

Utilizing the Foundation Playbooks

Deploy Foundation0 Management

The **Deploy_Foundation0_Management.yml** playbook is meant to setup the systems for management by Ansible which is now installed as part of the RHCI Foundation base. This playbook is meant to deploy the following files:

- **/etc/hosts**
- **/home/kiosk/.ssh/config**

In order to make the playbook flexible for all the systems, there are multiple resource files that must be created and deployed. The resource files are named by where they would go with the course code appended on the back.

For example, for the RH318 RHV course, the **/etc/hosts** is one of the Ansible resource files and located in the following: **~kiosk/Foundation/files/f0_hosts_rh318** location on the filesystem. There is also a corresponding **f0_config_rh318** file which will replace the SSH config file.

IMPORTANT

Note about the Playbook

When running the playbook, since these files may change, the plays utilize the **copy** module with the backup parameter. If there is something wrong with either of the files that Ansible deploys, you can revert back to the original file.

1. Open a command shell.
2. Navigate to the **/home/kiosk/Foundation** directory.
3. Run the playbook with the **ansible-playbook** directive and ensure that you specify the course code with the extra variable setting **-e "course_code=rh318"** at the end of the command line.

Running the Playbook for the RH318 Course

```
[kiosk@foundation0 Foundation]$ ansible-playbook Deploy_Foundation0_Management.yml  
-e "course_code=rh318"
```

4. You can now access all student systems in the class through SSH by using the following syntax: **ssh root@rhvmX** where you are attempting to access RHVM on system X.

Accessing RHVM on the Foundation 10 System from Foundation0

```
[kiosk@foundation0 Foundation]$ ssh root@rhvm10
```

System Access

TIP

The playbook distributes an **/etc/hosts** file and **.ssh/config** file for the **kiosk** user. Together and with the help of Bastion, these files allow the names of the system to resolve properly (*using /etc/hosts*) and send the request to Bastion (*forwarded to the correct port with the .ssh/config*) file.

Deploy Gnome Tweaks

This playbook will deploy Gnome Tweaks if it hasn't already been installed. It is also capable of modifying the Gnome Session settings to enable the graphical environment look more like RHEL7 with **minimize/maximize/window list/etc.** all being enabled.

This playbook can be run against the various inventory groups that have been created.

- **Instructor** - containing only Foundation0
- **Foundation** - containing all student Foundation systems 1-X.
- **Workstation** - containing all Workstation systems 0-X.

Default Variables

This playbook takes multiple variables as listed below:

NOTE

- **variable_user** - User to run playbook as since the gnome-settings is user specific.
- **variable_host** - Host(s) to run the playbook against.

The **variable_user** default is set to **kiosk** as the user and the **variable_host** is set to **Instructor**. It should also be pointed out, that for workstation in the inventory file, there is an inventory variable set for **Workstation** which sets the **variable_user=student**.

1. Setting up Gnome Tweaks on Foundation0

```
[kiosk@foundation0 Foundation]$ ansible-playbook Deploy_Gnome_Tweaks.yml

PLAY [Installation of Gnome-tweaks] *****

TASK [Gathering Facts] *****
ok: [foundation0]

TASK [Install Gnome-Tweaks] *****
ok: [foundation0]

PLAY [Gnome-Tweaks Settings] *****

TASK [Gathering Facts] *****
ok: [foundation0]

TASK [Complete Gnome-Tweaks Settings for Extensions] *****
changed: [foundation0]

TASK [Complete Gnome-Tweaks Settings for Windows] *****
changed: [foundation0]

PLAY RECAP *****
foundation0      : ok=5    changed=2    unreachable=0    failed=0
skipped=0      rescued=0    ignored=0
```

Deploy NoMachine

This playbook will deploy and install NoMachine to the Foundation systems. NoMachine will allow graphical remote access to the Foundation systems from the NoMachine client on the Instructor system or an Instructor laptop that is connected to the classroom environment.

Default Variables

This playbook takes multiple variables as listed below:

NOTE

- **variable_user** - User to run playbook as since the gnome-settings is user specific.
- **variable_host** - Host(s) to run the playbook against.

The **variable_user** default is set to **kiosk** as the user and the **variable_host** is set to **Instructor**. It should also be pointed out, that for workstation in the inventory file, there is an inventory variable set for **Workstation** which sets the **variable_user=student**.

Deploying on Systems other than Foundation0

In order to deploy on a system other than Foundation0, you would need to specify the system in inventory with the **-e** argument.

IMPORTANT

Deploying to a single host from inventory

```
[kiosk@foundation0 Foundation]$ ansible-playbook
Deploy_NoMachine.yml -e "variable_host=foundation3"
```

1. Installing and Deploying NoMachine

Installing NoMachine on Foundation0

```
[kiosk@foundation0 Foundation]$ ansible-playbook Deploy_NoMachine.yml

PLAY [Installation of NoMachine] *****

TASK [Gathering Facts] *****
ok: [foundation0]

TASK [Copy NoMachine] *****
changed: [foundation0]

TASK [Install NoMachine] *****
ok: [foundation0]

TASK [Setup Firewall] *****
ok: [foundation0]

PLAY RECAP *****
foundation0      : ok=4    changed=1    unreachable=0    failed=0
skipped=0      rescued=0    ignored=0
```