Configure ERSPAN with the Nexus 1000V

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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. This guide explains how to configure ERSPAN on an ExtraHop Discover appliance with a Cisco Nexus 1000V switch that is running on a Windows machine.

This guide assumes that you are familiar with basic Cisco administration.

For more information, see the following documentation:

- Cisco: Configuring an ERSPAN Port Profile
- ExtraHop: ExtraHop Admin UI Guide 🖪

Configure the ExtraHop interface settings

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

- 1. Log in to the Administration settings on the ExtraHop system through https://extrahop-hostname-or-IP-address>/admin.
- 2. In the Network Settings section, click **Connectivity**.
- 3. In the Interfaces section, click Interface 1 or Interface 2.
- From the Interface Mode drop-down menu, select Management + RPCAP/ERSPAN/VXLAN/GENEVE Target.
- 5. To enable DHCP, select the checkbox.
- 6. In the IP Address field, type the IP address that you want to assign to the ExtraHop port for ERSPAN traffic
- 7. In the Netmask field, type the netmask of the ExtraHop system.
- 8. In the Gateway field, type the gateway IP address of the ExtraHop system.
- Click Save.
- 10. Optional: Disable the remaining interfaces, based on your configuration needs.
 - Note: For more information about setting up network interfaces, see the Connectivity ✓ section of the ExtraHop Admin UI Guide ☑.

Configure the Nexus 1000V settings

- 1. Log in to your virtual supervisor module (VSM).
- 2. Identify the virtual Ethernet hosts to monitor by running the following command:

Switch# Show int virt

3. Enter configuration mode by running the following command:

Switch# config terminal

4. Create a new monitor session (also know as a port mirroring session) by running the following command:

switch(config)# monitor session 1 type erspan-source

5. Configure the ExtraHop ERSPAN target IP address by running the following command:

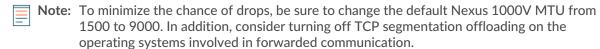
```
switch(config-erspan-src)# destination ip <ip-address>
```

where <ip-address> is the destination IP address for your ERSPAN target.

Set an ERSPAN ID by running the following command:

where <integer> is the ID number, such as 1.

7. Set the MTU to 9000 by running the following command:



8. Add data sources by running the following command:

where <sources> are the sources for your data.

1. In the following example, data is taken from a guest:

In this example, both means that the VM is sending and receiving data.

2. In the following example, data is taken from all traffic received by the VLAN:

```
switch(config-erspan-src)# source vlan 1010 rx
```

9. Enable the monitoring session by running the following command:

```
switch(config-erspan-src)# no shut
```

10. Exit from the ERSPAN source and return to configuration mode by running the following command:

11. Exit config mode and return to the enable prompt by running the following command:

12. Save your changes by running the following command:

```
switch# copy running-config startup-config
```

13. Check the settings by running the following command:

In the following example, a functioning monitoring session is

```
session 1
both
source port-profile :
    rx
     tx
both :
filter VLANs : filter not specified
destination IP : 10.10.247.93
ERSPAN ID : 1
ERSPAN TTL : 64
ERSPAN IP Prec. : 0
ERSPAN DSCP : 0
ERSPAN MTU : 9000
ERSPAN Header Type: 2
```

displayed:

Next steps

Log in to the ExtraHop system through https://extrahop-hostname-or-IP-address> and view the monitored traffic.