

18/03/2019 Ansible Roles

ANSIBLE ROLES

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- Ansible Concepts
- Ansible Playbooks
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ROLES

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STRUCTURE

myrole	role name
defaults <ul style="list-style-type: none">main.yml	default values for role variables/parameters
vars <ul style="list-style-type: none">main.yml	additional variables
files	files to deploy/copy
templates	templates to deploy/copy
tasks <ul style="list-style-type: none">main.yml	task list (role's entry point)
handlers <ul style="list-style-type: none">main.yml	handlers to be triggered (by role and playbook)
tests <ul style="list-style-type: none">inventorytest.yml	test for this role
meta <ul style="list-style-type: none">main.yml	meta-data (author/license, version, dependencies ...)
README.md	

Each directory/file is optional

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USING a ROLE >2.3

```
- hosts: webservers
  tasks:
    - name: ...
      ...
    - import_role:
        name: apache
    - include_role:
        name: fluentd
      vars:
        fluentd_version: "1.2.5"
```

templates/files/task includes can be referenced as `role/«name»/...`

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USING a ROLE

TRADITIONAL <2.3

```
- hosts: webservers
  roles:
    - apache
    - role: fluentd
      fluentd_version: "1.2.5"
```

use `pre/post_tasks` to run something before/after roles

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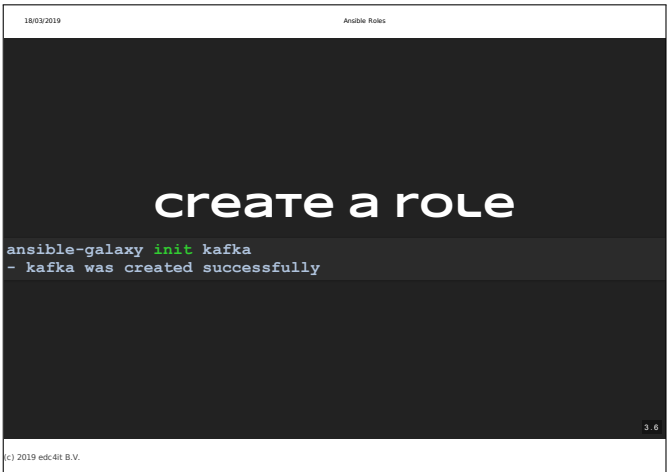
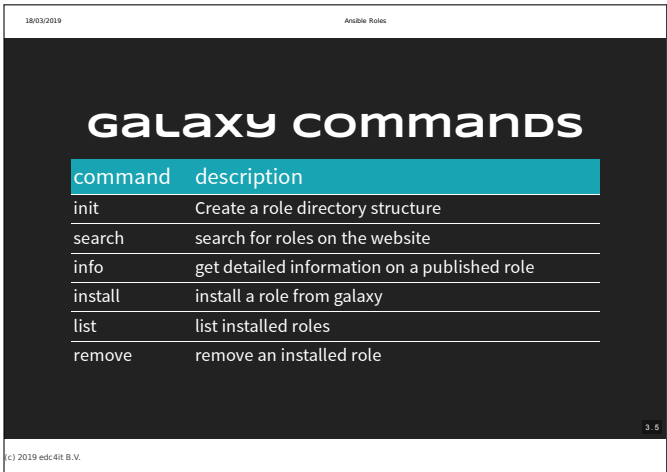
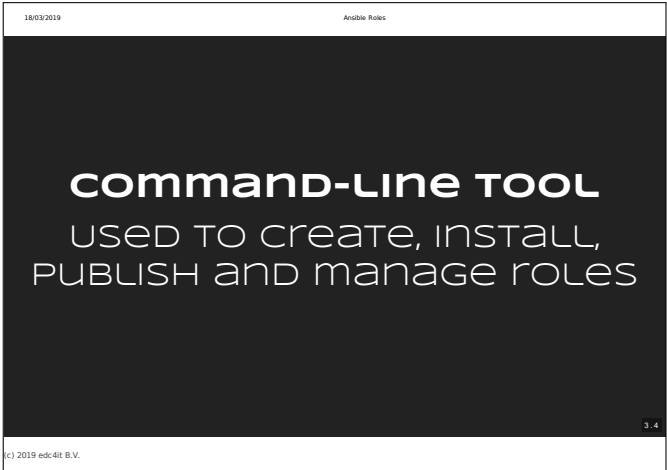
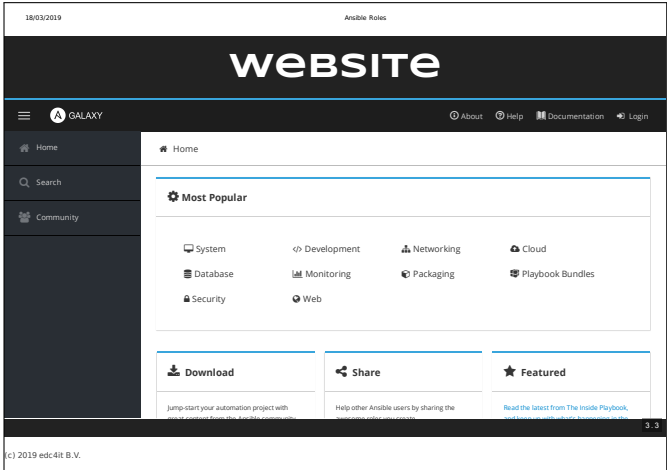
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LOCATING roles

- ./roles/
- ~/.ansible/roles
- /usr/share/ansible/roles
- /etc/ansible/roles

Can be overridden using `roles_path/ANSIBLE_ROLES_PATH`

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searching and installing

```
$ ansible-galaxy search nginx --platforms=centos
...
$ ansible-galaxy install geerlingguy.nginx
```

3.7

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PUBLISHING ROLES

command	description
login	login to galaxy with your github credentials
delete	delete a published role
import	import a role (source is a github repo)
setup	setup travis integration

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using requirements.yml

```
- src: geerlingguy.pip
- src: geerlingguy.docker

$ ansible-galaxy install -r requirements.yml

Mandatory with Tower/AWX
```

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creating roles

4.1

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define the structure

```
$ ansible-galaxy init docker
```

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write the role

- define the `task/main.yml` (plus use includes)
- Define the default parameter values in `vars/main.yml`
- place handlers in `handlers/main.yml` (plus use includes)
- place files in `files/` and `templates`
- Define meta-data (show next)

4.3

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dependencies

/meta/main.yaml

```
---
dependencies:
  - geerlingguy.pip
  - geerlingguy.docker
```

May pass variables

Uses the traditional **roles** format

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ADDITIONAL INFORMATION

/meta/main.yaml

```
---
galaxy_info:
  author: Narendra
  description: Simple kafka role

  license: license (GPLv2, CC-BY, etc)

  min_ansible_version: 1.2
  platforms:
    - name: CentOS
      versions:
        - 7
```

Used when publishing to galaxy

Galaxy is explained later

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LAB 9

USE GALAXY ROLES

LAB 10

CUSTOM ROLES

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