



QUANTUM[®]
ACCESS UNLIMITED

QUANTUM COLLAB

**COLLAB Configuration Guide
(Access Point in Bridge Mode)**



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Prerequisites

- Existing Network Gateway IP, Subnet Mask, and VLAN.
- Need to bypass RADIUS IP, authentication and accounting port (UDP 1812, 1813 and TCP 80, 443 in case of QN COLLAB) from firewall policy.

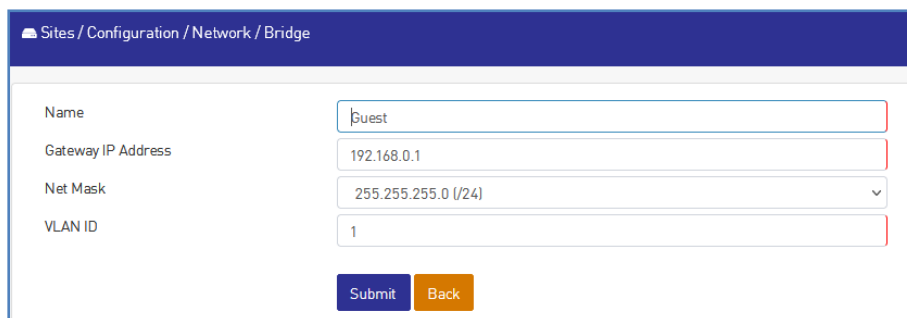
Configuration Steps

- Go to particular site.
- Create a Bridge Profile.
- Create Authentication Profile.
- Create MAC Whitelist Profile.
- Create Hotspot Profile.
- Create Hotspot SSID.

Create a Bridge Profile

Select the site:

- Go to **Configuration > Network > Bridge**, click **“Add”**. Below screen appears.



Sites / Configuration / Network / Bridge

Name: Guest

Gateway IP Address: 192.168.0.1

Net Mask: 255.255.255.0 (/24)

VLAN ID: 1

Submit Back

When WLAN access type is selected as Hotspot (WISPr) or Guest access and Routing option selected as “Bridge to WAN” this profile needs to be defined.

Configuration Parameter:

Parameter	Description
Name	Type a profile name of your choice.
Gateway	Assign Gateway IP Address.
Net Mask	Assign Net Mask.
VLAN ID	Assign VLAN ID on which this profile will apply.



Create Authentication Profile

- Go to **Configuration > Authentication > click “Add”**. Below screen appears.

Configuration Parameter:

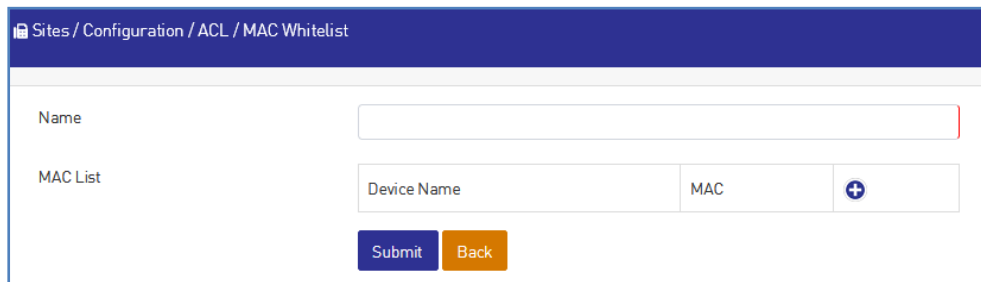
Parameter	Description
Name	Name of Authentication Profile.
Description	Detail for reference.
AUTHENTICATION SERVER	
Server IP Address	Authentication server primary IP address.
Secondary Server IP Address	Authentication server secondary IP address.
Authentication Port	Authentication port provided by Hotspot service provider.
Shared Secret	Shared Secret provided by Hotspot service provider.
Confirm Shared Secret	Confirm shared Secret provided by Hotspot service provider.
ACCOUNTING SERVER	
Server IP Address	Accounting server primary IP address.
Secondary Server IP Address	Accounting server secondary IP address.
Authentication Port	Accounting port provided by Hotspot service provider.
Shared Secret	Shared Secret provided by Hotspot service provider.
Confirm Shared Secret	Confirm secret provided by Hotspot service provider.



Create MAC Whitelist Profile

With Whitelisting- Devices get access without authentication. To create a profile

- Go to **Configuration >ACL > MAC Whitelist**, click “**Add**”. Below screen appears.



The screenshot shows a web interface for configuring a MAC Whitelist profile. The breadcrumb path is "Sites / Configuration / ACL / MAC Whitelist". There is a text input field for "Name". Below it is a table for "MAC List" with columns for "Device Name" and "MAC", and a plus sign icon to add entries. At the bottom are "Submit" and "Back" buttons.

Configuration Parameter:

Parameter	Description
Name	Profile name.
MAC List	Add MAC addresses to be whitelisted.



Create Hotspot Profile

- Go to **Configuration > Hotspot > click "Add"**. Below screen appears.

Configuration Parameter:

Parameter	Description
Name	Name of Hotspot Profile.
Description	Detail for reference.
CAPTIVE PORTAL	
Portal URL	Captive portal (splash page) redirection URL.
Portal Secret	User define field- same as configured in COLLAB.
Confirm Portal Secret	User define field- same as configured in COLLAB.
USER SESSION	
Session Timeout (second)	Assign time limit after which user will get disconnects and required to login again.
Ideal Timeout (second)	It's a period of inactivity from user. When there is no traffic from the user, once the timeout is reached, user will be disconnected from the Hotspot.
NETWORK SETTINGS	
DNS Domain	Use this option to Domain name for the Hotspot.
NAS ID	Enter the Network Access Server identifier of this device. The NAS-ID parameter is sent in RADIUS access and accounting request messages.
WALLED GARDEN	
Auth Exception	Use this option to allow domains which can be accessed by users without Authentication. Clients accessing these domains will not be redirected to the splash page.
Enable MAC Whitelist	Selected list devices will be whitelisted and allow getting access without authentication.



Create Hotspot SSID

- Go to **Configuration > Wireless** > click **"Add"**. Below screen appears.

The screenshot shows the Rudder configuration interface for creating a Hotspot SSID. The interface is divided into several sections:

- GENERAL SETTING**:
 - WLAN Name: HotspotSSID
 - SSID: HotspotSSID
 - SSID Description: (empty)
 - Enable SSID:
 - Broadcast SSID:
 - Client Isolation:
 - Radio: 2.4 GHz 5 GHz
- METHOD**:
 - Access Type: Hotspot (WISPr)
 - Authentication Method: Open
 - Authentication Profile: COLLABAUTH
 - Hotspot Profile: COLLAB
- SECURITY SETTINGS**:
 - Encryption Method: None
- NETWORK SETTINGS**:
 - Routing Option: Bridge To WAN
 - Bridge Profile: Guest
 - VLAN: 1
- ADVANCE WIRELESS SETTINGS**:
 - NAS ID: (empty)
 - NAS ID Delimiter: Colon
 - NAS Request Timeout: 10 Seconds
 - NAS Max Number of Retries: 4 Times
 - Called Station ID: WLAN BSSID AP MAC

At the bottom, there are expandable sections for **ADVANCE WIRELESS SETTINGS**, **DHCP SETTINGS**, and **ACL/SECURITY SETTINGS**, each with a plus sign. At the very bottom, there are **Submit** and **Back** buttons.



Configuration Parameter:

Parameter	Description
GENERAL SETTING	
WLAN Name	This Wireless LAN name is a unique name for management purposes only and is not visible to wireless clients.
SSID	The SSID name that is visible by the wireless clients (Network). SSID can contain up to 32 alphanumeric characters and are case-sensitive.
SSID Description	Detail for reference.
Enable SSID	To enable a Broadcasting SSID. Choose Yes/No checkbox to enable/disable the SSID.
Broadcast SSID	Choose Yes/No checkbox to enable/disable the Broadcasting SSID. By selecting Yes the SSID name is visible to the wireless Clients and will be able to connect to the SSID. By selecting No the SSID name is not visible to the wireless Clients and is in Hidden mode and can add connect to the correct SSID required by the user.
Client Isolation	Choose Yes/No checkbox to prevent wireless clients from communicating to each other. Wireless client isolation enables subnet restrictions for connected clients. Click Enable if you want to prevent wireless clients associated with the same AP from communicating with each other locally.
Radio	Enable required Radio channels.
METHOD	
Access Type	Select Hotspot (WISPr) (Before configuring Access Type as Hotspot (WISPr), create Authentication Profile and Hotspot Profile).
Authentication Method	Open (Any encryption method can be used. It allows you to configure a WPA2 or WPA-Mixed or "none" based encryption. By Choosing a WPA or WPA-Mixed, you can then enter a passphrase or key text of our choice).
SECURITY SETTING	
Encryption Method	Choose encryption method WPA2, None or WPA-Mixed.
Algorithm	Select AES – in case of Encryption Method is selected to WPA2.
Key	Set PW in case of WPA2.
Other options	Will remain as default-inactive.
ADVANCED NETWORK SETTING	
Routing Option	Use this option to select routing option as "Bridge To WAN" or "NAT To WAN". Select as "Bridge To WAN".
Bridge Profile	Select predefined Bridge profile.
VLAN	Auto populate with selected Bridge profile.
ADVANCE RADIUS SETTING	
NAS ID	Select AP_MAC.
NAS ID Delimeter	Select MAC format supported by Hotspot service provider.
NAS Request Timeout	Will remain as default.
NAS Max Number of Retries	Will remain as default.
Called Station ID	Select AP MAC.

