CHAPTER 20

Unique Device Identifier Retrieval for the Cisco CMTS

Revised: November 10, 2008, OL-1467-08

The Unique Device Identifier Retrieval (UDI retrieval) feature provides the ability to retrieve and display the Unique Device Identifier (UDI) information from any Cisco product that has electronically stored such identity information.

Feature History for the Unique Device Identifier Retrieval Feature

Release	Modification
12.3(13)BC	This feature was integrated into Cisco IOS Release 12.3(13)BC.

Software images for the Cisco uBR10012 universal broadband router, Cisco uBR7246VXR universal broadband router, and the Cisco uBR7100 series universal broadband routers are deferred to Cisco IOS Release 12.3(13)BC.

Finding Support Information for Platforms and Cisco IOS Software Images

Use Cisco Feature Navigator to find information about platform support and Cisco IOS software image support. Access Cisco Feature Navigator at http://www.cisco.com/go/fn. You must have an account on Cisco.com. If you do not have an account or have forgotten your username or password, click **Cancel** at the login dialog box and follow the instructions that appear.

Contents

Prerequisites for Unique Device Identifier Retrieval

In order to use UDI retrieval, the Cisco product in use must be UDI-enabled. A UDI-enabled Cisco product supports five required Entity MIB objects. The five Entity MIB v2 (RFC-2737) objects are as follows:

- entPhysicalName
- entPhysicalDescr
- entPhysicalModelName
- entPhysicalHardwareRev
- entPhysicalSerialNum

Although the **show inventory** command may be available, using that command on devices that are not UDI-enabled will likely produce no output.

Information About Unique Device Identifier Retrieval

Before using the UDI Retrieval feature, you should understand the following concepts:

- Unique Device Identifier Overview, page 20-2
- Benefits of the Unique Device Identifier Retrieval Feature, page 20-3
- Product Item Descriptor (PID) for Cable Products, page 20-3

Unique Device Identifier Overview

Each identifiable product is an entity, as defined by the Entity MIB (RFC-2737) and its supporting documents. Some entities, such as a chassis, will have subentities like slots. An Ethernet switch might be a member of a superentity like a stack. Most Cisco entities that are orderable products will leave the factory with an assigned UDI. The UDI information is printed on a label that is affixed to the physical hardware device, and it is also stored electronically on the device in order to facilitate remote retrieval.

A UDI consists of the following elements:

- Product identifier (PID)
- Version identifier (VID)
- Serial number (SN)

The PID is the name by which the product can be ordered; it has been historically called the “Product Name” or “Part Number.” This is the identifier that one would use to order an exact replacement part.

The VID is the version of the product. Whenever a product has been revised, the VID will be incremented. The VID is incremented according to a rigorous process derived from Telcordia GR-209-CORE, an industry guideline that governs product change notices.

The SN is the vendor-unique serialization of the product. Each manufactured product will carry a unique serial number assigned at the factory, which cannot be changed in the field. This is the means by which to identify an individual, specific instance of a product.

Benefits of the Unique Device Identifier Retrieval Feature

- Identifies individual Cisco products in your networks.
- Reduces operating expenses for asset management through simple, cross-platform, consistent identification of Cisco products.
- Identifies PIDs for replaceable products.
- Facilitates discovery of products subject to recall or revision.
- Automates Cisco product inventory (capital and asset management).
- Provides a mechanism to determine the entitlement level of a Cisco product for repair and replacement service.

Product Item Descriptor (PID) for Cable Products

The following is a list of product numbers for cable products. These products can be identified using UDI software.

Cisco uBR10012	Cisco uBR7200VXR	Other
UBR10012 (chassis)	UBR-7246VXR (chassis)	UBR7111 (chassis)
UBR10-DSPL=	UBR-MC28U	UBR7114 (chassis)
PRE2	UBR-MC28X	UBR7111E (chassis)
UBR10-PWR-AC	UBR-MC16U	UBR7114E (chassis)
UBR10-PWR-DC	UBR-MC16X	—
UBR10-1GE	UBR7200-NPE-G1	NPE-400
UBR10-1OC12/P-SMI	UBR7200-I/O-2FE/E	NPE-G1
UBR10-TCC+ -T1	—	—
UBR10-MC5X20U-D	—	—
UBR10-1GE	—	—

How to Retrieve the Unique Device Identifier

This section contains the following task:

- Retrieving the Unique Device Identifier, page 20-3 (required)

Retrieving the Unique Device Identifier

Perform this task to retrieve and display identification information for a Cisco product.

SUMMARY STEPS

1. **enable**
2. **show inventory** [**raw**]

DETAILED STEPS

Step 1 **enable**

Enters privileged EXEC mode. Enter your password if prompted.

```
Router> enable
```

Step 2 **show inventory** [**raw**]

Enter the **show inventory** command to retrieve and display information about all of the Cisco products installed in the networking device that are assigned a PID, VID, and SN. If a Cisco entity is not assigned a PID, that entity is not retrieved or displayed.

```
Router# show inventory

NAME: "", DESCR: "uBR10000 chassis, Hw Serial#: SPE08450FQA, Hw Revision: 1.1"
PID: uBR10000 , VID: 1.1, SN: SPE08450FQA
NAME: "slot 0/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "", DESCR: "Routing Processor"
PID: Routing Processor , VID: 1.0, SN: CAT09030GVK
NAME: "PRE_A:FastEthernet0/0/0", DESCR: "Network Management Ethernet"
PID: Network Management Ethernet, VID: , SN:
NAME: "", DESCR: "Temperature Sensor"
PID: Temperature Sensor, VID: , SN:
NAME: "", DESCR: "Forwarding Processor"
PID: Forwarding Processor, VID: 1.0, SN: CAT09030GBL
NAME: "slot 0/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 1/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 1/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 2/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "", DESCR: "1gigethernet-1"
PID: 1gigethernet-1 , VID: 1.0, SN: CAB0542KX74
NAME: "GigabitEthernet2/0/0", DESCR: "Gigabit Ethernet MAC Controller"
PID: Gigabit Ethernet MAC Controller, VID: Unknown Rev, SN:
NAME: "slot 2/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 3/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "", DESCR: "1oc12pos-1"
PID: 1oc12pos-1 , VID: 2.0, SN: CAB0437ECQU
NAME: "POS3/0/0", DESCR: "Skystone 4302 Sonet Framer"
PID: Skystone 4302 Sonet Framer, VID: 0xFFFF, SN:
NAME: "slot 3/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 4/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 4/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 5/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 5/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "", DESCR: "MC520S_D_connector"
PID: MC520S_D_connector, VID: 1.1, SN: CAT08510MM0
NAME: "Cable5/1-MAC0", DESCR: "UBR10000 CLC"
PID: UBR10000 CLC , VID: 0x0 , SN:
NAME: "Cable5/1-MAC1", DESCR: "UBR10000 CLC"
```

```
PID: UBR10000 CLC , VID: 0x0 , SN:
NAME: "Cable5/1-MAC2", DESCR: "UBR10000 CLC"
PID: UBR10000 CLC , VID: 0x0 , SN:
NAME: "Cable5/1-MAC3", DESCR: "UBR10000 CLC"
PID: UBR10000 CLC , VID: 0x0 , SN:
NAME: "Cable5/1-MAC4", DESCR: "UBR10000 CLC"
PID: UBR10000 CLC , VID: 0x0 , SN:
NAME: "Cable5/1-US0", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US1", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US2", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US3", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US4", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US5", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US6", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US7", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US8", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US9", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US10", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US11", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US12", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US13", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US14", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US15", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US16", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US17", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US18", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US19", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-DS0", DESCR: "BCM3033 PHY"
PID: BCM3033 PHY , VID: 3033, SN:
NAME: "Cable5/1-DS1", DESCR: "BCM3033 PHY"
PID: BCM3033 PHY , VID: 3033, SN:
NAME: "Cable5/1-DS2", DESCR: "BCM3033 PHY"
PID: BCM3033 PHY , VID: 3033, SN:
NAME: "Cable5/1-DS3", DESCR: "BCM3033 PHY"
PID: BCM3033 PHY , VID: 3033, SN:
NAME: "Cable5/1-DS4", DESCR: "BCM3033 PHY"
PID: BCM3033 PHY , VID: 3033, SN:
NAME: "slot 6/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 6/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 7/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 7/1/0", DESCR: "Chassis Slot"
```

```
PID: Chassis Slot , VID: , SN:
NAME: "slot 8/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 8/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "", DESCR: "Container for Power Supply"
PID: Container for Power Supply, VID: , SN:
NAME: "", DESCR: "Power Supply"
PID: Power Supply , VID: , SN:
NAME: "", DESCR: "Power Supply"
PID: Power Supply , VID: , SN:
NAME: "", DESCR: "Container for Fan Tray"
PID: Container for Fan Tray, VID: , SN:
NAME: "", DESCR: "Fan Tray"
PID: Fan Tray , VID: , SN:
NAME: "", DESCR: "Fan"
PID: Fan , VID: , SN:
NAME: "", DESCR: "Fan"
PID: Fan , VID: , SN:
NAME: "", DESCR: "Backplane"
PID: Backplane , VID: 1.1, SN: SPE08450FQA
```

For diagnostic purposes, the **show inventory** command can be used with the **raw** keyword to display every RFC 2737 entity including those without a PID, UDI, or other physical identification.

Note The **raw** keyword option is primarily intended for troubleshooting problems with the **show inventory** command itself.

```
Router# show inventory raw

NMS-RACK9-UBR10K-1#sh inventory raw
NAME: "", DESCR: "uBR10000 chassis, Hw Serial#: SPE08450FQA, Hw Revision: 1.1"
PID: uBR10000 , VID: 1.1, SN: SPE08450FQA
NAME: "slot 0/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "", DESCR: "Routing Processor"
PID: Routing Processor , VID: 1.0, SN: CAT09030GVK
NAME: "PRE_A:FastEthernet0/0/0", DESCR: "Network Management Ethernet"
PID: Network Management Ethernet, VID: , SN:
NAME: "", DESCR: "Temperature Sensor"
PID: Temperature Sensor, VID: , SN:
NAME: "", DESCR: "Forwarding Processor"
PID: Forwarding Processor, VID: 1.0, SN: CAT09030GBL
NAME: "slot 0/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 1/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 1/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 2/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "", DESCR: "1gigethernet-1"
PID: 1gigethernet-1 , VID: 1.0, SN: CAB0542KX74
NAME: "GigabitEthernet2/0/0", DESCR: "Gigabit Ethernet MAC Controller"
PID: Gigabit Ethernet MAC Controller, VID: Unknown Rev, SN:
NAME: "slot 2/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 3/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "", DESCR: "1oc12pos-1"
PID: 1oc12pos-1 , VID: 2.0, SN: CAB0437ECQU
NAME: "POS3/0/0", DESCR: "Skystone 4302 Sonet Framer"
PID: Skystone 4302 Sonet Framer, VID: 0xFFFF, SN:
NAME: "slot 3/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
```

```
NAME: "slot 4/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 4/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 5/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 5/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "", DESCR: "MC520S_D_connector"
PID: MC520S_D_connector, VID: 1.1, SN: CAT08510MM0
NAME: "Cable5/1-MAC0", DESCR: "UBR10000 CLC"
PID: UBR10000 CLC , VID: 0x0 , SN:
NAME: "Cable5/1-MAC1", DESCR: "UBR10000 CLC"
PID: UBR10000 CLC , VID: 0x0 , SN:
NAME: "Cable5/1-MAC2", DESCR: "UBR10000 CLC"
PID: UBR10000 CLC , VID: 0x0 , SN:
NAME: "Cable5/1-MAC3", DESCR: "UBR10000 CLC"
PID: UBR10000 CLC , VID: 0x0 , SN:
NAME: "Cable5/1-MAC4", DESCR: "UBR10000 CLC"
PID: UBR10000 CLC , VID: 0x0 , SN:
NAME: "Cable5/1-US0", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US1", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US2", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US3", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US4", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US5", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US6", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US7", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US8", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US9", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US10", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US11", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US12", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US13", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US14", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US15", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US16", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US17", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US18", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-US19", DESCR: "LBT4522 PHY"
PID: LBT4522 PHY , VID: 4522, SN:
NAME: "Cable5/1-DS0", DESCR: "BCM3033 PHY"
PID: BCM3033 PHY , VID: 3033, SN:
NAME: "Cable5/1-DS1", DESCR: "BCM3033 PHY"
PID: BCM3033 PHY , VID: 3033, SN:
NAME: "Cable5/1-DS2", DESCR: "BCM3033 PHY"
PID: BCM3033 PHY , VID: 3033, SN:
NAME: "Cable5/1-DS3", DESCR: "BCM3033 PHY"
PID: BCM3033 PHY , VID: 3033, SN:
NAME: "Cable5/1-DS4", DESCR: "BCM3033 PHY"
PID: BCM3033 PHY , VID: 3033, SN:
NAME: "slot 6/0/0", DESCR: "Chassis Slot"
```

```
PID: Chassis Slot , VID: , SN:
NAME: "slot 6/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 7/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 7/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 8/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 8/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "", DESCR: "Container for Power Supply"
PID: Container for Power Supply, VID: , SN:
NAME: "", DESCR: "Power Supply"
PID: Power Supply , VID: , SN:
NAME: "", DESCR: "Power Supply"
PID: Power Supply , VID: , SN:
NAME: "", DESCR: "Container for Fan Tray"
PID: Container for Fan Tray, VID: , SN:
NAME: "", DESCR: "Fan Tray"
PID: Fan Tray , VID: , SN:
NAME: "", DESCR: "Fan"
PID: Fan , VID: , SN:
NAME: "", DESCR: "Fan"
PID: Fan , VID: , SN:
NAME: "", DESCR: "Backplane"
PID: Backplane , VID: 1.1, SN: SPE08450FQA

NAME: "fan 1", DESCR: "Fan"
PID: , VID: , SN:
NAME: "fan 2", DESCR: "Fan"
PID: , VID: , SN:
NAME: "Backplane", DESCR: "Backplane"
PID: , VID: , SN: SPE08450FQA
```

Troubleshooting Tips

If any of the Cisco products do not have an assigned PID, the output may display incorrect PIDs and the VID and SN elements may be missing, as in the following example.

```
NAME: "POS3/0/0", DESCR: "Skystone 4302 Sonet Framer"
PID: FastEthernet, VID: , SN:

NAME: "Serial1/0", DESCR: "M4T"
PID: M4T               , VID:    , SN:
```

In the sample output, the PID is exactly the same as the product description. The UDI is designed for use with new Cisco products that have a PID assigned. UDI information on older Cisco products is not always reliable.

Configuration Examples for Unique Device Identifier Retrieval

There are no configuration examples for the UDI Retrieval feature. For sample display output from the **show inventory** command, see the "Retrieving the Unique Device Identifier" section on page 20-3.

Additional References

This section provides references related to the UDI Retrieval feature.

Related Documents

Related Topic	Document Title
Information about managing configuration files	• Cisco IOS Configuration Fundamentals Configuration Guide, Release 12.3(13)BC **Note** This document has reached End of Life. For more information, see the following End-of-Life Announcement at the following URL: http://www.cisco.com/en/US/docs/ios/redirect/eol.html • *Cisco IOS Configuration Fundamentals and Network Management Configuration Guide* **Note** This document has reached End of Life. For more information, see the following End-of-Life Announcement at the following URL: http://www.cisco.com/en/US/docs/ios/redirect/eol.html
Commands for showing interface statistics	• *Cisco IOS Interface Command Reference*, Release 12.3(13)BC

Standards

Standards	Title
No new or modified standards are supported by this feature, and support for existing standards has not been modified by this feature.	—

MIBs

MIBs	MIBs Link
CISCO-ENTITY-ASSET-MIB	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL: http://www.cisco.com/go/mibs

RFCs

RFCs	Title
RFC 2737	*Entity MIB (Version 2)*

Technical Assistance

Description	Link
Technical Assistance Center (TAC) home page, containing 30,000 pages of searchable technical content, including links to products, technologies, solutions, technical tips, and tools. Registered Cisco.com users can log in from this page to access even more content.	http://www.cisco.com/cisco/web/support/index.html

Command Reference

This section documents the following new command only.

- show inventory

show inventory

To display the product inventory listing of all Cisco products that are installed in a networking device, use the **show inventory** command in user EXEC or privileged EXEC mode.

show inventory [raw]

Syntax Description

raw	(Optional) Retrieves information about all of the Cisco products—referred to as entities—installed in the Cisco networking device, even if the entities do not have a product ID (PID) value, a unique device identifier (UDI), or other physical identification.

Command Modes

User EXEC
Privileged EXEC

Command History

Release	Modification
12.3(13)BC	This command was integrated into Cisco IOS Release 12.3(13)BC.

Usage Guidelines

The **show inventory** command retrieves and displays inventory information about each Cisco product in the form of a UDI. The UDI is a combination of three separate data elements: a product identifier (PID), a version identifier (VID), and the serial number (SN).

The PID is the name by which the product can be ordered; it has been historically called the "Product Name" or "Part Number." This is the identifier that one would use to order an exact replacement part.

The VID is the version of the product. Whenever a product has been revised, the VID will be incremented. The VID is incremented according to a rigorous process derived from Telcordia GR-209-CORE, an industry guideline that governs product change notices.

The SN is the vendor-unique serialization of the product. Each manufactured product will carry a unique serial number assigned at the factory, which cannot be changed in the field. This is the means by which to identify an individual, specific instance of a product.

The UDI refers to each product as an entity. Some entities, such as a chassis, will have subentities like slots. Each entity will display on a separate line in a logically ordered presentation that is arranged hierarchically by Cisco entities.

Use the **show inventory** command without options to display a list of Cisco entities installed in the networking device that are assigned a PID.

Examples

The following is sample output from the **show inventory** command without any keywords or arguments. This sample output displays a list of Cisco entities installed in a router that are assigned a PID.

```
Router# show inventory

NAME: "", DESCR: "uBR10000 chassis, Hw Serial#: SPE08450FQA, Hw Revision: 1.1"
PID: uBR10000 , VID: 1.1, SN: SPE08450FQA
NAME: "slot 0/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "", DESCR: "Routing Processor"
PID: Routing Processor , VID: 1.0, SN: CAT09030GVK
NAME: "PRE_A:FastEthernet0/0/0", DESCR: "Network Management Ethernet"
PID: Network Management Ethernet, VID: , SN:
NAME: "", DESCR: "Temperature Sensor"
PID: Temperature Sensor, VID: , SN:
NAME: "", DESCR: "Forwarding Processor"
PID: Forwarding Processor, VID: 1.0, SN: CAT09030GBL
```

Table 20-1 describes the fields shown in the display.

Table 20-1 show inventory Field Descriptions

Field	Description
NAME	Physical name (text string) assigned to the Cisco entity. For example, console or a simple component number (port or module number), such as “1,” depending on the physical component naming syntax of the device. Equivalent to the entPhysicalName MIB variable in RFC 2737.
DESCR	Physical description of the Cisco entity that characterizes the object. Equivalent to the entPhysicalDesc MIB variable in RFC 2737.
PID	Entity product identifier. Equivalent to the entPhysicalModelName MIB variable in RFC 2737.
VID	Entity version identifier. Equivalent to the entPhysicalHardwareRev MIB variable in RFC 2737.
SN	Entity serial number. Equivalent to the entPhysicalSerialNum MIB variable in RFC 2737.

For diagnostic purposes, the **show inventory** command can be used with the **raw** keyword to display every RFC 2737 entity including those without a PID, UDI, or other physical identification.

Note The **raw** keyword option is primarily intended for troubleshooting problems with the **show inventory** command itself.

```
Router# show inventory raw

NAME: "", DESCR: "uBR10000 chassis, Hw Serial#: SPE08450FQA, Hw Revision: 1.1"
PID: uBR10000 , VID: 1.1, SN: SPE08450FQA
NAME: "slot 0/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "", DESCR: "Routing Processor"
PID: Routing Processor , VID: 1.0, SN: CAT09030GVK
NAME: "PRE_A:FastEthernet0/0/0", DESCR: "Network Management Ethernet"
PID: Network Management Ethernet, VID: , SN:
```

Enter the **show inventory** command with an *entity* argument value to display the UDI information for a specific type of Cisco entity installed in the networking device. In this example, a list of Cisco entities that match the sfslot argument string is displayed.

```
Router# show inventory sfslot
Router# show inventory moduleslot

NAME: "slot 0/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 1/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 1/1/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "slot 2/0/0", DESCR: "Chassis Slot"
PID: Chassis Slot , VID: , SN:
NAME: "", DESCR: "1gigethernet-1"
PID: 1gigethernet-1 , VID: 1.0, SN: CAB0542KX74
NAME: "GigabitEthernet2/0/0", DESCR: "Gigabit Ethernet MAC Controller"
PID: Gigabit Ethernet MAC Controller, VID: Unknown Rev, SN:
```

Related Commands

Command	Description
show diag	Displays diagnostic information about the controller, interface processor, and port adapters for a networking device.
show tech-support	Displays general information about the router when it reports a problem.