GLOSSARY

A

ARPA Advanced Research Projects Agency of the U.S. Department of Defense. ARPA funded research and experimentation with ARPANET, the predecessor to the Internet.

ATM Asynchronous Transfer Mode

B

blank filler plate An empty panel used to fill vacant subslots on a SIP. For proper operation, a SIP should be fully installed with either functional SPAs or blank filler plates.

F

FPD field-programmable device. General term for any hardware component implemented on router cards that supports separate software upgrades. SIPs and SPAs must have the correct FPD version to function properly; an FPD incompatibility will disable all interfaces on the SPA or all SPAs within the SIP.

FPD image package A software file used to upgrade FPD images. Whenever a Cisco IOS image is released that supports SPAs, a companion SPA FPD image package is also released for that Cisco IOS software release.

L

LAN local-area network. High-speed, low-error data network covering a relatively small geographic area (up to a few thousand meters). LANs connect workstations, peripherals, terminals, and other devices in a single building or other geographically limited area. LAN standards specify cabling and signaling at the physical and data link layers of the OSI model. Ethernet, FDDI, and Token Ring are widely used LAN technologies.

M

MAC   media access control. Lower of the two sublayers of the data link layer defined by the IEEE. The MAC sublayer handles access to shared media.

MIB   Management Information Base. Database of network management information that is used and maintained by a network management protocol such as SNMP or CMIP. The value of a MIB object can be changed or retrieved using SNMP or CMIP commands, usually through a GUI network management system. MIB objects are organized in a tree structure that includes public (standard) and private (proprietary) branches.

O

OIR   online insertion and removal. Feature supported by SIPs and SPAs allowing removal of the cards while the router and the cards are activated, without affecting the operation of other cards or the router. Although this removal can be done while the SIP or SPA is activated, it is generally recommended that you gracefully deactivate the hardware using the appropriate commands for your platform prior to removal of the hardware.

P

PPP   Point-to-Point Protocol. A link-layer encapsulation method for dialup or dedicated circuits.

Q

QoS   quality of service. Measure of performance for a transmission system that reflects its transmission quality and service availability.

S

SFP   small form-factor pluggable optical transceiver. A type of fiber optic receptacle device that mounts flush with the front panel to provide network connectivity.

single height   Describes the dimension of a SPA that occupies a single SIP subslot, or half of the SIP.

SIP SPA interface processor. A SIP is a platform-specific carrier card that inserts into a router slot like a line card. A SIP can hold one or more SPAs in its subslots, depending on the SIP type. The SPA provides the network interface. The SIP provides the connection between the Route Processor (RP) and the SPA.

SNMP Simple Network Management Protocol. The protocol governing network management and monitoring of network devices and their functions.

SPA shared port adapter. A SPA is a modular, platform-independent port adapter that inserts into a subslot of a compatible SIP carrier card to provide network connectivity and increased interface port density. The SPA provides the interface between the network and the SIP.

subslot Slot on a SIP where a SPA is installed. The primary slot is the chassis slot on the where the SIP is installed.

V

VLAN Virtual LAN. Group of devices on one or more LANs that are configured (using management software) so that they can communicate as if they were attached to the same wire, when in fact they are located on a number of different LAN segments. Because VLANs are based on logical instead of physical connections, they are extremely flexible. See also *LAN*.

Cisco ASR 1000 Series Aggregation Services Routers SIP and SPA Software Configuration Guide