Catalyst 1200

This chapter provides information on the Catalyst 1200 series workgroup switch. The information is organized into the following sections:

- Product Overview

- Standard Features

- Options

    — A/B Port Cards

    — Optional Software and Services

- Accessories

    — CDDI/FDDI Media Translator

    — UTP Cables

    — STP-to-UTP Converter

    — FDDI Patch Cable

    — Optical Attenuation Set

    — Wall-Mounting Kit

    — AC Power Cords

- Configuration Worksheet

Note   Documentation for the Catalyst 1200 switch is available in two forms: on a CD-ROM called Cisco Connection Documentation, Enterprise Series and printed books. A CD and hard-copy installation documentation ship with each chassis, and a configuration note ships with each component ordered. All configuration notes are available on the CD. Additional CDs and a subscription CD update service are also available.

You can also access Cisco technical documentation on the World Wide Web URL http://www.cisco.com. For more information, see the chapter "Documentation" at the end of the catalog.

Product Overview

The Catalyst 1200 series workgroup switch is a high-performance system that enhances network performance in client/server environments. The switch delivers Ethernet-to-Ethernet and Ethernet-to-CDDI/FDDI switching. It solves client/server networking problems with a seamless, high-bandwidth networking interface to servers and existing dedicated Ethernet desktop clients.

The Catalyst 1200 series workgroup switch supports the following basic configurations:

- 1,024 or 4,096 addresses

- Eight 10BaseT Ethernet interfaces

- Eight 10BaseFL Ethernet interfaces

- CDDI or FDDI 100-Mbps interfaces

The switch's software enhancements provide additional management and control functions to the network manager. Virtual Networking Services (VNS) makes the Catalyst 1200 series workgroup switch the only switch that offers a comprehensive set of features to manage switched network traffic. VNS lets managers add, move, and change individual or multiple workgroups across a connected stack of switches. VNS also helps managers implement VLANs of multiple workgroups across switches and routers, provide for security controls to sensitive resources within these workgroups, and provide broadcast management services that optimize the performance of switched workgroups. The switched port analyzer, which is provided free of charge, lets a single network analyzer monitor all of the switch's switched Ethernet segments.

Optional enhanced monitoring services (EMS) make the Catalyst 1200 series switch the only switch that can comprehensively monitor switched workgroup traffic. The optional embedded RMON software lets the switch monitor traffic flow, identify the network's heavy users, and decode switched traffic for troubleshooting purposes.

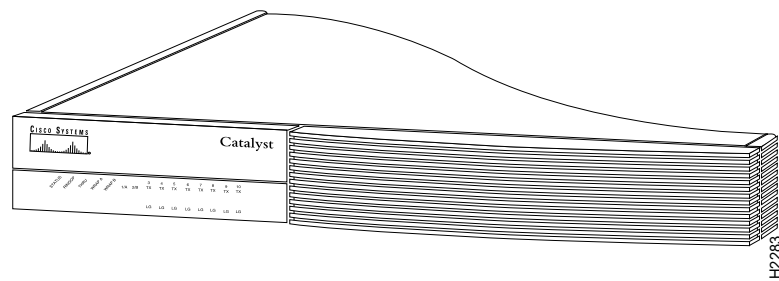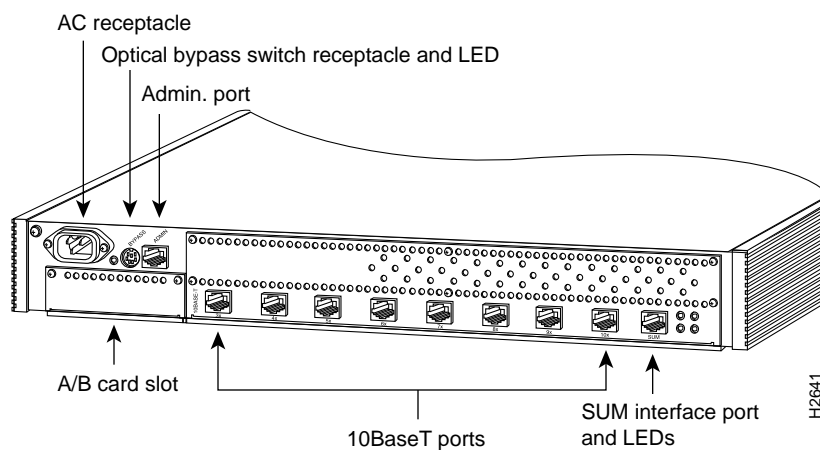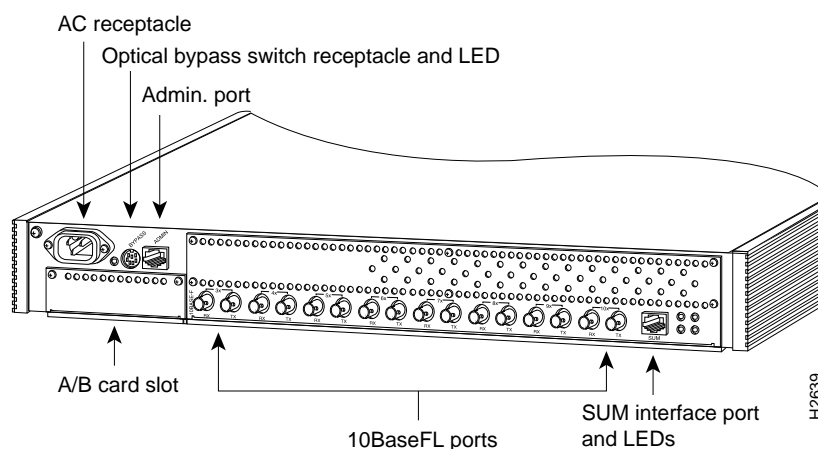**Figure 133 Catalyst 1200 Series Workgroup Switch Front Panel**

Figure 134 Catalyst 1200 Series Workgroup Switch Rear Panel (10BaseT)

AC receptacle

Optical bypass switch receptacle and LED

Admin. port

A/B card slot

10BaseT ports

SUM interface port and LEDs

H2641

Figure 135 Catalyst 1200 Series Workgroup Switch Rear Panel (10BaseFL)

AC receptacle

Optical bypass switch receptacle and LED

Admin. port

A/B card slot

10BaseFL ports

SUM interface port and LEDs

H2639

Table 270   Catalyst 1200 Series Workgroup Switch Summary of Features

Characteristics	Description
Placement	Desktop 19-inch rack-mount hardware included Wall-mount hardware optional
Network management	Simple Network Management Protocol (SNMP) agent (RFC 1155-1157) Station Management (SMT) Specification, Revision 7.3 Ethernet Management Information Base (MIB) RFC 1398 Spanning-tree bridge MIB FDDI MIB (RFC 1285) MIB II (RFC 1213) Cisco-specific workgroup MIB Optional RMON agent (RFC 1271)
Maximum FDDI station-to-station cabling distance	1.25 miles (2 km) using 62.5 or 50/125-micron multimode fiber 18.6 miles (30 km) using single-mode fiber
Maximum CDDI station-to-station cabling distance	330' (100 m) using Category 5 unshielded twisted-pair (UTP) or Type 1 shielded twisted-pair (STP)

Characteristics	Description
Maximum Ethernet station-to-station cabling distance	10BaseT: maximum segment length 330' (100 m) 10BaseFL: multimode fiber 1.25 miles (2 km)

Front panel indicators	Mechanical/electrical:
	  Switch status
	FDDI/CDDI:
	  Ringop
	  Thru
	  Wrap A
	  Wrap B
	10BaseT/10BaseFL:
	  Link status
	  Transmit

Rear panel indicators	Optical bypass switch present LED
	SUM port:
	  Collision
	  Link good
	  Transmit
	  Receive

Connectors	Ethernet:
	  8 Ethernet 10BaseT LAN ports (RJ-45)
	  8 Ethernet 10BaseFL LAN ports (ST multimode fiber)
	CDDI A/B port: RJ-45
	FDDI A/B port: MIC multimode or ST single-mode

Administration interface	EIA/TIA-232 administration port (RJ-45)
Optical bypass switch	6-pin mini-DIN
Processor	Motorola 68EC030 network management processor IDT 3081 RISC data movement processor
Dimensions (H x W x D)	2.7 x 18.0 x 16.0" (6.9 x 45.7 x 40.6 cm)
Weight (average shipping)	~17 lb (~ 7.85 kg)
Agency approvals	UL 1950 CSA-C22.2 No. 950-M89 EN 60950 FCC Class A (47 CFR, Part 15) EN55022A VDE-B (fiber A/B) CE Mark VCCI-I

Table 271   Catalyst 1200 Series Workgroup Switch Environmental Specifications
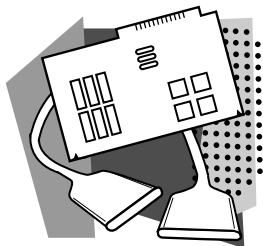
Description	Specification
Input	100 to 240 VAC autoranging
Frequency	50 to 60 Hz autoranging
AC current rating	2.0A @ 110V; 1.0A @ 220V
Operating temperature range	32 to 104 F (0 to 40 C)
Nonoperating temperature range	–40 to 167 F (–40 to 75 C)

Standard Features

The Catalyst 1200 series workgroup switch includes the following standard features:

- Eight 10BaseT ports deliver high-performance, dedicated 10 Mbps to Ethernet hubs or high-performance desktop systems.

- Automated packet recognition/translation (APaRT) technology supports automatic translation of popular protocols used in a variety of client/server applications.

- Support of the standards-based IP fragmentation algorithm ensures maximum utilization of interconnected Ethernet and FDDI stations.

- 100-Mbps CDDI/FDDI interface delivers standards-based, high-speed connectivity to servers and other high-speed workgroup resources.

- 1,024-address lookup table lets you connect over 1000 devices across any of its eight Ethernet ports.

- Optional 4,096-station database allows the switch to support flat networks with over 4,000 attached systems.

- Eight 10BaseFL ports deliver high-performance, dedicated Ethernet to systems supporting fiber-optic interrepeater link (FOIRL) or 10BaseFL specification interfaces.

- Spanning-tree support for redundant/fault tolerant workgroup applications.

- Flash memory allows for easy upgrades of switch software.

- SNMP MIB II with Telnet support for third-party management.

- Graphical user interface (GUI) with Workgroup Director displays icons and pull-down menus.

- Switched port analyzer lets a single network analyzer monitor traffic from all Catalyst's switched segments.

- Virtual Networking Services (VNS) lets managers define multiple workgroups across Catalyst switches, segmenting traffic, providing access control, and enabling deployment of multimedia applications. VNS includes the following features:

  — Bridge services with 802.10-based VLANs define virtual networks across stacked Catalyst switches.

  — Access lists allow managers to exclude user-defined traffic from workgroups.

  — Broadcast suppression limits the amount of broadcasts forwarded by the switch.

  — Virtual IP services allow routing between separate IP workgroups.

  — IP multicast services selectively forward traffic to workgroups requiring them.

  — Distributed Host Configuration Protocol (DHCP) and BOOTP help users facilitate management of dynamically configured IP hosts.
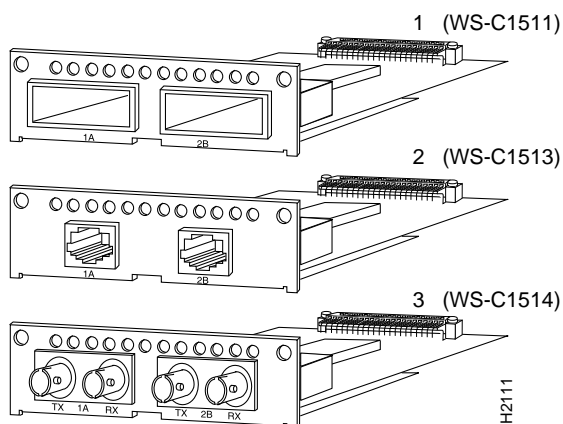
Options

Catalyst 1200 series workgroup switch options include A/B port cards, software, and services such as SMARTnet agreements and documentation.

A/B Port Cards

An A/B port card may be added to implement CDDI/FDDI A and B ports, as defined in the American National Standards Institute (ANSI) standard for dual attachment stations using the following media:

- FDDI

- CDDI

- Single-mode FDDI

Figure 136 A/B Port Cards

Cables must be ordered separately. See the section "Accessories," later in this chapter, for cable descriptions and ordering information.

Optional Software and Services

Catalyst 1200 series workgroup switch optional software and services include the following:

- TrafficDirector monitoring console

  TrafficDirector provides an RMON-based network management tool used to capture and graph RMON data. A GUI-based command interface allows network managers to set capture conditions with Catalyst switch software.

- The Catalyst Enhanced Monitoring Software (EMS) license provides network managers with the switch-based RMON software to deliver unprecedented traffic monitoring and analysis capabilities. EMS includes the industry's first integrated RMON agent, which allows for monitoring and troubleshooting of traffic passing through the switch.

- SMARTnet agreements provide multinational support that can include telephone, onsite, and Cisco Connection Online (CCO) support.

- Additional hardware and software documentation.

The following tables provide Catalyst 1200 series product numbers: see Table 272 for software and services and Table 273 for hardware product numbers.

Table 272   Catalyst 1200 Series Workgroup Switch Software and Services

Description	Product Number
CiscoView 3.0.3 for SunNet Manager—SunOS, Solaris	CV-3.0.3-SNM
CiscoView 3.0.3 for HP OpenView—SunOS, Solaris	CV-3.0.3-OVS
CiscoView 3.0.3 for HP OpenView—HP-UX	CV-3.0.3-OVH
CiscoView 3.0.3 for IBM NetView—NetView AIX	CV-3.0.3-NV
Catalyst EMS	WS-C12-EMS-LIC
Catalyst TrafficDirector for PC Windows	TRAFFDIR3.3-PC
Catalyst TrafficDirector for SunOS, Solaris	TRAFFDIR3.3-SUN
Catalyst TrafficDirector for HP-UX	TRAFFDIR3.3-HP
Catalyst TrafficDirector for IBM-AIX	TRAFFDIR3.3-IBM
SMARTnet agreement	CON-SNT-WS-C1200
SMARTnet agreement for TrafficDirector (PC)	CON-SNT-TD-PC
SMARTnet for TrafficDirector (SunOS, Solaris)	CON-SNT-TD-SUN
SMARTnet for TrafficDirector (HP-UX)	CON-SNT-TD-HP
SMARTnet for TrafficDirector (IBM-AIX)	CON-SNT-TD-IBM
Additional documentation	See the chapter "Documentation" at the end of this catalog.

Table 273   Catalyst 1200 Series Workgroup Switch Hardware

Description	Product Numbers
Catalyst 1200 series workgroup switch, 1,024 addresses, 8 10BaseT	WS-C1201
Catalyst 1200 series workgroup switch, 4,096 addresses, 8 10BaseT	WS-C1202
Catalyst 1200 series workgroup switch, 1,024 addresses, 8 10BaseFL	WS-C1211
Catalyst 1200 series workgroup switch, 4,096 addresses, 8 10BaseFL	WS-C1212
Catalyst 1200 series workgroup switch, 1,024 addresses, 8 10BaseT with bundled FDDI A/B (MIC)	WS-C1221
Catalyst 1200 series workgroup switch, 1,024 addresses, 8 10BaseT with bundled CDDI A/B (MLT-3)	WS-C1241

Description	Product Numbers
Catalyst 1200 series workgroup switch, 4,096 addresses, 8 10BaseFL with bundled FDDI A/B (MIC)	WS-C1251
Catalyst 1200 series workgroup switch, 4,096 addresses, 8 10BaseFL with bundled CDDI A/B (MLT-3)	WS-C1261
A/B port cards	
Multimode FDDI A/B port card, 100 Mbps	WS-C1511
CDDI/MLT-3 A/B port card, 100 Mbps	WS-C1513
Single-mode FDDI A/B port card, 100 Mbps	WS-C1514

Accessories

This section describes the accessories available for the Catalyst 1200 switch. Each accessory is described, and the product number included, in Table 274.

Table 274   Catalyst 1200 Series Workgroup Switch Accessories

Description	Product Number
CDDI/FDDI media translator	WS-C703
UTP cross-connect modular cable, 7' (2.12 m)	WS-C710
UTP straight-through modular cable, 25' (7.57 m)	WS-C725
STP-to-UTP converter	WS-C737
FDDI patch cable, 7' (2.12 m), MIC-to-MIC	WS-C757
FDDI patch cable, 7' (2.12 m), SC-to-MIC	WS-C767
Cross-connect, 1' (.30 m), for A/B CDDI-port daisy chain	WS-C711
10-dB optical attenuator set	WS-C784
Wall-mounting kit	WS-C1670

CDDI/FDDI Media Translator

The C703 CDDI/FDDI media translator is used to convert between CDDI and FDDI links. It includes a transceiver and a +5V external 120-VAC power supply for North America. Table 275 provides specifications for the C703 CDDI/FDDI media translator.
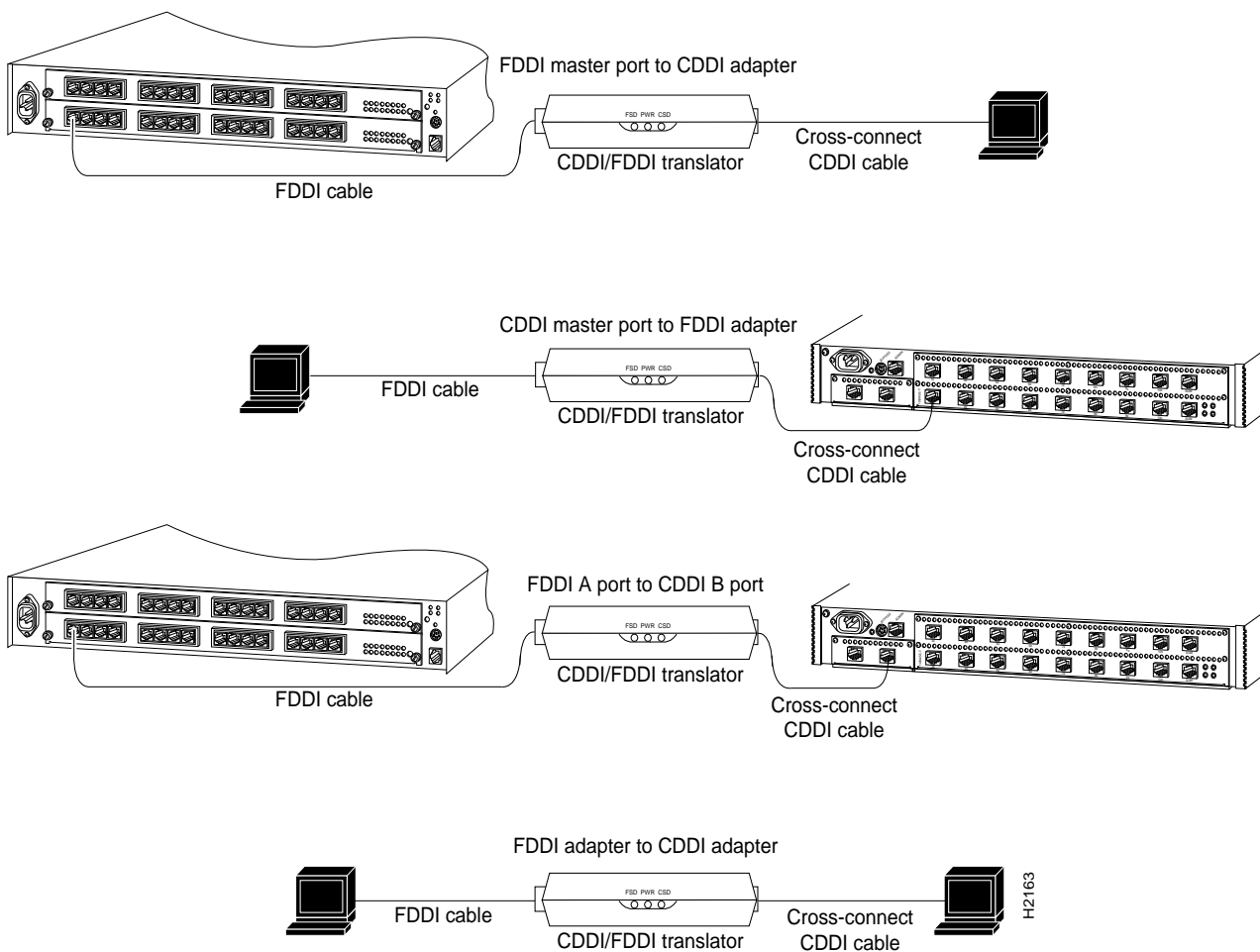
Table 275   CDDI/FDDI Media Translator Specifications

Description	Specification
Connectors	1 FDDI MIC 1 CDDI 8-pin RJ-45
LEDs	FDDI signal detect CDDI signal detect Power
Dimensions (H x W x D)	1.5 x 3.5 x 5.6"

Description	Specification
Translator power requirements	+5V
External power supply	120 VAC, UL, CS
Agency compliance	FCC Part 15, Subpart J, Class A

Figure 137 shows the most typical configurations for CDDI/FDDI translators. A standard patch cable is used to connect the FDDI side to the media translator. A cross-connect cable is used to connect the CDDI side, except when connecting a Workgroup 1000 concentrator (MLT-2), which requires a straight-through cable.

Figure 137 Typical Configuration of the CDDI/FDDI Media Translator

UTP Cables

Two kinds of unshielded twisted-pair (UTP) modular cables can be used—cross-connect and straight-through:

- The UTP cross-connect modular cable (WS-C710) is a seven-foot long, data-grade modular cable for connecting the workgroup concentrator M port to the patch panel. A one-foot, cross-connect cable (WS-C711) is also available for daisy-chaining A/B CDDI ports.

- The UTP straight-through cables are 7-foot (WS-C717) or 25-foot (WS-C725) long, data-grade modular cables for connecting the CDDI/FDDI adapter to the wall plate.

STP-to-UTP Converter

The STP-to-UTP converter (WS-C737) is used to connect CDDI equipment to IBM Type 1 STP cabling systems.

FDDI Patch Cable

The FDDI patch cable (WS-C757) is a seven-foot long, fiber-optic cable with MICs on each end.

The FDDI MIC-to-FDDI SC cable (WS-C767) is a seven-foot long, fiber-optic cable with a MIC on one end and an SC connector on the other end.

Optical Attenuation Set

The optical attenuation set (WS-C784) includes two 10-dB optical attenuators, one for each signal direction. The set must be used in single-mode fiber applications having a total link attenuation of less than 10 dBs.

Wall-Mounting Kit

The wall-mounting kit (WS-C1670) contains hardware mounting accessories to mount the WS-C1200 chassis on the wall.

AC Power Cords

Workgroup products are shipped with North American power cords standard. Specify on your order alternate power cords for European (220V), U.K., Italian, or Australian power cords. For part numbers, see the chapter "Power Cords," later in this catalog.

Configuration Worksheet

Use the following worksheet to help plan your order or to upgrade an existing system. One blank worksheet is provided, and you can make extra copies as needed.

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Catalyst 1200 Switch Worksheet

Network Management Software

CiscoView 3.0.3 for SunNet Manager—SunOS, Solaris	☐ CV-3.0.3-SNM
CiscoView 3.0.3 for HP OpenView—SunOS, Solaris	☐ CV-3.0.3-OVS
CiscoView 3.0.3 for HP OpenView—HP-UX	☐ CV-3.0.3-OVH
CiscoView 3.0.3 for IBM NetView—NetView AIX	☐ CV-3.0.3-NV
TrafficDirector for PC Windows	☐ TRAFFDIR3.3-PC
TrafficDirector for SunOS, Solaris	☐ TRAFFDIR3.3-SUN
TrafficDirector for HP-UX	☐ TRAFFDIR3.3-HP
TrafficDirector for IBM-AIX	☐ TRAFFDIR3.3-IBM

Power cord: ☐ U.S.—standard if not specified   ☐ Australia
☐ Italy   ☐ Europe   ☐ U.K.

Catalyst 1200 Series Workgroup Switch

Base unit	☐ WS-C1201	☐ WS-C1211	
	☐ WS-C1202	☐ WS-C1212	

100-Mbps A/B port cards (maximum one per system)

FDDI A/B	☐ WS-C1511
CDDI/MLT-3 A/B	☐ WS-C1513
Single-mode FDDI A/B	☐ WS-C1514

Software options

Catalyst Enhanced Monitoring Services	☐ WS-C12-EMS-LIC

Bundled configurations

	☐ WS-C1221
	☐ WS-C1241
	☐ WS-C1251
	☐ WS-C1261

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