Deploying with Ansible

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What we needed to do

- Deploy Hydra-head(s) and related stack
- Deploy private compute and storage cloud
- Automation of deploys and updates
- Consistency of systems dev/qa/prod
- Be able to recreate systems in case of disasters/failures

Ansible

- Configuration Management, Deployment, Integration
- Ships with the kitchen sink (Plugins for many applications)
- Plugins are idempotent
- Plugins can be written in any language
- Uses SSH to execute commands

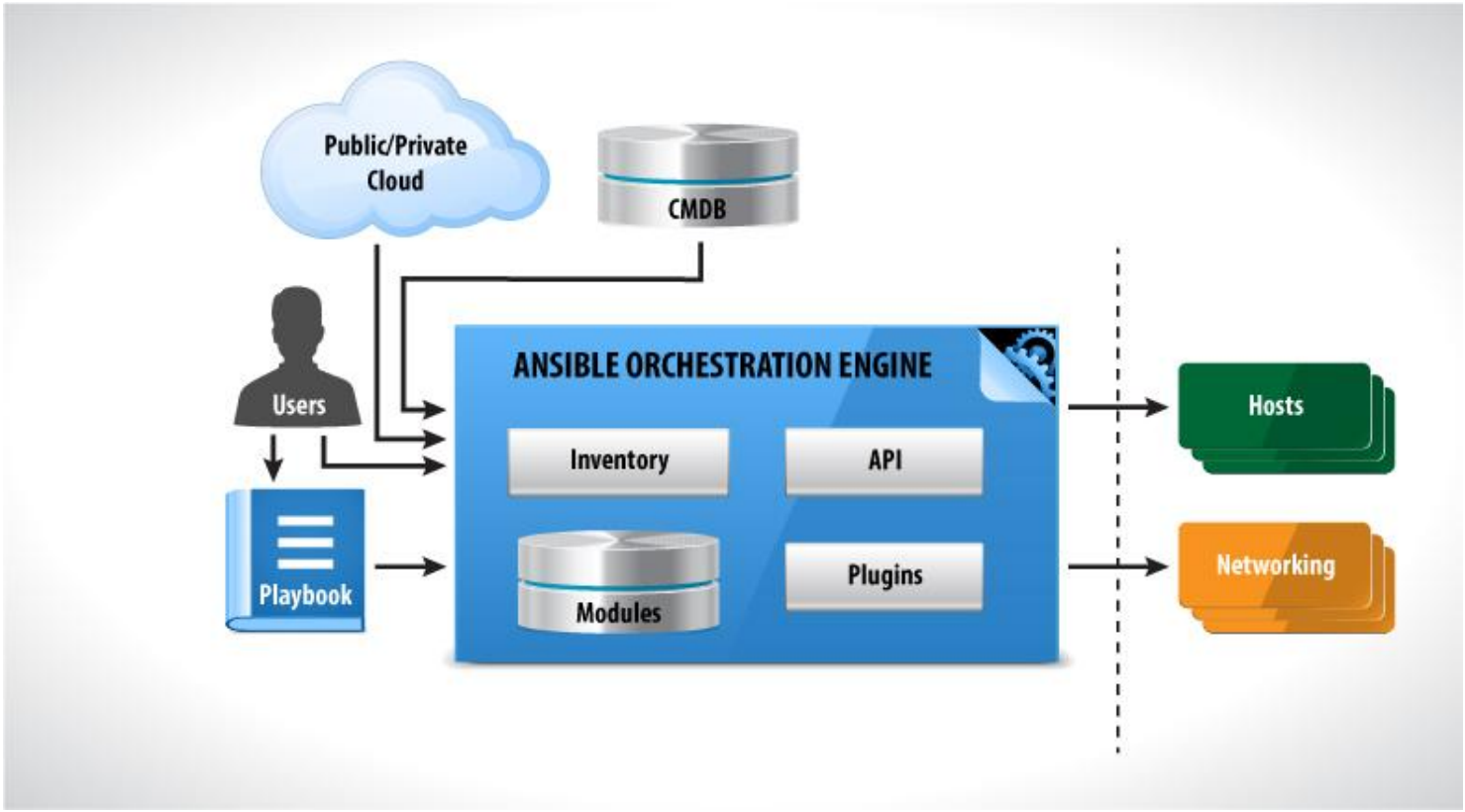
Why Ansible

- Idempotent behaviour
- Playbooks are in a YAML format
- Order of operations is deterministic
- Agentless!!!, no need for yet another PKI
- Roles can be written, shared and reused for different projects
- Inventories/Groups can be dynamically generated

What we're doing with Ansible

- Deploying our hydra-head in a distributed environment
  - Tomcat, Fedora-Commons, SOLR, Ruby (via RVM), Passenger, MySQL, Redis, Shibboleth IDP/SP, HAProxy, LDAP, Nagios, Collectd, Buildbot, Radosgw (local S3/Swift service)
- Deploying our private cloud
- Managing databases
- Maintenance work (rolling updates, scaling)
- Enforcing states of production systems
- Replicating the production systems for testing/qa
  - in private cloud and vagrant
- TODO: packer based images for cloud deployments

- http://www.ansibleworks.com/
- https://github.com/jcftang/hydraconnect-deploying-with-ansible
- https://github.com/jcftang/ansible-hydra


Public/Private
Cloud
CMDB
Users
ANSIBLE ORCHESTRATION ENGINE
Inventory
API
Modules
Plugins
Playbook
Hosts
Networking