



## Network Management Policy

Frontier invests significant resources to bring Internet access to our customers and strives to provide customers an optimum online experience that enables them to access all available content, including: up-to-date news and information, online shopping, communications tools, movies, video, music, gaming and an array of other online services.

As a result of explosive growth of the Internet and the availability of ever more sophisticated applications, per subscriber bandwidth consumption has dramatically increased. This may cause periodic congestion in the network that Frontier must address. Generally, Frontier utilizes a best-efforts approach to deliver residential Internet service. This means Frontier does not prioritize one type of traffic or application over other types, except as described in the specialized services section below. Frontier seeks to deliver all traffic at the speed the customer has purchased (e.g. 6/12/25/50 Mbps download speeds); network management is content and application agnostic.

Frontier uses network management tools to enforce quality of service to customers for applications that are sensitive to packet loss, delay or jitter like VoIP, time sensitive data, and video traffic.

Key features of Frontier's network management are:

- Frontier does not block, throttle, or inhibit any specific applications or classes of applications.
- Frontier does not restrict the types of devices that can be connected to its network.
- Frontier does not engage in paid prioritization.

Like other Internet service providers, Frontier manages its network to provide customers a secure and optimal Internet experience. Frontier monitors the flow of traffic on its network, including the amount of data sent to and from customer connections, the source and destination of data, and the type—but not the contents—of information sent and received. In limited circumstances, Frontier may also review the contents of the information to determine whether it is malicious (such as spam or a virus) or when required by law. Frontier continually upgrades its security and network management tools based on technology advances and network needs.

Frontier generally allows customers to attach any lawful device to its network so long as it does not impede the provision of Internet access service, harm the network, enable theft of the service or a violation of Frontier's Acceptable Use Policy or any terms of service, or harm other users of the service.

Additionally, like other Internet service providers, Frontier's Internet services are configured to use an Internet protocol address, which may be a publicly-routable Internet protocol address or a privately managed IP address utilizing CGN (Carrier Gateway NAT) technology.

## Usage Terms & Conditions

Customers can consult Frontier's general [Terms and Conditions](#) of service as well as Internet pricing plans for more information about their Internet service.

**Trial Information:** To better understand the dynamics of network utilization and network congestion, Frontier has instituted a trial in certain markets to measure actual bandwidth consumption by application type. Frontier **does not** capture any site-specific information or restrict or inhibit the use of any applications. Frontier simply measures the amount of consumer bandwidth consumption by general type of application utilized (web-browsing, voice calling, video streaming, etc.).

## Specialized Services—VoIP and Video

For certain customers, Frontier offers specialized services, such as voice over IP ("VoIP") and video service, over the same customer facilities as broadband Internet access services. When the customer uses these specialized services, less bandwidth will be available for broadband Internet access service than when they are not using the specialized services. When the specialized service is not in



use, customers can in most cases use the capacity for broadband Internet access. Details regarding the specific effects of specialized services are disclosed to affected customers at the point of sale.

## Service Performance

The Service speeds identified in Frontier's marketing materials and other communications reflect service capability speeds in service speed tiers. The service tiers are usually denoted by a number that identifies the high-end of that service tier's speed range—commonly referred to as "up to" the noted speed. The high-end of the speed range in a service tier represents the potential wired maximum speed capability in that service tier, but is not a statement or guarantee of the maximum speed you will receive. Some applications such as short email without attachments or basic Web browsing do not require high speed service capability to function optimally, while other activities such as transferring large data file can be performed faster with higher speed services. The speed capability of the plan you purchase may not be suitable for some applications, particularly those involving high-bandwidth uses such as streaming video or video conferencing. Service is not available to all locations, and may not be available at certain speeds (or at all) at your location.

The maximum speed you will receive will depend on a multitude of factors, including, among other things: the distance of your premises from our nearest remote terminal or central office; the equipment in use and number of other users on the portion of our network that connects you to the remainder of our network or the Internet; interference; the wiring inside your premises; and the capacity or performance of your computer, device or modem. Furthermore, the speed you receive at a point in time may vary and may be less than your maximum speed, depending on, among other things, the composition of the information or files you are accessing, usage and traffic on the Internet, the server with which you are communication, and the networks you and others are using when communicating.

Frontier participates in the Federal Communications Commission's (FCC) annual Internet performance study of the top national Internet service providers. The FCC measures how Frontier's service performs when compared to its advertised broadband speeds during peak Internet usage periods (weekdays from 7-11 p.m.). While performance varied based upon the speed tier tested, the FCC reports that Frontier provides:

- For its fiber product, 88% of the advertised download speed, 123% of the advertised upload speed, packet loss of 0.5%, and latency of 24 ms.
- For its DSL product, 87% of the advertised download speed, 91% of the advertised upload speed, packet loss of 0.58%, and latency of 58 ms.

Visit the [FCC's website](#) for a full set of the FCC's results and further discussion about Frontier's performance and how bandwidth throughput, latency, and other service metrics affect your Internet experience.

## For More Information

For more information or for specific inquiries regarding Frontier's network management policies, email [networkmanagement@ftr.com](mailto:networkmanagement@ftr.com)