



SWITCH CONFIGURATION USER GUIDE

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Document Abstract

This document explains how to Configure and Manage Switches with Quantum Rudder (Quantum Networks' Cloud Controller).

Supported Models

The guide supports the following listed models:

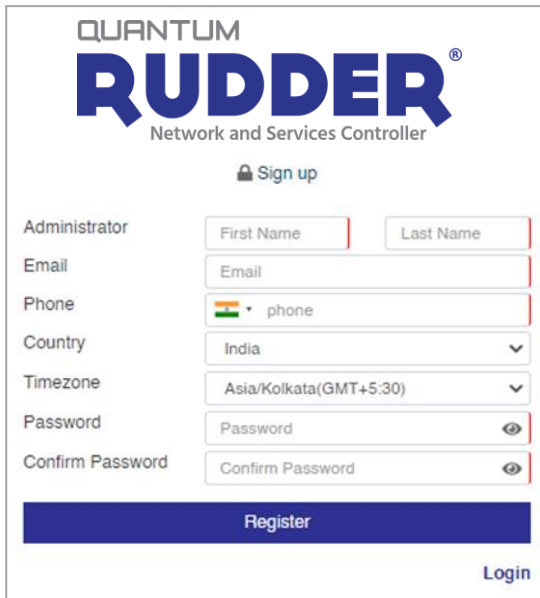
Model Series	Type
QN-CS-4810GF	Core Switch
QN-CS-1610GF	Core Switch
QN-CS-2410GF	Core Switch
QN-CS-241GF	Core Switch
QN-SW-225 Series	Enterprise Switches
QN-SW-230 Series	Enterprise Switches
QN-SW-325 Series	Enterprise Switches
QN-SW-330 Series	Enterprise Switches
QN-SW-425 Series	Enterprise Switches
QN-SW-430 Series	Enterprise Switches
QN-IS-225 Series	Industrial Switches
QN-IS-220 Series	Industrial Switches

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Account Setup on Quantum Rudder

- Browse <https://rudder.qntmnet.com>.
- Click "Create New Account" to sign up for a new account.

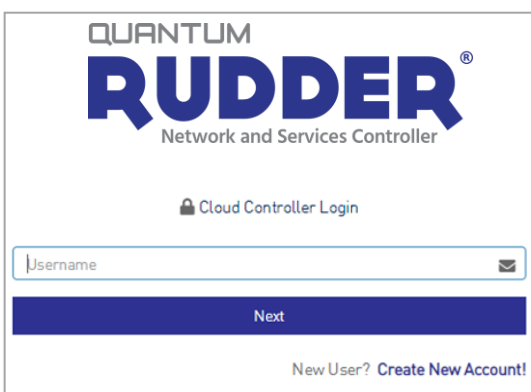


The screenshot shows the registration page for Quantum Rudder. At the top, the logo reads "QUANTUM RUDDER® Network and Services Controller". Below the logo is a "Sign up" button. The form fields are: Administrator (First Name and Last Name), Email, Phone (with a dropdown for country and a "phone" label), Country (dropdown menu), Timezone (dropdown menu), Password (with a toggle for visibility), and Confirm Password (with a toggle for visibility). A blue "Register" button is at the bottom, and a "Login" link is at the bottom right.

- Follow the steps as guided on the screen for Registration.
- Verify Quantum Rudder account from registered Email ID.
- Once the account gets validated, it turns the page to "Add License Key" (User will get the license key from the respective (Partner / Resource)).
- Account on Quantum Rudder (Quantum Networks' Cloud Controller) is now ready to use.

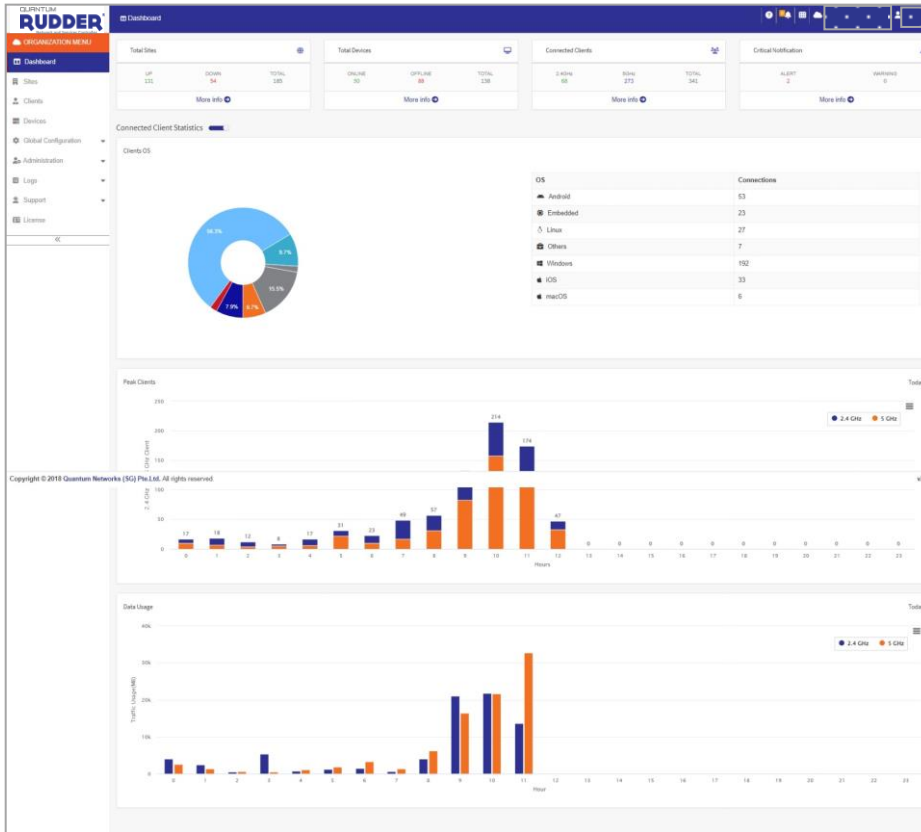
Login to Quantum Rudder Web Interface

- Go to <https://rudder.qntmnet.com>
- Enter credentials and click Login.



The screenshot shows the login page for Quantum Rudder. At the top, the logo reads "QUANTUM RUDDER® Network and Services Controller". Below the logo is a "Cloud Controller Login" button. There is a "Username" input field with a mail icon. A blue "Next" button is at the bottom. At the bottom right, there is a link: "New User? [Create New Account!](#)".

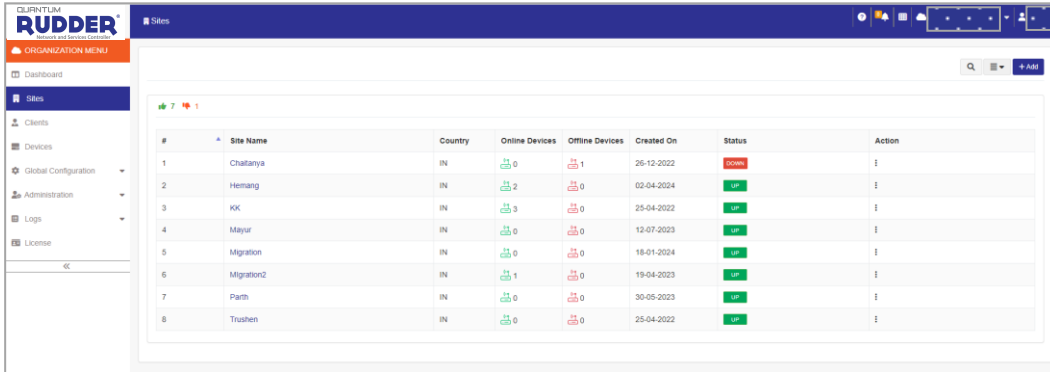
- Successful log-in redirects to the Quantum Rudder dashboard.



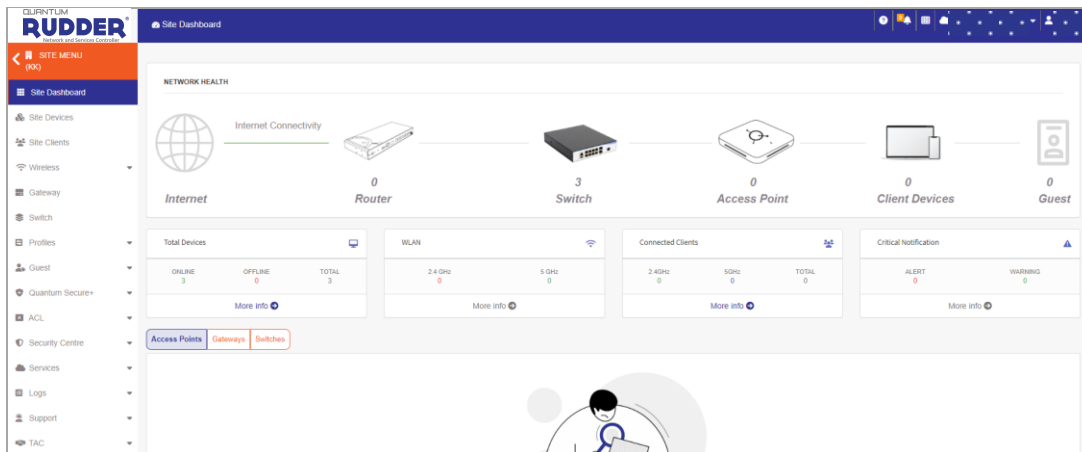
Upon successful login, users are redirected to the Quantum Rudder dashboard. The main screen allows the admin to perform various tasks. The top panel provides options for "Critical Alerts," "Edit Current Cloud," and managing "Cloud Admin" features.

Cloud Dashboard

From the left panel, select the "Site" option. All the created sites will be displayed on the dashboard.

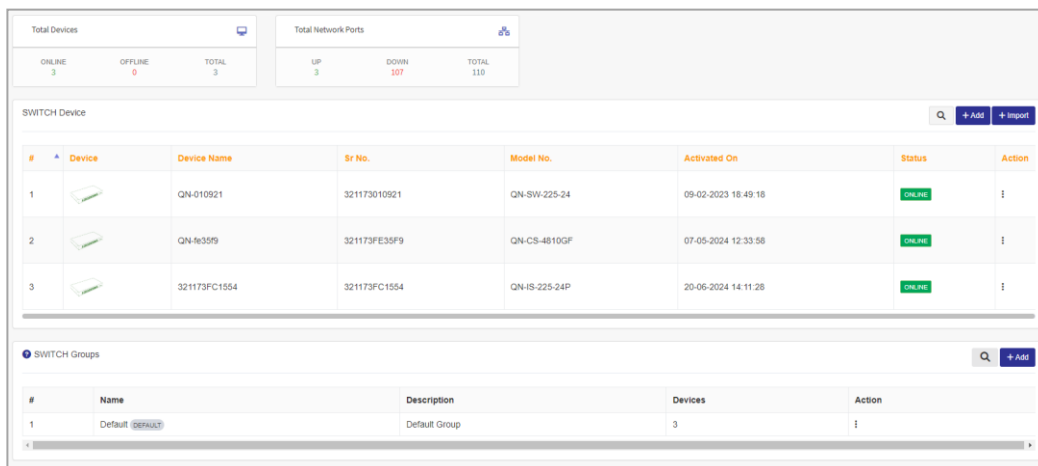


Click on the "Site Name" where the switch needs to be added. Users will be redirected to the selected site's configuration page.



Click on "Switch" to be redirected to the switch configuration page.

All the added switches will be displayed here, allowing users to update their configurations or add new switches.



Click on "Add" to add a new switch. A pop-up screen shown below will come up where you can add a new switch.

Add the device name, switch serial number and MAC address. Select the switch group from the dropdown menu if pre-configured in the cloud. For the first switch, select the "Default" group.

Add SWITCH Pre Provisioning ✕

Device Name

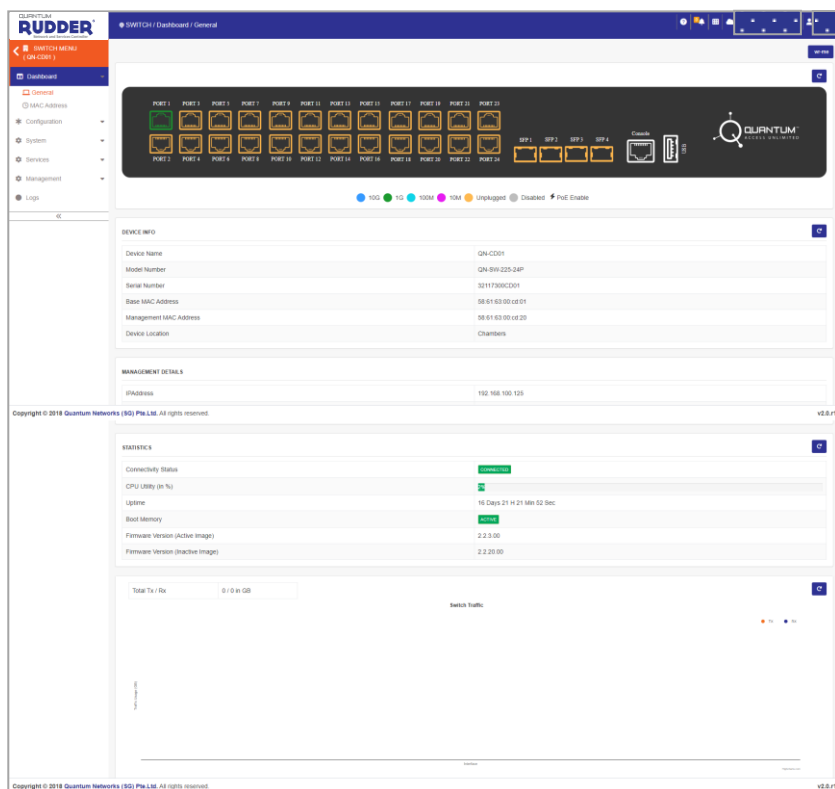
Serial Number

MAC

SWITCH Group

Dashboard

General



The main dashboard collects all switch device information, including the name, model with serial number and MAC address, management MAC address, device location, assigned IP address and switch statistics.

MAC Address

The MAC address table is where the switch stores information about devices connected to the network through its Ethernet ports.

#	VLAN	MAC Address	Interface type	Interface
1	1	30:E1:71:6A:4C:C6	Dynamic	gi1/0/1
2	1	58:61:63:00:14:79	Dynamic	gi1/0/1
3	1	58:61:63:00:B0:F4	Dynamic	gi1/0/1
4	1	58:61:63:00:C3:41	Dynamic	gi1/0/1
5	1	58:61:63:00:C3:60	Dynamic	gi1/0/1
6	1	58:61:63:00:C5:E1	Dynamic	gi1/0/1
7	1	58:61:63:00:C6:00	Dynamic	gi1/0/1
8	1	58:61:63:00:CD:01	Self	0
9	1	58:61:63:01:08:81	Dynamic	gi1/0/1
10	1	58:61:63:01:08:A0	Dynamic	gi1/0/1

Configuration

Devices

PARAMETERS	DESCRIPTION	DEFAULT VALUE	REMARKS
Device Name	Enter device name of your choice	None	None
Device Location	Enter location detail	None	None
Jumbo Frame	Enable jumbo frame, as per your requirement	Disable	Jumbo frames are Ethernet frames with a payload size over 1500 bytes, the MTU set by IEEE 802.3. Their maximum size is 9000 bytes.
SSH	Enable SSH for establish secure connection	Disable	The Secure Shell Protocol (SSH) is a cryptographic network protocol for secure access to network devices. It ensures communication security and integrity through strong encryption. This SSH option functions only for the data plane

Port Management

Users can manage all ports from this section. They can activate or deactivate ports and use the action option to edit and update port descriptions, set port speed, adjust duplex parameters and enable or disable port protection status.

#	Interface	Port Status	Admin Status	Speed	Duplex	Port Description	Port Type	Total TX/RX (GB)	Action
1	gi1/01	Plugged	Active	10G/10G	Full duplex		1G - Copper	3.68510.1188	!
2	gi1/02	Unplugged	Active	-/10G	-		1G - Copper	-	!
3	gi1/03	Unplugged	Active	-/10G	-		1G - Copper	-	!
4	gi1/04	Unplugged	Active	-/10G	-		1G - Copper	-	!
5	gi1/05	Unplugged	Active	-/10G	-		1G - Copper	-	!
6	gi1/06	Unplugged	Active	-/10G	-		1G - Copper	-	!
7	gi1/07	Unplugged	Active	-/10G	-		1G - Copper	-	!
8	gi1/08	Unplugged	Active	-/10G	-		1G - Copper	-	!
9	gi1/09	Unplugged	Active	-/10G	-		1G - Copper	-	!
10	gi1/10	Unplugged	Active	-/10G	-		1G - Copper	-	!
11	gi1/11	Unplugged	Active	-/10G	-		1G - Copper	-	!
12	gi1/12	Unplugged	Active	-/10G	-		1G - Copper	-	!
13	gi1/13	Unplugged	Active	-/10G	-		1G - Copper	-	!
14	gi1/14	Unplugged	Active	-/10G	-		1G - Copper	-	!
15	gi1/15	Unplugged	Active	-/10G	-		1G - Copper	-	!
16	gi1/16	Unplugged	Active	-/10G	-		1G - Copper	-	!
17	gi1/17	Unplugged	Active	-/10G	-		1G - Copper	-	!

SWITCH / Configuration / Port Management

PORT CONFIGURATION

Selected Port:

Port Description:

Speed:

Duplex:

Protected port

PARAMETERS	DESCRIPTION
Port Number	Will display port number count
<input type="checkbox"/>	Port selection box
Interface	Will display Interface (port) detail
Port Status	Displays the status of the port, indicating whether it is in use or free – i.e. Plugged or Unplugged
Admin Status	Displays the status of the port, indicating whether it is active or inactive
Speed	Indicates the configured port speed
Duplex	Indicates the configured Duplex status
Port Description	Displays the port description if specified by the user during configuration
Port Type	Displays the port type, indicating whether it is Copper or Fiber
Total TX/RX (GB)	Displays the port total transmit/ receive (in GBPS)
Action	Option with that user can edit port configuration

Port Configuration

PARAMETERS	DESCRIPTION	REMARKS
Selected Port	Will display selected port	
Port Description	User can add remarks for their reference (Optional)	
Speed	Set the respective port speed with selecting options from dropdown	
Duplex	Set port communication mode	Duplex parameter refers to the mode of communication between network devices, specifying how data transmission occurs. it can be Half-Duplex: In this mode, data transmission can occur in both directions, but not simultaneously. Full-Duplex: In this mode, data transmission can occur simultaneously in both directions.
Protected Port	Enable / Disable as per the requirement	To enhances network security and control by preventing certain ports from communicating directly with each other. This mode is particularly useful in environments where isolation between devices is necessary.

STP

Global Setting

STP Status

GLOBAL SETTING Save

Protocol:

BPDU Handling:

Default path cost:

BRIDGE SETTING Save

Priority:

Forward Delay: (Sec)

Max Age: (Sec)

Hello time: (Sec)

DESIGNATED ROOT

Root Bridge Id: 24576-90-3a-72-2c-a0-24

Root Address: 90-3a-72-2c-a0-24

Root Port: gi1/0/1

Root Path Cost: 2

Topology Changes Count: 1

Last Topology Changes: 16 Days 21 H 34 Min 25 Sec

PARAMETERS	DESCRIPTION	DEFAULT VALUE	REMARKS
GLOBAL SETTING			
Protocol	Select RSTP / Classic STP	RSTP	Classic STP (Spanning Tree Protocol) is a network protocol used to prevent loops in Ethernet networks by creating a spanning tree. Rapid Spanning Tree Protocol (RSTP) is an enhancement of the classic Spanning Tree Protocol (STP) designed for faster convergence and improved network stability.
BPDU Handling	Select flooding / filtering	flooding	Flooding is forwarded out all other ports. Filtering is not sent or received on the port.
Default Path Cost	Set Long / Short	Long	STP uses path cost as the metric to calculate the shortest path for electing the root port to reach the root bridge. In short mode, the path cost uses a 16-bit value, while in long mode, it uses a 32-bit value.
BRIDGE SETTING			
Priority	Set priority between 0 to 61440	32768 seconds	The root bridge in spanning tree protocol (STP) is identified based on the switch with the lowest value, indicating the highest priority.
Forward Delay (Sec)	Set Forward Delay between 4 to 30	15 seconds	The time a port waits before transitioning from STP learning and listening states to forwarding state is set in seconds.
Max Age	Set Max Age between 6 to 40	20 seconds	The time a switch waits without receiving STP configuration messages before attempting a reconfiguration is set in seconds.
Hello time (Sec)	Set Hello time between 2 to 20	2 seconds	The interval between STP configuration messages is set in seconds.

STP Table

#	Interface	Port Status	Port State	Port Priority	Port Path Cost	Port Fast	Port Root Guard	Action
1	g1/0/1	Active	Forwarding	128	20000	Disabled	Disabled	!
2	g1/0/2	Active	Disabled	128	2000000	Disabled	Disabled	!
3	g1/0/3	Active	Disabled	128	2000000	Disabled	Disabled	!
4	g1/0/4	Active	Disabled	128	2000000	Disabled	Disabled	!
5	g1/0/5	Active	Disabled	128	2000000	Disabled	Disabled	!
6	g1/0/6	Active	Disabled	128	2000000	Disabled	Disabled	!
7	g1/0/7	Active	Disabled	128	2000000	Disabled	Disabled	!
8	g1/0/8	Active	Disabled	128	2000000	Disabled	Disabled	!
9	g1/0/9	Active	Disabled	128	2000000	Disabled	Disabled	!
10	g1/0/10	Active	Disabled	128	2000000	Disabled	Disabled	!
11	g1/0/11	Active	Disabled	128	2000000	Disabled	Disabled	!
12	g1/0/12	Active	Disabled	128	2000000	Disabled	Disabled	!
13	g1/0/13	Active	Disabled	128	2000000	Disabled	Disabled	!
14	g1/0/14	Active	Disabled	128	2000000	Disabled	Disabled	!
15	g1/0/15	Active	Disabled	128	2000000	Disabled	Disabled	!
16	g1/0/16	Active	Disabled	128	2000000	Disabled	Disabled	!
17	g1/0/17	Active	Disabled	128	2000000	Disabled	Disabled	!

RSTP PORT CONFIGURATION

Selected Port: te1/0/1

Port Priority: 128

Port Cost: 2000000

Port Fast:

Port Root Guard:

STP is crafted to avert layer-2 loops by blocking certain ports on switches with redundant links, thus preventing broadcast storms. It allows for redundant links between switches, ensuring network redundancy.

PARAMETERS	DESCRIPTION
Port Number	Will display port number count
<input type="checkbox"/>	Port selection box
Interface	Will display Interface (port) detail
Port Status	Displays the status of the port, indicating whether it is Active or Deactivate
Port State	Will display port is on disable state or forwarding state.
Port Priority	Will display port priority.
Port Path Cost	Will display port path cost.
Port Fast	Will display port fast enable / disable.
Port Root Guard	Will display port root guard enable / disable.
Action	Option with that user can edit RSTP port configuration

Port Configuration

PARAMETERS	DESCRIPTION	REMARKS
Selected Port	Will display selected port	
Port Priority	Set port priority.	A setting on network switches that determines which ports are preferred for forwarding traffic in spanning tree protocols like STP and RSTP.
Port Cost	Set port cost.	Port cost is a value assigned to each port on a switch to indicate the cost of sending data through that port.
Port Fast	Enable / disable port fast.	Port fast is a feature in Spanning Tree Protocol (STP) designed to speed up port transition on a switch.
Port Root Guard	Enable / disable port root guard.	Port Root Guard is a security feature in Spanning Tree Protocol (STP) that helps prevent unauthorized switches from becoming the root bridge.

PoE

PoE delivers power over standard Ethernet cables (Cat5, Cat5e, Cat6, etc.) to network devices such as IP cameras, wireless access points, VoIP phones and other PoE-enabled devices. This is achieved by injecting power into the Ethernet cable at the switch or through a PoE injector, allowing a single cable to provide both data connection and electrical power to devices.

Click on "PoE". You will be redirected to the PoE settings page, where you can configure your PoE settings.

POE SETTINGS									
#		Interface	Port PoE State	Priority	Power Limit (Milliwatts)	Power status	Output Power Class	Output Power (Milliwatts)	Action
1	<input type="checkbox"/>	gi1/0/1	↑ ENABLE	Low	30000	Searching	Class 0	-	:
2	<input type="checkbox"/>	gi1/0/2	↑ ENABLE	Low	30000	Searching	Class 0	-	:
3	<input type="checkbox"/>	gi1/0/3	↑ ENABLE	Low	30000	Searching	Class 0	-	:
4	<input type="checkbox"/>	gi1/0/4	↑ ENABLE	Low	30000	Searching	Class 0	-	:
5	<input type="checkbox"/>	gi1/0/5	↑ ENABLE	Low	30000	Searching	Class 0	-	:
6	<input type="checkbox"/>	gi1/0/6	↑ ENABLE	Low	30000	Searching	Class 0	-	:
7	<input type="checkbox"/>	gi1/0/7	↑ ENABLE	Low	30000	Searching	Class 0	-	:
8	<input type="checkbox"/>	gi1/0/8	↑ ENABLE	Low	30000	Searching	Class 0	-	:
9	<input type="checkbox"/>	gi1/0/9	↑ ENABLE	Low	30000	Searching	Class 0	-	:
10	<input type="checkbox"/>	gi1/0/10	↑ ENABLE	Low	30000	Searching	Class 0	-	:
11	<input type="checkbox"/>	gi1/0/11	↑ ENABLE	Low	30000	Searching	Class 0	-	:
12	<input type="checkbox"/>	gi1/0/12	↑ ENABLE	Low	30000	Searching	Class 0	-	:
13	<input type="checkbox"/>	gi1/0/13	↑ ENABLE	Low	30000	Searching	Class 0	-	:
14	<input type="checkbox"/>	gi1/0/14	↑ ENABLE	Low	30000	Searching	Class 0	-	:
15	<input type="checkbox"/>	gi1/0/15	↑ ENABLE	Low	30000	Searching	Class 0	-	:
16	<input type="checkbox"/>	gi1/0/16	↑ ENABLE	Low	30000	Searching	Class 0	-	:
17	<input type="checkbox"/>	gi1/0/17	↑ ENABLE	Low	30000	Searching	Class 0	-	:

PARAMETERS	DESCRIPTION
Port Number	Will display port number count
<input type="checkbox"/>	Port selection box
Interface	Will display Interface (port) detail
Port PoE Status	PoE power enable / disable.
Priority	Will display priority Low / High / critical
Power Limit (Milliwatts)	Will display power limit.
Power Status	Will display power status.
Output Power Class	Will display output power classes.
Output Power (Milliwatts)	Will display output power in milliwatts.
Action	Option with that user can edit PoE configuration

VLAN

In a switching network, VLANs (Virtual Local Area Networks) are used to segment the network into different broadcast domains.

Click on "VLAN" to be redirected to the page where you can create multiple VLANs and configure their settings as needed.

VLAN							Add New
#	VLAN ID	VLAN Name	Action				
1	1	Default Vlan	⋮				
2	10	10	⋮				
3	20	20	⋮				
4	30	30	⋮				
5	40	40	⋮				

VLAN SETTINGS							↻
#	Interface	Untagged VLAN	Tagged VLAN	Port Type	Native VLAN	Action	
1	gi1/0/1	1	30, 40	Trunk port	1	⋮	
2	gi1/0/2	1	-	Access port	1	⋮	
3	gi1/0/3	1	-	Access port	1	⋮	
4	gi1/0/4	1	-	Access port	1	⋮	
5	gi1/0/5	1	-	Access port	1	⋮	
6	gi1/0/6	1	-	Access port	1	⋮	
7	gi1/0/7	1	-	Access port	1	⋮	
8	gi1/0/8	1	-	Access port	1	⋮	

For , Create new VLAN click on "Add New".

ADD VLAN ✕

VLAN

VLAN ID

[Save](#)

VLAN

PARAMETERS	DESCRIPTION
VLAN ID	Assign VLAN ID
VLAN Name	Assign name of VLAN

VLAN Setting

PARAMETERS	DESCRIPTION
Port Number	Will display port number count
Interface	Will display Interface (port) detail
Untagged VLAN	An untagged VLAN is a VLAN that does not include a tag in the Ethernet frame header. The frame is treated as belonging to the default VLAN assigned to the port (often referred to as the "native VLAN"). Used on Access Ports , do not include VLAN tags, typically carry traffic for a single VLAN.
Tagged VLAN	A tagged VLAN is a VLAN that includes a tag (usually an IEEE 802.1Q tag) in the Ethernet frame header. This tag identifies the VLAN to which the frame belongs. Used on Trunk Ports , include VLAN tags in the frame, carry traffic for multiple VLANs.
Port Type	Select port type Access or Trunk as per the requirement
Native VLAN	Shows Native Vlan.
Action	Option with that user can edit VLAN configuration

Layer-3

IP Configuration

Layer-3 IP configuration in a network switch involves setting up the switch to perform routing functions, allowing it to manage traffic between different VLANs or subnets.

Click on "IP Configuration" to be redirected to the page where you can add IP Configuration to set up the switch to perform routing functions.

#	Interface	IP Address type	IP Address	Subnet mask	Action
1	Vlan1	Static	192.168.100.125	255.255.255.0	⏪ Edit Delete
2	gi1/0/3	DHCP	0.0.0.0	255.255.255.255	⋮

Click on "Add" to set IP Interface and protocols.

ADD IP ADDRESS ✕

Interface eth port Vlans

gi1/0/1

Protocol DHCP

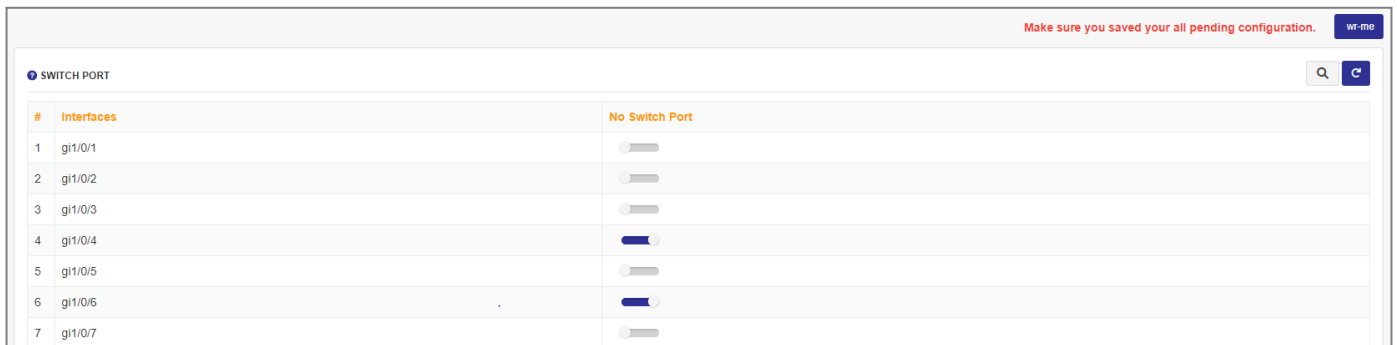
IP Address IP Address

Subnet

Gateway

Save

Switch Port / Route Only



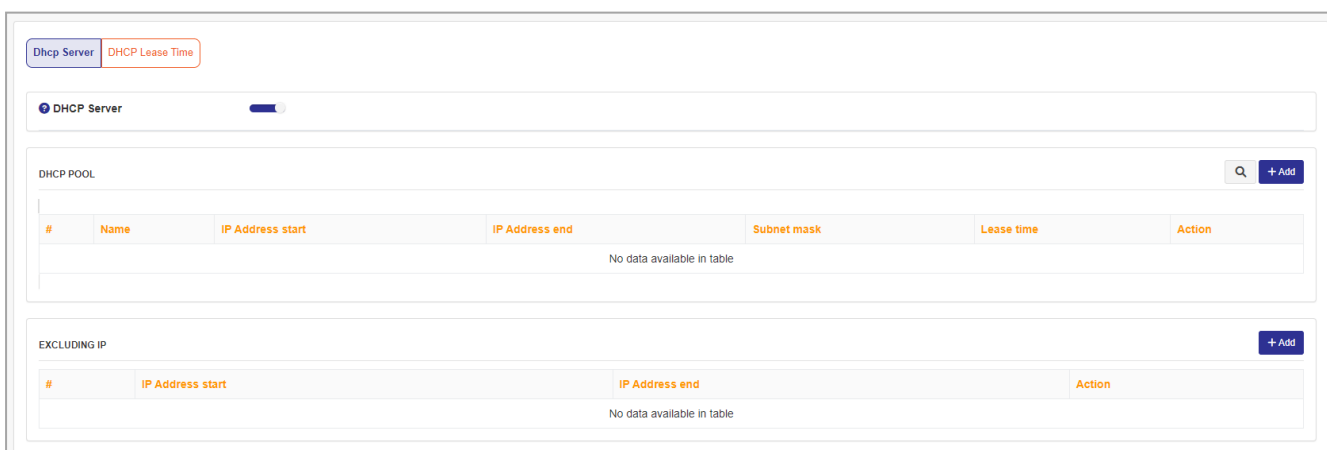
#	Interfaces	No Switch Port
1	gi1/0/1	<input type="checkbox"/>
2	gi1/0/2	<input type="checkbox"/>
3	gi1/0/3	<input type="checkbox"/>
4	gi1/0/4	<input checked="" type="checkbox"/>
5	gi1/0/5	<input type="checkbox"/>
6	gi1/0/6	<input checked="" type="checkbox"/>
7	gi1/0/7	<input type="checkbox"/>

Enabling this option transforms the Layer-2 port into a Layer-3 port, causing it to function as a router interface instead of a switch port.

DHCP

The DHCP (Dynamic Host Configuration Protocol) server function in network switching is crucial for automatically assigning IP addresses and other network configuration parameters to devices on a network. The DHCP server dynamically assigns IP addresses to devices (clients) on the network, ensuring each device gets a unique address without manual configuration.

By default, this option is disabled. Enable the DHCP option to dynamically assign IP addresses to devices connected to switches in the network when needed.



Dhcp Server DHCP Lease Time

DHCP Server

DHCP POOL

#	Name	IP Address start	IP Address end	Subnet mask	Lease time	Action
No data available in table						

EXCLUDING IP

#	IP Address start	IP Address end	Action
No data available in table			

DHCP Pool

Click on "Add" to add DHCP pool.

DHCP POOL

Name

IP address start

IP address end

Subnet Mask

Lease Time Infinity Limited

PARAMETERS	DESCRIPTION
Name	Assign Name
IP address start	Enter the starting IP address of the range to be assigned in DHCP pool
IP address end	Enter the last IP address of the range to be assigned in DHCP pool
Subnet Mask	Enter the subnet mask
Lease Time	Select Lease time

ADD EXCLUDING IP ✕

Excluding IP Start

Excluding IP End

Click on "Add" to add an Excluding IP address range in case of requirement.

PARAMETERS	DESCRIPTION
Excluding IP Start	Enter the starting IP address of the range to be excluded from the assigned DHCP pool.
Excluding IP End	Enter the last IP address of the range to be excluded from the assigned DHCP pool.

DHCP Lease Time

Dhcp Server
DHCP Lease Time

DHCP LEASE TIME 🔍

#	IP Address	Client Identifier	Lease Expiration	Type	State
No data available in table					

Bandwidth Control

Ingress Rate Limit

Ingress rate limiting in switches is a feature that controls the amount of incoming traffic to a network port. It helps prevent network congestion and ensures fair bandwidth distribution by limiting the rate at which packets are received.

#	Interface	Status	Rate Limit (KBits/sec)	Action
1	g1/0/1	Disabled	NA	⋮
2	g1/0/2	Disabled	NA	⋮
3	g1/0/3	Disabled	NA	⋮
4	g1/0/4	Disabled	NA	⋮
5	g1/0/5	Disabled	NA	⋮
6	g1/0/6	Disabled	NA	⋮
7	g1/0/7	Disabled	NA	⋮
8	g1/0/8	Disabled	NA	⋮
9	g1/0/9	Disabled	NA	⋮
10	g1/0/10	Disabled	NA	⋮

EDIT BANDWIDTH CONTROL

Interface: g1/0/1

Status:

Rate Limit (KBits/sec):

PARAMETERS	DESCRIPTION
Interface	Interface number
Status	Enable/Disable parameter
Rate Limit (KBits/sec)	Set rate limit.
Action	Option with that user can enable respective interface status and can set rate limit

Egress Rate Limit

#	Interface	Status	CIR (KBits/sec)	CBS (Bytes)	Action
1	g1/0/1	Disabled	NA	NA	⋮
2	g1/0/2	Enabled	15000	35000	⋮
3	g1/0/3	Disabled	NA	NA	⋮
4	g1/0/4	Disabled	NA	NA	⋮
5	g1/0/5	Disabled	NA	NA	⋮
6	g1/0/6	Disabled	NA	NA	⋮
7	g1/0/7	Disabled	NA	NA	⋮
8	g1/0/8	Disabled	NA	NA	⋮
9	g1/0/9	Disabled	NA	NA	⋮
10	g1/0/10	Disabled	NA	NA	⋮

EDIT BANDWIDTH CONTROL

Interface: g1/0/1

Status:

CIR (KBits/sec):

CBS (KBits/sec):

PARAMETERS	DESCRIPTION
Interface	Interface number
Status	Enable/Disable parameter
CIR (KBits/sec)	Set CIR.
CBS (Bytes)	Set CBS.
Action	Option with that user can enable respective interface status and can CIR / CBS

Security

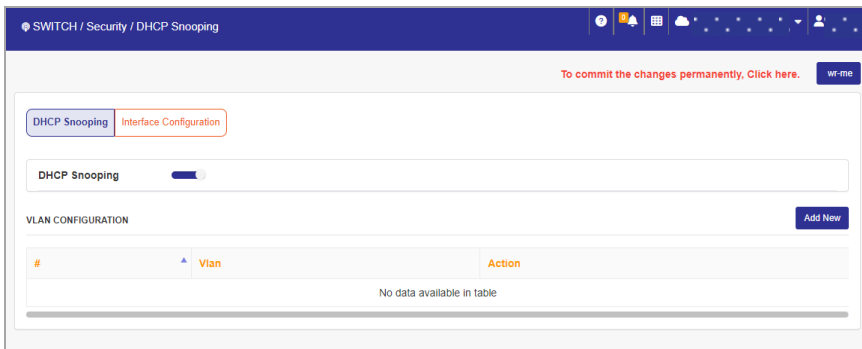
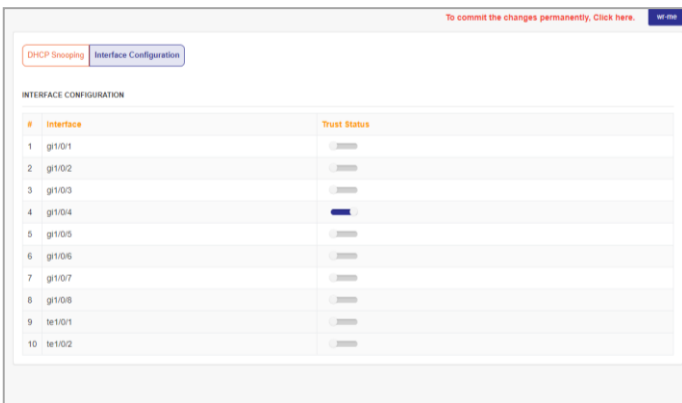
Firewall



Access rules in the Firewall can be configured using the CLI.

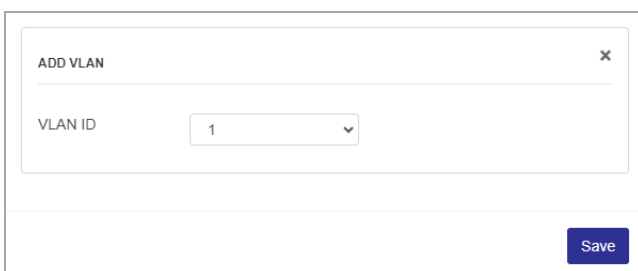
DHCP Snooping

DHCP Snooping is a security feature on network switches that helps protect against rogue DHCP servers and other DHCP-related attacks. It monitors and controls DHCP traffic on a Layer 2 network, ensuring that only authorized DHCP servers can assign IP addresses to clients.



To apply DHCP snooping on a particular VLAN.

Add VLAN.



Storm Control

Storm control in a network switch is a feature designed to prevent network disruptions caused by traffic floods, such as broadcast, multicast, or unicast storms. These storms occur when there is an excessive amount of broadcast, multicast, or unicast traffic, often caused by misconfigurations, loops, or malicious activity, and can overwhelm the switch, degrade network performance, or cause a complete network outage.

#	Interface	Status	Rate threshold (kbit/sec)	Rate threshold (%)	Passed counters	Stopped counters	Action	Action
1	gi1/0/1	Disabled	-	-	-	-	-	<< Edit
2	gi1/0/2	Disabled	-	-	-	-	-	⋮
3	gi1/0/3	Disabled	-	-	-	-	-	⋮
4	gi1/0/4	Disabled	-	-	-	-	-	⋮
5	gi1/0/5	Disabled	-	-	-	-	-	⋮
6	gi1/0/6	Disabled	-	-	-	-	-	⋮
7	gi1/0/7	Disabled	-	-	-	-	-	⋮
8	gi1/0/8	Disabled	-	-	-	-	-	⋮
9	te1/0/1	Disabled	-	-	-	-	-	⋮
10	te1/0/2	Disabled	-	-	-	-	-	⋮

EDIT STORM CONTROL [X]

Interface: gi1/0/1

Storm Control:

Rate Threshold (% / Kbps)

Kbps

1024

Save

Port Channel

A Port Channel (also known as an EtherChannel or Link Aggregation Group (LAG)) on a network switch is a logical interface that combines multiple physical interfaces (ports) into a single link, providing increased bandwidth, redundancy, and load balancing across the physical connections.

The screenshot shows the 'PORT CHANNEL' configuration page. At the top, there is a 'Load Balancing' dropdown menu and a 'Save' button. Below this, there are two tabs: 'Interface settings' and 'Port channel management'. The 'Port channel management' tab is active, displaying a table of interface settings.

#	Channel	Active Ports	Inactive Ports	Action
1	Po1	-	-	⋮
2	Po2	-	-	⋮
3	Po3	-	-	⋮
4	Po4	-	gi1/0/3,gi1/0/7,gi1/0/8,te1/0/1	<< Edit
5	Po5	-	-	⋮
6	Po6	-	-	⋮
7	Po7	-	-	⋮
8	Po8	-	-	⋮
9	Po9	-	-	⋮
10	Po10	-	-	⋮
11	Po11	-	-	⋮
12	Po12	-	-	⋮

The screenshot shows the 'Select Ports Channel' configuration page for Po4. It is divided into three sections: 'Select Ports', 'Available Interface', and 'Assigned Interface'. The 'Available Interface' section shows a list of 7 interfaces: gi1/0/1, gi1/0/2, gi1/0/4, gi1/0/5, gi1/0/6, and te1/0/1. The 'Assigned Interface' section shows a list of 3 interfaces: gi1/0/3, gi1/0/7, and gi1/0/8. A 'Save' button is located at the bottom right.

The purpose of port channel management is to control port channels that have been created.

To commit the changes permanently, Click here. wr-me

PORT CHANNEL Save

Load Balancing

Interface settings Port channel management

PORT CHANNEL MANAGEMENT

#	Channel	Channel status	Admin status	Speed	Duplex	Description	Action
1	Po1	Not Present	Active	-	-		⋮
2	Po2	Not Present	Active	-	-		⋮
3	Po3	Not Present	Active	-	-		⋮
4	Po4	Down	Active	10	-		⋮
5	Po5	Not Present	Active	-	-		⋮
6	Po6	Not Present	Active	-	-		⋮
7	Po7	Not Present	Active	-	-		⋮
8	Po8	Not Present	Active	-	-		⋮
9	Po9	Not Present	Active	-	-		⋮
10	Po10	Not Present	Active	-	-		⋮
11	Po11	Not Present	Active	-	-		⋮
12	Po12	Not Present	Active	-	-		⋮

wr-me

PORT CHANNEL CONFIGURATION Save Back

Selected Port Po3

Port Description

Negotiation

System Maintenance

Date and Time

CURRENT TIME & DATE

Current Time: 11:42:58

Current Date: 23/09/24

TIME & DATE SETUP

Manual:

New Time (hh:mm:ss):

New Date (yyyy:mm:dd):

PARAMETERS	DESCRIPTION
Current Date & Time	Will display the current Time and Date
Time & Date setup	Users can manually set the time and date, overriding the automatic settings with their manual configuration.

Maintenance

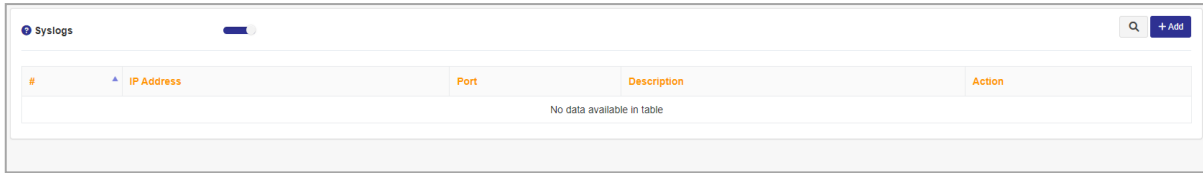
PRIMARY IMAGE

Current firmware version	2.2.3.00	
Download & upgrade	<input type="text" value="2.2.12.B1"/>	<input type="button" value="Upgrade Now"/>
Boot from secondary image	2.2.20.00	<input type="button" value="Reboot Now"/>

PRIMARY IMAGE	DESCRIPTION
Current firmware version	Will display the current firmware running on the switch
Download & upgrade	Select a file from the dropdown list of available firmware on Quantum Cloud, then click "Upgrade" to update the switch with the selected firmware
Boot from secondary image	Will display the previous firmware version before the switch was upgraded. Clicking on Reboot will revert the switch to this firmware

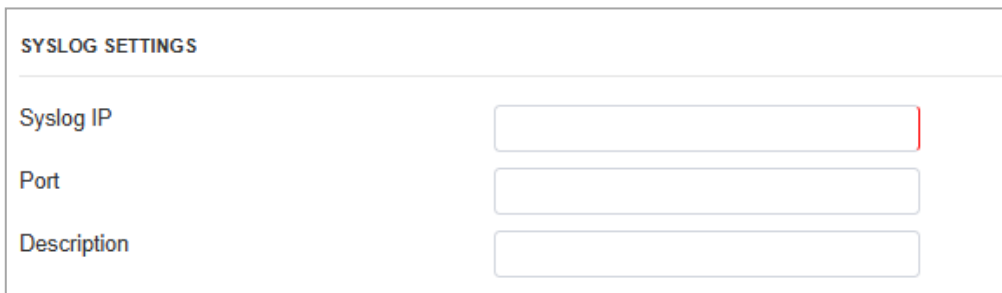
Services

Syslogs



#	IP Address	Port	Description	Action
No data available in table				

Click on "Add" to set Syslog IP.



SYSLOG SETTINGS

Syslog IP

Port

Description

Syslog allows network administrators to collect and store logs from multiple devices in a centralized location. This makes it easier to monitor and analyze network activity and identify potential issues.

Management

Users

#	Name	Privilege	Action
1	admin	Super user	:

Click "Add" to create a user and assign different rights according to the required role.

ADD USER ✕

Username

User Privilege

Password

Confirm Password

Diagnostics

Ping

PING

Connections:

Destination:

PING RESULT GOES BELOW

Ping (Packet Internet Groper) is a network administration tool used to test the reachability of a host on an Internet Protocol (IP) network.

Traceroute

TRACEROUTE

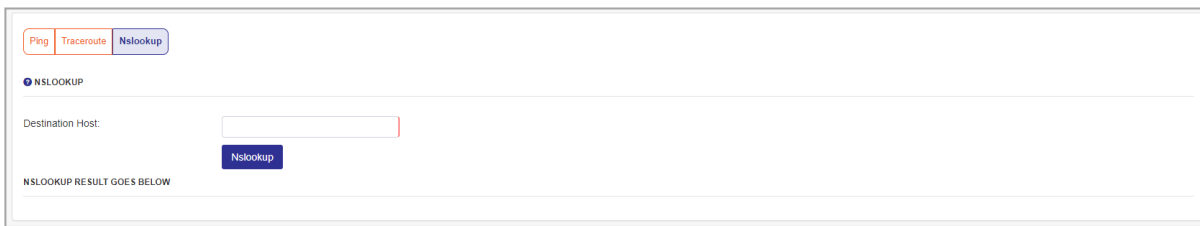
Connections:

Destination:

TRACEROUTE RESULT GOES BELOW

Traceroute is a network diagnostic command used to display potential routes (paths) and measure the transit delays of packets across an Internet Protocol (IP) network.

Nslookup



The screenshot shows a web-based interface for the Nslookup tool. At the top, there are three tabs: 'Ping', 'Traceroute', and 'Nslookup', with 'Nslookup' being the active tab. Below the tabs, there is a section titled 'NSLOOKUP'. Underneath, there is a label 'Destination Host:' followed by an empty text input field. To the right of the input field is a blue button labeled 'Nslookup'. Below the input field and button, there is a line of text that reads 'NSLOOKUP RESULT GOES BELOW'.

NSlookup is a command-line tool used in network administration to query the Domain Name System (DNS). It retrieves information such as the mapping between domain names and IP addresses or other DNS records.

Startup Config

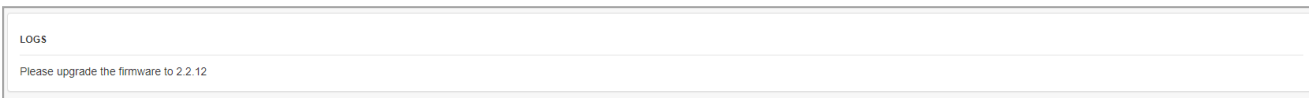
The "startup configuration" (or "startup config") is the configuration file stored in the non-volatile memory of the device. This file includes the initial settings and parameters the switch will use upon booting up.



The screenshot shows a web-based interface for the Startup Config page. At the top right, there is a small blue button labeled 'vrf-mc'. Below this, there is a section titled 'STARTUP CONFIG'. Underneath, there is a line of text that reads 'Please upgrade the firmware to 2.2.12'.

Logs

Network switch logs are records of events and activities that occur on the device.



The screenshot shows a web-based interface for the Logs page. At the top, there is a section titled 'LOGS'. Underneath, there is a line of text that reads 'Please upgrade the firmware to 2.2.12'.