



# Deployment Guide

Version 1.0.1

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# Document Revision History

## March 12, 2018

- Initial release of documentation

## OVA Download

The latest OVA file is available as a secure download hosted on Amazon S3.

Your professional services representative will provide you with a secure link to download the file when it becomes available.

# OVA Deployment

## Preparations

To set up Beep, you must have:

- Beep OVA
- Supported virtual infrastructure
- Nginx compatible SSL certificate and SSL certificate key

# OVA Deployment

## Network

### Port Usage

Protocol	Port	Direction	Purpose
HTTPS	443	Inbound/Outbound	SMS API <i>example.us-east-1.amazonaws.com or similar</i>
HTTPS	443	Outbound	VCC API
HTTP	80	Outbound	VCC API
SSH	22	Inbound	Cluster administration

# OVA Deployment

## System Requirements

### Supported Platforms

VMware ESXI 5.5 and later are supported.

### Cluster Size

The recommended size of a Beep cluster is 1 node on 1 distinct physical host.

### Virtual Machine Configuration

The minimum requirements for a Beep node are:

**CPU:** 3 GHz dual core or 4 virtual processors

**RAM:** 8 GB

**STORAGE:** 80GB



# Beep OVA Deployment

## Deploying

Deploy the OVA on your platform as you would any other OVA. Refer to your platform's documentation for instructions on deploying OVA files.

## Cluster Setup

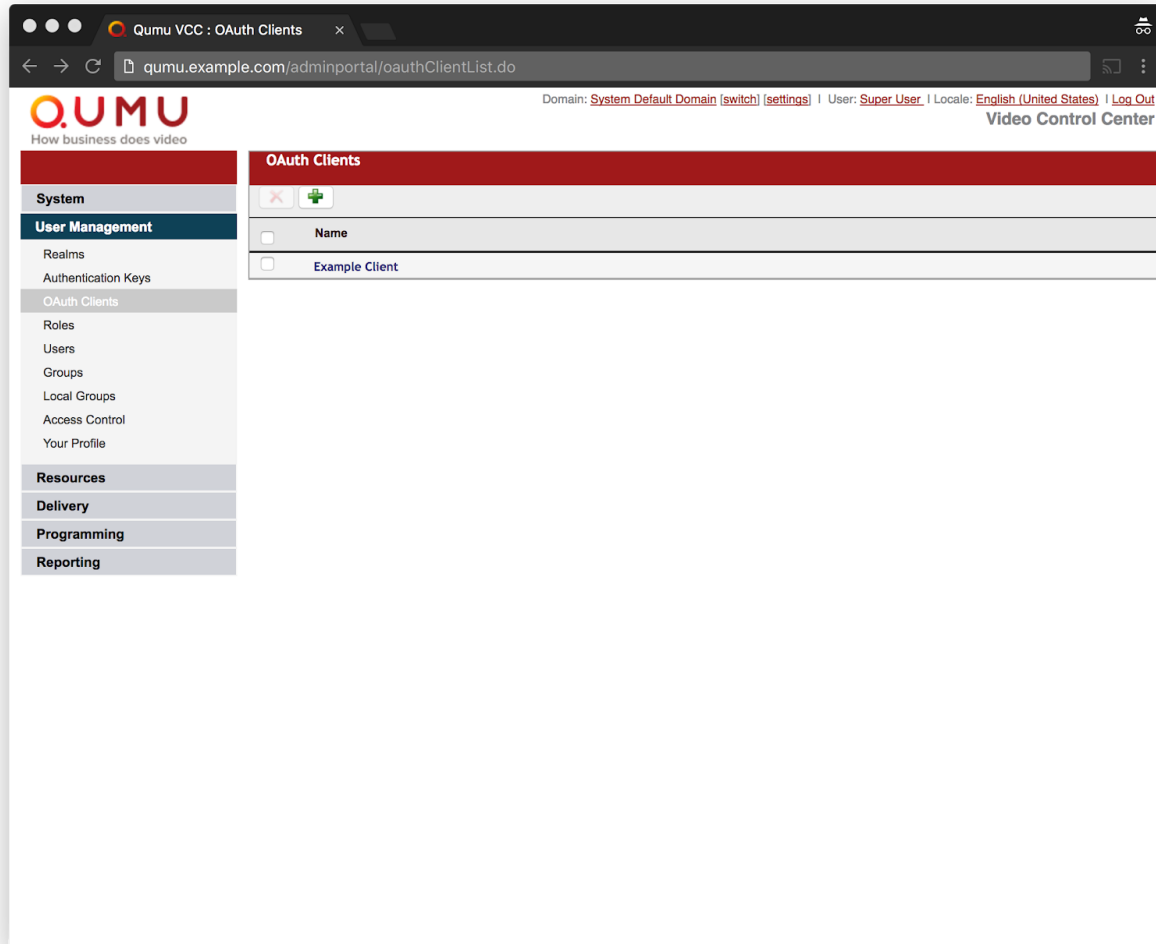
Clusters are headless and all nodes are functionally identical.

### SSL Certificates

The SSL certificate and certificate key should be Nginx compatible. See - [http://nginx.org/en/docs/http/configuring\\_https\\_servers.html](http://nginx.org/en/docs/http/configuring_https_servers.html) - for more information.

## OAuth Client

1. From the Qumu Video Control Center Admin Portal, navigate to **User Management > OAuth Clients** and click the green + button to add a new client



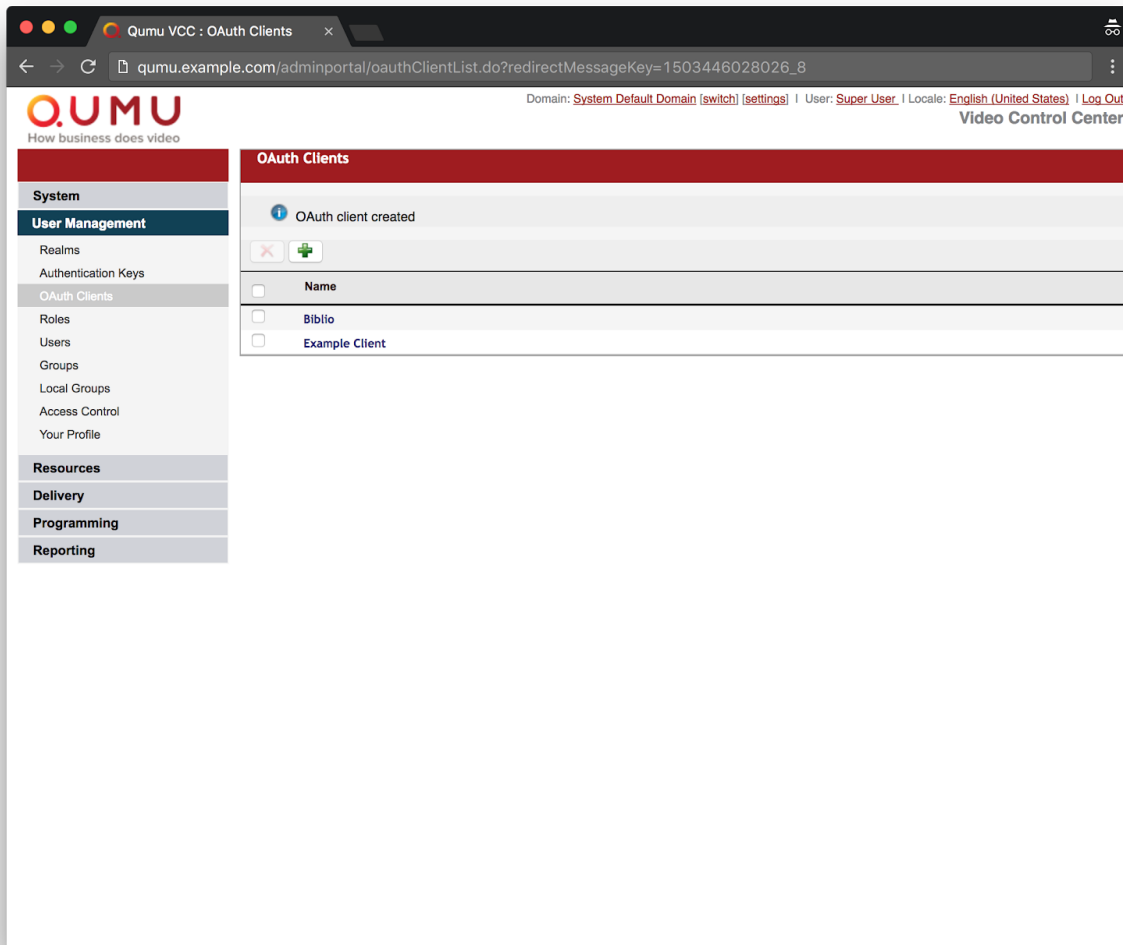
2. Enter the following values for a new OAuth Client and click **Save**. Make note of the values for use when [initializing the cluster](#).
  - a. **Client ID:** [ A recognizable value of your choice. ]
  - b. **Name:** Beep
  - c. **Redirect URL Pattern:** [https://\[BEEP<sup>1</sup>\\_HOSTNAME\]/admin/login](https://[BEEP<sup>1</sup>_HOSTNAME]/admin/login)
  - d. **Client Secret:** [ A random value of your choice. <https://www.uuidgenerator.net/> helps create these. ]
  - e. **Skip User Authorization:** Checked
  - f. **Access Token Expiry (seconds):** 86400
  - g. **Implicit Token Expiry (seconds):** 86400

The screenshot shows a web browser window with the URL `qumu.example.com/adminportal/oauthClientCreate.do`. The page title is "Qumu VCC : OAuth Clients". The page content includes a sidebar with navigation links: System, User Management (selected), Realms, Authentication Keys, OAuth Clients, Roles, Users, Groups, Local Groups, Access Control, and Your Profile. The main content area is titled "Add OAuth Client" and contains a form with the following fields:

- Client Id:** ExampleClientID \*
- Name:** Biblio \*
- Redirect URL Pattern:** https://biblio.example.com/admin/login \*
- Client Secret:** dc01c73e-7189-473e-a002-fd7d9db305f \*
- Skip User Authorization:** ☒
- Access Token Expiry (seconds):** 86400 \*
- Implicit Token Expiry (seconds):** 86400 \*

At the bottom of the form, there are two buttons: "Save" (with a green checkmark icon) and "Cancel".

3. Confirm the OAuth client was created and exit the Qumu Video Control Center Admin Portal.



## Network Setup (Static IP)

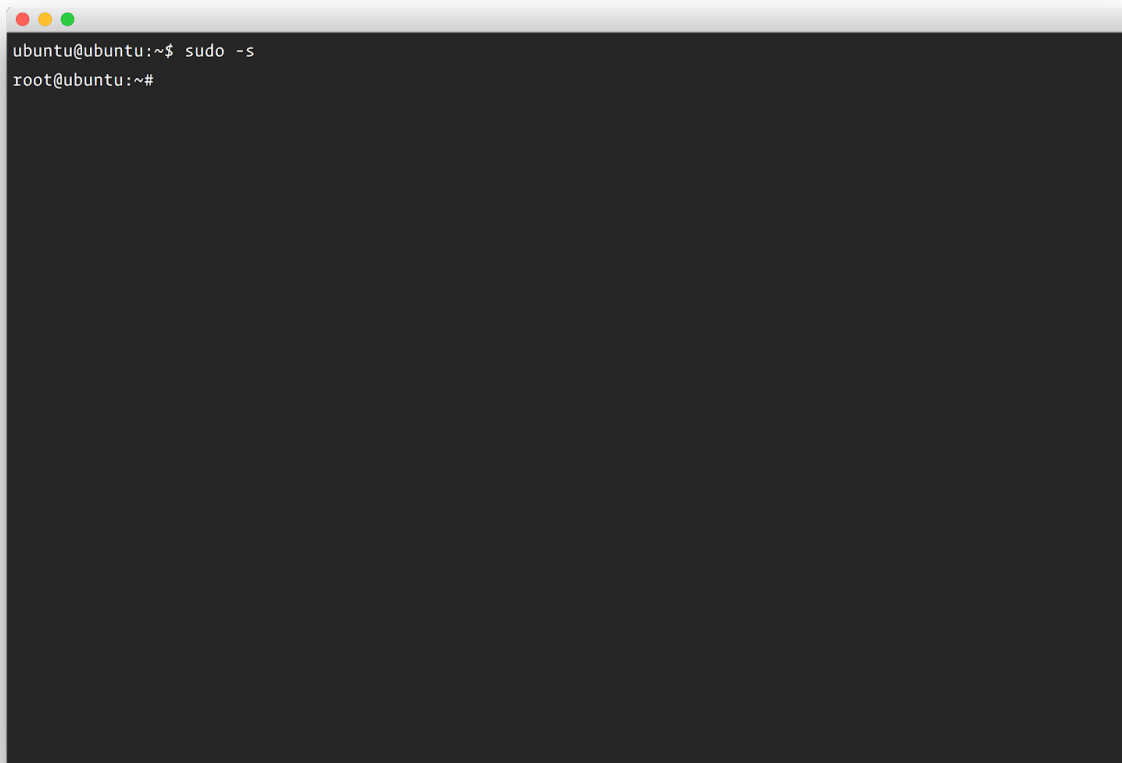
For systems with statically allocated IP addresses:

1. Access the virtual machine terminal.
2. At the login prompt, enter:

```
username: ubuntu  
password: ubuntu
```

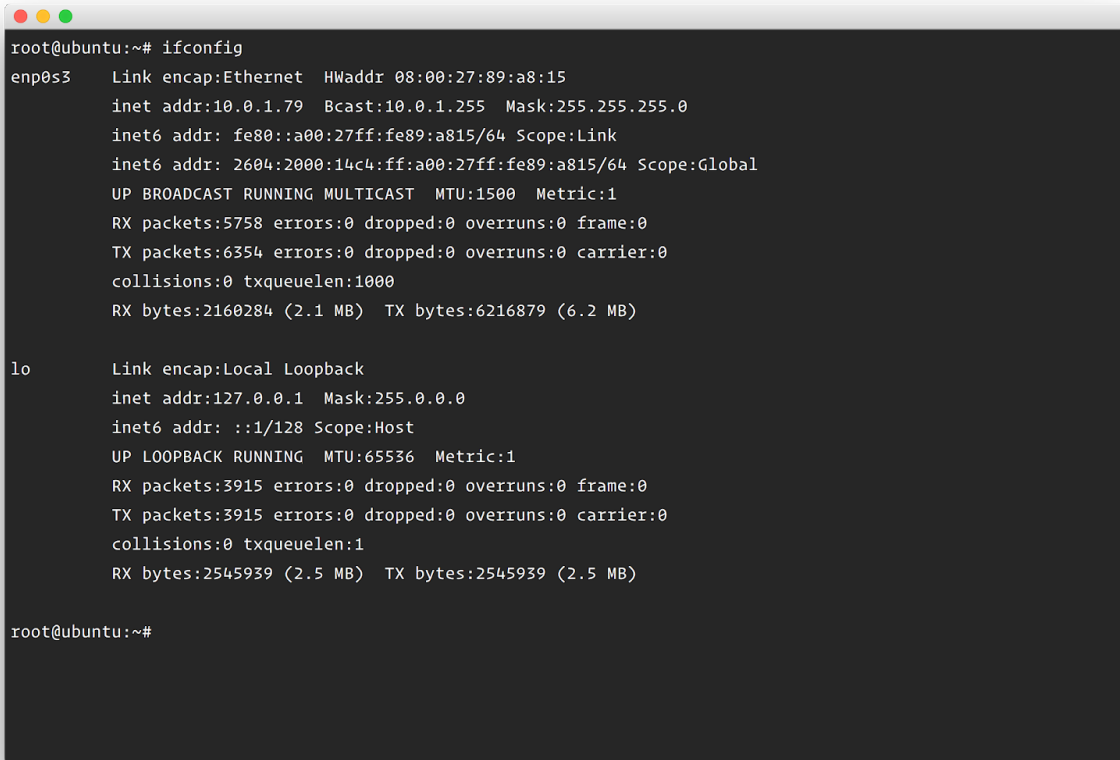
3. Run the following command to switch to 'root' user:

```
sudo -s
```



#### 4. Verify the network interface, In this case it's **enp0s3**

```
ifconfig
```



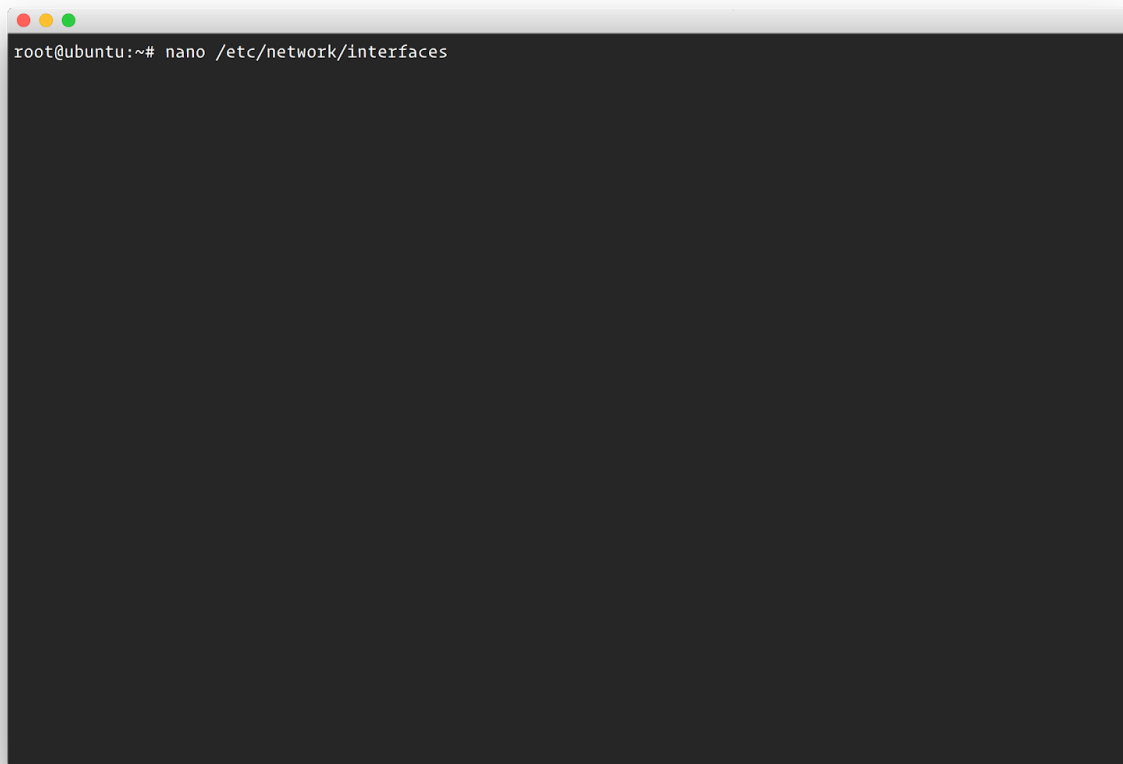
```
root@ubuntu:~# ifconfig
enp0s3  Link encap:Ethernet  HWaddr 08:00:27:89:a8:15
        inet addr:10.0.1.79  Bcast:10.0.1.255  Mask:255.255.255.0
        inet6 addr: fe80::a00:27ff:fe89:a815/64  Scope:Link
        inet6 addr: 2604:2000:14c4:ff:a00:27ff:fe89:a815/64  Scope:Global
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
        RX packets:5758 errors:0 dropped:0 overruns:0 frame:0
        TX packets:6354 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:2160284 (2.1 MB)  TX bytes:6216879 (6.2 MB)

lo      Link encap:Local Loopback
        inet addr:127.0.0.1  Mask:255.0.0.0
        inet6 addr: ::1/128  Scope:Host
        UP LOOPBACK RUNNING  MTU:65536  Metric:1
        RX packets:3915 errors:0 dropped:0 overruns:0 frame:0
        TX packets:3915 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1
        RX bytes:2545939 (2.5 MB)  TX bytes:2545939 (2.5 MB)

root@ubuntu:~#
```

5. Open the network configuration file for editing:

```
nano /etc/network/interfaces
```

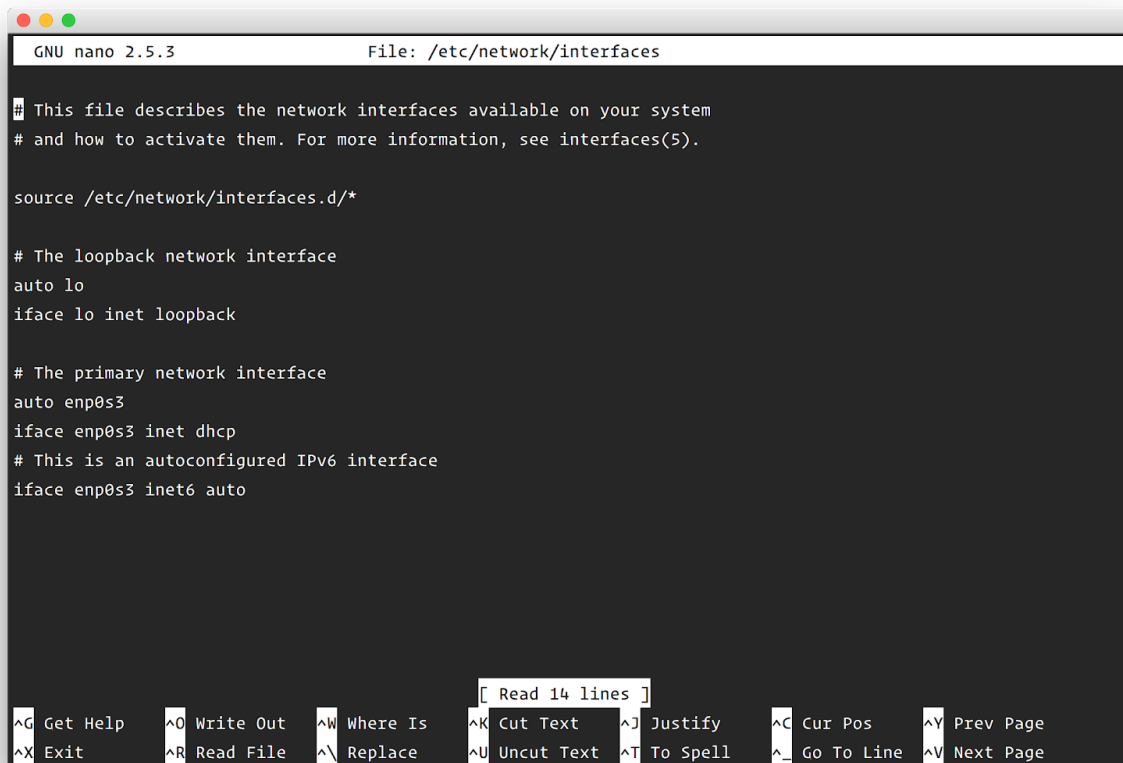




## 6. Review and modify the settings as needed.

- If the primary network interface has a different name, the `/etc/network/interfaces` file may look little different.
- The file will look similar to:

```
# The loopback network interface
auto lo
iface lo inet loopback
# The primary network interface
auto enp0s3
iface enp0s3 inet dhcp
# This is an autoconfigured IPv6 interface
iface enp0s3 inet6 auto
```



GNU nano 2.5.3 File: /etc/network/interfaces

```
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

source /etc/network/interfaces.d/*

# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
auto enp0s3
iface enp0s3 inet dhcp
# This is an autoconfigured IPv6 interface
iface enp0s3 inet6 auto
```

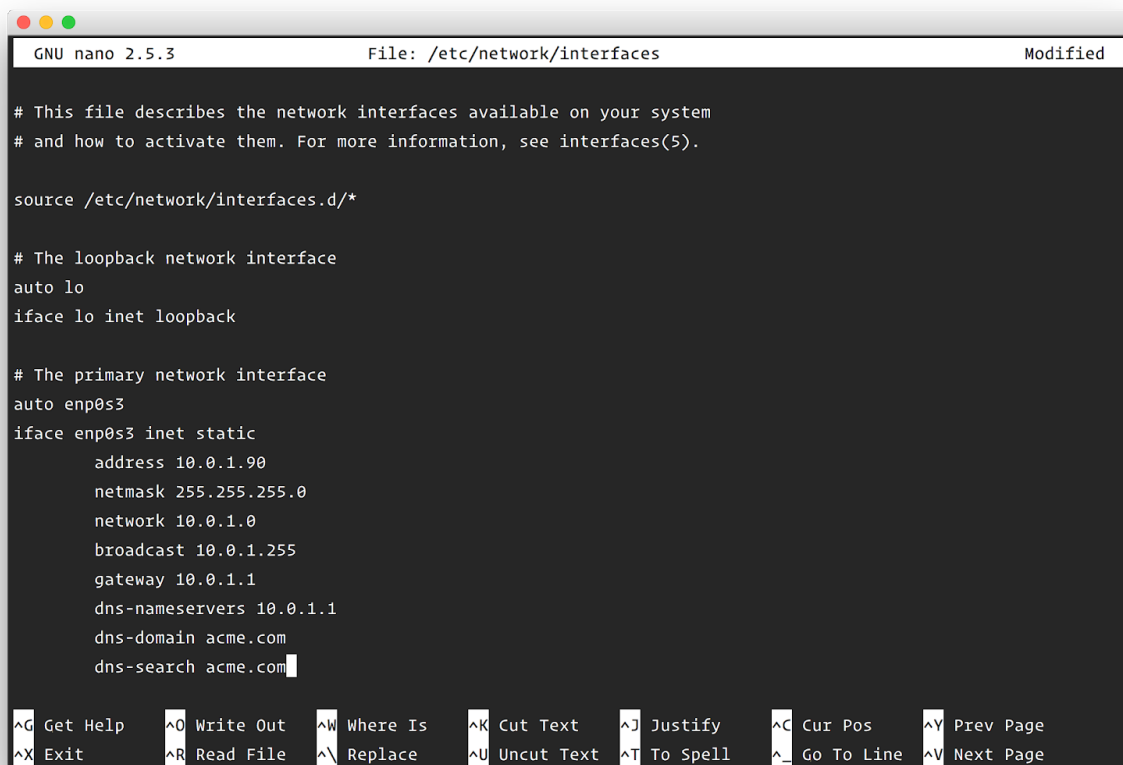
[ Read 14 lines ]

<b>^G</b> Get Help	<b>^O</b> Write Out	<b>^W</b> Where Is	<b>^K</b> Cut Text	<b>^J</b> Justify	<b>^C</b> Cur Pos	<b>^Y</b> Prev Page
<b>^X</b> Exit	<b>^R</b> Read File	<b>^_</b> Replace	<b>^U</b> Uncut Text	<b>^T</b> To Spell	<b>^_</b> Go To Line	<b>^V</b> Next Page

- Your changes will most likely look similar to:

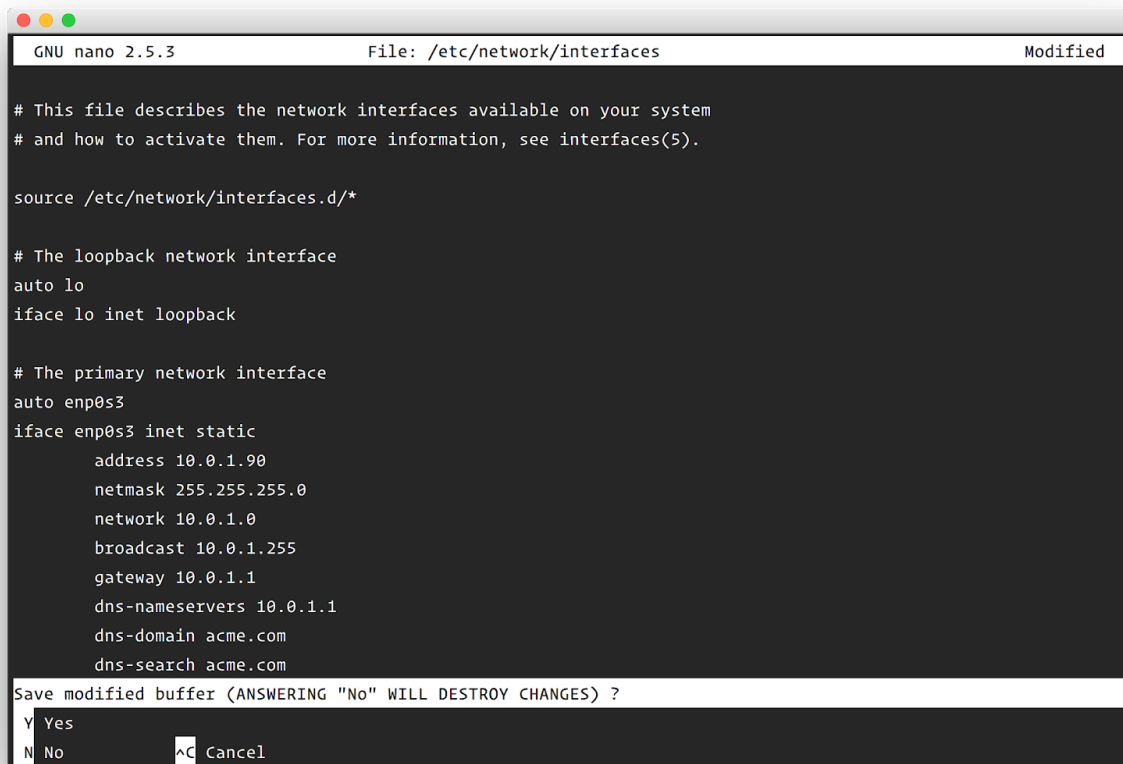
```
# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
auto enp0s3
iface enp0s3 inet static
    address 10.0.1.90
    netmask 255.255.255.0
    network 10.0.1.0
    broadcast 10.0.1.255
    gateway 10.0.1.1
    dns-nameservers 10.0.1.1
    dns-domain acme.com
    dns-search acme.com
```



The screenshot shows a terminal window with the GNU nano 2.5.3 text editor. The title bar indicates the file being edited is `/etc/network/interfaces` and it has been modified. The editor's content matches the configuration shown in the previous block, including comments about the loopback and primary network interfaces, and their respective settings. The bottom of the window displays a status bar with various keyboard shortcuts for navigation and editing, such as `^G Get Help`, `^O Write Out`, `^W Where Is`, `^K Cut Text`, `^J Justify`, `^C Cur Pos`, `^Y Prev Page`, `^X Exit`, `^R Read File`, `^_ Replace`, `^U Uncut Text`, `^T To Spell`, `^_ Go To Line`, and `^V Next Page`.

7. When your modifications are completed press **CTRL-X** to exit.
8. Press the **Y** key to save your changes.



```
GNU nano 2.5.3      File: /etc/network/interfaces      Modified

# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

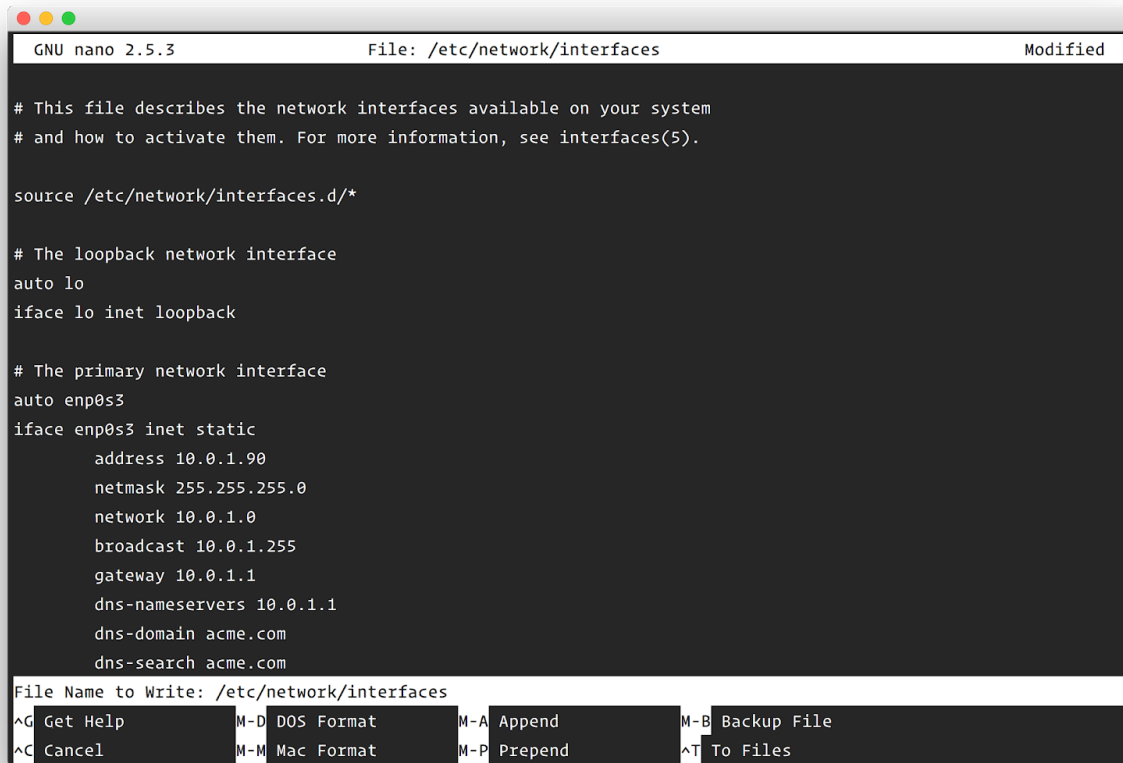
source /etc/network/interfaces.d/*

# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
auto enp0s3
iface enp0s3 inet static
    address 10.0.1.90
    netmask 255.255.255.0
    network 10.0.1.0
    broadcast 10.0.1.255
    gateway 10.0.1.1
    dns-nameservers 10.0.1.1
    dns-domain acme.com
    dns-search acme.com

Save modified buffer (ANSWERING "No" WILL DESTROY CHANGES) ?
Y Yes
N No      ^C Cancel
```

9. Press **ENTER** to save the file.



```
GNU nano 2.5.3      File: /etc/network/interfaces      Modified

# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

source /etc/network/interfaces.d/*

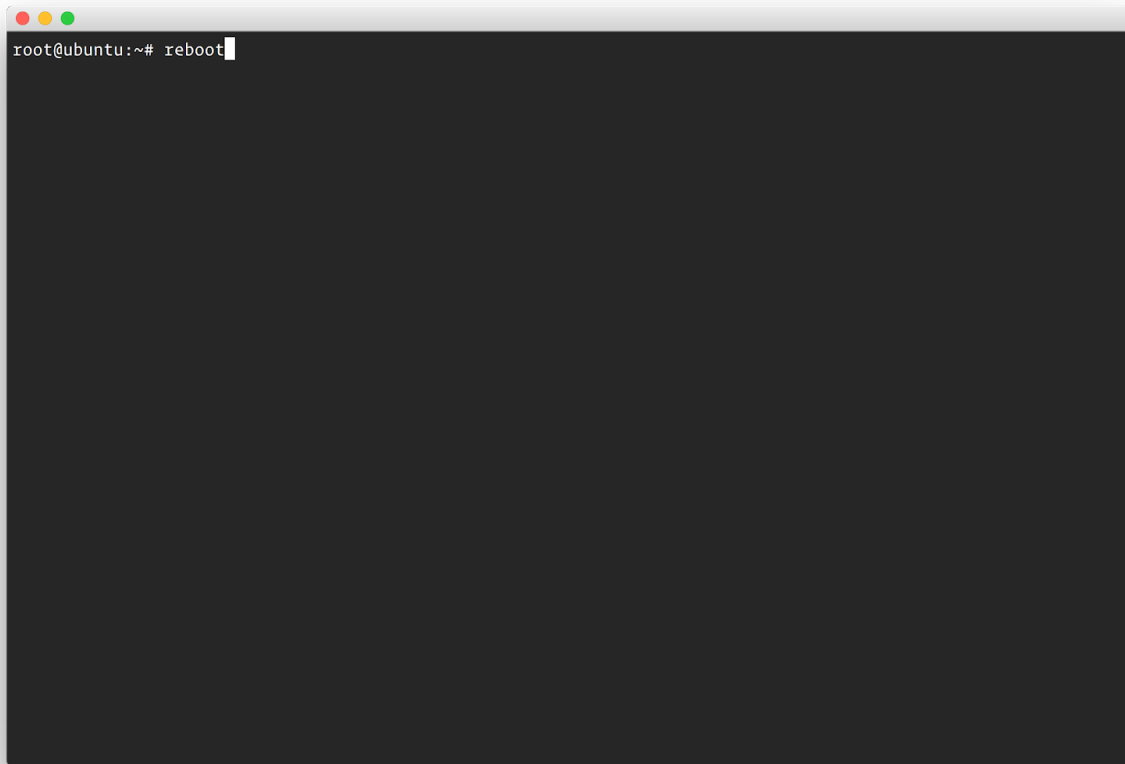
# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
auto enp0s3
iface enp0s3 inet static
    address 10.0.1.90
    netmask 255.255.255.0
    network 10.0.1.0
    broadcast 10.0.1.255
    gateway 10.0.1.1
    dns-nameservers 10.0.1.1
    dns-domain acme.com
    dns-search acme.com

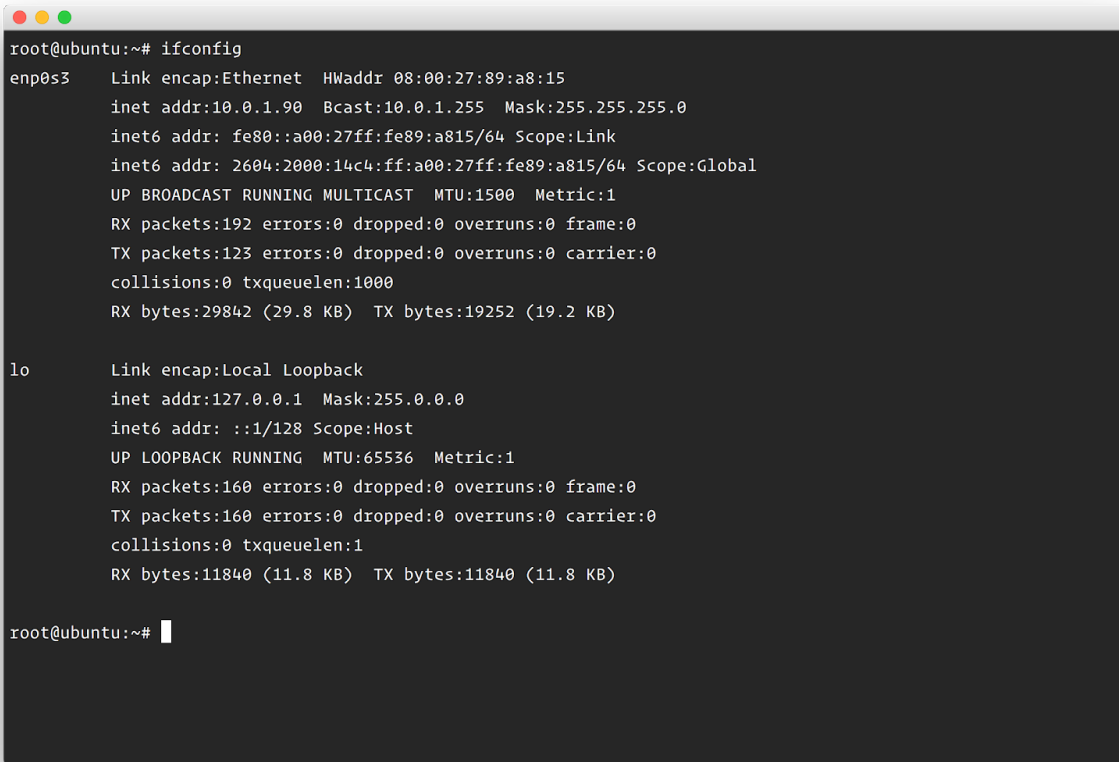
File Name to Write: /etc/network/interfaces
^G Get Help      M-D DOS Format  M-A Append      M-B Backup File
^C Cancel        M-M Mac Format  M-P Prepend     ^T To Files
```

10. Reboot the machine:

```
reboot
```



11. After the system restarts, confirm that it was configured successfully.
  - Lookup ip address of the machine by running,  
`ifconfig`
  - Ping the configured IP address:  
`ping [configured IP address]`
  - Access [https://\[configured IP address\]/cluster](https://[configured IP address]/cluster) in a web browser and check for the cluster setup screen.



```
root@ubuntu:~# ifconfig
enp0s3  Link encap:Ethernet  HWaddr 08:00:27:89:a8:15
        inet addr:10.0.1.90  Bcast:10.0.1.255  Mask:255.255.255.0
        inet6 addr: fe80::a00:27ff:fe89:a815/64 Scope:Link
        inet6 addr: 2604:2000:14c4:ff:a00:27ff:fe89:a815/64 Scope:Global
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
        RX packets:192 errors:0 dropped:0 overruns:0 frame:0
        TX packets:123 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:29842 (29.8 KB)  TX bytes:19252 (19.2 KB)

lo      Link encap:Local Loopback
        inet addr:127.0.0.1  Mask:255.0.0.0
        inet6 addr: ::1/128 Scope:Host
        UP LOOPBACK RUNNING  MTU:65536  Metric:1
        RX packets:160 errors:0 dropped:0 overruns:0 frame:0
        TX packets:160 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1
        RX bytes:11840 (11.8 KB)  TX bytes:11840 (11.8 KB)

root@ubuntu:~#
```