

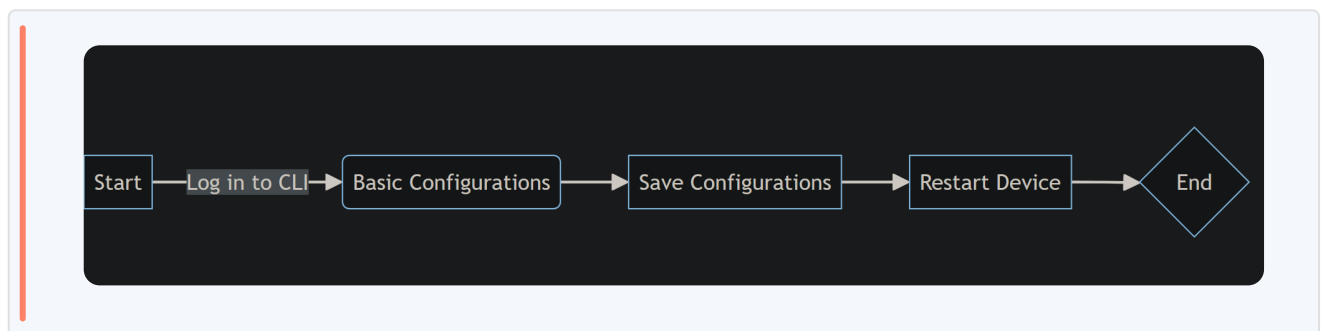
Lab1

1 Lab1 Huawei VRP and Configuration Basics

1.1 Lab Configuration Overview

- **Steps:**
 1. Configure device name and interface IP.
 2. Save configurations.
 3. Restart the device.

1.2 Configuration Roadmap



1.3 Basic Device Configurations

1.3.1 Step-by-Step Guide

1.3.1.1 Step 1: Logging In

- Access the Command Line Interface (CLI) through the console port.

1.3.1.2 Step 2: Displaying Basic Info

```
markdown
1 <Huawei>display version
```

Check device version and uptime.

```
Huawei Versatile Routing Platform Software
VRP (R) software, Version 5.110 (eNSP V100R001C00)
Copyright (c) 2000-2011 HUAWEI TECH CO., LTD
```

1.3.1.3 Step 3: Setting Up Basic Configurations

```
Markdown
1 <Huawei>system-view
2 [Huawei]sysname Datacom-Route
```

Enter system view.

Change router name.

1.3.1.4 Interface IP Configuration



Markdown



```
1 [Datacom-Router]interface GigabitEthernet0/0/1
2 [Datacom-Router-GigabitEthernet0/0/1]ip address
  192.168.1.1 24
```

Go to interface view.

Set IP address for the interface.

1.3.1.5 Undo Configuration



Markdown



```
1 [Datacom-Router-GigabitEthernet0/0/1]undo ip address
```

Remember to negate incorrect configurations with `undo` command if necessary.

1.3.1.6 Keys

tab : When typed into the CLI, pressing the Tab key can autocomplete commands or list available commands if there's more than one option.

? : prompts the user for additional information or indicates an error or unknown command in the network simulation environment.

```
[Datacom-Router]inter?  
interface
```

<cr> : Stands for "Carriage Return" and is often shown in command-line help to indicate that you should press the Enter key to execute the command as it is.

1.3.1.7 Display and navigation

display this : Displays the configuration of the current module/view you're in. For instance, if you're in a specific interface configuration view, it would display the settings for that interface.

```
[Datacom-Router-GigabitEthernet0/0/1]dis this  
#  
interface GigabitEthernet0/0/1  
ip address 192.168.100.1 255.255.255.0  
#  
return
```

quit : Exits from the current mode or goes back one level in the command hierarchy (e.g., from interface configuration mode back to global configuration mode).

display current-configuration : to review settings.

```
#
sysname Datacom-Router
#
aaa
 authentication-scheme default
 authorization-scheme default
 accounting-scheme default
 domain default
 domain default_admin
 local-user admin password cipher OOCM4m($F4ajUnlvMEIBNUw#
 local-user admin service-type http
#
firewall zone Local
 priority 16
#
interface Ethernet0/0/0
```

1.3.1.8 Basic startup

compare configuration : This command allows you to compare the current running configuration with another saved configuration file to see what changes have been made.

dir : Lists the contents of a directory on a file system, such as flash memory.

```
Directory of flash:/

   Idx  Attr      Size(Byte)   Date       Time       FileName
   ---  ---
    0   drw-          -   Aug 07 2015 13:51:14   src
    1   drw-          -   Apr 09 2024 23:06:50   pmdata
    2   drw-          -   Apr 09 2024 23:06:56   dhcp
    3  -rw-        28   Apr 09 2024 23:06:56   private-dat
    4   drw-          -   Apr 09 2024 23:22:01   mplstpam

32,004 KB total (31,994 KB free)
```

configuration file The filename extension of a configuration file must be .cfg or .zip


system software The filename extension of system software must be .c

`startup saved-configuration` : This might not be a valid Huawei command as written; however, if referring to viewing startup configurations, it would typically be something like `display startup-config` , which shows you the saved startup configuration that will be used upon next boot.

`display startup` : This is another way to show the system's startup configuration file—what has been saved and will be loaded upon next restart.

```
MainBoard:
Configured startup system software:      NULL
Startup system software:                  NULL
Next startup system software:             NULL
Startup saved-configuration file:         NULL
Next startup saved-configuration file:    NULL
Startup paf file:                         NULL
Next startup paf file:                    NULL
Startup license file:                     NULL
Next startup license file:                NULL
Startup patch package:                    NULL
Next startup patch package:               NULL
```

`reset saved-configuration` : Deletes the current saved configuration so that when you reboot, it will start with default settings (be very careful with this command as it erases your saved setup).

 **Important:** After `reset saved-configuration` , ensure that you save your desired startup configuration before rebooting.

1.3.1.9 Step 4: Saving Configurations

```
M↓ Markdown ↕
1 <Datacom-Router>save
```

Save current configuration after confirmation.

1.3.2 Restart Procedure

```
M↓ Markdown ↕
1 <Datacom-Router>reboot
```

Command for restarting the device.

1.4 Function Keys Table

Key	Function
Ctrl+A	Moves cursor to beginning of line
Ctrl+B	Moves cursor back one character
Ctrl+C	Stops current functions
Ctrl+D	Deletes character at cursor
Ctrl+E	Moves cursor to end of line
Ctrl+F	Moves the cursor forward one character
Ctrl+H	Deletes the character to the left of the cursor
Ctrl+K	Terminates the connection of an outgoing call during connection establishment.
Ctrl+N or Down Arrow Key	Displays the next command in the command history.
Ctrl+P or Up Arrow Key	Displays the previous command in the command history.
Ctrl+T	Enters a question mark (?).

Key	Function
Ctrl+W	Deletes the character string (word) to the left of the cursor
Ctrl+X	Deletes all characters on the left of the cursor
Ctrl+Y	Deletes the character at the cursor and all characters to the right
Ctrl+Z	Returns to user view
Ctrl+]	Stops or redirects incoming connections
Esc+B	Moves the cursor back one character string (word)
Esc+D	Deletes one character string (word) to the right of the cursor

in my version of Ensp most of the shortcuts don't working