How The Internet Works

nternet connections are far more complex than they may seem here; data may be sent through several routers before reaching its final destination. The data, however, travels though the complex network at lightning speed, and this high-speed network gives the Internet its immediacy and power. No single person or company owns the hardware that makes up the Internet. Each component of the Internet is vital in bringing end users data they request.

NAPs (Network Access Points) are the major access points in the United States that tie regional networks together. Regional networks

are connected to to NAPs through backbones. Data from the NAP travels a route, which moves the data on to the appropriate regional network, then passes the data to the correct ISP (Internet service provider).

Data is routed from the United States to Europe and other overseas locations by a variety of means, including undersea cables and satellites.



Data goes from individual user to local ISP, to regional ISP, to national ISP, and back again, depending on its final destination. There are many different possible routes for information to travel, and parts of a single communication may take different paths.



Large companies sometimes connect their networks directly to regional access providers. The largest of companies may even tie directly to national backbones.

Backbone Maps

Backbones are the fastest and most direct routes for Internet data to travel. These maps detail how backbones are structured across the United States.

Each of the lines on these charts represents a number of dedicated circuits traveling along different paths that end up in the same place. For example, there might be one circuit from Dallas to Chicago that passes through Cleveland, and another data line from Dallas to Chicago that passes through Kansas City. If we tried to show you one map with all the possible paths from all the possible carriers, the majority of the map would be solid black.

