

User Manual

Command Line Interface

WR302G/WR312G/WR322GR

Industrial Secure Cellular Router (Serial Server)

Aug.29.2018 V.1



WoMaster

WR302G/WR312G/WR322GR

Industrial Secured and Rugged LTE Serial Router

WoMaster Command Line Interface User Manual

Copyright Notice

© WoMaster. All rights reserved.

About This Manual

This user manual is intended to guide a professional installer to configure the device through Command Line Interface. It includes procedures to assist you in avoiding unforeseen problems.



NOTE:

Only qualified and trained personnel should be involved with installation, inspection, and repairs of this switch.

Disclaimer

WoMaster reserves the right to make changes to this Manual or to the product hardware at any time without notice. Information provided here is intended to be accurate and reliable. However, it might not cover all details and variations in the equipment and does not claim to provide for every possible contingency met in the process of installation, operation, or maintenance. Should further information be required or should particular problem arise which are not covered sufficiently for the user's purposes, the matter should be referred to WoMaster. Users must be aware that updates and amendments will be made from time to time to add new information and/or correct possible unintentional technical or typographical mistakes. It is the user's responsibility to determine whether there have been any such updates or amendments of the Manual. WoMaster assumes no responsibility for its use by the third parties.

WoMaster Online Technical Services

At WoMaster, you can use the online service forms to request the support. The submitted forms are stored in server for WoMaster team member to assign tasks and monitor the status of your service. Please feel free to write to help@womaster.eu if you encounter any problems.

TABLE OF CONTENTS

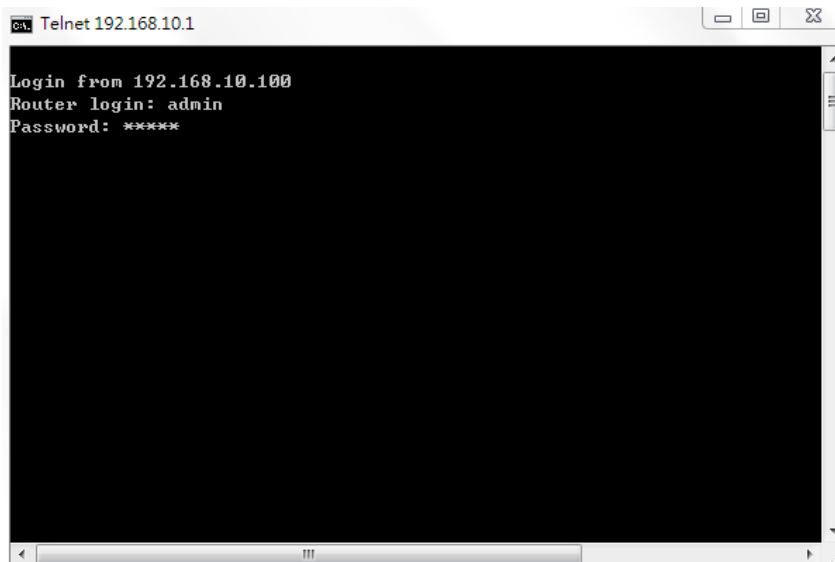
COVER.....	1
TABLE OF CONTENTS.....	3
1. COMMAND LINE INTERFACE (CLI) INTRODUCTION	4
2. UNDERSTANDING ALL COMMANDS	6
3. CLI COMMANDS	8
3.1 CLI COMMANDS FOR SHOW.....	8
3.2 CLI COMMANDS FOR SET	19
3.3 CLI COMMANDS FOR BACKUP RESTORE	23
3.4 CLI COMMANDS FOR FIRMWARE UPGRADE.....	23
3.5 CLI COMMANDS FOR RESET	23
3.6 CLI COMMANDS FOR SAVE & LOAD	23
3.7 CLI COMMANDS FOR LOGOUT	24
3.8 ALL COMMANDS LIST.....	24

1. COMMAND LINE INTERFACE (CLI) INTRODUCTION

The Command Line Interface (CLI) is the user interface to the switch's embedded software system. The CLI in WoMaster switches can be accessed through Telnet console. The explanation for Telnet console preparation would be explained below.

WoMaster managed switch supports Telnet console. User can connect to the switch by Telnet and the command lines are the same as what user sees by RS232 console port. Below are the steps to open Telnet connection to the switch.

1. Start -> Run -> cmd. ->**Enter**
2. Type the **Telnet 192.168.10.1** (or the IP address of the switch). And then press **Enter**, user will directly enter the Telnet console.
3. Type the Login Name and its Password. The default Login Name and Password are **admin / admin**.



SSH (Secure Shell)

WoMaster managed SWITCH also supports SSH console. User can remotely connect to the switch by command line interface. The SSH connection can secure all the configuration commands user sent to the switch.

SSH is a client/server architecture while the switch is the SSH server. When user wants to make SSH connection with the switch, user should download the SSH client tool first.

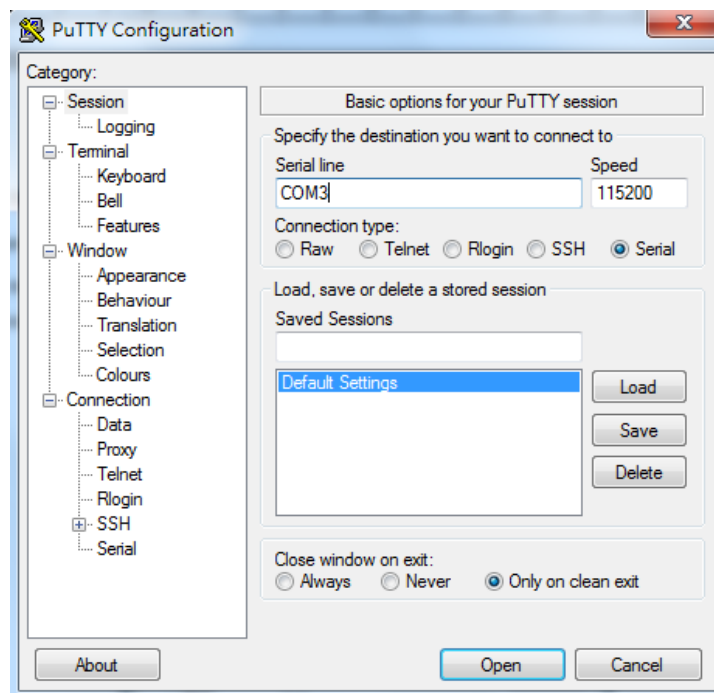
SSH Client

There are many free, sharewares, trials or charged SSH clients user can find on the internet, e.g., PuTTY is a free and popular Telnet/SSH client. We'll use this tool to demonstrate how to login by SSH. (PuTTY copyright 1997-2016 Simon Tatham).

Download PuTTY: <http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

1. Open SSH Client/PuTTY

In the **Session** configuration, choose the **Serial** protocol then enter the **Serial line** and **Speed**. For the serial line, please check the device manager to make sure the serial line name. The speed should be 115200. Then click on **Open** to start the SSH session console.



2. After it user can see the CLI command screen is pop-up
3. Type the Switch Login name and its Password. The default settings are **admin / admin**.

2. UNDERSTANDING ALL COMMANDS

There are some different command modes which are show, set and list. Each command mode has its own access ability, available command lines and uses different command lines to enter and exit.

Privileged EXEC Mode: As long as user login the router by CLI. User can show some basic information, set some configuration and list all of the command line lists. Type **exit** to logout. Press **tab** to see the command list

```
router#
archive download-sw
configure terminal
copy
end
exit
guest_password
list
no
password
ping
reboot
reload
show
timeout
write
```

Type configure terminal in first level then User can enter the Global Configuration mode. In Global Configuration mode, User can configure all the features that the system provides. Type **exit** to leave the current mode. Press **tab** to see the command list.

The command lists of global configuration mode.

```
router# configure terminal
router(config)#
archive download-sw
configure terminal
copy
end
exit
guest_password
list
no
password
ping
reboot
reload
set
show
timeout
write
```

The table below presents the summary of the 2 command modes:

COMMAND MODE	MAIN FUNCTION	PROMPT
Privileged EXEC	In this mode, the system allows User to view current configuration, reset default, reload switch, show system information, save configuration...and enter global configuration mode.	router#
Global Configuration	In global configuration mode, User can configure all the features that the system provides User	router(config)#

Here are some useful commands for User to see these available commands. Save User time in typing and avoid typing error. Press **tab** to see all the available commands in this mode. It helps User to see the next command User

```
router# show
clock
event-log
guest_user
hostname
interface
ip
ping-watchdog
spanning-tree
static_route
syslog
user
version
```

can/should type as well.

(Character)? To see all the available commands starts from this character.

```
router# r
reboot
reload
```

The tab key helps User to input the command quicker. If there is only one available command in the next, clicking on tab key can help to finish typing soon.

```
SWITCH# sh (tab) (tab)
show

SWITCH(config)# pas (tab)
SWITCH(config)# password
```

Alert message when multiple users want to configure the switch. If the administrator is in configuration mode, then the Web users can't change the settings. Womaster router allows only one administrator to configure the router at a time.

3. CLI COMMANDS

This chapter will show the main CLI Command for Show, Set, List and some other main CLI Commands. The Show commands are used to display device settings, statistics and other information, The Set commands are used to do the configuration and for the List command to show all of the command lists that available in the telnet mode.

3.1 CLI COMMAND FOR SHOW

Feature	Command Line
Show – Privileged EXEC Mode & Global Configuration	
Clock	<pre>router# show clock clock now : 2018-8-28 0:23:4 clock timezone : (GMT)Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London clock ntp : Disable clock servertype : Manual IP clock server selected : unkown clock manual ip : 0.0.0.0</pre>
Event Log	<pre>router# show event-log event-log : Idx Time Source Message ===== 1 2018-08-28 00:17:56 syslogd syslogd started. 2 2018-08-28 00:17:56 syslog br0 hw ether 001122445578 3 2018-08-28 00:17:57 cellular Init cellular subsystem. 4 2018-08-28 00:17:57 cellular module [] detected. 5 2018-08-28 00:18:00 cellular Repower Cellular Module 6 2018-08-28 00:18:03 system TZ: GMT0 7 2018-08-28 00:18:04 syslogd System log stop. 8 2018-08-28 00:18:04 syslogd syslogd</pre>

	<pre> started. 9 2018-08-28 00:18:17 syslog br0 ip is 192.168.10.1 10 2018-08-28 00:18:17 syslog dns1 is 8.8.8.8 11 2018-08-28 00:18:17 system TZ: GMT0 12 2018-08-28 00:18:18 wifi :service stopped. 13 2018-08-28 00:18:18 cellular Repower Cellular Module 14 2018-08-28 00:18:21 cellular Cellular watchdog start. 15 2018-08-28 00:18:21 ipsec_setup Stopping Openswan IPsec... </pre>
Guest user	<pre> router# show guest_user guest_user : guest </pre>
Hostname	<pre> router# show hostname hostname : router </pre>
Interface	<pre> router# show interface interface ethernet1 state : Enable eth1 : 00:11:22:44:55:77 interface ethernet1 DataRate : Auto interface ethernet2 state : Enable eth2 : 00:11:22:44:55:78 interface ethernet2 DataRate : Auto (1000M/full-duplex) interface vlan active : Disable interface vlan manageID : 1 Serial1 Config : interface serial1 baudrate : 38400 interface serial1 databit : 8 interface serial1 parity : NONE interface serial1 stopbit : 1STOPBIT interface serial1 flow : NONE interface serial1 interfaceType : RS422 interface serial1 mode : TCP Server interface serial1 tcp_port : 4000 interface serial1 multilink_max_net_count: 0 </pre>

```
interface serial1 idle_timeout      : 0
interface serial1 alive_check       : 0
interface serial1 term_resistor     : Disable
interface serial1 tty2net_delimiter0 :
interface serial1 tty2net_delimiter1 :
interface serial1 tty2net_delimiter2 :
interface serial1 tty2net_delimiter3 :
interface serial1 tty2net fush time(ms): 0
interface serial1 net2tty_delimiter0 :
interface serial1 net2tty_delimiter1 :
interface serial1 net2tty_delimiter2 :
interface serial1 net2tty_delimiter3 :
interface serial1 net2tty fush time(ms): 0
interface serial1 force TX interval time(ms): 0
interface serial1 force TX length(bytes): 1024
Serial2 Config :
interface serial2 baudrate          : 38400
interface serial2 databit           : 8
interface serial2 parity             : NONE
interface serial2 stopbit            : 1STOPBIT
interface serial2 flow               : NONE
interface serial2 interfaceType      : RS422
interface serial2 mode               : TCP Server
interface serial2 tcp port           : 4002
interface serial2 multilink_max_net_count: 0
interface serial2 idle timeout       : 0
interface serial2 alive check        : 0
interface serial2 term_resistor      : Disable
interface serial2 tty2net_delimiter0 :
interface serial2 tty2net_delimiter1 :
interface serial2 tty2net_delimiter2 :
interface serial2 tty2net_delimiter3 :
interface serial2 tty2net fush time(ms): 0
interface serial2 net2tty_delimiter0 :
interface serial2 net2tty_delimiter1 :
interface serial2 net2tty_delimiter2 :
interface serial2 net2tty_delimiter3 :
interface serial2 net2tty fush time(ms): 0
```

	interface serial2 force TX interval time(ms): 0
	interface serial2 force TX length(bytes): 1024
	interface cellular1 sim current index : 2
	interface cellular1 provider : NONE
	interface cellular1 service-type : No Service
	interface cellular1 imei : 0000000000000000
	interface cellular1 signal : 0 dBm
	interface cellular1 sim-status: SIM not inserted
	interface cellular1 status : Disconnected
	interface cellular1 ip-address :
	interface cellular1 gateway-ip :
	interface cellular1 module-info :
	interface cellular1 signalBER :
	interface cellular1 cellID :
	interface cellular1 imsi :
	interface cellular1 msisdn :
	interface cellular1 sim-change-counter: 0
	interface cellular1 MCC :
	interface cellular1 MNC :
	interface cellular1 sim-id : No ID
	interface cellular1 activate : Enable
	interface cellular1 sim-selection : 1
	interface cellular1 cellular-redundant: Disable
	interface cellular1 redundant-period : 30 sec
	interface cellular1 redundant-retries : 3
	interface cellular1 network-type : Auto
	interface cellular1 apn : internet
	interface cellular1 username :
	interface cellular1 authenticationType: CHAP
	interface cellular1 pin :
	interface cellular1 new-pin :
	interface cellular1 remember-pin : Disable
	interface cellular1 pin-protection : Disable
	interface cellular1 unlock-sim : Disable
	interface wlan1 wirelessmode : AP
	interface wlan1 ssid : WR322_1
	interface wlan1 ssidhided : Disable
	interface wlan1 radio : Enable

interface wlan1 802.11mode	: 802.11G/N
interface wlan1 HTprotect	: Disable
interface wlan1 Currentfrequency/channel:	Auto
interface wlan1 Noise Floor	: -256 dBm
interface wlan1 power	: Half
interface wlan1 rate	: Auto
interface wlan1 antenna number	: Two Antenna
interface wlan1 wmm	: Enable
interface wlan1 Isolation	: Disable
interface wlan1 maxStaNum	: 64
interface wlan1 StaNumLmt	: Enable
interface wlan1 channelMode	: 20 MHz
interface wlan1 channelOffset	: None
interface wlan1 extension	: No Protection
interface wlan1 A-MPDU	: Enable
interface wlan1 A-MSDU	: Disable
interface wlan1 shortGI	: Disable
interface wlan1 RIFS	: Enable
interface wlan1 RTS	: 2347
interface wlan1 fragment	: 2346
interface wlan1 beacon	: 100
interface wlan1 DTIM	: 1
interface wlan1 preamble	: Auto
interface wlan1 IGMP	: Enable
interface wlan1 authentication	: Open System
interface wlan1 encryption	: None
interface wlan1 key type	: 64HEX
interface wlan1 key default	: 1
interface wlan1 wpa psk	:
interface wlan1 wdsMac remote	: 00:00:00:00:00:00
interface wlan1 acl mode	: disabled
interface wlan1 acl entry	: NULL
interface wlan1 acl list:	
index MAC address	
=====	
NULL NULL	
interface wlan1 radius IPAddr	: 0.0.0.0

```
interface wlan1 radius port          : 1812
interface wlan1 vap profile1 active  : Enable
interface wlan1 vap profile1 profileName: Profile1
interface wlan1 vap profile1 ssid    : WR322_1
interface wlan1 vap profile1 ssidhided: Disable
interface wlan1 vap profile1 vlanID  : 1
interface wlan1 vap profile1 Isolation: Disable
interface wlan1 vap profile1 wmm     : Enable
interface wlan1 vap profile1 MaxStaNum: 64
interface wlan1 vap profile1 StaNumLmt: Enable
interface wlan1 vap profile1 authentication: Open System
interface wlan1 vap profile1 encryption: None
interface wlan1 vap profile1 default : 1
interface wlan1 vap profile1 wpa     :
interface wlan1 vap profile2 active  : Disable
interface wlan1 vap profile2 profileName: Profile2
interface wlan1 vap profile2 ssid    : WR322_1
interface wlan1 vap profile2 ssidhided: Disable
interface wlan1 vap profile2 vlanID  : 1
interface wlan1 vap profile2 Isolation: Disable
interface wlan1 vap profile2 wmm     : Enable
interface wlan1 vap profile2 MaxStaNum: 64
interface wlan1 vap profile2 StaNumLmt: Enable
interface wlan1 vap profile2 authentication: Open System
interface wlan1 vap profile2 encryption: None
interface wlan1 vap profile2 default : 1
interface wlan1 vap profile2 wpa     :
interface wlan1 vap profile3 active  : Disable
interface wlan1 vap profile3 profileName: Profile3
interface wlan1 vap profile3 ssid    : WR322_1
interface wlan1 vap profile3 ssidhided: Disable
interface wlan1 vap profile3 vlanID  : 1
interface wlan1 vap profile3 Isolation: Disable
interface wlan1 vap profile3 wmm     : Enable
interface wlan1 vap profile3 MaxStaNum: 64
interface wlan1 vap profile3 StaNumLmt: Enable
interface wlan1 vap profile3 authentication: Open System
interface wlan1 vap profile3 encryption: None
```

```
interface wlan1 vap profile3 default : 1
interface wlan1 vap profile3 wpa :
interface wlan1 vap profile4 active : Disable
interface wlan1 vap profile4 profileName: Profile4
interface wlan1 vap profile4 ssid : WR322_1
interface wlan1 vap profile4 ssidhided: Disable
interface wlan1 vap profile4 vlanID : 1
interface wlan1 vap profile4 Isolation: Disable
interface wlan1 vap profile4 wmm : Enable
interface wlan1 vap profile4 MaxStaNum: 64
interface wlan1 vap profile4 StaNumLmt: Enable
interface wlan1 vap profile4 authentication: Open System
interface wlan1 vap profile4 encryption: None
interface wlan1 vap profile4 default : 1
interface wlan1 vap profile4 wpa :
interface wlan1 vap profile5 active : Disable
interface wlan1 vap profile5 profileName: Profile5
interface wlan1 vap profile5 ssid : WR322_1
interface wlan1 vap profile5 ssidhided: Disable
interface wlan1 vap profile5 vlanID : 1
interface wlan1 vap profile5 Isolation: Disable
interface wlan1 vap profile5 wmm : Enable
interface wlan1 vap profile5 MaxStaNum: 64
interface wlan1 vap profile5 StaNumLmt: Enable
interface wlan1 vap profile5 authentication: Open System
interface wlan1 vap profile5 encryption: None
interface wlan1 vap profile5 default : 1
interface wlan1 vap profile5 wpa :
interface wlan1 vap profile6 active : Disable
interface wlan1 vap profile6 profileName: Profile6
interface wlan1 vap profile6 ssid : WR322_1
interface wlan1 vap profile6 ssidhided: Disable
interface wlan1 vap profile6 vlanID : 1
interface wlan1 vap profile6 Isolation: Disable
interface wlan1 vap profile6 wmm : Enable
interface wlan1 vap profile6 MaxStaNum: 64
interface wlan1 vap profile6 StaNumLmt: Enable
interface wlan1 vap profile6 authentication: Open System
```

```

interface wlan1 vap profile6 encryption: None
interface wlan1 vap profile6 default : 1
interface wlan1 vap profile6 wpa :
interface wlan1 vap profile7 active : Disable
interface wlan1 vap profile7 profileName: Profile7
interface wlan1 vap profile7 ssid : WR322_1
interface wlan1 vap profile7 ssidhided: Disable
interface wlan1 vap profile7 vlanID : 1
interface wlan1 vap profile7 Isolation: Disable
interface wlan1 vap profile7 wmm : Enable
interface wlan1 vap profile7 MaxStaNum: 64
interface wlan1 vap profile7 StaNumLmt: Enable
interface wlan1 vap profile7 authentication: Open System
interface wlan1 vap profile7 encryption: None
interface wlan1 vap profile7 default : 1
interface wlan1 vap profile7 wpa :
interface wlan1 vap profile8 active : Disable
interface wlan1 vap profile8 profileName: Profile8
interface wlan1 vap profile8 ssid : WR322_1
interface wlan1 vap profile8 ssidhided: Disable
interface wlan1 vap profile8 vlanID : 1
interface wlan1 vap profile8 Isolation: Disable
interface wlan1 vap profile8 wmm : Enable
interface wlan1 vap profile8 MaxStaNum: 64
interface wlan1 vap profile8 StaNumLmt: Enable
interface wlan1 vap profile8 authentication: Open System
interface wlan1 vap profile8 encryption: None
interface wlan1 vap profile8 default : 1
interface wlan1 vap profile8 wpa :
interface wlan1 Offload_Active_Path : Wireless
interface statistics wireless : Rx
Tx
=====
Unicast Packets: 0
Error Packets: 0

```

```

Dropped Packets: 0
0
Packet Count: 0
0
Byte Count: 0
0
interface statistics WAN : Rx
Tx
=====
Packet Count: 0
0
Byte Count: 0
0
interface statistics LAN : Received
Transmitted
=====
Packet Count: 1582
1619
Byte Count: 267355
546232
interface statistics cellular : Rx Tx
=====
Packet Count: 0
0
Byte Count: 0
0
interface gps radio : Enable
interface gps information : status: Retry(516)
date:
utc:
latitude:

```

	longitude: altitude: spkm: nsat: 0
IP	router# show ip ip networkmode : Bridge ip bridge iptype : fixed ip bridge ipaddr : 192.168.10.1 ip bridge netmask : 255.255.255.0 ip bridge gateway : 0.0.0.0 ip bridge dns1 : 8.8.8.8 ip bridge dns2 : 0.0.0.0 ip router wan accesstype : Static ip router wan ipaddr : 192.168.1.1 ip router wan netmask : 255.255.255.0 ip router wan gateway : 0.0.0.0 ip router wan dns1 : 8.8.8.8 ip router wan dns2 : 0.0.0.0 ip router wan dhcpclient-hostname : router ip router lan ipaddr : 192.168.10.1 ip router lan netmask : 255.255.255.0 ip dhcpserver active : Enable ip dhcpserver ipstart : 192.168.10.100 ip dhcpserver ipend : 192.168.10.200 ip dhcpserver netmask : 255.255.255.0 ip dhcpserver gateway : 192.168.10.1 ip dhcpserver wins1 : 0.0.0.0 ip dhcpserver wins2 : 0.0.0.0 ip dhcpserver primary-DNS-Server : 8.8.8.8 ip dhcpserver secondary-DNS-Server : 0.0.0.0 ip dhcpserver leasetime : 1440 ip proxy-arp : Disable
Ping Watchdog	router# show ping-watchdog ping-watchdog ping-ip1 : Disable ping-watchdog ip-address1 : 0.0.0.0 ping-watchdog ping-ip2 : Disable ping-watchdog ip-address2 : 0.0.0.0 ping-watchdog interval : 300

	<pre>ping-watchdog deferred : 120 ping-watchdog failcounter : 30</pre>
Spanning Tree	<pre>router# show spanning-tree spanning-tree enable : Enable spanning-tree forward-time : 15 spanning-tree hello-time : 2 spanning-tree max-age : 20</pre>
Static Route	<pre>router# show static_route String format : Destination mask Netmask gw Gateway metric Metric dev Interface Ex : set route 192.168.20.0 mask 255.255.255.0 gw 192.168.20.254 metric 0 dev WAN (dev : LAN, WAN Cellular) static_route status : Rule Destination Netmask Gateway Metric Interface =====</pre>
Syslog	<pre>router# show syslog syslog remote : Disable syslog ipaddr : 0.0.0.0 syslog port : 514</pre>
User	<pre>router# show user user : admin</pre>
Version	<pre>router# show version Model Name : WR322GR-WLAN+LTE-E Software : 1.2.10 MAC Address : 00:11:22:44:55:78 Host Name : router router#</pre>

3.2 CLI COMMAND FOR SET

This chapter provides the Set CLI Commands; all of the features are covered in this chapter. By using set command user can do the configuration.

Feature	Command Line
Set – Global Configuration Mode (router# configure terminal)	
Clock	<pre>router(config)# set clock manual ip ntp server selected servertype timezone router(config)# set clock manual ip 192.168.10.100 clock manual ip : 192.168.10.100</pre>
Guest password	<pre>router(config)# set guest_password old password: ***** new password: ***** confirm password: *****</pre>
Hostname	<pre>router(config)# set hostname router hostname : router</pre>
Interface	<pre>router(config)# set interface cellular1 ethernet1 ethernet2 gps serial1 serial2 vlan wlan1 router(config)# set interface ethernet1 DataRate 100M/full-duplex 100M/half-duplex 10M/full-duplex 10M/half-duplex Auto router(config)# set interface ethernet1 DataRate Auto</pre>

	interface ethernet1 DataRate : Auto
IP	<pre> router(config)# set ip bridge dhcpserver networkmode proxy-arp router router(config)# set ip bridge dns1 dns2 gateway ipaddr iptype netmask router(config)# set ip router lan wan router(config)# set ip dhcpserver active gateway ipend ipstart leasetime netmask primary-DNS-Server secondary-DNS-Server wins1 wins2 router(config)# set ip networkmode Bridge Router router(config)# set ip proxy-arp Disable </pre>

	Enable
Password	<pre>router(config)# set password old password: ***** new password: ***** confirm password: *****</pre>
Ping Watchdog	<pre>router(config)# set ping-watchdog deferred failcounter interval ip-address1 ip-address2 ping-ip1 ping-ip2 router(config)# set ping-watchdog deferred Integer[120-9999] router(config)# set ping-watchdog failcounter Integer[1-9999] router(config)# set ping-watchdog interval Integer[1-9999] router(config)# set ping-watchdog ip ip-address1 ip-address2 router(config)# set ping-watchdog ip-address1 string [4-15 chars] router(config)# set ping-watchdog ping-ip ping-ip1 ping-ip2 router(config)# set ping-watchdog ping-ip1 Disable Enable</pre>
Spanning tree	<pre>router(config)# set spanning-tree enable forward-time hello-time max-age</pre>

	<pre> router(config)# set spanning-tree enable Disable Enable router(config)# set spanning-tree enable Disable Enable router(config)# set spanning-tree forward-time invalid parameter: Integer[1-30] router(config)# set spanning-tree enable forward-time hello-time max-age router(config)# set spanning-tree hello-time invalid parameter: Integer[1-10] router(config)# set spanning-tree enable forward-time hello-time max-age router(config)# set spanning-tree max-age invalid parameter: Integer[6-40] </pre>
Static Route	<pre> router(config)# set static_route add delete </pre>
Syslog	<pre> router(config)# set syslog clear ipaddr port remote </pre>

3.3 CLI COMMAND FOR BACKUP RESTORE

This chapter provides a detailed explanation of the Backup and Restore the configuration by using CLI commands.

Feature	Command Line
Backup Startup Configuration file	router# copy startup-config tftp: 192.168.10.100 router.conf Writing startup-config to tftp: 192.168.10.100/router.conf [OK]!
Restore Configuration	router# copy tftp: startup-config EXEC commands : copy tftp: startup-config <tftp_server_ip> <file_name> router# copy tftp: startup-config 192.168.10.100 router.conf Updating startup-config from tftp: 192.168.10.100/router.conf [OK]

3.4 CLI COMMAND FOR FIRMWARE UPGRADE

This chapter covers the CLI Command for upgrading the switch firmware.

Feature	Command line
Firmware Upgrade	router# archive download-sw tftp 192.168.10.100 v1.2.10.img The device is upgrading now and then it will reboot.

3.5 CLI COMMAND FOR RESET

This chapter is about CLI command to reset to factory default configuration with change the IP. Address of the device to default IP.

Feature	Command Line
Factory Default	router# reload default-config file

3.6 CLI COMMAND FOR SAVE & LOAD

This chapter is cover two function from the switch, Save and Load the configuration CLI command.

Feature	Command Line
Save	router# write file Building Configuration... [OK]
Load	router# copy startup-config EXEC commands : copy startup-config tftp: <tftp_server_ip> <file_name> Example: copy startup-config tftp: 192.168.10.100 backup.conf router# copy tftp: startup-config 192.168.10.100 router.conf Updating startup-config from tftp: 192.168.10.100/router.conf [OK]

3.7 CLI COMMAND FOR LOGOUT

This chapter is about the CLI Command for log out from the switch CLI interface.

Feature	Command Line
Logout	router# exit/end Bye!

3.8 CLI COMMAND FOR LIST ALL OF THE COMMANDS

This chapter is about the all of the command lists from CLI Command by type **list**.

Feature	Command Line
List all of CLI Commands	<pre> router# list version --system version Model Name : WR322GR-WLAN+LTE-E Software : 1.2.10 Host Name : router clock --Configure time-of-day clock -now --current system time -timezone --time zone -ntp --NTP Update -servertype --server type -server selected --NTP Server `-manual ip --Manual IP interface --interface config -ethernet1 --ethernet1 settings -state --enabled/disabled -MAC Address --ethernet1 mac address `DataRate --ether port 1 data rate -ethernet2 --ethernet2 settings -state --enabled/disabled -MAC Address --ethernet2 mac address `DataRate --ether port 2 data rate -vlan --vlan setting -active --enable 802.1Q VLAN `manageID --Management VLAN ID -----More----- </pre>