IBM Security QRadar Incident Forensics
Version 7.3.0

QRadar Packet Capture Quick Reference Guide

Note

Before you use this information and the product that it supports, read the information in “Notices” on page 7.

Product information

This document applies to IBM QRadar Security Intelligence Platform V7.3.0 and subsequent releases unless superseded by an updated version of this document.

Contents

About this Packet Capture quick reference guide

This documentation provides you with quick reference information that you need to install and configure IBM® QRadar® Packet Capture. QRadar Packet Capture is supported by IBM Security QRadar.

Intended audience

System administrators who are responsible for installing QRadar Packet Capture must be familiar with network security concepts and device configurations.

Technical documentation

To find IBM Security QRadar product documentation in the QRadar products library, see Accessing IBM Security Documentation Technical Note (www.ibm.com/support/docview.wss?rs=0&uid=swg21614644).

Contacting customer support

For information about contacting customer support, see the Support and Download Technical Note (http://www.ibm.com/support/docview.wss?uid=swg21616144).

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Chapter 1. Upgrading QRadar Packet Capture

To upgrade from QRadar Packet Capture V7.2.8 to V7.3.0, install a cumulative software fix pack on a QRadar Packet Capture appliance. The software version that is installed on the appliance must be build 7.2.6.241 .

Procedure

1. Ensure that there isn't packet capture or search activities in progress.
2. Use SSH to log in to your system as `root` user.
3. Download the `7.3.0-QRadar-PCAP-build<build_number>.sfs` fix pack from IBM Fix Central (http://www.ibm.com/support/fixcentral/)
4. Copy the fix pack to the `/tmp` directory.

   If space in the `/tmp` directory is limited, copy the fix pack to another location that has sufficient space.
5. Create the `/updates` directory by typing the following command:

   ```
   mkdir -p /updates
   ```
6. Use the **`cd`** command to change to the directory where you copied the fix pack file.

   ```
   cd /tmp
   ```
7. To mount the fix pack file to the `/updates` directory, type the following command:

   ```
   mount -o loop -t squashfs 7.3.0-QRadar-PCAP-build<build_number>.sfs
   /updates
   ```
8. To run the installer for the fix pack, change the directory to the `/updates` directory and type the following command:

   ```
   sh installer.sh
   ```
9. Restart the system.

Chapter 2. QRadar Packet Capture quick reference

Before you can capture packets, you must configure IBM Security QRadar Packet Capture network and connection settings.

Intel SFP+ and SFP compatibility list

The QRadar Packet Capture appliance has only one capture port (DNA0). The QRadar Packet Capture appliance is not equipped with a SFP transceiver, so you must install either an SFP+ 10G or SFP 1G (Copper RJ45) into the capture port.

To purchase SFP modules for your QRadar Packet Capture appliance, see the following vendor websites:

- Digi-Key web site (http://www.digikey.com)
- Mouser Electronics web site (http://www.mouser.com)
- CDW web site (http://www.cdw.com)
- Newegg web site (https://www.newegg.com)
- Amazon web site (http://amazon.com)

When the SFP 1G is installed, it truncates the capture rate to 1 Gbps.

To have multiple 1G connections, you can put a switch or an aggregator in front of where the 10G outbound port goes into the QRadar Packet Capture SFP+ 10G port. As a result, you can have multiple 1Gb ports aggregated into the QRadar Packet Capture 10G SFP+ interface.

The following list describes the SFP+ and SFP module requirements:

Part Number	Description
E10GSFPSR	Dual Rate 10GBASE-SR/1000BASE-SX, Intel Ethernet SFP+ SR Optical
E10GSFPLR	Dual Rate 10GBASE-LR/1000BASE-LX, Intel Ethernet SFP+ LR Optical
FCLF8522P2BTL	1000BASE-T, Finisar Gigabit Ethernet Transceiver
453153-001	HP Gigabit SX Transceiver

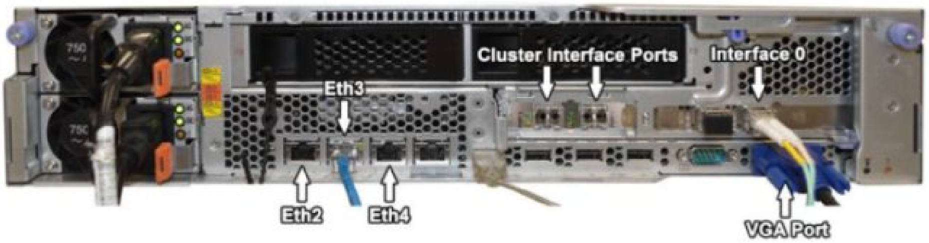
Network Configuration

To initially configure the network, a display, a keyboard, and an Ethernet connection to an onboard port are required. By default, the system has active DHCP ports.

If you know the IP address of the Ethernet port that is in use, go to Start recording.

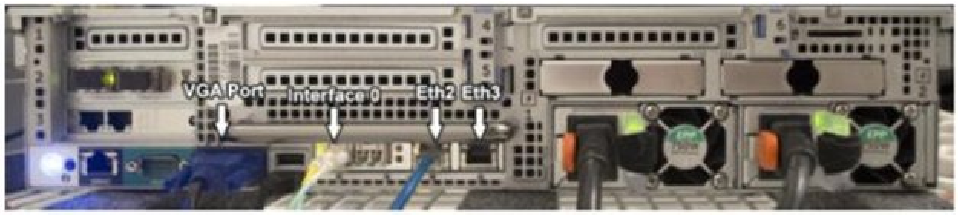
1. Provide a network connection for remote access to the server.

Provide an Ethernet connection to one of the onboard Ethernet ports, eth2, eth3, or eth4, as shown in the following diagram.



2. Provide a network connection for network capture.

   Provide fiber 10G connections by using the Interface 0 ports that are shown in the following diagram.



   Important: Ensure that there is traffic over the connections. To capture traffic, you must use a Tap or SPAN (mirror) port. When you use a SPAN port on a switch, if the switch assigns a lower priority to the SPAN port, some packets might be dropped.

3. Use SSH and port 4477 to log in as the root user.

   The default user name is: `root`. The default password is: `P@ck3t08.`.

4. Record the IP address.

   After you log in, open a terminal and enter the following command: `#ifconfig -a`

   This command provides the IP address of the Ethernet port that is connected.

   Note: For information about setting a static IP address, see the *IBM Security QRadar Packet Capture User Guide.*

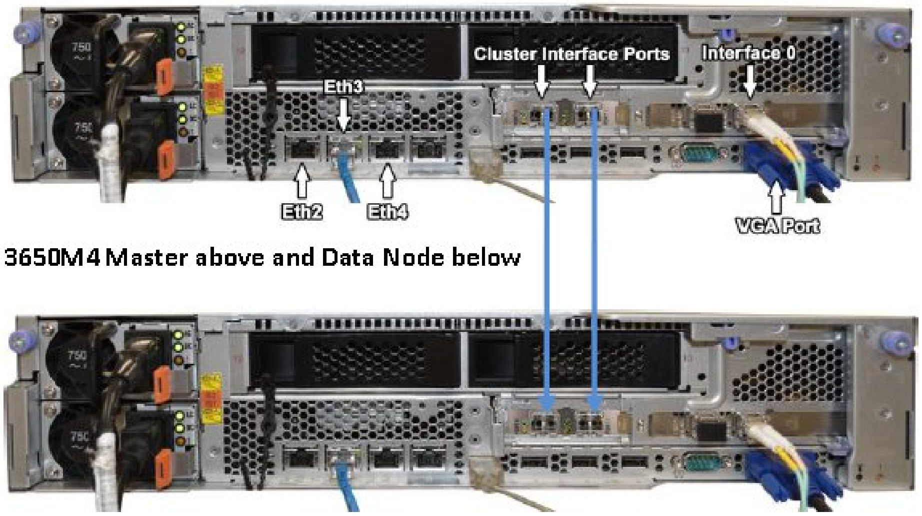
5. Test the connection.

   To test the connection, ping your internal network or log in remotely by using SSH on port 4477. Ensure that there is a successful connection before you continue.

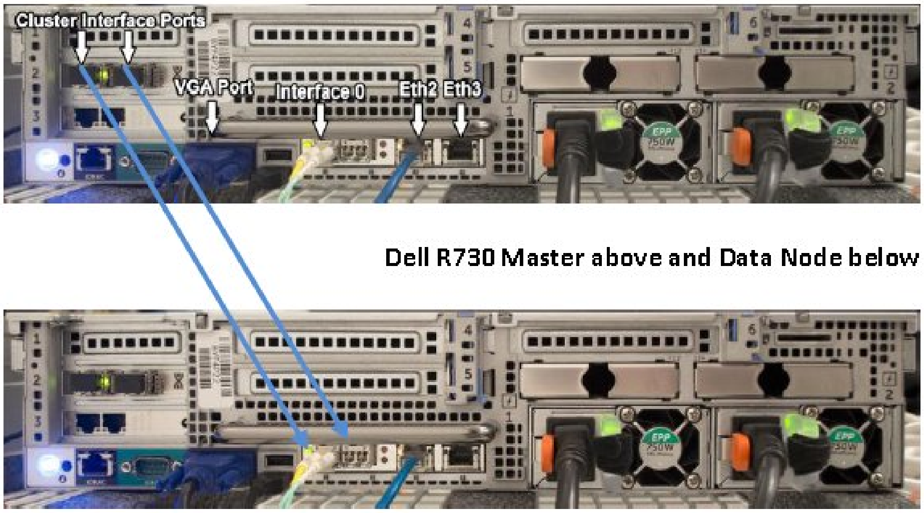
Connect the cluster

After you successfully connect the network to the standalone or master system, connect the master packet capture appliance to the QRadar Packet Capture Data Node appliances. If you have only a standalone packet capture system, this step is not required.

1. Refer to the hardware diagram for your packet capture device.
   - IBM System x3650 M4 master packet capture device and QRadar Packet Capture Data Node connection



- Dell R730 packet capture device and QRadar Packet Capture Data Node



2. On the back of the packet capture device, connect the left cluster interface port on the master to the left cluster interface port on the first data node, as indicated by the arrows in the preceding diagrams.
3. If there is a second data node, connect the right cluster interface port on the master to the right interface port on the second data node.
4. From a terminal on the master system, check the connections with a ping test:

   ```
   ping 1.1.1.2
   ping 2.2.2.2
   ```

5. If you do not receive a response from the ping, swap the cable connections on only the data node interfaces.
   - If only one data node is attached, only one ping must respond successfully.
   - If after you switch the cables and there is still no response from the ping test, switch the cables on the data node NIC to the second installed optical Ethernet NIC (if there is one) and repeat the ping test.

Start recording

After there is a successful network connection to the system, you can begin recording network packets to disk and viewing statistics about traffic on a network.

1. Open a web browser and access the device:

   `https://PCAP_IP_Address:41390`

2. Log in by using following user information:

   User: `continuum`

   Password: `P@ck3t08..`

3. Enable each data node (slave) that you physically connected.
4. Start recording.

   After you log in, and enabled any data nodes, go to the **Capture State** page and click **Start Capture**.

   Note: After the capture starts, a statistics window that contains all capture details is displayed.

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