# Product Installation Guide

Version 2.0.2



razberi.net

Product List	
EndpointDefender <sup>™</sup>	5
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Razberi Monitor™	

EndpointDefender™

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This installation guide provides instructions for installing Razberi EndpointDefenders and monitoring them using Razberi Monitor software.

#### **Package Contents**

- EndpointDefender<sup>™</sup> Cybersecure PoE Appliance
- Power Cord (16/24 port units)
- Rack Mounting Brackets (16/24 port units)
- Power Supply (8 port unit)
- Installation Guide

#### Hardware Overview

#### **Front View**





### EndpointDefender

#### LED Operation Information

The tables below describe the status conditions of the various light emitting diode (LED) lights on the front and rear of your EndpointDefender.

#### Front Power and PoE Port LED Information

When the unit is powered, the Power LED will be on (green). When endpoints are connected to the device ports, they will be off, on (red), or blinking.

LED	STATUS		
PoE LED OFF		Poe not provided	
	RED ON	PoE provided	
	RED BLINKING	PoE overloaded	

#### Rear RJ45 Connector LED Information

Each RJ45 connector has a left and right LED. Data rate is shown on the left LED and link status is shown on the right LED.

LED	STATUS			
Left LED Data	OFF	10-MBPS data rate selected		
Rate Indicator	GREEN	100-MBPS data rate selected		
	ORANGE	1000 MBPS data rate selected (U1 only)		
Right LED Link	OFF	LAN link not established		
Status Indicator	AMBER ON	LAN link established		
	amber Blinking	LAN activity is occurring		

#### Install SFP Modules

The SFP port should use UL listed transceiver products, rated 3.3 V DC, Laser Class 1. The SFP is a combo port. Only the SFP or the RJ45 Uplink can be active at any given time.

#### Power Notice

This product requires 100-240 VAC / 50-60 HZ power. Consider using an UPS (Uninterruptible Power Supply) to avoid network data loss or network downtime. Installing a surge protector may help protect the product from being damaged by unregulated power surges.

### **Mounting Options**

#### **Rack Mounting**

16/24 port EndpointDefenders come with rack mounting brackets and side mount screws.



8 port EndpointDefenders require a mounting kit (MNT-RACK-SSIQ8) sold separately.



- 1. Remove the rubber feet from the bottom of the EndpointDefender to ensure a proper fit within the rack.
- 2. For 16/24 port EndpointDefenders, remove the front screws on both sides of the unit and align them with the mounting bracket holes. Insert the screws included with the kit and tighten them to secure the brackets. The removed screws can be discarded.
- 3. For 8 port mounting kits, remove the rear side screws on both sides of the device, place the device within the kit and align the device's holes with kit tabs (1). Insert and tighten the screws to secure the EndpointDefender to the kit. Place the power supply to the right of the device on the kit (2).
- 4. Place the assembled kit within the rack. Align the kit's rack brackets with the rack post mounting holes. Insert rack post screws (not included) and tighten them.



Mounting the product to rack posts.

#### **Desk or Shelf Mounting**

EndpointDefenders come with rubber feet for desk or shelf mounting. Ensure the desk or shelf is sturdy. Place the product on the desk or shelf free of obstructions to ensure proper airflow.

#### **Software Overview**



EndpointDefender™ Web Interface

Your product has an embedded web management interface that may be accessed using the default username: **admin** and password: **system**. You will use the web interface to configure and secure the product. Access to the web management interface requires an IP address. Detailed instructions on obtaining the IP address are covered later in this guide.



#### Razberi Monitor™

Razberi Monitor is a .NET Windows service that collects device information, monitors devices, and proactively notifies users of alert conditions. Razberi Monitor has alarm integrations with other systems such as Milestone XProtect® and Razberi MonitorCloud. Razberi Monitor is installed on every ServerSwitchIQ, Rugged, and Core unit. Alternatively, it can be installed on any Windows 10, Windows Server 2012 R2, or Windows Server 2016 platform. Instructions for installing and using Razberi Monitor are covered in the Razberi Monitor section.



#### Razberi MonitorCloud™

MonitorCloud provides 24/7 health monitoring and centralized management using secure, cloud-based services. You can receive Razberi Monitor performance and cyber security alerts from thousands of endpoints and Razberi appliances via email and SMS messages using MonitorCloud. For more information on Razberi MonitorCloud, visit www.razberi.net/support to review Razberi MonitorCloud prerequisites.

#### **Obtaining and Changing an IP Address**

To access and manage your EndpointDefender you will need to obtain its IP address. There are two procedures for doing so based on your network setup.

#### **DHCP** Procedure

1. Power the product and connect Uplink 1 network interface to a DHCP

#### EndpointDefender

server network to assign its IP address.

2. Use an IP device discovery tool such as Windows Network Discovery to discover your device.

#### **Static IP Procedure**

- 1. Power the device and connect the EndPointDefender's Uplink 1 network interface to a test or lab network of 169.254.X.X/ subnet 255.255.0.0
- The EndpointDefender's static IP address is shown on its product label. This unique address will be within the 169.254.X.X/ subnet 255.255.0.0 network. Once you have the device's IP address, it may be changed.

#### Change IP Connection Type or Address as Appropriate

- 1. Browse to the device's IP address, enter the default user name of **admin** and password of **system**.
- 2. Follow the prompts to change the password. Assign the device's name and location. Record the new password in secure location.
- 3. To change the IP connection type or IP address, navigate to the "Network" tab and enter the desired network settings. Select "Save" and "No" when asked to reboot the device.
- 4. Remove power and connect to the production network.

### Managing EndpointDefenders

Use Razberi Monitor installed on a Razberi appliance or other Windows device to discover, add, and manage EndpointDefenders and their endpoint devices.

1. Select the Razberi Monitor desktop icon to open its web-based management interface.



Razberi	Monitor
deskto	p icon

ystem mio		
Server: SSIQ24P-I7-8T (RZ024Q104164)		
Processor: Intel(R) Core(TM) i7-47905 CPU @ 1	20GHz	
Memory: 16 GB		
Disks		
Volumes		
RAID		
Uplink: Uplink 1		
Uplink: Uplink 2		
Uplink: Uplink 2 - Fiber		
Switch: 24 Port Switch		

Razberi Monitor web-based management interface

- To add discovered, unmanaged devices, go the EndpointDefender tab, click "Add Devices" and select the add button icon to manage the device. For devices not discovered, select the "Add by IP" button. You will be prompted to enter the device's IP address and credentials to manage. For discovering EndpointDefenders on a layer 2 network, SSDP must be enabled.
- 3. Click on "Managed Devices" to view all managed EndpointDefenders and their status.

Devices currently mana	aged by Razberi Monitor.								
Add Devices 🔸									aring
Location	Name	IP Address	^ Model	Serial	мас	Licensed	Status	CameraDefense	Remove
RU 14	RAZ-QA-SSIQ24	10.0.20.107	\$\$IQ24P-17-8T	RZ024Q104164	266081827FD5	~	Normal	•	
RU 38 :: Dev Rack	EPD 386	10.0.20.112	EPD-16P	RZED16104386	24608182826F	~	Online	0	
Day Rack RU37	EPO 532	10.0.20.113	EPD-16P	RZED16104532	246081828425	~	Online	0 0	

 Razberi Monitor is a licensed product for providing alerts to external systems. To obtain a license, contact Razberi Sales via email at salesinfo@razberi.net.

### **Connect and Secure Endpoints**

If your network and endpoint devices (cameras, controllers and IoT devices) are DHCP enabled, connect the devices to PoE LAN ports to obtain IP addresses, otherwise ensure the endpoint devices' IP addresses are within the same subnet as the EndpointDefender's network. Power over Ethernet (PoE) will automatically be provided to devices that require it. Secure your endpoint devices from cyber security threats by browsing to the EndpointDefender's CameraDefense webpage. Follow the CameraDefense setup instructions to bind MAC addresses, limit services, and apply other security policies. See the User Guide, CameraDefense section for more information and a detailed explanation of CameraDefense cyber security features, found at www.razberi.net/support.

### How to Factory Reset the Product

In the event you cannot access the product's web interface, it can be reset to its factory default by creating a network loop-back condition.

- 1. Remove power from the product and remove all endpoint devices and cables from the RJ45 PoE LAN Ports and Uplink 1.
- 2. Restore power to the product. Wait for 1 minute to allow the product to start normally before proceeding to the next step.

#### EndpointDefender

- 3. Using a short CAT 5 / 6 LAN cable, connect RJ45 LAN ports 1 and 2 together creating a loop-back condition. Wait for 15 seconds for detection of the loop-back condition.
- 4. Remove the CAT 5 / 6 LAN cable and wait for 1 minute as the unit performs a factory reset.
- 5. Your EndpointDefender's IP address and login credentials will be restored to their factory defaults.

#### Specification

#### PoE

- IEEE 802.3af, 802.3at
- 8 or 16 ports
- Up to 30W per port

#### **Ethernet Switch**

- HTTPS browser interface
- Layer 2 switching
- VLAN
- DHCP server
- Simple Service Discovery Protocol
- AES 256 encrypted communications
- Deep packet inspection to support Razberi CameraDefense

#### Software

- Razberi CameraDefense (included)
- Razberi Monitor (license not included)

#### Alerts

- Hardware performance
- Cyber

For a complete listing of all supported alerts see the User Guide.

#### **Part Numbers**

- EPD-8P: 8 Port EndpointDefender, 8 PoE, 140W output
- EPD-16P: 16 Port EndpointDefender, 6 PoE, 277W output
- MNT-RACK-SSIQ8: 8 Port EndpointDefender rack mount kit

### Support and Warranty Information

If you experience any problems with the installation or operation of this product **do not return it**, please contact Razberi.

For technical support via phone:

- In the United States, call 469-828-3380 Option 3, from 8:00 AM to 5:00 PM CDT.
- In Latin America, call +52 55 4161 1511, from 8:00 AM to 5:00 PM CDT.
- In the UK / Europe / Middle East / and Asia, call +44 113 868 0160

For technical support via email, contact technicalsupport@razberi.net

For information about Razberi's product warranty, see www.razberi.net/support/warranty/

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This installation guide provides instructions for installing all ServerSwitchIQ 1U and 2U models, and associated software.

#### **Package Contents**

#### 8 Port

- ServerSwitchIQ<sup>™</sup> 8 port
- Power Cord
- Wall Mounting Brackets
- Power Supply
- Installation Guide

#### 16/24 Port 1U

- ServerSwitchIQ<sup>™</sup>16/24 port 1U
- Power Cord
- Mounting Brackets
- Installation Guide

#### 24 Port 2U

- ServerSwitchIQ<sup>™</sup>2U
- Two Power Cords
- Rack Mount Accessories
- Installation Guide

#### **Hardware Overview**

#### **Model Front/Rear Views**

• 8 Port





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0

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9

-

8

[11]

USB 3.0 Ports

11 eSATA Port

8

9

6

10 U2 Uplink Port: SFP2 (Fiber)

12 HDMI Monitor Display

13 VGA Monitor Display

U2 Uplink Port: Razberi Server



#### • 16/24 Port 1U Front View





- ۲ 1
- ۲ ranbert W 6 1 USB 2.0 Ports 2 Power LED Disk Acitivity LED 3 4 PoE Indicators

#### **Rear View**



#### **LED** Operation Information

The tables below describe the status conditions of the various light emitting diode (LED) lights on the front and rear of your ServerSwitchIQ.

#### Front Power and PoE Indicator LED Information

When the unit is powered, the Power LED will be on (green). When endpoints are connected to the device ports, they will be off, on (red), or blinking.

LED	STATUS		
PoE Indicator	OFF	Poe not provided	
	RED ON	PoE provided	
	RED BLINKING	PoE overloaded	

#### **Rear RJ45 Connector LED Information**

Each RJ45 connector has a left and right LED. Data rate is shown on the left LED and link status is shown on the right LED.

LED		STATUS
Left LED Data	OFF	10-MBPS data rate selected
Rate Indicator	GREEN	100-MBPS data rate selected
	ORANGE	1000 MBPS data rate selected (U1 only)
Right LED Link	OFF	LAN link not established
Status Indicator	AMBER ON	LAN link established
	amber Blinking	LAN activity is occurring

#### **Network Uplinks**

There are two network uplinks on each ServerSwitchIQ:

- 1. Uplink 1 is a 10/100/1000 RJ45/SFP combo port. Only one connection type, either RJ45 or SFP, can be active at any given time.
- 2. Uplink 2 offers both 10/100/1000 RJ45 and SFP. Both connection types can be active simultaneously.

For questions regarding supported SFP modules, please contact Razberi technical support.

#### **Power Notice**

This product requires 100-240 VAC / 50-60 HZ power. Consider using an UPS (Uninterruptible Power Supply) to avoid network data loss or network downtime. Installing a surge protector may help protect the product from being damaged by unregulated power surges.

1 Mounting Tabs 2 Power Supply Location

**ServerSwitchIQ** 

#### **Mounting Options**

#### 8 Port

Use the two wall-mount brackets for securing your 8 port unit to a wall or shelf.

Wall-mount Brackets

Rack-mounting the 8 port ServerSwitchIQ requires a mounting kit (MNT-RACK-SSIQ8) sold separately.

Follow these instructions to rack-mount the 8 port ServerSwitchIQ:

1. Remove the rubber feet from the bottom of the 8 Port ServerSwitchIQ to ensure a proper fit within the rack.

8 Port Mounting Kit (MNT-RACK-SSIQ8)

2. Remove the rear side screws on both sides of the device, place the

#### 16/24 Port 1U

The 16/24 port 1U ServerSwitchIQ comes with rack mounting brackets and side mount screws.

16/24 Port Mount Kit (side mount screws not shown)

Follow these instructions to rack-mount the 16/24 port 1U ServerSwitchIQ:

25

1. Remove the rubber feet from the bottom of the 16/24 port 1U ServerSwitchIQ to ensure a proper fit within the rack.

Mounting the 8 Port ServerSwitchIQ to rack posts.

3. Insert and tighten the screws to secure the 8 Port ServerSwitchIQ to the kit.

- 4. Place the power supply to the right of the device on the kit (2).
- 5. Place the assembled kit within the rack. Align the kit's rack brackets with the rack post mounting holes. Insert rack post screws (not included) and tighten them.





- 2. Remove the front screws on both sides of the device and align them with the mounting bracket holes.
- 3. Insert the screws included with the kit and tighten them to secure the brackets. The removed screws can be discarded.
- 4. Place the assembled kit within the rack. Align the kit's rack brackets with the rack post mounting holes. Insert rack post screws (not included) and tighten them.



Mounting the 16/24 Port 1U ServerSwitchIQ to rack posts.

#### 24 Port 2U

The ServerSwitchIQ 2U rack mount kit allows you to install the appliance in any standard rack, accommodating racks with varying heights and depths. The kit includes a left and right L bracket rail structure that can be adjusted to the front and rear mounting posts of racks. Two small rack ears are also provided to secure the unit so that it cannot slide while resting on the L brackets of the rails.



This rail-based rack mounting kit is safe and rated for supporting the ServerSwitchIQ 2U appliance, but is <u>NOT</u> designed for use as a shelf. DO <u>NOT</u> PLACE ADDITIONAL WEIGHT OR OBJECTS ON TOP OF THE SERVERSWITCHIQ 2U APPLIANCE, USING IT AS A SHELF. OVERLOADING THIS RAIL SYSTEM CAN DAMAGE THE SERVERSWITCHIQ AND OTHER DEVICES IN THE RACK.  Conduct an inventory of all the components that come with the kit. Use the table below to review the component listing and their descriptions prior to starting the installation process. Should something be missing contact salesinfo@razberi.net.

Ref.	Part Name	Description	Qty
A	Rack ear fastener plate	Secures the ServerSwitchIQ to the rack, preventing it from sliding while on the rails.	2
В	Left and right rails, with L brackets	One rail is designed for the left and other for the right. Together they provide a rail that the ServerSwitchIQ sits upon.	2
С	Rear adjustable rail plates	Screwed to the rails with L brackets (B) and adjustable to be secured to back of the rack.	2
D	Rail screws and nuts	Secure the adjustable rails (B and C)	8
E	Ear mount screws	Secure the rack ears (A) to the chassis.	6

24 Port 2U ServerSwitchIQ Component Inventory List

2. Install the rack ears (A) on the left and right side of the appliance using the six (6) rack ear screws (E).



Installing the rack ears (A)

3. Mount the left and right front rails (B components) to the front rack mounting posts in the desired location using the rail screws and nuts (not supplied). One rail screw and mounting nut is applied to the top and bottom of each side of a rail (2 per side) for a total of 4 rail screws and mounting nuts. At this point, all four of the screws should be finger tight. Now, mount the left and right rear rails (C components) to the rear rack mounting posts in the matching location using four additional rail screws and nuts. The rear rails should fit on the outside of the front rails.



Left and right front rails (B) with left and right rear rails (C)

- 4. Fasten together the front and rear rails using four (4) rail screws and nuts (D) on each side. Place screws in the top and bottom positions, and as far apart as possible in the mounting holes provided.
- 5. Tighten all mounting screws to ensure they are secure prior to placing the appliance in the rack. <u>Double check each of the 16 screws and nuts</u> as this is **CRITICAL** for a secure rack mount assembly.
- 6. Test the strength of the two rails by gently applying downward pressure. This serves as a double check that all screws are tightened and properly placed. You are now ready to place the appliance on the rails.
- 7. Remove the rubber feet on the bottom of the appliance to ensure proper fit. Place the appliance on the two rails by sliding it into the rack, resting the appliance on top of the L brackets of the rails.



Placing the appliance on the rails

8. Secure the rack ears on each side of the front rack mounting post using screws approved for your rack (screws not included). This keeps the unit from being removed or sliding back or forward.

#### **Software Overview**

#### **Operating System Activation**

Razberi appliances come with Windows 10 Enterprise LTSB, Windows Server 2012 R2 or Windows Server 2016, and must be activated to enable all features. Please refer to the Windows license activation instructions in the Getting Started section below.

#### NVIDIA® GPU (optional)

Select units include an NVIDIA® Graphics Processing Unit for enabling analytics solutions from our certified partners. The option reduces CPU utilization, improves video quality, and reduces hardware costs by enabling higher camera counts per appliance.



#### Setup Wizard

Select the Setup Wizard desktop icon to start the application. Use the Setup Wizard to perform Product Registration, Switch Configuration, Network Configuration, MonitorCloud Registration, and to install your selected Video Management System VMS software.



#### Razberi Monitor™

Razberi Monitor is a .NET Windows service that collects device information, monitors devices, and proactively notifies users of alert conditions. It comes installed on the desktop of your ServerSwitchIQ. Razberi Monitor has alert integrations with other systems such as Milestone XProtect®, SolarWinds®, Syslog Servers, and Razberi MonitorCloud. Instructions for using it are covered in the Razberi Monitor section.



#### Razberi MonitorCloud™

MonitorCloud provides 24/7 health monitoring and centralized management using secure, cloud-based services. You can receive Razberi Monitor performance and cyber security alerts from thousands of endpoints and Razberi appliances via email and SMS message using MonitorCloud. A link to the website comes installed on the desktop of your ServerSwitchIQ. For more information on Razberi MonitorCloud, visit

www.razberi.net/support and review Razberi MonitorCloud prerequisites.

#### **RAID** Management

The unit's default RAID configuration is RAID 0. If that is not your desired configuration, you need to change it to avoid future video loss. Depending on your model, you will use either the Intel® Rapid Storage Technology or Highpoint application located on the Windows Startup Menu for configuring and managing your devices RAID configuration. Each application provides extensive help instructions to guide you through changing or managing your RAID configuration.

#### **CylancePROTECT**®

CylancePROTECT® is a licensed endpoint protection product. Users can check its status by right clicking on the green shield found in the Windows toolbar. It provides Razberi Monitor alerts if malware or other cyber threats are detected.

#### **Getting Started**

#### **Initial Setup**

- 1. Connect a keyboard, mouse and monitor to the appliance.
- 2. Power the unit
  - 8 Port: Connect the power supply to the appliance. Connect the power cord to the power supply and plug it into a power source.
  - 16/24 Port 1U: Connect the power cord to the appliance and plug it into a power source.
  - 24 Port 2U: Attach each of the two power cords to the appliance and plug each into a power source for redundancy.
- 3. For network connectivity, plug a network enabled ethernet cable into Uplink 2 (U2) of the appliance.

#### Windows Administration

The first time you start the appliance you will be asked to configure Windows for your use and accept the product terms and conditions.

The MS Windows license automatically activates if the appliance has access to the internet.

Windows 10 can be activated in one of two ways:

- Via the Internet: Connect Uplink 2 (U2) to the internet, right click on the Startup Window on the left side of the toolbar and select "System". Follow the instructions for activation on this page.
- OR
- Via the phone with Microsoft: Right click on the Startup Window on the left side of the toolbar and select "Run". Enter "SLUI.EXE 4" without quotes and with a space before the 4 in the command entry field and hit "Enter". Follow instructions for phone activation.

Windows Server 2012 R2 and 2016 can be activated as follows.

- 1. Copy the product key from the Windows label located on the top left of the appliance.
- From Windows, right click on the Startup Window on the left side of the toolbar and select "System". From this page select "Activate Windows". For Windows Server 2012 a Product Key entry form will appear. For Windows Server 2016 select "Change product key" for the Product Key entry form to appear.
- 3. Enter the product key into the form and select "Next".
- 4. Your unit's Windows Server license is activated.

#### **Use Setup Wizard**

1. Network Setup

Select the "Network Setup" tab to configure the network settings for the appliance's two Uplink NIC adapters. Both Uplink NIC adapters must be enabled in Windows and be connected to a live ethernet cable so that the configuration can be properly applied. The Uplink NIC adapters may be enabled from the Windows Network and Sharing Center > Change adapter settings page.

#### 2. Switch Configuration

Select the "Switch Configuration" tab to configure network settings for the appliance's switch, open the switch's web interface, reboot the switch, and reset the switch to its factory defaults.

#### 3. Product Registration

Select the "Product Registration" tab to register your new Razberi appliance to claim three years of warranty service. In addition to extending your 90-day warranty to three years, you also receive priority technical support, important notifications of software, hardware, and firmware updates, and health checks and cyber security reports relating to this appliance.

#### 4. MonitorCloud Registration

Razberi MonitorCloud is a cloud-based cybersecurity and health monitoring feature on all Razberi appliances. Select this tab, connect the appliance to the internet, and register for a MonitorCloud account. Only one account is needed for monitoring hundreds of Razberi appliances. Users can set up event triggers that proactively send out SMS texts or email alerts.

5. VMS Installation

Select the "VMS Installation" tab for installing one of the leading Video Management Systems available. Each featured installer product has been qualified to run on your Razberi appliance.

#### Verify RAID Configuration

The unit's default RAID configuration is RAID 0. If that is not your desired configuration, you need to change it now to avoid future video loss. Models with multiple storage drives have two different RAID management options.

 Intel Rapid Storage Technology Use the Intel Rapid Storage Technology application located in the Startup Menu to change the RAID configuration. Select its "Help"

menu to learn how to use this application for changing and managing the appliance's RAID configuration.

If your model includes a HighPoint RAID Controller, use the HighPoint application located in the Startup Menu to change its configuration. Enter username: **RAID**, password: **hpt** when prompted to access the configuration menu. Select its "Help" menu to learn how to use this application for changing and managing the appliance's RAID configuration.

### Complete Switch Setup

Your unit comes with a Power over Ethernet (PoE) switch for networking and powering cameras and endpoints. Besides providing a dedicated surveillance network, its build-in CameraDefense automates camera or endpoint cyber protection. Follow these steps to access, configure, and manage these capabilities.

- 1. Open the Switch web interface in either of the following two ways:
  - From the Setup Wizard, select the "Switch Configuration" tab and click on the "Open Switch Webpage" button.
  - Or, from your browser, access http://192.168.50.1
- 2. Login to the switch and change its default password. Its default credentials are username: **admin** / password: **system** Record the new password in a safe location.
- 3. Select the switch's "Network" tab and configure the network.

By default, the switch web interface's connection type is static and the DHCP Server is disabled.

If you want an isolated DHCP network for your cameras and endpoints, click on the DHCP Server's "Enabled" setting option to set it to 1. This will enable the switch's DHCP server for providing IP addresses to DHCP enabled cameras and endpoints.

If you want to use an external DHCP server, ensure it is connected via Uplink 1 (U1) for providing IP addresses to DHCP enabled devices on the LAN ports.

To assign static IP addresses to endpoints, you can use the same network settings as the default switch web interface (192.168.50.1) or configure it to match any network assignment you choose.

See the ServerSwitchIQ User Guide for more details on this functionality.

4. The Uplink 2 (U2) default is DHCP. It can be managed from the Windows Network and Sharing Center > Change adapter settings page.

#### Connect Cameras Securing them using CameraDefense

After configuring the switch's network, you are ready to attach cameras and other endpoints. The switch will automatically provide PoE to devices that require it. Next, use CameraDefense to protect cameras and endpoints from cybersecurity threats. Its setup wizard within the Switch web user interface quickly steps you through the configuration process.

- 1. Before you begin ensure the following:
  - Cameras and other devices are connected to the switch and generating traffic,
  - The VMS or other applications using the endpoints are configured and running, and
  - You have the addresses of any networks you want to whitelist.
- 2. Login to the switch web user interface selecting the "CameraDefense" tab.
  - Follow its setup wizard prompts.
  - Once complete, the CameraDefense dashboard will provide you the status of any vulnerabilities or cyber alert conditions. Its alerts are also provided to Razberi Monitor for centralized, proactive alerting.

#### Manage ServerSwitchIQ

Use Razberi Monitor installed on a Razberi appliance or other Windows device to discover, add, and manage ServerSwitchIQ, EndpointDefender and their endpoint devices.

1. Select the Razberi Monitor desktop icon to open its web-based management interface.



razberi	Home	EndpointDefender	Razbert MonitorCloud	Milestone
System Info	)			
Terrer 887		140		
Processor:	ntel(R) Core(TM) 17-479	16 CPU @ 3.20GHz		~
Memory: 16	GB			~
Disks				~
Volumes				~
RAID	p.4			¥
Uplink: Upli	ik 2			~
Uplink: Upli	ik 2 - Fiber			~
Switch: 24 F	ort Switch			~

- 2. Razberi Monitor will manage your ServerSwitchIQ and its switch by default. To add EndpointDefenders go to the "Managed Devices" tab, click "Add Devices" and select the add button icon to manage the device. For discovering EndpointDefenders, SSDP protocol must be enabled. For devices not discovered, select the "Add by IP" button entering the device's IP address and credentials.
- 3. Click on "Managed Devices" to view the managed ServerSwitchIQ, all managed EndpointDefenders and their status.

Managed Devices									
Devices currently mana	ged by Razberi Monitor.								
Add Devices 🕨									aring
Location	Name	IP Address	^ Model	Serial	MAC	Licensed	Status	CameraDefense	Remove
RU 14	RAZ-QA-SSIQ24	10.0.20.107	\$\$!Q24P-I7-8T	RZ024Q104164	266081827FD5	~	Normal	•	
RU 38 :: Dev Rack	EPD 386	10.0.20.112	EPD-16P	RZED16104386	24608182826F	~	Online	0	
Dev Rack RU37	EPD 532	10.0.20.113	EPD-16P	RZED16104532	246081828425	~	Online	0	

Managed Devices and their Status

 Razberi Monitor is a licensed product for providing alerts to external systems. To obtain a license contact Razberi Sales via email at salesinfo@razberi.net

#### Verify CylancePROTECT Operation

CylancePROTECT comes pre-installed on all professional models of ServerSwitchIQ. Follow these steps to verify that the program is running:

- 1. Open the system tray from the Windows Taskbar, typically located at the bottom of the screen next to the date/time display.
- 2. Click on the green CylancePROTECT agent icon.
- 3. The CylancePROTECT window will open and show the current activity underway.

Razberi Monitor web-based management interface

#### How to Factory Reset the Switch

In the event you cannot access the switch's web interface, it can be reset to its factory default by creating a network loop-back condition.

- 1. Remove power from the product and remove all endpoint devices and cables from the RJ45 PoE LAN Ports and Uplink 1.
- 2. Restore power to the product. Wait for 1 minute to allow the product to start normally before proceeding to the next step.
- 3. Using a short CAT 5 / 6 LAN cable, connect RJ45 LAN ports 1 and 2 together creating a loop-back condition. Wait for 15 seconds for detection of the loop-back condition.
- 4. Remove the CAT 5 / 6 LAN cable and wait for 1 minute as the unit performs a factory reset.
- 5. Your EndpointDefender's IP address and login credentials will be restored to their factory defaults.

### Support and Warranty Information

If you experience any problems with the installation or operation of this product **do not return it**, please contact Razberi.

For technical support via phone:

- In the United States, call 469-828-3380 Option 3, from 8:00 AM to 5:00 PM CDT.
- In Latin America, call +52 55 4161 1511, from 8:00 AM to 5:00 PM CDT.
- In the UK / Europe / Middle East / and Asia, call +44 113 868 0160

For technical support via email, contact technicalsupport@razberi.net

For information about Razberi's product warranty, see www.razberi.net/support/warranty/

Razberi Monitor™

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Use Razberi Monitor to manage and monitor Razberi products and services. Razberi Monitor is a suite of features that:

- Communicates with Razberi MonitorCloud for providing proactive SMS and Email notifications of Razberi hardware performance and cyber security threats.
- Integrates with leading VMS and Network Monitoring platforms to provide alert notifications.
- Manages ServerSwitchIQ and EndpointDefender appliances.

#### Activate Razberi Monitor

Razberi Monitor is a licensed product for providing monitoring alerts to systems such as MonitorCloud, SolarWinds, Milestone XProtect, and Syslog. To obtain a license contact Razberi Sales via email at salesinfo@razberi.net. You will be provided with a license activation file covering alerts generated from your ServerSwitchIQ and managed EndpointDefenders. Activate external alerting by uploading the license activation file from Razberi Monitor's License tab.

#### **Register Razberi Devices with MonitorCloud**

Razberi MonitorCloud is a health monitoring service providing hardware performance and cyber security threat notifications.

To register your Razberi devices, select the Razberi Monitor desktop icon, navigate to the "Razberi MonitorCloud" tab, and enter your credentials. If you do not have credentials, select the "Create account" link to request an account.

		Independent indepe
	Razberi Monitor	Razberi MonitorCloud
	desktop Icon	Razberi Monitor has been registered with Razberi MonitorCloud.
		Name (optional)
		Email Address
$\langle \rangle$	MonitorCloud	Password
C	desktop icon	Register with Razberi MonitorCloud
7,-		Don't have an account? Create account
$\checkmark$		MonitorCloud Setup within Razberi Monitor

Select the MonitorCloud desktop icon to access your account. For more detailed instructions on Razberi Monitor and MonitorCloud see www.razberi.net/support.

#### Manage Products Using Razberi Monitor

Please refer to the specific product section above for detailed instructions on how to configure Razberi Monitor for product management.

### **Other Alert Integrations**

In addition to MonitorCloud, Razberi Monitor provides alerts to other enterprise systems.

## milestone

Milestone XProtect®

To enable Razberi Monitor's alert integration with Milestone XProtect Corporate and Plus versions, follow these steps:

- 1. Select the Razberi Monitor desktop icon, navigate to the "Milestone" tab, and enter the Milestone XProtect Management server's IP address and Windows Authentication login credentials. Select save and enable.
- 2. Razberi Monitor will connect and automatically create event and alert definitions within the XProtect Management client.
- 3. Razberi alerts will be passed to the Alarm manager of Milestone XProtect. Work with the Milestone administrator to add the notifications for Razberi Alerts.
- 4. See the ServerSwitchIQ User Guide, Alert Integration section for more details on setup options and management.

### **SolarWinds**®

Razberi Monitor was tested on the SolarWinds Orion Platform 2018.2, NPM 12.3 and should work on this or higher versions. To enable Razberi Monitor's alert integration with SolarWinds, follow these steps:

- 1. Select the Razberi Monitor desktop icon, navigate to the "SolarWinds" tab, and enter the SolarWinds Management Server's IP address and application login credentials. Select save and enable.
- 2. Razberi Monitor will connect and automatically create Razberi alert definitions within SolarWinds' Alert Management component.
- 3. The administrator of SolarWinds must register your ServerSwitchIQ, which hosts Razberi Monitor, as a Node for alerts to have an originator.
- 4. Razberi alerts will be passed to SolarWinds. The alert resolution and notification rules can be modified to meet your organization's requirements.

### **Syslog Server**

To enable Razberi Monitor's alert integration with Syslog Servers, follow these steps:

- 1. Select the Razberi Desktop icon, navigate to the "Syslog" tab, and enter the Syslog Server's IP address. Select "Save" and "Enable".
- 2. Select the "Send Test Syslog" button to send a test message to the Syslog Server. Verify the message was received.
- 3. Work with the Syslog Server administrator to create alert notification rules for the Razberi Alerts.

### Install Razberi Monitor on Other Devices

To run Razberi Monitor on a non-Razberi Windows device follow these steps:

- 1. Download the latest version of Razberi Monitor from https://www.razberi.net/support/
- 2. Ensure the device is running Windows 10, Windows Server 2012, or Windows Server 2016.
- 3. .NET 4.7.2 or higher must be installed and enabled. If it is not, the installer will direct you to the Microsoft site where it can be downloaded. The installer will not operate without this prerequisite.
- 4. With the Razberi Monitor executable placed on the device, double click to install it. Follow the installation instructions. When finished, the Razberi Monitor Service will be operational and the Razberi Monitor and MonitorCloud icons will be installed on the desktop.
- Ensure the Windows or other network firewalls are not blocking ports used by Razberi Monitor. See the Ports Used By Razberi Monitor section of this guide for details.
- 6. Select the Razberi Monitor desktop icon to open its web-based management interface.

#### Ports Used by Razberi Monitor

Razberi Monitor's host platform requires the following UDP and TCP ports enabled. Unless otherwise noted, assume both inbound and outbound access are required.

Protocol/Port	Description
UDP 124	Time synchronization between EndpointDefenders and the Razberi Monitor host. Allows alerts from Endpoint- Defenders to be in time synchronization with Razberi Monitor.
TCP 8443	HTTPS Razberi Monitoring communications with End- pointDefenders. Necessary for Razberi Monitor to man- age and monitor EndpointDefenders.
TCP 433	TLS 1.2 Razberi Monitor initiated communications with MonitorCloud at https://monitor.razberi.net. Necessary for sharing EndpointDefender and Host Platform status and alerting with MonitorCloud.
UDP 1900	SSDP is used by EndpointDefenders for automated discovery within Razberi Monitor. Otherwise, users must know the IP address of EndpointDefenders to add and manage them.

Ports for Milestone, SolarWinds and Syslog:

See the respective product guides for ports used by each system.

- For Milestone, Razberi Monitor communicates with both the XProtect® Management and Event servers for providing its AlarmManager alerting information.
- For SolarWinds, Razberi Monitor communicates with the SolarWinds management server.
- For Syslog, Razberi Monitor communicates with the Syslog server using UDP port 514.

<u>NOTES</u>

NOTES

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