

BCDV 4033

DevOps & Blockchain Admin

Lab-3 - Ansible

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1. Setup the docker containers and check in the control node if Ansible is installed

```
[+] Running 3/3
  ✓ Container node1    Started
  ✓ Container ansible  Started
  ✓ Container node2    Started
aratrika@Aratrikas-MacBook-Air BCDV-4033-Lab3-Ansible % docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED            STATUS              PORTS               NAMES
647576429676        node2              "/usr/sbin/sshd -D"   About a minute ago   Up 10 seconds      22/tcp              node2
4337f33dcf37        ansible            "/bin/bash"         About a minute ago   Up 10 seconds      0.0s               ansible
71121500f9c9        node1              "/usr/sbin/sshd -D"   About a minute ago   Up 10 seconds      22/tcp              node1
aratrika@Aratrikas-MacBook-Air BCDV-4033-Lab3-Ansible %
```

```
aratrika@Aratrikas-MacBook-Air BCDV-4033-Lab3-Ansible % docker exec -it 4337f33dcf37 bash
root@4337f33dcf37:/# ansible --version
ansible 2.10.8
  config file = None
  configured module search path = ['/root/.ansible/plugins/modules', '/usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python3/dist-packages/ansible
  executable location = /usr/bin/ansible
  python version = 3.10.12 (main, Nov 20 2023, 15:14:05) [GCC 11.4.0]
root@4337f33dcf37:/#
```

2. Setup the docker containers and ssh into the remote nodes from the control node

```
[root@4337f33dcf37:/# ssh-keygen -t rsa -b 2048
Generating public/private rsa key pair.
Enter file in which to save the key (/root/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /root/.ssh/id_rsa
Your public key has been saved in /root/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:eqnQ5Sszq3Txdm0eIw0PWJVrvwm4uwxoN6AL9R4CJrE root@4337f33dcf37
The key's randomart image is:
+---[RSA 2048]----+
|          .. |
|          .. |
|          . . |
|          o o o |
|          E = S oo . |
|          . B X ..*. . |
|          . + X X o.B. o |
|          o ** *.*+ oo |
|          o.=. +o. |
+---[SHA256]----+
[root@4337f33dcf37:/# ssh-copy-id root@node1
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/root/.ssh/id_rsa.pub"
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
[root@node1's password:

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'root@node1'"
and check to make sure that only the key(s) you wanted were added.

[root@4337f33dcf37:/# ssh root@node1
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 6.6.12-linuxkit aarch64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage
Last login: Wed Feb 28 20:59:51 2024 from 172.20.0.2
[root@71121500f9c9:~# exit
logout
Connection to node1 closed.
root@4337f33dcf37:/#
```

```
[root@4337f33dcf37:/# ssh-copy-id root@node2
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/root/.ssh/id_rsa.pub"
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
[root@node2's password:

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'root@node2'"
and check to make sure that only the key(s) you wanted were added.

[root@4337f33dcf37:/# ssh root@node2
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 6.6.12-linuxkit aarch64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage
Last login: Wed Feb 28 21:01:34 2024 from 172.20.0.2
[root@64757b429676:~# exit
logout
Connection to node2 closed.
root@4337f33dcf37:/# ]
```

3. Create a directory using the ad-hoc command.

```
[root@4337f33dcf37:/# ansible all -m file -a "dest=/tmp/test state=directory"
node1 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "gid": 0,
    "group": "root",
    "mode": "0755",
    "owner": "root",
    "path": "/tmp/test",
    "size": 4096,
    "state": "directory",
    "uid": 0
}
node2 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "gid": 0,
    "group": "root",
    "mode": "0755",
    "owner": "root",
    "path": "/tmp/test",
    "size": 4096,
    "state": "directory",
    "uid": 0
}
root@4337f33dcf37:/# ]
```

```
[root@4337f33dcf37:/# ssh root@node1
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 6.6.12-linuxkit aarch64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage
Last login: Wed Feb 28 21:31:42 2024 from 172.20.0.2
[root@71121500f9c9:~/# cd /tmp/
[root@71121500f9c9:/tmp# ls -la
total 12
drwxrwxrwt 1 root root 4096 Feb 28 21:29 .
drwxr-xr-x 1 root root 4096 Feb 28 20:55 ..
drwxr-xr-x 2 root root 4096 Feb 28 21:26 test
root@71121500f9c9:/tmp# ]
```

```
[root@4337f33dcf37:/# ssh root@node2
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 6.6.12-linuxkit aarch64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage
Last login: Wed Feb 28 21:29:20 2024 from 172.20.0.2
[root@64757b429676:~/# cd /tmp/
[root@64757b429676:/tmp# ls -la
total 12
drwxrwxrwt 1 root root 4096 Feb 28 21:29 .
drwxr-xr-x 1 root root 4096 Feb 28 20:55 ..
drwxr-xr-x 2 root root 4096 Feb 28 21:26 test
root@64757b429676:/tmp# ]
```

4. Create the file playbook yml and create file in both nodes

```
root@4337f33dcf37:/# vim create-file.yml
root@4337f33dcf37:/# ansible-playbook create-file.yml
PLAY [all] ****
TASK [Gathering Facts] ****
ok: [node1]
ok: [node2]

TASK [create a file] ****
changed: [node1]
changed: [node2]

PLAY RECAP ****
node1 : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
node2 : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
root@4337f33dcf37:/# ]
```

```
hosts: all
  - name: create a file
    file:
      path: /tmp/file-playbook1
      state: touch
```

create-file.yml" 7L, 120B 7,28 All

```
[root@4337f33dcf37:/# ssh root@node1
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 6.6.12-linuxkit aarch64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage
Last login: Wed Feb 28 22:05:43 2024 from 172.20.0.2
[root@71121500f9c9:~/# cd /tmp/
[root@71121500f9c9:/tmp# ls =la
ls: cannot access '=la': No such file or directory
[root@71121500f9c9:/tmp# ls -la
total 12
drwxrwxrwt 1 root root 4096 Feb 28 22:05 .
drwxr-xr-x 1 root root 4096 Feb 28 20:55 ..
-rw-r--r-- 1 root root 0 Feb 28 22:05 file-playbook1
drwxr-xr-x 2 root root 4096 Feb 28 21:26 test
```

```
connection to node1 closed.
[root@4337f33dcf37:/# ssh root@node2
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 6.6.12-linuxkit aarch64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage
Last login: Wed Feb 28 22:05:43 2024 from 172.20.0.2
[root@64757b429676:~/# cd /tmp/
[root@64757b429676:/tmp# ls -la
total 12
drwxrwxrwt 1 root root 4096 Feb 28 22:05 .
drwxr-xr-x 1 root root 4096 Feb 28 20:55 ..
-rw-r--r-- 1 root root 0 Feb 28 22:05 file-playbook1
drwxr-xr-x 2 root root 4096 Feb 28 21:26 test
root@64757b429676:/tmp# ]
```

5. Create a new playbook to delete the file you created previously

```
[root@04337f33dcf37:~]# vim delete-file.yml
[root@04337f33dcf37:~]# ansible-playbook delete-file.yml

PLAY [all] ****
TASK [Gathering Facts] ****
ok: [node1]
ok: [node2]

TASK [Delete a file] ****
changed: [node1]
changed: [node2]

PLAY RECAP ****
node1 : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
node2 : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

[root@04337f33dcf37:~]# ssh root@node1
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 6.6.12-linuxkit aarch64)

 * Documentation:  https://help.ubuntu.com
 * Management:   https://landscape.canonical.com
 * Support:      https://ubuntu.com/advantage
Last login: Wed Feb 28 22:24:28 2024 from 172.20.0.2
[root@71121500f9c9:~]# cd /tmp/
[root@71121500f9c9:/tmp# ls -la
total 12
drwxr-xr-x 1 root root 4096 Feb 28 22:24 .
drwxr-xr-x 1 root root 4096 Feb 28 20:55 ..
drwxr-xr-x 2 root root 4096 Feb 28 21:26 test
[root@71121500f9c9:/tmp# exit
logout
Connecting to node1 closed.
[root@04337f33dcf37:~]# ssh root@node2
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 6.6.12-linuxkit aarch64)

 * Documentation:  https://help.ubuntu.com
 * Management:   https://landscape.canonical.com
 * Support:      https://ubuntu.com/advantage
Last login: Wed Feb 28 22:24:28 2024 from 172.20.0.2
[root@64475b7429676:~]# cd /tmp/
[root@64475b7429676:/tmp# ls -la
total 12
drwxrwxrwt 1 root root 4096 Feb 28 22:24 .
drwxr-xr-x 1 root root 4096 Feb 28 20:55 ..
drwxr-xr-x 2 root root 4096 Feb 28 21:26 test
[root@64475b7429676:/tmp# ]
```

```
- hosts: all
  tasks:
    - name: delete a file
      file:
        path: /tmp/file-playbook1
        state: absent
```

6. Create a new playbook for test group and demonstrate using the playbook output that you have updated only the test node

```
root@4337f33dcf37:/# ansible-playbook create-file-test.yml
PLAY [test] ****
TASK [Gathering Facts] ****
ok: [host2]
TASK [Create a file] ****
changed: [host2]
PLAY RECAP ****
host2 : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
root@4337f33dcf37:/#
```

```
---  
- hosts: test  
  tasks:  
    - name: create a file  
      file:  
        path: /tmp/file-playbook1  
        state: touch
```

```
[root@4337f33dcf37:/# ssh root@node1  
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 6.6.12-linuxkit aarch64)  
  
 * Documentation: https://help.ubuntu.com  
 * Management: https://landscape.canonical.com  
 * Support: https://ubuntu.com/advantage  
Last login: Fri Mar  1 01:37:17 2024 from 172.20.0.2  
[root@71121500f9c9:~/# cd /tmp/  
[root@71121500f9c9:/tmp# ls -la  
total 32  
drwxrwxrwt 1 root root 4096 Mar  1 01:37 .  
drwxr-xr-x 1 root root 4096 Feb 28 20:55 ..  
drwx----- 2 root root 4096 Feb 29 01:38 ansible_git_payload_4rooaees  
drwx----- 2 root root 4096 Feb 29 02:06 ansible_git_payload_a4v69705  
drwx----- 2 root root 4096 Feb 29 01:12 ansible_git_payload_ivh578hm  
drwx----- 2 root root 4096 Feb 29 00:06 ansible_git_payload_szddws1s  
drwx----- 2 root root 4096 Feb 28 23:58 ansible_git_payload_u8kqb1fs  
drwxr-xr-x 2 root root 4096 Feb 28 21:26 test  
[root@71121500f9c9:/tmp# exit  
logout  
Connection to node1 closed.
```

```
[root@4337f33dcf37:/# ssh root@node2  
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 6.6.12-linuxkit aarch64)  
  
 * Documentation: https://help.ubuntu.com  
 * Management: https://landscape.canonical.com  
 * Support: https://ubuntu.com/advantage  
Last login: Fri Mar  1 01:38:27 2024 from 172.20.0.2  
[root@64757b429676:~/# cd /tmp/  
[root@64757b429676:/tmp# ls -la  
total 32  
drwxrwxrwt 1 root root 4096 Mar  1 01:38 .  
drwxr-xr-x 1 root root 4096 Feb 28 20:55 ..  
drwx----- 2 root root 4096 Feb 29 01:38 ansible_git_payload_02c5d9dc  
drwx----- 2 root root 4096 Feb 29 01:12 ansible_git_payload_62io107o  
drwx----- 2 root root 4096 Feb 29 00:06 ansible_git_payload_t9zkoe0r  
drwx----- 2 root root 4096 Feb 28 23:58 ansible_git_payload_u0_0ti0x  
drwx----- 2 root root 4096 Feb 29 02:06 ansible_git_payload_yo4zgg_8  
-rw-r--r-- 1 root root 0 Mar  1 01:38 file-playbook1  
drwxr-xr-x 2 root root 4096 Feb 28 21:26 test  
[root@64757b429676:/tmp# exit  
logout  
Connection to node2 closed.  
root@4337f33dcf37:/#
```

7. Install Nodejs using nodejs yaml

```
[root@4337f33dcf37:/# ansible-playbook nodejs.yml
PLAY [all] ****
TASK [Gathering Facts] ****
ok: [host2]
ok: [host1]

TASK [Ensure apt-transport-https is installed] ****
ok: [host1]
ok: [host2]

TASK [Update apt cache] ****
changed: [host1]
changed: [host2]

TASK [Install Node.js dependencies] ****
ok: [host2] => (item=curl)
ok: [host1] => (item=curl)
ok: [host1] => (item=software-properties-common)
ok: [host2] => (item=software-properties-common)

TASK [Add NodeSource repository] ****
ok: [host1]
ok: [host2]

TASK [Install Node.js] ****
ok: [host1]
ok: [host2]

TASK [Install build-essential] ****
ok: [host1]
ok: [host2]

TASK [Check Node.js version] ****
changed: [host1]
changed: [host2]

TASK [Check npm version] ****
changed: [host1]
changed: [host2]

TASK [Display Node.js and npm versions] ****
ok: [host1] => {
  "msg": "Node.js version: v14.21.3 | npm version: 6.14.18"
}
ok: [host2] => {
  "msg": "Node.js version: v14.21.3 | npm version: 6.14.18"
}

PLAY RECAP ****
host1 : ok=10  changed=5    unreachable=0   failed=0   skipped=0   rescued=0   ignored=0
host2 : ok=10  changed=5    unreachable=0   failed=0   skipped=0   rescued=0   ignored=0
root@4337f33dcf37:/# ]
```

```
---
- hosts: all
  gather_facts: yes
  become: yes
  tasks:
    - name: Ensure apt-transport-https is installed
      apt:
        name: apt-transport-https
        state: present

    - name: Update apt cache
      apt:
        update_cache: yes

    - name: Install Node.js dependencies
      apt:
        name: "{{ item }}"
        state: present
      loop:
        - curl
        - software-properties-common

    - name: Add NodeSource repository
      apt_repository:
        repo: "deb https://deb.nodesource.com/node_14.x {{ ansible_distribution_release }} main"
        state: present
        update_cache: yes
        filename: nodesource

    - name: Install Node.js
      apt:
        name: nodejs
        state: present
        allow_unauthenticated: yes

    - name: Install build-essential
      apt:
        name: build-essential
        state: present

    - name: Check Node.js version
      command: node --version
      register: node_version_output

    - name: Check npm version
      command: npm --version
      register: npm_version_output

    - name: Display Node.js and npm versions
      debug:
        msg: "Node.js version: {{ node_version_output.stdout }} | npm version: {{ npm_version_output.stdout }}"

nodejs.yml 51L, 1237B 51,111 All
```

8. Clone the Lab 1 repo to both the nodes. Build the node modules.

```
[root@4337f33dcf37:/# ansible-playbook example-node.yml --ask-vault-pass
Vault password:
PLAY [all] ****
TASK [Install sudo] ****
ok: [host1]
ok: [host2]

TASK [Run the equivalent of "apt-get update" as a separate step] ****
ok: [host2]
ok: [host1]

TASK [Ansible shell module multiple commands] ****
[WARNING]: Consider using the get_url or uri module rather than running 'curl'. If you need to use command because get_url or uri is insufficient you can add 'warn: false' to this command task or set 'command_warnings=False' in ansible.cfg to get rid of this message.
changed: [host2]
changed: [host1]

TASK [Install required packages] ****
[DEPRECATION WARNING]: Invoking "apt" only once while using a loop via squash_actions is deprecated. Instead of using a loop to supply multiple items and specifying "name: "{{ item }}", please use 'name: ["{{ item }}"]' and remove the loop. This feature will be removed from ansible-base in version 2.11. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
[DEPRECATION WARNING]: Invoking "apt" only once while using a loop via squash_actions is deprecated. Instead of using a loop to supply multiple items and specifying "name: "{{ item }}", please use 'name: ["{{ item }}"]' and remove the loop. This feature will be removed from ansible-base in version 2.11. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
ok: [host2] => (item=['git', 'curl', 'wget', 'nginx', 'nodejs'])
ok: [host1] => (item=['git', 'curl', 'wget', 'nginx', 'nodejs'])

TASK [Copy SSH key to remote node] ****
ok: [host1]
ok: [host2]

TASK [Clone a private repository] ****
changed: [host1]
changed: [host2]

TASK [Install packages based on package.json using the npm] ****
changed: [host1]
changed: [host2]

TASK [Build app] ****
changed: [host2]
changed: [host1]

PLAY RECAP ****
host1 : ok=8    changed=4    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
host2 : ok=8    changed=4    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
root@4337f33dcf37:/# ]
```

```
[root@4337f33dcf37:/# ssh root@node1
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 6.6.12-linuxkit aarch64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage
Last login: Fri Mar  1 01:06:50 2024 from 172.20.0.2
[root@71121500f9c9:~/# cd /home/
[root@71121500f9c9:/home# ls -la
total 12
drwxr-xr-x 1 root root 4096 Mar  1 01:06 .
drwxr-xr-x 1 root root 4096 Feb 28 20:55 ..
drwxr-xr-x 7 root root 4096 Mar  1 01:06 repo
[root@71121500f9c9:/home# cd repo/
[root@71121500f9c9:/home/repo# ls -la
total 264
drwxr-xr-x  7 root root  4096 Mar  1 01:06 .
drwxr-xr-x  1 root root  4096 Mar  1 01:06 ..
-rw-r--r--  1 root root   43 Mar  1 01:06 .babelrc
drwxr-xr-x  8 root root  4096 Mar  1 01:06 .git
drwxr-xr-x  3 root root  4096 Mar  1 01:06 .github
-rw-r--r--  1 root root   13 Mar  1 01:06 .gitignore
-rw-r--r--  1 root root  955 Mar  1 01:06 Jenkinsfile
drwxr-xr-x  2 root root  4096 Mar  1 01:06 dist
drwxr-xr-x 228 root root 12288 Mar  1 01:06 node_modules
-rw-r--r--  1 root root 211275 Mar  1 01:06 package-lock.json
-rw-r--r--  1 root root   779 Mar  1 01:06 package.json
-rw-r--r--  1 root root 1523 Mar  1 01:06 readme.md
drwxr-xr-x  2 root root  4096 Mar  1 01:06 src
root@71121500f9c9:/home/repo# ]
```

```
[root@4337f33dcf37:/# ssh root@node2
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 6.6.12-linuxkit aarch64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage
Last login: Fri Mar  1 01:06:50 2024 from 172.20.0.2
[root@64757b429676:~# cd /home/
[root@64757b429676:/home# ls -la
total 12
drwxr-xr-x 1 root root 4096 Mar  1 01:06 .
drwxr-xr-x 1 root root 4096 Feb 28 20:55 ..
drwxr-xr-x 7 root root 4096 Mar  1 01:06 repo
[root@64757b429676:/home# cd repo/
[root@64757b429676:/home/repo# ls -la
total 264
drwxr-xr-x  7 root root  4096 Mar  1 01:06 .
drwxr-xr-x  1 root root  4096 Mar  1 01:06 ..
-rw-r--r--  1 root root   43 Mar  1 01:06 .babelrc
drwxr-xr-x  8 root root  4096 Mar  1 01:06 .git
drwxr-xr-x  3 root root  4096 Mar  1 01:06 .github
-rw-r--r--  1 root root   13 Mar  1 01:06 .gitignore
-rw-r--r--  1 root root  955 Mar  1 01:06 Jenkinsfile
drwxr-xr-x  2 root root  4096 Mar  1 01:06 dist
drwxr-xr-x 228 root root 12288 Mar  1 01:06 node_modules
-rw-r--r--  1 root root 211275 Mar  1 01:06 package-lock.json
-rw-r--r--  1 root root   779 Mar  1 01:06 package.json
-rw-r--r--  1 root root  1523 Mar  1 01:06 readme.md
drwxr-xr-x  2 root root  4096 Mar  1 01:06 src
root@64757b429676:/home/repo# ]
```

```
---  
hosts: all  
become: yes  
gather_facts: no  
vars:  
  git_repo_url: https://{{ git_username | urlencod }}:{{ git_password | urlencod }}@github.com/aratrika1996/BCDV-4033-Lab1.git  
  repo_path: /home/repo  
  repo_branch: main  
vars_files:  
  - gitsecrets.yml  
tasks:  
  - name: Install sudo  
    apt:  
      name: sudo  
      state: present  
  
  - name: Run the equivalent of "apt-get update" as a separate step  
    apt:  
      update_cache: yes  
  
  - name: Ansible shell module multiple commands  
    shell: curl -fsSL https://deb.nodesource.com/setup_14.x | sudo -E bash -  
  
  - name: Install required packages  
    apt: names={{ item }} state=present  
    with_items:  
      - git  
      - curl  
      - wget  
      - nginx  
      - nodejs  
  
  - name: Copy SSH key to remote node  
    copy:  
      src: /root/.ssh/id_rsa  
      dest: /root/.ssh/id_rsa  
      owner: root  
      group: root  
      mode: '0600'  
  
  - name: Clone a private repository  
    git:  
      repo: "{{ git_repo_url }}"
      dest: "{{ repo_path }}"
      version: "{{ repo_branch }}"
      accept_hostkey: yes
      update_index: yes
      clone: yes
      environment:
        GIT_TERMINAL_PROMPT: "0"  
  
  - name: Install packages based on package.json using the npm  
    npm:  
      path: "{{ repo_path }}"
      state: present  
  
  - name: Build app  
    command: npm run build
    args:
      chdir: "{{ repo_path }}"]
```

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```
git_username: aratrika1996
git_password: ghp_hD1mB91Q77jHc35P0yYnnkY52S7oq102SRWA
```