Numerics

1+1

A method of protecting traffic in which a protection channel exists for each working traffic channel. For optical systems, the protection channel fibers can be routed over a path separate from the working fibers. The traffic signal is bridged to both the working and protection transmitters so the protection signal can be selected quickly if the working channel fails.

1:n

A method of protecting traffic in which one protection channel exists for *n* traffic channels. Only one traffic channel can be switched to the protection channel at any given time.

1G mobile network

First generation mobile network. Refers to the initial category of mobile wireless networks that use analog technology only. Advanced Mobile Phone Service (AMPS) is an example of a 1G mobile network standard.

10Base2

10-Mbps baseband Ethernet specification using 50-ohm thin coaxial cable. 10Base2, which is part of the IEEE 802.3 specification, has a distance limit of 606.8 feet (185 meters) per segment. See also *Cheapernet*, *EtherChannel*, *IEEE 802.3*, and *Thinnet*.

10Base5

10-Mbps baseband Ethernet specification using standard (thick) 50-ohm baseband coaxial cable. 10Base5, which is part of the IEEE 802.3 baseband physical layer specification, has a distance limit of 1640 feet (500 meters) per segment. See also *EtherChannel* and *IEEE 802.3*.

10BaseF

10-Mbps baseband Ethernet specification that refers to the 10BaseFB, 10BaseFL, and 10BaseFP standards for Ethernet over fiber-optic cabling. See also *10BaseFB*, *10BaseFL*, *10BaseFP*, and *EtherChannel*.

10BaseFB

10-Mbps baseband Ethernet specification using fiber-optic cabling. 10BaseFB is part of the IEEE 10BaseF specification. It is not used to connect user stations, but instead provides a synchronous signaling backbone that allows additional segments and repeaters to be connected to the network. 10BaseFB segments can be up to 1.24 miles (2000 meters) long. See also *10BaseF* and *EtherChannel*.

10BaseFL

10-Mbps baseband Ethernet specification using fiber-optic cabling. 10BaseFL is part of the IEEE 10BaseF specification and, although able to interoperate with FOIRL, is designed to replace the FOIRL specification. 10BaseFL segments can be up to 3280 feet (1000 meters) long if used with FOIRL, and up to 1.24 miles (2000 meters) if 10BaseFL is used exclusively. See also *10BaseF*, *EtherChannel*, and *FOIRL*.

10BaseFP

10-Mbps fiber-passive baseband Ethernet specification using fiber-optic cabling. 10BaseFP is part of the IEEE 10BaseF specification. It organizes a number of computers into a star topology without the use of repeaters. 10BaseFP segments can be up to 1640 feet (500 meters) long. See also *10BaseF* and *EtherChannel*.

10BaseT

10-Mbps baseband Ethernet specification using two pairs of twisted-pair cabling (Categories 3, 4, or 5): one pair for transmitting data and the other for receiving data. 10BaseT, which is part of the IEEE 802.3 specification, has a distance limit of approximately 328 feet (100 meters) per segment. See also *EtherChannel* and *IEEE 802.3*.

10Broad36

10-Mbps broadband Ethernet specification using broadband coaxial cable. 10Broad36, which is part of the IEEE 802.3 specification, has a distance limit of 2.24 miles (3600 meters) per segment. See also *EtherChannel* and *IEEE 802.3*.

100BaseFX

A 100-Mbps baseband Fast Ethernet specification using two strands of multimode fiber-optic cable per link. To guarantee proper signal timing, a 100BaseFX link cannot exceed 1312 feet (400 meters) in length. Based on the IEEE 802.3 standard. See also *100BaseX*, *Fast Ethernet*, and *IEEE 802.3*.

100BaseT

100-Mbps baseband Fast Ethernet specification using UTP wiring. Like the 10BaseT technology on which it is based, 100BaseT sends link pulses over the network segment when no traffic is present. However, these link pulses contain more information than those used in 10BaseT. Based on the IEEE 802.3 standard. See also *10BaseT*, *Fast Ethernet*, and *IEEE 802.3*.

100BaseT4

100-Mbps baseband Fast Ethernet specification using four pairs of Categories 3, 4, or 5 UTP wiring. To guarantee the proper signal timing, a 100BaseT4 segment cannot exceed 328 feet (100 meters) in length. Based on the IEEE 802.3 standard. See also *Fast Ethernet* and *IEEE 802.3*.

100BaseTX

100-Mbps baseband Fast Ethernet specification using two pairs of either UTP or STP wiring. The first pair of wires receives data; the second transmits data. To guarantee the proper signal timing, a 100BaseTX segment cannot exceed 328 feet (100 meters) in length. Based on the IEEE 802.3 standard. See also *100BaseX*, *Fast Ethernet*, and *IEEE 802.3*.

100BaseX

100-Mbps baseband Fast Ethernet specification that refers to the 100BaseFX and 100BaseTX standards for Fast Ethernet over fiber-optic cabling. Based on the IEEE 802.3 standard. See also *100BaseFX*, *100BaseTX*, *Fast Ethernet*, and *IEEE 802.3*.

100VG-AnyLAN

100-Mbps Fast Ethernet and Token Ring media technology using four pairs of Categories 3, 4, or 5 UTP cabling. This high-speed transport technology, developed by Hewlett-Packard, can operate on existing 10BaseT Ethernet networks. Based on the IEEE 802.12 standard. See also *IEEE 802.12*.

1000Base-F

A 1-Gbps IEEE standard for Ethernet LANs.

2B1Q

2 binary 1 quaternary. An encoding scheme that provides a 2 bits per baud, 80-kbaud per second, 160-kbps transfer rate. The most common signaling method on ISDN U interfaces. The 1988 ANSI spec T1.601 defines this protocol in detail.

2G mobile network

second generation mobile network. Refers generically to a category of mobile wireless networks and services that implement digital technology. GSM is an example of a 2G mobile network standard.

2G+ mobile network

second generation plus mobile network. Refers generically to a category of mobile wireless networks that support higher data rates than 2G mobile networks. GPRS is an example of a 2G+ mobile network standard.

24th channel signaling

See *2G mobile network*.

3G mobile network

third generation mobile network. Refers generically to a category of next-generation mobile networks, such as UMTS and IMT-2000.

370 block mux channel

See *block multiplexer channel*.

4B/5B local fiber

4-byte/5-byte local fiber. Fiber channel physical media used for FDDI and ATM. Supports speeds up to 100 Mbps over multimode fiber. See also *TAXI 4B/5B*.

6BONE

The Internet's experimental IPv6 network.

8B/10B local fiber

8-byte/10-byte local fiber. Fiber channel physical media that supports speeds up to 149.76 Mbps over multimode fiber.

802.x

A set of IEEE standards for the definition of LAN protocols.

822

The short form of RFC 822. Refers to the format of Internet-style e-mail as defined in RFC 822.

1822

A historic term that refers to the original ARPANET host-to-IMP interface. The specifications are in BBN report 1822. See also *host* and *IMP*.