

# Minio - Distributed Mode

---

**Ansible role to deploy and configure Minio in distributed mode**

*Peter Murphy*

*My Company*

# Table of contents

---

1. Home	3
1.1 Role Name	3
1.2 Description	3
1.3 Dependencies	3
1.4 Information	3
2. Defaults	4
2.1 main.yml	4
3. Vars	7
3.1 main.yml	7
4. Tasks	8
4.1 Flow	8
4.2 Tasks: main	9
4.3 Tasks: users	10
4.4 Tasks: file-system	11
4.5 Tasks: minio	12
5. Handlers	13
5.1 main.yml	13
6. Appendix	14
6.1 References	14

# 1. Home

---

## 1.1 Role Name

---

minio\_install

---

## 1.2 Description

---

Role to install and configure Minio in distributed mode

---

## 1.3 Dependencies

---

None

---

## 1.4 Information

---

Author	Company	License	Minimum Ansible Version
Peter Murphy	My Company	None	2.9

---

## 2. Defaults

---

### 2.1 main.yml

---

#### 2.1.1 minio\_server\_install\_volume\_groups

Volume Group settings ...

```
vg_min:  
  pv: /dev/sdd
```

#### 2.1.2 minio\_server\_install\_volumes

Logical volume variable settings ...

```
lv_min:  
  drive: vg_min  
  size: +100%FREE
```

#### 2.1.3 minio\_server\_install\_dir\_mounts

Directory for logical volume mount ...

```
/var/lib/minio:  
  src: /dev/vg_min/lv_min
```

#### 2.1.4 minio\_server\_datadirs

Minio server data directory ...

```
/var/lib/minio  
...
```

#### 2.1.5 minio\_user

Minio user ...

```
minio  
...
```

#### 2.1.6 minio\_group

Minio user group ...

```
minio  
...
```

## 2.1.7 minio\_server\_download\_base\_url

Base URL to download minio from ...

```
https://dl.minio.io/server/minio/release/linux-amd64
...
```

## 2.1.8 minio\_server\_bin

Minio server bin directory ...

```
/usr/local/bin/minio
...
```

## 2.1.9 minio\_server\_envfile

Path to the file containing the ENV variables for the Minio server ...

```
/etc/default/minio
...
```

## 2.1.10 minio\_port

Minio server port ...

```
'9091'
```

## 2.1.11 minio\_server\_opts

Additional Minio server CLI options ...

```
''
```

## 2.1.12 minio\_access\_key

Minio access key ...

```
''
```

## 2.1.13 minio\_secret\_key

Minio secret key ...

```
''
```

## 2.1.14 minio\_server\_env\_extra

---

Additional environment variables to be set in minio server environment ...

```
''
```

## 3. Vars

---

### 3.1 main.yml

---

#### 3.1.1 minio\_server\_download\_url

---

URL to download minio from ...

```
'{{ minio_server_download_base_url }}/minio'
```

#### 3.1.2 minio\_server\_addr

---

Minio server listen address ...

```
:{{ minio_port }}  
...
```

## 4. Tasks

---

### 4.1 Flow

---

```
graph LR
  main.yml(main.yml) --> minio/users.yml(minio/users.yml)
  main.yml(main.yml) --> volumes.yml(volumes.yml)
  main.yml(main.yml) --> minio/minio.yml(minio/minio.yml)
  main.yml(main.yml) --> minio/firewall.yml(minio/firewall.yml)
  volumes.yml(volumes.yml) --> directories.yml(directories.yml)
```



## 4.2 Tasks: main

---

### 4.2.1 main.yml

---

- Set proxy server if defined
- Configure Minio user
- Configure logical volumes
- Download, Install and Configure Minio
- Configure Firewall

## 4.3 Tasks: users

---

### 4.3.1 minio/users.yml

---

- Create Minio group
- Create Minio user

## 4.4 Tasks: file-system

---

### 4.4.1 volumes.yml

---

- Configure LVM volume groups
- Configure LVM logical volumes
- Create the xfs filesystems
- Create directories
- Create list of mounted devices
- Mount and bind a volume

### 4.4.2 directories.yml

---

- Get status of the FS object
- Create directory if not already created

## 4.5 Tasks: minio

---

### 4.5.1 minio/minio.yml

---

- Get the Minio server checksum
- Download the Minio server
- Generate the Minio server envfile
- Create the Minio server systemd config
- Create the Minio server init.d config
- Enable and start the Minio service

### 4.5.2 minio/firewall.yml

---

- Enable firewalld
- Open firewall ssh port
- Open firewall minio ports

## 5. Handlers

---

### 5.1 main.yml

---

- Reload minio systemd
- Restart minio
- Reload firewalld service

## 6. Appendix

---

### 6.1 References

---

Description	Link
Distributed Minio QuickStart Guide	<a href="https://docs.min.io/docs/distributed-minio-quickstart-guide.html">https://docs.min.io/docs/distributed-minio-quickstart-guide.html</a>
Peter Murphy	<a href="https://www.linkedin.com/in/peter-murphy-61493974/">https://www.linkedin.com/in/peter-murphy-61493974/</a>