

Glossary

The following are definitions of some of the terms used in this article.

AAL. ATM Adaptation Layer. The AAL translates services from their native format, such as variable-length frames, into fixed-size ATM cells. It returns the service data to its original form at the destination.

ATM. Asynchronous Transfer Mode. A transmission technology that provides high bandwidth, low delay, packet switching, and multiplexing. Usable capacity is segmented into ATM cells that are allocated to services on demand. ATM is designed to handle a variety of service types, such as data, voice, and video.

BECN. Backward Explicit Congestion Notification. A bit in a Frame Relay header that indicates that frames transmitted on this connection may experience congestion (backward notification of congestion).

BITS Source. Building Integrated Timing Source. A reference clock, typically distributed throughout public networks, that is used to synchronize network elements.

Cell. ATM cells have a fixed size of 53 bytes. They consist of a 5-byte header that carries routing information, and a 48-byte payload that carries service data.

FECN. Forward Explicit Congestion Notification. A bit in a Frame Relay header that indicates that the current frame has encountered congestion over the connection (forward notification of congestion).

Frame Relay. A variable-size packet service operating from 56 kbits/s to 2 Mbits/s. Frame relay can efficiently transport high-speed, bursty data, but does not support services that are highly sensitive to transmission delay (such as voice). A number of Frame Relay services can be multiplexed onto a high-speed ATM connection.

LAN. Local Area Network. A short-distance data communications network, typically within a building or campus. A LAN service can be transported directly over an ATM connection or a lower-speed WAN technology such as Frame Relay or SMDS.

Multiplexing. Merging several different signals into one source and separating them at the destination.

PCR. Peak Cell Rate. PCR is one example of a traffic parameter specified in a contract between an ATM network operator and a customer. As long as the customer's service does not exceed the specified PCR, it should not incur any cell loss.

SMDS. Switched Multimegabit Data Service. A high-speed, public, packet-switched data service. SMDS extends LAN capabilities over wider areas. A number of SMDS services can be multiplexed onto a high-speed ATM connection.

Stratum-3 Reference. A highly accurate and stable reference clock, used in network equipment and communications test equipment.

SWG. Sub-Working Group. A group of people within a standards organization who propose new standards or recommendations.

VC. Virtual Circuit. An ATM connection between two endpoints, identified by a VPI/VCI.

VP. Virtual Path. A collection of virtual circuits, grouped together for routing purposes, sharing a common VPI.

VPI/VCI. Virtual Path Identifier/Virtual Channel Identifier. A field in the ATM cell header that provides routing information.

WAN. Wide Area Network. A network that operates over an extended geographic area. ATM, Frame Relay, and SMDS are examples of WAN technologies.

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