



Setup / Configuration

For Units

4210D 1MP / 6210D 2MP

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Disclaimer: Nimitz does not take responsibility for security breaches related to failures in changing the default password (nimitz) on any of its units.

# Step 1: Connecting to Nimitz

## Content

Serial Cable Login-----4

Telnet Login-----4

Serial Cable Login	
<b>Client</b>	PuTTY
<b>Session</b>	<div style="border: 1px solid gray; padding: 5px;">           Specify the destination you want to connect to            Serial line: <input type="text" value="/dev/ttyS0"/> Speed: <input type="text" value="115200"/>            Connection type:  <input type="radio"/> Raw   <input type="radio"/> Telnet   <input type="radio"/> Rlogin   <input type="radio"/> SSH   <input checked="" type="radio"/> Serial         </div>
<b>Terminal -- Keyboard</b>	<div style="border: 1px solid gray; padding: 5px;">           The Home and End keys  <input checked="" type="radio"/> Standard   <input type="radio"/> rvt            The Function keys and keypad  <input type="radio"/> ESC[n~   <input type="radio"/> Linux   <input type="radio"/> Xterm R6  <input type="radio"/> VT400   <input checked="" type="radio"/> VT100+   <input type="radio"/> SCO         </div>
<b>Connection -- Serial</b>	<div style="border: 1px solid gray; padding: 5px;">           Select a serial line            Serial line to connect to: <input type="text" value="/dev/ttyS0"/>            Configure the serial line            Speed (baud): <input type="text" value="115200"/>            Data bits: <input type="text" value="8"/>            Stop bits: <input type="text" value="1"/>            Parity: <input type="text" value="None"/> ▼            Flow control: <input type="text" value="None"/> ▼         </div> <p>*Microsoft Windows: COM(n)          *Linux: /dev/ttys(n)          *Serial line will vary with Operating System, check kernel device pages for more information.</p>

Console Settings			
<b>Terminal Type</b>	vt100+	<b>Stop Bits</b>	1
<b>Bits Per Second</b>	115200	<b>Flow Control</b>	none
<b>Data Bits</b>	8	<b>Putty KeyPad</b>	VT100
<b>Parity</b>	none	<b>Recorder Mode</b>	disabled
<b>VT-UTF8 Combo Key Support</b>	enabled		

Telnet Settings	
<b>Telnet</b>	telnet 10.30.0.33 2601
<b>Password (default)</b>	nimitz

## Step 2: Basic Configurations

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## Change Default Password

<b>Login</b>	<pre>\$telnet 10.30.0.33 2601 Trying ::1... Trying 10.30.0.33 Connected to 10.30.0.33 Escape character is '^]'.  Hello, this is Quagga (version 1.1.1). Copyright 1996-2005 Kunihiro Ishiguro, et al.  User Access Verification  Password: &lt;nimitz&gt;</pre>
<b>enable</b>	<pre>Nimitz&gt; enable Password: &lt;nimitz&gt; Nimitz#</pre>
<b>configure terminal</b>	<pre>Nimitz# configure terminal Nimitz(config)#</pre>
<b>password</b>	<pre>Nimitz(config)# password &lt;enter new password&gt; Nimitz(config)#</pre>

## Enable IP-Forwarding

<b>enable</b>	<pre>Nimitz&gt; enable Password: &lt;password&gt; Nimitz#</pre>
<b>Configure terminal</b>	<pre>Nimitz# configure terminal Nimitz(config)#</pre>
<b>ip forwarding</b>	<pre>Nimitz(config)# ip forwarding Nimitz(config)#</pre>

## Adding Static Routes

<b>enable</b>	<pre>Nimitz&gt; enable Password: &lt;password&gt; Nimitz#</pre>
<b>configure terminal</b>	<pre>Nimitz# configure terminal Nimitz(config)#</pre>
<b>ip route &lt;gateway - address&gt;</b>	<pre>Nimitz(config)# ip route A.B.C.D/xx A.B.C.D Nimitz(config)#</pre>
<b>ip route &lt;interface - address&gt;</b>	<pre>Nimitz(config)# ip route A.B.C.D/xx &lt;interface-name&gt; Nimitz(config)#</pre>

## Using <?> for clarity

<b>ip route ?</b>	<pre>Nimitz(config)# ip route ? A.B.C.D IP destination prefix A.B.C.D/M IP destination prefix (e.g. 10.0.0.0/8)</pre>
<b>ip route A.B.C.D/24 ?</b>	<pre>Nimitz(config)# ip route A.B.C.D/xx ? A.B.C.D IP gateway address INTERFACE IP gateway interface name</pre>
<b>ip route A.B.C.D/24 A.B.C.D ?</b>	<pre>Nimitz(config)# ip route A.B.C.D/xx A.B.C.D ? &lt;1-255&gt; Distance value for this route *Directly connected routes carry a default route metric of 0</pre>

# Additional Features

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## Show Running Configuration <sample>

<b>enable</b>	Nimitz> enable Password: <password> Nimitz#
<b>show running-config</b>	Nimitz# show running-config Current configuration: ! hostname Nimitz password nimitz ! interface enp1s0 description "WAN" ip address A.B.C.D/xx ! interface enp2s1 description "LAN" ip address A.B.C.D/xx ! interface lo ! ip route A.B.C.D/xx A.B.C.D ip route A.B.C.D/xx A.B.C.D ! ip forwarding ! ! line vty ! end #Nimitz

## Adding Interface Descriptors <sample>

<b>enable</b>	Nimitz> enable Password: <password> Nimitz#
<b>configure terminal</b>	Nimitz# configure terminal Nimitz(config)#
<b>interface &lt;if-name&gt;</b>	Nimitz(config)#interface <if-name> Nimitz(config-if)# description "WAN Interface" Nimitz(config-if)# show running-config Current Configuration: ...truncated for clarity ! interface <if-name> description "WAN Interface" ip address A.B.C.D/xx Nimitz(config-if)#

## Negating commands <sample>

<b>no</b>	Prepend <no> to an existing command to negate its effect e.g. Nimitz(config)# no ip route A.B.C.D/xx A.B.C.D Nimitz(config)#
-----------	--



## Maneuvering Zebra commands with <?>

**Nimitz> ?**

The <?> command has 4 primary uses

1. Show current available commands

Nimitz> ?

```
echo    Echo a message back to the vty
enable  Turn on privileged mode command
exit    Exit current mode and down to previous mode
help    Description of the interactive help system
list    Print command list
quit    Exit current mode and down to previous mode
show    Show running system information
terminal Set terminal line parameters
who     Display who is on vty
```

**Nimitz> show?**

2. Show a commands <definition>

\*no space following command

Nimitz> show?

```
show Show running system information
```

**Nimitz> show ?**

3. Show a commands <options>

\*space following command

Nimitz> show ?

```
commandtree Show command tree
debugging   Debugging information
history     Display the session command history
interface   Interface status and configuration
ip          IP information
ipv6        IPv6 information
logging     Show current logging configuration
memory      Memory statistics
table       default routing table to use for all clients
thread      Thread information
version     Displays zebra version
work-queues Work Queue information
```

**Nimitz> show ip ?**

4. Show a commands <options><suboptions><suboptions>

Nimitz> show ip ?

```
forwarding IP forwarding status
nht        IP nexthop tracking table
prefix-list Build a prefix list
protocol   IP protocol filtering status
route     IP routing table
rpf       Display RPF informat
```

## Nested Privileges While Maneuvering Zebra <sample>

**Nimitz>**

Nimitz>

**Nimitz#**

Nimitz> enable

Password: <password>

**Nimitz(config)#**

Nimitz#

**Nimitz(config-if)#**

Nimitz# configure terminal

Nimitz(config)#

Nimitz(config)# interface <interface-name>

Nimitz(config-if)#

## Returning to Previous Levels <sample>

**exit**

The <exit> command returns you to the previous level of privilege e.g.

Nimitz(config-if)# exit

Nimitz(config)#

**end**

The <end> command returns you to the initial enable level of privilege e.g.

Nimitz(config-if)# end

Nimitz#