

CLI SSH Command Reference

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Command Overview

CLI Command	Description
Status commands	
<code>get wan</code>	Retrieves each WAN's connection status (<i>Connected</i> , <i>Disconnected</i> , etc.), IP address, additional IP address, default gateway, DNS servers, and MTU. When reporting on cellular WANs, also includes mode (<i>3G</i> , <i>4G</i>) and signal strength.
<code>get pepvpn</code>	Retrieves the connection status (<i>Established</i> , <i>Connecting</i>) of PepVPN / SpeedFusion connections.
<code>get clientlist</code>	Retrieves the Client List table.
<code>get session</code>	Retrieves active sessions.
<code>get cpuload</code>	Retrieves current CPU load percentage.
<code>get ha</code>	Retrieves Balance's HA status (<i>Master</i> , <i>Slave</i> , <i>Disabled</i>), LAN IP address, and virtual IP address (if applicable).
<code>get cellular-operator</code>	Display Cellular Operator Setting
<code>get bandwidth transferred</code>	Retrieves upload and download volume of each WAN connection since last reboot.
<code>get bandwidth aggregated</code>	Retrieves current aggregated upload and download transfer rate.
<code>get bandwidth wan</code>	Retrieves current upload and download transfer rate of WAN <i>n</i> , by protocol. Shows all WANs when <i>n=0</i> .
<code>get system</code>	Retrieves Balance's model, hardware revision, s/n, and firmware version, plus MAC addresses of LAN, WAN1, WAN2, etc.
<code>get uptime</code>	Retrieves system uptime.
<code>get eventlog</code>	Retrieves eventlog in two-column CSV format. Use <i>n</i> to specify number of events. Leave blank to show all events.

CLI Command	Description
System commands	
<code>system reboot</code>	Reboots device. Confirmation required.
<code>system restore</code>	Restores device to factory defaults. Confirmation required.
<code>system debugmode</code>	Turn ON/OFF debug mode (print kernel message to console)
<code>system clionly</code>	This will turn off HTTP/HTTPS web admin access completely. CLI is the only access.
<code>system backup</code>	Perform configuration backup.

CLI Command	Description
Support commands	
<code>support arp</code>	Display the ARP table.
<code>support cellular-mdreset</code>	Reset the cellular module.
<code>support cellular-mdstatus</code>	Display the status of cellular module.
<code>support cellular-simstatus</code>	Display SIM status.
<code>support nslookup</code>	Performing nslookup.
<code>support pepvpn</code>	Display detail information about PepVPN/Speedfusion tunnels.
<code>support ping</code>	Performing ping to a target.
<code>support traceroute</code>	Performing traceroute to a target.

CLI Command	Description
Set command	
<code>set cellular-operator</code>	Set cellular WAN operator configuration.

Command Details

Notes:

1. *<param>* is a required parameter.
2. *(param)* is an optional parameter.
3. The serial output screen is always 80w x 24h. Limiting the output line width to a maximum of 80 characters is suggested.

Command Category: Status

Command: `get wan <n>`

Parameters: *n* = WAN interface ID

Description: Retrieves each WAN's connection status (*Connected*, *Disconnected*, etc.), IP address, additional IP address, default gateway, DNS servers, and MTU. When reporting on cellular WANs, also includes mode (*3G*, *4G*) and signal strength.

Sample usage: `get wan 2`

Sample output:

```
> get wan 1
WAN Connection [1]
Connection Name      : W1-Unifi-Pro-800M
Connection Status    : Connected
Connection Type      : Ethernet
Connection Method    : PPPoE
IP Address            : 175.143.176.187
Default Gateway      : 175.143.191.254
DNS Servers          : 202.188.18.188
                    : 1.9.1.9
MTU                  : 1436
```

Command: `get pepvpn`

Parameters: None

Description: Retrieves the connection status (*Established*, *Connecting*) of PepVPN / SpeedFusion connections.

Sample usage: `get pepvpn`

Sample output:

```
> get pepvpn
VPN Status

Name                Status
WM2MYOffice        ESTABLISHED
```

Command: `get clientlist`

Parameters: None

Description: Retrieves the Client List table, ordered by IP address.

Sample usage: `get clientlist`

Sample output:

```
> get clientlist
Client List

IP Address      Status   Name                Up/Down (kbps)  MAC Address
192.168.125.10  Active  WWM-DS218Plus      0/              0 00:11:32:BB:CA:26
192.168.125.32  Active  C1-Pro_Side-Entrance 0/              0 EC:71:DB:52:9C:02
192.168.125.33  Active  C1-Pro_Living-Room  0/              0 D4:AE:05:9D:43:A7
192.168.125.39  Active  CWH-iPad mini      0/              0 C8:B5:B7:27:9F:62
192.168.125.46  Active  C1-Pro_Living-Room  0/              0 B0:41:1D:5C:E0:45
192.168.125.52  Active  CWH-Vivo-1716      0/              0 C4:AB:B2:7F:FC:B8
192.168.125.108 Active  WKY-iPad            0/              0 34:C0:59:68:BF:7F
192.168.125.254 Active  APOE-AC5C          0/              0 00:1A:DD:05:1F:A0
```

Command: `get session`

Parameters: None

Description: Retrieves active sessions.

Sample usage: `get session`

Sample output:

```
> get session
Active Session List
```

Dir	Prot	Src	Dest	Service	Intf	Idle
Out	UDP	192.168.125.46:44622	18.163.6.0:58200		WAN1	7
Out	UDP	192.168.125.10:6881	170.84.8.150:6881	Bittorrent	WAN1	16
Out	UDP	192.168.125.10:6881	42.60.188.215:50321	Bittorrent	WAN1	5
Out	TCP	192.168.125.10:47058	52.197.168.111:443	SSL	WAN1	26
Out	UDP	169.254.0.194:59350	8.8.8.8:53	DNS	WAN1	3
Out	TCP	192.168.125.33:52031	74.125.130.188:5228	Google	WAN1	4
Out	TCP	192.168.125.254:44264	54.254.186.173:443	SSL/SSH	WAN1	5
Out	UDP	192.168.125.10:6881	79.105.9.164:49001	Bittorrent	WAN1	26
Out	UDP	192.168.125.32:55644	18.163.6.0:58200		WAN1	10
Out	UDP	192.168.125.10:54620	220.130.197.210:443		WAN1	10

Command: `get cpuload`

Parameters: None

Description: Retrieves current CPU load percentage.

Sample usage: `get cpuload`

Sample output:

```
> get cpuload
CPU Load: 1.00%
```

Command: `get ha`

Parameters: None

Description: Retrieves Balance's HA status (*Master*, *Slave*, *Disabled*), LAN IP address, and virtual IP address (if applicable).

Sample usage: `get ha`

Sample output:

```
> get ha
High Available Status

Status : Disabled
```

Command: `get cellular-operator <n>`

Parameters: n = cellular ID

Description: Display Cellular Operator Setting

Sample usage: `get cellular-operator 1`

Sample output:

```
> get cellular-operator 1
Cellular 1 (Cellular 1)
  SIM A
      Mode           : Custom
      APN            : myapn
      Username       : myuser
      Password       : @~Hf
```

Command: `get bandwidth transferred`

Parameters: None

Description: Retrieves upload and download volume of each WAN connection since last reboot.

Sample usage: `get bandwidth transferred`

Sample output:

```
> get bandwidth transferred
Data transferred since last reboot

Connection                Download          Upload           Total
ALL WAN Connections       25.00 GB         6.86 GB         31.86 GB
W1-Unifi-Pro-800M        25.00 GB         6.86 GB         31.86 GB
```

Command: `get bandwidth aggregated`

Parameters: None

Description: Retrieves current aggregated upload and download transfer rate.

Sample usage: `get bandwidth aggregated`

Sample output:

```
> get bandwidth aggregated

Overall                Download          Upload           Total
  HTTP                0 kbps           0 kbps           0 kbps
  HTTPS               0 kbps           0 kbps           0 kbps
  IMAP                0 kbps           0 kbps           0 kbps
  POP3                0 kbps           0 kbps           0 kbps
  SMTP                0 kbps           0 kbps           0 kbps
  Others              0 kbps           0 kbps           0 kbps
```

Command: `get bandwidth wan`

Parameters: `n` (optional): specifies WAN interface ID; shows all when `n=0`

Description: Retrieves current upload and download transfer rate of WAN `n`, by protocol. Shows all WANs when `n=0`.

Sample usage: `get bandwidth wan 0`

Sample output:

```
> get bandwidth wan
Connection                               Download           Upload            Total
W1-Unifi-Pro-800M                         2 kbps            0 kbps            3 kbps
  HTTP                                     0 kbps            0 kbps            0 kbps
  HTTPS                                    0 kbps            0 kbps            0 kbps
  IMAP                                     0 kbps            0 kbps            0 kbps
  POP3                                     0 kbps            0 kbps            0 kbps
  SMTP                                     0 kbps            0 kbps            0 kbps
  OTHERS                                   2 kbps            0 kbps            3 kbps
```

Command: `get system`

Parameters: None

Description: Retrieves Balance's model, hardware revision, s/n, and firmware version, plus MAC addresses of LAN, WAN1, WAN2, etc.

Sample usage: `get system`

Sample output:

```
> get system
System Information

Router Name           : MAXHD4-MBX
Product Model        : Pepwave MAX HD4 MBX
Hardware Revision    : 2
Serial Number        : 2936-416E-F02D
Firmware Version     : 8.0.2 build 1409

Interface            MAC Address
LAN                  00:1a:dd:70:f1:c0
WAN 1                00:1a:dd:70:f1:c1
WAN 2                00:1a:dd:70:f1:c2
WAN 3                00:1a:dd:70:f1:c3
```


Command: `get uptime`

Parameters: None

Description: Retrieves system uptime.

Sample usage: `get uptime`

Sample output:

```
> get uptime
Uptime: 3 days 0 hour 35 minutes
```

Command: `get eventlog (n)`

Parameters: `n`=number of events to show. No value=show all events.

Description: Retrieves eventlog in two-column CSV format. Use `n` to specify the number of events. Leave blank to show all events.

Sample usage: `get eventlog 7`

Sample output:

```
> get eventlog 7
Time           Message
Jan 09 15:37:41, System: Changes applied
Jan 09 15:38:35, Admin: admin (192.168.52.61) login successful
Jan 09 15:39:27, System: Changes applied
Jan 09 15:41:37, WAN: Cellular connected to MY MAXIS (10.120.3.126) in SIM slot A
Jan 09 15:41:40, WAN: Priority changed (Priority 1 - WAN, Cellular / Disabled - Wi-Fi WAN)
Jan 09 15:53:18, WAN: Cellular disconnected
Jan 09 15:53:57, WAN: Cellular connected to MY MAXIS (10.120.38.53) in SIM slot A
```

Command category: System**Command:** `system reboot`

Parameters: None.

Description: Reboots device. Confirmation required.

Sample usage: `system reboot`

Sample output:

```
> system reboot
Continue to reboot? [y/N] 
```

Command: `system restore`

Parameters: None.

Description: Restores device to factory defaults. Confirmation required.

Sample usage: `system restore`

Sample output:

```
> system restore
Continue to restore? [y/N] 
```

Command: `system debugmode`

Parameters: None

Description: Turn ON/OFF debug mode (print kernel message to console)

Sample usage: `system debugmode`

Sample output:

```
> system debugmode
Turn ON debug mode? [y/N] y

Debug mode is now ON
```

Command: `system clionly <n>`

Parameters: n = enable / disable

Description: This will turn off HTTP/HTTPS web admin access completely. CLI is the only access.

Sample usage: `system clionly enable / system clionly disable`

Sample output:

```
> system clionly enable
CLI Access Only: Enabled
```

Command: `system backup <a> `

Parameters: <a> = tftp, = IP address of TFTP server

Description: Backup system configuration file to a TFTP server

Sample usage: `system backup tftp 1.1.1.1`

Sample output:

```
> system backup tftp 1.1.1.1
>
```

Command Category: Support**Command:** support arp

Parameters: None

Description: Display the ARP table

Sample usage: system arp

Sample output:

```
> support arp
? (192.168.50.10) at 5C:F9:DD:47:D6:AB [ether] on untagged LAN
? (192.168.52.1) at 10:56:CA:0A:39:3C [ether] on eth0
? (192.168.52.61) at E0:DB:55:BB:B2:CB [ether] on eth0
```

Command: support cellular-mdreset <n>

Parameters: <n> = cellular ID

Description: Reset cellular module

Sample usage: support cellular-mdreset 1

Sample output:

```
> support cellular-mdreset 1
Reset Cellular 1: OK
```

Command: support cellular-mdstatus <n>

Parameters: <n> = cellular ID

Description: Display the cellular module status

Sample usage: support cellular-mdstatus 1

Sample output:

```

> support cellular-mdstatus 1
Cellular 1 Module Status:

Manufacturer: Sierra Wireless, Incorporated
Model: MC7304
Revision: SWI9X15C_05.05.58.00 r27038 carmd-fwbuild1 2015/03/04 21:30:23
IMEI: 356853053029569
IMEI SV: 18
FSN: J3634100720310
+GCAP: +CGSM

OK

!GSTATUS:
Current Time: 29          Temperature: 43
Bootup Time: 5           Mode: ONLINE
System mode: LTE        PS state: Attached
LTE band: B3            LTE bw: 20 MHz
LTE Rx chan: 1300       LTE Tx chan: 19300
EMM state: Registered   Normal Service
RRC state: RRC Connected
IMS reg state: No Srv

RSSI (dBm): -52         Tx Power: -3
RSRP (dBm): -91         TAC: 2E1D (11805)
RSRQ (dB): -17          Cell ID: 03F8F002 (66646018)
SINR (dB): -5.8

OK

```

Command: support cellular-simstatus <n>

Parameters: <n> = cellular ID

Description: Display the SIM slot status

Sample usage: support cellular-simstatus 1

Sample output:

```

> support cellular-simstatus 1
Slot A - SIM detected
Slot B - No SIM

```

Command: support nslookup <n>

Parameters: <n> = target domain name

Description: Perform nslookup on a target domain name

Sample usage: support nslookup google.com

Sample output:

```
> support nslookup google.com
Server:      127.0.0.1
Address 1: 127.0.0.1 localhost

Name:       google.com
Address 1: 216.58.196.14 kul08s09-in-f14.1e100.net
```

Command: support pepvpn

Parameters: None

Description: Display detail information about PepVPN

Sample usage: support pepvpn

Sample output:

```

=====
#          profile - [REDACTED]          #
#          remote id - [REDACTED]        #
# DEVICE   device name - [REDACTED]     #
#          serial number - [REDACTED]    #
=====
Cryptlvl | Proto | Role | Status
-----
AES-256 | UDP | Client | CONNECTED
-----
Cost | QoS UL | QoS DL | RTT diff cutoff | Rx Buffer | WAN Smoothing
-----
10 | 200000 | 500000 | 500 | 0 | Off
-----
# DETAILS - L3
-----
Route | 192 | 192 | 4
      | 10. | 172 |
      | 10. | 100 | 4
      | 10. | 10. | 24
      | 10. | 192 | 4
      | 10. | 192 |
      | 10. | 10. | /24
      | 169 | 138.0/24
      | 192 | 141.0/24
      | 169 | 143.0/24
      | 10. |
      | 192 | 146.0/24
      | 192 | .248/29
      | 10. |
      | 10. |
      | 10. |
      | 10. |
      | 172 | 24
      | 10. |
      | 10. | 4
      | 61. | 1.0/24
      | 192 | .0/24
      | 192 | 0/24
      | 10. |
-----
# WAN TO WAN LINK INFO
-----
L | R | Local IP | Remote IP | Status | Dir
-----
1 | 2 | 175.[REDACTED]:32015 | [REDACTED].205:32015 | STANDBY | Both
1 | 3 | 175.[REDACTED]:32015 | [REDACTED].204:32015 | STANDBY | Both
1 | 5 | 175.[REDACTED]:32015 | [REDACTED].100:32015 | ACTIVE | Both
-----

```

Command: support ping <n>

Parameters: <n> = target IP address or domain name

Description: Perform ping to target IP address or domain name

Sample usage: support ping google.com

Sample output:

```
> support ping google.com
PING google.com (172.217.166.142) 56(84) bytes of data.
64 bytes from kul09s13-in-f14.1e100.net (172.217.166.142): icmp_req=1 ttl=53 time=83.2 ms
64 bytes from kul09s13-in-f14.1e100.net (172.217.166.142): icmp_req=2 ttl=50 time=35.0 ms
64 bytes from kul09s13-in-f14.1e100.net (172.217.166.142): icmp_req=3 ttl=53 time=79.2 ms
64 bytes from kul09s13-in-f14.1e100.net (172.217.166.142): icmp_req=4 ttl=56 time=2.15 ms
64 bytes from kul09s13-in-f14.1e100.net (172.217.166.142): icmp_req=5 ttl=53 time=56.5 ms

--- google.com ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4004ms
rtt min/avg/max/mdev = 2.151/51.248/83.251/30.041 ms
```

Command: support traceroute <n>

Parameters: <n> = target IP address or domain name

Description: Perform traceroute to target IP address or domain name

Sample usage: support traceroute 8.8.8.8

Sample output:

```
> support traceroute 8.8.8.8
traceroute to 8.8.8.8 (8.8.8.8), 30 hops max, 60 byte packets
 1 * 192.168.52.1 (192.168.52.1) 0.318 ms *
 2 121.121.88.1 (121.121.88.1) 37.914 ms 10.214.47.30 (10.214.47.30) 32.961 ms 202.190.51.1 (202.190.51.1) 4.789 ms
 3 * * *
 4 223.28.43.70 (223.28.43.70) 2.096 ms * 2.002 ms
 5 * 72.14.205.104 (72.14.205.104) 1.898 ms *
 6 108.170.250.17 (108.170.250.17) 3.228 ms * 58.71.241.105 (58.71.241.105) 34.860 ms
 7 * * *
 8 8.8.8.8 (8.8.8.8) 3.179 ms * *
```


Command Category: Set

Command: set cellular-operator <a> <c> <d> <e> <f>

Parameters: <a>=cellular ID, =sim slot, <c>=mode, <d>=APN, <e>=username, <f>= pass

Description: Configure cellular wan configuration settings

Sample usage: set cellular-operator 1 A custom myapn myusername mypassword

Sample output:

```
> set cellular-operator 1 A custom myapn myuser2 mypass2
OK
```