

Basic Juniper Router Configuration - JunOS Commands | ProTechGurus

Basic Juniper Router Configuration – JunOS Commands

Similar to Cisco routers, Juniper routers are also used to perform the routing functions on networks. Before you should start to learn the routing and switching configuration through the Juniper routers, first, you need to be familiar with basic Juniper Router Configuration commands. Here, we are going to explain the step by step Juniper Router Configuration guide.

We hope you have already added Juniper Router in GNS3 and created a topology. If not yet, visit the following link to add Juniper Router in GNS3.

[How To Add Juniper Router in GNS3](#)

This article will help to understand the most Basic Juniper Router Configuration commands for the beginners who are new to juniper devices.

Juniper Router CLI Commands Modes

Similar to Cisco IOS CLI modes, JunOS also has different command modes to perform different types of configuration tasks. The major JunOS CLI command modes are:

1. **Operational mode:** You can compare this mode to the Privileged mode of Cisco IOS. It is used to display the current status of the Juniper device. In this mode, the JunOS commands are used to monitor and troubleshoot the Juniper devices and their network connectivity.
2. **Configuration mode:** The configuration mode of Juniper router is almost similar to the Global Configuration mode of Cisco IOS. You use this mode to define all the properties of the Juniper devices. It includes interfaces configuration, general routing information configuration, routing protocols configuration, user access configuration, and various other system and hardware properties configurations.

Basic Juniper Router Configuration Command and Tasks

The following are some of the basic Juniper router configuration tasks that every network administrator should know:

How To Login to Juniper Router

Working with JunOS is almost similar to working with the CLI interface of Linux/UNIX-based operating systems. To login into JunOS Command mode, simply type username and password. **The default login credentials for JunOS Olive are: username as root and password is blank.**

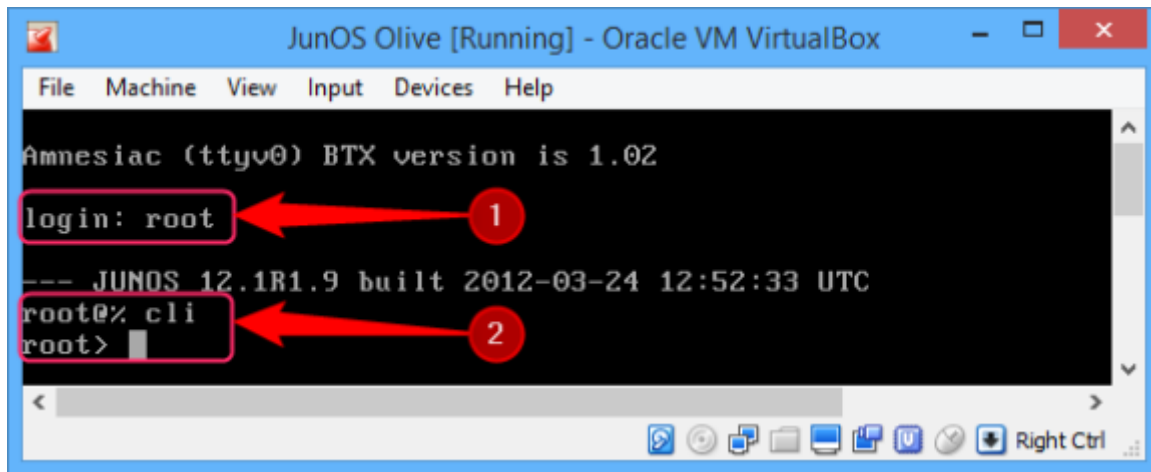
```
Login: root
password:
```

Note: If you face to login into JunOS Olive, please visit the Juniper.net official Website.

How To enter JunOS CLI Mode

Once you logged into JunOS CLI mode, type CLI and press Enter to switch into CLI mode.

```
root@% cli
root>
```



How To Switch into JunOS Configuration Mode

As discussed earlier, configuration mode allows you to configure most of the basic JunOS configuration tasks. In order to switch to JunOS configuration mode, type the **configure** command and press Enter.

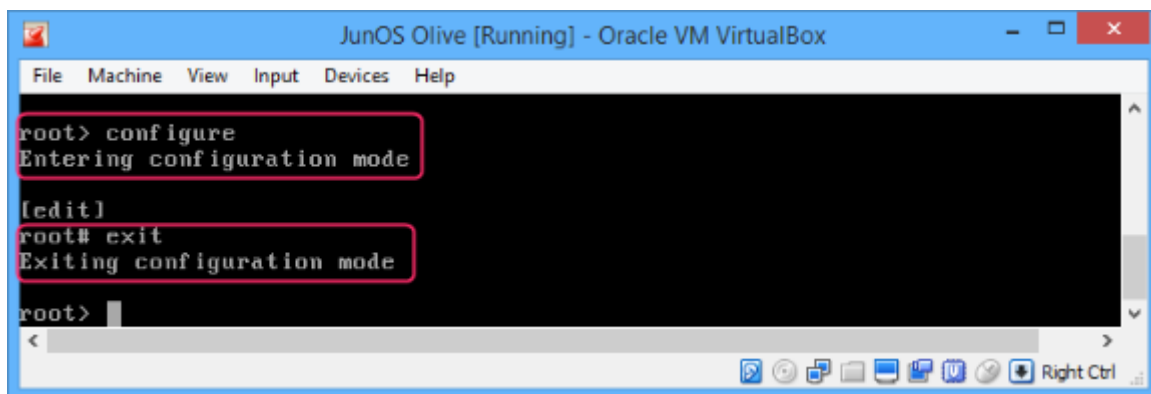
```
root> configure
```

```
[edit]
```

```
root#
```

To exit from the current mode, use the **exit** command.

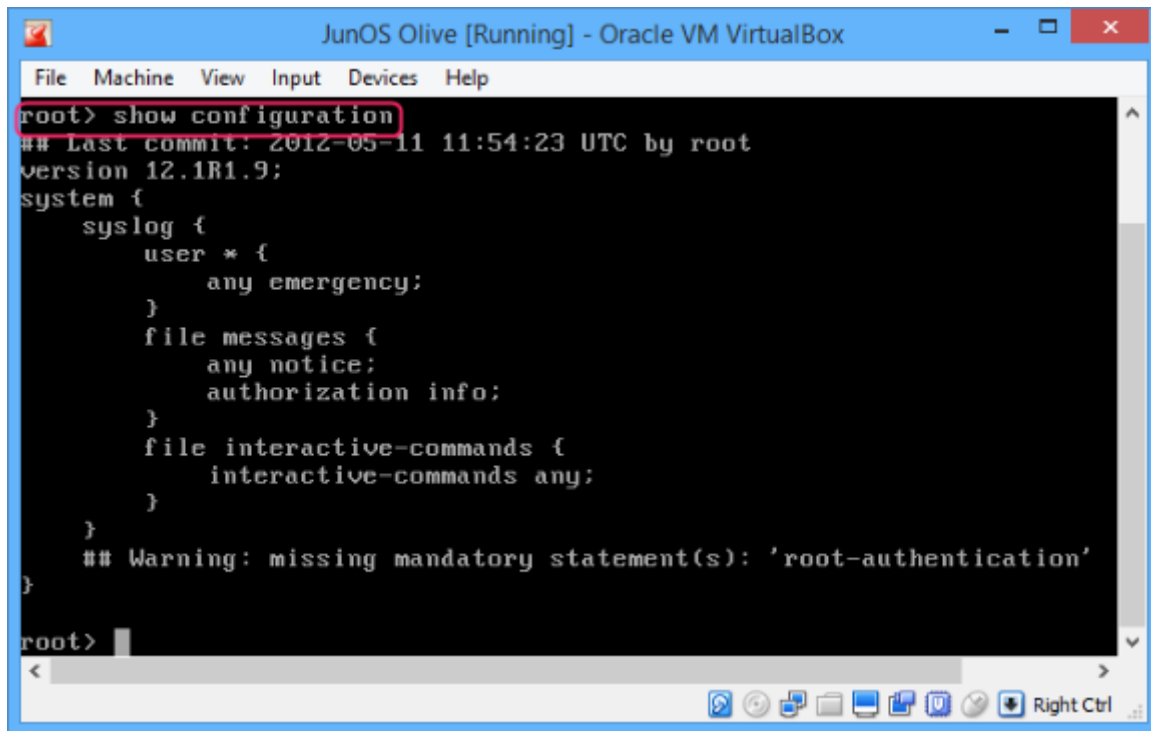
```
root#exit
```



How To Check the Current Configurations of a Juniper Router

To check the current configuration settings on a Juniper Router, execute the following command at the Operational CLI mode.

```
root> show configuration
```



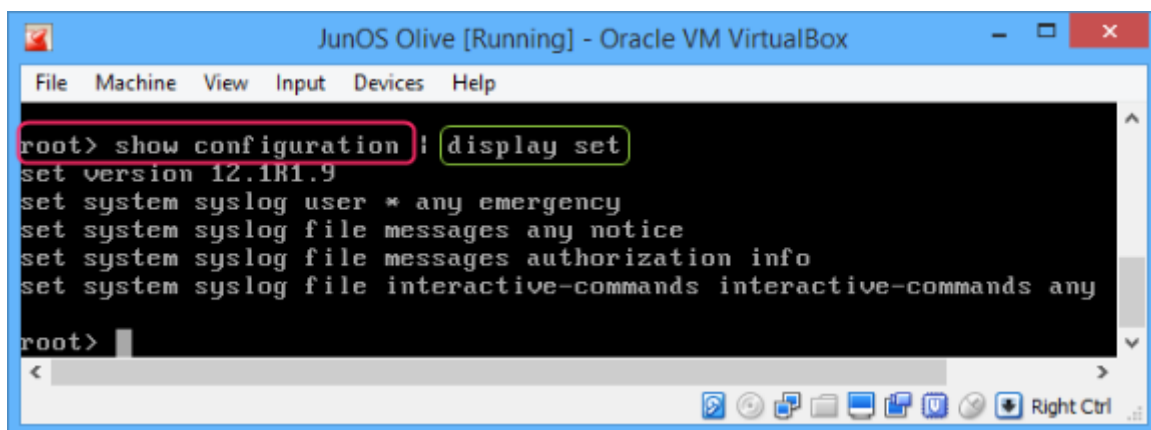
```

JunOS Olive [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
root> show configuration
## Last commit: 2012-05-11 11:54:23 UTC by root
version 12.1R1.9;
system {
  syslog {
    user * {
      any emergency;
    }
    file messages {
      any notice;
      authorization info;
    }
    file interactive-commands {
      interactive-commands any;
    }
  }
  ## Warning: missing mandatory statement(s): 'root-authentication'
}
root>

```

Viewing configurations commands starting with the specific group of commands use the following command syntax. For example, to show all the command of Operation CLI mode starting with “set” prefix, execute the following command.

```
root> show configuration | display set
```



```

JunOS Olive [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
root> show configuration | display set
set version 12.1R1.9
set system syslog user * any emergency
set system syslog file messages any notice
set system syslog file messages authorization info
set system syslog file interactive-commands interactive-commands any
root>

```

[Click here to know more about show configuration JunOS CLI command.](#)

How To View the Interface Information on a Juniper Router

To show all the available interfaces on a Juniper Router you are using, use the following command.

```
root# show interfaces
```

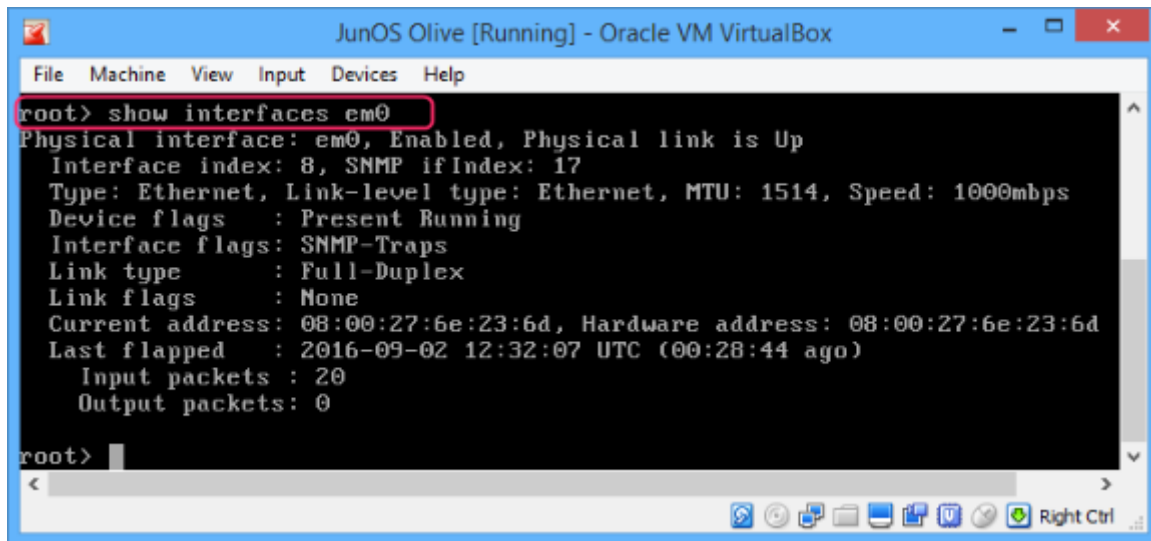
How To View the Status of a Specific Interface on a Juniper Router

To view the status of a specific interface information on Juniper Router running on JunOS, use the following command syntax.

```
root# show interfaces <interface name>
```

For example, to view the interface configuration information of em0 interface, use the following command.

```
Root> show interfaces em0
```



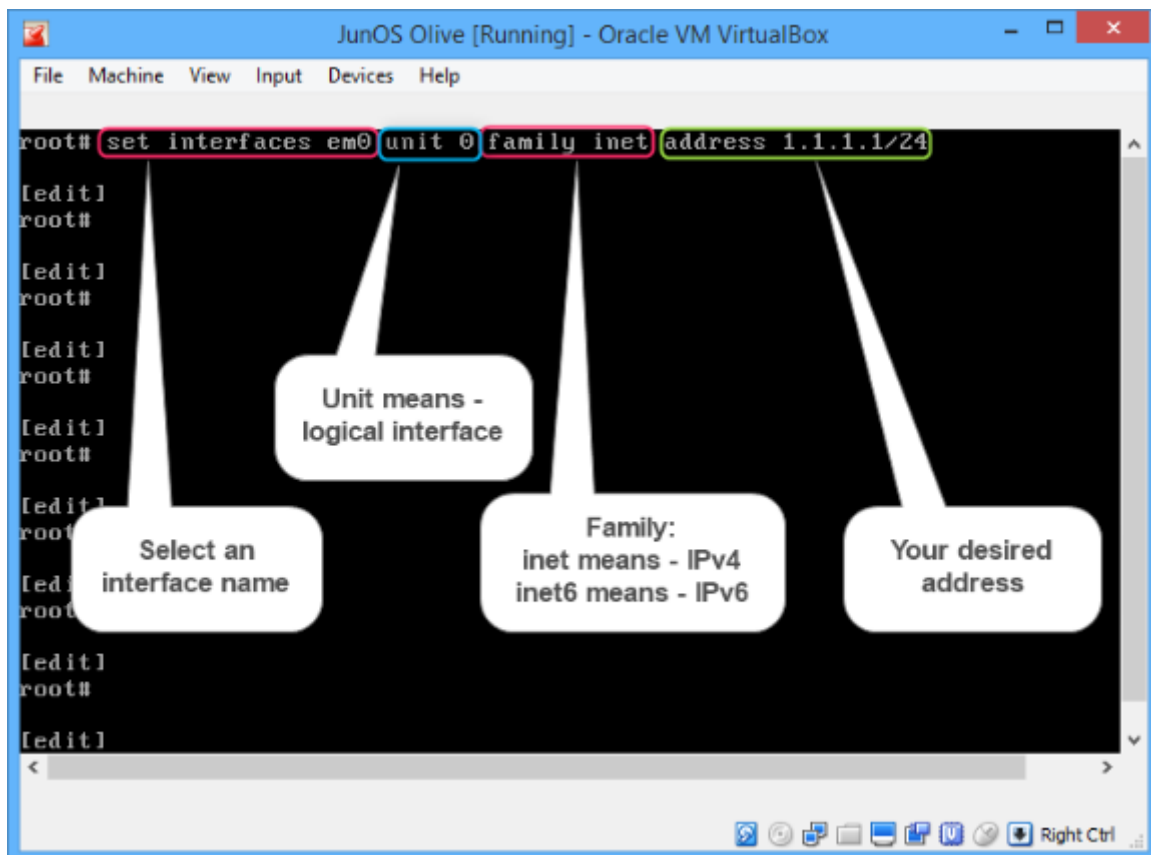
How To Set IPv4 address on a Juniper Router

To configure an appropriate IPv4 address on a Juniper Router, use the following command syntax.

```
root# set interfaces <interface name> unit <unit number> family inet <IP address>/mask
```

For example, use the following command to set 1.1.1.1/24 IPv4 address 22.2.2.2 on the em0 interface.

```
root# set interfaces em0 unit 0 family inet 1.1.1.1/24
```



How To Change the Hostname of a Juniper Router

Use the following JunOS CLI command syntax to set the desired hostname for a Juniper Router.

```
root# set system host-name <type-name>
```

For example, to change the current hostname to JunOSR1 hostname, use the following command.

```
root# set system host-name JunOSR1
```

How To Set Password on a Juniper Router

To set the desired root password for your Juniper Router, execute the following JunOS CLI command.

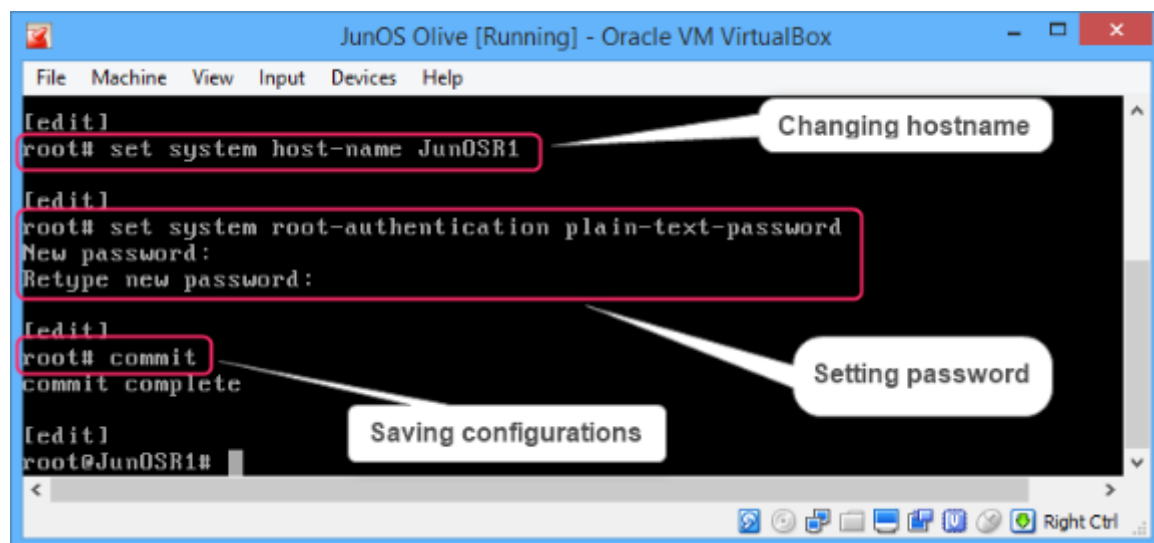
```
root# set system root-authentication plain-text-password
New password: Jun@123
Retype new Password: Jun@123
```

Note: Password will not be displayed.

How To Save JunOS Configuration Permanently

Whatever you do on a Juniper or Cisco router, the current configuration is stored on the temporary memory called RAM. However, if the power supply fails, your configuration will be lost. So, it is important to save your configuration at the regular time intervals. On a Juniper router, the **commit** command is used to save the current configuration as permanently. Refer the following figure.

```
root# commit
```



How To View Routing Table (Routes) on a Juniper Router

The following command is used to view the all the routes on a Juniper Router running on the JunOS.

```
root> show route
```

How To Configure Static Route on a Juniper Router

Configuring the static route on a Juniper Router is pretty simple. For example, to add 1.1.1.0/24 route with 5.5.5.5 as the default gateway, use the following JunOS CLI command.

Syntax:

```
root# set routing-options static route <Network/Prefix Length> next-hop <Gateway Address>
```

Example:

```
root# set routing-options static route 1.1.1.0/24 next-hop 5.5.5.5
```

```

JunOS Olive [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

root@JunOSR1# set routing-options static route 1.1.1.0/24 next-hop 5.5.5.5
[edit]
root@JunOSR1# exit
The configuration has been changed but not committed
Exit with uncommitted changes? [yes,no] (yes) yes

Exiting configuration mode

root@JunOSR1> show route

inet.0: 2 destinations, 2 routes (2 active, 0 holddown, 0 hidden)
+ = Active Route, - = Last Active, * = Both

1.1.1.0/24          * [Direct/0] 00:09:41
                    > via em0.0
1.1.1.1/32          * [Local/0] 00:09:41
                    Local via em0.0

root@JunOSR1>

```

Login To and Logout From JunOS CLI Interface

Take a look at the following figure to understand the command used in the given output.

```

JunOS Olive [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

root@JunOSR1> exit
root@JunOSR1% exit
logout

JunOSR1 (ttyv0)

login: root
Password:

--- JUNOS 12.1R1.9 built 2012-03-24 12:52:33 UTC

root@JunOSR1% cli
root@JunOSR1> configure
Entering configuration mode
The configuration has been changed but not committed

[edit]
root@JunOSR1# commit
commit complete

[edit]
root@JunOSR1#

```

Logout from the JunOS CLI

Enter the credentials

Switch to the operational mode

Finally commit the changes.

In this article, we have explained the Basic Juniper Router Configuration Commands used to configure basic tasks for a Juniper Router. Don't hesitate to share this nice article to your friends.

- Settings
- Family