*Edge*Switch®

Configuration Interface

Release Version: 1.8

USER GUIDE

Table of Contents

Chapter 1: Overview

Introduction

This User Guide is designed to provide details about how to set up and use the EdgeSwitch® Configuration Interface, version 1.8 or above. This interface manages the EdgeSwitch and EdgeSwitch X models, which this User Guide will collectively refer to as EdgeSwitch.

The EdgeSwitch XP models use a different user interface. This is described in the EdgeSwitch XP User Guide, which is available at: **downloads.ubnt.com/edgemax**
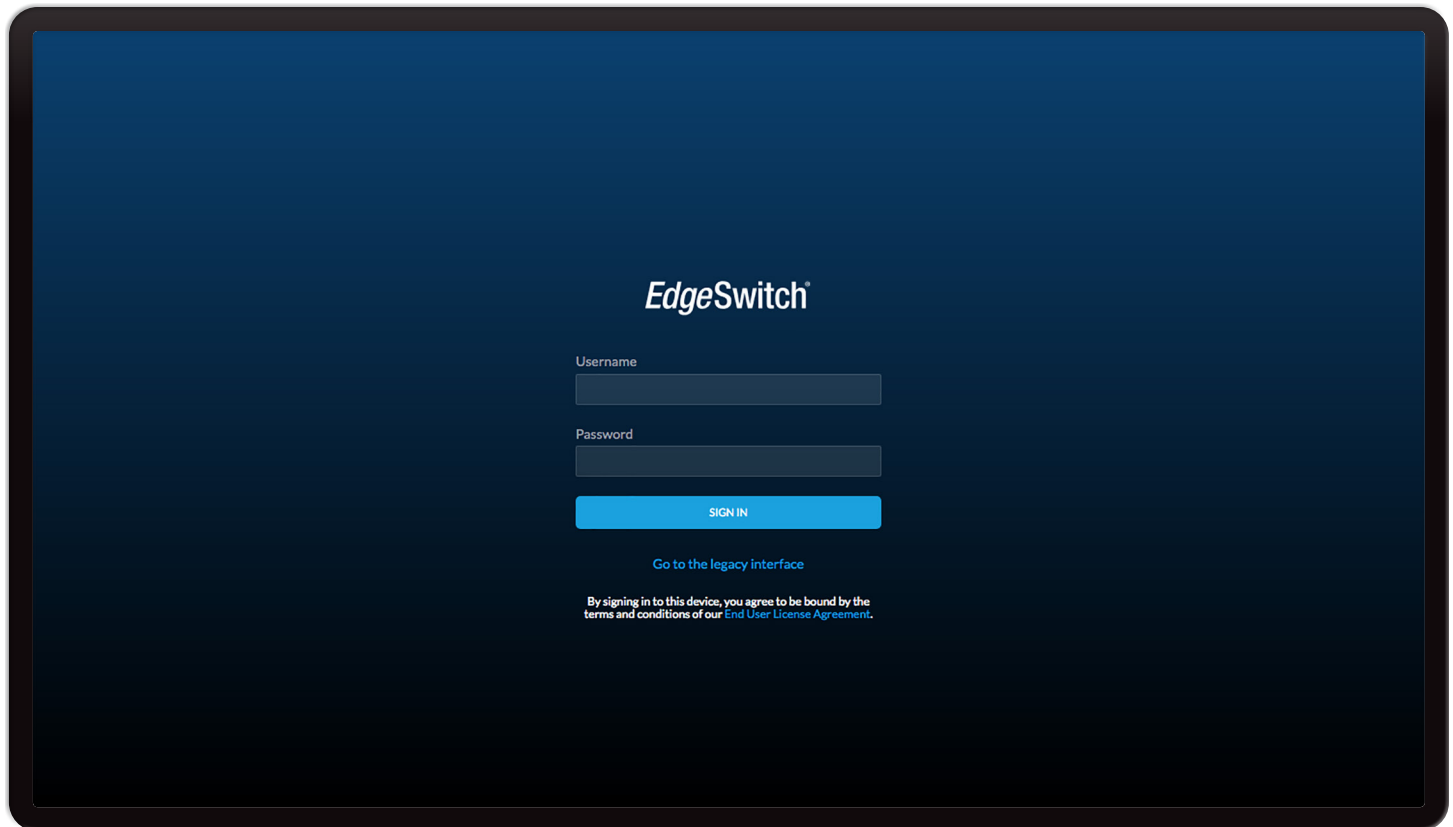
Configuration

This intuitive interface allows you to conveniently manage your EdgeSwitch using your web browser. There are two versions available; however, this User Guide describes the default, which is the new UI with a more graphical interface. The legacy UI is still available as an option and is described in the EdgeSwitch Administration Guide, which is available at: **downloads.ubnt.com/edgemax**

You can also manage your device using the Ubiquiti® Network Management System, UNMS™, which lets you configure, monitor, upgrade, and back up your devices using a single software application. To get started, go to: **unms.com**

Configuration Interface System Requirements

• Linux, Mac OS X, or Microsoft Windows
• Web Browser: Google Chrome, Mozilla Firefox, or Apple Safari

Chapter 2: Navigation

The EdgeSwitch uses an advanced operating system accessed through a simple and intuitive user interface for convenient configuration and management via a web browser. This interface is referred to as the Configuration Interface or UI (User Interface).

There are two versions of the Configuration Interface. The new one is described in this User Guide. The previous one is described in the EdgeSwitch Administration Guide, which is available at: **downloads.ubnt.com/edgemax**

The new Configuration Interface is designed for basic configuration of the EdgeSwitch. If you want to configure advanced settings via the old Configuration Interface or CLI, then please be aware that these advanced settings may interfere with the proper function of the new Configuration Interface, and vice versa.

Note: Do NOT make configuration changes using both the new interface and old interface/CLI – this is NOT supported.

Accessing the Configuration Interface

The EdgeSwitch is set to *DHCP* by default, so it will try to automatically obtain an IP address. If that fails, then it will use the default fallback IP address, *192.168.1.2*. Proceed to the appropriate section, *DHCP* or **"Fallback IP Address" on page 4**:

DHCP

Use one of the following methods:

• Set up the DHCP server to provide a specific IP address to the EdgeSwitch based on its MAC address (on the label).

• Let the EdgeSwitch obtain an IP address and then check the DHCP server to see which IP address was assigned.

To log in, follow these steps:

1. Launch your web browser. Type the appropriate IP address in the address field. Press **enter** (PC) or **return** (Mac).

2. Enter **ubnt** in the *Username* and *Password* fields. Click **Sign In**. (When you sign in, you agree to accept the Ubiquiti License Agreement.)
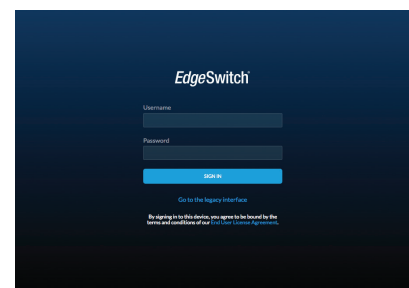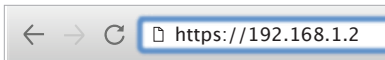

Note: To use the previous Configuration Interface, click **Go to the legacy interface**.

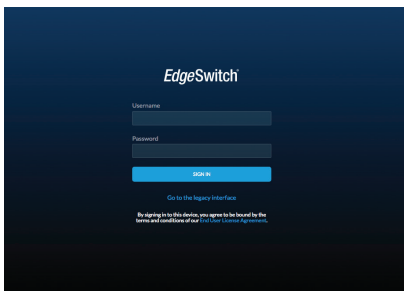The EdgeSwitch Configuration Interface will appear, allowing you to customize additional settings as needed.

You can also manage your device using the Ubiquiti Network Management System. UNMS lets you configure, monitor, upgrade, and back up your devices using a single application. Get started at **www.unms.com**

Fallback IP Address

1. Ensure that your computer (or other host system) is connected to the EdgeSwitch.

2. Configure the Ethernet adapter on your host system with a static IP address on the 192.168.1.x subnet.

3. Launch your web browser. Type the appropriate IP address in the address field (*192.168.1.2* is the default fallback IP address). Press **enter** (PC) or **return** (Mac).
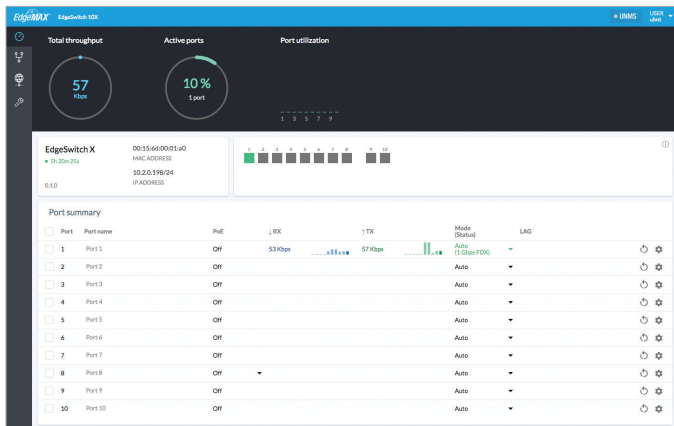

4. Enter **ubnt** in the *Username* and *Password* fields. Click **Sign In**. (When you sign in, you agree to accept the Ubiquiti License Agreement.)
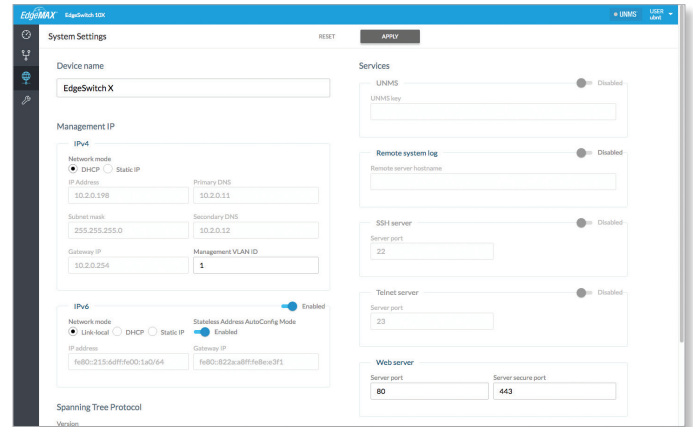

> Note: To use the previous Configuration Interface, click **Go to the legacy interface**.

5. The EdgeSwitch Configuration Interface will appear. Click the **System Settings** tab.

6. Change the *IP Address* to a unique IP address. Click **Apply**.

> Note: If you change the IP settings, then the session will be cut off, and you will need to reconnect to the EdgeSwitch using the new IP address.

Customize additional settings as needed.

You can also manage your device using the Ubiquiti Network Management System. UNMS lets you configure, monitor, upgrade, and back up your devices using a single application. Get started at **www.unms.com**

Common Interface Options

The common interface options are accessible from the top right of the Configuration Inteface.

• UNMS

• **"User" on page 5**

UNMS

You can manage your device using UNMS, which lets you configure, monitor, upgrade, and back up your devices using a single application. Click the **UNMS** button to visit: **unms.com**

The color of the circular icon represents the status of the connection to UNMS.

Color	Status
🟢	Connected to UNMS
🟡	Trying to Connect to UNMS (Refer to the on-screen tooltip for more information)
⚫	Disabled

User

Click **User** to view the *User* options:
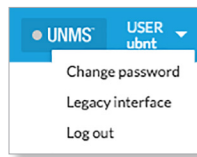
Change Password Click **Change Password** to make a change. The *Change Password* screen appears:

- **Old Password** Enter the previous password.
- **New Password** Enter the new password.
- **Confirm New Password** Enter the new password again.
- **Change Password** Click to save the new password.

Legacy Interface Click to use the previous Configuration Interface.

Log Out Click to manually log out of the EdgeSwitch Configuration Interface.

Interface Screens

The Configuration Interface contains four main screens, each of which provides a web-based management page to configure a specific aspect of the EdgeSwitch. This User Guide covers each main screen with a chapter. For details on a specific screen, refer to the appropriate chapter.

- **Dashboard** **"Dashboard" on page 7** displays status information and statistics for the EdgeSwitch and each port. You can also configure port settings and Link Aggregation Groups (LAGs).
- **VLANs** **"VLANs" on page 13** configures Virtual Local Area Networks (VLANs) for the various ports.
- **System Settings** **"System Settings" on page 15** configures system settings and services.
- **Tools** **"Tools" on page 21** offers the MAC forwarding table and ping test as network administration and monitoring tools.
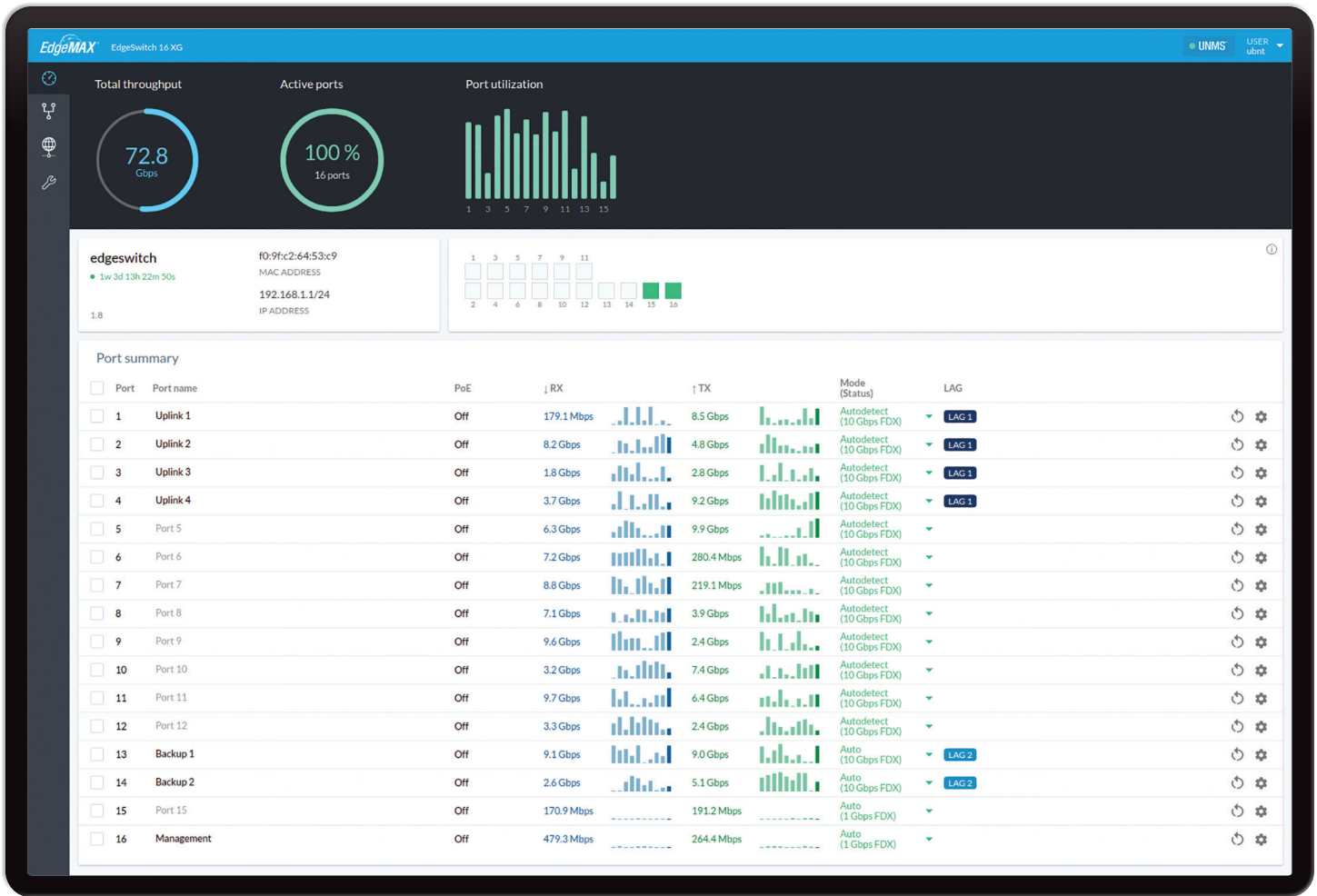
Chapter 3: Dashboard

The *Dashboard* screen displays a summary of the link status information, current values of the basic configuration settings, network settings and information, and traffic statistics. You can also configure port settings.

Total Throughput Displays the throughput as related to the currently active ports and their link status information. For example, if there is only one active port and it is set to 100 Mbps in full-duplex mode, then the maximum *Total Throughput* is 100 Mbps, shown with a complete circle. The throughput dimension (bps, kbps, Mbps) changes dynamically depending on the mean throughput value.
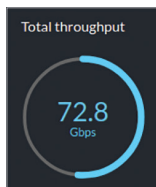

Active Ports Displays the percentage of usage (all ports combined).
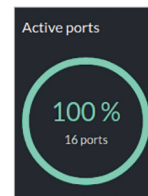
Port Utilization Displays the port utilization as related to each active port and its link status information. For example, if there is only one active port and it is set to 100 Mbps in full-duplex mode, then the maximum *Port Utilization* is 100%, shown with a full bar to indicate the maximum theoretical utilization for the port's link state.
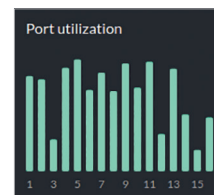
Device Status
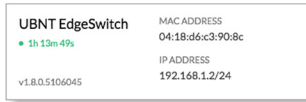
(Device Name) Displays the customizable name or identifier of the device. The *Device Name* (also known as hostname) is displayed in registration screens and discovery tools.

(Uptime) This is the total time the device has been running since the latest reboot (when the device was powered up) or software upgrade. The time is displayed in days, hours, minutes, and seconds.

(Firmware) Displays the firmware version of the device.

MAC Address Displays the Media Access Control (MAC) address of the device.

IP Address Displays the local IP address of the device.

Port Status
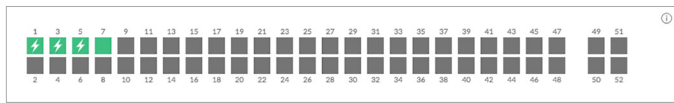
(Port) Displays the number of the port.

**Link Status** Displays the speed, activity status, and PoE feature of the port.

Color	Status
	10/100 Mbps Link
	10/100 Mbps Link with PoE
	1000 Mbps/1 Gbps Link
	1000 Mbps/1 Gbps Link with PoE
	10 Gbps Link
	Disabled
	Disconnected
	Disconnected with PoE

Click a port to access its advanced settings. Go to **"Advanced Settings" on page 10** for more information.

Port Summary
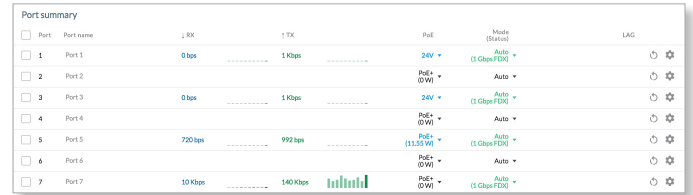
(checkbox) Select multiple ports for group configuration.
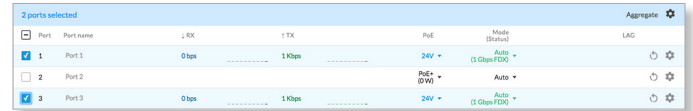

- **Aggregate** If you have multiple ports selected, click **Aggregate** to configure LAG options for them. The *LAG* window appears and displays the following:

   - **(Add)** Click an existing LAG to add the selected ports.
   - **(Create)** Click the *Create* + icon to create a new LAG. Go to **"Create or Edit a LAG" on page 9**.
   - **(Edit)** (Available if the selected ports belong to the same LAG.) Click the *Edit* ✎ icon to configure LAG settings. Go to **"Create or Edit a LAG" on page 9**.

   - **(Delete)** (Available if the selected ports belong to the same LAG.) Move the cursor over the current LAG ✅. When the check mark becomes an X, click it to remove the selected ports from the LAG.
   - **(Delete from current LAGs)** (Available if the selected ports belong to different LAGs.) Click the *Delete* 🗑 icon to remove the selected ports from the current LAGs.
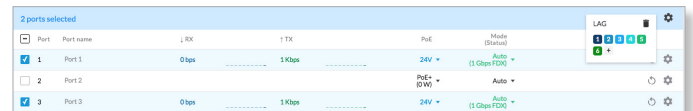
- **(Advanced Settings)** Configure settings for the selected ports. Go to **"Advanced Settings" on page 10** for more information.

Port Displays the number of the port.

Port Name Displays the name of the port. Click to change the name.

RX Displays the current RX throughput in blue.

TX Displays the current TX throughput in green.

PoE Displays the status and voltage of the *PoE* feature. Active PoE is displayed in blue. To disable PoE, select **Off**. To enable 24V passive PoE, select **24V**. The default is *PoE+*.

Mode (Status) Active mode is displayed in green. For RJ45 ports, *Auto* is enabled by default, and it applies only to speed and duplex, not PoE. For SFP/SFP+ ports, *Autodetect* is enabled by default. The EdgeSwitch automatically detects the speed of the inserted SFP/SFP+ module.

The EdgeSwitch automatically negotiates transmission parameters, such as speed and duplex, with its counterpart. In this process, the networked devices first share their capabilities and then choose the fastest transmission mode they both support.

To manually specify the maximum transmission link speed and duplex mode, select the appropriate option (options vary depending on the model). Full-duplex mode allows communication in both directions simultaneously. Half-duplex mode allows communication in one direction at a time, alternating between transmission and reception.

To achieve full performance with extra-long Ethernet cables, ensure that you use Cat 6-qualified cables and interconnects.

LAG A port channel, also known as a Link Aggregation Group (LAG), combines multiple links into a single logical link (single IP address) for load balancing and/or redundancy. You can have up to 8 ports in a LAG, and you can create up to 32 LAGs per EdgeSwitch. If a port is part of a LAG, its LAG number is displayed.

Click the *Add LAG* `+ LAG` icon to add the port to a LAG.

You have the following options:

- **(Add)** Click an existing LAG to add the port to it.
- **(Create)** Click the *Create* `+` icon to create a new LAG. Go to the *Create or Edit a LAG* section below for more information.
- **(Edit)** If a LAG is already selected, click the *Edit* ✎ icon to configure LAG settings. Go to the *Create or Edit a LAG* section below for more information.

- **(Delete)** Move the cursor over the current LAG ✅. When the check mark becomes an X, click it to remove the port from the LAG.
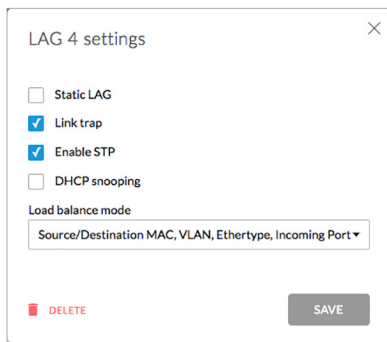
Create or Edit a LAG

To edit or create a new LAG, configure these options:

New LAG Settings

- **Static LAG** Dynamic LAGs use the Link Aggregation Control Protocol (LACP); all devices must use LACP. If any device does not support LACP, then you can configure a static LAG. If enabled, this LAG will be static and will not use LACP.
- **Link Trap** If enabled, a notification (SNMP trap) will be sent if the status of the link changes.
- **Enable STP** Enabled by default. Ethernet networks cannot have multiple active paths between switches (excluding aggregation such as LAG), as this causes a switching loop: broadcast and multicast traffic is amplified and repeated in a never-ending loop, disrupting the network. Spanning Tree prevents switching loops and allows for redundant interconnections between switches. Interfaces with redundant paths are put into STP blocking mode, leaving the port down unless the current best active path fails.

  Deselecting this option will disable all versions of spanning tree; however, this is not recommended, as it can leave the network susceptible to being taken down by an inadvertently created switching loop.
- **DHCP Snooping** DHCP snooping monitors DHCP messages between clients and servers and builds a database of trusted sources. If enabled, only DHCP server messages from trusted sources will be allowed.
- **Load Balance Mode** Load balancing distributes traffic load while preserving the packet order per flow. The algorithm can consider different packet attributes to determine the appropriate outgoing physical port to use. Select the appropriate option:
  - *Source/Destination MAC, VLAN, Ethertype, Incoming Port* (default)
  - **Destination MAC, VLAN, Ethertype, Incoming Port**
  - **Source/Destination MAC, VLAN, Ethertype, Incoming Port**
  - **Source IP and Source TCP/UDP Port Fields**
  - **Destination IP and Destination TCP/UDP Port Fields**
  - **Source/Destination IP and TCP/UDP Port Fields**

- **Delete** Click the *Delete* 🗑 DELETE icon to remove an existing LAG. Then click **OK** to confirm.
- **Save** Click to apply changes.

LAG 4 settings ✕

☐ Static LAG
☑ Link trap
☑ Enable STP
☐ DHCP snooping
Load balance mode
Source/Destination MAC, VLAN, Ethertype, Incoming Port ▾

🗑 DELETE   SAVE

(Powercycle) To power off the connected device for five seconds and then power it back on, click the *Powercycle* ↻ icon.
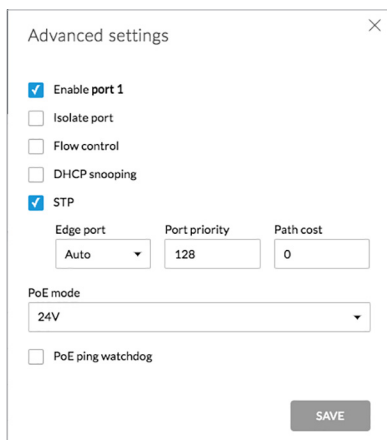
(Advanced Settings) To configure advanced settings, click the *Advanced Settings* ⚙ icon.

Advanced Settings

- **Enable Port** Enabled by default. Deselect to disable.

  📋 Note: Enabling/disabling this option only affects data traffic on a port. PoE functionality remains unaffected.

- **Isolate Port** Disabled by default. Select this option to mark this port as an isolated port. Isolated ports cannot communicate directly with any other isolated port.

Advanced settings ✕

☑ Enable **port 1**
☐ Isolate port
☐ Flow control
☐ DHCP snooping
☑ STP

Edge port   Port priority   Path cost
Auto ▾   128   0

PoE mode
24V   ▾

☐ PoE ping watchdog

                                SAVE

- **Flow Control** Disabled by default. Select this option to enable 802.3x Ethernet Flow Control. This should remain disabled, unless you have a specific requirement for 802.3x and understand its implications.
- **DHCP Snooping** Disabled by default. DHCP snooping monitors DHCP messages between clients and servers and builds a database of trusted sources. If enabled, only DHCP server messages from trusted sources are allowed.

- **STP** Enabled by default. Ethernet networks cannot have multiple active paths between switches (excluding aggregation such as LAG), as this causes a switching loop: broadcast and multicast traffic is amplified and repeated in a never-ending loop, disrupting the network. Spanning Tree prevents switching loops and allows for redundant interconnections between switches. Interfaces with redundant paths are put into STP blocking mode, leaving the port down unless the current best active path fails.

  Deselecting this option will disable all versions of spanning tree; however, this is not recommended, as it can leave the network susceptible to being taken down by an inadvertently created switching loop.

  - **Edge Port** Select **Auto**, **Enable**, or **Disable**. If enabled, designates this port as a port that connects to only a host device. The host device must not be connected to another switch or router. The *Edge Port* is always in the forwarding state and never undergoes the learning or blocking state. The default is *Auto*.
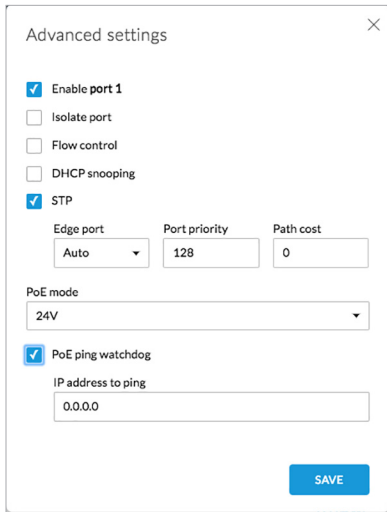
    📋 Note: Ensure that the *Edge Port* is connected to only a host device. If the *Edge Port* is connected to a switch or router (even indirectly through a host device), then this may cause a network loop.

  - **Priority** STP uses *Priority* as a tiebreaker when multiple ports have the same *Path Cost* value. The lower the value, the higher the priority. If multiple ports have the same *Path Cost* value, then STP chooses the port with the highest *Priority* (lowest value) as the active port (the others are blocked). If STP detects a network loop, then a port with higher *Priority* is less likely to be blocked. If multiple ports share the highest *Priority*, then STP enables the port with the lowest port ID. The *Priority* range is 0 (highest priority) to 255 (lowest priority).The default is *128*.

  - **Path Cost** STP uses *Path Cost* to determine the best path between devices. The lower the value, the higher the ranking. In most cases, specify lower values for ports with higher bandwidths, such as gigabit speeds, and specify higher values for ports with lower bandwidth. You can also specify lower values for ports you prefer to use. (*Path Cost* has precedence over *Priority*.) The default is *0*.

- **PoE Mode** Select the appropriate option: **Off**, **24V**, or **PoE+**. The default is *PoE+*, which is auto-sensing.

- **PoE Ping Watchdog** Disabled by default. *Ping Watchdog* is only for PoE-enabled ports. If enabled, it configures the device to continuously ping a user-defined IP address (it can be the internet gateway, for example). If it is unable to ping under the user-defined constraints, then the device will automatically turn off PoE on the port, and then turn it back on. This option creates a kind of "fail-proof" mechanism.

Ping Watchdog is dedicated to continuous monitoring of the specific connection to the remote host using the *Ping* tool. The *Ping* tool works by sending ICMP echo request packets to the target host and listening for ICMP echo response replies. If the specified number of replies is not received, the tool reboots the device.

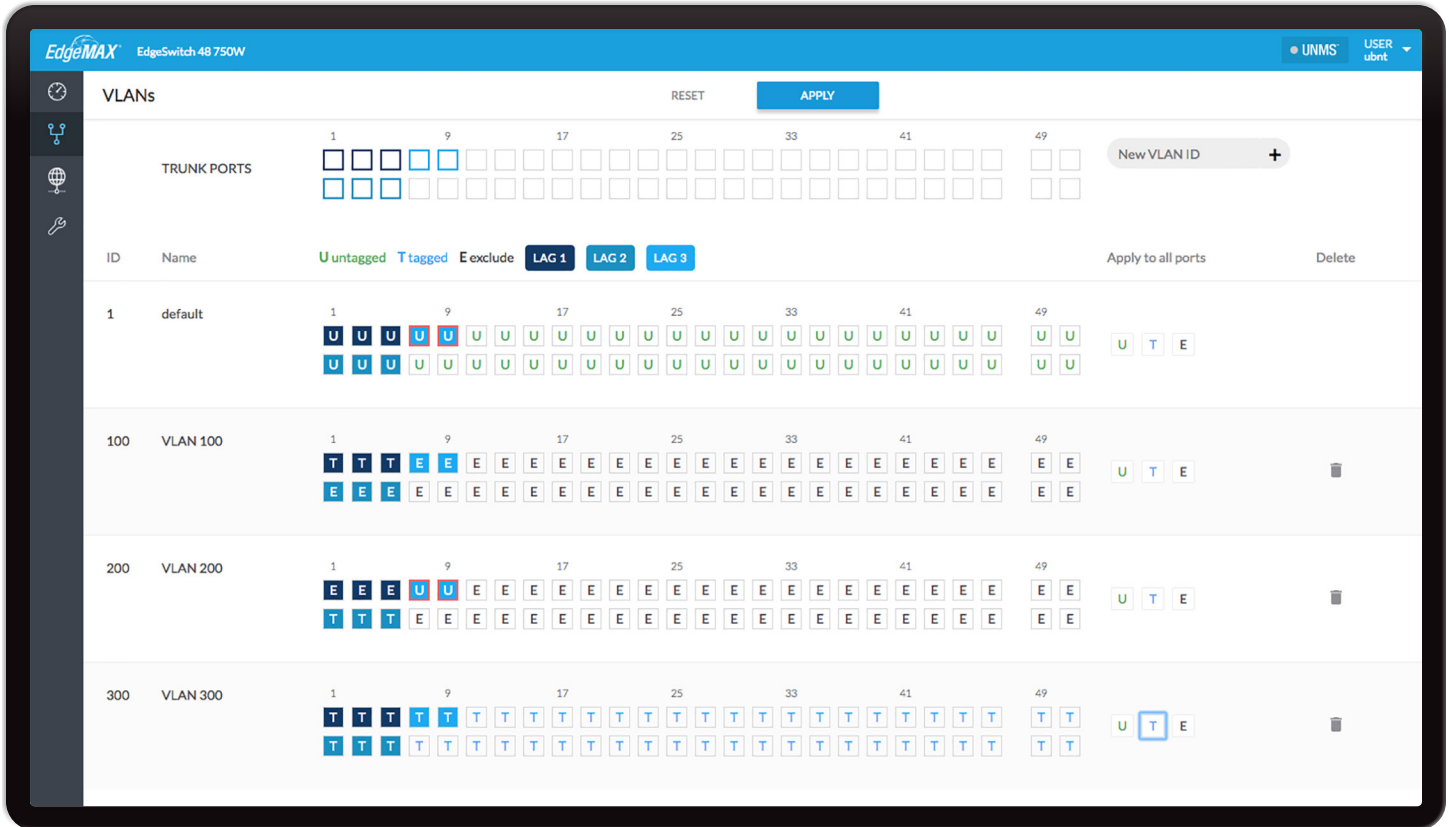- **IP Address to Ping** Specify the IP address of the target host to be monitored by *Ping Watchdog*.

- **Save** Click to apply changes.

Chapter 4: VLANs

The *VLANs* screen configures Virtual Local Area Networks (VLANs) and trunk ports.

Reset To cancel your changes, click **Reset**.

**Apply** To immediately save your changes, click **Apply**.

VLANs

All ports belong to VLAN1, which is enabled as a management VLAN by default. A port can belong to more than one VLAN.

Trunk Ports Trunk mode is disabled by default. Trunk ports carry both untagged and tagged traffic from multiple VLANs. Trunk ports are indicated by a dark gray background in the *Trunk Ports* section and by a thick outline in the *VLAN* sections below. If ports belong to a LAG, they are color-coded by LAG.

New VLAN ID To create a new VLAN, enter a unique VLAN ID from 2 to 4093 and click +.
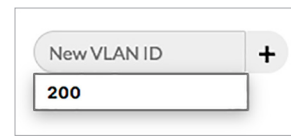

The new VLAN appears.

- **ID** Displays the ID number of the VLAN.

- **Name** Displays the name of the VLAN. Click to change the name.

- **(ports)** Displays the ports with the appropriate membership status indicator, as described below.

- *n* For each port, assign its membership status as a tagged or untagged member of this VLAN. You can also exclude a port from this VLAN.

  - **T (tag)** The port belongs to this VLAN, and VLAN tags are included on outgoing frames. Click the letter until it becomes a "T".

  - **U (untag)** The port belongs to this VLAN, and VLAN tags are excluded from outgoing frames. Click the letter until it becomes a "U".

- **E (exclude)** The port does not belong to this VLAN. Click the letter until it becomes an "E". If a port is configured as a trunk port, you can also use *E (exclude)* to exclude it from trunking.

Icon	Status
U	Untagged
T	Tagged
E	Exclude

If ports belong to a LAG, they are color-coded by LAG. For any LAG port, click the letter until it becomes a "U", "T", or "E". The other ports in the same LAG will be automatically assigned the same status.
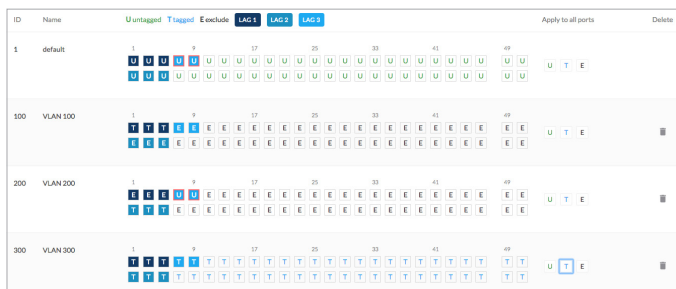
- **Apply to all ports** You can assign member status to all ports as a group. You have the following options:

  - **T (tag)** All ports are tagged members of this VLAN. All ports belong to this VLAN, and VLAN tags are included on outgoing frames. Click **T**.

  - **U (untag)** All ports belong to this VLAN, and VLAN tags are excluded from outgoing frames. Click **U**.

  - **E (exclude)** All ports do not belong to this VLAN. Click **E**.
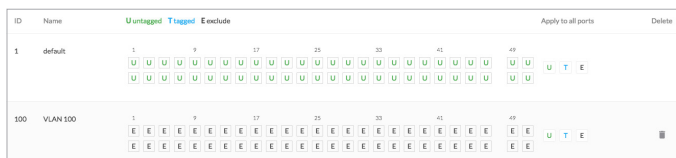
- **Delete** Click the *Delete* 🗑 icon to permanently remove the VLAN.

Chapter 5: System Settings

The *System Settings* screen allows you to configure and use the *Device Name*, *Management IP*, *Spanning Tree Protocol*, *Services*, and *System Actions*, including configuration backup and restore, as well as firmware update.

Reset To cancel your changes, click **Reset**.

Apply To immediately save your changes, click **Apply**.

Device Name

Device Name Specify the Device Name (hostname), which is the system-wide device identifier. The SNMP agent reports it to authorized management stations. The *Device Name* will be used in popular router operating systems, registration screens, and discovery tools.

Management IP

The *Management IP* settings configure the IP settings of the EdgeSwitch.

The *IP Address* and *Subnet Mask* are not mandatory for a Layer 2 device such as the EdgeSwitch; however, they must be configured if you want to manage the EdgeSwitch (and will not be using DHCP).

Configure the *Management VLAN ID* and then configure the appropriate section(s): IPv4 or IPv6.

Note: The *Management VLAN ID* is shared for IPv4 DHCP and static modes, as well as IPv6.

Management VLAN ID Specify the ID of the management VLAN. This VLAN must be configured in the list of VLANs; otherwise you may lose access. The default is *1*.

IPv4

Network Mode The EdgeSwitch can use a static IP address or obtain an IP address from its DHCP server.

- **DHCP** The local DHCP server assigns a dynamic IP address, netmask, gateway IP address, and DNS address to the EdgeSwitch.

- **Static** Assign static IP settings to the EdgeSwitch.

  Note: IP settings should be consistent with the address space of the EdgeSwitch's network segment.

- **IP Address** Specify the IP address of the EdgeSwitch. This IP will be used for device management purposes. The default is *192.168.1.2*.

- **Subnet Mask** When the subnet mask is expanded into its binary form, it provides a mapping to define which portions of the IP address range are used for the network devices and which portions are used for host devices. The netmask defines the address space of the EdgeSwitch's network segment. The default 255.255.255.0 (or "/24") netmask is commonly used on many Class C IP networks.

- **Gateway IP** Typically, this is the IP address of the host router, which provides the point of connection to the internet. This can be a DSL modem, cable modem, or WISP gateway router. The EdgeSwitch directs packets to the gateway if the destination host is not within the local network.

- **Primary DNS IP** Specify the IP address of the primary DNS (Domain Name System) server.

- **Secondary DNS IP** Specify the IP address of the secondary DNS server. This entry is optional and used only if the primary DNS server is not responding.

IPv6

Note: The *Management VLAN ID* setting is in the IPv4 section; however, it is shared for both IPv4 and IPv6.

Enabled/Disabled IPv6 is enabled by default.

Network Mode Configure the appropriate mode for the EdgeSwitch: **Link-local**, **DHCP**, **Static IP**, or **Stateless Address AutoConfig Mode**.

- **Link-local** A link-local address is intended for communication only within the local network. Link-local addresses have a prefix of *fe80::/64*.

- **DHCP** The local DHCPv6 server assigns a dynamic IP address, netmask, gateway IP address, and DNS address to the EdgeSwitch.

  Note: We do not recommend the *DHCP* option. The IP address may change, and you will need to use the *Discovery* tool from another Ubiquiti device or computer to discover the IP address of the EdgeSwitch. You can also reset the EdgeSwitch to its factory default settings. (Press and hold the **Reset** button for more than 10 seconds.) Its default *IP Address* is reset to an EUI-64 link-local address derived from its MAC address.

- **Static** Assign static IPv6 settings to the EdgeSwitch.

  Note: IP settings should be consistent with the address space of the EdgeSwitch's network segment.

- **IP Address** Specify the IPv6 address of the EdgeSwitch. This IP will be used for device management purposes. The default is an EUI-64 link-local address derived from its MAC address.
- **Gateway IP** Typically, this is the IPv6 address of the host router, which provides the point of connection to the internet. This can be a DSL modem, cable modem, or WISP gateway router. The EdgeSwitch directs packets to the gateway if the destination host is not within the local network.

- **Stateless Address AutoConfig Mode** Disabled by default. If enabled, the EdgeSwitch can acquire an IPv6 address through the IPv6 Neighbor Discovery Protocol (NDP) and the use of Router Advertisement messages.

Spanning Tree Protocol

For optimal performance, there should be a single active path between two networking devices in an Ethernet network. Spanning Tree Protocol (STP) provides redundant paths and prevents network loops that can create excessive traffic and slow down performance. STP calculates the best path for network traffic; if the best path fails, STP recalculates and finds the next best path.

Enabled by default, STP provides redundancy without network loops.

Version Select the version of STP to use: **MSTP**, **STP**, or **RSTP**. Multiple STP (MSTP) and Rapid STP (RSTP) are enhanced versions of STP. RSTP displays the following states: *Blocking*, *Learning*, and *Forwarding*. MSTP uses RSTP and groups VLANs together. When STP is selected, the EdgeSwitch sends STP packets. The default is *MSTP*.

Max Age Specify how long the EdgeSwitch saves a configuration message received on a port. If the EdgeSwitch does not hear any new configuration messages after the *Max Age* time interval, then the EdgeSwitch adapts and starts to reconfigure. The default is *20* seconds.

Hello Time Specify the time interval between configuration messages transmitted by the EdgeSwitch to other switches. The default is *2* seconds.

Forward Delay Specify how long the listening and learning states last before the EdgeSwitch forwards traffic. The default is *15* seconds.

Priority STP uses priority values to select a switch as the root switch of the spanning tree. Specify the *Priority* value of the EdgeSwitch. The default is *32768*.

Services

Configure the following services: *UNMS*, *Remote System Log*, *SSH Server*, *Telnet Server*, *Web Server*, and *SNTP Client*.

UNMS

Enabled/Disabled Disabled by default. Enabling this option activates UNMS access to the device.

- **UNMS Key** Enter the UNMS key, which helps to secure communication between the device and UNMS. For more information, go to: **ubnt.link/UNMS-Key**

Remote System Log

Every logged message contains at least a system time and host name. Usually a specific service name that generates the system event is also specified within the message. Messages from different services have different contexts and different levels of detail. Usually error, warning, or informational system service messages are reported; however, more detailed debug level messages can also be reported. The more detailed the system messages reported, the greater the volume of log messages generated.

Enabled/Disabled Disabled by default. If enabled, system log messages are sent to a remote server.

- **Remote Server Hostname** Enter the hostname of the remote server that receives syslog messages. Properly configure the remote host to receive syslog protocol messages.

SSH Server

Enabled/Disabled SSH access to the device is enabled by default.

- **Server Port** Specify the TCP/IP port of the SSH server. The default is *22*.

Telnet Server

Enabled/Disabled Disabled by default. Enabling this option activates Telnet access to the device.

- **Server Port** Specify the TCP/IP port of the Telnet server. The default is *23*.

Web Server

HTTPS is enabled by default. The following *Web Server* parameters can be set:

Server Port For HTTP mode, specify the TCP/IP port of the web server. The default is *80*.

Secure Server Port For secure HTTPS mode, specify the TCP/IP port of the web server. The default is *443*.

SNTP Client

Simple Network Time Protocol (SNTP) is a simplified version of NTP, a protocol for the synchronization of network device clocks using an SNTP server. You can use it to set the system time on the device, and the system time is reported next to every log entry that registers a system event.

Enabled/Disabled Enabled by default. The device obtains the system time from a time server on the internet.

- **NTP Server 1** Specify the IP address or domain name of the primary NTP server. The default is as follows: *1.ubnt.pool.ntp.org*
- **NTP Server 2** Specify the IP address or domain name of the secondary NTP server. The default is as follows: *2.ubnt.pool.ntp.org*

System Actions

This section manages device configuration routines, firmware updates, and the option to reset the device to factory default settings.

Backup

Backup Click [BACKUP] to download the current system configuration file. The device configuration is stored as a gzipped tar archive (.tar.gz). You can back up, restore, or update the system configuration file:

> Note: We strongly recommend that you save the configuration file in a secure location. The configuration file includes confidential information, such as hashed passwords.

Restore

> Note: We recommend that you back up your current system configuration before uploading the new configuration.

The configuration file must match the device you are uploading to. Behavior may be unpredictable if you mix configuration files from different device models. For example, upload an ES-16-150W configuration file to an ES-16-150W; do NOT upload an ES-24-Lite configuration file to an ES-16-150W.

Restore Click [RESTORE] to locate the new configuration file. Select the file and then click **Open** to upload the new configuration file to the EdgeSwitch.
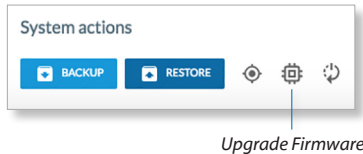
After the EdgeSwitch reboots, the settings of the new configuration are displayed in the Configuration Interface.

Locate Device
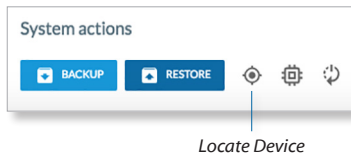
Locate Device

Click the *Locate Device* ⊕ icon to flash the System LED on the EdgeSwitch so you can locate it. It will quickly flash blue until you click the *Locate Device* ⊕ icon again.

Upgrade Firmware

Upgrade Firmware

📋 Note: We recommend that you back up your current system configuration before updating the firmware.

The EdgeSwitch firmware update is compatible with all configuration settings. The system configuration is preserved while the EdgeSwitch is updated with a new firmware version.

Click the *Upgrade Firmware* ⚙ icon to locate the new firmware file. Select the file and then click **Open** to update the firmware.

During the firmware update, the System LED on the EdgeSwitch will alternate between blue and white.

If the firmware update is in process, you can close the EdgeSwitch Configuration Interface, but this does not cancel the firmware update.

While the firmware update is in process, please be patient, as the firmware update routine can take three to seven minutes. You cannot access the EdgeSwitch until the firmware update routine is completed.

⚠ WARNING: Do not power off, do not reboot, and do not disconnect the EdgeSwitch from the power supply during the firmware update process as these actions will damage the EdgeSwitch!

Reboot Device
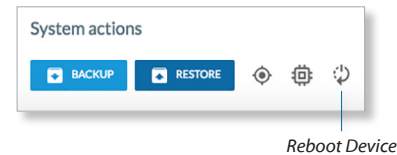
Reboot Device

Click the *Reboot Device* ↻ icon to initiate a full reboot cycle of the device. You will be prompted to confirm; click **OK** to proceed with the reboot or click *Cancel* to cancel the reboot.

Reboot is the same as the hardware reboot, which is similar to the power-off and power-on cycle. The system configuration stays the same after the reboot cycle completes. Any changes that have not been applied are lost.

Chapter 6: Tools

The *Tools* screen offers the MAC forwarding table and ping test.

MAC Table

The *MAC Forwarding Table* displays information, including MAC addresses, of the hardware devices using the EdgeSwitch.

MAC Table

All ports *All ports* is the default. To view information about the hardware device using a specific port, select the port from the drop-down list.

Search The *Search* field automatically filters MAC and IP addresses containing specified numbers or letters as you enter them.

Refresh To refresh the window, click **Refresh**.

The *MAC Forwarding Table* reports the *Port* number, *VLAN* ID, *MAC Address*, *IP Address*, and *Hostname* for each hardware device.

- **Ping** If the IP address is displayed, then you can click the *Ping* PING icon to start a ping test.

Ping

You can ping other devices on the network directly from the EdgeSwitch. The *Ping* tool uses ICMP packets to check the preliminary link quality and packet latency estimation between two network devices.

Ping

Address Enter the IP address.

Packet size The default is *56 bytes*. To specify the size of the packet in bytes, click **Change parameters**.

Packet count The default is *10*. To specify the number of packets to send for the ping test, click **Change parameters**.

Ping Parameters

- **Packet size** Enter the size of the packet in bytes.
- **Packet count** Enter the number of packets to send for the ping test.
- **Save** Click to apply changes.

Start Click to begin the ping test.

Packet loss statistics and latency time evaluation are displayed after the test is completed.

Appendix A: Contact Information

Ubiquiti Networks Support

Ubiquiti Support Engineers are located around the world and are dedicated to helping customers resolve software, hardware compatibility, or field issues as quickly as possible. We strive to respond to support inquiries within a 24-hour period.

Ubiquiti Networks, Inc.
685 Third Avenue, 27th Floor
New York, NY 10017 USA
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Online Resources

Support: **ubnt.link/EdgeMAX-Support**

Community: **community.ubnt.com/edgemax**

Downloads: **downloads.ubnt.com/edgemax**

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