Antietam Network Management Policy

Antietam Broadband (“Antietam”) provides mass-market retail broadband Internet access service (“Internet Service”) as defined by the FCC. In accordance with these rules, this disclosure provides information about three aspects of Antietam’s residential and small business broadband Internet access services: (1) network management practices we use to manage our broadband network; (2) key performance characteristics of our residential and small business broadband services; and (3) certain commercial terms that apply to these services. The disclosures pertain solely to our Internet Service offerings and are intended to be relied upon by our current and prospective subscribers to our Internet Service offerings as well as providers of applications, devices, services and content accessed over or connected to our Internet Service (“edge providers”). The information contained in this disclosure is subject to modification from time to time as we deem appropriate. These disclosures are in addition to the other disclosures and terms and conditions set forth [on our website](http://www.myactv.net/legal/privacy-policy.php).

# NETWORK MANAGEMENT PRACTICES

Antietam works to ensure that its Internet access service subscribers have a high quality online experience. The bandwidth and network resources used to deliver our Internet access service are limited and shared among users. The potential for congestion that could adversely affect the performance of our network can arise when a large number of customers are making use of the network at the same time, when a small number of users place an unusually heavy demand on available bandwidth, or a combination of these and other factors. To address this potential problem, we use reasonable network management practices to protect our user base from the impact of activities that can unreasonably burden our network or cause service degradation. Antietam reserves the right to modify these network management practices in its discretion and in accordance with law.

## Blocking

Antietam does not currently block, or otherwise prevent end users from accessing lawful content, applications, services or non-harmful devices on its network. In order to protect our customers, we may use reasonable network management practices to block or limit sources that are commonly used to launch malware, or other malicious attacks, send spam, or steal a user's information. In so doing we may enforce limits on the number of login, Simple Mail Transfer Protocol (SMTP), Domain Name System (DNS), and Dynamic Host Configuration Protocol (DHCP) transactions per second that customers can send to our servers. In addition, as described below, in order to protect our network and our customers against Denial of Service (DoS) attacks, we may block or limit certain ports or protocols commonly used for these attacks.

## Throttling

Antietam does not degrade or impair access to lawful Internet traffic on the basis of content, application, service, user or use of a non-harmful device.

## Prioritization

Antietam does not utilize any practice that directly or indirectly favors some traffic, either its own or an affiliate’s traffic, over other traffic in exchange for consideration.

## Network Congestion

Antietam does not currently engage in any specific network management practices to address the effects of congestion. For example, we do not block specific applications or traffic that may tend to increase congestion. Instead, we focus on anticipating and minimizing or avoiding congestion by monitoring network usage and augmenting capacity in a targeted manner. Nevertheless, Antietam recognizes that as Internet traffic volumes continue to grow, it might not be possible to manage network congestion through capacity upgrades alone. Indeed, to ensure all of our customers a high-quality Internet access experience, the FCC permits Internet Service providers to utilize reasonable network management practices, including congestion management practices. Active congestion management practices typically involve the use of network management tools which can cause minor and temporary impairments to a user’s experience. As a result, Antietam will continue to evaluate its practices in this respect and will revise its approach as needed in order to continue to deliver a quality service.

## Network Security Measures

Antietam actively seeks to address the threats posed by harmful and unwanted traffic and reserves the right to protect the security and integrity of its network and its customers by any lawful means it deems appropriate. Viruses, worms, denial of service attacks, and the use of malicious software such as spyware, can adversely affect the network and harm customers’ computers, impair quality of service, compromise their data, and harm third parties as well.

Antietam employs certain practices on a case-by-case and as-needed basis to protect its network and its customers against third-party attacks. These practices could be triggered if Antietam detects traffic levels that significantly exceed certain baselines. In accordance with common industry practices (and in response to demonstrated harms), Antietam blocks certain ports that are known to be vulnerable or used for malicious purposes, including: TCP Port 135, TCP Port 139, UDP Port 135, UDP Port 139 and TCP Port 1080.

## Application Specific Behavior

Antietam does not use any application-specific network management practices. Antietam does not block or rate-control specific protocols or protocol ports, modify protocol fields (in ways not prescribed by the protocol standard), and does not inhibit or favor certain applications or classes of applications. Antietam does not discriminate against or otherwise prevent users of its Internet service from sending and receiving the lawful content of their choice; running lawful applications and using lawful services of their choice; or connecting their choice of legal devices, as long as such applications, services and devices do not harm the network or the provision of broadband Internet access services, facilitate theft of service, or harm other users of the service. Similarly, Antietam does not impair or degrade particular content, applications, services, or non-harmful devices. Antietam reserves the right to employ network management practices to prevent certain harmful or illegal activity, such as viruses or other malicious code or the transfer of child pornography or other unlawful content, including copyright infringing files that are alleged to be or actually are shared via BitTorrent or other peer-to-peer applications.

## Device Attachment Rules

Antietam’s customers have two options regarding attaching devices to our network to make use of our Internet access services: they can lease a modem from Antietam or purchase their own modem at retail. Customers who choose to use equipment that they provide are free to attach any device, including modems, to their service as long as it does not harm the network. Antietam’s network uses the DOCSIS technology standard to exchange Internet data with its customers. Antietam currently recommends the use of at least a DOCSIS 3.0 certified modem. Use of a non-compliant modem may lead to service interruption in the case of network updates.

# PERFORMANCE CHARACTERISTICS

## General

Antietam offers residential and commercial customers their choice of a variety of packages or “tiers” of broadband Internet access service, each of which offers different maximum and average upload and download speeds, features and prices. The most appropriate package for a particular customer will depend upon a variety of factors, including the types of applications typically used and the number of users in the household. The features, branding, pricing and other commercial terms of our service offerings are modified from time to time and not all packages are available in all geographic areas. Full descriptions of pricing and features for the tiers of service currently available in your geographic region can be found by entering your zip code on our [website](https://www.antietambroadband.com/internet/packages-and-pricing) or by contacting an Antietam Broadband customer service representative at 301-797-5000.

## Data Usage Allowances

All of our residential Internet access service plans, other than Flight Gigabit, are subject to a monthly data allowance. You will receive an email from Antietam if and when you reach 70%, 80%, 90% and 100% of your plan’s monthly data usage allowance. For more information on the data usage allowance applicable to your service plan and how you can monitor, manage and make the most of your own online data usage see our residential [Data Usage Plan](http://myactv.net/tech-support/knowledge-base-article.php?article_id=146). Should you exceed the monthly data allowance applicable to your plan, you will still enjoy the same Internet speed and full access, but may be charged an additional $10 per month for every additional 50GB of data or portion thereof used. Unused bandwidth from your monthly allotment expires at the end of your billing cycle and does not carry over to subsequent billing cycles. If you find that you are regularly exceeding the data usage allowance applicable to your service plan, please contact a customer service representative at 301-797-5000 to discuss alternatives.

## Speed

The actual speed a customer experiences at any particular time may vary based on a number of factors and conditions, many of which are outside of our control. These conditions include, but are not limited to:

The performance of a customer’s Internet-connected devices(that is, the customer’s cable modem, wireless router(s), computers and other devices used to access the Internet).

Type of connection between a customer’s computer 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.

The distance packets travel (round trip)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.

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, the speed with which your information downloads or uploads will be affected if the site or destination does not have sufficient capacity to serve all of the visitors efficiently at the same time.

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.

The suitability of the cable modem. Some modems may not be capable of handling higher speeds. Where a modem upgrade is necessary to enjoy available speeds and a customer has not yet completed that upgrade, the customer’s experienced speed may be limited by the technical capabilities of that older device.

Congestion on Antietam’s network**.** As noted above, the data-carrying capacity on Antietam’s network is shared among many users. If a large fraction of users on a given portion of our network is attempting to upload or download information at the same time, or if a smaller number of users is making intensive use of the network, such activity can affect the data transfer speed experienced by our users. The number of users in a household at a particular moment can also affect the speed experienced by such household members.

In addition to the variables described above, customers’ Internet speed will depend on the service level to which they subscribe. As noted above, Antietam offers different tiers of broadband Internet access services with varying targeted upload and download speeds across its footprint. Antietam encourages all of our customers to consider the capabilities of their equipment when deciding which tier of service to purchase. A customer may need to upgrade the computers and wireless or other networks on their own premises to take full advantage of the transmission speeds that Antietam’s network can provide. The foregoing factors are the reason Antietam, like other ISPs, advertises speeds as “up to” a particular level but does not guarantee such speeds.

## Performance

The FCC requires ISPs like Antietam to disclose information regarding the expected and actual upstream and downstream speeds of our broadband Internet access services. There are a number of publicly available sources of information regarding actual broadband performance, each of which uses a different methodology and thus may produce different results. Please note, however, that all performance tests are based on certain assumptions and therefore have certain inevitable biases and flaws. The results of such tests therefore should be considered a guide rather than a definitive measurement of performance. Also, customers should keep in mind that a speed a customer experiences at a specific location may vary from the average speed calculated on a company-wide basis. In addition, these tests are dependent on a variety of factors, including the customer’s home network configuration, modem and Internet-connected devices and the time of day, and therefore do not reflect the performance of the Antietam network only.

Antietam customers can check the speed of their current Internet connection using [Antietam’s online speed test](http://myactv.speedtestcustom.com/). Fiber customers can use [Google Fiber’s speed test](http://speedtest.googlefiber.net).

The table below shows Antietam’s advertised maximum upstream and downstream speeds as compared to the average actual upstream and downstream speeds, as well as Antietam’s average latency during busy and non-busy times, for our upgraded markets. The majority of Antietam’s customers subscribe to one of the marketed service tiers listed below. Performance data reflected below was collected by Antietam during busy and non-busy times over a 24-hour period for each of the Internet service levels reflected on the table below and reflects an average result. The results below are illustrative of what the majority of users in our markets experience on average. However, the results do not reflect the performance levels to be expected by any individual customer at any particular time.

| Provisioned Speed (Download/upload in Mbps) | Download (Mean in Mbps) | Upload  (Mean in Mbps) | Latency  (Mean in ms) |
| --- | --- | --- | --- |
| 1 Gig (1000 Mbps) | 930.00 | 714.00 | 26.0 |
| 200/20 | 191.60 | 19.60 | 9.6 |
| 150/10 | 144.00 | 10.16 | 7.4 |
| 100/5 | 101.36 | 4.91 | 8.0 |
| 75/10 | 77.32 | 9.68 | 7.0 |
| 50/10 | 48.20 | 9.68 | 7.0 |
| 50/5 | 48.22 | 4.90 | 7.0 |
| 30/5 | 28.88 | 5.14 | 9.8 |
| 18/2 | 19.30 | 2.25 | 10.0 |
| 15/2 | 14.50 | 2.25 | 9.8 |
| 10/1 | 9.65 | 1.21 | 10.2 |
| 5/1 | 5.07 | 1.04 | 7.0 |

## Description and Impact of Specialized Services

Antietam has built its network to support a range of quality services, including, but not limited to, its residential and small business broadband Internet access services, its cable television services and its voice telephone services. The performance of such a shared network will turn on how much aggregate bandwidth is being used by all users and all services at a given time.

Services that share bandwidth with broadband Internet access services, but do not necessarily include broadband Internet access capability or are not primarily intended for that purpose are known as “specialized services.” Antietam provides certain cable services over its cable systems in IP format that may fall within that category. Antietam also offers its video service on other customer devices, such as a smart phone or tablet device, via its “Antietam2Go” service. In addition, Antietam offers Voice-over-IP (“VoIP”) services and residential and business voice service offerings. These VoIP services share network capacity with data use. In order to accommodate the technical requirements of VoIP service, Antietam gives VoIP traffic priority in its network over general data traffic. However, because VoIP services use relatively little bandwidth, VoIP services are not likely to affect the performance of Antietam’s data service. Although all services are affected at any given time by the total usage of all services, Antietam’s provision of specialized services does not adversely affect its provision of broadband Internet access services.

# COMMERCIAL TERMS

## Pricing

Antietam’s prices for residential broadband Internet access services are set forth [here](https://www.antietambroadband.com/internet/packages-and-pricing). Prices may vary by region, are subject to change over time, may be based on current promotions and are dependent on a customer’s particular needs. All rates are subject to change and certain restrictions. The rates set forth on the pricing page identified above are not inclusive of additional monthly fees for other services, such as voice and/or cable, or other recurring or one-time fees, which may include service charges, equipment charges, late fees, regulatory fees and Federal, state and local taxes. Once a current promotion ends, regular rate card charges for the service will apply. All tiers of residential Internet service are subject to monthly data usage allowances.

Current subscribers can find pricing information concerning their services on their monthly bill or by contacting a customer service representative. Prospective customers can obtain full descriptions of pricing and features for the tiers of broadband Internet access service currently available in their geographic regions by entering their zip code on our website at http://www.Antietambroadband.com/internet/packages-and-pricing or may obtain pricing information by contacting an Antietam sales representative at 301-797-5000.

## Privacy Policy

Antietam values the privacy of our Internet service customers and follows procedures to ensure that information we collect is reasonably protected. As indicated above, in order to manage our network performance, ensure that our network runs smoothly and deny malicious traffic to make our network safer, Antietam analyzes network traffic on our system. In connection with this analysis, Antietam stores certain traffic information (such as the identity of a customer using a particular IP address during a specific period) for time periods required by state or federal law. As explained in our privacy policy, we may be required to disclose certain personal information to respond to subpoenas, court orders, civil investigative demands or other legal process.

We do not collect, store or use traffic information to profile our customers in order to sell additional services to them or for similar non-network management purposes. Personal information you provide to Antietam is governed by [Antietam’s Customer Privacy Notice](http://www.myactv.net/legal/privacy-policy.php), which is subject to change from time to time.

## Redress Options

For questions, complaints or requests for additional information about Antietam’s broadband Internet access services or regarding any of the information set forth above, please contact a customer service representative at 301-797-5000 or visit our [MyACTV page](http://www.myactv.net/tech-support/) for technical support concerning Internet service issues; or [our Antietam Broadband site](https://www.antietambroadband.com/support/index) for general information or further assistance.

The FCC has established procedures for addressing informal and formal complaints regarding broadband service. For information concerning these formal and informal complaint procedures, please refer to the FCC’s website at http://www.fcc.gov/guides/getting-broadband.