

Lab Exercise 04

Executing Ansible Modules

By: Sairanjan Subudhi

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. Run the following command using the **setup** module to collect and display detailed system information about the servers:

ansible -m setup dbservers

```
[do@ip-172-31-8-236 ~]$ ansible -m setup dbservers
[WARNING]: Platform linux on host 172.31.5.230 is using the discovered Python interpreter
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for :
172.31.5.230 | SUCCESS => {
  "ansible_facts": {
    "ansible_all_ipv4_addresses": [
      "172.31.5.230"
    ],
    "ansible_all_ipv6_addresses": [
      "fe80::888:ecff:fe01:53e3"
    ],
    "ansible_apparmor": {
      "status": "disabled"
    },
    "ansible_architecture": "x86_64",
    "ansible_bios_date": "08/24/2006",
    "ansible_bios_version": "4.11.amazon",
    "ansible_cmdline": {
      "BOOT_IMAGE": "/boot/vmlinuz-5.10.234-225.921.amzn2.x86_64",
      "biosdevname": "0",
      "console": "ttyS0,115200n8",
      "net.ifnames": "0",
      "nvme_core.io_timeout": "4294967295",
      "rd.emergency": "poweroff",
      "rd.shell": "0",
      "ro": true,
      "root": "UUID=7b04f564-68b4-4385-9f70-5693ce07a995"
    },
  },
}
```

2. Run the following command using the **shell** module to retrieve server hostnames:
ansible dbservers -m shell -a 'hostname'

```
[do@ip-172-31-8-236 ~]$ ansible dbservers -m shell -a 'hostname'
[WARNING]: Platform linux on host 172.31.5.230 is using the discovered Python interpreter
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for
172.31.5.230 | CHANGED | rc=0 >>
ip-172-31-5-230.ap-south-1.compute.internal
[WARNING]: Platform linux on host 172.31.6.104 is using the discovered Python interpreter
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for
172.31.6.104 | CHANGED | rc=0 >>
ip-172-31-6-104.ap-south-1.compute.internal
```

3. Run the following command using the **apt** module to install Git on servers:
ansible dbservers -m yum -a 'name=git state=present' - -become

```
[do@ip-172-31-8-236 ~]$ ansible dbservers -m yum -a 'name=git state=present' --become
[WARNING]: Platform linux on host 172.31.5.230 is using the discovered Python interpreter at /usr/bin/p
https://docs.ansible.com/ansible/2.9/reference_appendices/interpreter_discovery.html for more informati
172.31.5.230 | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python"
  },
  "changed": true,
  "changes": {
    "installed": [
      "git"
    ]
  },
  "msg": "",
  "rc": 0,
  "results": [
    "Loaded plugins: extras_suggestions, langpacks, priorities, update-motd\nResolving Dependencies
nstalled\n--> Processing Dependency: git-core = 2.47.1-1.amzn2.0.2 for package: git-2.47.1-1.amzn2.0.2.
.47.1-1.amzn2.0.2.x86_64\n--> Processing Dependency: perl-Git = 2.47.1-1.amzn2.0.2 for package: git-2.4
amzn2.0.2.x86_64\n--> Processing Dependency: perl(Term::ReadKey) for package: git-2.47.1-1.amzn2.0.2.x8
will be installed\n--> Package git-core-doc.noarch 0:2.47.1-1.amzn2.0.2 will be installed\n--> Packag
rl(Error) for package: perl-Git-2.47.1-1.amzn2.0.2.noarch\n--> Package perl-TermReadKey.x86_64 0:2.30-
noarch 1:0.17020-2.amzn2 will be installed\n--> Finished Dependency Resolution\n\nDependencies Resolved
Package Arch Version Repository Size\n-----\n\nInstalling for dependencies:\n git-co
noarch 2.47.1-1.amzn2.0.2 amzn2-core 3.2 M\n perl-Error noarch 1:
.amzn2.0.2 amzn2-core 44 k\n perl-TermReadKey x86_64 2.30-20.amzn2.0.2 amzn
=====
\nInstall 1 Package (+5 Dependent packages)\n\nTotal download size:
-----\n\nTotal 47 MB
on test succeeded\nRunning transaction\n Installing : git-core-2.47.1-1.amzn2.0.2.x86_64
2/6 \n Installing : 1:perl-Error-0.17020-2.amzn2.noarch 3/6 \n Insta
: perl-Git-2.47.1-1.amzn2.0.2.noarch 5/6 \n Installing : git-2.47.1-1.amzn2
0.amzn2.0.2.x86_64 1/6 \n Verifying : perl-Git-2.47.1-1.amzn2.0.2.noarch
3/6 \n Verifying : 1:perl-Error-0.17020-2.amzn2.noarch 4/6 \n V
ing : git-core-2.47.1-1.amzn2.0.2.x86_64 6/6 \n\nInstalled:\n git.x86_64 0:
ed:\n git-core.x86_64 0:2.47.1-1.amzn2.0.2 \n git-core-doc.n
:0.17020-2.amzn2 \n perl-Git.noarch 0:2.47.1-1.amzn2.0.2
\n\nComplete!\n"
  ]
}
```