



SOFTWARE CORP

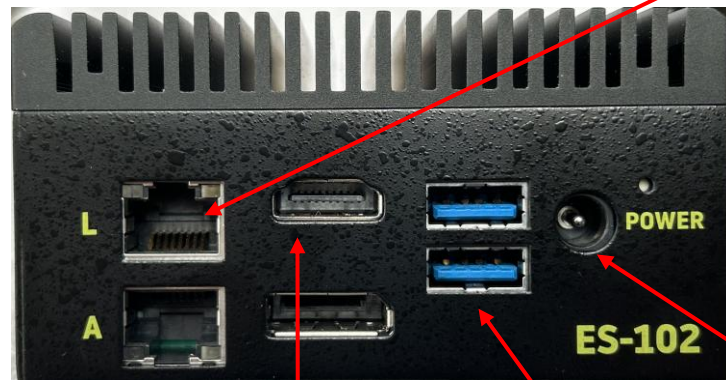
EdgeSentry configuration

With the **ES-Portal** app

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Basic Wiring – network connections

ES-102



Monitor
HDMI port

USB ports for keyboard/mouse

Power connection

L (Listening) Port

Used for capturing network communications

Unmanaged switch network:

- connects to any port on the switch where the servers are located

Managed switch network:

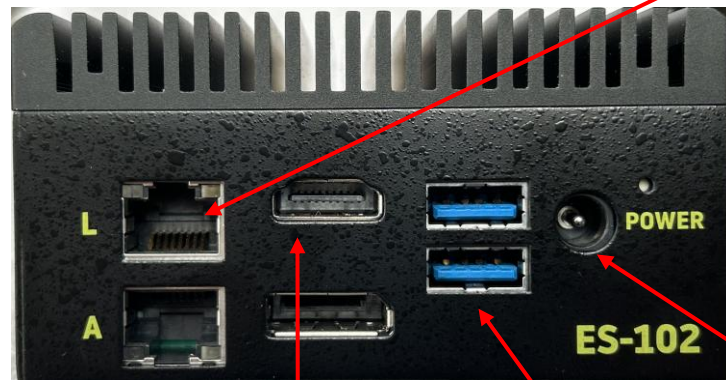
- Connects at a switch where the servers are located. That switch port should be configured as a Mirror or SPAN port (see slide #11)

A (Administration) Port

This port is used for administration, monitoring and outbound internet communications.

Basic Wiring – network connections

ES-102



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Basic Wiring – IP Addresses

ES-102



2 ethernet ports:

If one logical network

L (Listening) – assign an APIPA address (169.254.1.x)

A (Administration) – Use DHCP or assign an address in the range of the logical network

If two logical networks

L (Listening) – Use DHCP or assign an address in the range of the monitored network

A (Administration) – Use DHCP or assign an address in the range of the logical network used for Administration or internet access

Basic Wiring – network connections

ES-304 / ES-604



L (Listening) Port

Used for capturing network communications

Unmanaged switch network:

- connects to any port on the switch where the servers are located

Managed switch network:

- Connects at a switch where the servers are located. That switch port should be configured as a Mirror or SPAN port (see slide #11)

A (Administration) Port

This port is used for administration, monitoring and outbound internet communications.

(2) Ports

These port are used for connections to ancillary networks for the switch interface (control plane) or UPS networks.

Monitor
HDMI port

Power connection

USB ports for
keyboard/mouse

Basic Wiring – IP Addresses

ES-304 / ES-604



4 ethernet ports:

If one logical network

L (Listening) – assign an APIPA address (169.254.1.x)

A (Administration) – Use DHCP or assign an address in the range of the logical network

If two logical networks

L (Listening) – Use DHCP or assign an address in the range of the monitored network

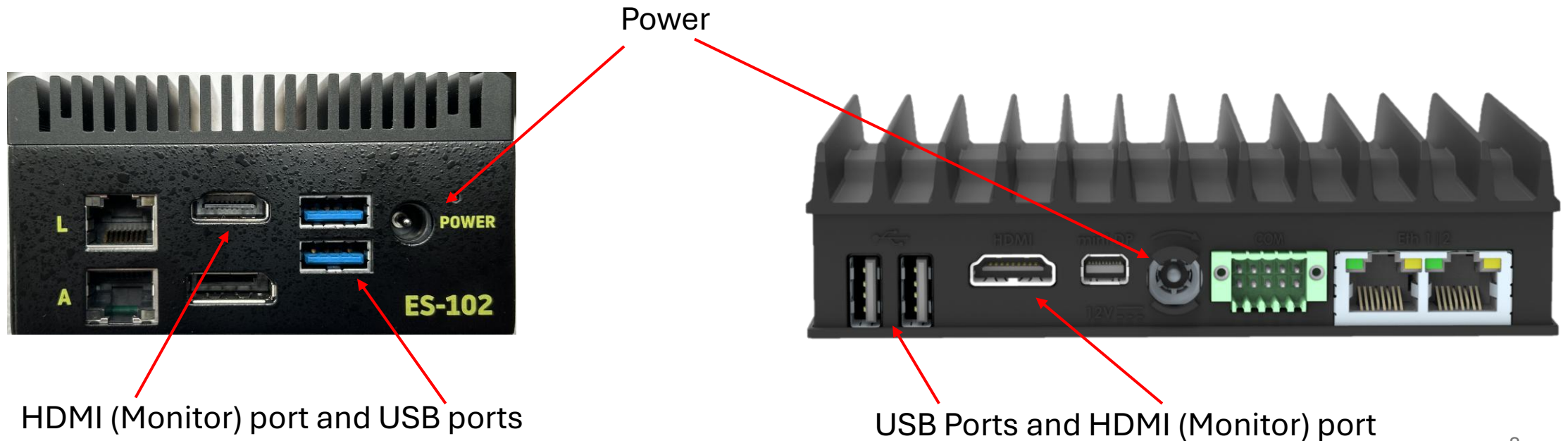
A (Administration) – Use DHCP or assign an address in the range of the logical network used for Administration or internet access

Spare Ports

Used for connections to the control plane network for the switch interface or to the UPS network for UPS monitoring.

First power-up

- Connect a keyboard and mouse to the USB ports
- Connect a monitor to the HDMI port
- Apply power to the EdgeSentry



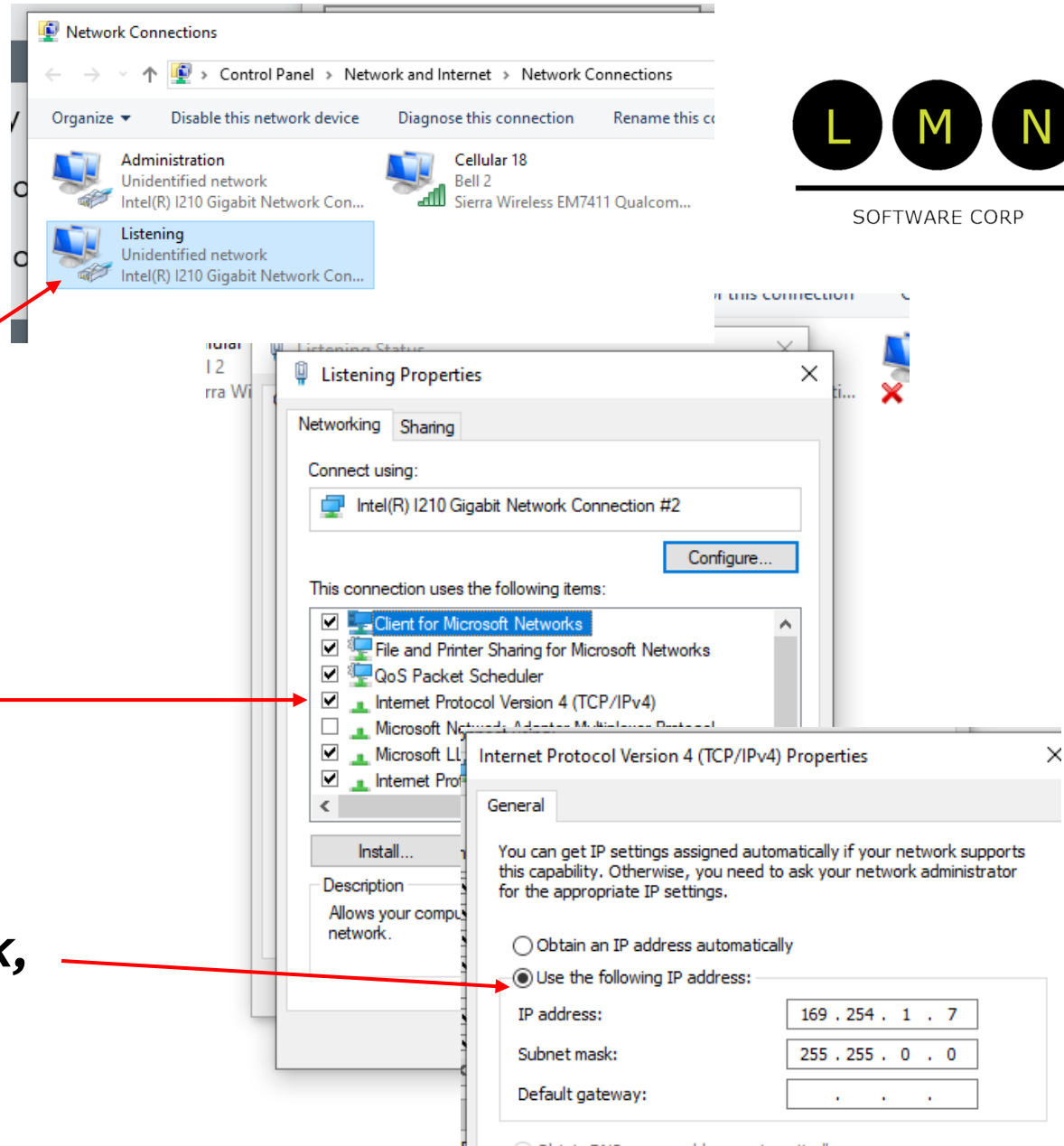
First login

- The Windows EdgeSentry login is on a sticker on the bottom of the unit and also on a sheet of paper in the box
- Login and change the password



Set IP Addresses

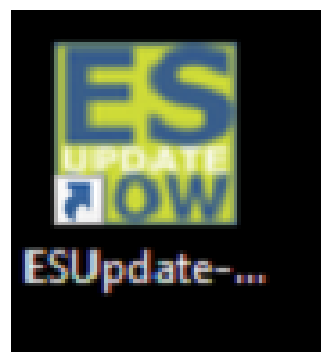
- Go to the Windows **Network & Internet settings**, Select Change adapter options and select the interface you want to alter.
- Select **Properties**, then double click the **Internet Protocol Version (TCP/IPv4)** option.
- **Set the IP Address and subnet mask, or set DHCP**



Update EdgeSentry Core

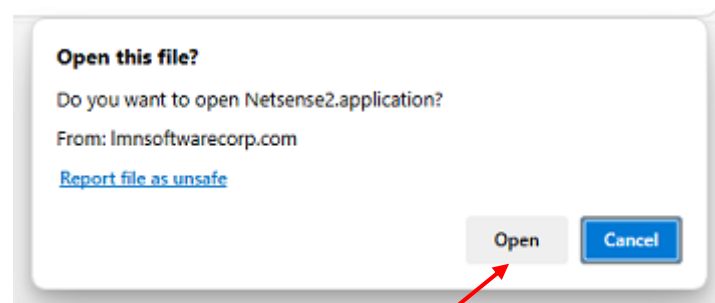
- Make sure your EdgeSentry is connected to the internet
- Double click the “Update Now” icon

1



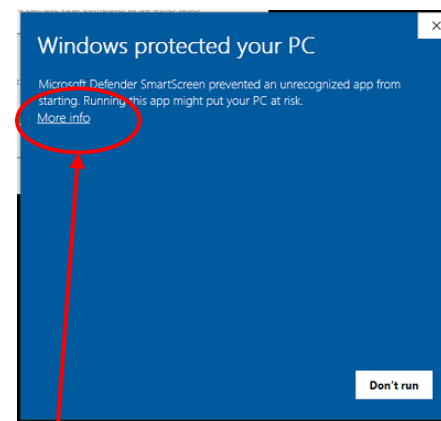
Double click

2



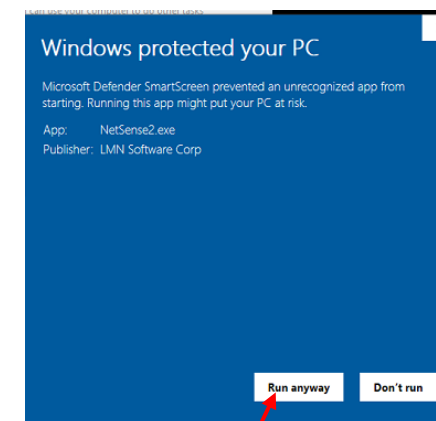
Click

3



Click

4



Click

Managed switch Mirror or SPAN Port

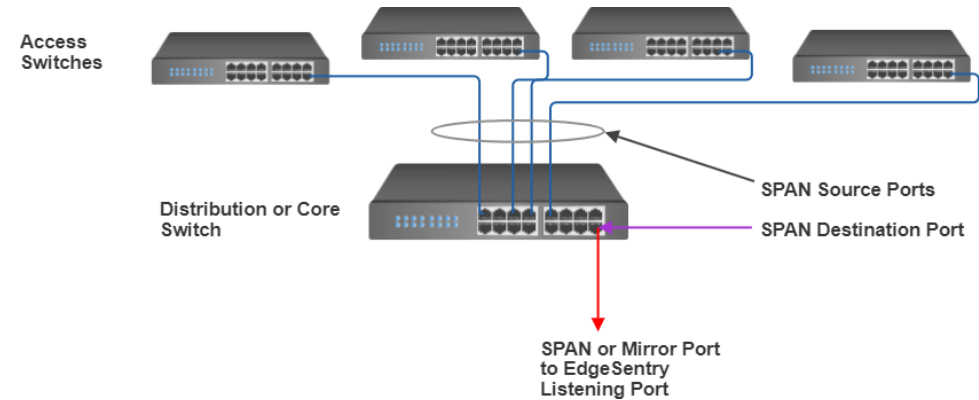


This step is necessary **ONLY** if you are connecting EdgeSentry to a managed switch, otherwise proceed to the next slide.

Choose the source ports that need to be monitored by EdgeSentry

Configure the Mirror (or SPAN) in the switch, specifying the source and destination (L) port

Router ports can be configured for traffic in **BOTH** directions, on large networks other ports should be set to RX only or TX only to prevent the L port from being overloaded.



1/ Set the destination Port

2/ Choose the Source Ports

The screenshot shows the 'Mirror Settings' configuration window. It includes a 'Session Number' dropdown set to '1'. The 'Destination' field has a checked 'Port' dropdown. The 'Source' field also has a checked 'Port' dropdown. The 'From Port' is set to 'eth1/0/1' and the 'To Port' is set to 'eth1/0/15'. The 'Frame Type' is set to 'Both'. There are 'Add' and 'Delete' buttons at the bottom right.

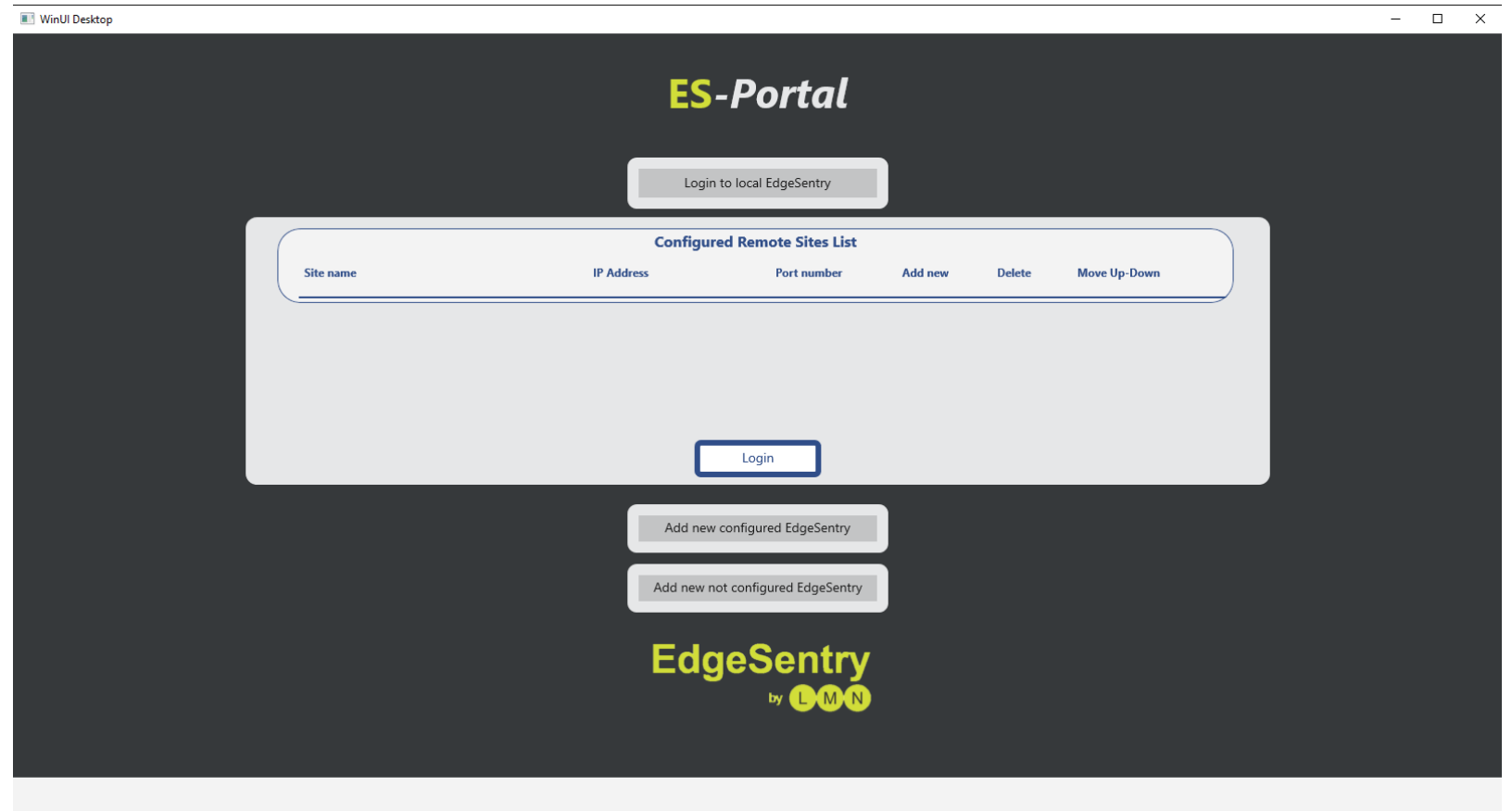
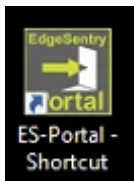
2a/ Set ranges of source ports

Save the configuration

Launch ES-Portal

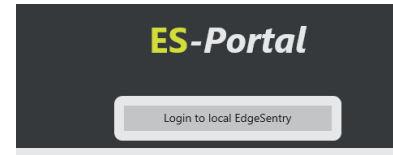
Is the ES-Portal software open on the desktop?

If not, locate the ES-Portal shortcut on the desktop and double click it.



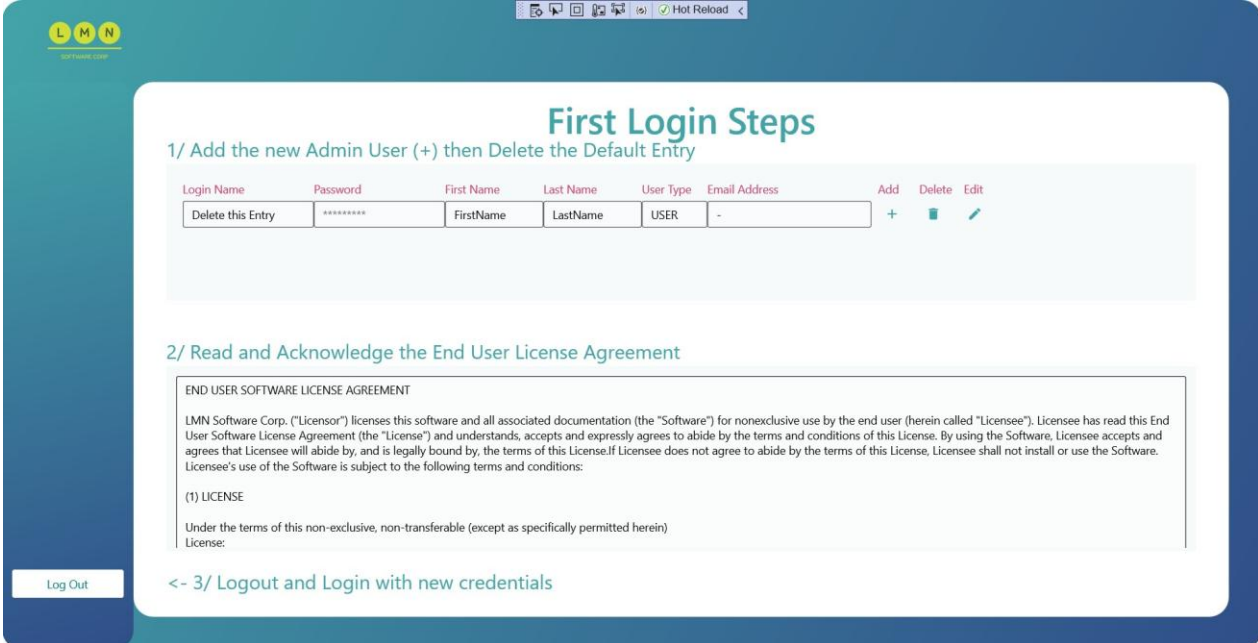
First login steps

Click “Login to Local EdgeSentry”



If the system has not been configured, you will be taken to a page for adding new users and acknowledging the End User License Agreement (EULA).

- Add new ADMIN users (for remote access)
- Delete the default user
- Read and acknowledge the EULA
- Log out and log in again using the “Login to Local EdgeSentry” button



The screenshot shows a web interface titled "First Login Steps" with a blue header and a white content area. The page is divided into two main sections:

1/ Add the new Admin User (+) then Delete the Default Entry

Login Name	Password	First Name	Last Name	User Type	Email Address	Add	Delete	Edit
Delete this Entry	*****	FirstName	LastName	USER	-	+	✖	✎

2/ Read and Acknowledge the End User License Agreement

END USER SOFTWARE LICENSE AGREEMENT

LMN Software Corp. ("Licensor") licenses this software and all associated documentation (the "Software") for nonexclusive use by the end user (herein called "Licensee"). Licensee has read this End User Software License Agreement (the "License") and understands, accepts and expressly agrees to abide by the terms and conditions of this License. By using the Software, Licensee accepts and agrees that Licensee will abide by, and is legally bound by, the terms of this License. If Licensee does not agree to abide by the terms of this License, Licensee shall not install or use the Software. Licensee's use of the Software is subject to the following terms and conditions:

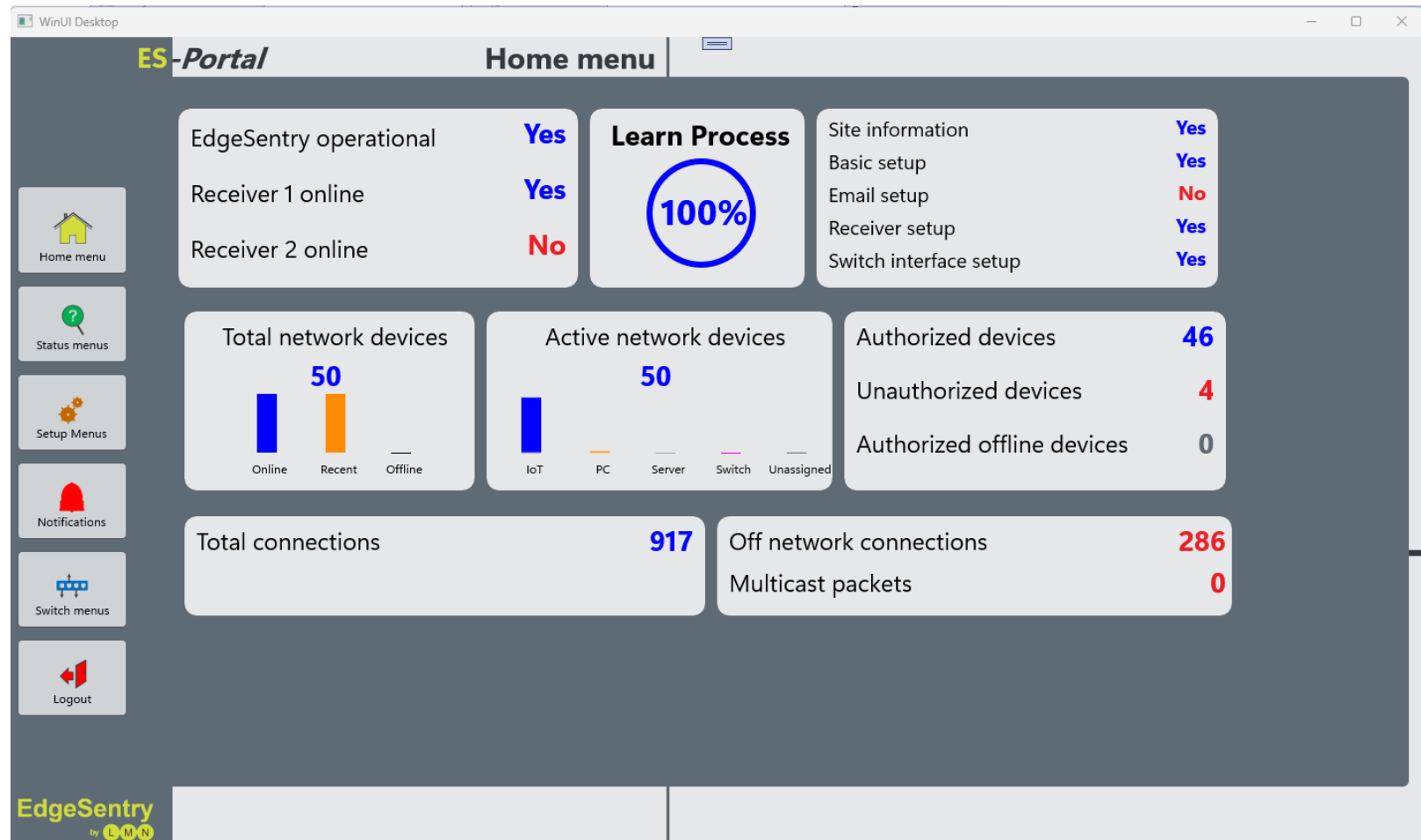
(1) LICENSE

Under the terms of this non-exclusive, non-transferable (except as specifically permitted herein) License:

<- 3/ Logout and Login with new credentials

The ES-Portal menu system

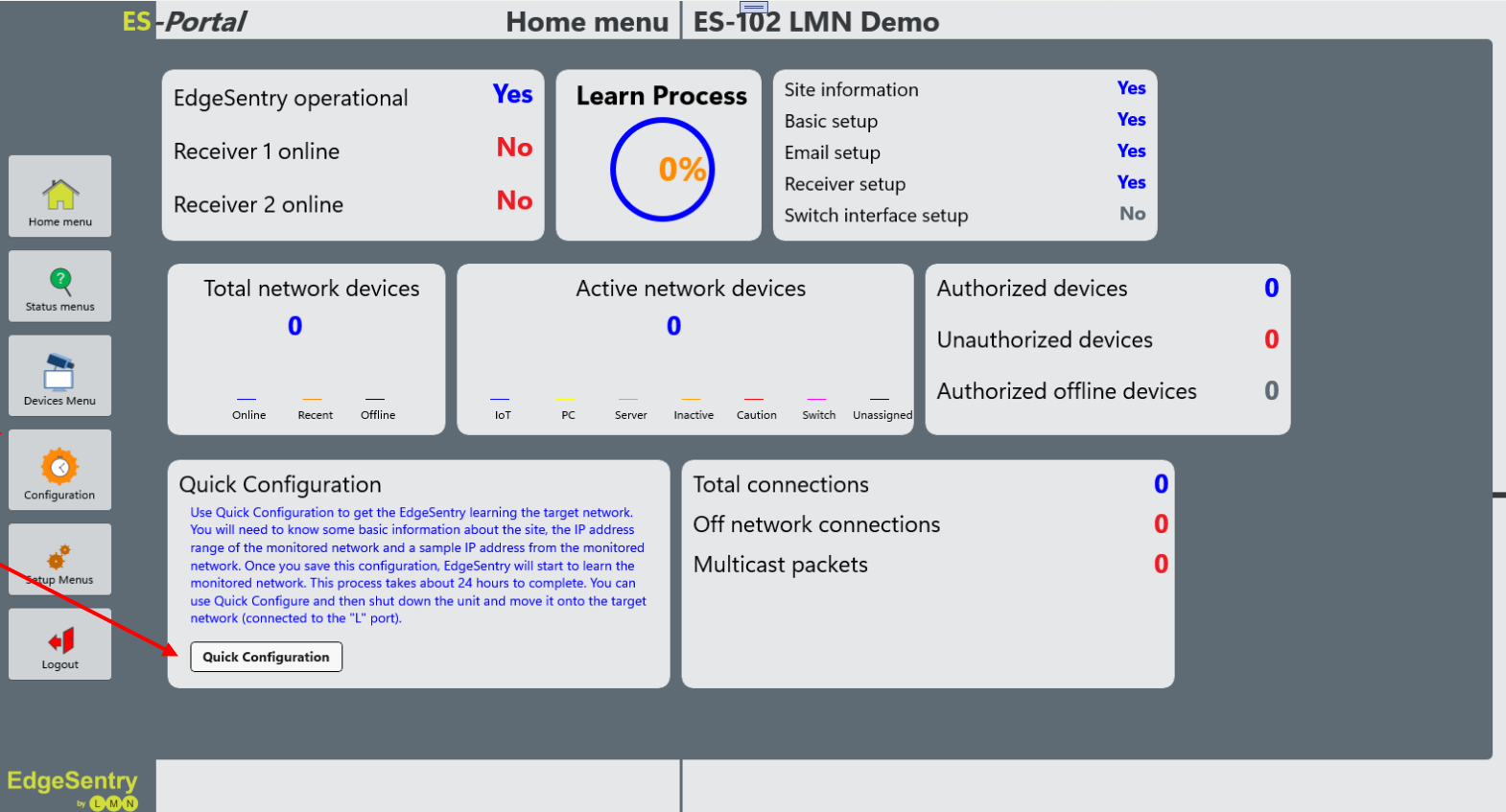
The “Home” menu provides a summary of the EdgeSentry configuration status and a menu bar for configuring and monitoring the EdgeSentry



The ES-Portal menu system

The “Home” menu before the EdgeSentry has “learned” the network

Select either “Quick Configuration” button



The screenshot shows the ES-Portal Home menu for an ES-102 LMN Demo. The interface includes a sidebar with navigation options: Home menu, Status menu, Devices Menu, Configuration, Setup Menu, and Logout. The main content area displays various system status and configuration panels:

- Operational Status:** EdgeSentry operational (Yes), Receiver 1 online (No), Receiver 2 online (No).
- Learn Process:** A circular progress indicator showing 0% completion.
- Site Information:** A list of setup items with status: Site information (Yes), Basic setup (Yes), Email setup (Yes), Receiver setup (Yes), Switch interface setup (No).
- Device Counts:** Total network devices (0), Active network devices (0), Authorized devices (0), Unauthorized devices (0), Authorized offline devices (0).
- Quick Configuration:** A section with instructions on how to use Quick Configuration to learn the target network, including a "Quick Configuration" button.
- Connections:** Total connections (0), Off network connections (0), Multicast packets (0).

Red arrows from the text on the left point to the "Quick Configuration" button in the sidebar and the "Quick Configuration" button in the main content area.

Quick Configuration



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First steps:

- Site information
- Email notifications
- Receiver setup

Site info is the essential to get the sensor into learn mode. The other steps can be done at a later date.

ES-Portal Quick Configuration ES-102 LMN Demo

Essential pre-learn steps (3)

- Site Info (step 1)**: Step 1 completed **Yes**
- Email notifications**: SMTP email account configured **Yes**, Email recipients configured **1**
- Receiver menu**: Receivers configured **Yes**, Receivers on line **1**

Optional post learn steps (3)

- Re-Configure (opt)**: Re-configure the sensor. Use Re-configuration when there have been new devices added to the sensor but no large scale reassignment of IP addresses.
- Reset Learn State**: Reset the learn process if the composition or IP address ranges of the network have undergone major changes or if you are moving the EdgeSentry to a new site.
- Correct Config Rules**: The Correct Rules tools are used to correct errant rules that are occasionally created by Re-configuration. These tools use the alarm history database to remove rules that have created repeated alerts in the previous three hours. Note that rules can also be altered manually in both the Devices Menu and the Setup->Notifications->Critical Connections menu.

The sensor will start the learn process after the options in Site Info Step 1 are saved. Use the Email notifications and the Receiver menus to receive alerts from the sensor. When the learn process is completed (after 24+ hours), the sensor will configure itself with rules for all the basic alert types. Three hours later the sensor will automatically review the alerts and remove any that are causing repeated alerts.

Most sensor configurations do not require anything beyond these three steps. Consider reviewing the Authorization and Device Name settings for each device in the Devices menu after the learn process is completed.

Quick Configuration



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Fill in information about the site

Site ID# - a unique number for each EdgeSentry that is going to be monitored with a receiver.

Site information and site contacts is important as this information is used whenever the EdgeSentry communicates via email or the receiver.

Monitored network information must be filled out for the EdgeSentry to go into learn mode.

ES-Portal Quick Configuration | ES-102 LMN Demo

Step 1 - site information

Site ID#

Site name

Site address

Site contact 1

Contact 1 name

Contact 1 phone

Contact 1 email

Site contact 2

Contact 2 name

Contact 2 phone

Contact 2 email

Monitored Network Information

Admin port IP address:

Any address from the monitored IP range:

Subnet mask:

Gateway:

Auto delete alerts older than (days)

Enable email detection

Enable off-network web browsing detection

Email alert spam control Identical alerts will not be resent via email for the specified period

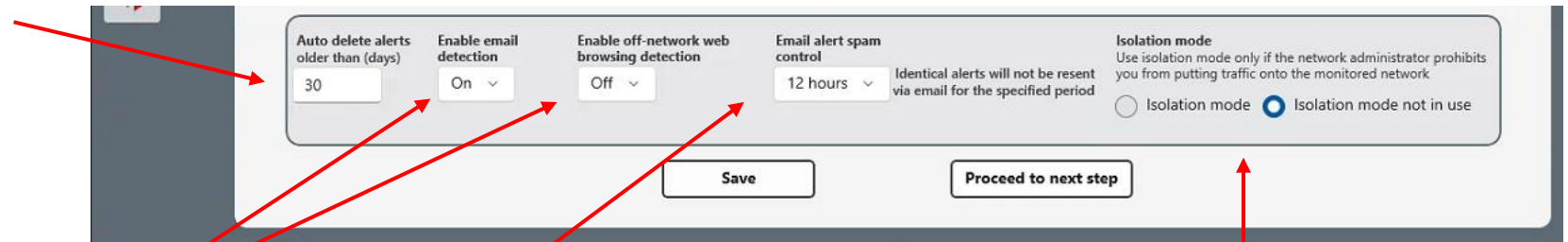
Isolation mode Use isolation mode only if the network administrator prohibits you from putting traffic onto the monitored network

Isolation mode Isolation mode not in use

Quick Configuration

5 configuration settings

Auto delete – The minimum number of days the EdgeSentry will hold alert information in it’s database.



The screenshot shows a configuration panel with the following settings:

- Auto delete alerts older than (days):** 30
- Enable email detection:** On
- Enable off-network web browsing detection:** Off
- Email alert spam control:** 12 hours
- Isolation mode:** Isolation mode not in use (selected)

Buttons: Save, Proceed to next step

Email and Browsing detection – enable these if the users are not permitted to use the network for business activities (recommended)

Email alert spam control – limits the number of times a day a specific alert will be sent –12 or 24 hours recommended

Isolation mode – Default to “not in use”
Select Isolation mode only if the client has specified that the sensor not put any traffic onto the monitored network.

Click Save– this will put the sensor into learn mode. Click “Proceed to next step”

Quick Configuration



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Input the SMTP **account email address, server, a “from Address”** (this is used as a destination address during testing), the **Port number** and the **account password**.

Save your settings, then click the **“Test”** button – after 20 seconds a message will confirm that the message has been sent or that there was an error.

The screenshot shows two main configuration panels. The top panel, titled "Add SMTP email account", contains several input fields: "Account address" (placeholder: "Replace this"), "Email server" (value: "smtp.gmail.com"), "From address" (value: "from address"), and "Password" (value: "587"). There are also "Send Test" and "Delete Account" buttons, and a "Refresh" button. A "Save email account" button is at the bottom. The bottom panel, titled "Add SMTP email recipient", shows a table with columns for "Recipient EMail", "Enable Status Report", "Port Usage", "Off LAN Report", "New Device", "Tamper - UPS", "Comm. Failure", "Tracked Ports", and "Off LAN Connect". The first row has the email "test@testaddress.ca", a status report of "None", port usage of "None", and checkboxes for "Off LAN Report", "New Device", "Tamper - UPS", "Comm. Failure", "Tracked Ports", and "Off LAN Connect". There are "Add" and "Delete" buttons on the right, and an "Update email recipients" button at the bottom.

Add email recipients

Click the “+” button to add a new user. Provide the email address and select daily/weekly/monthly reports for the user to receive and a selection of alerts.

Quick Configuration



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Select the receiver you want to configure, click the enable button and set it as primary (if using 2 receivers, one should be set as secondary).

Provide a **name for the receiver**, the **IP address** and **port number**.

Fill in the instance name and the credentials to write data to the EdgeSentry receiver.

Save the receiver.

Receiver 2

Receiver 1 Receiver 2

Enabled Off

Priority Primary Secondary

Receiver name or hosted receiver URL:

Receiver IP address If a hosted receiver, use 1s for the IP address

Port number If a hosted receiver, use a port number of '0'

Notes Access credentials (instance name, user name and password) must be unique for each receiver
- Once credentials are saved they are not shown in the spaces below

Instance name

Username

Password

Note that the Home menu will display the receiver online status, but that ***it can take up to 15 minutes for the receiver to connect*** when first set up or after a reboot of the EdgeSentry.

Quick Configuration



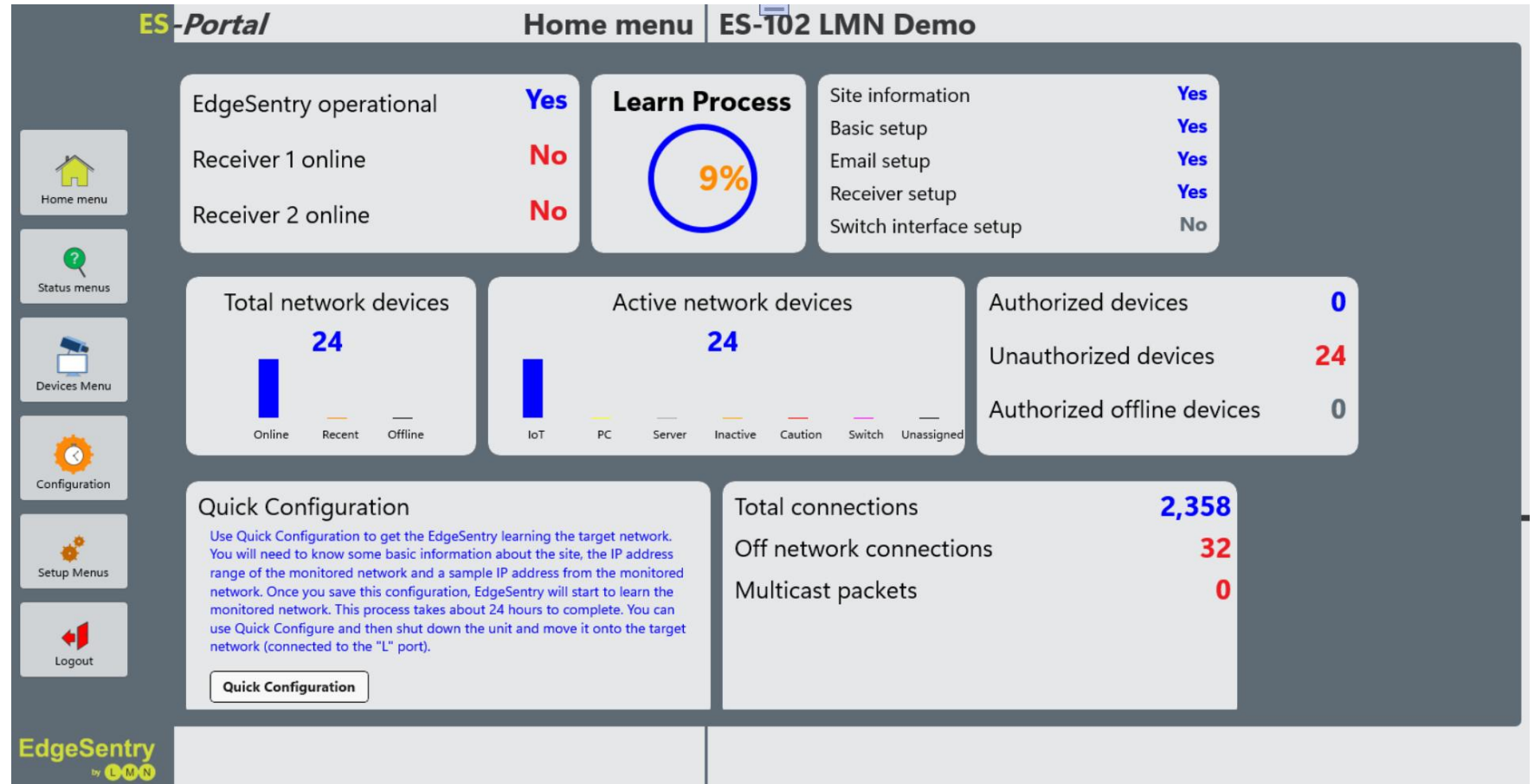
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The learn process

The Sensor is in the “Learn” process which can take between 24 and 48 hours to complete

The sensor will compile device and connection information over this time.

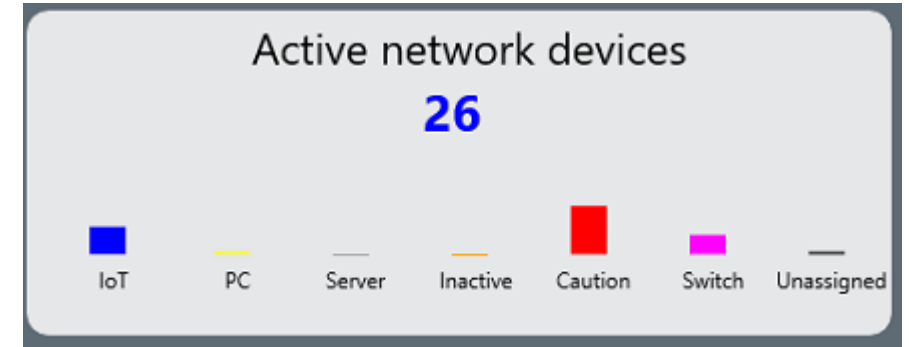
The learn process is complete when the Learn Process = 100% and the devices have been sorted into categories.



Quick Configuration

Learn process completed

The learn process is complete when the Learn Process = 100% and the devices have been sorted into categories.



The learn process also creates a set of log files when it completes that you will find in the **My Documents->Reports** directory. Successful completion of the Auto-config process creates the following files:

Notes

- If there are not enough connections being monitored, the system will not complete this process but will retry on each system reboot. **The Auto-Config process can also be run from ES-Portal.**
- Not all the files will be created during auto-configuration, presence of a few of the files indicates that the process has completed

Auto-Configuration Report
or
1-AssignPCs.txt
2-AssignServers.txt
3-AssignInactive.txt
4-AssignServerSideCCM.txt
5-AssignEdgeCCM.txt
6-MonitorAllNonPCs.txt

Quick Configuration



Auto-configuration corrections

Three hours after the learn process is completed, the system will check for faults in the configuration and remove any alerts that faulty rules. If you are not sure if this part of the process has been completed, check the reports directory (**My Documents -> Reports**) for the following log files:

- 1-CCM_Rules_Removed.txt
- 2-OffNetwork_Rules_Removed.txt
- 3-IdleTime_Rules_Adjusted.txt
- 4-Ping_Rules_Adjusted.txt

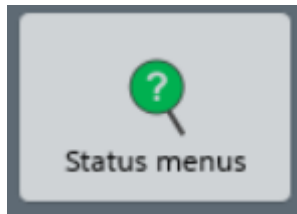
Note – the system only creates these files if the process is required, so the presence of just one of these four files indicates that the correction process has completed successfully.

The Auto-Configuration correction can also be run from ES-Portal from the **Quick Configuration->Re-Configure** menu.

Quick Configuration

Normal Operation

Once EdgeSentry has completed the Learn, Auto-Configuration and Correction processes your system should be operational and creating alerts. To view current alerts, click on the Status button.



Note that the status menu can take 5-10 seconds to open if there are a high number of system alerts.

The status menu shows a time line with alerts displayed on it grouped as “Security”, “Connectivity” and “Network”.

You can view detail of the alerts by clicking on the colored dots.



The ES-Portal menu system



The “Home” menu provides a summary of the EdgeSentry configuration

The “Status” menu provides a summary of the system status

The “Devices” menu shows all devices that have been detected on the network

The “Quick Configuration” menus determine the basic configuration of the sensor

The “Setup” menus (Setup, Notifications, Switches) are for configuration of advanced settings – hovering over the Setup Menus icon will display the sub menu

The “Logout” button returns you to the Login screen

The ES-Portal menu system



The “Setup” menu sub menus: (Setup, Notifications, Switches)

The “Setup” menu – basic system settings

The “Notification” menu – Email, Receivers and Critical Connection menus

The “Switch” menu – used to add compatible switches to the EdgeSentry

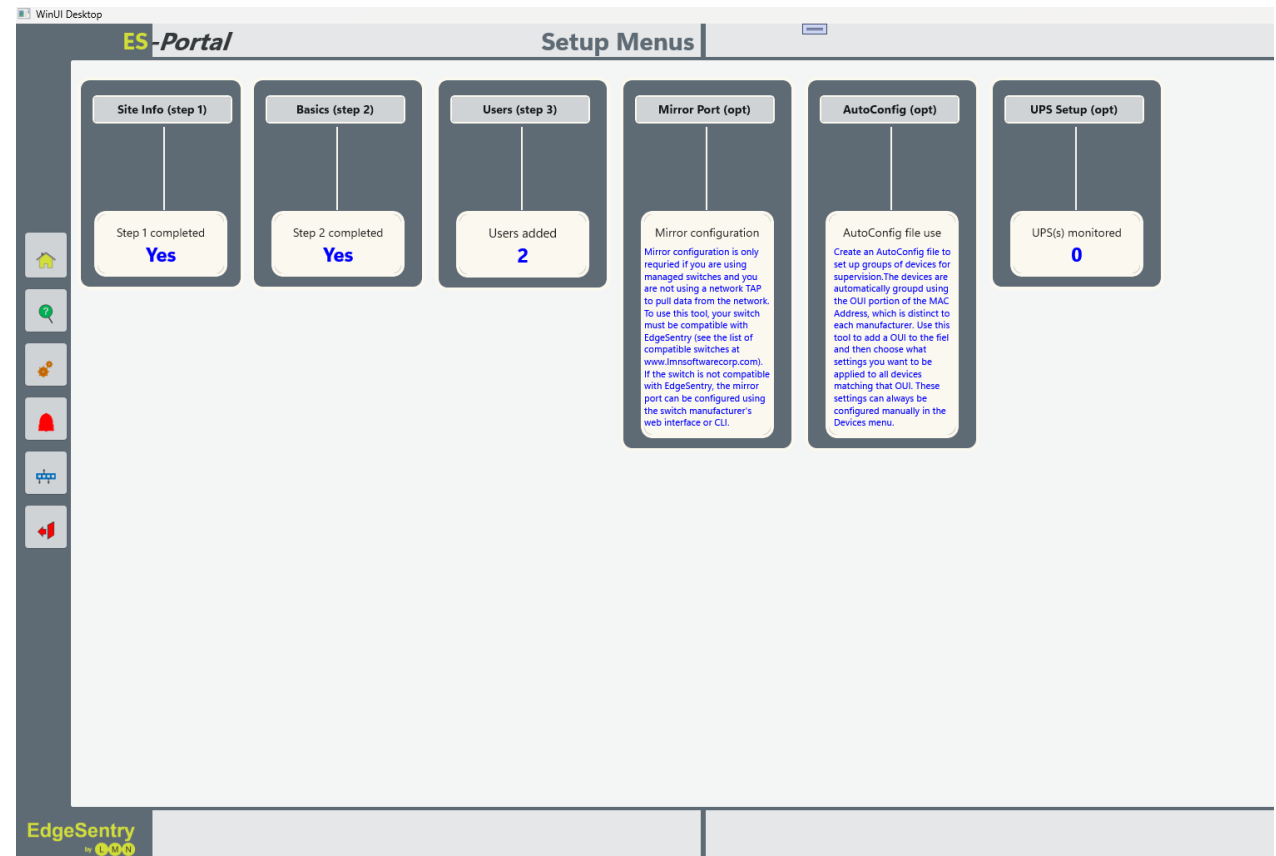
Full configuration – Setup Menus



Click the “Setup” button

Initial setup requires entering **Site Info**, **Basics** and adding **Users** who will have remote access to the EdgeSentry.

At this point you can also (optionally) set up a **Mirror Port** on an EdgeSentry compatible switch, build an **AutoConfig File** or add **UPSs** for monitoring.



Full configuration – Setup– Site Info



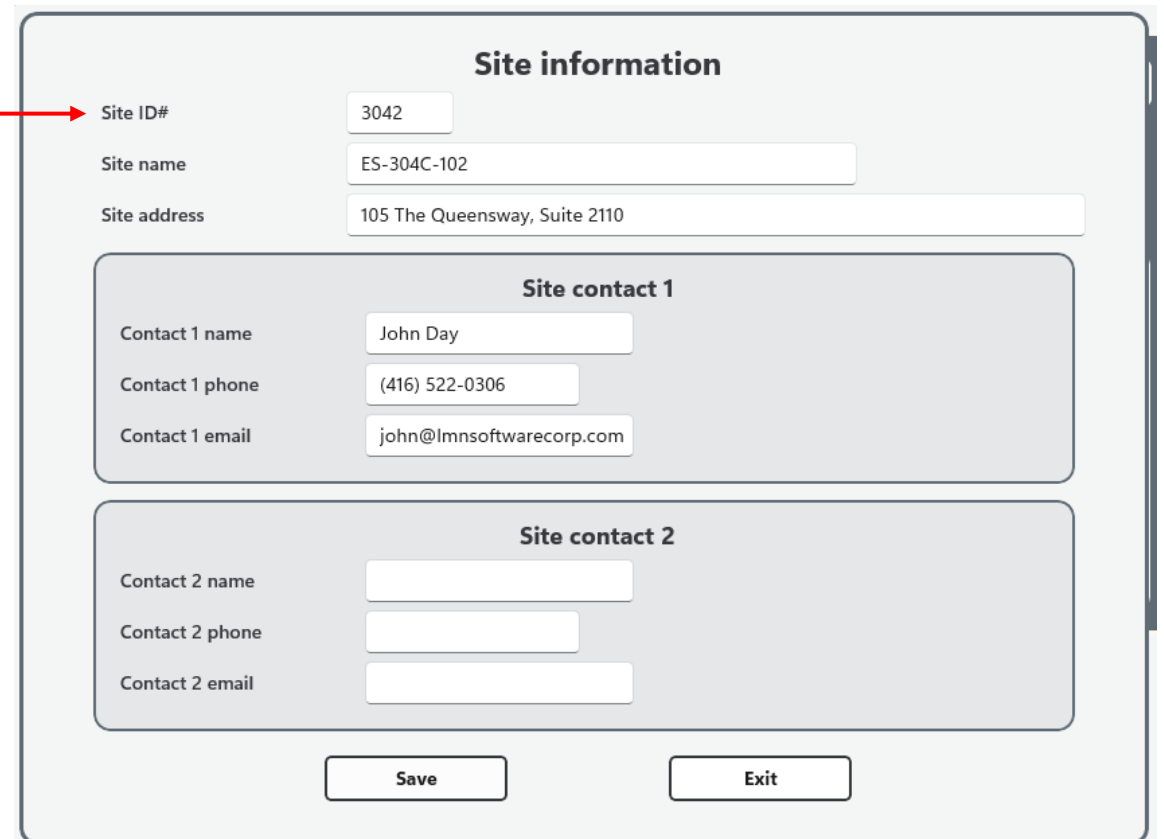
Click the “Site Info” button

Provide a unique number as a Site ID

This ID is used when multiple sites are being monitored with a single EdgeSentry receiver.

Fill out the Site name/address and contacts. These are used in alert emails and notifications about the site.

When you save these settings, **EdgeSentry will start the Learn process.** In the Home menu you will see the Learn status increment about every 20 minutes and you will see the device numbers start to populate.



The form is titled "Site information" and contains the following fields:

- Site ID#: 3042
- Site name: ES-304C-102
- Site address: 105 The Queensway, Suite 2110
- Site contact 1:
 - Contact 1 name: John Day
 - Contact 1 phone: (416) 522-0306
 - Contact 1 email: john@lmnsoftwarecorp.com
- Site contact 2:
 - Contact 2 name: [empty]
 - Contact 2 phone: [empty]
 - Contact 2 email: [empty]

Buttons: Save, Exit

Full configuration – Setup Basics



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Click the “Setup” button

1/ **Enter an IP address from the monitored network’s IP address range.** This is used to determine whether sensed devices are part of the local network or not.

2/ **Enter the subnet mask and gateway.** Note that the system will not enter Learn Mode without this information.

3/ **Set the number of days before alerts are auto deleted.** These systems usually hold 365 or more days of information. Reducing the number of days can make the database more responsive for searches.

4/ **Enable email detection and off-network browser detection** Networks get malware infections from email and web browsing. If there is not reason for someone to use this network for email/web browsing, then enable detection for each of these. Specific IP addresses can be authorized for email/browsing in the “Notifications->Trusts” menu

5/ **Set the time before an email alert will be repeated.** Setting this parameter prevents a user from being “spammed” with email alerts. It is recommended to set this to 12 hours, even if you are not currently using email alerts.

The screenshot shows the 'Basics (step 2)' configuration page. It includes the following sections:

- Admin port IP address:** 192.168.0.53
- Any address from the monitored IP range:** 192, 168, 0, 102
- Subnet mask:** 255, 255, 255, 0
- Gateway:** 192, 1680, 0, 1
- Settings 1 (these can be left with default values):**
 - Logging (Logging defaults to OFF): Off
 - Auto delete alerts older than (days): 7
 - Auto acknowledge new connections: On
 - Enable cellular economy mode: Off
- Settings 2 (pay attention to these):**
 - Enable email detection: On
 - Enable off-network web browsing detection: On
 - Email alert spam control: 12 hours
- Settings 3 (if unsure, use Mixed Switch Mode):**
 - EdgeSentry operating mode: Integration mode

Red arrows point from the text instructions to the following fields in the screenshot: 'Any address from the monitored IP range', 'Auto delete alerts older than (days)', 'Enable email detection', 'Enable off-network web browsing detection', and 'Email alert spam control'.

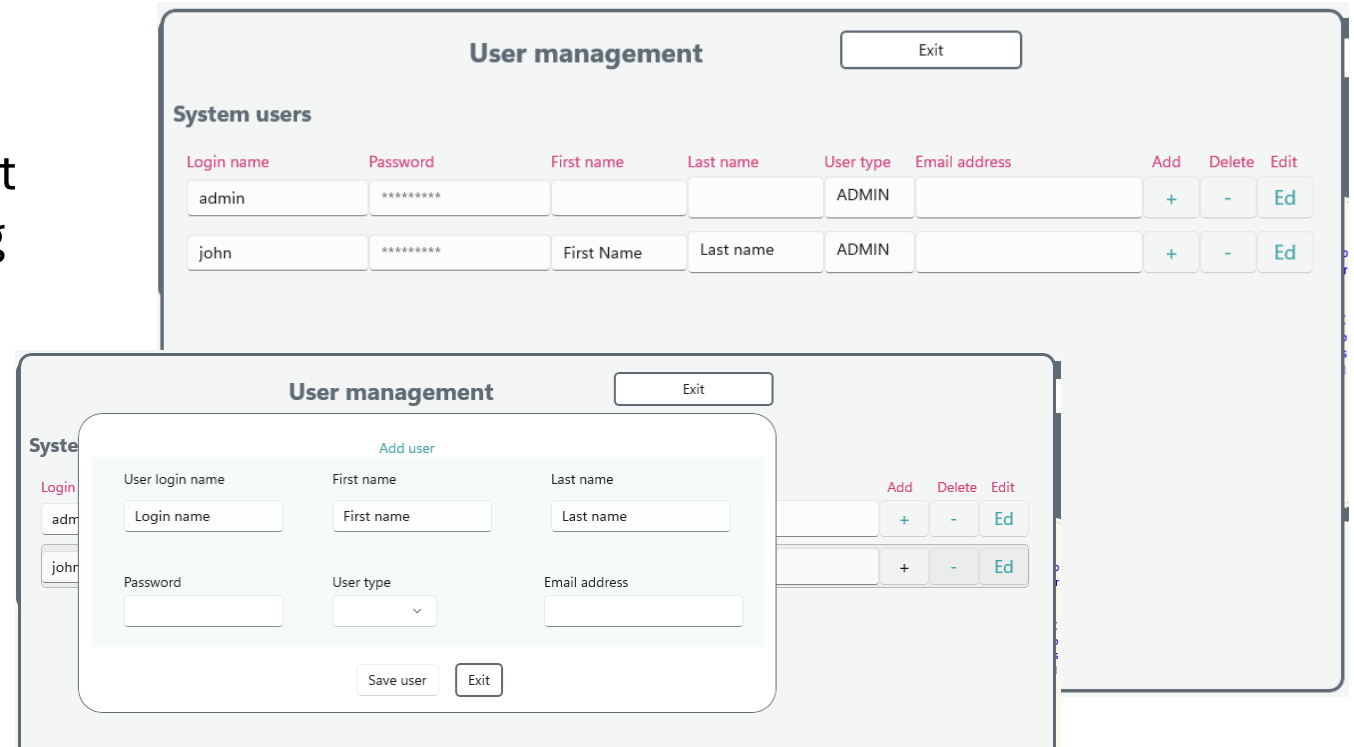
Full configuration – Setup Menus



Click the “Users” button

Users added here are given access to EdgeSentry using ES-Portal through a local network. Users must be set up as ADMIN to access using ES-Portal.

Clicking the “+” button will display the “Add User” popup.



The image displays two overlapping screenshots of the 'User management' interface. The top screenshot shows a table of 'System users' with columns for Login name, Password, First name, Last name, User type, and Email address. The table contains two rows: 'admin' and 'john'. Each row has '+', '-', and 'Ed' buttons. The bottom screenshot shows the 'Add user' popup form, which includes fields for User login name, First name, Last name, Password, User type (a dropdown menu), and Email address. It also has 'Save user' and 'Exit' buttons.

Login name	Password	First name	Last name	User type	Email address	Add	Delete	Edit
admin	*****			ADMIN		+	-	Ed
john	*****	First Name	Last name	ADMIN		+	-	Ed

Full configuration – Notifications



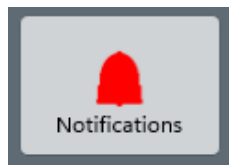
Notifications are critical function of network monitoring. There are four basic ways that EdgeSentry can be monitored and these can be used in any combination:

1/ **Email** – requires the use of a SMTP email account

2/ **ES-Portal (desktop) monitoring** – this is usually done using a remote desktop application

3/ **Receiver Monitoring** – Set up an EdgeSentry Receiver on the local site or out on the internet and send a site’s data to that location. ES-Monitor software is used for monitoring the EdgeSentry receiver.

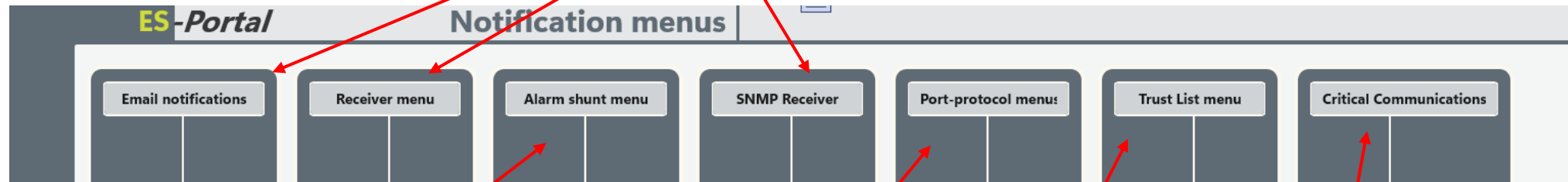
4/ **SNMP monitoring** - using the Genetec IoT plugin or a SNMP receiver.



Click the “Notifications” button

Full configuration - Notifications

Monitoring is set up using the **Email, Receiver** and **SNMP** menus.



The **Alarm Shunt** menu is used to mute alerts that are occurring frequently but are not relevant to the site.

The **Port Protocol** menu is used to set up alerts when specific port/protocols are used. You can select from a list of commonly monitored ports (FTP, Telnet) or add your own port/Protocols.

The **Trust List** menu is used to prevent off network, email or browsing alerts for trusted local or remote (off network) addresses.

The **Critical Communications** menu is used to detect if a regular critical IPv4 connection is lost between two devices.

Full configuration – Email Notifications



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Input the SMTP **account email address, server, a “from Address”** (this is used as a destination address during testing), the **Port number** and the **account password**.

Save your settings, then click the **“Test”** button – after 20 seconds a message will confirm that the message has been sent or that there was an error.

The screenshot shows two configuration screens. The top screen is titled 'Add SMTP email account' and contains the following fields and buttons:

- Account address: Replace this
- Email server: smtp.gmail.com
- From address: from address
- Port: 587
- Password: (empty)
- Buttons: Exit, Send Test (Test), Delete Account (-), Refresh
- Save email account

The bottom screen is titled 'Add SMTP email recipient' and contains the following fields and buttons:

Recipient EMail	Enable Status Report	Port Usage	Off LAN Report	New Device	Tamper - UPS	Comm. Failure	Tracked Ports	Off LAN Connect	Add	Delete
test@testaddress.ca	! (dropdown)	None (dropdown)	None (dropdown)	[]	[]	[]	[]	[]	+	-

Update email recipients

Add email recipients

Click the “+” button to add a new user. Provide the email address and select daily/weekly/monthly reports for the user to receive and a selection of alerts.

Full configuration – Receiver Notifications

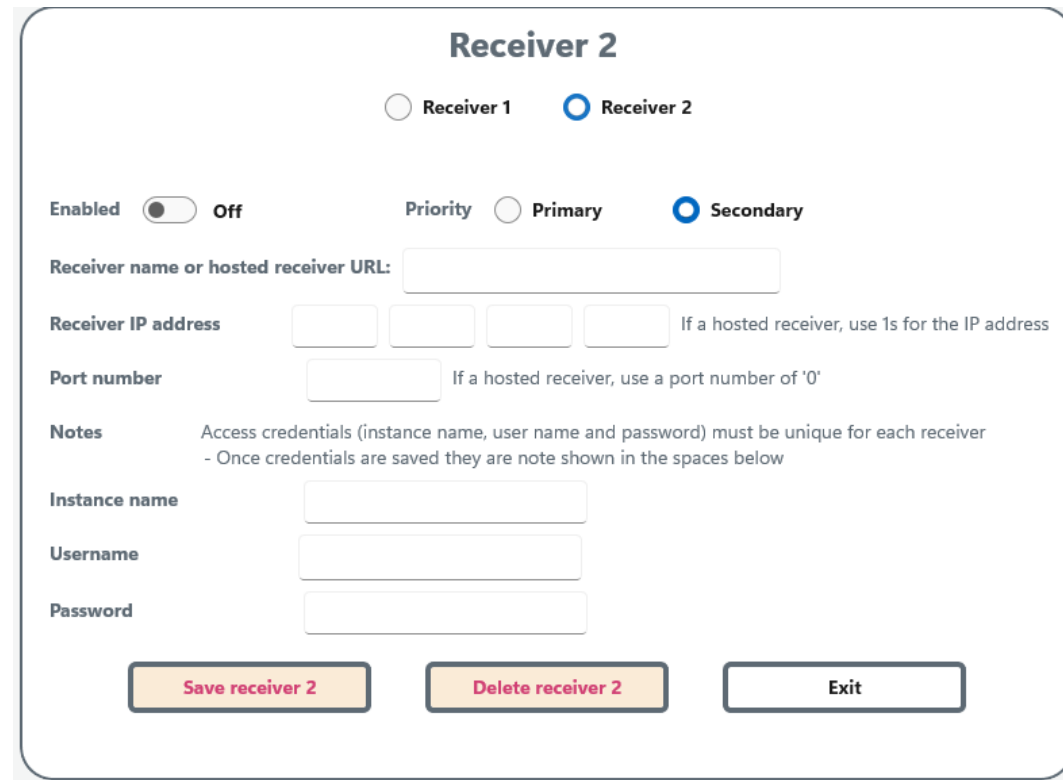


Select the receiver you want to configure, click the enable button and set it as primary (if using 2 receivers, one should be set as secondary).

Provide a **name for the receiver**, the **IP address** and **port number**.

Fill in the instance name and the credentials to write data to the EdgeSentry receiver.

Save the receiver.



Receiver 2

Receiver 1 Receiver 2

Enabled Off

Priority Primary Secondary

Receiver name or hosted receiver URL:

Receiver IP address If a hosted receiver, use 1s for the IP address

Port number If a hosted receiver, use a port number of '0'

Notes Access credentials (instance name, user name and password) must be unique for each receiver
- Once credentials are saved they are not shown in the spaces below

Instance name

Username

Password

Note that the Home menu will display the receiver online status, but that ***it can take up to 15 minutes for the receiver to connect*** when first set up or after a reboot of the EdgeSentry.

Initial configuration – SNMP Notifications



Note: At the time this manual was created, the SNMPv3 communications are not available. **Use the SNMPv2** settings until further notice.

There is currently a restriction of **two SNMP managers**.

Verify the Community name you are using and enter the **Manager name**, **IP address** and **Community name**. **Save** the SNMP manager.

SNMP Receiver
Exit

Trap version: SNMPv2 SNMPv3

SNMP manager

Manager name

Manager IP address

Community

Save SNMP manager

Manager name	IP Address	Engine ID	Delete manager
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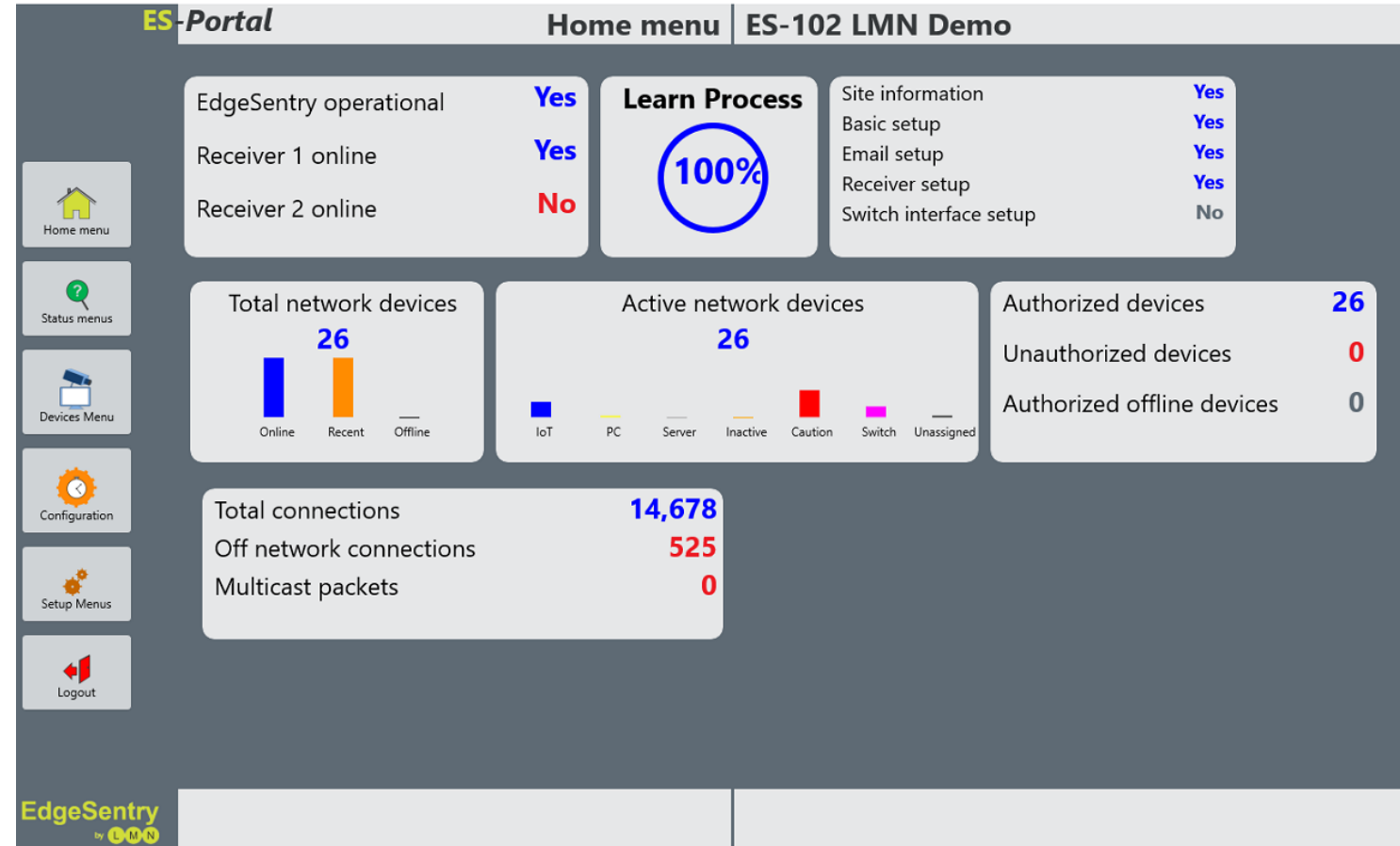
Post learn configuration

The learn process is completed when the indicator shows 100%. Sometimes this will take longer than 24 hours if the unit performed a Windows update during the learn process.

You should see the approximate number of devices from the network and if the site has internet access, you will normally see some number of off-network connections.

There is an auto-configuration process that runs after the learn process is complete and on system startup.

The Auto-Configuration process is completed when devices are automatically categorized as IoT, PC, Server Router, Inactive or Caution.



Post learn configuration

After Auto-Configuration has completed the system will operate for 3 hours, then check for and correct faulty auto-configuration rules.

Both the Auto-Configuration and Rule Correction processes can be run manually from ES-Portal via the Quick Configuration menus.

ES-Portal Quick Configuration | ES-102 LMN Demo

Essential pre-learn steps (3)

- Site Info (step 1)**: Step 1 completed **Yes**
- Email notifications**: SMTP email account configured **Yes**; Email recipients configured **1**
- Receiver menu**: Receivers configured **Yes**; Receivers on line **1**

Optional post learn steps (3)

- Re-Configure (opt)**: Re-configure the sensor. Use Re-configuration when there have been new devices added to the sensor but no large scale reassignment of IP addresses.
- Reset Learn State**: Reset the learn process if the composition or IP address ranges of the network have undergone major changes or if you are moving the EdgeSentry to a new site.
- Correct Config Rules**: The Correct Rules tools are used to correct errant rules that are occasionally created by Re-configuration. These tools use the alarm history database to remove rules that have created repeated alerts in the previous three hours. Note that rules can also be altered manually in both the Devices Menu and the Setup->Notifications->Critical Connections menu.

The sensor will start the learn process after the options in Site Info Step 1 are saved. Use the Email notifications and the Receiver menus to receive alerts from the sensor. When the learn process is completed (after 24+ hours), the sensor will configure itself with rules for all the basic alert types. Three hours later the sensor will automatically review the alerts and remove any that are causing repeated alerts.

Most sensor configurations do not require anything beyond these three steps. Consider reviewing the Authorization and Device Name settings for each device in the Devices menu after the learn process is completed.

EdgeSentry by LMN

Post learn configuration – Network devices



The Network devices table shows all the devices that have been sensed by EdgeSentry since EdgeSentry was installed. The list can be sorted by Name, IP Address, Manufacturer and the first connected date.

There are a number of steps you can take to fine-tune your configuration

1/ Provide name/locations for the devices

2/ Confirm the device type for each entry in the list, particularly any devices that are shown as “Caution”

3/ Verify that every non-PC device is being monitored by at least one of CCM, SNMP, Ping or Idle-time

Status	Name-Location	IP Address	Device type	Auth	Ping	SNMP	Community	CCM Rules	Idle time allowed	Off Network	Manufacturer	MAC Address	First connected	View Connections
24 Hour	Broadcom Limit...115	192.168.0.115	Caution	A	P	S	public	0	Not Monitored	Not ignore	Broadcom Limited	E4:3D:1A:A0:31:B9	1/17/2026 12:16:41 PM	View Connections
Active	Broadcom Limit...123	192.168.0.123	IoT	A	P	S	public	0	Not Monitored	Not ignore	Broadcom Limited	E4:3D:1A:A0:31:B8	1/17/2026 9:18:26 AM	View Connections
Active	VCS Video Comm...130	192.168.0.130	IoT	A	P	S	public	0	Not Monitored	Not ignore	VCS Video Communi	00:07:5F:8B:01:16	1/17/2026 9:19:58 AM	View Connections
24 Hour	VCS Video Comm...133	192.168.0.133	IoT	A	P	S	public	0	Not Monitored	Not ignore	VCS Video Communi	00:07:5F:8B:01:1E	1/17/2026 9:20:10 AM	View Connections
Active	Sonos, Inc...134	192.168.0.134	IoT	A	P	S	public	0	Not Monitored	Not ignore	Sonos, Inc.	5C:AA:FD:F4:CD:E6	1/17/2026 9:18:36 AM	View Connections
Active	Microsoft Corp...135	192.168.0.135	Caution	A	P	S	public	0	Not Monitored	Not ignore	Microsoft Corporation	28:16:A8:47:55:A5	1/17/2026 9:18:36 AM	View Connections
Active	VMware, Inc...136	192.168.0.136	Server	A	P	S	public	0	Not Monitored	Outbound	VMware, Inc.	00:0C:29:54:7E:7B	1/17/2026 11:51:22 AM	View Connections
Active	Unknown137	192.168.0.137	Caution	A	P	S	public	0	Not Monitored	Not ignore		44:A8:FC:57:EC:C7	1/17/2026 9:19:09 AM	View Connections
Active	American Power...148	192.168.0.148	IoT	A	P	S	public	0	Not Monitored	Not ignore	American Power Conv	00:0C:87:86:66:17	1/17/2026 9:18:52 AM	View Connections
Active	Unknown149	192.168.0.149	Caution	A	P	S	public	0	Not Monitored	Not ignore		EE:0B:8D:CA:73:7D	1/17/2026 9:18:37 AM	View Connections
Active	IEEE Registrat...156	192.168.0.156	Caution	A	P	S	public	0	Not Monitored	Not ignore	IEEE Registration Auth	0C:73:EB:80:5C:B0	1/17/2026 9:18:37 AM	View Connections

Post learn configuration – Network devices



SOFTWARE CORP

Status on network	Device name-location	Device IP address	Device type	Authorized	Ping	SNMP monitor / community	Current CCM rules	Idle time monitoring	Off-network connection monitoring (ignored parameter)	Manufacturer, MAC Address and First detected on network	View connections button	
Active	Sonos, Inc....134	192.168.0.134	IoT	A	P	S	public	0	Not Monitored	Not ignore	Sonos, Inc. 5C:AA:FD:F4:CD:E6 1/17/2026 9:18:36 AM	View Connections
Active	Microsoft Corp...135	192.168.0.135	PC	A	P	S	public	0	Not Monitored	Outbound	Microsoft Corporation 28:16:A8:47:55:A5 1/17/2026 9:18:36 AM	View Connections
Active	VMware, Inc....136	192.168.0.136	Server	A	P	S	public	0	Not Monitored	Outbound	VMware, Inc. 00:0C:29:54:7E:7B 1/17/2026 11:51:22 AM	View Connections
Active	Unknown137	192.168.0.137	Caution	A	P	S	public	0	Not Monitored	Not ignore	44:A8:FC:57:EC:C7 1/17/2026 9:19:09 AM	View Connections

4/ Device supervision: There are five ways that EdgeSentry can supervise devices.

- By **default**, if a device is marked as “IoT” it will be ping checked several times daily.
- Selecting “**P**” (**Ping**) means that the device will be Ping test several times each hour
- Selecting “**S**” enables **SNMPv1 monitoring** and requires that the device have SNMPv1 enabled with the correct community
- **CCM monitoring** rules are Auto-configured by the sensor and can also be manually configured in the Notifications menu (under Critical Communications)
- **Idle Time monitoring** allows you to set the maximum time a device can be silent on the network before an alert is created.

Network devices - recommended settings



SOFTWARE CORP

Status on network	Device name-location	Device IP address	Device type	Authorized Ping	SNMP monitor / community	Current CCM rules	Idle time monitoring	Off-network connection monitoring (ignored parameter)	Manufacturer, MAC Address and First detected on network	View connections button
Active	Sonos, Inc....134	192.168.0.134	IoT	A	P S public	0	Not Monitored	Not ignore	Sonos, Inc. 5C:AA:FD:F4:CD:E6 1/17/2026 9:18:36 AM	View Connections
Active	Microsoft Corp...135	192.168.0.135	PC	A	P S public	0	Not Monitored	Outbound	Microsoft Corporation 28:16:A8:47:55:A5 1/17/2026 9:18:36 AM	View Connections
Active	VMware, Inc....136	192.168.0.136	Server	A	P S public	0	Not Monitored	Outbound	VMware, Inc. 00:0C:29:54:7E:7B 1/17/2026 11:51:22 AM	View Connections
Active	Unknown137	192.168.0.137	Caution	A	P S public	0	Not Monitored	Not ignore	44:A8:FC:57:EC:C7 1/17/2026 9:19:09 AM	View Connections

IoT Device – use CCM for supervision (this should be configured automatically at the end of the learn process). IoT devices should be configured to detect off network connections – Off Network set to “Not ignore”

Server– use CCM and Ping for supervision (Servers should be detected and configured automatically at the end of the learn process). Server devices should be configured to ignore outbound off network connections – Off Network set to “Outbound”

PC – Only supervise if they are supposed to be on the network all the time. Use Ping or Idle Time for supervision. PCs should be detected and configured automatically at the end of the learn process. PCs should be configured to ignore outbound off network connections – Off Network set to “Outbound”

Network devices - recommended settings



SOFTWARE CORP

Status on network	Device name-location	Device IP address	Device type	Authorized	Ping	SNMP monitor / community	Current CCM rules	Idle time monitoring	Off-network connection monitoring (ignored parameter)	Manufacturer, MAC Address and First detected on network	View connections button
Active	Sonos, Inc....134	192.168.0.134	IoT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> public	0	Not Monitored	Not ignore	Sonos, Inc. 5C:AA:FD:F4:CD:E6 1/17/2026 9:18:36 AM	View Connections
Active	Microsoft Corp...135	192.168.0.135	PC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> public	0	Not Monitored	Outbound	Microsoft Corporation 28:16:A8:47:55:A5 1/17/2026 9:18:36 AM	View Connections
Active	VMware, Inc....136	192.168.0.136	Server	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> public	0	Not Monitored	Outbound	VMware, Inc. 00:0C:29:54:7E:7B 1/17/2026 11:51:22 AM	View Connections
Active	Unknown137	192.168.0.137	Caution	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> public	0	Not Monitored	Not ignore	44:A8:FC:57:EC:C7 1/17/2026 9:19:09 AM	View Connections

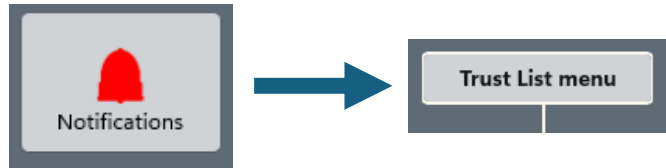
Router– Usually not supervised. Router make lots of off-network connections so Off Network set to “Outbound”

Network switch – Usually not supervised. Network switches should not make off-network connections so set Off Network set to “Not ignore”

Caution – Verify that this device has a purpose on the network and configure it as IoT, PC or Server. If it should not be on the network toggle the Authorized button off (to red).

Inactive – This device has not been active on the network for a period of time and should be de-authorized - toggle the Authorized button off (to red).

Post learn configuration – Trust Lists



Trust Lists are used to authorize **off LAN connections**, **use of email** for a specific IP and **use of off-network browsing** for a specific IP.

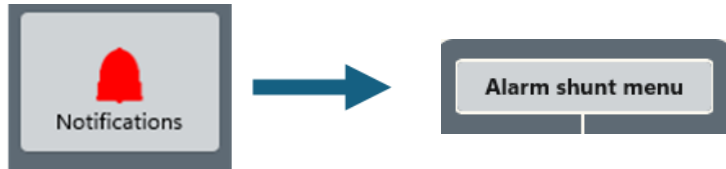
1/ Fill in the IP Address in the “Add an IP Address” space

2/ Select the list you want to place the address in.

The screenshot shows a 'Manage trusted connections' screen with an 'Exit' button in the top right. It is divided into two main sections: IP addresses and destinations. The top section has 'Not trusted IP address' on the left (containing '0.0.0.0') and 'Trusted IP address' on the right. Between them is an 'Add IP:' section with a four-digit input field, 'Add ->' and '<- Add' buttons, 'Move to trusted ->' and '<- Move to NOT trusted' buttons, and a 'Delete IP address' button. The bottom section has 'Not trusted destinations' on the left (listing AF Afghanistan, AX Aland Islands, AL Albania, DZ Algeria) and 'Trusted destinations' on the right. Between them are 'Move to trusted ->' and '<- Move to NOT trusted' buttons. Red arrows point from the text on the left to the 'Add IP:' input field, the 'Add ->' button, and the 'Trusted IP address' list area. Another red arrow points from the text on the right to the '<- Move to NOT trusted' button.

3/ Highlight and move addresses between the lists.

Post learn configuration – Shunting alerts



Alarm Shunts are used to **“turn off” specific alerts**. If you shunt from email, the alert won’t be sent via email but will still be recorded in the alarm database. If you choose to **“Shunt All”** the alert won’t be sent by email or recorded in the alarm database.

1/ Select the alert from the “Not shunted” list

2/ Click “Move alert to email shunt list”

3/ If required, Click “Move alert to shunt all list”

Alarm shunting

Exit

Move alert to email shunt list ->

Move alert to shunt all list ->

Alert types NOT shunted	Alert email shunted	Alarm email and event history shunted
10 Known-Unauthorized Device	20 Sensor Reboot	22 Sensor Windows Update - Reboot Pending
11 New/Unauthorized Device - ARP Protocol		
12 New/Unauthorized Device - IPv4 Protocol		
13 New/Unauthorized Device - IPv6 Protocol		
14 New/Unauthorized Device - LLDP Protocol		
15 New/Unauthorized Device - Address Outside Lo		
16 Unauthorized-Tracked TCP Port		
17 Unauthorized-Tracked UDP Port		
18 Connection to Not Trusted Off-Network Public II		

<- Move alert to NOT shunted

<- Move alert to Email shunted

4/ Alerts can be moved off the shunt lists using the buttons at the bottom

Post learn configuration – Critical Communications



EdgeSentry can monitor for **regular critical IPv4 communications**. EdgeSentry will monitor for that connection and warn you if it is not present within the specified time interval.

Monitoring parameters

- IPv4 packet monitoring only
- Source IP address
- Destination IP address
- Destination port number
- Minimum packet size
- Maximum packet size
- Time Frame (in intervals from 1-60 minutes)

Usually the manufacturer of the devices you are monitoring will be able to tell you **the port, packet size** and **time frame** information.

If that information is unavailable or incomplete, you can use WireShark to get the information from the network. Note that you should always clear use of WireShark with the IT department before using it.

There is no actual limit on the number of devices you can select for critical communications monitoring nor for the number of connections per device that you monitor.

Post learn configuration – Critical Communications



1/ Select your source device from the master list of devices.

2/ Select the destination IP and port from the list of detected connections.

Critical Communications Monitoring Exit

Network devices list
Double click to select the source device

IP	Device Name	Manufacturer
192.168.0.33	-	VCS Video Communicator
192.168.0.36	-	FLIR Systems
192.168.0.4	Trendnet Switch	TRENDnet, Inc.
192.168.0.5	Antaira Switch - Test Area	Antaira Technologies, LLC
192.168.0.6	Transition Switch - Production	Transition Engineering Inc.
192.168.0.7	Netgear Switch	Netgear
192.168.0.8	-	Communication Network
192.168.0.81	Main IT UPS	Eaton Corporation
192.168.0.97	-	Compal Information (Kunming)
192.168.1.110	-	Cellport Labs, Inc.

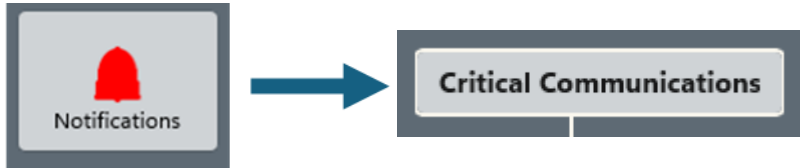
Device connections
Double click to select the destination port and IP

Destination IP	Destination port
1.179.118.1	587
104.208.16.88	443
104.208.16.89	443
104.208.16.90	443
104.208.16.91	443
104.208.16.92	443
104.208.16.95	443

Connections selected for monitoring
Double click to edit an existing monitored connection

Source IP	Destination IP	Dest. port	Min size	Max size	Time frame
192.168.0.128	192.168.0.107	49991	2200	2600	5
192.168.0.107	192.168.0.122	80	2000	22000	1

Post learn configuration – Critical Communications



3/ Choose minimum and maximum allowed packet sizes, and the time frame which you expect the packet to be sensed.

Critical connection monitor details

Source IP	192.168.0.128
Destination IP	104.208.16.91
Destination port	443
Minimum packet size	<input type="text"/>
Maximum packet size	<input type="text"/>
Max time elapsed	<input type="text"/>

4/ Click “Enable” to **save** the connection for monitoring.

5/ The connection will appear in the monitored connections list below.

Connections selected for monitoring
Double click to edit an existing monitored connection

Source IP	Destination IP	Dest. port	Min size	Max size	Time frame
192.168.0.128	192.168.0.107	49991	2200	2600	5
192.168.0.107	192.168.0.122	80	2000	22000	1

6/ Double click on any monitored connection to **edit** the monitoring parameters or to **delete** monitoring of that connection.

Questions-need assistance with setup?



- Phone Support, virtual training sessions and remote access support are available on request.
- Virtual training can be booked in advance via email
- Remote access support can be booked in advance via email and involves installation of a ConnectWise client (provided by LMN) on the EdgeSentry.

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