Title:
What is Ethernet?

Word Count:
352

Summary:
Ethernet is the single most widely used form of the local area network currently in existence.

Keywords:
ethernet

Article Body:
Ethernet is the single most widely used form of the local area network currently in existence. The original design for Ethernet was created by Xerox, and was based on an earlier design that was known as Alohanet. After the initial creation and success of Ethernet, the product went through further enhancement under the auspices of Xerox, Intel, and DEC.

How Did Ethernet Get Its Name?

Robert Metcalfe, who was one of the developers working on the original design, came up with the name. The designation is based on the idea of light transmitting ether that was at one time thought to be found throughout the universe as a main component of the spread of light. Because cabling also functions as a medium that is somewhat passive, the correlation with ether seemed like a good fit.

How Does Ethernet Work?

Ethernet usually makes use of twisted pair wires or coaxial cable in the basic design of a wired local area network. However, the same general principle applies to wireless Ethernet as well. Various devices are connected to the cable or wires and achieve connectivity to Ethernet through Carrier Sense Multiple Access with Collision Detection.

In general, Ethernet systems are referred to as 10BASE-T and are capable of producing speeds of up to 10 Mbps.

What Are Some Types of Ethernet?

Along with the standard 10BASE-T, there is also today what is known as Fast Ethernet. Properly designated as 100BASE-T, this form of Ethernet is capable of producing transmission speeds that are up to one hundred megabits per second. Generally, Fast Ethernet is used as a backbone for the LAN system, with the 10BASE-T cards used for the workstations that are supported by the LAN.

Gigabit Ethernet takes the process one step further. This form of Ethernet will provide up to one thousand megabits per second and is an excellent option for large networks that require a great deal of support to manage local and remote work stations.

10-Gigabit Ethernet provides the greatest power currently available. This type of Ethernet offers up to ten billion bits per second, making it the fastest version currently available.