

18/03/2019 Ansible Introduction

ANSIBLE INTRODUCTION

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

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ANSIBLE



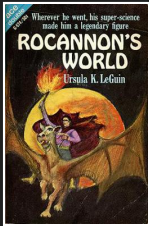
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ANSIBLE

INSTANTANEOUS OR FASTER-THAN-LIGHT
COMMUNICATION DEVICE



wikipedia 2.2

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HISTORY

- 2012 - Michael DeHaan
- 2013 - AnsibleWorks/Ansible, Inc.
- 2015 - Red Hat

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AUTOMATION TOOL

- Configuration Management
- Application Deployment
- Orchestration over multiple systems
- Provisioning (e.g. cloud/vms)
- ...

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PURPOSE

CONFIGURATION MANAGEMENT

Similar to Chef/Puppet

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PURPOSE
ORCHESTRATED APPLICATION
DEPLOYMENT

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PURPOSE
PROVISIONING
CLOUD SERVERS, VIRTUAL MACHINES

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AS a DSL
TO DEFINE THE *Desired State*
Easy to read

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MULTIPLATFORM
LINUX, UNIX and WINDOWS

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AGENTLESS

2.10

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AGENTLESS
Uses ssh (or winrm for Windows)

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AGENTLESS

Uses ssh (or winrm for Windows)
or docker, local and many others

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IDEMPOTENT

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INSTALLATION

3.1

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SETUP

CONTROL MACHINE	MANAGED NODE
<ul style="list-style-type: none">• Ansible Installed• Playbooks created/Managed/Launched	<ul style="list-style-type: none">• ssh sftp/scp python installed• Plays/Actions are executed (based on playbook scenario)

Ansible packages are ONLY installed on the Control Machine

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REQUIREMENTS

MASTER

- Linux, Unix, MacOS
- OS package manager (yum, apt ..)
- Pip (Python Package Manager)
- Python 2.7 or Python 3 (3.5 and higher)
- SSH is used by default to communicate with hosts

Support for Python 2.6 dropped with Ansible 2.7

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REQUIREMENTS

MANAGED NODE

- SSH (by default)
- sftp (or fallback to scp)
- Python 2 2.6 or later
- Or Python 3 3.5 and higher

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INSTALLATION METHODS

FEDORA

```
$ sudo dnf install ansible
```

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INSTALLATION METHODS

RHEL/CENTOS

```
$ $ sudo subscription-manager repos \
--enable rhel-7-server-ansible-2.x-rpms
$ sudo yum install ansible
```

Requires Ansible Engine Repository (see Knowledge portal [3174981](#))

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INSTALLATION

UBUNTU

```
$ sudo apt-get update \
&& sudo apt-get install software-properties-common
$ sudo apt-add-repository ppa:ansible/ansible
$ sudo apt-get update \
&& sudo apt-get install ansible
```

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INSTALLATION METHODS

PIP

```
$ pip install ansible
```

(pip is Python's package manager)

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INSTALLATION METHODS

SOURCE CODE

```
$ git clone git://github.com/ansible/ansible.git
$ cd ansible
$ sudo make install
```

 [ansible/ansible](#)

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CHECK ansible version

```
$ ansible --version
ansible 2.6.1
config file = /etc/ansible/ansible.cfg
configured module search path = [u'/home/me/.ansible/plugins/modu
ansible python module location = /usr/lib/python2.7/site-packages
executable location = /usr/bin/ansible
python version = 2.7.15 (default, May 16 2018, 17:50:09) [GCC 8.1
```

Your versions may differ

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TEST TO PING LOCALHOST

```
[nathan@node1 ~]$ ansible localhost -m ping
SSH password:
mymachine | SUCCESS => {
  "changed": false,
  "ping": "pong"
}
```

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LAB 1

SETUP

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DONE!

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