

# CONWAY CORP BROADBAND | INTERNET SERVICE DISCLOSURES

Consistent with FCC regulations,[1] Conway Corporation provides this information about our broadband Internet access services. Questions about this information are welcome. Please call 501-450-6000 or email comments@conwaycorp.net.

## **NETWORK PRACTICES**

**General Description**. Conway Corp provides a variety of broadband service offerings to residential and business customers. Those services are provided over our customer access networks, both hybrid-fiber-coax and optical network as well as through third party fiber optic lines connecting to the internet. Network and traffic patterns are monitored, and changes made when deemed necessary to manage and improve overall network performance. Conway Corp uses reasonable, nondiscriminatory, network management practices to improve overall network performance to ensure a high-quality online experience for all users. Network management practices do not target any specific content, application, service or device. As network management issues arise and as technology develops, Conway Corp may employ additional or new network management practices. These disclosures will be updated as necessary.

Related Documents and Disclosures. Use of Conway Corp Internet service is also governed by:

- Conway Corp Services & Rates Information
- Conway Corp Acceptable Use Policy
- Conway Corp Privacy Policy

**Congestion Management.** This section describes network management practices used by Conway Corp to address congestion on our network.

#### Congestion management practices used:

**Real-time** "fair share" traffic management. Conway Corp utilizes real-time monitoring and application/protocol agnostic means of maximizing performance for as many customers as possible by ensuring that each user has access to a fair share of the available bandwidth. When network congestion thresholds are reached, traffic management practices are applied universally or in stages based on severity.

**Types of traffic affected.** All network traffic is potentially affected by this practice as congestion can occur anywhere at any time on Conway Corp's network.

**Purposes of congestion management practices.** Conway Corp's congestion management practices serve to moderate demands on the network during periods of peak network traffic. Our broadband network is a shared network. This means that customers share upstream and downstream bandwidth. The goal of our congestion management practices is to enable better network availability and broadband speeds for all users.

**Congestion management criteria.** Conway Corp's network management is performed in real time. Traffic intervention may be triggered by network congestion and ceases whenever the triggering network congestion is cleared. When the network consumption reaches a high threshold, of 90% of maximum

bandwidth, customers' quality of service configuration file may be dynamically changed, allowing a more even and ubiquitous distribution of bandwidth among all customers on the network. Once consumption on the network drops below the threshold, all active management of flows on the network ceases.

**Effects on end user experience.** Conway Corp's congestion management technique does not manage congestion based on the online activities, protocols or applications a customer uses; it only focuses on the overall peaks in real time. Our congestion management technique has no impact on real--time protocols such as those used to provide voice or video.

**Typical frequency of congestion.** Network congestion can occur on some portion of the network on a daily basis. Congestion may occur during periods of peak demand such as prime time hours. The congestion management technique focuses on the peak usage in real time, so the periods of congestion typically tend to be limited and short-lived in any 24 -hour period.

Application- Specific Practices. This section discloses any application- specific practices Conway Corp uses, if any.

**Management of specific protocols or protocol ports.** All ports and protocols may be subject to Conway Corp's management practices. However, the traffic is broadly categorized into real time and non-real time, based upon the impact the traffic intervention would have on the customer's online experience. As described below, to ensure network and end user security, practices may be employed that affect specific protocols and/or ports.

**Modification of protocol fields.** Conway Corp does not manipulate, change, modify, or alter any protocols in any respect.

**Applications or classes of applications inhibited or favored.** Conway Corp management practices favor real -time protocols, such as voice and video universally.

**Device Attachment Rules.** This section addresses any limitations on attaching lawful devices to Conway Corp's network.

General restrictions on types of devices to connect to network. Conway Corp's broadband service requires connection of a cable modem or optical network terminal to our network. Customers may lease a cable modem from Conway Corp or purchase one from most retail electronics sellers. Optical network terminals are provided as part of the service. Only devices that have been fully certified by CableLabs as compliant with the DOCSIS 3.1 specifications may be used. Additionally, Conway Corp maintains a list of supported devices here that are supported on its network. In addition, a customer's computer must meet the minimum requirements set forth by Conway Corp's service and rates, available <a href="here.">here.</a> Beyond these minimum requirements, Conway Corp's service works with most types of PCs ,laptops, tablets and smartphones including but not limited to Apple, Microsoft, and Android. If a customer or potential customer believes they have an unusual configuration, our customer service department will help determine if there is a compatibility problem.

**Network and End User Security.** This section provides a general description of the practices Conway Corp uses to maintain security of our network and end users, including triggering conditions.

**Practices used to ensure security of the network, including triggering conditions**. Conway Corp uses a variety of industry standard practices to protect its network from harmful attacks.

**Traffic monitoring:** Viruses, worms, Trojans, and other "malware" or "spyware" pose a significant threat to our network and users. In an effort to minimize these threats, Conway Corp constantly monitors the activity and traffic patterns of its network. If it is reasonably determined that traffic from a user customer is some form of harmful traffic, the flow of some or all of the traffic will be suppressed from the user until it is determined that the traffic has ceased or that the traffic is legitimate traffic.

#### **Performance Characteristics**

**General Service Description.** Conway Corp's Internet service product includes wiring, a cable modem/optical network terminal. Network router and WiFi for customer devices may have additional cost. Through Conway Corp's Internet service products, it serves as a local Internet service provider. Those Internet service products enable residential and commercial subscribers to access all lawful content, applications, and services of their choice available on the Internet.

Cable Modem and Fiber to the Home Internet Service Technology. Cable modem Internet service is delivered over Conway Corp's hybrid fiber- coaxial network using the Data Over Cable Service Interface Specification (DOCSIS). Customers access the network using cable modems. To connect from the network to the Internet, equipment called a Cable Modem Termination System (CMTS) is used. The CMTS acts as a gateway to the Internet for customers' cable modems. This is a shared network, which means that our customers share upstream and downstream bandwidth.

Fiber to the Home Internet service is delivered over Conway Corp's fiber optic network. Customers access the network using optical network terminals (ONT's). An Optical Line Terminal is used to the Internet. The OLT acts as a gateway to the Internet for customers' ONT's. This network is symmetrical in upstream and downstream.

### **Expected and Actual Speeds and Latency:**

**Expected performance.** Customers are offered a variety of high speed Internet plans to choose from. A complete description of the transfer speeds provided with each specific product offering for residential and business customers is available here.

**Speed.** The speeds identified for each Internet access service level are the maximum upload and download speeds that customers are likely to experience. Customers' modems are provisioned and the network is engineered to deliver the speeds to which customers subscribe. However, Conway Corp cannot guarantee that a customer will actually achieve those speeds at all times. A variety of factors can affect upload and download speeds, including customer equipment, network equipment, congestion in the network, congestion beyond the network, performance issues with an Internet application, content, or service, and more.

Latency. Latency is another measurement of Internet performance. Latency is the time delay in transmitting or receiving packets on a network. Latency is primarily a function of the distance between two points of transmission, but also can be affected by the quality of the network or networks used in transmission. Latency is typically measured in milliseconds, and generally has no significant impact on typical everyday Internet usage. As latency varies based on any number of factors, most importantly the distance between a customer's computer and the ultimate Internet destination (as well as the number and variety of networks your packets cross), it is not possible to provide customers with a single figure that will define latency as part of a user experience.

**Actual Speed and Latency Performance.** Actual speed and latency performance for Conway Corp's cable modem Internet service follows.

Cable modem and ONT service. Actual speed and latency experienced may vary depending upon network conditions and other factors. Actual performance of Conway Corp's Internet access service in most cases will conform to national wireline broadband Internet speed and latency levels reported by the FCC. The FCC has reported that customers of coaxial cable- based broadband Internet services receive mean download speeds that are within 93% of advertised speeds during non-peak hours, and 85.7% of advertised speeds during peak hours. In addition, the FCC has reported that these same customers experience average latency delays of 28 milliseconds, increasing by an average of 30 milliseconds

during peak hours.

**Customer speed test.** We provide an online speed test for our Internet service customers, available here.

**Suitability of the service for real-time applications.** Our Internet service is suitable for typical real-time applications including messaging, voice applications, video chat applications, gaming, and Internet video. If users or developers have questions about particular real-time applications, please contact us at (501) 450--6000 or by email at comments@conwaycorp.net.

**Broadband Labels CSV.** Labels for our broadband services may be found in CSV format at www.conwaycorp.com\broadbandlabels or on our website at www.conwaycorp.com\broadbandlabels\.

# **Commercial Terms**

**Prices**. Monthly prices for our broadband Internet services are available here.

Usage- based fees. Not applicable.

Fees for early termination. Not applicable.

Fees for additional network services. Not applicable.

<u>Privacy Policies</u>. Conway Corp reserves the right to disclose network traffic information to third parties solely for purposes of providing and maintaining its Internet service product or if required by law.

Inspection of Network Traffic. Conway Corp routinely monitors network and traffic patterns.

**Traffic monitoring.** Viruses, worms, Trojans, and other "malware" or "spyware" pose a significant threat to Conway Corp's network and users. In an effort to minimize these threats, Conway Corp constantly monitors the activity and traffic patterns of its network.

**Storage of network traffic information for cable modem Internet service.** DHCP (Dynamic Host Configuration Protocol) information is a code included in all network traffic that associates that traffic with a particular cable modem/ONT sending or receiving the traffic. Conway Corp stores DHCP information for minimum of 6 months.

**Provision of network traffic information to third parties.** Conway Corp may disclose network traffic information to third parties solely for purposes of providing and maintaining its Internet service product or if required by law.

Use of network traffic information for non-network management purposes. None.

#### REDRESS OPTIONS

**Practices for resolving end- user and edge provider complaints and questions.** End users or edge providers with complaints or questions should contact us by phone at (501) 450--6000 or by email at <a href="mailto:comments@conwaycorp.net">comments@conwaycorp.net</a>.

Questions: Conway Corp will endeavor to answer questions promptly via email or voice.

**Complaints:** Conway Corp will provide an initial response in writing within 15 business days of receipt. An attempt to resolve complaints informally will be made, escalating the matter to senior management if needed.

<sup>[1] 47</sup> C.F.R. § 8.3 and *In re: Preserving the Open Internet, Broadband Industry Practices*, Report and Order, 22 FCC Rcd 17905 (2010).

<sup>[2]</sup> \_See FCC's Office of Engineering and Technology and Consumer Affairs Bureau, *Measuring Broadband, A Report on Consumer Wireline Broadband Performance* in the U.S., OET CGB DOC-308828A1, pp. 4-6 (Aug. 2, 2011) (available at <a href="http://transition.fcc.gov/cgb/measuringbroadbandreport/Measuring">http://transition.fcc.gov/cgb/measuringbroadbandreport/Measuring U.S. - Main Report Full.pdf</a>).

<sup>[3]</sup> \_The FCC has defined peak hours measured during "busy hour" as weeknights between 7:00 pm and 11:00 pm local time.

<sup>[4]</sup> \_The FCC has defined latency is the total length of time it takes a signal to travel from an origination point to the nearest server, plus the time for an acknowledgement of receipt to travel back to the origination point. The nearest server is the server providing the minimum round trip time.