

Atlantic Broadband's High Speed Internet Network Management Practices

Pursuant to the Federal Communications Commission's Open Internet Rules found in Part 8 of Title 47 of the Code of Federal Regulations, Atlantic Broadband provides this statement regarding the high speed Internet services provided by Atlantic Broadband, its network management practices, service performance, and terms of service so that our current customers, prospective customers, third-party content providers and other interested parties may make informed choices regarding the broadband Internet access services we offer.

Atlantic Broadband's Internet Access Services

Atlantic Broadband offers several broadband Internet access service options that provide the capability of connecting to the Internet. Such services are provided over Atlantic Broadband's hybrid fiber-coax network using DOCSIS technology. Customers have the ability to choose a variety of different speed levels (depending on geographic region) to best meet their needs. To help determine which level of service is most suitable based on users' particular needs, preferences and budgets, visit: [Residential Internet Offers](#) (for residential services) and [Small Business Internet Offers](#) (for small business services) for current product descriptions and pricing. The terms and conditions applicable to Atlantic Broadband's Internet access services are contained in its High Speed Internet Subscriber Agreement, which can be found on Atlantic Broadband's website at: [Residential High Speed Internet Subscriber Agreement](#) (for residential customers) and [Small Business High Speed Internet Subscriber Agreement](#) (for small business customers). Atlantic Broadband's Acceptable Use Policy can be found at: [Residential Acceptable Use Policy](#) (for residential customers) and [Small Business Acceptable Use Policy](#) (for small business customers).

Network Management

Atlantic Broadband manages its High Speed Internet Network to deliver the best possible broadband Internet experience to all of its customers. Atlantic Broadband uses various tools and techniques to manage its network, deliver its service, and ensure compliance with the Acceptable Use Policy. Without effective network management, customers would be subject to the negative effects of spam, viruses, security attacks, network congestion, and other risks or degradations of the service. Network management activities may include identifying spam and preventing its delivery to customer email accounts, detecting malicious Internet traffic and preventing the distribution of viruses or other harmful code or content and using other tools and techniques that Atlantic Broadband may be required to implement in order to meet its goal of delivering the best possible broadband Internet experience to all of its customers.

Atlantic Broadband has not established a monthly data usage cap for its customers. We do monitor usage, however, and we regularly review accounts with uncommonly high usage relative to all other accounts to ensure that such accounts have not been subjected to cloning, unauthorized access, other security breach, business use or unlawful activity. As part of our review, we may contact account holders to inquire about usage and may take or require actions to correct problems such as security, class of use or unlawful activity.

Content Access

Atlantic Broadband provides its customers with full access to all lawful content, services, and applications and is committed to protecting customers from spam, phishing, and other unwanted

or harmful online content and activities. Atlantic Broadband uses industry standard tools and generally accepted best practices and policies to help it meet this customer commitment. In cases where these tools and policies identify certain online content as harmful and unwanted, such as spam or phishing websites, this content is usually prevented from reaching customers. Atlantic Broadband limits the number of login, SMTP, DNS, and DHCP transactions per second (at levels far above 'normal' rates) that customers can send to Atlantic Broadband's servers in order to protect them against Denial of Service (DoS) attacks. The exact rate limits are not disclosed in order to maintain the effectiveness of these measures.

Network Traffic

Atlantic Broadband does not block Peer to Peer (P2P) network traffic or applications like BitTorrent, Gnutella, or others as part of its current network management practice. Atlantic Broadband also does not prioritize any type of network traffic in a preferential manner. In order to protect its customers, Atlantic Broadband blocks a limited number of ports that are commonly used to send spam, launch malicious attacks, or steal a customer's information.

Limitations on Devices that Can Be Attached

An approved cable modem device is required for the use of the Atlantic Broadband High Speed Internet Service. It must pass CableLabs certification, UL certification, FCC certification, and Atlantic Broadband device testing covering things like DOCSIS performance and integration with Atlantic Broadband's network and systems to be used on the network. This type of modem is available from Atlantic Broadband and is also commercially available in all customer locations. A list of approved modems can be found here: [Approved Modem List](#). Parties interested in Atlantic Broadband cable modem testing should contact the company at HSIsupport@atlanticbb.com.

Atlantic Broadband does not limit the lawful devices that can be attached to a cable modem and used with Atlantic Broadband's broadband services, *PROVIDED* that the user complies with Atlantic Broadband's applicable Acceptable Use Policy and terms of service referenced above under Atlantic Broadband's Internet Access Services.

Performance Standards

Atlantic Broadband provisions its modems and engineers its network to maximize customers' ability to receive the maximum speed levels for each tier of service. Atlantic Broadband, however, does not guarantee that a customer will achieve those speeds at all times. Atlantic Broadband advertises its speeds as "up to" a specific level based on the tier of service to which a customer subscribes. The actual speed a customer experiences may vary based on a number of factors and conditions, many of which are beyond the control of Atlantic Broadband. These conditions include:

- **The performance of a customer's Internet connected device**, including its age, memory, processing capability, its operating system, the number of users in a household at a particular moment and the number of applications running simultaneously impacts the speed and performance of your Internet service. The presence of any malware or viruses also has an effect on your Internet connected device's ability to communicate with the Internet. Often, increasing the amount of memory (RAM) in your Internet connected device can have a positive effect on how quickly your Internet connected

device can communicate with the Internet. You should make sure that you are running the most up-to-date operating system your Internet connected device can handle (with all available patches installed) to maximize your connection speeds.

- **Type of connection between a customer's Internet connected device and modem.** If there is a router between your modem and your Internet connected device, the connection speed you experience can often depend on the model and configuration of the router. In-home wireless connections may be slower than wired connections. Wireless connections also may be subject to greater fluctuations, interference and congestion.
- **The distance packets travel (round trip time of packets)** between a customer's Internet connected device and its final destination on the Internet, including the number and quality of the networks of various operators in the transmission path. A customer's connection may traverse the networks of multiple providers before reaching its destination, and the limitations of those networks will most likely affect the overall speed of that Internet connection.
- **Congestion or high usage levels at the website or destination.** If a large number of visitors are accessing a site or particular destination at the same time, your connection will be affected if the site or destination does not have sufficient capacity to serve all of the visitors efficiently.
- **Gating of speeds or access by the website or destination.** In order to control traffic or performance, many websites limit the speeds at which a visitor can download from their site. Those limitations will carry through to a customer's connection.
- **The suitability of the cable modem.** Some modems may not be capable of handling higher speeds.

Latency is another measurement of Internet performance that refers to the time it takes for a packet of data to travel from one designated point to another on a network. Since many communication protocols depend upon an acknowledgement that packets were received successfully, or otherwise involve transmission of data packets back and forth along a path in the network, latency is often measured by round-trip time. Some applications are particularly sensitive to latency, such as some high-definition multiplayer online games. 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 Internet connected device and the ultimate Internet destination (as well as the number, variety, and quality 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.

Below is information regarding the expected and actual mean speed and latency of our Internet service offerings, based on internal testing:

Residential Cable Modem	Mean	Mean	Mean
Service Speed	Downstream	Upstream	Latency
1Mbps Down \ .512Kbps Up	1.07 Mbps	0.65 Kbps	15 ms
5Mbps Down \ .768Kbps Up	5.28 Mbps	0.90 Kbps	13 ms
8Mbps Down \ 1Mbps Up	8.64 Mbps	1.12 Mbps	12 ms
10Mbps Down \ 1Mbps Up	10.65 Mbps	1.15 Mbps	12 ms
12Mbps Down \ 1Mbps Up	12.24 Mbps	1.14 Mbps	12 ms
15Mbps Down \ 1.5Mbps Up	15.96 Mbps	1.71 Mbps	14 ms
15Mbps Down \ 2Mbps Up	15.96 Mbps	1.71 Mbps	14 ms
18Mbps Down \ 1.5Mbps Up	18.24 Mbps	1.62 Mbps	14 ms
30Mbps Down \ 2Mbps Up	20.17 Mbps	2.16 Mbps	14 ms
30Mbps Down \ 3Mbps Up	30.21 Mbps	3.40 Mbps	13 ms
60Mbps Down \ 6Mbps Up	40.22 Mbps	3.43 Mbps	13 ms
75Mbps Down \ 3Mbps Up	75.64 Mbps	5.22 Mbps	13 ms
75Mbps Down \ 5Mbps Up	75.64 Mbps	5.22 Mbps	13 ms
120Mbps Down \ 10Mbps	126.49 Mbps	10.20 Mbps	12 ms

Commercial Cable Modem	Mean	Mean	Mean
Service Speed	Downstream	Upstream	Latency
5Mbps Down \ .768Kbps Up	5.28 Mbps	0.90 Kbps	13 ms
15Mbps Down \ 1Mbps Up	15.96 Mbps	1.14 Mbps	14 ms
25Mbps Down \ 2Mbps Up	26.14 Mbps	2.31 Mbps	12 ms
30Mbps Down \ 2Mbps Up	30.14 Mbps	2.32 Mbps	12 ms
50Mbps Down \ 4Mbps Up	51.24 Mbps	4.15 Mbps	10 ms
75Mbps Down \ 3Mbps Up	75.64 Mbps	3.30 Mbps	13 ms
75Mbps Down \ 5Mbps Up	75.64 Mbps	5.22 Mbps	13 ms
110Mbps Down \ 3Mbps Up	111.49 Mbps	3.30 Mbps	12 ms
110Mbps Down \ 7Mbps Up	110.25 Mbps	7.16 Mbps	14 ms
120Mbps Down \ 10Mbps	126.49 Mbps	10.20 Mbps	12 ms

You can also test the speeds yourself. Atlantic Broadband provides its customers with a performance speed test to ensure the quality of our service delivery. This industry standard test is installed on the Atlantic Broadband network and is available at any time without charge at [Atlantic Broadband Speed Test](#). These tests are heavily dependent on many of the factors described above, however, and therefore do not necessarily reflect the performance of the Atlantic Broadband network alone.

Customer Information Privacy and Security

Atlantic Broadband offers computer network security tools for its customers at www.atlanticbb.net under the My Atlantic Broadband tab. Atlantic Broadband also maintains the privacy and security of all customer network traffic as described above and in accordance with the Atlantic Broadband privacy policy available online at [Subscriber Privacy Notice](#).

Additional Information

For more information or to file a complaint about Atlantic Broadband's network management practices please contact HSIsupport@atlanticbb.com.

If any information found within our policies and agreements located on www.atlanticbb.com are inconsistent with this network management disclosure, this disclosure controls.