources (Job Templates, Projects, Inventory), Access (Organization, Users, Teams, Notifications), and Administration (Instance Groups, Execution Environments)
- Fixed the Job Output to properly follow and scroll; and improved the Page Up/Page Down button behavior
- Fixed the controller UI to now be able to filter by multiple labels
- Large workflow templates no longer cause browsers to crash when linking nodes near the end of the template
- Fixed the approval node "Deny" to no longer run the subsequent workflow nodes
- Forks information no longer missing in running job details
- Upon saving a schedule, the date chooser no longer changes to the day before the selected date
- References to Ansible Tower are replaced with Automation Controller throughout the UI, including tooltips where documentation is referenced
- Corrected translations for the Japanese Subscription settings screen

Installation fixes specific to Automation Controller:

None for this release

1.3 Automation Controller Version 4.2

Introduced

- Graphical visualization of the automation topology to show the types of nodes, the links between them and their statuses

Added

- For VM-based installs, the controller will now automatically mount the system trust store in execution environments when jobs run
- **Log Format For API 4XX Errors** field to the Logging settings form to allow customization of 4xx error messages that are produced when the API encounters an issue with a request
- Ability to use labels with inventory
- Ability to flag users as superusers and auditors in SAML integration
- Support for expanding and collapsing plays and tasks in the job output UI
- Filtering job output UI by multiple event types
- Various default search filters to a number of list views
- Top-level list of instances to now be visible in the UI
- A pop-up message when a user copies a resource

- Job Templates tab to Credentials and Inventories to view all the templates that use that particular credential or inventory

Updated

- Controller to use Python 3.9
- Django's `SESSION_COOKIE_NAME` setting to a non-default value. **Note**, any external clients that previously used the `sessionid` cookie will need to change. Refer to Session Authentication for more detail.
- Controller to support podman-style volume mount syntax in the **Paths to expose to isolated jobs** field of the Jobs Settings of the UI
- Isolated path to be exposed in OCP/K8s as HostPath
- Upgraded Django from version 2.2 to 3.2
- Modified usage of `ansible_facts` on Advanced Search to add more flexibility to the usage of `ansible_facts` when creating a smart inventory
- The controller node for a job running on an execution node now incurs a penalty of 1 unit of capacity to account for the system load that controlling a job incurs. This can be adjusted with the file-based setting `AWX_CONTROL_NODE_TASK_IMPACT`.
- Project updates to always run in the `controlplane` instance group
- Slack notifications to allow replying to a thread instead of just channels
- UI performance to improve job output
- Job status icons to be more accessible
- Display of only usable inventories when launching a job
- Browser tab to show more information about which page the user is currently viewing
- Controller to now load variables *after* job template extra variables to prevent overriding the meta variables injected into each job run

Deprecated

- The concept of "committed capacity" from Instance Groups due to the removal of RabbitMQ
- Inventory source option to **Update on project update** - this field updates the inventory source if its project pulled a new revision. In the future, when updating an inventory source, the controller shall automatically run project updates if the project itself is set to **Update on launch**.

Removed

- Case sensitivity around hostcount

Automation Controller fixes:

- When setting the use role on a credential to more than 10 users, users are no longer added on different admin roles unexpectedly
- Fixed the fallback cleanup task to not delete files in-use
- Updated inventory hosts to allow editing when organization is at max host limit
- Enabled job slicing with fact caching now correctly saves facts for hosts from the relevant slice
- No longer validating hostnames when editing the hostname on an existing host

Execution Environment fixes:

- Fixed jobs stuck in running when timing out during an image pull

Automation Controller UI fixes:

- Fixed list search/pagination filters in place when clicking the **Back to <N>** button. Applies to all top-level list pages except the Schedules page.
- Updated Subscription and inventory usage details, including a status indicating whether the customer is in or out-of-compliance with their subscriptions
- Survey wizard now handles multiple choice/multi-select question-answers in both array and string form (formerly only strings were supported)
- Fixed error that resulted from relaunching an adhoc command with password
- Updated filter websockets related to sync jobs on jobs list(s) that when refreshed, these jobs will be filtered again from the Jobs view
- Added validation for same start/end day different time schedules

1.4 Automation Controller Version 4.1.3

Automation Controller fixes:

- Receptor no longer fails in FIPS mode
- Added the ability to exit gracefully and recover quickly when a service in the control plane crashes
- The `create_partition` method will skip creating a table if it already exists
- Having logging enabled no longer breaks migrations if the migration sends logs to an external aggregator
- Fixed the metrics endpoint (`/api/v2/metrics`) to no longer produce erroneous `500` errors

Execution Environment fixes:

- Enhanced the execution environment copy process to reduce required space in the `/tmp` directory
- Allowed execution environment images to be pulled from automation controller only
- Added the **ansible-builder-rhel8** image to the setup bundle
- Modified base execution environment images so that controller backups can run in the container

Automation Controller UI fixes:

- Upon saving a schedule, the date chooser no longer changes to the day before the selected date
- Fixed the ability to create manual projects in Japanese and other supported non-English languages
- Forks information no longer missing in running job details
- Project selected for deletion is now removed as expected when running a project sync
- The **Admin** option in the Team Permissions is now disabled so that a user cannot select it when it is not applicable to the available organization(s)
- Large workflow templates no longer cause browsers to crash when linking nodes near the end of the template
- References to Ansible Tower are replaced with Automation Controller throughout the UI, including tooltips where documentation is referenced

Installation fixes specific to Automation Controller:

- Updated the Receptor to 1.2.3 everywhere as needed

1.5 Automation Controller Version 4.1.2

Automation Controller fixes:

- Upgraded Django version to 3.2 LTS
- System (management) jobs are now able to be canceled
- Rsyslog no longer needs manual intervention to send out logs after hitting a 40x error
- Credential lookup plugins now respect the `AWX_TASK_ENV` setting
- Fixed the controller to list valid subscriptions from Satellite when having multiple quantities from the same SKU
- Updated Receptor version to 1.2.1, which includes several fixes

Execution Environment fixes:

- The host trusted cert store is now exposed to execution environments by default. See Isolation functionality and variables for detail.
- Mounting the `/etc/ssh` or `/etc/` to isolated jobs now works in podman
- User customization of execution environment mount options and mount paths are now supported
- Fixed SELinux context on `/var/lib/awx/.local/share/containers` and ensure awx as podman storage
- Fixed failures to no longer occur when the semanage `fcontext` has been already set for the expected directory

Automation Controller UI fixes:

- Fixed the ability to create manual projects in Japanese and other suppported non-English languages
- Fixed the controller UI to list the roles for organizations when using non-English web browsers
- Fixed the job output to display all job type events, including source control update events over websockets
- Fixed the `TypeError` when running a command on a host in a smart inventory
- Fixed the encrypted password in surveys to no longer show up as plaintext in the Edit Order page

Installation fixes specific to Automation Controller:

- Fixed duplicate Galaxy credentials with no default organization
- Running the `./setup.sh -b` out of the installer directory no longer fails to load group vars
- The installer no longer fails when IPV6 is disabled
- Fixed unnecessary `become_user:root` entries in the installation
- Modified database backup and restore logic to compress dump data
- Creating default execution environments no longer fails when password has special characters
- Fixed installations of execution environments when installing without internet access
- Upgrading to AAP 2.1 no longer breaks when the Django superuser is missing
- Rekey now allowed with existing key

1.6 Automation Controller Version 4.1.1

- Added the ability to specify additional nginx headers
- Fixed analytics gathering to collect all the data the controller needed to collect
- Fixed the controller to no longer break subsequent installer runs when deleting the demo organization

1.7 Automation Controller Version 4.1

Introduced

- Connected Receptor nodes to form a control plane and execution mesh configurations
- The special `controlplane` instance group to allow for the task manager code to target an OpenShift Controller node to run the project update
- The ability to render a configured mesh topology in a graph in the installer
- Controller 4.1 execution nodes can be remote
- Node types for Controller 4.1 (`control`, `hybrid`, `execution`, `hop`, `control`, `hybrid`, `execution`, `hop`) installed for different sets of services and provide different capabilities, allowing for scaling nodes that provide the desired capability such as job execution or serving of web requests to the API/UI.

Added

- The ability for the platform installer to allow users to install execution nodes and express receptor mesh topology in the inventory file. The platform installer will also be responsible for deprovisioning nodes.
- Work signing to the receptor mesh so that control plane nodes have the exclusive authority to submit receptor work to execution nodes over the mesh
- Support for pre-population of execution environment name, description, and image from query parameters when adding a new execution environment in the Controller User Interface
- Ability to trigger a reload of the topology configuration in Receptor without interrupting work execution
- Using Public Key Infrastructure (PKI) for securing the Receptor mesh
- Added importing execution environments from Automation Hub into the controller to improve the platform experience

Updated

- The controller to support new controller control plane and execution mesh
- Task manager will only run project updates and system jobs on nodes with `node_type` of "control" or "hybrid"
- Task manager will only run jobs, inventory updates, and ad hoc commands on nodes with `node_type` of "hybrid" or "execution"
- Heartbeat and capacity check to work with Receptor execution nodes
- Reaper to work with the addition of execution nodes
- Controller User Interface to not show control instances as an option to associate with instance groups
- The Associate pop-up screen to display host names when adding an existing host to a group
- Validators for editing miscellaneous authentication parameters
- Advanced search key options to be grouped

- SAML variables default values
- Survey validation on Prompt on Launch
- Login redirect

Deprecated

- None

Removed

- The ability to delete the default instance group through the User Interface

1.8 Automation Controller Version 4.0.1

- Upgraded Django version to 3.2 LTS
- Updated receptor to version 1.2.1

1.9 Automation Controller Version 4.0

Introduced

- Support for automation execution environments. All automation now runs in execution environments via containers, either directly via OpenShift, or locally via podman
- New PatternFly 4 based user-interface for increased performance, security, and consistency with other Ansible Automation Platform components

Added

- Added identity provider support for GitHub Enterprise
- Support for RHEL system crypto profiles to nginx configuration
- The ability to disable local system users and only pull users from configured identity providers
- Additional Prometheus metrics for tracking job event processing performance
- New `awx-manage` command for dumping host automation information
- Red Hat Insights as an inventory source
- Ability to set server-side password policies using Django's `AUTH_PASSWORD_VALIDATORS` setting
- Support for Centrify Vault as a credential lookup plugin
- Support for namespaces in Hashicorp Vault credential plugin

Updated

- OpenShift deployment to be done via an Operator instead of a playbook
- Python used by application to Python 3.8
- Nginx used to version 1.18
- PostgreSQL used to PostgreSQL 12, and moved to partitioned databases for performance
- The "container groups" feature to general availability from Tech Preview; now fully utilizes execution environments

- Insights remediation to use new Red Hat Insights inventory source rather than utilizing scan playbooks with arbitrary inventory
- Subscriptions display to count hosts automated on instead of hosts imported
- Inventory source, credential, and Ansible content collection to reference *controller* instead of *tower*

Deprecated

- None

Removed

- Support for deploying on CentOS (any version) and RHEL 7
- Support for Mercurial projects
- Support for custom inventory scripts stored in controller (use `awx-manage export_custom_scripts` to export them)
- Resource profiling code (`AWX_RESOURCE_PROFILING_*`)
- Support for custom Python virtual environments for execution. Use new `awx-manage` tools for assisting in migration
- Top-level /api/v2/job_events/ API endpoint
- The ability to disable job isolation

CHAPTER

TWO

KNOWN ISSUES

2.1 Launching the ansible-runner component not working as expected

A change was made to the way the ansible-runner component is launched (the executable inside of the execution environment that the controller launches to run a playbook), introduced a backward incompatibility. It is highly recommended to always rebuild on top of the base execution environments that corresponds to the platform version you are using. This should be the ideal way to upgrade in general.

2.2 Deleted default orgs produces duplicate Ansible-Galaxy credentials

Despite being able to run subsequent installs when deleting the default organization, it does not automatically remove or fix duplicate Ansible-Galaxy credentials. Refer to the KCS article on How to remove duplicated Ansible-Galaxy credentials from the database for further detail.

2.3 Isolated nodes unsupported in an OpenShift deployment

Isolated nodes are not currently supported when deploying automation controller in OpenShift.

2.4 Browsers ignoring the `autocomplete=off` setting

automation controller leverages the `autocomplete=off` attribute on forms to relay to the browser that it should not autocomplete the fields within that form. In some scenarios, however, the browser may ignore this setting and attempt to save and/or autocomplete fields. This tends to happen on forms that appear to contain login fields like username and password, such as the *User* form and some *Settings* forms. Further investigation is underway to deliver options that prevent this behavior.

2.5 Login via HTTP requires workaround

To access controller nodes behind your load balancer (in traditional cluster controller installs) via HTTP, refer to the procedure described in the Troubleshooting section of the *Automation Controller Administration Guide*.

2.6 Job slicing and limit interactions

When passing a limit to a Sliced Job, if the limit causes slices to have no hosts assigned, those slices will fail, causing the overall job to fail.

2.7 Misuse of job slicing can cause errors in job scheduling

Job slicing is intended to scale job executions horizontally. Enabling job slicing on a job template divides an inventory to be acted upon in the number of slices configured at launch time and then starts a job for each slice.

It is expected that the number of slices will be equal to or less than the number of controller nodes. Setting an extremely high number of job slices (e.g., thousands), while allowed, can cause performance degradation as the job scheduler is not designed to schedule simultaneously thousands of workflow nodes, which are what the sliced jobs become.

2.8 Default LDAP directory must be configured to use LDAP Authentication

The ability to configure up to six LDAP directories for authentication requires a value. On the settings page for LDAP, there is a "Default" LDAP configuration followed by five-numbered configuration slots. If the "Default" is not populated, the controller will not try to authenticate using the other directory configurations.

2.9 Potential security issue using `X_FORWARDED_FOR` in `REMOTE_HOST_HEADERS`

If placing controller nodes behind some sort of proxy, this may pose a security issue. This approach assumes traffic is always flowing exclusively through your load balancer, and that traffic that circumvents the load balancer is suspect to `X-Forwarded-For` header spoofing.

2.10 Server error when accessing SAML metadata via hostname

When the controller is accessed via hostname only (e.g. https://my-little-controller), 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 the controller 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.

2.11 SAML authentication revokes admin role upon login

In previous versions of automation controller, the SAML adapter did not evaluate the System Auditor or System Admin roles for a user logging in. Because of this, the login process would not change a user's system roles that were granted through the User Interface. The adapter now has a setting called **SAML User Flags Attribute Mapping** to grant users logging in these roles based on either SAML attributes or roles, and the adapter defaults to removing these roles if unspecified akin to the LDAP adapter. Refer to the logic table that shows the relationship between how the role, attribute, and attribute value settings are configured and whether or not a user will be granted the System Admin/Auditor roles.

2.12 Live events status indicators

Live events status dots are either seen as a red or orange dot at the top of the automation controller 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.

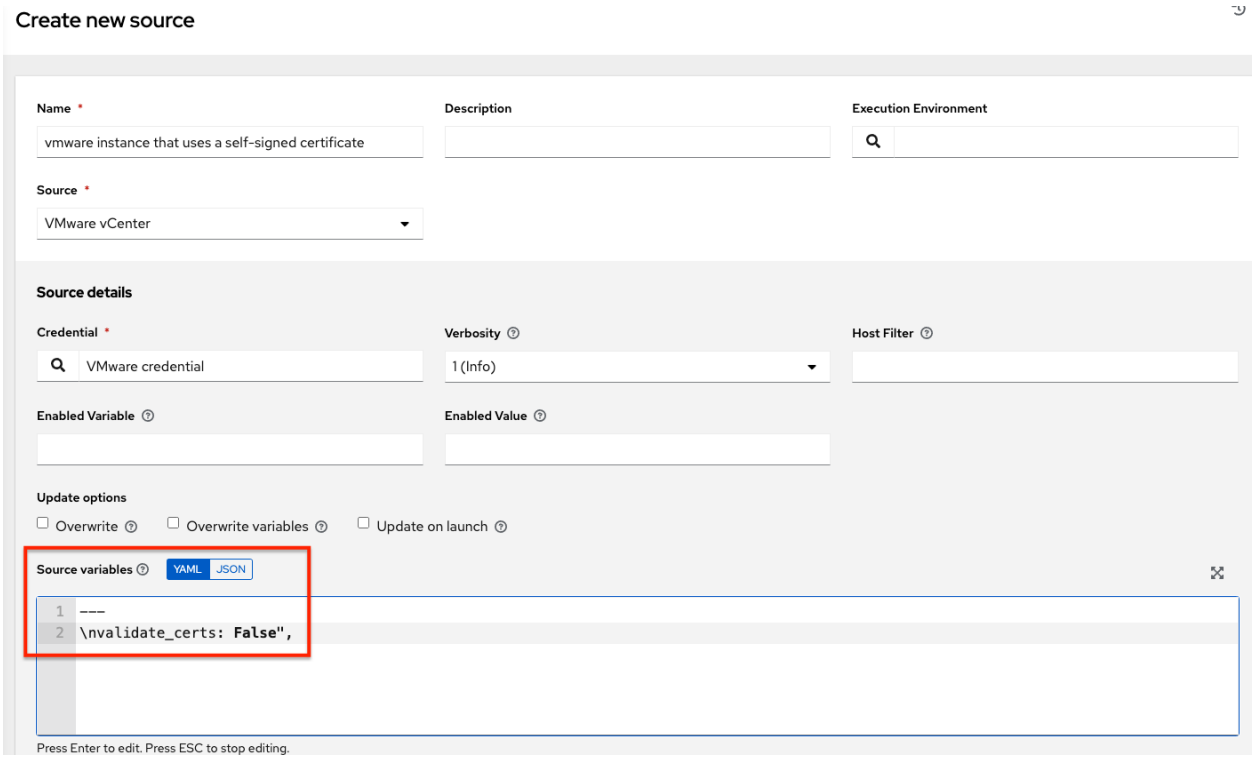
Live event status dots are used for troubleshooting problems with your controller instance. You can collect troubleshooting help by running a `sosreport`. As root, run the command `sosreport` from your system to automatically generate a diagnostic tar file, then contact Ansible's Support team with the collected information for further assistance. For more information on `sosreport`, refer to sosreport in the *Automation Controller Administration Guide*.

2.13 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",
```

You can set this in inventory source for VMware vCenter as follows:



2.14 awx-manage inventory_import user

In general, the use of `awx-manage` commands is supported when executed by the root or awx user. However, in automation controller 4.0, even when run as the root user, the command `awx-manage inventory_import` fails to authenticate with the private registry where the Red Hat execution environments are hosted. The workaround is to run the command as the `awx` user, given that the images should be pre-pulled by the installer which correctly authenticates.

2.15 Upgrading Tower 3.8 existing Instance Groups on OCP deployments

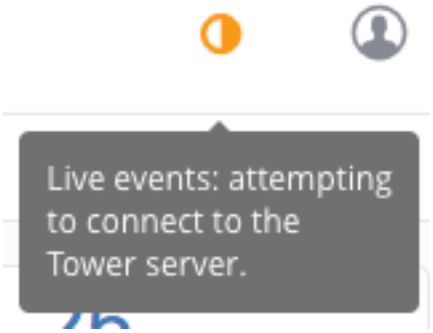
All job execution occurs in Container Groups for automation controller 4.0 deployed on OCP 4. Creating new "normal" Instance Groups is disabled in the user interface, however upon upgrade, nothing happens to regular instance groups. This is a known issue because any resources that attempt to use the normal instance group that contains control plane pods as instances will have 0 capacity and jobs will stay in the pending state indefinitely. The workaround is to delete all of these "normal" instance groups. By default, there is a Container Group where job execution will occur in the same namespace as the Controller pods are deployed. Additional capacity can be provided by configuring other Container Groups on the same or any other OpenShift 4 cluster.

2.16 Database on Disk Becomes Corrupted

If the controller is not cleanly shutdown, it leaves a `/var/lib/awx/beat.db` file on disk. If that happens, the dispatcher won't start, and you must manually delete the `/var/lib/awx/beat.db` file and restart the controller before the dispatcher will start properly.

2.17 Safari unable to establish connection to web socket

The following connection error displays in the controller:



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.

2.18 Local management not functioning as expected

All playbooks are executed by automation controller in a Linux container called an automation execution environment.

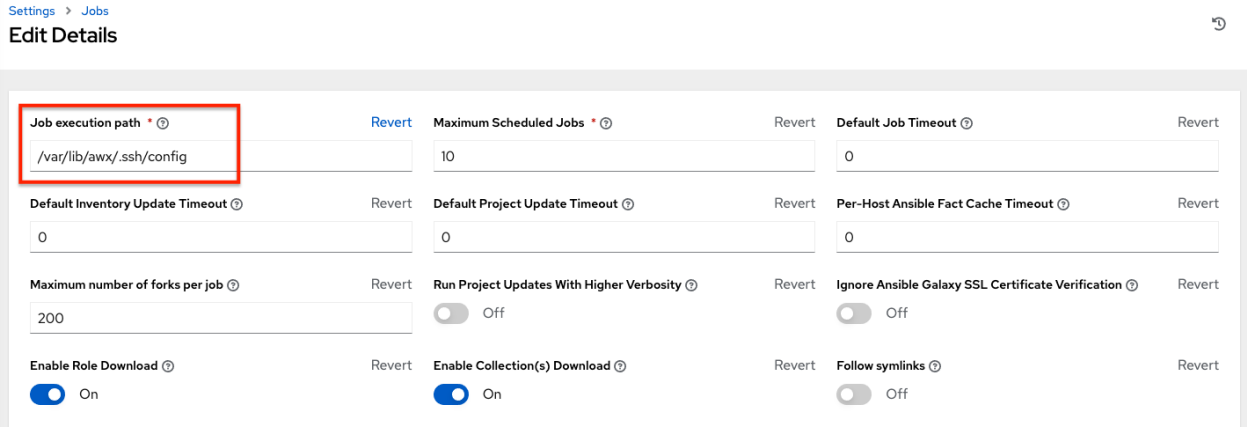
The use of `delegate_to: localhost` or `local_action` to manage the executing host will not function in this environment, as it will still be executing inside the container.

To manage the local host where execution is running, you will need to use the ssh connection plugin to connect from the container to the local host.

2.19 Problems when using SSH customization

The Job Isolation functionality in automation controller limits the directories available for playbooks to the project that is in use. If you are attempting to customize SSH behavior by using a custom SSH configuration in the awx user's home directory, this directory must be added to the list of directories exposed to the container.

For example, to add a custom SSH config in `/var/lib/awx/.ssh/config` and make it available for controller jobs, you can specify the path in the **Job Execution Isolation Path** field accessed from the **Jobs** tab of the Settings screen:



2.20 Database server installed on nodes

All nodes in the cluster get a database server even if the nodes do not have a database. This is unexpected and may take up space.

2.21 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, the controller must be restarted using the `automation-controller-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.

2.22 Using vaulted variables in inventory sourced from a project

When using inventory from a source control project, individual vaulted variable values are supported. Vaulted files are not currently supported.

2.23 Saved scheduled and workflow configurations and surveys

If a configuration of a job template is scheduled or added to a workflow with answers from a prompted survey, changing the Job Template survey to supply different variable names may cause the saved configuration to not function. The workaround is to delete the saved schedule configuration/workflow node, and recreate it with answers from the updated survey.

CHAPTER

THREE

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

INDEX

- genindex

CHAPTER

FIVE

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INDEX

O

P

R

S

T

U

V

W

Y