

Cisco Catalyst 6500 Content **Switching** Module Software Version 2.1(1)



New Features

Firewall Load Balancing

Firewall load balancing allows you to scale firewall protection by distributing traffic across multiple firewalls on a per-connection basis. Version 2.1(1) of the Cisco Catalyst® 6500 Content Switching Module (CSM) supports configurations for both standard and stealth firewalls and has the performance necessary to scale for high-performance networks with many firewalls.

Connection Redundancy/Stateful Failover

You can configure two CSMs, either in the same chassis or in two different chassis, in a fault-tolerant pair to share state information about user sessions and provide connection redundancy. If the active CSM fails, open connections are handled by the standby CSM without interruption, and users experience hitless failover—an important requirement for e-commerce sites and sites where encryption is used.

Multiple CSMs in a Chassis

This feature allows multiple CSM blades to be simultaneously inserted into a Catalyst 6500 Series Switch for redundancy or increased performance. In addition, you can simultaneously use both IOS-SLB and one or more CSMs in the same chassis.

HTTP 1.1 Persistence

With connection persistence, you can dispatch multiple HTTP requests from the client to the server on the same persistent connection. Implementation of “persistence” support allows for independent switching of each successive HTTP request in a persistent connection. As a new HTTP request arrives, it can be switched to the same server as the prior request or to a different server.

Load Balancing of All Common IP Protocols

In Version 1.1, the CSM load-balanced TCP traffic only. The current version of CSM balances traffic consisting of all common IP protocols including User Datagram Protocol (UDP).

URL Hashing

This feature is an additional predictor for Layer 7 connections in which the real server is chosen using a hash value based on the URL. This hash value is computed on the entire URL or on a portion of it.

Generic Header Parsing

The CSM parses, matches, and switches connections based on the HTTP URL or cookie value. With this version, additional information about the end user is included in the header record of a HTTP request. The information, such as an end user's browser device type or selected language, is important to business segments that provide content services to end users. The content must be tailored for an end user with a personal handheld device versus for an end user with a desktop PC. The ability to select Web servers based on any user data helps businesses better organize content for their customers.

VPN and IP Security Protocol Load Balancing

In addition to support for generic IP protocols, specific enhancements to the CSM optimize virtual private networking (VPN) and IP Security Protocol (IPSec) load balancing.

SNMP Server Health Traps

Simple Network Management Protocol (SNMP) server traps can now be configured on the CSM. Full SNMP support will be available on the CSM in a future release.

Orderable Product Numbers

CSM Software Release	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 Multiswitch Feature Card (MSFC) and Policy Feature Card (PFC) or Supervisor 2 Module with MSFC 2	12.1(8a)e	Supervisor 2 support Route Health Injection
2.1(1)	WS-X6066-SLB-APC	SC6k-2.1-CSM	Supervisor 1A with MSFC & PFC or Supervisor 2 with MSFC 2	12.1(8a)EX or 2.1	Firewall Load Balancing Non-TCP Load Balancing URL Hashing HTTP 1.1 Persistence Full Stateful Failover Generic Header Parsing SNMP Server Health Traps Multiple CSM in a Chassis VPN/IPSec Load Balancing

Further Information

Download this software version at:

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

CSM Data Sheet: http://www.cisco.com/en/US/products/hw/modules/ps2706/products_data_sheet09186a00800887f3.html

CSM Installation and Configuration Guide: http://www.cisco.com/en/US/products/hw/switches/ps708/products_installation_and_configuration_guide_book09186a008007fa85.html

Version 1.2(1) Release Notes: <http://www.cisco.com/univercd/cc/td/doc/product/lan/cat6000/relnotes/index.htm>

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