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RH294 Exam Boot-camp S1

Marks: 300
Marks Ob.: 210 (70%)
Duration: 4hrs approx.

- 3 managed nodes are provided.

- Read instructions (10-15 min)
- We do not need to login to root we have sudo power in devops user.
- NO need of password. ssh keys are already authorised.
- If we do ssh-key it will override the existing and won't run.
- *. We do not need to do anything in the environment. We only need to write the playbook in the precreated dir.
  - ↳ /home/devops/playbooks
    - ↳ workspace.

- First we have to install the ansible, inventory
- We have to ssh to the controller node with devops user
  - # ssh devops@<ip> or <host_name>
- Create a user (devops) and create an env using ssh passwd (FOR PRACTICE)
- In exam pip and won't work.
  - # yum install ansible
    - ↳ first confirm; ansible --version

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useradd devops
su - devops
~~ssh~~ . # ssh <host_name>
ansible --version
sudo yum install ansible (If not installed)
cd /home/devops/playbooks
vim ansible.cfg
[defaults]
inventory = /home/devops/key/inventory
host_key_checking = False
remote_user = devops

[privilege_escalation]
become_user = root
become = yes
become_method = sudo

wget use
↳ TO download the inventory and update the ansible.cfg file

ansible all --list-hosts
ansible all -m ping
ansible all -m command -a id
↳ They gives the id of all the nodes

*. creating the env : 14min
T- 30 min

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- Main Topics:
  - 2. Deploying Ansible (Pg 47)
  - 4. Managing variables & Facts
  - 5. Implementing Task Control
  - 6. Deploying Files to Managed Hosts
  - 7. Managing Large Project (Pg 256)
  - 8. Simplifying Roles (System Roles, Pg 319 & Pg 332)
  - 10. Automating I.A.T (Pg 409, 440)

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RH294 EXAM BOOT-CAMP S2

- Installation of rhel with minimal install.

yum install vsftpd
  ↳ ftp server
- If we want to share the files using ftp server we need to put the contents in /var/ftp dir.
- We'll mount cd on /var/ftp.

ls -l /dvd/cdrom
mkdir /var/ftp/dvd
mount /dvd/cdrom /var/ftp/dvd

- By default in rhel we can't connect without user, pass
vim /etc/vsftpd/vsftpd.conf
  ↳ anonymous_enable=YES
  (first uncommented line)

systemctl enable vsftpd --now

URL: ftp://<ip_ftp_server>/dvd/BaseOS/
                                /AppStream/

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cli OS

```
# mkdir /dvd
# mount /dev/cdrom /dvd
# vi /etc/yum.repos.d/dvd.repo
    [dvd1]
    baseurl= file:///dvd/BaseOS
    gpgcheck=0

    [dvd2]
    baseurl= file:///dvd/AppStream
    gpgcheck=0

# yum install vim net-tools -y
```

cli-OS → settings → Network → Bridged Adap

```
# nmcli connection up enp0s3
# vi /etc/sysconfig/network-scripts/
                        ifcfg-enp0s3
    ↳ ONBOOT=yes

# useradd devops
# vim /etc/sudoers
  ↳ devops ALL=(ALL)  NOPASSWD: ALL

# rm /etc/yum.repos.d/dvd.repo
# umount /dev/cdrom
# init 0
```

< create 4 copies of it >

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rhel-cli → clone
└ ansible_CN
└ ☑ Reinitialize MAC.
└ Full clone.
→ ansible_MN1
→ ansible_MN2
→ ansible_MN3

lw.com
hostnamectl set-hostname controller.
hostname

hostnamectl set-hostname servera.lw.com
hostname
↓
servera
=

controller
su - devops
ssh-keygen
~~# ssh-copy-id~~

(root) vi /etc/hosts
<ip> <servera>.lw.com <servera>
— controller.lw.com controller

scp /etc/hosts servera:/etc/hosts
——————— b ———

su - devops
#(devops) ssh-copy-id ~~devops~~ devops@servera
——— b
——— c

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Mount DVD in controller Node.

cd /etc/yum.repos.d/

vim dvd.repo

create repo.

yum install python3-pip

pip3 install ansible

GUI

ssh awopse@192.168.0.125

<Controller>

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RH294 - Exam Boot-Camp S3

ssh admin@controller
mkdir /home/admin/ansible

- Ansible is pre-installed. If not download the package.

vim ansible.cfg
↳ copy the global file
Uncomment privilege, remote_user, host_key_checking

vim inventory
[dev]
node1.example.com
ansible all --list-hosts

- Check each step after performing it
ansible all -m command -a id

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ansible all -a id

sudo yum grouplist
↳ lists all the groups available in yum.

sudo yum groupinstall "RPM Development Tools"
↳ installs all RPM dev tools.

3. vars:
  pkgs:
    - php
    - mariadb

- yum:
  name: "{{ item }}"
  state:
  loop: "{{ pkgs }}"
  when: inventory_hostname in groups['dev'] or ---- ['test']

- yum:
  name: "@RPM Development Tools"
  ↳ Tells that it is a gp.

- yum:
  name: "*"
  state: latest
  when: inventory_hostname in groups['dev']

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4. # sudo yum install rhel-system-roles
↳ installs system roles

vim timesync.yml

- hosts: all
  vars:
    timesync_ntp_servers:
      - hostname: 172.25.254.250
        iburst: yes
  roles:
    - /usr/share/ansible/roles/rhel-system-roles.timesync

cd ./roles (path)

5. # ansible-galaxy init --init-path=roles apache

vim roles/apache/vars/main.yml
pkgs:
  - httpd
  - firewalld
port:
  - http
  - https

vim ./templates/index.html.j2
Welcome to {{ ansible_facts['fqdn'] }}
on {{ ansible_facts['default_ipv4']['address'] }}

vim ./tasks/main.yml
=
=
=

vim httpd.yml
- host: webserver
  roles:
    - apache

6. # vim roles/requirement.yml
- src: ——
name: balancer
- src: —
name: phphello

~~ansible~~ roles/requirement.yml

ansible-galaxy install -r roles/requirement.yml
↳ downloads the roles from the path created in the local yaml file.

8. # ls -Z -d /var/www/html
↳ shows SELinux type
↳ dir.

9. # vim password.txt
↳ alteroth

#ansible-vault create --vault-password-file password.txt vault.yml

dw_pass = wakenym
mgr_pass = rocky

chmod 0600 password.txt

12. # ansible-vault rekey --ask-vault-pass secret.yml