Command Line Interface Guide
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Document Abstract

This document describes the use of Command Line Interface, here in after referred as CLI through SSH to access the Access Point parameters, configuration and offers several troubleshooting tools. Currently, the guide applies to QN-I-200, QN-I-220, QN-O-230 and QN-H-220 models only.
**Prerequisites**

In order to access device using CLI, SSH supported utility is required. CLI access is operating system independent. You may use Windows®, or MAC® or Linux®. The command terminal should support SSH. In Windows®, you may use third party application like Putty whereas the MAC® and Linux® command terminals already support SSH. Default port used by SSH is 22. Please use the same device username and password as defined during Site creation in Quantum RUDDER (https://cc.qntmnet.com) and for standalone use preconfigured device login username and password. We used admin as the Device username and **192.168.25.6** is the Access Point IP address.

Example of a SSH command (IP Address 192.168.25.6 has been used in test scenario only):
```
command_prompt>sshadmin@192.168.25.6 {press Enter Key}
```

**How to access CLI?**

Using Windows® platform?

**Step 1:** Download Putty for windows and follow as below (For test scenario we used 192.168.25.6 as the assigned IP address to Access Point).
Step 2: On first connection from Windows® using Putty, click “Yes” to accept host key.

![PuTTY Security Alert]

Step 3: Enter the username and password defined during Site creation in Quantum RUDDER and press Enter.
Step 4: You are successfully logged into Access Point with command prompt as “QNTM”. You may execute CLI commands now.

For Linux® and Apple® devices, SSH is, by default, supported. In usual cases any third party application is not required.
Using Apple® Platform?
We used an Apple® Macbook with macOS High Sierra Version 10.13.4 to brief commands ahead. Feel free to consult for updated versions issued ahead.

Step 1: Start Terminal and execute below SSH command followed by Enter key (For test scenario we used 192.168.25.6 as the assigned IP address to Access Point).

```
Last login: Sun May 27 20:52:47 on ttys000
Macbook- dennis$ ssh admin@192.168.25.6
```

Step 2: For first connection to the Access Point using SSH, you may be prompted to accept the host key. Do so by clicking “Yes” and press Enter.

```
Last login: Sun May 27 20:50:47 on ttys000
Macbook- dennis$ ssh admin@192.168.25.6
```

The authenticity of host '192.168.25.6' can't be established.
```
RSA key fingerprint is SHA256:PED8B5V3VjD9F3-s3.18p0d5meBqL8HQI72ZaAHM51.
Are you sure you want to continue connecting (yes/no)? yes
```
Step 3: Please enter the password as defined to access the Access Point during Site creation in Quantum RUDDER and press Enter.

Step 4: You are successfully logged into Access Point with command prompt as “QNTM”(Device Name). You may execute CLI commands now.
Understanding Commands:

General Commands:

**Command Prompt > help**
Description: help command would display basic commands available through terminal.

![](image1.png)

**Command Prompt >?**
Description: ? command would display all (except basic) commands available through terminal.

![](image2.png)
Command Prompt > `clear`
Description: `clear` command would clear the terminal screen.

Command Prompt > `date`
Description: `date` command would display current date and time in Access Point. Date and Time can’t be modified from Terminal as they are automatically updated as per selected Country in Quantum RUDDER or in standalone configuration.
Command Prompt > ping

Description: ping command can be used in trouble shooting network issues and helps to verify IP-level connectivity. When troubleshooting, you can use this command to send an ICMP echo request to a target host name or IP address. Use it whenever you need to verify that the Access Point can connect to the network resources.

Command Prompt > nslookup

Description: nslookup command can be used during trouble shooting to query domain name server and, if successful, replies with resolved IP Address.
**Command Prompt > tracert**

Description: tracert command can be used during trouble shooting to trace path / hopes from Access Point to the specified destination.

![Command Prompt tracert](image)

**Command Prompt > restart**

Description: restart command can be used to restart the Access Point through terminal. When prompted, enter y to continue reboot or n to cancel reboot.

![Command Prompt restart](image)
Command Prompt > exit

Description: exit command can be used to disconnect the terminal access. When prompted, enter y to exit or n to cancel.
System Commands:

Command Prompt > setwan

Description: setwan command can be used to define Access Point’s WAN Interface mode. Available options are DHCP / Static IP or PPPoE. To apply configuration, enter y or n to discard.

Command Prompt > wanstatus

Description: wanstatus command would display Ethernet Port status with operation mode (Static / DHCP / PPPoE) along with details.
**Command Prompt > interface**

The `interface` command will display the details listed below:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>Displays selected country in Access Point.</td>
</tr>
<tr>
<td>Radio</td>
<td>Displays type of Radio (2.4 GHz / 5 GHz)</td>
</tr>
<tr>
<td>Channel Bandwidth</td>
<td>Displays Channel bandwidth configured in Access Point</td>
</tr>
<tr>
<td>Channel Range</td>
<td>Displays configured channel range and Max Tx Power setting in Access Point</td>
</tr>
<tr>
<td>Max Tx Power</td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td>Displays type of Radio (2.4 GHz / 5 GHz)</td>
</tr>
<tr>
<td>Channel Bandwidth</td>
<td>Displays Channel bandwidth configured in Access Point</td>
</tr>
<tr>
<td>Channel Range</td>
<td>Displays configured channel range and Max Tx Power setting in Access Point</td>
</tr>
<tr>
<td>Max Tx Power</td>
<td></td>
</tr>
</tbody>
</table>

Additionally, the output includes information about the wireless interface:

- **Radio**: Displays type of Radio (2.4 GHz / 5 GHz)
- **Channel Bandwidth**: Displays Channel bandwidth configured in Access Point
- **Channel Range**: Displays configured channel range and Max Tx Power setting in Access Point
- **Max Tx Power**: Displays type of Radio (2.4 GHz / 5 GHz)
Command Prompt > statistics

Statistics command will display detail listed below

---

```
DNTM > statistics
Model No.: GN-T-200
Serial No.: 1234567890
MAC: 01:23:45:67:89:AB
Uptime: 4 days 3h 2m
Cloud Status: Offline
Firmware: GN.1.0.0.0.11
Username: admin
CPU Utilization(%): 36.71
Memory Usage(%): 85.61
Total Wireless Clients: 0
Clients on 2.4 GHz: 0
Clients on 5 GHz: 0
Channel of 2.4 GHz: auto(11)
Channel of 5 GHz: auto(62)
DNTM >
```

---

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model No.</td>
<td>Displays Access Point model number</td>
</tr>
<tr>
<td>Sr. No</td>
<td>Displays Access Point serial number</td>
</tr>
<tr>
<td>MAC</td>
<td>MAC Address of Access Point</td>
</tr>
<tr>
<td>Uptime</td>
<td>Displays since what time Access Point has been Up</td>
</tr>
<tr>
<td>Firmware</td>
<td>Displays current Access Point Firmware detail</td>
</tr>
<tr>
<td>CPU Utilization(%)</td>
<td>Displays Access Point CPU utilization in percentage</td>
</tr>
<tr>
<td>Memory Usage(%)</td>
<td>Displays Access Point Memory utilization in percentage</td>
</tr>
<tr>
<td>Total Wireless Clients</td>
<td>Provides detail of total number of connected clients</td>
</tr>
<tr>
<td>Clients On 2.4 GHz</td>
<td>Displays number of clients connected on 2.4 GHz</td>
</tr>
<tr>
<td>Clients On 5 GHz</td>
<td>Displays number of clients connected on 5 GHz</td>
</tr>
<tr>
<td>Channel 2.4</td>
<td>Displays 2.4 GHz, selected channel detail</td>
</tr>
<tr>
<td>Channel 5</td>
<td>Displays 5 GHz, selected channel detail</td>
</tr>
</tbody>
</table>
Command Prompt > status

**status** command will display detail listed below.

```
 2WTH > status
  Uptime : adays-3h:08min
  Cloud Status : Offline
  Total Wireless Clients : 0
  Clients On 2.4 GHz : 0
  Channel of 2.4 GHz : Auto(11)
  Channel of 5 GHz : Auto(62)
  ETH0 : Down
  ETH1 : Down
  ETH2 : Down
  2WTH >
```

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uptime</td>
<td>Displays since what time Access Point has been Up.</td>
</tr>
<tr>
<td>Cloud status</td>
<td>Displays Access Point status on Quantum RUDDER whether it is online or offline. (If configured in Quantum RUDDER)</td>
</tr>
<tr>
<td>Total Wireless Clients</td>
<td>Provides detail of total number of connected clients. (2.4 GHz / 5 GHz both)</td>
</tr>
<tr>
<td>Clients on 2.4GHz</td>
<td>Displays number of clients connected on 2.4 GHz.</td>
</tr>
<tr>
<td>Clients on 5 GHz</td>
<td>Displays number of clients connected on 5 GHz.</td>
</tr>
<tr>
<td>Channel 2.4</td>
<td>Displays 2.4 GHz, selected channel detail.</td>
</tr>
<tr>
<td>Channel 5</td>
<td>Displays 5 GHz, selected channel detail.</td>
</tr>
<tr>
<td>ETH0</td>
<td>Displays reference ethernet port status.</td>
</tr>
<tr>
<td>ETH1</td>
<td>Displays reference ethernet port status.</td>
</tr>
<tr>
<td>ETH2</td>
<td>Displays reference ethernet port status.</td>
</tr>
</tbody>
</table>
Command Prompt > `wclient`

`wclient` command will display detail listed below.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio</td>
<td>Displays radio detail on which reference client is connected. (2.4 GHz / 5 GHz)</td>
</tr>
<tr>
<td>SSID</td>
<td>Display SSID with which client is connected.</td>
</tr>
<tr>
<td>MAC</td>
<td>MAC address of client device.</td>
</tr>
<tr>
<td>IP</td>
<td>IP Address of the client device.</td>
</tr>
<tr>
<td>HOSTNAME</td>
<td>Displays Client device hostname.</td>
</tr>
</tbody>
</table>
Command Prompt > reset

The reset command is used Access Point to factory setup if it’s in standalone mode. The terminal will logout from session.

Note: If the access point is managed by Quantum RUDDER, reset command will not work. It will give warning.