

How to Get Catalyst Switch Backplane Utilization Using SNMP

Document ID: 15214

Contents

Introduction

Prerequisites

- Requirements
- Components Used
- Conventions

Procedure

Related Information

Introduction

This document describes how to get Cisco Catalyst switch backplane utilization with the use of Simple Network Management Protocol (SNMP).

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is applicable to Catalyst switches that run Catalyst OS (CatOS) and Cisco Catalyst 6500/6000 series switches that run Cisco IOS® Software.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Conventions

Refer to Cisco Technical Tips Conventions for more information on document conventions.

Procedure

For traditional Cisco switches that have a single backplane, such as the Catalyst 5000 series, sysTraffic from CISCO-STACK-MIB provides the system backplane utilization. The sysTraffic measurement equates roughly to the meter of the same name on the Supervisor Engine card.

```
.1.3.6.1.4.1.9.5.1.1.8
sysTraffic OBJECT-TYPE
    -- FROM CISCO-STACK-MIB
    SYNTAX Integer (0..100)
    MAX-ACCESS read-only
    STATUS Current
    DESCRIPTION "Traffic meter value, i.e. the percentage of bandwidth utilization"
```

```
for the previous polling interval."
 ::= { iso(1) org(3) dod(6) internet(1) private(4) enterprises(1) cisco(9)
workgroup(5) ciscoStackMIB(1) systemGrp(1) 8 }
```

For switches that contain multiple backplanes, such as the Catalyst 5500, use the sysTrafficMeterTable from the CISCO-STACK-MIB.

```
.1.3.6.1.4.1.9.5.1.1.32
sysTrafficMeterTable OBJECT-TYPE
    -- FROM CISCO-STACK-MIB
    DESCRIPTION "The system traffic meter table. This table lists the traffic meters
available in the system."
    ::= { iso(1) org(3) dod(6) internet(1) private(4) enterprises(1) cisco(9)
workgroup(5) ciscoStackMIB(1) systemGrp(1) 32 }
```

Other Catalyst switches that run Cisco IOS Software are based on a different architecture. Therefore, you are not able to get the backplane utilization for them. With these devices, you can determine the performance of the switch from the utilization of the CPU and bandwidth of its interfaces. Refer to [How To Calculate Bandwidth Utilization Using SNMP](#) and [How to Collect CPU Utilization on Cisco IOS Devices Using SNMP](#) in order to collect the performance parameters.

Related Information

- [How To Calculate Bandwidth Utilization Using SNMP](#)
- [How to Collect CPU Utilization on Cisco IOS Devices Using SNMP](#)
- [Simple Network Management Protocol Support Resources](#)
- [IP Application Services Design TechNotes](#)
- [LAN Product Support Pages](#)
- [LAN Switching Support Page](#)
- [Technical Support & Documentation – Cisco Systems](#)

[Contacts & Feedback](#) | [Help](#) | [Site Map](#)

© 2014 – 2015 Cisco Systems, Inc. All rights reserved. [Terms & Conditions](#) | [Privacy Statement](#) | [Cookie Policy](#) | [Trademarks of Cisco Systems, Inc.](#)

Updated: May 21, 2006

Document ID: 15214
