

<epam>

# Ansible

Configuration management with



ANSIBLE

# Ansible Tower and AWX

---

- Web based interface that brings Ansible to large environments, offering several features
  - Workflow design
  - Activity logging
  - Scalability
  - Notifications
  - Scheduling
  - Remote execution
  - REST API and Tower CLI tool

# Ansible Tower and AWX

---

- Ansible Tower is based on AWX. AWX provides the same functionality, without the need to purchase any licenses
- Free evaluation licenses are available from RedHat

# Ansible Tower and AWX

---

- System requirements
  - Control node
    - 4 Gb RAM (8 Gb recommended)
    - 2 vCPUs
    - 20 Gb disk space
    - RHEL\CentOS 7 or 8
  - Managed machines
    - 1 Gb RAM
    - 1 vCPU
    - 10 Gb disk space

# Ansible Tower and AWX

---

- AWX is used as a container in OpenShift, K8S or Docker-Compose
- Of all these methods, Docker-Compose method is the most accessible method
- Aware system configuration requirements (amount of RAM and CPU cores)

# Ansible Tower and AWX

---

- Ansible Tower is providing Ansible Engine
- Ansible engine is not provided with AWX, you should install it by your own
- `sudo yum install -y epel-release`
- `sudo yum install -y ansible bash-completion git device-mapper-persistent-data lvm2 python3 vim yum-utils`
- `git clone https://github.com/ansible/awx`

# Ansible Tower and AWX

---

- `sudo yum-config-manager --add-repo https://download.docker.com/linux/centos/docker-ce.repo`
- `sudo yum install -y docker-ce docker-ce-cli containerd.io`
- `sudo systemctl enable --now docker`
- `sudo usermod -aG docker $(whoami)`
- `newgrp docker`
- `sudo ln -sf /usr/bin/python3 /usr/bin/python`
- `sudo pip3 install docker-compose`

# Ansible Tower and AWX

---

- Edit config file
  - `~/awx/installer/inventory` - define “\*password” variables
  - `project_data_dir=/var/lib/awx/projects`
- `sudo setenforce 0`
- `/etc/sysconfig/selinux`
  - `SELINUX=disabled`
- `ansible-playbook -i inventory install.yml`



# Ansible Tower and AWX

---

- Organization: a collection of managed devices
- Users: administrative users that can be granted access to specific tasks
- Inventories: managed servers
- Credentials: credentials that are used to log in to a managed machine
- Project: a collection of playbooks obtained from a certain location (some repo)
- Template: the job definition with all of its parameters. Must be launched or scheduled

# Ansible Tower and AWX

---

- Define an organization
- Create an inventory
- Configure credentials
- Set up a project
- Define a job template
- Run the job