



# System Provisioning and Configuration Management Lab

Submitted to:

***Dr. Hitesh Kumar  
Sharma***

Submitted by:

***Sidharth Malpani***

***500106041***

***R2142220666***

***Devops B1(H)***

## EXPERIMENT 4

### Lab Exercise: Executing Ansible Modules

**Objective:** To demonstrate the use of the Ansible module for server configuration and management

**Tools required:** Linux terminal

**Prerequisites:** None

#### Steps to be followed:

1. Use Ansible modules for server configuration

#### Step 1: Use Ansible modules for server configuration

- 1.1 Run the following command using the **setup** module to collect and display detailed system information about the servers: **ansible -m setup dbbservers**

```
ubuntu@ip-172-31-7-36: ~  
ubuntu@ip-172-31-7-36:~$ ansible -m setup dbbservers  
65.2.4.161 | SUCCESS => {  
  "ansible_facts": {  
    "ansible_all_ipv4_addresses": [  
      "172.31.7.36"  
    ],  
    "ansible_all_ipv6_addresses": [  
      "fe80::8bc:44ff:fec6:3399"  
    ],  
    "ansible_apparmor": {  
      "status": "enabled"  
    },  
    "ansible_architecture": "x86_64",  
    "ansible_bios_date": "08/24/2006",  
    "ansible_bios_vendor": "Xen",  
    "ansible_bios_version": "4.11.amazon",  
    "ansible_board_asset_tag": "NA",  
    "ansible_board_name": "NA",  
    "ansible_board_serial": "NA",  
    "ansible_board_vendor": "NA",  
    "ansible_board_version": "NA",  
    "ansible_chassis_asset_tag": "NA",  
    "ansible_chassis_serial": "NA",  
    "ansible_chassis_vendor": "Xen",  
    "ansible_chassis_version": "NA",  
    "ansible_cmdline": {  
      "BOOT_IMAGE": "/vmlinuz-6.8.0-1024-aws",  
      "console": "ttyS0",  
      "nvme_core.io_timeout": "4294967295",  
      "panic": "-1",  
      "ro": true,  
      "root": "PARTUUID=a8ef6bc6-0748-47d7-a4a8-b126c21ff84c"  
    },  
    "ansible_date_time": {  
      "date": "2025-04-25",  
      "day": "25",  
      "epoch": "1745544753",  
      "epoch_int": "1745544753",  
      "hour": "01",  
      "iso8601": "2025-04-25T01:32:33Z",  
      "iso8601_basic": "20250425T013233Z",  
      "iso8601_basic_short": "20250425T013233",  
      "iso8601_micro": "2025-04-25T01:32:33.725219Z",  
    },  
  },  
}
```

1.2 Run the following command using the **shell** module to retrieve server hostnames:

**ansible dbbservers -m shell -a 'hostname'**

```
ubuntu@ip-172-31-7-36:~$ ansible dbbservers -m shell -a 'hostname'
65.2.4.161 | CHANGED | rc=0 >>
ip-172-31-7-36
172.31.7.36 | CHANGED | rc=0 >>
ip-172-31-7-36
localhost | CHANGED | rc=0 >>
ip-172-31-7-36
ubuntu@ip-172-31-7-36:~$ |
```

1.3 Run the following command using the **apt** module to install Git on servers:

**ansible dbbservers -m apt -a 'name=git state=present update\_cache=true' --become**

```
ubuntu@ip-172-31-7-36:~$ ansible dbbservers -m apt -a 'name=git state=present update_cache=true' --become
localhost | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "cache_update_time": 1745545101,
  "cache_updated": true,
  "changed": false
}
65.2.4.161 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "cache_update_time": 1745545103,
  "cache_updated": true,
  "changed": false
}
172.31.7.36 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "cache_update_time": 1745545105,
  "cache_updated": true,
  "changed": false
}
ubuntu@ip-172-31-7-36:~$
```