

Cisco Content Switching Module

Software Version 2.2(1) for the Cisco Catalyst 6500 Series and Cisco 7600 Series Internet Router

New Features

Increased Virtual LAN (VLAN) Limit to 256

The Cisco Content Switching Module (Cisco CSM) for the Cisco Catalyst® 6500 Series Switch and the Cisco 7600 Series Internet Router now supports up to 256 VLANs configured per blade.

Inband Health Monitoring

To efficiently balance connections, the Cisco CSM must continuously monitor the health of all real servers in its configuration. The inband health-monitoring feature provides another level of health checking to ensure high availability. Configurable at the server farm level, the parameters are then applied to each real server in the server farm. You configure the number of abnormal end sessions to occur before the real server is considered unreachable and specify how long to wait before a real server is reintroduced into the server farm after a failure. If you configure both health probes and inband health monitoring on a server, both sets of health checks are required to pass in order for the Cisco CSM to consider the server in service. If either health-checking feature finds the server out of service, the Cisco CSM will not select the server for load balancing.

Return Code Checking

You use this feature to indicate when a server returns an undesirable number of a particular HTTP return code. This feature extends the Cisco CSM's capability to inspect packets, parse the HTML return codes, and act upon the return codes returned by the server. After receiving an HTTP request from the Cisco CSM, the server responds with an HTTP return code. When HTTP return code checking is configured, the Cisco CSM monitors HTTP responses from all balanced HTTP connections and logs the occurrence of the return code for each real server. The Cisco CSM stores return code counts and, when a configured threshold for a return code is reached, the Cisco CSM sends either a syslog message or removes the server from service. By using return code checking with your standard health checks, you can ensure that good content is delivered.

Real-Time Streaming Protocol Support

The Cisco CSM is optimized to support Real-Time Streaming Protocol (RTSP) with simple user configuration. RTSP is one of many protocols that uses "buddied" connections, where a control and data channel must be associated for the protocol

to function properly (similar to File Transfer Protocol [FTP]). This requires the Cisco CSM to parse the commands in the control channel to properly set up the associated data sessions. Without RTSP support you would have to configure special parameters to ensure that server-initiated connections went out properly. In addition, a feedback channel from the client to the server is used with RTSP and this channel would not be operational without RTSP configured on the Cisco CSM.

Configurable Pending Connection Timeout Value

The Cisco CSM begins to time out connections for which the server has responded with a SYN ACK but for which no get request has been received (pending connection) after a default time. In the past, these “pending connections” timed out in 30 seconds. The Cisco CSM now enables you to configure this timeout value as an added protection against some denial-of-service attacks.

Orderable Product Numbers

Cisco CSM Software Version	Hardware Part Number	Software Part Number	Hardware Requirements	Native Cisco IOS® Software Release	Added Features
1.2(1)	WS-X6066-SLB-APC	SC6k-1.2-CSM	Supervisor 1A with MSFC ¹ and PFC ² or Supervisor 2 Module with MSFC 2	12.1(8a)e	Supervisor 2 support Route health injection
2.1(2)	WS-X6066-SLB-APC	SC6k-2.1.2-CSM	Supervisor 1A with MSFC and PFC or Supervisor 2 with MSFC 2	12.1(8)EX	Firewall load balancing Non-TCP load balancing URL hashing HTTP 1.1 persistence Full stateful failover Generic header parsing SNMP server health traps Multiple Cisco CSM in a chassis VPN/IPSec ³ load balancing
2.2(1)	WS-X6066-SLB-APC	SC6k-2.2-CSM	Supervisor 1A with MSFC and PFC or Supervisor 2 with MSFC 2	12.1(11)e	Increased VLAN limit Return code checking Inband health monitoring Configuration pending timeout value RTSP support

1. Multilayer Switch Feature Card

2. Policy Feature Card

3. IP Security

Further Information

Download the software release at:

<http://www.cisco.com/cgi-bin/tablebuild.pl/cat6000-csm>

Cisco CSM Data Sheet:

Cisco CSM Installation and Configuration Guide:

Software Version 2.2(1) Release Notes:

[brelnotes/78_12569.htm](http://www.cisco.com/cisco/en/tech/rtr/products/csm/brelnotes/78_12569.htm)

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(0402R) 204064_ETMG_WH_05.04