Finding the Most Appropriate Barracuda Web Filter Model

RELEASE 2
JUNE 2009

With the award-winning Barracuda Web Filter managing an organization's Internet usage and protecting against malware, it is imperative to select a model size that matches the needs of the deployment site. Without industry standard metrics, it can be confusing to select the correct model from the various methods of measurement. The Barracuda Web Filter utilizes three simple specifications: throughput, concurrent users and active TCP connections to ensure optimal performance.

During the model sizing stage, consider the following specifications when evaluating how the Barracuda Web Filter fits into the desired network environment. These specifications are generally relevant across most industries ranging from schools and enterprises to hospitals and banks where Internet usage is part of each day. To properly size a Barracuda Web Filter deployment, it requires all three specifications from a network to fall between the ranges listed in the model comparison grid.

Throughput (Mb/sec)

A starting point is to estimate the desired throughput. When deployed inline at the network perimeter, the Barracuda Web Filter is in the network data path and must match the Internet access bandwidth to prevent any bottlenecks. Throughput gauges the total volume of traffic that the Barracuda Web Filter can handle.

Concurrent Users

The next step to evaluating model sizes is to determine the maximum number of users that will simultaneously access the Internet through the Barracuda Web Filter. Typically the number of concurrent users is less than the number of work stations and should take future growth into account for simple scalability.

Peak Number of Active TCP Connections

While concurrent users provides a coarse-grain estimate for sizing Barracuda Web Filters, the most relevant metric is the peak number of Active TCP connections that are proxied through the Barracuda Web Filter.

Heavy usage environments, such as school districts and larger enterprises, should expect peaks of up to 5 TCP connections per concurrent user. Factors contributing to heavy usage include permissive Web filtering policies that enable advertisements or other streaming media applications, deployment of tabbed Web browsers and Web pages that aggregate content from multiple sites. Environments with more restrictive Web filtering policies and usage generally consume fewer TCP connections and can often size their Barracuda Web Filters with as few as 1.5-4 TCP connections per concurrent user.

Evaluating Capacity of Barracuda Web Filter Models

Model Comparison	Model 210	Model 310	Model 410	Model 610	Model 810	Model 910
CAPACITY*						
Throughput (Mb/sec)	5	10	20	50	200	300
Web Cache Size		10 GB	50 GB	100 GB	200 GB	300 GB
Concurrent Users	25-100	50-200	150-500	450-1,500	1,000-3,000	2,500-4,500
Active TCP Connections	50-200	20-300	300-700	700-1,800	1,800-3,500	3,500-5,500

Throughput
The amount of data transferred or processed from one place to another in a specific amount of time.

TCP Connections
Transmission Control Protocol connections where two hosts establish a connection and exchange streams of data. TCP guarantees delivery of data and in the same order as sent.

Sizing Examples and Suggested Models

When trying to identify the most appropriate Barracuda Web Filter model, all three specifications should be evaluated. The three sizing specifications should fall between the ranges listed in the models comparison grid, while taking into account current usage and future growth.

Your Network Requirements	Suggested Model	Reason
5 Mbps Throughput 50 Concurrent Users 200 Active TCP Connections	Barracuda Web Filter 310	Requirement is within suggested ranges for the Barracuda Web Filter 310
35 Mbps Throughput 200 Concurrent Users 1,000 Active TCP Connections	Barracuda Web Filter 610	Expected TCP Connections are higher than suggested ranges for the Barracuda Web Filter 410
50 Mbps Throughput 800 Concurrent User 250 Active TCP Connections	Barracuda Web Filter 810	Expected TCP Connections are higher than suggested ranges for the Barracuda Web Filter 610
200 Mbps Throughput 1,000 Concurrent Users 5,000 Active TCP Connections	Barracuda Web Filter 910	Expected TCP Connections are higher than suggested ranges for the Barracuda Web Filter 810

For questions about the Barracuda Web Filter, please visit http://www.barracuda.com/webfilter or call Barracuda Networks for a free 30-day evaluation at 1-888-ANTI-SPAM or +1 408-342-5400. For more information on our other security and productivity solutions, please visit http://www.barracuda.com/products.

About Barracuda Networks Inc.

Barracuda Networks Inc. built its reputation as the worldwide leader in content security appliances by offering easy to use and affordable products that protect organizations from email, Web and IM threats. Barracuda Networks has leveraged its success in the security market to offer networking products that improve application delivery and network access as well as world-class solutions for message archiving, backup and data protection. Coca-Cola, FedEx, Harvard University, IBM, L'Oreal, and Europcar, are amongst the 70,000 organizations protecting their networks with Barracuda Networks' solutions. Barracuda Networks' success is due to its ability to deliver easy to use, comprehensive solutions that solve the most serious issues facing customer networks without unnecessary add-ons, maintenance, lengthy installations or per user license fees. Barracuda Networks is privately held with its headquarters in Campbell, Calif. Barracuda Networks has offices in 10 international locations and distributors in more than 80 countries worldwide. For more information, please visit http://www.barracudanetworks.com.

Barracuda Networks
3175 S. Winchester Boulevard
Campbell, CA 95008
United States
+1 408.342.5400
www.barracuda.com
info@barracuda.com