



Configuring SPAN on SVC Interfaces

Effective SAN-OS Release 1.3(x) Switched Port Analyzer (SPAN) capabilities are also available on the Caching Services Module (CSM) module.

The SPAN feature is specific to switches in the Cisco MDS 9000 Family. It monitors network traffic through a interface. Traffic through any SVC interface can be replicated to a special port called the SPAN destination port (SD port).

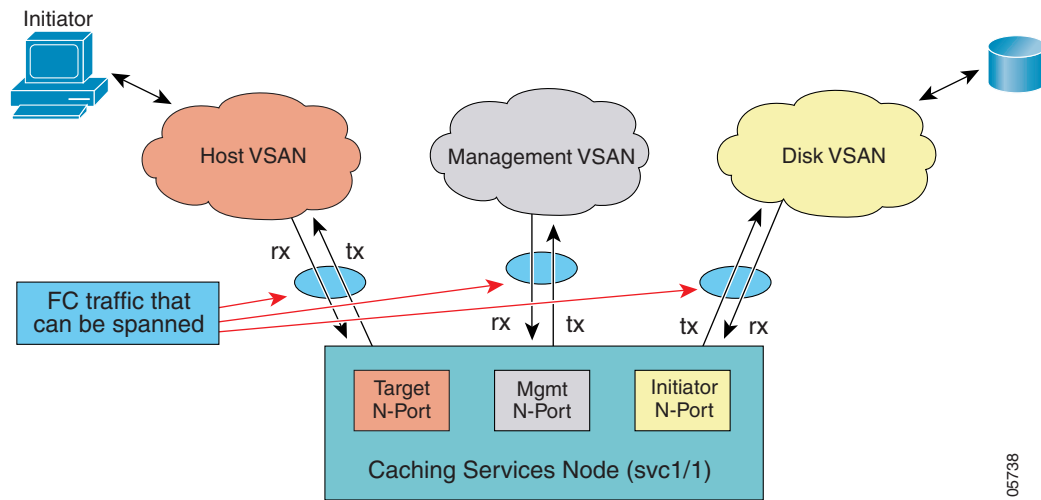
This chapter includes the following sections:

- [About SVC as a SPAN Source, page 9-2](#)
- [Configuring SVC Interfaces as SPAN Sources, page 9-2](#)

About SVC as a SPAN Source

SPAN sources refer to the interfaces from which traffic can be monitored. You can also specify CSM nodes as a SPAN source, in which case, the SVC virtual interfaces (N-ports) are included as SPAN sources. You can choose the SPAN traffic in the ingress direction, the egress direction, or both directions for any source interface (see [Figure 9-1](#)).

Figure 9-1 SVC Interfaces as SPAN Sources



You can also specify the traffic type (initiator traffic, target traffic, or management traffic) in both the ingress and egress directions or in either direction. To specify this option, use the **traffic-type** parameter.

Refer to the “[Multiple Initiators and Targets](#)” section on [page 2-9](#) for additional information on configuring multiple N-port VSANs.

Configuring SVC Interfaces as SPAN Sources

To create SVC interfaces as SPAN sources, follow these steps.

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- Step 1** Enter the MDS configuration mode.
- ```
switch# config t
switch(config)#
```
- Step 2** Configure a SPAN session.
- ```
switch(config)# span session 2
switch(config-span)#
```
- If the session does not exist, it will be created.
- Step 3** Configure the destination interface for the SPAN session.
- ```
switch(config-span)# destination interface fc1/9
```
- Step 4** Configure the source interface svc1/1 for the initiator, target, and mgmt traffic-types in both directions.

```
switch(config-span)# source interface svc1/1
```

**Note**

The traffic-type option is specific to SVC interfaces and cannot be used with any other SPAN source interfaces type.

- Step 5** Configure the source interface svc2/1 for all initiator and mgmt traffic in the rx direction, and for all target traffic in the tx direction.

```
switch(config-span)# source interface svc2/1 rx traffic-type initiator
switch(config-span)# source interface svc2/1 rx traffic-type mgmt
switch(config-span)# source interface svc2/1 tx traffic-type target
```

- Step 6** Configure the source interface in the rx direction for the initiator, target, and mgmt traffic-types in the rx direction.

```
sw(config-span)# source interface svc1/1 rx
```

- Step 7** Display the configured SPAM session to verify the configuration.

```
switch# show span session 2
Session 2 (admin suspended)
 Destination is fc1/9
 No session filters configured
 Ingress (rx) sources are
 svc1/1(initiator), svc1/1 (target), svc1/1 (mgmt)
 svc2/1(initiator), svc2/1(mgmt)
 Egress (tx) sources are
 svc1/1(initiator), svc1/1 (target), svc1/1 (mgmt)
 svc2/1(target)
...
```

You have now configured SVC interfaces as SPAN sources. Refer to the *Cisco MDS 9000 Family Configuration Guide* for further details on the SPAN feature.

## Using VSAN Filters to Specify N-Port Traffic

By default, traffic on all N-ports are spanned. You can monitor traffic on a specific N-port using the VSAN filtering SPAN feature.

For example, if a SVC interface (3/1) with three initiator N-ports. Each N-port is in VSAN 3, 4, and 5 respectively. The following procedure configures the steps to SPAN the initiator N-port in VSAN 3.

Refer to the *Cisco MDS 9000 Family Configuration Guide* for further details on using VSAN filters.

To configure a SPAN filter, follow these steps:

- Step 1** Enter the MDS configuration mode.

```
switch# config t
switch(config)#
```

- Step 2** Configure a SPAN session.

```
switch(config)# span session 3
switch(config-span)#
```

- Step 3** Configures the source svc 3/1 interface in the egress (tx) direction for all initiator traffic.

```
switch(config-span)# source interface svc 3/1 tx traffic-type initiator
```

- Step 4** Configures VSAN 2 as a session filter to only span traffic in VSAN 2. This will specifically monitor traffic on the initiator N-port traffic in VSAN 2.

```
switch(config-span)# source filter vsan 2
```

- Step 5** Configures VSAN 4 and 5 as a session filter to additionally span initiator N-port traffic in these two VSANS.

```
switch(config-span)# source filter vsan 4-5
```

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