NOMADIX®

Alloc8

SPAN and Mirror Port Monitoring

SPAN and Mirror Port Monitoring

The Alloc8 appliance can operate out-of-path, or ON-LAN mode, with any hub or switch that supports port mirroring or SPAN ports.

This topology is used when customers need to monitor traffic only, without installing the Alloc8 in-line. The Alloc8 monitors and reports on all applications presented on the SPAN/mirror port. This is regularly used to perform network audits as it provides great flexibility in restricted and complex network environments.

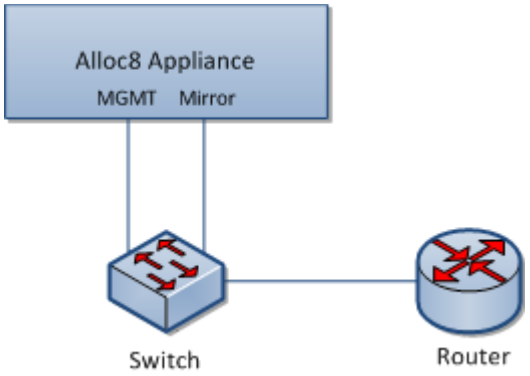


Figure 1: Topology diagram showing how to cable MGMT and Mirror ports for Mirror/SPAN port monitoring.

To configure Mirror/SPAN port monitoring, perform the following tasks:

1. Configure Mirror Port Mode
2. Enable Monitoring of Mirror/SPAN Traffic
3. Configure internal subnets as internal network objects

After enabling Mirror/SPAN monitoring, and the appropriate Internal Network Objects have been defined, the Alloc8 appliance monitors traffic received on the Mirror/SPAN receiving port as if it were in-line. The onlyexception is the Interface Reports are blank because the Alloc8 appliance has no concept of packet direction at the interface level.

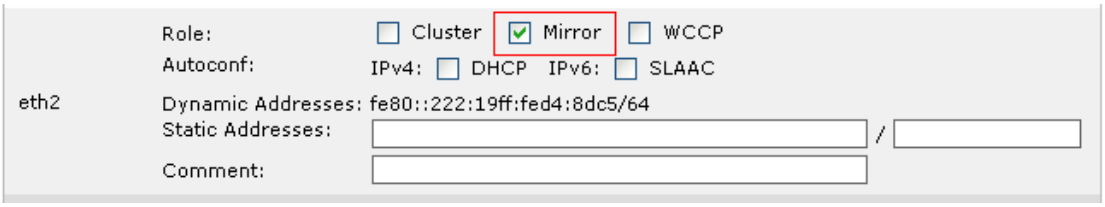
Configure Mirror Port Mode

Before enabling Mirror/SPAN port monitoring, you must first configure a switch port that will mirror all the traffic. Typically, the WAN port on the core switch is configured to mirror traffic to an unused port, which is cabled to the Alloc8 appliance. Alternatively, a network hub can be deployed in-path, and the Alloc8 appliance can be cabled directly to the hub (since a hub, by design, mirrors all traffic to all ports).
Any port not enslaved to a bridge or in use for another function, for example Cluster, may be used to receive mirror port or SPAN port traffic.

Enable Monitoring of Mirror/SPAN Traffic

Enable mirror/SPAN port on an interface to monitor that type of traffic.

1. Click **System > Network > IP Address**.
2. To use an interface as a Mirror port, select the **Mirror** check box.



3. Click **Apply Changes**.
   The selected interface now accepts Mirror/SPAN traffic.

The following commands can be executed from the CLI in order to enable or disable Mirror/SPAN port monitoring on an interface.

> en

con t

(config) # mirror interface <inf>(config) # no mirror

interface <inf>

Configure internal subnets as internal network objects

For the Alloc8 appliance to determine traffic direction, all internal subnets should to be defined as internal Network Objects. After identifying the subnets as internal network objects, as traffic passes through the appliance the Alloc8 appliance determines packet direction based on the following rules:

Rule	Result
Packet's source IP matches an Internal Network Object AND Packet's destination IP DOES NOT match an Internal Network Object	Packet is classified as outboundtraffic.
Packet's source IP DOES NOT match an Internal Network Object AND Packet's destination IP matches an Internal Network Object	Packet is classified as inbound traffic.

Packet's source IP matches an Internal Network Object AND Packet's destination IP matches an Internal Network Object	Traffic flowing from the lower IP to the higher IP is classified as outbound traffic. Traffic flowing from the higher IP to the lower IP is classified as inbound traffic.
Packet's source IP DOES NOT match an Internal Network Object AND Packet's destination IP DOES NOT match an Internal Network Object	Traffic flowing from the lower IP to the higher IP is classified as outbound traffic. Traffic flowing from the higher IP to the lower IP is classified as inbound traffic.

1. Click **Objects > Network**.
2. To change a network object to an internal object, click **Edit** and change the location to **Internal**.
3. Click **Apply Changes**.

Monitor Span/Mirror Traffic

Once Mirror/SPAN monitoring is enabled and the appropriate Internal Network Objects have been defined, the Alloc8 appliance will monitor traffic received on the Mirror/SPAN receiving port as if it were in-line.
The only exception is the Interface Reports will be blank, because the Alloc8 appliance has no concept of packet direction at the Interface level.