SNMP Support for VLAN Subinterfaces

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This feature module describes the SNMP Support for VLAN Subinterfaces feature. It includes information on the benefits of the new feature, supported platforms, supported standards, and the commands necessary to configure the SNMP Support for VLAN Subinterfaces feature.

The SNMP Support for VLAN Subinterfaces feature provides mib-2 interfaces sparse table support for Fast Ethernet subinterfaces. This enhancement is similar to the functionality supported in Frame Relay subinterfaces.

Finding Feature Information

Your software release may not support all the features documented in this module. For the latest feature information and caveats, see the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the "Feature Information for SNMP Support for VLAN Subinterfaces" section on page 6.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to http://www.cisco.com/go/cfn. An account on Cisco.com is not required.

Contents

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Information About SNMP Support for VLAN Subinterfaces

Benefits

Sparse table support for the interfaces table on Fast Ethernet subinterfaces provides customers accustomed to Frame Relay subinterfaces the same functionality.

Supported Platforms

- Cisco 2600 series
- Cisco 3600 series
- Cisco 4000-m series
- Cisco 7200 series
- Cisco 7500 series

How to SNMP Support for VLAN Subinterfaces

To configure SNMP Support for VLAN Subinterfaces, complete the tasks in the following section:

- Enabling the SNMP Agent on VLAN Subinterfaces

Enabling the SNMP Agent on VLAN Subinterfaces

Perform the following task to enable the SNMP agent on VLAN subinterfaces.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **snmp community public**
4. **interface** *type slot/port*
5. **encapsulation isl** *vlan-identifier*
6. **ip address** *ip-address mask*
7. **end**
8. **show vlans**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**snmp community** *string* **Example:** `Router(config)# snmp community public`	Enables the SNMP agent for remote access.
Step 4	**interface** *type slot/port* **Example:** `Router(config)# interface FastEthernet 0/1.1`	Selects a particular Fast Ethernet interface for configuration.
Step 5	**encapsulation isl** *vlan-identifier* **Example:** `Router(config-if)#  encapsulation isl 10`	Enables the Inter-Switch Link.
Step 6	**ip address** *ip-address mask* **Example:** `Router(config)# ip address 192.168.10.1 255.255.255.0`	Sets a primary or secondary IP address for an interface.
Step 7	**end** **Example:** `Router(config-if)# end`	Returns to privileged EXEC mode.
Step 8	**show vlans** **Example:** `Router# show vlans`	Displays VLAN subinterfaces.

Configuration Examples for SNMP Support for VLAN Subinterfaces

Example: Enabling the SNMP Agent for VLAN Subinterfaces

The following configuration example shows you how to enable the SNMP agent on the router with VLAN subinterfaces to monitor the SNMP application remotely:

```
snmp community public
!
interface FastEthernet4/0.100
 encapsulation isl 100
 ip address 192.168.10.21 255.255.255.0
!
interface FastEthernet4/0.200
 encapsulation isl 200
 ip address 172.21.200.11 255.255.255.0
!
interface FastEthernet4/1.1
 encapsulation isl 10
 ip address 171.69.2.111 255.255.255.0
```

Additional References

Related Documents

Related Topic	Document Title
Cisco IOS commands	*Cisco IOS Master Commands List, All Releases*
SNMP commands	*Cisco IOS Network Management Command Reference*

Standards

Standard	Title
None	—

MIBs

MIB	MIBs Link
• None	To locate and download MIBs for selected platforms, Cisco software releases, and feature sets, use Cisco MIB Locator found at the following URL: http://www.cisco.com/go/mibs

RFCs

RFC	Title
RFC 1573	*Evolution of the Interfaces Group of MIB-II*

Technical Assistance

Description	Link
The Cisco Support and Documentation website provides online resources to download documentation, software, and tools. Use these resources to install and configure the software and to troubleshoot and resolve technical issues with Cisco products and technologies. Access to most tools on the Cisco Support and Documentation website requires a Cisco.com user ID and password.	http://www.cisco.com/cisco/web/support/index.html

Feature Information for SNMP Support for VLAN Subinterfaces

Table 1 lists the release history for this feature.

Use Cisco Feature Navigator to find information about platform support and software image support. Cisco Feature Navigator enables you to determine which software images support a specific software release, feature set, or platform. To access Cisco Feature Navigator, go to http://www.cisco.com/go/cfn. An account on Cisco.com is not required.

Note Table 1 lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Table 1 Feature Information for SNMP Support for VLAN Subinterfaces

Feature Name	Releases	Feature Information
SNMP Support for VLAN Subinterfaces	12.2	The SNMP Support for VLAN Subinterfaces feature provides mib-2 interfaces sparse table support for Fast Ethernet subinterfaces. This enhancement is similar to the functionality supported in Frame Relay subinterfaces.