



# Installation Tasks on the Compute Nodes

Compute nodes setup tasks are:

- Enable the EPEL repo and enable powertools in dnf (powertools role)
- Set timezone to America/Chicago (timesync role)
- Install perl, perl-DBI, autofs (compute-node\_pkg\_inst role)
- Configure autofs (compute-node\_autofs role)

Copy the compute node Ansible directory to the rocky user's home directory:

```
[rocky@lci-head-01-1 ~]$ cd
[rocky@lci-head-01-1 ~]$ cp -a lci-scripts/introductory/compute_nodes/Compute_node_playbook .
[rocky@lci-head-01-1 ~]$ cd /home/rocky/Compute_node_playbook
```

Let's check out these roles:

- **powertools:**

```
[rocky@lci-head-01-1 Compute_node_playbook]$ cat roles/powertools/tasks/main.yml
```

- ```
- name: Enable the EPEL repo
  ansible.builtin.dnf:
    name: epel-release
    state: latest

- name: Enable the powertools repo
  ansible.builtin.command:
    cmd: dnf config-manager --set-enabled powertools
```

- **timesync:**

```
[rocky@lci-head-01-1 Compute_node_playbook]$ cat roles/timesync/tasks/main.yml
```

- ```
- name: Ensure time zones are in sync
  ansible.builtin.command:
    cmd: timedatectl set-timezone America/Chicago
```

- **compute-node\_pkg\_inst**

```
[rocky@lci-head-01-1 Compute_node_playbook]$ cat roles/compute-node_pkg_inst/tasks/main.yml
```

- ```
- name: Compute node packages
  ansible.builtin.dnf:
    name: perl, perl-DBI, autofs
    state: latest
```

- **compute-node\_autofs:**

```
[rocky@lci-head-01-1 Compute_node_playbook]$ cat roles/compute-node_autofs/tasks/main.yml
- name: install autofs
```

```

    ansible.builtin.dnf:
      name: autofs
      state: present

- name: Creates directory
  ansible.builtin.file:
    path: /head
    state: directory
    mode: '0755'

- name: Copy auto.master
  ansible.builtin.copy:
    src: auto.master
    dest: /etc/auto.master
    owner: root
    group: root
    mode: '0644'

- name: Copy auto.nfs
  ansible.builtin.copy:
    src: auto.nfs
    dest: /etc/auto.nfs
    owner: root
    group: root
    mode: '0644'

- name: Restart service autofs
  ansible.builtin.systemd_service:
    state: restarted
    daemon_reload: yes
    name: autofs

```

Run the Ansible playbook on the compute nodes:

```

[rocky@lci-head-01-1 ~]$ cd /home/rocky/Compute_node_playbook
[rocky@lci-head-01-1 Compute_node_playbook]$ ansible-playbook playbook_compute_node.yml

```

Check out the results:

```

[rocky@lci-head-01-1 Compute_node_playbook]$ ssh lci-compute-01-1

```

```

[rocky@lci-compute-01-1 ~]$ rpm -q epel-release
epel-release-8-19.el8.noarch

```

```

[rocky@lci-compute-01-1 ~]$ dnf repolist

```

| repo id    | repo name                                      |
|------------|------------------------------------------------|
| appstream  | Rocky Linux 8 - AppStream                      |
| baseos     | Rocky Linux 8 - BaseOS                         |
| epel       | Extra Packages for Enterprise Linux 8 - x86_64 |
| extras     | Rocky Linux 8 - Extras                         |
| powertools | Rocky Linux 8 - PowerTools                     |

```

[rocky@lci-compute-01-1 ~]$ timedatectl
    Local time: Tue 2024-01-30 03:09:02 CST
    Universal time: Tue 2024-01-30 09:09:02 UTC
    RTC time: Tue 2024-01-30 09:09:03
    Time zone: America/Chicago (CST, -0600)
System clock synchronized: yes
    NTP service: active

```

RTC in local TZ: no

```
[rocky@lci-compute-01-1 ~]$ findmnt /head
```

```
TARGET SOURCE          FSTYPE OPTIONS
```

```
/head /etc/auto.nfs autofs
```

```
rw,relatime,fd=7,pgrp=399677,timeout=60,minproto=5,maxproto=5,indirect,pipe_ino=1252261
```

```
[rocky@lci-compute-01-1 ~]$ ls /head/NFS #Touch the directory to mount it
```

```
[rocky@lci-compute-01-1 ~]$ mount | grep /head/NFS
```

```
lci-head-01-1:/head/NFS on /head/NFS type nfs4
```

```
(rw,relatime,vers=4.2,rsz=1048576,wsz=1048576,namlen=255,hard,proto=tcp,timeo=600,retrans=2,sec=s  
ys,clientaddr=192.168.1.170,local_lock=none,addr=192.168.1.88)
```