

RancherOS Installation

a. Environment Preparation

- Prepare xshell and xftp clients (before installing xManager).
- Burn rancheros.iso to CD or U disk to make system disk.

b. Install RancherOS

3. Startup

Plug the system disk into the host and turn on the power for installation. After startup, set the temporary account password at the command line as follows:

```
sudo passwd rancher
```

Enter a new password two times when the prompt appears, for example: supermap

2. Set Network

Check the network:

1. Check the host IP through Ifconfig. if you can see the eth0 item, continue the next step; otherwise please contact technical support staff.

2. Check whether the host has been assigned to IP. The ip needs to be configured as in the following figure if eth0 does not have the inet addr item. If the host has been assigned to IP, you do not need to configure any more.

```
eth0      Link encap:Ethernet  HWaddr 08:0C:29:E2:DB:AE
          inet6 addr: fe80::28c:29ff:fee2:dbae/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:7 errors:0 dropped:0 overruns:0 frame:0
          TX packets:21 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:735 (735.0 B)  TX bytes:4422 (4.3 KiB)
```

Add IP commands as follows: ({IP} is a temporary IP that will be configured, please contact your network administrator to get it)

```
sudo ip addr add {ip} dev eth0
```

```
$ sudo ip addr add 192.168.127.128/24 dev eth0
```

Check results via Ifconfig after Setup is successful:

```
eth0      Link encap:Ethernet  HWaddr 00:0C:29:E2:DB:AE
          inet addr:192.168.127.128  Bcast:0.0.0.0  Mask:255.255.255.0
          inet6 addr: fe80::20c:29ff:fee2:dbae/64  Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:10  errors:0  dropped:0  overruns:0  frame:0
          TX packets:22  errors:0  dropped:0  overruns:0  carrier:0
          collisions:0  txqueuelen:1000
          RX bytes:981 (981.0 B)  TX bytes:4808 (4.6 KiB)
```

Modify the rancheros_config.yml file:

Find rancheros_config.yml in Attachments and open it. If you use DHCP to assign ip, you only need to set dhcp to true, as shown below:

```
network:
  interfaces:
    eth*:
      dhcp: true
```

If you are not using DHCP, you need to set ip by yourself (please contact the network administrator to get it), as shown below:

```
network:
  interfaces:
    eth*:
      dhcp: false
    eth0:
      address: 192.168.127.128/24
      gateway: 192.168.127.1
      mtu: 1500
```

3. Upload yml File

Log on to the host with xshell. For ip and password, please refer to the 1st and 2nd step.

Input ssh rancher@{ip} in the xshell command line, select "password" in the "ssh User Authentication" in the dialog box that displays, enter the password and click OK. {ip} is the host ip

Now, yu can connect to the host with xshell.



After login, click on the New File Transfer in the upper right corner, and upload the local rancheros_config.yml file to the Docker host via xftp.



4. Check Local Disk

Perform the following command to view the local disk:

```
sudo fdisk -l
```

Select the largest disk to install the system system. In the following example, select /dev/sda.

```

Disk /dev/sda: 8 GiB, 8589934592 bytes, 16777216 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: dos
Disk identifier: 0x50725632

Device      Boot Start      End  Sectors  Size Id Type
/dev/sda1   *        2048 16775167 16773120   8G 83 Linux

Disk /dev/sdb: 6 GiB, 6442450944 bytes, 12582912 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

```

5. Install Operating System

Use the following command to install the system: (where /dev/sda is the name of the disk with the maximum space selected for the previous step, the login password)

```
sudo ros install -c rancheros_config.yml -d /dev/sda --append
'rancher.password='
```

Example:

```
[rancher@rancher ~]$ sudo ros install -c ./rancheros_config_ip.yml -d /dev/sda --append
nd "rancher.password=1234"
```

During the installation, you will be prompted two times. You can select Y, and the system will be restarted after the installation is completed.

6. Log In

After the system restarts, the temporary account password set in step 1 will expire. You can use the login password set in step 5 to log on to Xshell or directly log on to the host.

Host log in:

Fill in the username and password in Supermap login (user name is "rancher")

```
supermap login: rancher
Password:
```

Run docker -v, you will find Docker has been installed

```
docker -v
```

Note: The remote port opened for Docker is 2375. You can run the command below for the verification:

```
docker -H :2375 info
```

c. Install docker-compose

Use xftp to upload docker-compose.sh and docker-compose.tar to the Docker host.

Run command:

```
sudo docker load -i ./docker-compose.tar
sudo chmod +x ./docker-compose.sh
```

When installation of DockerCompose finished, run the command below for verification:

```
./docker-compose.sh -v
```

Note: Use ./docker-compose.sh instead of the docker-compose command for execution.

d. FAQ

Q: What if the IP that is configured in rancheros_config.yml file can not connect to the network?

A: Modify the network configuration using the following command:

Modify ip to your real ip:

```
sudo ros config set rancher.network.interfaces.eth0.address {ip}
```

Modify gateway to your real gateway:

```
sudo ros config set rancher.network.interfaces.eth0.gateway {gateway}
```

Example:

```
[rancher@supermap ~]$ sudo ros config set rancher.network.interfaces.eth0.address 192
.168.127.129/24
[rancher@supermap ~]$ sudo ros config set rancher.network.interfaces.eth0.gateway 192
.168.127.1
[rancher@supermap ~]$ sudo ros config set rancher.network.interfaces.eth0.mtu 1500
[rancher@supermap ~]$ sudo ros config set rancher.network.interfaces.eth0.dhcp false
```

Restart to make the configuraiton take effect.