

WAN Access Technologies At A Glance

Technology	Data-transfer speed	Distance from provider to customer site	Comments
ISDN	128 Kbps symmetrically	18,000 feet and more with additional equipment	Mature technology, though complex and difficult to implement; switched service may carry steep usage charges, diminishing appeal for long-term use
ADSL	1.5 Mbps to 9 Mbps downstream, 368 Kbps to 640 Kbps upstream	Up to 18,000 feet	Business solution; pricing is hazy, as telcos try to preserve their other broadband service offerings and compete with other access carriers for ADSL service; will cost more than cable access, but provide high bandwidth
Cable	10 Mbps to 30 Mbps downstream, 128 Kbps to 3 Mbps upstream	30 miles; up to 200 miles with additional amplifiers	Residential solution; total bandwidth shared among many users on a network segment; cable companies will struggle to gain the knowledge and experience for providing high-availability data