
Cisco CSS 11000 Series — Overview

Product Overview

The Cisco CSS 11000 series content services switches are Layer 5/7 aware and provide a robust front-end for Web server farms and cache clusters. With unique features for e-commerce, Web hosting, and content delivery, the Cisco CSS 11000 series is an important piece in Cisco's end-to-end content networking solution. Cisco's CSS 11000 series switches, powered by Cisco Web Network Services (Web NS) software, offer unique services such as:

- Directing Web traffic based on full visibility of URLs, host tags, and cookies
- Enabling premium services for e-commerce and Web hosting providers
- Strengthening DoS protection, cache/firewall load-balancing, and 'flash-crowd' management

Product Line

Cisco CSS 11050 content services switch — A compact, high performance solution for small Web sites and POPs. The Cisco CSS 11050 combines centralized processing and memory resources for policy-based flow setup with distributed network processors that support wire-speed flow forwarding, in a single platform. This unique architecture supports traffic volumes of more than 1 billion hits per day.

For more information, see

Cisco CSS 11150 content services switch — A stand-alone, high performance solution for small-to-medium Web sites. The Cisco CSS 11150 combines centralized processing and memory resources for policy-based flow setup with distributed network processors that support wire-speed flow forwarding, in a single platform. This unique architecture supports traffic volumes of more than 1.7 billion hits per day.

For more information, see

Cisco CSS 11800 content services switch — A high performance, chassis-based switching solution for large, high-traffic Web sites. The Cisco CSS 11800 combines symmetric multiprocessing and memory resources for policy-based flow setup with distributed network processors that support wire-speed flow forwarding, in a single platform. This unique architecture supports traffic volumes of more than 11 billion hits per day.

For more information, see

Key Features and Benefits

Cisco CSS 11050 Benefits

- Provides high-speed Web content delivery by selecting the best site and server based on full URL, cookie, and resource availability information
- Offers site-level security with wire-speed denial-of-service (DoS) prevention; firewall load-balancing provides scalable security for back-end data-bases and applications
- Delivers up to 400 percent improvement in Web cache efficiency for transparent, proxy, and reverse proxy configurations
- Provides eight full-duplex fast Ethernet ports and one optional gigabit Ethernet port
- Supports all TCP- and UDP-based Web protocols, wire-speed network address translation (NAT), and integrated IP routing
- Optimizes both content requests and delivery for HTTP, passive File Transfer Protocol (FTP), and streaming media protocols
- Enables advanced service level agreements (SLAs), and a variety of new fee-based services

Cisco CSS 11150 Benefits

- Provides high-speed Web content delivery by selecting the best site and server based on full URL, cookie, and resource availability information
- Offers site-level security with wire-speed denial-of-service (DoS) prevention; firewall load-balancing provides scalable security for back-end data-bases and applications
- Delivers up to 400 percent improvement in Web cache efficiency for transparent, proxy, and reverse proxy configurations
- Provides 12 or 16 full-duplex fast Ethernet ports or 12 fast Ethernet plus 2 gigabit Ethernet ports
- Supports all TCP- and UDP-based Web protocols, wire-speed network address translation (NAT), and integrated IP routing
- Optimizes both content requests and delivery for HTTP, passive File Transfer Protocol (FTP), and streaming media protocols
- Enables advanced service level agreements (SLAs), and a variety of new fee-based services

Cisco CSS 11800 Benefits

The CSS 11800 provides many benefits, including:

- High-speed Web content delivery by selecting the best site and server based on full URL, cookie, and resource availability information
- Site-level security with wire-speed denial-of-service (DoS) prevention; firewall load-balancing provides scalable security for backend databases and applications
- Up to 400 percent improvement in Web cache efficiency for transparent, proxy, and reverse proxy configurations
- 64 full-duplex 100BASE-TX ports, up to 48 100BASE-TX ports with 16 100BASE-FX ports, up to 32 gigabit Ethernet interfaces, or a combination of interfaces
- Supports all TCP- and UDP-based Web protocols, wire-speed Network Address Translation (NAT), and integrated IP routing
- Optimizes both content requests and delivery for HTTP, passive File Transfer Protocol (FTP), and streaming media protocols
- Enables advanced service-level agreements (SLAs), and a variety of new fee-based services

Specifications

Hardware

Table 21-2: Technical Specifications for Cisco CSC 11000 Series

Description	Cisco CSS 11050	Cisco CSS 11150	Cisco CSS 11800
Slot configuration	Fixed	Fixed	Eight slots for I/O modules
Switch bandwidth	5.0 Gbps	5.0 Gbps	20.0 Gbps (base) 20.0 Gbps 1:1 redundant (optional)

Table 21-3: Power Requirements for Cisco CSC 11000 Series

Description	Cisco CSS 11050	Cisco CSS 11150	Cisco CSS 11800
Input voltage AC	100 to 240 VAC, 50 to 60 Hz	100 to 240 VAC, 50 to 60 Hz	100 to 240 VAC, 50 to 60 Hz
Current AC	3.1A (max)	3.1A (max)	9.7A (per power supply)
Power consumption	310W (max)	310W (max)	970W (per power supply)

Table 21-4: Physical and Environmental Specifications for Cisco CSC 11000 Series

Description	Cisco CSS 11050	Cisco CSS 11150	Cisco CSS 11800
Dimensions (H x W x D)	2.62 x 17 x 15 in. (6.7 x 43.2 x 38.1 cm)	2.62 x 17 x 15 in. (6.7 x 43.2 x 38.1 cm)	25.25 x 17 x 12.5 in. (64.1 x 43.2 x 31.8 cm)
Slot configuration	Fixed	Fixed	Eight slots for I/O modules
Operating temperature	32 to 104°F (0° to 40°C)	32 to 104°F (0° to 40°C)	32 to 104°F (0° to 40°C)
Storage temperature	-4 to 149°F (-20° to 65°C)	-4 to 149°F (-20° to 65°C)	-4 to 149°F (-20° to 65°C)
Relative humidity	10 to 95%, noncondensing	10 to 95%, noncondensing	10 to 95%, noncondensing

Table 21-5: Regulatory Approvals for Cisco CSC 11000 Series

Description	Cisco CSS 11050	Cisco CSS 11150	Cisco CSS 11800
Safety	UL 1950; CSA 950; EN60950; GS Mark	UL 1950; CSA 950; EN60950; GS Mark	UL 1950; CSA 950; EN60950; T Mark;
EMC	FCC Part 15 Class A; EN55022 Class A; EN50082-1; VCCI Class 1	FCC Part 15 Class A; EN55022 Class A; EN 50082-1; VCCI Class 1	FCC Part 15 Class A; EN55022 Class A; EN50082-1; VCCI Class 1
Factory approvals	UL; TUV; BABT 340	UL; TUV; BABT 340	UL; TUV; BABT 340

Software

See part number table below.

Ordering Information

Where to buy Cisco products

Visit http://www.cisco.com/public/ordering_info.shtml

Product and Part Numbers

Part Numbers for the Cisco 11000 Series

Part Description	Part Number
Cisco 11000 Series of Content Services Switch (CSS)	
Cisco 11050 Series	
CSS 11051, 8 pt FE (TX), 128MB, HD, AC	CSS-11051-AC
CSS 11052, 8 pt FE (TX), 1 pt GE (SX), 128MB, HD, AC	CSS-11052-AC
Cisco 11150 Series	
CSS 11151, 12 pt FE (TX), 128MB, HD, AC	CSS-11151-AC
CSS 11152, 16 pt FE (TX), 128MB, HD, AC	CSS-11152-AC
CSS 11153, 12 pt FE (TX), 4 pt FE (FX), 128MB, HD, AC	CSS-11153-AC
CSS 11154, 12 pt FE (TX), 2 pt GE (SX w/ 8MB), 128MB, HD, AC	CSS-11154-AC
CSS 11155, 12 pt FE (TX), 2 pt GE (SX w/ 16MB), 128MB, HD, AC	CSS-11155-AC
CSS 11151, 12 pt FE (TX), 256MB, HD, AC	CSS-11151-256M-AC
CSS 11152, 16 pt FE (TX), 256MB, HD, AC	CSS-11152-256M-AC
CSS 11153, 12 pt FE (TX), 4 pt FE (FX), 256MB, HD, AC	CSS-11153-256M-AC
CSS 11154, 12 pt FE (TX), 2 pt GE (SX w/ 8MB), 256MB, HD, AC	CSS-11154-256M-AC
CSS 11155, 12 pt FE (TX), 2 pt GE (SX w/ 16MB), 256MB, HD, AC	CSS-11155-256M-AC
CSS 11151, 12 pt FE (TX), 128MB, FD, AC	CSS-11151-FD-AC
CSS 11152, 16 pt FE (TX), 128MB, FD, AC	CSS-11152-FD-AC
CSS 11153, 12 pt FE (TX), 4 pt FE (FX), 128MB, FD, AC	CSS-11153-FD-AC
CSS 11154, 12 pt FE (TX), 2 pt GE (SX w/ 8MB), 128MB, FD, AC	CSS-11154-FD-AC
CSS 11155, 12 pt FE (TX), 2 pt GE (SX w/ 16MB), 128MB, FD, AC	CSS-11155-FD-AC
Cisco 11800 Series	
CSS 11801, (1) SFM2, (1) SCM, (1) IDM-HD, (1) AC	CSS-11801-AC

Part Description	Part Number
CSS 11801, (1) SFM2, (1) SCM, (1) IDM-HD, (1) DC	CSS-11801-DC
CSS 11800, (1) AC, (1) BLOWER	CSS-11801-AC=
CSS 11801, (1) DC, (1) BLOWER	CSS-11801-DC=
CSS 11801, (1) SFM2, (1) SCM, (1) IDM-FD, (1) AC	CSS-11801-FD-AC
Cisco 11800 Series Processors and Accessories	
Redundant System Control Module (SCM)	CSS8-SCM
System Control Module (SCM)	CSS8-SCM=
Switch Fabric Module 2 (SFM2)	CSS8-SFM2
Switch Fabric Module 2 (SFM2)	CSS8-SFM2=
Integrated Disk Module (IDM) - Hard Drive	CSS8-IDM-MEM-HD
Spare Integrated Disk Module (IDM) - Hard Drive	CSS8-IDM-MEM-HD=
Integrated Disk Module (IDM) Flash Drive	CSS8-IDM-MEM-FD
Integrated Disk Module (IDM) Flash Drive	CSS8-IDM-MEM-FD=
Cisco 11800 Series Line Cards	
Gigabit Ethernet IOM - 16MB, order up to 4 GBICs	CSS8-IOM-4GE/16
Gigabit Ethernet IOM - 16MB, order up to 4 GBICs	CSS8-IOM-4GE/16=
Gigabit Ethernet IOM - 8MB, order up to 4 GBICs	CSS8-IOM-4GE/8
Gigabit Ethernet IOM - 8MB, order up to 4 GBICs	CSS8-IOM-4GE/8=
Fast Ethernet (TX/FX) I/O Module - 6 pt (TX), 2 pt (FX)	CSS8-IOM-6/2FE
Fast Ethernet (TX/FX) I/O Module - 6 pt (TX), 2 pt (FX)	CSS8-IOM-6/2FE=
Fast Ethernet (TX) I/O Module - 8 pt (TX)	CSS8-IOM-8FE
Fast Ethernet (TX) I/O Module - 8 pt (TX)	CSS8-IOM-8FE=
1000BASE-SX Gigabit Interface Converter (GBIC)	CSS8-GBIC-SX
1000BASE-SX Gigabit Interface Converter (GBIC)	CSS8-GBIC-SX=
Cisco 11800 Series Power Supply Options	
Redundant 630W Power supply (AC) for CSS-1180x	PWR-CSS8-630-AC/2
Spare 850W Power supply (AC) for CSS-1180x	PWR-CSS8-850-AC=
Spare 850W Power Supply (DC) for CSS-1180x	PWR-CSS8-850-DC=
Redundant 850W Power Supply (DC) for CSS-1180x	PWR-CSS8-DC/2
Power Cable Australia / New Zealand	CSS-PWR-AUS

Part Description	Part Number
Power Cable Australia / New Zealand	CSS-PWR-AUS=
Power Cable Europe (excluding Italy, Switzerland, and UK)	CSS-PWR-EUR
Power Cable Europe (excluding Italy, Switzerland, and UK)	CSS-PWR-EUR=
Power Cable- Israel	CSS-PWR-ISR
Power Cable- Israel	CSS-PWR-ISR=
Power Cable- Italy	CSS-PWR-IT
Power Cable- Italy	CSS-PWR-IT=
Power Cable- Japan	CSS-PWR-JPN
Power Cable- Japan	CSS-PWR-JPN=
Power Cable- South Africa / India	CSS-PWR-SA
Power Cable- South Africa / India	CSS-PWR-SA=
Power Cable- Switzerland	CSS-PWR-SWZ
Power Cable- Switzerland	CSS-PWR-SWZ=
Power Cable- United Kingdom / Hong Kong / Singapore	CSS-PWR-UK
Power Cable- United Kingdom / Hong Kong / Singapore	CSS-PWR-UK=
United States / Canada / South America	CSS-PWR-USA
United States / Canada / South America	CSS-PWR-USA=
Cisco 11800 Series Spares and Accessories	
Spare Fan Tray - 6 Fans	CSS8-BLOWER-6FAN=
Spare Fan Tray - 4 Fans	CSS8-BLOWER-4FAN=
Blank Slot Cover	CSS-SLOT-CVR
Blank Slot Cover	CSS-SLOT-CVR=
Blank Power Supply Cover	CSS-PWR-CVR
Blank Power Supply Cover	CSS-PWR-CVR=
Cisco 11000 Series Software Options	
WebNS V4.0X Enhanced Feature Set for CSS-1105x	S11K-050EN-4.0
WebNS V4.0X Enhanced Feature Set for CSS-1105x	S11K-050EN-4.0=
WebNS V4.0X Standard Feature Set for CSS-1105x	S11K-050ST-4.0
WebNS V4.0X Standard Feature Set for CSS-1105x	S11K-050ST-4.0=
WebNS V4.0X Enhanced Feature Set for CSS-1115x	S11K-150EN-4.0
WebNS V4.0X Enhanced Feature Set for CSS-1115x	S11K-150EN-4.0=
WebNS V4.0X Proximity Database License for CSS-1115x	S11K-150PD-4.0
WebNS V4.0X Proximity Database License for CSS-1115x	S11K-150PD-4.0=
WebNS V4.0X Standard Feature Set for CSS-1115x	S11K-150ST-4.0

Part Description	Part Number
WebNS V4.0X Standard Feature Set for CSS-1115x	S11K-150ST-4.0=
WebNS V4.0X Enhanced Feature Set for CSS-1180x	S11K-800EN-4.0
WebNS V4.0X Enhanced Feature Set for CSS-1180x	S11K-800EN-4.0=
WebNS V4.0X Standard Feature Set for CSS-1180x	S11K-800ST-4.0
WebNS V4.0X Standard Feature Set for CSS-1180x	S11K-800ST-4.0=
WebNS V3.1x Enhanced Feature Set for CSS-1105x	S11K-050EN-3.10
WebNS V3.1x Enhanced Feature Set for CSS-1105x	S11K-050EN-3.10=
WebNS V3.1x Standard Feature Set for CSS-1105x	S11K-050ST-3.10
WebNS V3.1x Standard Feature Set for CSS-1105x	S11K-050ST-3.10=
WebNS V3.1x Enhanced Feature Set for CSS-1115x	S11K-150EN-3.10
WebNS V3.1x Enhanced Feature Set for CSS-1115x	S11K-150EN-3.10=
WebNS V3.1x Standard Feature Set for CSS-1115x	S11K-150ST-3.10
WebNS V3.1x Standard Feature Set for CSS-1115x	S11K-150ST-3.10=
WebNS V3.1x Enhanced Feature Set for CSS-1180x	S11K-800EN-3.10
WebNS V3.1x Enhanced Feature Set for CSS-1180x	S11K-800EN-3.10=
WebNS V3.0x Standard Feature Set for CSS-1180x	S11K-800ST-3.03
WebNS V3.1x Standard Feature Set for CSS-1180x	S11K-800ST-3.10
WebNS V3.1x Standard Feature Set for CSS-1180x	S11K-800ST-3.10=
WebNS V4.0X SSH Software License for CSS-11xxx	S11K-SSH-4.0
WebNS V4.0X SSH Software License for CSS-11xxx	S11K-SSH-4.0=
WebNS V4.0x Content Switch Documentation - Hard Copy	DOC-CSS-4.0=
WebNS V3.1x Content Switch Documentation - Hard Copy	DOC-CSS-3.10=

Documentation

For part numbers for product specific documentation, visit

http://www.cisco.com/univercd/cc/td/doc/pcat/swdo__d1.htm

