

# Ansible Assignment 1

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An organization XYZ private limited is transforming into DevOps, they have a very complex infrastructure setup and their applications runs on 100s of servers. They would like to automate the server configuration to bring in consistency across the servers and improve their environment stability. You have been hired as a DevOps Engineer to automate their infrastructure configuration. Organization has decided to use Ansible as Configuration Automation tool.

As a DevOps Engineer, you are required to execute following task.

1. Create 2 AWS ubuntu instance.
2. Setup Ansible on one instance.
3. Write a playbook to configure another instance with following software.
  - a. Install git
  - b. Install maven
  - c. Install tomcat9
4. Configure hosts inventory file to configure another instance.
5. Execute the playbook.
6. Validate the configuration on another instance with following commands. a. `mvn -version`

Instances | EC2 Management Console | Installing Ansible on specific op: x | +

https://ap-northeast-1.console.aws.amazon.com/ec2/home?region=ap-northeast-1#Instances:instanceState=running&v=3,\$case=tags:true%5C,client:false,\$regex=tags:false%5C,client:false

Successfully terminated i-0212b23b7461c9f50, j-0fb5550163411bffd

Instances (1/2) Info

Find instance by attribute or tag (case-sensitive)

Instance state = running X Clear filters

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Publ
<input checked="" type="checkbox"/>	ansass	i-04bbce59f8d81a5b9	Running	t2.micro	2/2 checks passed	No alarms	ap-northeast-1c	ec2-
<input type="checkbox"/>	answorker	i-05673328ab392fb9b	Running	t2.micro	2/2 checks passed	No alarms	ap-northeast-1c	ec2-

Instance: i-04bbce59f8d81a5b9 (ansass)

Details Security Networking Storage Status checks Monitoring Tags

Instance summary Info

Instance ID i-04bbce59f8d81a5b9 (ansass)	Public IPv4 address 13.115.253.44   open address	Private IPv4 addresses 172.31.10.40
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-13-115-253-44.ap-northeast-1.compute.amazonaws.com   open address
Hostname type IP name: ip-172-31-10-40.ap-northeast-1.compute.internal	Private IP DNS name (IPv4 only) ip-172-31-10-40.ap-northeast-1.compute.internal	

Feedback Language

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```
ubuntu@ip-172-31-10-40:~$ ansible --version
ansible [core 2.14.3]
  config file = /etc/ansible/ansible.cfg
  configured module search path = ['/home/ubuntu/.ansible/plugins/modules', '/usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python3/dist-packages/ansible
  ansible collection location = /home/ubuntu/.ansible/collections:/usr/share/ansible/collections
  executable location = /usr/bin/ansible
  python version = 3.10.6 (main, Nov 14 2022, 16:10:14) [GCC 11.3.0] (/usr/bin/python3)
  jinja version = 3.0.3
  libyaml = True
```

```
13.115.253.44 controller
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help
Quick connect...
/home/ubuntu/
- hosts: webserver
  become: yes
  tasks:
    - name: install git
      apt: name=git update_cache=yes state=latest
    - name: install maven
      apt: name=maven update_cache=yes state=latest
    - name: install tomcat9
      apt: name=tomcat9 update_cache=yes state=latest
  ~
  ~
  ~
  ~
  "install.yml" 15L, 283B
13,2 All
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```

```
13.115.253.44 controller
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help
Quick connect...
/home/ubuntu/
# them like this:
## www[001:006].example.com
# Ex 3: A collection of database servers in the 'dbservers' group:
## [dbservers]
##
## db01.intranet.mydomain.net
## db02.intranet.mydomain.net
## 10.25.1.56
## 10.25.1.57
# Here's another example of host ranges, this time there are no
# leading 0s:
## db-[99:101]-node.example.com
[webserver]
172.31.6.90
-- INSERT --
45,1 Bot
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```

```
13.115.253.44 controller
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help
Quick connect...
/home/ubuntu/
Name
  .
  .cache
  .ssh
  .bash_logout
  .bashrc
  .profile
  .xauthority
Remote monitoring
Follow terminal folder
ubuntu@ip-172-31-10-40:~$ ansible-playbook install.yml
PLAY [webserver] *****
*
TASK [Gathering Facts] *****
*
ok: [172.31.6.90]
TASK [install git] *****
*
changed: [172.31.6.90]
TASK [install maven] *****
*
changed: [172.31.6.90]
TASK [install tomcat9] *****
*
changed: [172.31.6.90]
UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: https://mobaxterm.mobatek.net
```

```
ubuntu@ip-172-31-6-90:~$ mvn -version
Apache Maven 3.6.3
Maven home: /usr/share/maven
Java version: 11.0.18, vendor: Ubuntu, runtime: /usr/lib/jvm/java-11-openjdk-d64
Default locale: en, platform encoding: UTF-8
OS name: "linux", version: "5.15.0-1028-aws", arch: "amd64", family: "unix"
```