Devops and its applications(CS457)

Assignment 2.2 : Ansible Playbook Exercise

Group :4

Reference links: https://www.middlewareinventory.com/blog/ansible-git-example/

Step1: Configuring Git login

To login to GITHUB , we use the username and token in the following format.

Using the username and security token on the URL

- `https://user:token@github.com/path`

Step2: Creating Ansible vault to Store the Git username and token

```
[sreehari@ip-172-31-30-111 ~]$ cat secrets.yml
$ANSIBLE_VAULT;1.1;AES256
3364353934353934336366653731666132353336231613534646538336439383063656630343737374
3863326136643664643337646134346238376639633361340a643633303566613663383535396161666
3338323362613830356161656563362626526533333630377663338339633383632313836306656563
3634626439383839310a353338343862313931616432343865566613763303865643337653865646
623863623639636236231326535393734663732633564643132343966664386664366164623130306639
396533365393353543333338643463386562336337303139656534303464613337336134643566664
3362623861666432303838653737630336632646136666265663343031343432393313373163396464
63316166336138323351
[sreehari@ip-172-31-30-111 ~]$ ansible-vault decrypt secrets.yml
[DEPRECATION WARNING]: Ansible will require Python 3.8 or newer on the controller starting with Ansible 2.12. Current version: 3.0.8 (default, Aug 12 2021, 07:06:15) [GCC 8.4.1 20200928 (Red Hat
8.4.1-1)]. This feature will be removed from ansible-core in version 2.12. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
Vault password:
Decryption successful
[sreehari@ip-172-31-30-111 ~]$ cat secrets.yml
gituser: sreeharipremkumar
gitpass: ghp_1K91bkWgNRypHf07esAx26Aoo59hMv1h77N1
[sreehari@ip-172-31-30-111 ~]$
[sreehari@ip-172-31-30-111 ~]$
[sreehari@ip-172-31-30-111 ~]$ ansible-vault encrypt secrets.yml
[DEPRECATION WARNING]: Ansible will require Python 3.8 or newer on the controller starting with Ansible 2.12. Current version: 3.0.8 (default, Aug 12 2021, 07:06:15) [GCC 8.4.1 20200928 (Red Hat
8.4.1-1)]. This feature will be removed from ansible-core in version 2.12. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
New Vault password:
Confirm New Vault password:
Encryption successful
[sreehari@ip-172-31-30-111 ~]$
```

Step3: The Ansible Git Example Playbook


```yaml
- name: Install and Launch the Simple NodeJS Application
  hosts: slave1
  vars_files:
    - secrets.yml
  vars:
    - destdir: /home/ansibletest
  tasks:

    - name : install Node and NPM
      become: yes
      register: ymrepo
      yum:
        name: nodejs
        state: latest

    - name: Install dependencies
      become: yes
      yum: name={{ item }} state=present
      with_items:
        - git-all

    - name : validate the nodejs installation
      debug: msg="Installation of node is Successfull"
      when: ymrepo is changed

    - name: Version of Node and NPM
      shell:
        "npm -v && node -v"
      register: versioninfo

    - name: Version Info
      debug:
        msg: "Version info {{ versioninfo.stdout_lines }}"
      when: versioninfo is changed

    - name: Download the NodeJS code from the GitRepo
      become: yes
      git:
        repo: 'https://{{gitpass}}@github.com/sreeharipremkumar/AnsibleLearn.git'
        dest: "{{ destdir }}"

    - name: Change the ownership of the directory
      become: yes
      file:
        path: "{{destdir}}"
        owner: "harisree"
      register: chgrpout

    - name: Install Dependencies with NPM install command
      shell:
        "npm install"
      args:
        chdir: "{{ destdir }}"
      register: npminstlout
```
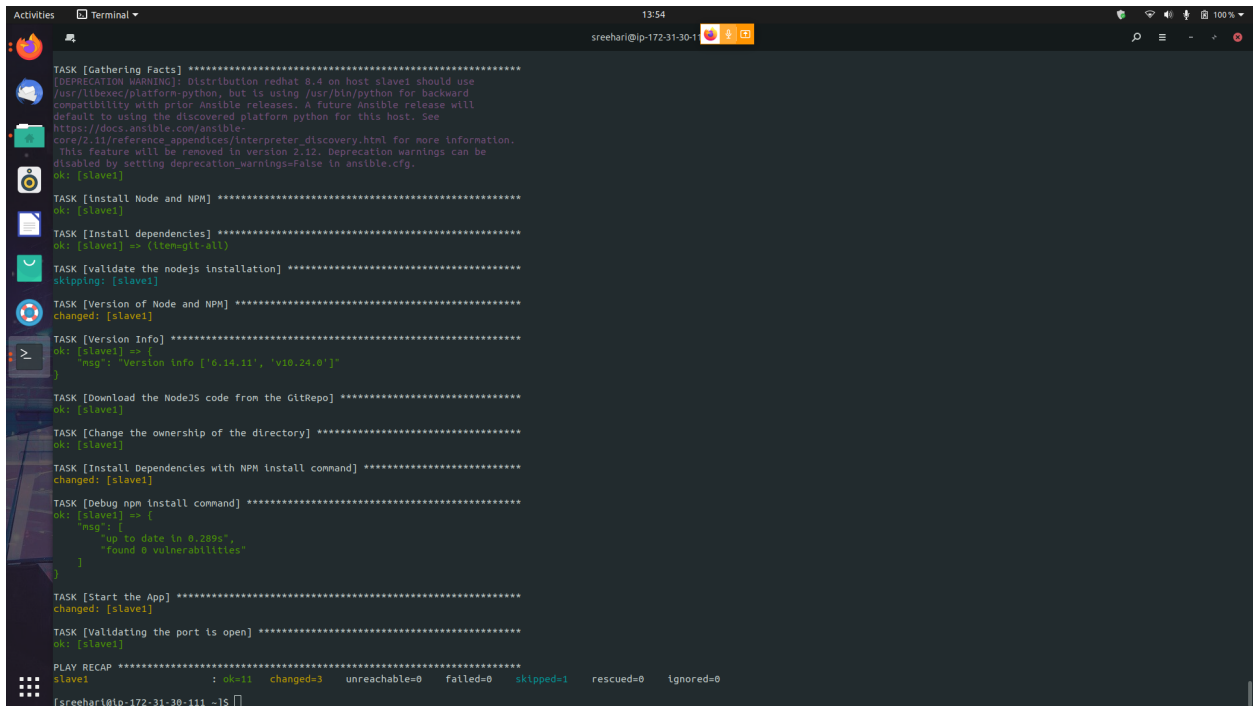
Step4: Launch the Playbook with Ansible Git

Step5: Validate the Deployment
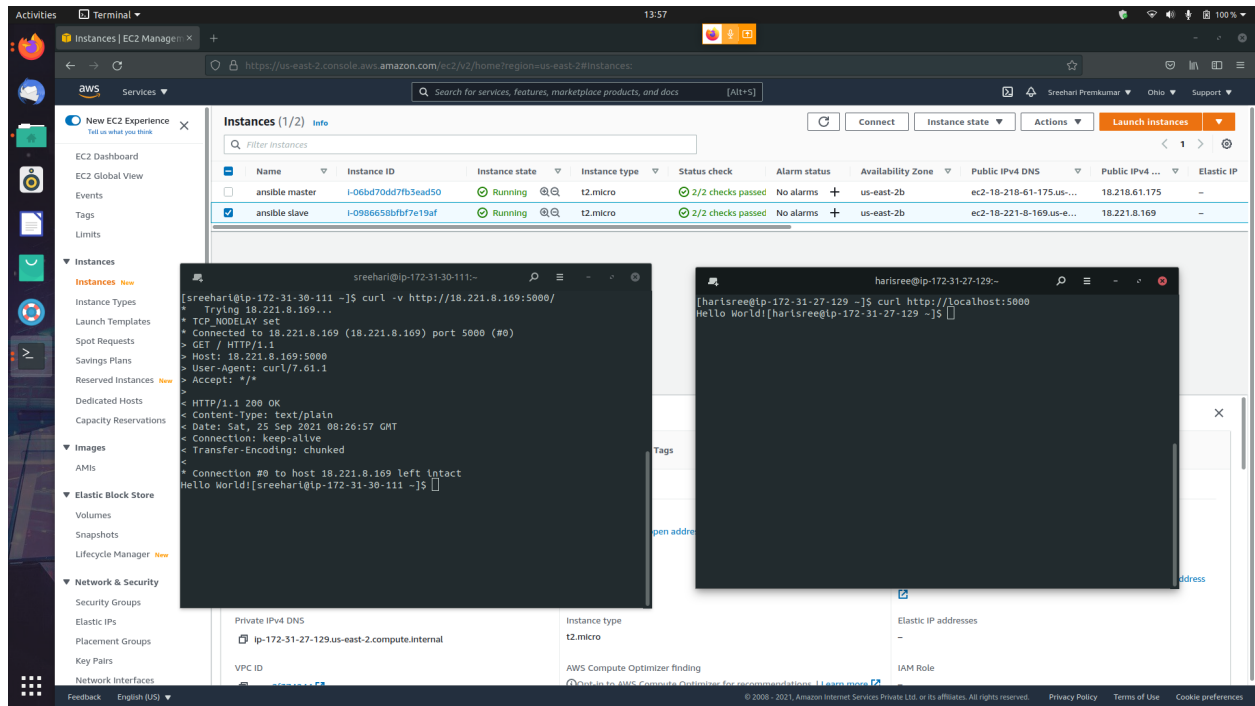
Github Repo :

Github Repo link: https://github.com/sreeharipremkumar/AnsibleLearn
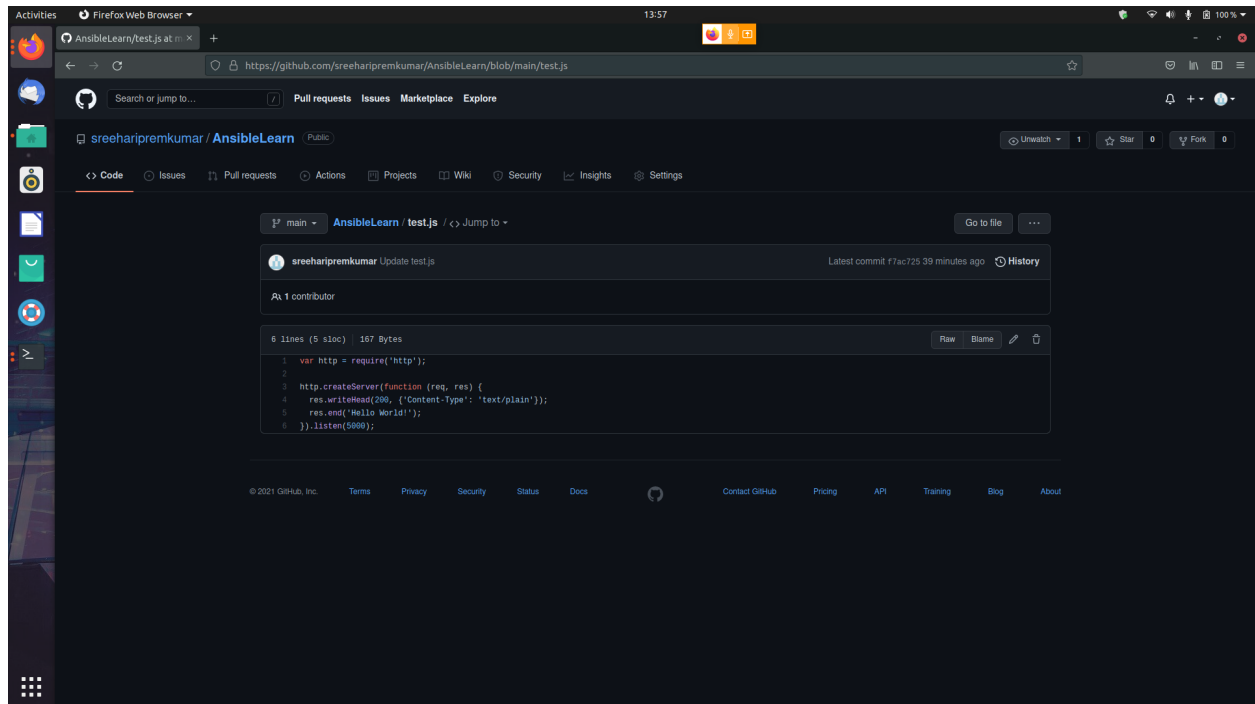
Redhat Instances:

Server : sreehari@ip-172-31-30-111   **HostNode:**harishree@ip-172:31:27:129