

### Access the labs:

Go to <https://rol.redhat.com/>

Login with your RHN ID

Click on the **JOIN** under **MY VIRTUAL TRAINING CLASSES** section

Log in to the **workstation** system as a **student** user using **student** as the password.

### Ansible Commands:

Run the ansible --version command to confirm the version of Ansible that is installed.

```
[student@workstation ~]$ ansible --version
```

Determine the SSH password less configuration for the devops account that was configured when the managed hosts was built.

```
[student@workstation ~]$ ssh devops@servera.lab.example.com  
[devops@servera ~]$ exit
```

```
[student@workstation ~]$ ssh devops@serverb.lab.example.com  
[devops@serverb ~]$ exit
```

Explore the inventory file.

```
[student@workstation ~]$ cat /etc/ansible/hosts
```

Explore the configuration file

```
[student@workstation ~]$ cat /etc/ansible/ansible.cfg
```

Syntax of the ansible command to run the ad hoc commands:

```
[student@workstation ~]$ ansible host-pattern -m module [-a 'module arguments']  
[-i inventory] [-b] [-u remote_user]
```

A trivial test module, this module always returns 'pong' on successful contact.

```
[student@workstation ~]$ ansible 'all' -m ping
```

Using the shell module, execute an ad hoc command to run the hostname command on all the managed hosts.

```
[student@workstation ~]$ ansible 'all' -m shell -a 'hostname'
```

Using the user module, execute an ad hoc command on servera.lab.example.com to create a torvalds user.

```
[student@workstation ~]$ ansible 'servera.lab.example.com' -m user -a 'name=torvalds state=present' -b -u devops
```

### Create and execute playbook:

Use a text editor to create a new playbook called **/home/student/web.yml**

```
---
- name: "Play 1"
  hosts: all
  remote_user: devops
  become: true
  tasks:
    - name: "Task 1 - Install httpd package"
      yum:
        name: httpd
        state: installed
    - name: "Task 2 - Start the httpd service"
      service:
        name: httpd
        state: started
        enabled: true
    - name: "Task 3 - Allow httpd on firewall"
      firewallld:
        state: enabled
        service: http
        immediate: true
        permanent: true
    - name: "Task 4 - Create a webpage"
      copy:
        dest: /var/www/html/index.html
        content: "Welcome to Ansible Hands-On Workshop!!\n"
...

```

Run the `ansible-playbook --syntax-check web.yml` command to verify that its syntax is correct

```
[student@workstation ~]$ ansible-playbook --syntax-check web.yml
```

Use the `ansible-playbook --check` command to run smoke tests on a playbook

```
[student@workstation ~]$ ansible-playbook --check web.yml
```

Run the playbook. Read through the output generated to ensure that all tasks completed successfully.

```
[student@workstation ~]$ ansible-playbook web.yml
```

Verify the web server is hosted by executing the curl command or access the URL via browser.

```
[student@workstation ~]$ curl http://servera.lab.example.com  
[student@workstation ~]$ curl http://serverb.lab.example.com
```