

Zirrus

Network Management Policy

Zirrus (“Zirrus” or “Company”) provides this Policy in order to disclose its network management practices in accordance with the FCC’s Open Internet Rules. Information about Zirrus’ other policies and practices concerning broadband are available at www.zirrus.com (“Zirrus Website”).

Zirrus manages its network to ensure that all of its customers experience a safe and secure broadband Internet environment that is fast, reliable and affordable. Zirrus wants its customers to indulge in all that the Internet has to offer, whether it is social networking, streaming videos and music, to communicating through email and videoconferencing.

Zirrus manages its network for a number of reasons, including optimization, as well as congestion- and security-protocol-management. Zirrus’ customers generally will not be impacted by the protocols and practices that Zirrus uses to manage its network.

Zirrus’ Network Management Practices

Zirrus uses various tools and industry standard techniques to manage its network and deliver fast, secure and reliable Internet service. Such management tools and practices include the following:

I. Managing Congestion

Zirrus manages congestion by periodically monitoring its network at every interface throughout the core network. Zirrus uses software that takes snapshots and graphs in five-minute increments to demonstrate bandwidth utilization. This method is used and checked daily. Zirrus manages bandwidth usage on its network in the aggregate. In order to decrease instances of congestion on the network, Zirrus increases its backbone and uplink capacity, as needed. Zirrus is also transitioning the subscriber network to Fiber-To-The-Home (FTTH) technology.

On Zirrus’ network, all customers have access to all legal services, applications and content online and, in the event of congestion, most Internet activities will be unaffected. Some customers, however, may experience longer download or upload times, or slower surf speeds on the web if instances of congestion do occur on Zirrus’ network.

Customers using conduct that abuses or threatens the Zirrus network or which violates the company’s [Acceptable Use Policy](#), Internet service Terms and Conditions, or the [Internet](#)

[Service Agreement](#) will be asked to stop any such use immediately. A failure to respond or to cease any such conduct could result in service suspension or termination.

Zirrus' network and congestion management practices are 'application-agnostic', based on current network conditions, and are not implemented on the basis of customers' online activities, protocols or applications. Zirrus' network management practices do not relate to any particular customer's aggregate monthly data usage.

II. Network Security

Zirrus knows the importance of securing its network and customers from network threats and annoyances. The company has implemented Greymail to filter customers' incoming emails and quarantine any messages that may be perceived as a threat. Customers may access and control whether these messages are kept or discarded. Customers may forward any messages deemed safe to the customer's inbox. Greymail may be viewed for 14 days and it is then deleted. Greymail is accessible by logging into Webmail or by going to the MyAccount login.

As its normal practice, Zirrus does not block any protocols, content or traffic for purposes of network management except that the company may block or limit such traffic as viruses, malware, or denial of service attacks to protect network integrity and the security of our customers.

Except as may be provided elsewhere herein, Zirrus does not currently engage in any application-specific behaviors nor does it employ any device attachment rules for its network.

III. Monitoring Schedule

Zirrus monitors the aggregate bandwidth utilization on its network daily. Zirrus also checks for abnormal traffic flows, network security breaches, malware, loss, and damage to the network. If a breach is detected or high volume users are brought to light by complaint, Zirrus provides notification to the customer via email or phone. If a violation of Zirrus' policies has occurred and such violation is not remedied, Zirrus will seek to suspend or terminate that customer's service.

IV. Network Management Technology

Zirrus employs a variety of industry-standard tools, applications and devices to monitor, secure and maintain its network, including technology network graphing solutions, which Zirrus uses to analyze the condition of its network.

V. Service Descriptions

A description of Zirrus' broadband service and pricing may be found [here](#).

VI. Network Performance

Zirrus makes every effort to support advertised speeds. The company has a [speed test site](#) within its network hosted by NeoNova wherein Zirrus and its customers may test actual download and upload speeds. Zirrus strives to meet internal service level targets. However, customer's service performance may also be affected by one or more of the following: (1) the particular websites being accessed; (2) capacity in the public Internet beyond Zirrus' network; (3) customer's computer and equipment (including wireless router); and (4) inside wiring at customer's premise.

Zirrus is in the process of developing additional systems that will allow us to measure these indicators out to test points at each major network aggregation site on the edge of our last mile network. Once these systems are developed, Zirrus will be able to measure system metrics on a network-wide basis and will disclose the results on its website.

VI. Specialized Services

Zirrus provides Internet-Protocol-Television (IPTV) services to end users. Throughout the core of the network, IPTV traffic is segregated from all other traffic (best effort voice, data) into a separate virtual router function within each router. In this way, IPTV maintains a separate routing process from all other traffic. No routing process is given priority over another at this time; however, the quality of service maps are in place and we are working with our vendors to develop a process of prioritizing traffic.

In the last mile, voice, data and IPTV traffic are separated into separate VLANs. No VLAN is given priority over another at this time. Currently, there is not enough traffic generated on our network to exceed the bandwidth constraints or the limitations of our equipment's forwarding queues. Therefore, this lack of prioritization does affect service. Prioritization, however, will be implemented in the future.

VII. Commercial Terms

In addition to this Network Management Policy, patrons may also find links to the following on Zirrus' website:

- [Frequently Asked Questions \("FAQs"\)](#)
- [Acceptable Use Policy](#)
- [Internet Service Agreement](#)
- [Broadband Service Offerings and Rates](#)
- [Privacy Policy](#)

For questions, complaints or requests for additional information, please contact Zirrus at:

Repair: 336-463-5047