

Cisco Catalyst 6500 Series Intrusion Detection System (IDSM-2) Services Module

Cisco integrated network security solutions enable organizations to protect productivity gains and reduce operating costs.

The Cisco IDSM-2 is part of the Cisco Intrusion Detection System. It works in concert with the other components to efficiently protect your data infrastructure. With the increased complexity of security threats, achieving efficient network intrusion security solutions is critical to maintaining a high level of protection. Vigilant protection ensures business continuity and minimizes the effect of costly intrusions.

For details on the complete Cisco Intrusion Detection System, go to www.cisco.com/go/ids

Cisco integrated network security solutions enable organizations to protect their connected business assets from threats and increase the operating efficiency of intrusion protection. Among these solutions is the second generation of the Cisco Intrusion Detection System (IDS) module, the IDSM-2, for the widely

deployed Cisco Catalyst® chassis. With an installed base in the hundreds of thousands, the Catalyst chassis is a logical platform for additional services such as firewall, virtual private network (VPN) and intrusion detection system (IDS) services.

Recognizing the value of this approach, Cisco introduced this second-generation module that provides unique benefits to customers seeking IDS attack protection.

Features and Benefits

The Cisco IDSM-2 offers the following features and benefits:

- Cisco is the only vendor to provide an in-switch IDS solution supplying access to the data stream via VLAN access control list (VACL) capture capable of supporting an unlimited number of VLANs
- Transparent operation via passive, promiscuous operation that inspects copies of packets via VACL capture and Switch Port Analyzer/Remote SPAN (RSPAN/SPAN) without exposing the network to performance degradation or downtime if the unit needs maintenance because it is not in the switch-forwarding path

Figure 1
Cisco IDSM-2





- One-rack-unit size takes up only a single slot in the Cisco Catalyst chassis making it an effective platform across all Catalyst chassis, from the 3-slot Catalyst 6503 Switch to the largest chassis available, allowing as many modules to be installed simultaneously as desired providing protection for a greater number of VLANs and traffic
- 500 megabits per second (Mbps) of IDS inspection provides high-speed packet-examination capabilities and allows for more protection of a wider variety of networks and traffic
- Multiple techniques for capture and actions including SPAN/RSPAN as well as VACL capture combined with shunning and TCP resets allows customers to monitor various network segments and traffic while the product provides timely action to mitigate threats
- Uses the same code as the award-winning Cisco IDS network appliances allowing users to standardize on a single management technique and makes installation, training, operation, and support simpler and faster while taking advantage of Cisco IDS comprehensive attack recognition and signature coverage
- Improved management techniques such as support by the Cisco VMS 2.1 security bundle, as well as built-in Cisco IDS Device Manager (IDM) and IDS Event Viewer (IEV) local management capabilities and CLI support make the IDSM-2 easier to manage and more capable of detecting and responding to threats while alerting operators to potential attacks. In addition, the new option makes management of multiple devices across wide and varied networks much simpler

Technical Specifications

Cisco IDSM-2 Part Numbers

WS-SVC-IDS2-BUN-K9

Cisco IDSM-2 Service Part Numbers

CON-xxxx-WS-IDSM2-K9

Service key for “xxxx” in the part number:

- SNT = 8x5xnext business day
- SNTE = 8x5x4 hour service
- SNTP = 24x7x4 hour service
- OS = 8x5xnext business day
- OSE = 8x5x4 hour service onsite
- OSP = 24x7x4 hour service onsite

Form Factor

One rack-unit module uses one slot in the Cisco Catalyst 6500 chassis



LEDs and Switches

Single indicator (LED)

- OFF—no power
- YELLOW—booting up/standby
- GREEN—application is running
- RED—module fault located

Shutdown switch used before removing the module from the chassis.

Hot-Swap Requirements

Module shutdown required before removal

Module insertion/removal never affects the Cisco Catalyst switch

Processor

Pentium 1.13 GHz on main board with IXP on the accelerator

Operating System

Red Hat Linux 6.2

Maximum Number of Modules per Chassis

Unlimited per chassis

Traffic Capture Methods

VACL capture

SPAN

RSPAN

Minimum Code Revision

Release 4.0

Features:

- TCP resets
- IP logging
- SME (Signature Micro Engine)
- IDM
- NTP Synchronization
- Local CLI (Command-line Interface)
- Performance enhancements



Catalyst Supervisor Software Requirements

Catalyst OS 7.5(1) (minimum)

Native Cisco IOS Software Release 12.1(19)E

Catalyst Supervisor Hardware Options with IDSM-2

With Catalyst OS 7.5.(1): Supervisor Engine 1A

- Supervisor Engine 1A/PFC2
- Supervisor Engine 1A/MSFC1
- Supervisor Engine 1A/MSFC2
- Supervisor Engine 2
- Supervisor Engine 2/MSFC2

With Native Cisco IOS Software Release 12.1(19)E:

- Supervisor Engine 2/MSFC2

Performance Metrics

600 Mbps with 450-byte packets

Supports up to 5,000 TCP connections per second (new arrivals)

Supports up to 500,000 concurrent connections

100% alarm rate

Catalyst performance not affected by additional VLANs or devices in the Cisco Catalyst chassis

Fabric Enabled

Maximum Number of VLANs (802.1q tagging)

Unlimited

Failover Protection

The IDSM-2 is a passive device that has no disruptive effect on the Cisco Catalyst chassis in the event of failure.

Management

Cisco IDM and IEV are included with IDSM-2.

- Cisco IEV PC-based configuration manager (3 devices)
- Cisco IDM on-board Web browser (1 device)
- Cisco VMS 2.1 with Security Monitor and IDS Management Center v1.1 (minimum 20 devices)

Physical Dimensions

Occupies any slot in the Catalyst 6000 chassis, and as many IDSM-2 modules can be inserted as desired.

Height: 3.0 cm (1.2 in.)

Width: 35.6 cm (14.4 in.)

Depth: 40.6 cm (16 in.)

Weight: 2.27 kg (5 lb)

Operating Environment

Operating temperature: 0 to 40°C (32 to 104.5°F)

Non-operating temperature: -40 to 70°C (-40 to 158°F)

Operating relative humidity: 10 to 90% (noncondensing)

Non-operating relative humidity: 5 to 95% (noncondensing)

Operating and non-operating altitude: sea level to 3050m (10,000 ft.)

Agency Approvals

Emissions

FCC Part 15 (CFR 47) Class A, ICES-003 Class A, EN55022 Class A, CISPR22 Class A, AS/NZS 3548 Class A, VCCI Class A with UTP cables, EN55022 Class B, CISPR22 Class B, AS/NZS 3548 Class B, VCCI Class B with FTP cables

Safety

CE marking according to UL 1950, CSA 22.2 No. 950, EN 60950, IEC 60950, TS 001, AS/NZS 3260

Export Restrictions

Cisco IDSM-2 is classified as a "strong encryption" product and is export restricted. For details see:

<http://www.cisco.com/wwl/export/crypto/tool/>

Additional Information

For information about the Cisco Catalyst 6500 Switch, see <http://www.cisco.com/go/6000>

For information about the Cisco Secure Intrusion Detection System, see <http://www.cisco.com/go/ids/>



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