



OPE Online Server Network Setup

1. Login to OPE online server.
2. Test your connection to the internet with either ping or wget.
 - a. Ping a site (e.g. google.com) to determine if server is connected to internet. This gives you two important pieces of information; the DNS server is working and the server is connected to the internet.

```
docker:~ # ping google.com
PING google.com (172.217.3.206) 56(84) bytes of data:
64 bytes from sea15s12-in-f14.1e100.net (172.217.3.206): icmp_seq=1 ttl=54 time=15.2 ns
64 bytes from sea15s12-in-f14.1e100.net (172.217.3.206): icmp_seq=2 ttl=54 time=11.1 ns
64 bytes from sea15s12-in-f14.1e100.net (172.217.3.206): icmp_seq=3 ttl=54 time=11.4 ns
64 bytes from sea15s12-in-f14.1e100.net (172.217.3.206): icmp_seq=4 ttl=54 time=11.9 ns
64 bytes from sea15s12-in-f14.1e100.net (172.217.3.206): icmp_seq=5 ttl=54 time=10.6 ns
```

- b. Use wget on a site (e.g. <https://google.com>) to determine if server is connected to internet.

```
docker:~ # wget https://google.com
--2018-02-15 13:12:13-- https://google.com/
Resolving google.com (google.com)... 172.217.3.206, 2607:f8b0:400a:807::200e
Connecting to google.com (google.com)|172.217.3.206|:443... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://www.google.com/ [following]
--2018-02-15 13:12:13-- https://www.google.com/
Resolving www.google.com (www.google.com)... 172.217.3.164, 2607:f0b0:400a:009::2004
Connecting to www.google.com (www.google.com)|172.217.3.164|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: unspecified [text/html]
Saving to: index.html
```

- Type ip addr to get server IP address.

```

1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default
   link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
   inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
   inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
   link/ether fa:64:1d:7c:cf:2a brd ff:ff:ff:ff:ff:ff
   inet 192.168.10.25/24 brd 192.168.10.255 scope global eth0
       valid_lft forever preferred_lft forever
   inet6 fe00::f064:1d7c:cf2a/64 scope link
       valid_lft forever preferred_lft forever
3: tunl0@NONE: <NOARP> mtu 1480 qdisc noop state DOWN group default
   link/ipip 0.0.0.0 brd 0.0.0.0
4: docker0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default
   link/ether 02:42:2f:55:81:e0 brd ff:ff:ff:ff:ff:ff
   inet 172.17.0.1/16 scope global docker0
       valid_lft forever preferred_lft forever
   inet6 fe80::42:2fff:fe55:81e0/64 scope link
       valid_lft forever preferred_lft forever
811: veth98191230if810: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue master docker0 state UP group default
   link/ether 2a:66:d3:da:d2:4b brd ff:ff:ff:ff:ff:ff link-netnsid 0
   inet6 fe00::2066:d3ff:fedd:d24b/64 scope link
       valid_lft forever preferred_lft forever
812: p1nreg@NONE: <NOARP,UP,LOWER_UP> mtu 1472 qdisc noqueue state UNKNOWN group default
   link/p1nreg
814: vethc0ec5100if813: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue master docker0 state UP group default
   link/ether 7a:93:f5:9f:f4:8b brd ff:ff:ff:ff:ff:ff link-netnsid 1
   inet6 fe00::7093:f5ff:fe9f:f40b/64 scope link
       valid_lft forever preferred_lft forever
816: veth5506ab00if815: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue master docker0 state UP group default
   link/ether ae:f6:c0:43:77:9a brd ff:ff:ff:ff:ff:ff link-netnsid 4
   inet6 fe80::acf6:c0ff:fe43:779a/64 scope link
       valid_lft forever preferred_lft forever
818: veth097e79beif817: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue master docker0 state UP group default
   link/ether 1a:e2:e9:40:af:ff brd ff:ff:ff:ff:ff:ff link-netnsid 3
   inet6 fe80::18e2:e9ff:fe40:afff/64 scope link
       valid_lft forever preferred_lft forever
820: veth6235ee20if819: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue master docker0 state UP group default
   link/ether bc:5f:c3:04:58:55 brd ff:ff:ff:ff:ff:ff link-netnsid 12
   inet6 fe00::bc5f:c3ff:fe04:5055/64 scope link
       valid_lft forever preferred_lft forever
822: vethcd8f5570if821: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue master docker0 state UP group default
   link/ether 2a:d7:c0:09:9f:ff brd ff:ff:ff:ff:ff:ff link-netnsid 13
   inet6 fe80::28d7:c0ff:fe89:9fff/64 scope link
       valid_lft forever preferred_lft forever
824: vethbc0ede6eif023: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue master docker0 state UP group default

```

Server ethernet

Docker private network for OPE apps

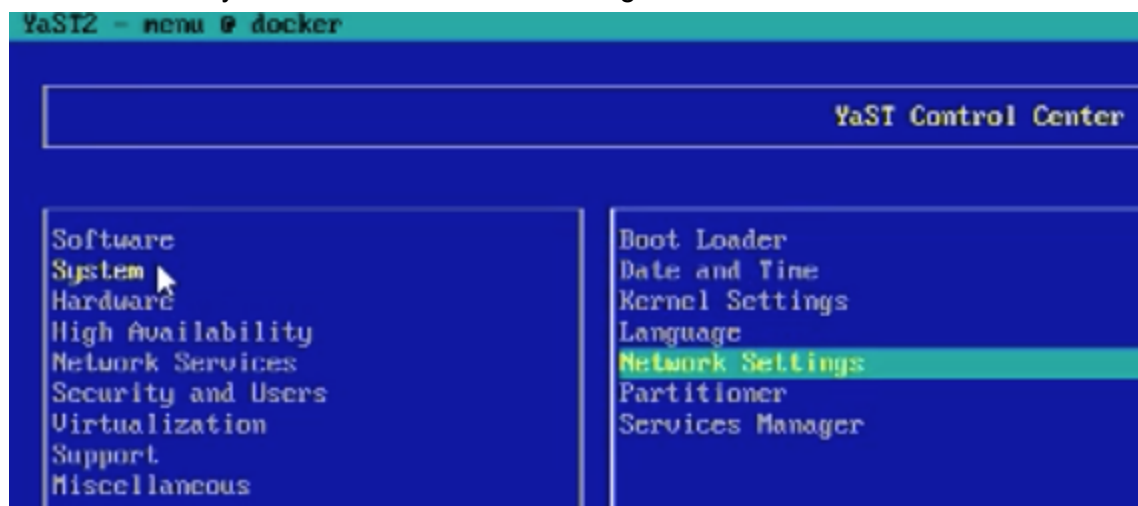
- Launch YaST to configure network.

```

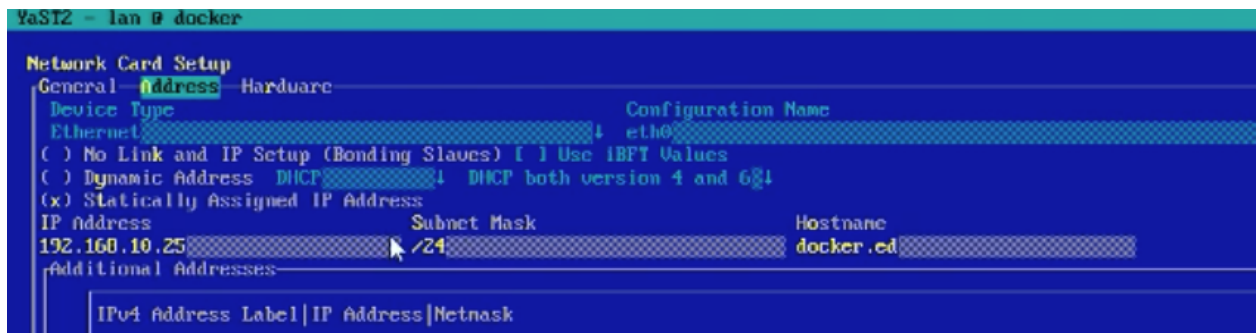
valid_lft forev
docker:~ # yast

```

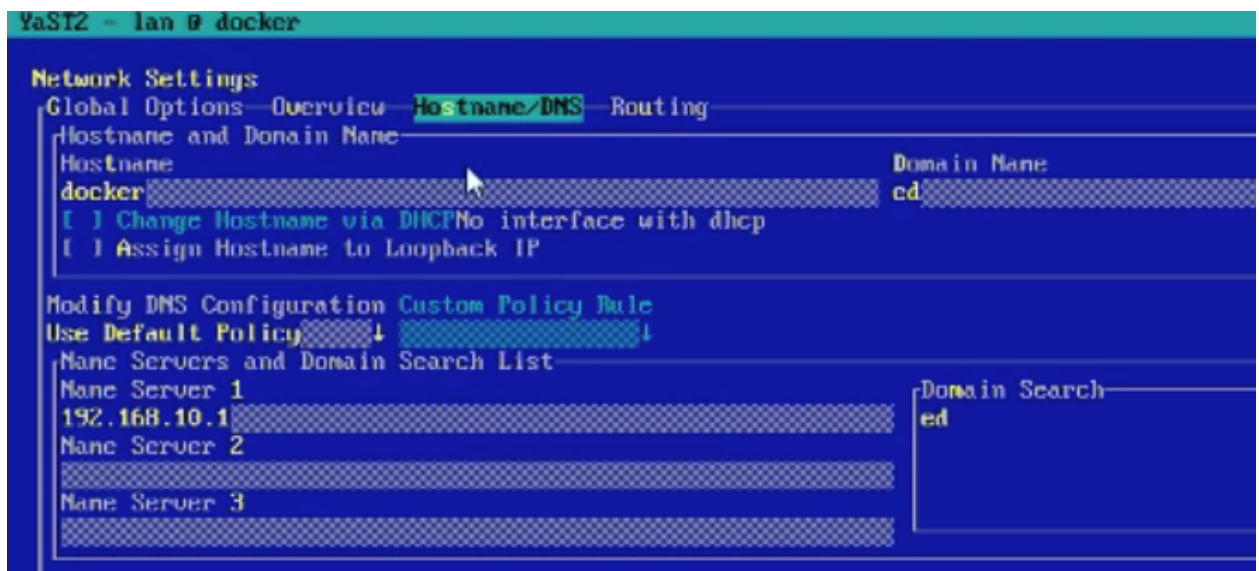
- In YaST select System and then Network Settings.



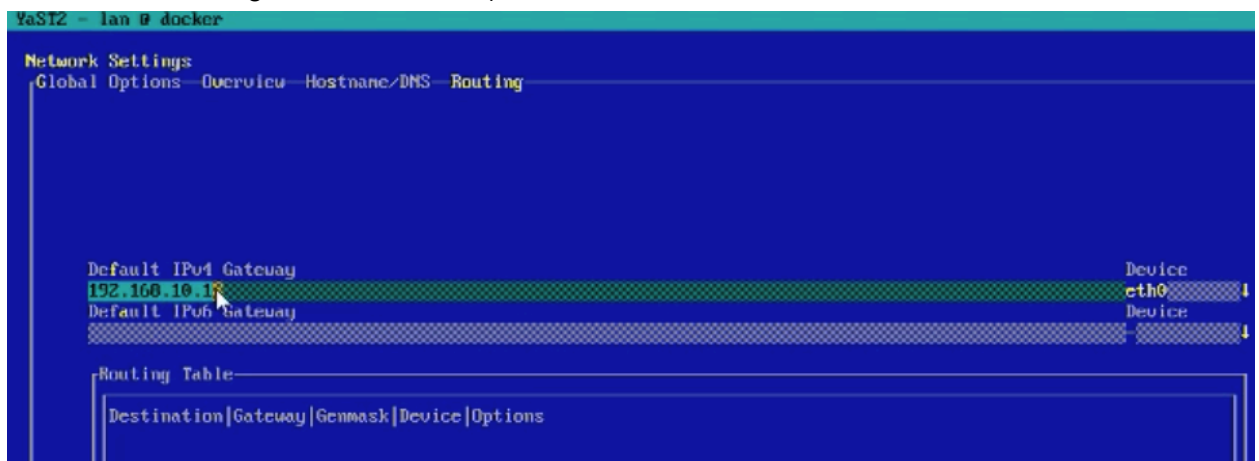
6. In Network Settings make sure the appropriate IP address is set for the server.



7. Check Hostname/DNS to make sure settings are correct. Name Server should be set to router or DNS server.



8. Check Routing area to ensure IP address of router is correct. (**Note:** Turning on IPv4 and IPv6 forwarding is recommended)



9. If all settings are correct you should be able to use ping or wget successfully.