Lab Exercise 04

Executing Ansible Modules

By: Anurag Negi

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====================
      x86_64       2.47.1-1.amzn2.0.2        amzn2-core        57 k\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:
-------------------------------------------\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"
    ]
}
```