Configure ERSPAN with VMware

Published: 2024-07-16

The Encapsulated Remote Switched Port Analyzer (ERSPAN) enables you to monitor traffic on multiple network interfaces or VLANs and then send the monitored traffic to one or more destinations. The ExtraHop system supports the VMware Encapsulated Remote Mirroring Source packet mirror feature, an ERSPAN-like capability.

The following procedures explain how to configure an interface on the ExtraHop system to receive ERSPAN traffic and how to configure the VMware server with the vSphere Web Client.

For more information about configuring networking on the ExtraHop system, see the ExtraHop Admin UI Guide .

For more information about configuring the VMware vSphere server, see Working with Port Mirroring I in the VMware documentation.

Configure the ExtraHop interface settings

- 1. Log in to the Administration settings on the ExtraHop system through https://<extrahophostname-or-IP-address>/admin.
- 2. In the Network Settings, click **Connectivity**.
- 3. In the Interfaces section, click **Interface 1**.

Note: If you select **Interface 1** for management and **Interface 2** for ERSPAN, you cannot configure both interfaces on the same subnet.

- 4. Select Management + RPCAP/ERSPAN/VXLAN/GENEVE Target from the Interface Mode drop-down list.
- 5. Complete the remaining fields and then click **Save**.
- 6. Optional: Depending on your configuration, configure or disable the remaining interfaces.



Note: For more information about setting up network interfaces, see the Connectivity section in the ExtraHop Administration Guide.

Configure port mirroring on the vSphere server

- 1. Log in to the vSphere Web Client and select the vSphere distributed switch (VDS) from which you want to monitor traffic.
- 2. Click the **Settings**tab.
- 3. In the Settings section, click Port Mirroring.

Summary Monitor C	onfigure	Permissions	Ports	Hosts	VMs	Net	works
✓ Settings	Port I	Mirroring					
Properties	+ New.	. // Edit >	K Remove				
Topology	Session	Name				Ŧ	Туре
Private VLAN							
NetFlow							
Port Mirroring							
Health Check							
 Resource Allocation 							
System traffic							
Network resource p							
▼ More							
Alarm Definitions							

4. Click **New...** to create a port mirroring session to mirror vSphere distributed switch traffic to specific physical switch ports.

Tip: For detailed information about creating a port mirroring session, see your vSphere documentation.

a) In the Select session type section, select **Encapsulated Remote Mirroring (L3) Source** and click **Next**.

1 Select session type	Select session type
2 Edit properties	Select the type of the port mirroring session.
3 Select sources	
4 Select destinations	O Distributed Port Mirroring
5 Ready to complete	
	Remote Mirroring Source
	Remote Mirroring Destination
	Encapsulated Remote Mirroring (L3) Source
	Descriptions per session type ①

- b) In the Edit properties section, configure the following settings:
 - Name: Specify the name.
 - Status: Select Enabled from the drop-down list.
 - Encapsulation type: Select ERSPAN Type II from the drop-down list

Note: GRE is a supported encapsulation type; however, you must configure Network Overlay Decapsulation **P** for NVGRE on the sensor.

Select session type Edit properties	Edit properties Specify a name and the prope	erties of the port mirroring session.	
3 Select sources 4 Select destinations 5 Ready to complete	Name	Session 0	
5 Ready to complete	Status	Enabled ~	
	Session type	Encapsulated Remote Mirroring (L3) Source GRE	
	Encapsulation type	ERSPAN Type II ERSPAN Type III	
	Session ID	0	
	Advanced properties		
	Mirrored packet length	Enable 60	
	Sampling rate	1	
	Description		

- c) In the Select sources section, select existing ports or create new source ports and then click Next.
 - Warning: Do not include any VMkernel (vmk) ports, any ports connected to the virtual RevealX sensor, or any ports that might be carrying the ERSPAN data created by this mirror. Adding these ports will compound the traffic destined for the sensor and disrupt the networking capabilities of the dvSwitch, causing any hosts or interfaces participating in the dvSwitch to become permanently unavailable.
- d) In the Select Ports section, select virtual ports to include in this mirror.
 - Warning: Do not include any VMkernel (vmk) ports, any ports connected to the virtual RevealX sensor, or any ports that might be carrying the ERSPAN data created by this mirror. Adding these ports will compound the traffic destined for the sensor and disrupt the networking capabilities of the dvSwitch, causing any hosts or interfaces participating in the dvSwitch to become permanently unavailable.

~	Port ID 🕆	Port Name 🕆	Connected Entity T	Host T	Runtime MAC Addr T	Port Group Name T
~]	0		📅 mike-linu-3	mike-esxi-4.ad	-	🛆 Core
~]	1		🛱 PAN_Migrati	inike-esxi-4.ad		🛆 Core
0	14		💓 vmk1	mike-esxi-3.ad	00:50:56:69:dc:ba	🛆 NFS
~]	164		📅 mike-pavm-a	mike-esxi-4.ad		🛆 traps-5-user
~	2		📅 mike-serv-2	mike-esxi-4.ad	00:50:56:b5:11:40	🛆 Core
~]	204	**	📅 mike-pavm-a	mike-esxi-4.ad	-	🛆 Demo
~]	205		📅 mike-wtst-1	mike-esxi-3.ad		🛆 Demo
~]	206		📅 mike-wtst-2	mike-esxi-3.ad	-	🛆 Demo
~]	207		📅 mike-kali-1	mike-esxi-3.ad	-	🛆 Demo
~]	208		🗂 CbArtifactKit	inike-esxi-3.ad		🛆 Demo
1	200		A tost const	🔲 miko osvi A od		A Domo

e) Click Next.

f) In the Select destinations section, click the plus sign (+) to add the IP address or addresses that should receive the mirrored traffic.

 1 Select session type 2 Edit properties 	Select destinations Select the destination ports and the uplinks of the port mirroring sess	sion.	
3 Select sources 4 Select destinations	+ ×		
5 Ready to complete	IP Address		т
	10.75.1.127		

g) In the Ready to complete section, verify the settings and then click **Finish**.

1 Select session type 2 Edit properties	Ready to complete Review the settings for the new port mirroring session before finishing the wizard.				
 3 Select sources 4 Select destinations 5 Ready to complete 	Name Status Session type Encapsulation type Session ID	Session O Enabled Encapsulated Remote Mirroring (L3) Source ERSPAN Type II O			
	Advanced properties Sampling rate Number of source ports Destination IP addresses Description	Mirror 1 of 1 packets 84 10.75.1.127 			
		CANCEL BACK FINIS			

Tip: Consider turning off TCP segmentation offloading on the operating systems where the mirrored traffic is coming from.