

RedHat

EX407 Exam

Red Hat Certified Specialist in Ansible Automation

**Questions & Answers
Demo**

Version: 6.0

Question: 1

Install and configure ansible

User bob has been created on your control node. Give him the appropriate permissions on the control node. Install the necessary packages to run ansible on the control node.

Create a configuration file `/home/bob/ansible/ansible.cfg` to meet the following requirements:

- The roles path should include `/home/bob/ansible/roles`, as well as any other path that may be required for the course of the sample exam.
- The inventory file path is `/home/bob/ansible/inventory`.
- Ansible should be able to manage 10 hosts at a single time.
- Ansible should connect to all managed nodes using the bob user.

Create an inventory file for the following five nodes:

node1.example.com

node2.example.com

node3.example.com

node4.example.com

node5.example.com

Configure these nodes to be in an inventory file where node1 is a member of group dev, node2 is a member of group test, node3 is a member of group proxy, node4 and node 5 are members of group prod. Also, prod is a member of group webservers.

**Answer: See the
Explanation for
complete Solution
below.**

Explanation:

```
In/home/sandy/ansible/ansible.cfg
[defaults]
inventory=/home/sandy/ansible/inventory
roles_path=/home/sandy/ansible/roles
remote_user= sandy
host_key_checking=false
[privilegeescalation]
become=true
become_user=root
become_method=sudo
become_ask_pass=false
```

```
In /home/sandy/ansible/inventory
[dev]
node1 .example.com
[test]
node2.example.com
[proxy]
node3 .example.com
[prod]
node4.example.com
node5 .example.com
[webservers:children]
prod
```

Question: 2

Create a file called `adhoc.sh` in `/home/sandy/ansible` which will use adhoc commands to set up a new repository. The name of the repo will be 'EPEL' the description 'RHEL8' the baseurl is <https://dl.fedoraproject.org/pub/epel/epel-release-latest-8.noarch.rpm> there is no `gpgcheck`, but you should enable the repo.

* You should be able to use an bash script using adhoc commands to enable repos. Depending on your lab setup, you may need to make this repo "state=absent" after you pass this task.

**Answer: See the
Explanation for
complete Solution
below.**

Explanation:
`chmod 0777 adhoc.sh`
`vim adhoc.sh`
`#!/bin/bash`
`ansible all -m yum_repository -a 'name=EPEL description=RHEL8`
`baseurl=https://dl.fedoraproject.org/pub/epel/epel-release-latest-8.noarch.rpm`
`gpgcheck=no enabled=yes'`

Question: 3

Create a file called `packages.yml` in `/home/sandy/ansible` to install some packages for the following hosts. On dev, prod and webservers install packages `httpd`, `mod_ssl`, and `mariadb`. On dev only install the development tools package. Also, on dev host update all the packages to the latest.

Answer: See the

**Explanation for
complete Solution
below.**

Explanation:

Solution as:

```
---
- name: install pack
  hosts: dev,test,webserver
  become: true
  tasks:
    - name: install on all hosts in this play
      yum:
        name:
          - httpd
          - mod_ssl
          - mariadb
        state: latest
    - name: install on dev only
      yum:
        name:
          - '@Development tools'
        state: latest
      when: "dev" in group_names
```

** NOTE 1 a more acceptable answer is likely 'present' since it's not asking to install the latest
state: present

** NOTE 2 need to update the development node
- name: update all packages on development node

```
  yum:
    name: '*'
    state: latest
```

Question: 4

Create a role called sample-apache in /home/sandy/ansible/roles that enables and starts httpd, enables and starts the firewall and allows the webserver service. Create a template called index.html.j2 which creates and serves a message from /var/www/html/index.html Whenever the content of the file changes, restart the webserver service.

Welcome to [FQDN] on [IP]

Replace the FQDN with the fully qualified domain name and IP with the ip address of the node using ansible facts. Lastly, create a playbook in /home/sandy/ansible/ called apache.yml and use the role to

serve the index file on webserver hosts.

**Answer: See the
Explanation for
complete Solution
below.**

Explanation:

/home/sandy/ansible/apache.yml

```
---  
- name: http  
  hosts: webserver  
  roles:  
    - sample-apache
```

/home/sandy/ansible/roles/sample-apache/tasks/main.yml

```
---
# tasks file for sample-apache
- name: enable httpd
  service:
    name: httpd
    state: started
    enabled: true
- name: enable firewall
  service:
    name: firewalld
    state: started
    enabled: true
- name: firewall http service
  firewalld:
    service: http
    state: enabled
    permanent: yes
    immediate: yes
- name: index
  template:
    src: templates/index.html.j2
    dest: /var/www/html/index.html
  notify:
    - restart
```

/home/sandy/ansible/roles/sample-apache/templates/index.html.j2

```
Welcome to {{ansible_fqdn}} {{ansible_default_ipv4.address}}
```

In /home/sandy/ansible/roles/sample-apache/handlers/main.yml

```
- name: restart
  service:
    name: httpd
    state: restarted
```

Question: 5

Create a file called requirements.yml in /home/sandy/ansible/roles to install two roles. The source for the first role is geerlingguy.haproxy and geerlingguy.php. Name the first haproxy-role and the second php-role. The roles should be installed in /home/sandy/ansible/roles.

**Answer: See the
Explanation for
complete Solution
below.**

Explanation:

```
in /home/sandy/ansible/roles
vim requirements.yml
```

```
- src: geerlingguy.haproxy
  name: haproxy-role
- src: geerlingguy.php_role
  name: php_role
```

Run the requirements file from the roles directory:

```
ansible-galaxy install -r requirements.yml -p /home/sandy/ansible/roles
```