

Ansible Tower: Present, Past and Future

Michelle Perz July 9, 2019

AGENDA

- Ansible Tower 3.5
 - UI Enhancements
 - New Features
 - Minor Enhancements
 - Technical Notes
- Ansible Tower Past Versions
 - Enhanced workflows
 - Job slicing
 - Smart inventories
 - Multi-LDAP
- Ansible Tower Future Directions





UI Enhancements





New Features



SUPPORT FOR EXTERNAL CREDENTIAL VAULTS

Use credentials from your corporate standard password and key storage directly from Tower.

- HashiCorp Vault
- CyberArk Aim and Conjur
- Microsoft Azure Key Vault







ENABLING ADVANCED ANSIBLE FEATURES







ENABLING INTELLIGENCE FOR AUTOMATION

SUPPORTING METRICS AND INSIGHTS

You've got questions on your automation.

We'll provide answers.





Metrics and Insights

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Prometheus Alerts Graph Status - Help

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redhat.



Red Hat Enterprise Linux 8

SUPPORTING RHEL 8

- Ansible Tower now runs on RHEL 8
- Ansible Tower can manage RHEL 8



ASSORTED MINOR ENHANCEMENTS

- License Limits by Organization
- Removed 1024 character limit on --limit fields
- Removed the restriction that schedules must be uniquely named.
- Allow custom virtual environments to be at an alternate path.
- Additional job details shown
 - custom environment used
 - artifacts stored
 - execution node



TECHNICAL NOTES FOR OPERATORS

DEPRECATIONS, REMOVALS, AND BEHAVIOR CHANGES

- Deprecation of /api/v1
 - \circ ~ Will be removed in 3.6 ~
- **Removal** of deprecated system tracking endpoints
- Change to dashboard count behavior.
 - Implicit jobs like SCM checkouts will no longer be counted
- Change to playbook detection in projects
 - Playbook names must be valid UTF-8
- **Deprecation** of several inventory computed fields in the API and the dashboard API endpoint.





Past Features



ENHANCED WORKFLOWS

WORKFLOW CONVERGENCE NODES

- Wait for any number of steps to finish before proceeding
- Allows for built-in synchronization points, easy result collection, and simplified error handling

Workflow convergence makes it easier than ever to have your Ansible automation workflows model and match your actual deployment processes.





JOB DISTRIBUTION VIA JOB SLICING

BEFORE ANSIBLE TOWER 3.4

- Any playbook run would run one ansible-playbook process on one cluster node
- Jobs run across thousands of machines could potentially starve that cluster node's resources, or fail due to memory contention
- Job resizing could be a complicated manual process

WITH TOWER 3.4 JOB SLICING

Jobs have a configurable number of slices. Each slice will be run as a separate ansible-playbook run, and slices will be distributed across the Tower cluster.

- Run fact gathering, configuration, and more across thousands of machines with ease
- Increase both job throughput and job reliability

NOTE: Job slicing is only appropriate when each host's automation is independent of other hosts





Future Directions



Ansible Tower: Future Directions



AUTOMATION FOR EVERYONE

No playbooks required.





Ansible Tower: Future Directions

BUILDING A GLOBAL AUTOMATION PLATFORM

Capacity where you need it, when you need it, how you need it.

INSTANCE GROUPS 4	
SEARCH Q KEY	+
dev INSTANCES 3 RUNNING JOBS 9 TOTAL JOBS 89 USED CAPACITY 61.8%	Ŵ
prod INSTANCES 4 RUNNING JOBS 6 TOTAL JOBS 26 USED CAPACITY 27.3%	Ŵ
test INSTANCES 3 RUNNING JOBS 6 TOTAL JOBS 44 USED CAPACITY 55.8%	Ŵ
tower INSTANCES 8 RUNNING JOBS 0 TOTAL JOBS 33 USED CAPACITY 43.6%	
	ITEMS 1-4

All scalable at runtime.





Questions





THANK YOU



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