

Ansible

Configuration Management System done right

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Intro

Ansible

Intro

About me

- IT Consultant since 2004
- Ansible user since 2013

Idempotence

Definition

Idempotence is the property of certain operations in mathematics and computer science, that can be applied multiple times without changing the result beyond the initial application.

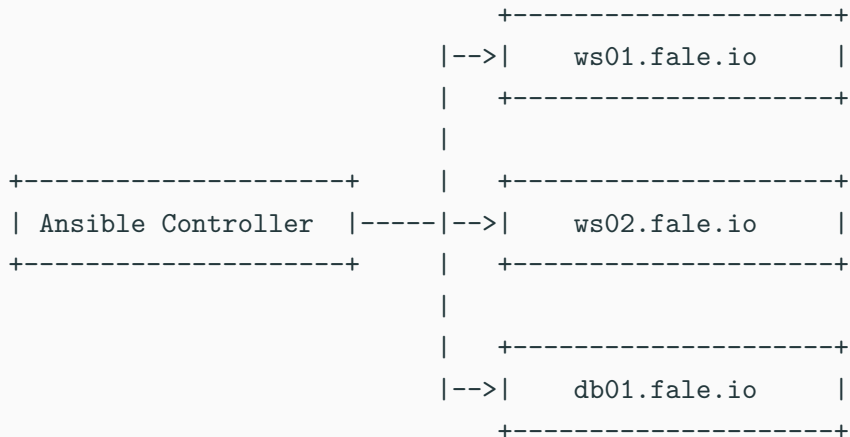
- Written in Python
- Mainly push mode
- Advantages
 - Infrastructure as **Data** (in YAML format)
 - Very gentle learning curve
 - Very simple setup
 - Balanced tool
- Disadvantages
 - Not very good introspection tools
 - Community is young

Ansible

Ansible concepts

- **Host:** Target of the execution
- **Module:** Modules can control system resources, like services, packages, or files (anything really), or handle executing system commands.
- **Module library:** Default set of modules coming with Ansible basic installation
- **Task:** An instance of a Module
- **Role:** A way to abstract a collection of tasks that has a specific role and is idempotent
- **Playbook:** A collection of Tasks and Roles that could be idempotent (or not)

Ansible infrastructure



Basic Commands

```
ansible all -u root -m setup
```

Layout

```
.  
├── inventory  
│   ├── group_vars  
│   ├── hosts  
│   └── hosts_vars  
├── master.yaml  
├── playbooks  
│   ├── auto  
│   ├── groups  
│   ├── hosts  
│   ├── manual  
│   └── provision.yaml  
└── roles
```

Links

- Slides: <https://static.fale.io/slides/20161025-en-ansible-ws.pdf>
- Demo source: https://github.com/Fale/ansible_lamp
- Official documentation: <http://docs.ansible.com>
- Videos: <https://www.ansible.com/videos>
- Ebooks: <https://www.ansible.com/ebooks>
- Fedora Infrastructure: <https://infrastructure.fedoraproject.org/cgit/ansible.git>
- Ceph: <https://github.com/ceph/ceph-ansible>
- OpenStack: <https://github.com/openstack/openstack-ansible>
- OpenShift: <https://github.com/openshift/openshift-ansible>