AT&T and IBM Cable Types and Specifications (2/95)

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TOPIC ---

I need basic information on cabling specs, features, and benefits for
discussions with customers regarding the following cable types:

• AT&T type 1 through 5
• IBM type 1 through 5

DISCUSSION --

IBM

Here is the information on IBM cable types. There is no type 4, nor type 7.

Type 1: 2 shielded, solid wire, twisted pair, 22 AWG, heavy jacket.
        Available for plenum or non-plenum interior use, and underground or
        aerial exterior use. Use of Type 1 permits transmission at 16 Mbps,
        and a maximum of 260 stations, 33 MAUs per ring. Maximum lobe
        length is 330 feet.

Type 2: 2 shielded, solid wire, twisted pair, 22 AWG, plus 4 twisted pairs
        of solid 26 AWG wires added between the shield and the insulation
        cable sheath. Type 2 also supports 16 Mbps transmission.

Type 3: Unshielded, telephone grade (22 or 24 AWG) twisted pair, typically
        found inside a building. Requires a media filter at (or within) the
        NIC, and limits the transmission rate to 4 Mbps, and the number of
        workstations to 72.

Type 5: 100/140 micron fiber optic cable, used to connect distant MSAUs
        with fiber optic repeaters.

Type 6: Patch cables consisting of data grade, stranded, shielded twisted
        pairs, 26 AWG. When used, the distance limits are 66% that of Type
        1.

Type 8: Under carpet cable, data grade twisted pair cable, 26 AWG. When

used, the distance limits are 50% that of Type 1.

Type 9: Shield twisted pair, 26 AWG approved for plenum installations. When
          used, the distance limits are 66% that of Type 1.

AT&T

Unlike IBM's cable types, which can be non-twisted pair, AT&T types (more
often referred to as Level) are all twisted pair cables.

Level 1: Used for voice and low speed data, digital and analog, RS-232.

Level 2: Unshielded twisted-pair, equivalent to IBM Type 3. Used in IBM
          3270, IBM System 3X/AS/400.

Level 3: Shield or unshielded, equivalent to DEC's 10BASE-T, 4 Mbps token
          ring.

Level 4: Used for high-speed data, 100 ohm plus/minus 15%, 16 Mbps token
          ring, or extended distance 10BASE-T environments, at up to 20
          Mbps.

Level 5: High speed LAN, 100 ohm plus/minus 15%, IBM data grade, used in
          all applications supported by levels 1-4 and 100 Mbps CDDI.

We are not sure there is much to discuss about features and benefits of the
cable specifications. As you can see, different vendors might have
different type definitions, they do have equivalence to other vendors'
specifications or industry standards. Customers need to understand their
network requirements and select the correct cable types to support it.
Things to consider are voice or data, speed, and cost.

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