



# CHAPTER 1

## Discovering SCSI Targets

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This chapter describes the SCSI LUN discovery feature provided in switches in the Cisco Nexus 5000 Series. It includes the following sections:

- [Information About SCSI LUN Discovery, page 1-1](#)
- [Displaying SCSI LUN Information, page 1-3](#)

### Information About SCSI LUN Discovery

Small Computer System Interface (SCSI) targets include disks, tapes, and other storage devices. These targets do not register logical unit numbers (LUNs) with the name server.

The name server requires LUN information for the following reasons:

- To display LUN storage device information so that a Network Management System (NMS) can access this information.
- To report device capacity, serial number, and device ID information.
- To register the initiator and target features with the name server.

The SCSI LUN discovery feature uses the local domain controller Fibre Channel address. It uses the local domain controller as the source FC ID, and performs SCSI INQUIRY, REPORT LUNS, and READ CAPACITY commands on SCSI devices.

The SCSI LUN discovery feature is initiated on demand, through CLI or SNMP. This information is also synchronized with neighboring switches, if those switches belong to the Cisco Nexus 5000 Series.

This section includes the following topics:

- [About Starting SCSI LUN Discovery, page 1-1](#)
- [Starting SCSI LUN Discovery, page 1-2](#)
- [About Initiating Customized Discovery, page 1-2](#)
- [Initiating Customized Discovery, page 1-2](#)

### About Starting SCSI LUN Discovery

SCSI LUN discovery is done on demand.

Only Nx ports that are present in the name server database and that are registered as FC4 Type = SCSI\_FCP are discovered.

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## Starting SCSI LUN Discovery

To start SCSI LUN discovery, perform this task:

| Command   | Purpose   |
|---|---|
| <pre>switch# <b>discover scsi-target</b> {<b>custom-list</b>   <b>local</b>   <b>remote</b>   <b>vsan</b> <b>vsan-id fcid fc-id</b>} <b>os</b> {<b>aix</b>   <b>hpux</b>   <b>linux</b>   <b>solaris</b>   <b>windows</b>} [<b>lun</b>   <b>target</b>]</pre> | Discovers SCSI targets for the specified operating system (OS). |

The following example discovers local SCSI targets for all operating systems (OSs):

```
switch# discover scsi-target local os all
discovery started
```

The following example discovers remote SCSI targets assigned to the AIX OS:

```
switch# discover scsi-target remote os aix
discovery started
```

The following example discovers SCSI targets for VSAN 1 and FC ID 0x9c03d6:

```
switch# discover scsi-target vsan 1 fcid 0x9c03d6
discover scsi-target vsan 1 fcid 0x9c03d6
VSAN:      1 FCID: 0x9c03d6 PWWN: 00:00:00:00:00:00:00:00
  PRLI RSP: 0x01 SPARM: 0x0012
  SCSI TYPE: 0 NLUNS: 1
  Vendor: Company 4 Model: ST318203FC   Rev: 0004
  Other: 00:00:02:32:8b:00:50:0a
```

The following example discovers SCSI targets from the customized list assigned to the Linux OS:

```
switch# discover scsi-target custom-list os linux
discovery started
```

## About Initiating Customized Discovery

Customized discovery consists of a list of VSAN and domain pairs that are selectively configured to initiate a discovery. Use the **custom-list** option to initiate this discovery. The domain ID is a number from 0 to 255 in decimal or a number from 0x0 to 0xFF in hex.

## Initiating Customized Discovery

To initiate a customized discovery, perform this task:

| Command  | Purpose   |
|--|---|
| <pre>switch# <b>discover custom-list add vsan</b> <b>vsan-id domain domain-id</b></pre>    | Adds the specified entry to the custom list.          |
| <pre>switch# <b>discover custom-list delete vsan</b> <b>vsan-id domain domain-id</b></pre> | Deletes the specified domain ID from the custom list. |

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## Displaying SCSI LUN Information

Use the **show scsi-target** and **show fcns database** commands to display the results of the discovery.

The following example displays the discovered targets:

```
switch# show scsi-target status
discovery completed
```



### Note

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This command takes several minutes to complete, especially if the fabric is large or if several devices are slow to respond.

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The following example displays the FCNS database:

```
switch# show fcns database
```

The following example displays the SCSI target disks:

```
switch# show scsi-target disk
```

The following example displays the discovered LUNs on all operating systems:

```
switch# show scsi-target lun os all
```

The following example displays the port WWN that is assigned to each operating system (Windows, AIX, Solaris, Linux, or HP-UX):

```
switch# show scsi-target pwwn
```

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