

18/03/2019 AWX / Ansible Tower Overview

AWX / Ansible Tower overview

- Ansible Introduction
- Ansible Concepts
- Ansible Playbooks
- Plugins & Dynamic inventories
- Playbooks Advanced
- Ansible Roles
- ➔ **AWX / Ansible Tower Overview**

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AWX/ANSIBLE TOWER

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central management OF PLAYBOOKS

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ALLOWS TO DEFINE JOBS TO run

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OFFERS access CONTROL

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Uses a SCM FOR PLAYBOOKS

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HAS a REST API

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TOWER INSTALLATION

overview

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INSTALLATION OPTIONS

- using ansible
- a vagrant image (to try)
- an Amazon AMI
- bundled (does not download)

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INSTALLATION TOOL

[HTTP://releases.ansible.com/ansible-tower/setup/](http://releases.ansible.com/ansible-tower/setup/)

Requires a license

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MINIMUM REQUIREMENTS

- 1750 MB
- Ansible 2.3 or higher
- ulimit of 4096 or higher

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ANSIBLE

INSTALLATION SCENARIOS

INTEGRATED	EXTERNAL DATABASE
<ul style="list-style-type: none">• Front-end, REST API & DB on single machine• Installs Postgres from vendor repo	<ul style="list-style-type: none">• With existing Postgres installation• remote Postgres via the playbook

Used in a clustered setup

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install

```
$ sudo ./setup.sh
...
PLAY RECAP *****
10.20.1.10      : ok=138  changed=69  unreachable=0

The setup process completed successfully.
[warn] /var/log/tower does not exist.
Setup log saved to setup.log.
```

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inventory

single node

```
[tower]
tower1.example.com

[database]

[all:vars]
ansible_become=true
admin_password='masterkey'

pg_database='awx'
pg_username='awx'
pg_password='tiger'

rabbitmq_username=tower
rabbitmq_vhost=tower
rabbitmq_password=tower
rabbitmq_cookie=rabbitmqcookie
rabbitmq_use_long_name=true
```

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MULTI node

```
[tower]
tower1.example.com
tower2.example.com
tower3.example.com

[database]
db.example.com

[all:vars]
ansible_become=true
admin_password='masterkey'

pg_host='db.example.com'
pg_port='5432'

pg_database='awx'
pg_username='awx'
pg_password='tiger'

# rabbitmq as shown before
...
```

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EXISTING database

```
[tower]
tower1.example.com

[database]

[all:vars]
ansible_become=true
admin_password='masterkey'

pg_host='db.example.com'
pg_port='5432'

pg_database='awx'
pg_username='awx'
pg_password='tiger'

# rabbitmq as shown before
...
```

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AWX

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UPSTream PROJECT FOR ANSIBLE TOWER

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DASHBOARD

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Name origin

ANSIBLE WORX

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ARCHITECTURE

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overview

```
graph LR; Job[Job] --> Template[Template]; Template --> Inventory[Inventory]; Template --> Project[Project]; Template --> Credentials[Credentials]; Project --> git_repo[(git repo)];
```

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inventory

DEFINE HOSTS and variables

can also use a yaml file

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credentials

MANAGEMENT OF SECRETS

machine, vault, ...

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PROJECT

DEFINES THE PLAYBOOK
TYPICALLY REFERENCES A SCM

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JOB TEMPLATE

- Combines inventory, project and credentials
- name of the playbook
- tags to include/exclude

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JOB

ACTUAL INSTANCE OF A
TEMPLATE
runs the template

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LAB 11

AWX

6

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done!

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7

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