



Product Overview

The Catalyst 5000 family and 6000 family switches support a variety of ATM modules that permit transparent connections between legacy LANs over ATM backbones and enable permanent virtual connections (PVCs) between Catalyst 5000, 6000, and ATM core switches. The modules also support PVC traffic shaping, Multiprotocol over ATM (MPOA), Fast Simple Server Redundancy Protocol (FSSRP), and ATM fabric integration.

This chapter consists of these sections:

- ATM Modules Overview, page 1-1
- ATM Switch Processor Software, page 1-4
- Software Features, page 1-4
- VLAN/ELAN Trunks, page 1-5
- Network Management, page 1-5
- ATM MIBs, page 1-5

ATM Modules Overview



Note

For installation information and a complete description of the Catalyst 5000 family ATM modules, refer to the *Catalyst 5000 Family Installation Guide*, the *Catalyst 5000 Family Supervisor Engine Installation Guide*, and the *Catalyst 5000 Family Module Installation Guide*. For installation information and a description of the Catalyst 6000 family ATM modules, refer to the *Catalyst 6000 Family Installation Guide* and the *Catalyst 6000 Family Module Installation Guide*.

Table 1-1 lists the product numbers and features on all ATM modules supported on the Catalyst 5000 family switches, and Table 1-2 lists the product numbers and features on all ATM modules supported on the Catalyst 6000 family switches.

Table 1-1 Catalyst 5000 Family ATM Modules

Product Number	Module Description
WS-X5156	ATM LANE ¹ Dual PHY Module (UTP) <ul style="list-style-type: none"> • Reassembly of up to 255 buffers simultaneously; each buffer represents a packet • Support for up to 4096 virtual circuits • Support for AAL 5 • ATM LANE 1.0, including LEC², LES³, BUS⁴, and LECS⁵
WS-X5158	ATM LANE Dual PHY OC-3 Module (MMF) <ul style="list-style-type: none"> • Reassembly of up to 255 buffers simultaneously; each buffer represents a packet • Support for up to 4096 virtual circuits • Support for AAL 5 • ATM LANE 1.0, including LEC, LES, BUS, and LECS
WS-X5157	ATM LANE Dual PHY OC-3 Module (SMF) <ul style="list-style-type: none"> • Reassembly of up to 255 buffers simultaneously; each buffer represents a packet • Support for up to 4096 virtual circuits • Support for AAL 5 • ATM LANE 1.0, including LEC, LES, BUS, and LECS
WS-X5166	ATM Dual PHY DS3 Module <ul style="list-style-type: none"> • Reassembly of up to 255 buffers simultaneously; each buffer represents a packet • Support for up to 4096 virtual circuits • Support for AAL 5 • Support for PVC traffic shaping
WS-X5167	ATM Dual PHY OC-3 LANE/MPOA ⁶ Module (MMF) <ul style="list-style-type: none"> • Reassembly of up to 255 buffers simultaneously; each buffer represents a packet • Support for up to 4096 virtual circuits • Support for AAL 5 • ATM LANE 1.0, including LEC, LES, BUS, and LECS • MPOA support

Table 1-1 Catalyst 5000 Family ATM Modules (continued)

Product Number	Module Description
WS-X5168	ATM Dual OC-3 LANE/MPOA Module (SMF) <ul style="list-style-type: none"> • Reassembly of up to 255 buffers simultaneously; each buffer represents a packet • Support for up to 4096 virtual circuits • Support for AAL 5 • ATM LANE 1.0, including LEC, LES, BUS, and LECS • MPOA support
WS-X5161	ATM Dual PHY OC-12 LANE/MPOA Module (MMF) <ul style="list-style-type: none"> • Reassembly of up to 255 buffers simultaneously; each buffer represents a packet • Support for up to 4096 virtual circuits • Support for AAL 5 • ATM LANE 1.0, including LEC, LES, BUS, and LECS • MPOA support
WS-X5162	ATM Dual PHY OC-12 LANE/MPOA Module (SMF) <ul style="list-style-type: none"> • Reassembly of up to 255 buffers simultaneously; each buffer represents a packet • Support for up to 4096 virtual circuits • Support for AAL 5 • ATM LANE 1.0, including LEC, LES, BUS, and LECS • MPOA support

1. LANE=LAN Emulation
2. LEC=LAN Emulation Client
3. LES=LAN Emulation Server
4. BUS=broadcast and unknown server
5. LECS=LAN Emulation Configuration Server
6. MPOA=Multiprotocol over ATM

Table 1-2 Catalyst 6000 Family ATM Modules

Product Number	Module Description
WS-X6101	ATM Dual PHY OC-12 LANE/MPOA Module (SMF) <ul style="list-style-type: none"> • Reassembly of up to 255 buffers simultaneously; each buffer represents a packet • Support for up to 4096 virtual circuits • Support for AAL 5 • ATM LANE 1.0, including LEC¹, LES², BUS³, and LECS⁴ • MPOA support⁵
WS-X6101	ATM Dual PHY OC-12 LANE/MPOA Module (MMF) <ul style="list-style-type: none"> • Reassembly of up to 255 buffers simultaneously; each buffer represents a packet • Support for up to 4096 virtual circuits • Support for AAL 5 • ATM LANE 1.0, including LEC, LES, BUS, and LECS • MPOA support

1. LEC=LAN Emulation Client
2. LES=LAN Emulation Server
3. BUS=broadcast and unknown server
4. LECS=LAN Emulation Configuration Server
5. MPOA=Multiprotocol over ATM

ATM Switch Processor Software

ATM modules require an additional software image, which is factory installed on the module.

Catalyst 5000 family and 6000 family share a command-line interface (CLI) with which you can configure modules and ports on the switches. For descriptions of the available CLI commands, see Chapter 7, “Command Reference.”

Software Features

Catalyst 5000 family and 6000 family ATM modules support these software features:

- LAN emulation
- PVCs with traffic shaping
- MPOA
- Fabric integration
- Fast Simple Server Redundancy Protocol (FSSRP)

VLAN/ELAN Trunks

Emulated LANs (ELANs) effectively extend VLANs across an ATM cloud. When you configure an ELAN, it is by default bound to a VLAN. Using ELANs, you can connect members of the same VLANs on different devices over an ATM link.

Network Management

Catalyst 5000 and 6000 family ATM modules can be monitored and controlled with network management, with the CLI, or with alternative methods, such as CWSI, CiscoWorks 2000, and SNMP. For information on SNMP, refer to the *Software Configuration Guide* for your switch.

ATM MIBs

Table 1-3 shows the supported MIB objects for the ATM software releases.

For additional information on MIBs, RMON groups, and traps, refer to the Cisco public MIB directory (<http://www.cisco.com/public/mibs/>) and the “*Enterprise MIB User Quick Reference*,” on Cisco Connection Online (CCO).

Table 1-3 Supported ATM MIB Objects

Software Release	MIBs
3.2 (2) and later	CISCO-ATM-DUAL-PHY-MIB
51.1 and later	CISCO-ATM-DUAL-PHY-MIB
	CISCO-ATM-PVC-MIB

