

# ISDN

Integrated Services Digital Network (ISDN) is a type of circuit switched telephone network system, designed to allow digital transmission of voice and data over ordinary telephone copper wires, resulting in better quality and higher speeds than available with analog systems. More broadly, ISDN is a set of protocols for establishing and breaking circuit switched connections, and for advanced call features for the user. The English term is a "backronym", thought better for English-language advertisements than the original, "Integriertes Sprach- und Datennetz" (German for "Integrated Speech and Data Net").

In a videoconference, ISDN provides simultaneous voice, video, and text transmission between individual desktop videoconferencing systems and group (room) videoconferencing systems.

In the phrase "Integrated Services Digital Network",

- Integrated Services refers to ISDN's ability to deliver at minimum two simultaneous connections, in any combination of data, voice, video, and fax, over a single line. Multiple devices can be attached to the line, and used as needed. That means an ISDN line can take care of most people's complete communications needs, without forcing the purchase of multiple analog phone lines at a much higher transmission rate.
- Digital refers to its purely digital transmission, as opposed to the analog transmission of plain old telephone service. If you're using an analog telephone modem for Internet access at this moment, your Internet service provider's modem has converted this site's digital content to analog signals before sending it to you, and your modem converts those signals back to digital when receiving (the same thing happens with every keystroke and mouse click you transmit). When you connect with ISDN, there is no analog conversion. ISDN transmits data digitally, resulting in a very clear transmission quality. There is none of the static and noise of analog transmissions that can slow transmission speed.
- Network refers to the fact that ISDN is not simply a point-to-point solution like a leased line. ISDN networks extend from the local telephone exchange to the remote user and include all of the telecommunications and switching equipment in between.