

How to Size the Barracuda Web Filter For Your Network

<https://campus.barracuda.com/doc/46895638/>

Whether purchasing your first Barracuda Web Filter or making a decision to expand your system, this article will guide you in evaluating your specific network traffic filtering needs. The Barracuda Web Filter has a built-in SNMP trap agent which can send alerts to the administrator when certain performance metrics are exceeded. As shown in this article, the agent can also be used to measure loads and throughput on the Barracuda Web Filter in your network, informing you as to whether the unit is properly sized to the network traffic needs. T

You should have a basic understanding of SNMP monitoring tools before using this guide.

Step 1. Configure SNMP on the Barracuda Web Filter

1. Log into the Barracuda Web Filter web interface as the administrator:

Use Username: *admin* Password: *admin*

2. Go to the **BASIC > Administration** page and set **Enable SNMP Agent** to **Yes** in the **SNMP Manager** section. See the screenshot below.
3. Click **Help** in the page for instructions on configuring SNMP.

For security purposes, use the **Allowed SNMP IP/Range** to limit which IP address(es) are allowed to connect to the Barracuda Web Filter via SNMP.

4. Click **Save Changes** on the page after enabling and configuring the SNMP agent.

Step 2. Monitor System Metrics to Size the Barracuda Web Filter

Use the following tools with your SNMP monitor to determine your system performance.

Step 2a. Estimate CPU Load

This measurement helps to understand the overall performance of the Barracuda Web Filter. Sizing for CPU load means ensuring that the CPU is queuing up jobs beyond 1.5 jobs per core. (1min, 5min, 15min) load / # of cores;

Example: $96 / 48$ cores on a Barracuda Web Filter 1010 = 2. This ration of jobs to number of cores exceeds 1.5 and, therefore, represents a taxing level for the system.

To get this load information with your SNMP monitor, use these OIDs:

1.3.6.1.4.1.2021.10.1.3.1 (1min)
1.3.6.1.4.1.2021.10.1.3.2 (5min)
1.3.6.1.4.1.2021.10.1.3.3 (15min)

Step 2b. Estimate Throughput

Measure the current flow of traffic that is passing through the Barracuda Web Filter, in Mbytes/second. With your SNMP monitor, use these OIDs:

1.3.6.1.4.1.20632.3.1.3 (current throughput)
1.3.6.1.4.1.20632.3.2.3 (high throughput)

Examples:

Model	Throughput
Barracuda Web Filter 1010	2000mbps (2gb)
Barracuda Web Filter 610Vx*	150mbps

*Note that, since the 610Vx is a virtual machine, throughput numbers will depend on the computer resources available to your hypervisor.

Step 2c. Estimate the number of TCP Connections

Measure the number of concurrent TCP connections used by the Barracuda Web Filter to service Internet traffic. Use this metric to size your Barracuda Web Filter while **Operating Mode** is set to *Audit* (as opposed to *Active* mode) to avoid affecting production traffic. With your SNMP monitor, use these OIDs:

1.3.6.1.4.1.20632.3.1.2 (Current)

1.3.6.1.4.1.20632.3.2.2 (High)

Examples:

Model	TCP connections
Barracuda Web Filter 1010	307200
Barracuda Web Filter 610Vx*	8000

*Note that, since the 610Vx is a virtual machine, the number of current or high TCP connections will depend on your hypervisor deployment.

Figures

1. SNMPRange.jpg

© Barracuda Networks Inc., 2024 The information contained within this document is confidential and proprietary to Barracuda Networks Inc. No portion of this document may be copied, distributed, publicized or used for other than internal documentary purposes without the written consent of an official representative of Barracuda Networks Inc. All specifications are subject to change without notice. Barracuda Networks Inc. assumes no responsibility for any inaccuracies in this document. Barracuda Networks Inc. reserves the right to change, modify, transfer, or otherwise revise this publication without notice.