

# **History Page**

https://campus.barracuda.com/doc/96026507/

The **History** page is the most powerful tool for troubleshooting. To open the page, click the **FIREWALL** tab and select **History**.

D	ASHBOARD	CON	FIGURATION CON	TROL FIR	EWALL VPN	LOGS STATIS	TICS EVEN	NTS SSH					d	ž
X	Monitor	(A) Li	ve 🗸 History	C Threat Scan	Shaping	R Users 支	Dynamic	C Host Rules	Forwarding Rules	Sync Filter Filter 2779	Max Entries: All	: 0	Refresh F5) Visconnect	
Histo	ry Selectio	n Acce	ss, Fail, Rule Block, Pack	et Drop 🗸 1	Traffic Selection	Forward, Local In, Loc	al Out, IPv4, IPv6	s∨ +						
Α	IP Proto	Port	Source	Interface	User	Destination	Output-IF	Next Hop	Application	Application Context	Count	Last	Rule	
õ	UDP	137	10.	eth0		10.					82	19d 17	BLOCKALL	
	TCP	33172	10.	eth0		10.					18	19d 18	t drop	
0	UDP	67	0.0	eth0		255					18	19d 18	SLOCKALL	
0	UDP	138	10.	eth0		10.					342	19d 18	C BLOCKALL	
C.	TCP	15070	18.	eth2		1.1					9	19d 18	≮ drop	
~	TCP	443	165	eth4		3.6	eth2	1.1.1.254			329	19d 18	SOX-LAN-2-INTERNET	
~	TCP	443	165	eth4		3.6	eth2		🖌 Barracuda Networks Onli		329	19d 18	APPPOL>:AppDefault	
~	TCP	443	165	eth4		3.1	eth2	1.1.1.254			67	19d 18	SOX-LAN-2-INTERNET	
~	TCP	443	165	eth4		3.1	eth2		🖌 Barracuda Networks Onli		67	19d 18	APPPOL>:AppDefault	
0	UDP	67	0.0	eth0		255					16	19d 19	SLOCKALL	
0	UDP	137	10.	eth0		10.					187	19d 19	SLOCKALL	
0	UDP	137	10.	eth0		10.					221	19d 19	SLOCKALL	
0	UDP	67	0.0	eth0		255					46	19d 19	SLOCKALL	
<b>S</b>	TCP	11611	10.	eth0		10.					17	19d 19	t drop	
~	TCP	80	1.1	eth2		205		1.1.1.254			977	19d 19	CP-SRV-PX	
~	UDP	53	1.1	eth2		40.		1.1.1.254			235	19d 19	SOX-DNSREC-OUT	
$\checkmark$	TCP	443	165	eth4		3.1	eth2	1.1.1.254			77	19d 19	BOX-LAN-2-INTERNET	
~	TCP	443	165	eth4		3.1	eth2		🖌 Barracuda Networks Onli		77	19d 19	APPPOL>:AppDefault	
$\checkmark$	TCP	443	165	eth4		205	eth2	1.1.1.254			257	19d 19	BOX-LAN-2-INTERNET	
$\checkmark$	TCP	443	1.1	eth2		205		1.1.1.254			808	19d 19	CP-SRV-VPN	
$\checkmark$	TCP	443	165	eth4		205	eth2		🖌 Barracuda Networks Onli		176	19d 19	APPPOL>:AppDefault	
0	UDP	137	10.	eth0		10.					87084	19d 21	BLOCKALL	
	TCP	59753	10.	eth0		10.					26	19d 21	t drop	L
0	UDP	137	10.	eth0		10.					8784	19d 21	SLOCKALL	
$\checkmark$	UDP	53	165	eth4		40.	eth4				134	19d 21	BOX-LOCALDNSCACHE	
~	UDP	53	165	eth4		13.	eth4				122	19d 21	BOX-LOCALDNSCACHE	
$\checkmark$	UDP	53	165	eth4		13.	eth4				116	19d 21	BOX-LOCALDNSCACHE	
~	UDP	53	165	eth4		64.	eth4				116	19d 21	BOX-LOCALDNSCACHE	
0	UDP	67	0.0	eth0		255					393	19d 21	SLOCKALL	
0	UDP	67	0.0	eth0		255					383	19d 21	SLOCKALL	

The **History** page displays all sessions when the slot ends. TCP sessions usually end with the FIN-FINACK-ACK sequence. This is displayed as **Normal operation** in the **Info** column. Resets are terminated with Session idle timeout or Last ACK timeout. For the stateless UDP and ICMP protocols, "pseudo" sessions are created that usually end with a timeout.

The following information is provided for each session:

- **AID** Access ID, including an icon for established connections (green), blocked connections (red), and impaired connections (yellow), and consecutive numbering for all connections.
- IP Proto The protocol used. For example, TCP, UDP, or ICMP.
- Port The destination port (or internal ICMP ID).
- Source The source IP address.
- **User** The username of the affected user and group.
- **Destination** The destination IP address.
- **Destination Info** Destination Info is a compound string of multiple partial names/symbols and relates to the template:
- **Output-IF** The outgoing interface.
- Next Hop The next hop.
- **Application** The name of the affected application, e.g., Web browsing, Ubuntu Update.
- Application Context The context of the affected application., e.g., www.barracuda.com
- **Count** The number of tries. The counter applies when a connection attempt hits a specific rule



with **Firewall History Entry** enabled in the **Advanced** rule configuration. Removal of old entries is handled according to a fixed buffer size that can be adjusted in the **Infrastructure Services > General Firewall Configuration > History Cache** page.

- Last Time passed since the last try.
- Rule The name of the affected firewall rule.
- Info Additional information.
- Org Origin. The value can be one of the following:
  - LIN Local In; incoming traffic on the box firewall.
  - **LOUT** Local Out; outgoing traffic from the box firewall.
  - **LB** Loopback; traffic via the loopback interface.
  - **FWD** Forwarding; outbound traffic via the forwarding firewall.
  - IFWD Inbound Forwarding; inbound traffic to the firewall.
  - **PXY** Proxy; outbound traffic via the proxy.
  - **IPXY** Inbound Proxy; inbound traffic via the proxy.
  - **TAP** Transparent Application Proxying; traffic via the virtual interface.
  - LRD Local Redirect; redirect traffic configured in forwarding ruleset.
- MAC The MAC address of the interface.
- Src NAT The source NAT address.
- **Dst NAT** The destination NAT address.
- Out Route Unicast or local.
- **Protocol** The affected protocol.
- Src./Dst. Geo The geographic source/destination of the active connection.
- URL Category Category of the destination URL.
- Src. Named Network The compound string of a named network used for a source. Example: example.com///Location-51/Department-18/Devices-3
- **Dst. Named Network** The compound string of a named network used for a destination. Example: example.com///Location-51/Department-18/Devices-3
- Src. VR Instance The source IP address of a virtual router instance.
- Dst. VR Instance The destination IP address of a virtual router instance.
- **Source Info** Source Info is a compound string of multiple partial names/symbols and relates to the template:
  - **Source Geo**: An icon that is either
    - a flag symbol that relates to the state at the given geo-location
    - a symbol of a house that stands for a private IP address
  - EITHER:
    - Source IP: the source IP address that is associated with the geographical information (Geo-IP).
      Example: 5.5.5.242
    - Example
  - $\circ~$  OR:
    - Named Network: If the IP address is defined by a named network, then the name of the Named Network is used.
- **Destination Info** Destination Info is a compound string of multiple partial names/symbols and relates to the template:
  - **Destination Geo**: An icon that is either
    - a flag symbol that relates to the state at the given geo-location



- a symbol of a house that stands for a private IP address
- EITHER:
  - **Destination IP**: the destination IP address that is associated with the geographical information (Geo-IP).
    - Example: 5.5.5.242

 $\circ$  OR:

- Named Network: If the IP address is defined by a named network, then the name of the Named Network is used.
- **Interface** The name of the interface is a compound of multiple partial names and relates to the template:
  - Output interface (see also Output-IF in this list)
  - ° "@"
  - (Optional): Name of the tunnel
  - Name of the box
  - ° " "
  - (Optional): Name of the cluster
  - ° " "
  - Optional): Name of the range Example: pvpn0@PGRP-MYBOX\_Cluster2\_1

## **Filter Options**

You can filter the list of sessions by traffic type, status, and properties. Click the **Filter** icon on the top right of the ribbon bar to access the filtering options.



- 1. Click the Filter icon.
- 2. Select New Filter. The Traffic Selection section opens on the top left of the list.
- 3. Expand the **Traffic Selection** drop-down menu and select the required checkboxes:
  - **Forward** Sessions that are handled by the Forwarding Firewall.
  - **Loopback** System-internal data exchanged by the loopback interface.
  - Local In Incoming sessions that are handled by the box firewall.
  - Local Out Outgoing sessions that are handled by the box firewall.
  - **IPv4** IPv4 traffic.
  - IPv6 IPv6 traffic.
- 4. From the Status Selection list, you can select the following options to filter for certain traffic



#### statuses:

- **Closing** Closing connections.
- **Established** Established connections.
- Failing Failed connections.
- $\circ~\textbf{Pending}$  Connections that are currently being established.
- 5. You can set additional filters based on the content of the menu list when you click the '+' symbol in the blue ribbon bar. Although these filters are displayed together in a common menu list for selection, they belong to two groups of filters:
  - 1. "Single filter" A single filter relates directly to a single column name in the table view of the window, e.g., **IP Protocol, Port, Source, Destination**.
  - "Compound filter" A compound filter relates to two columns of the table, e.g., Source/Destination, Any Interface, VR Instance (Src/Dst), that have a certain category in common, e.g., an IP address, a Named Network Object. You can regard such a filter as consisting of two separate filters (e.g., Source and Destination) that are linked to each other with a logical 'OR' operator and substituted by the filter Source/Destination.

Traffic Selection		Forward, Local In, Local Out, IPv4, IPv6 🗸			Status Selection		on (	Closing, Established, Failing, Pending 🗸 🗸		✓ Source	/Destin ☑ 10.1	7.84.65	×	
IĎ	State	IP Protocol	Port	Source		Interface	User	Destination	Output-IF	Application	Application Context	QoS	Rule	
	<⇒ ¢	TCP	807	10.27.251.2		eth0		10.17.84.65	eth0			Interactive /	MGMT-ACCESS	
	<⇒ \$	TCP	807	10.27.251.2		eth0		10.17.84.65	eth0			Interactive /	MGMT-ACCESS	
I	<⇒ ¢	ICMP		10.17.84.65		eth0		10.17.84.1	eth0			Interactive /	SOX-GW-TEST	
II	< <b>→</b> ۞	TCP	807	10.27.251.2		eth0		10.17.84.65	eth0			Interactive /	MGMT-ACCESS	
III	< <b>→</b> ۞	TCP	807	10.27.251.2		eth0		10.17.84.65	eth0			Interactive /	MGMT-ACCESS	
	< <b>→</b> \$	TCP	807	10.27.251.2		eth0		10.17.84.65	eth0			Interactive /	MGMT-ACCESS	

These additional filters can be used both on visible and blanked-out columns. As an example, you can activate a certain filter, e.g., **Source/Destination**, and the table view will display all matching records even if the column **Destination** is not visible.

Traffic Selection		Forward, Local In, Local Out, IPv4, IPv6 V			Status Selec	tion	Closing, Established, Failing, Pending 🛛 🗸			Source/Destin 🔽 10.17.84.65		× +	
IĎ	State	IP Protocol	Port	Source	Interface	User	Output-IF	Application	Application Contex	t QoS	Rule	Total	Src. VR Instance
	< <b>→</b> \$	TCP	807	10.27.251.2	eth0		eth0			Interactive /	MGMT-ACCESS	298.3 K	default
	< <b>→</b> ◊	TCP	807	10.27.251.2	eth0		eth0			Interactive /	MGMT-ACCESS	877.4 K	default
I	<⇒ ¢	ICMP		10.17.84.65	eth0		eth0			Interactive /	SOX-GW-TEST	78.0	default
II	<⇒ ◊	TCP	807	10.27.251.2	eth0		eth0			Interactive /	MGMT-ACCESS	345.6 K	default
III	<⇒ ¢	TCP	807	10.27.251.2	eth0		eth0			Interactive /	MGMT-ACCESS	7.0 M	default
	< <b>→</b> ◊	TCP	807	10.27.251.2	eth0		eth0			Interactive /	S MGMT-ACCESS	6.8 K	default

Currently, there are the following compound filters you can select: **Source/Destination**, **Any Interface**, **VR Instance (Src/Dst)**.

When you click the '+' icon in the blue ribbon bar, the menu list is created at runtime. The menu list first displays the filters that relate to the visible columns in the table view, followed by all remaining filters whose related columns are not visible. The following menu list is an example of the contained filters:

# Barracuda CloudGen Firewall



IP Protocol
Port
Source
Source/Destination
Interface
User
Destination
Output_IF
Application
App Context
Rule
Src. Named Networks
Any Interface
Dst. Named Networks
Src. VR Instance
Dst. VR Instance
VR Instance (Src/Dst)
Protocol
Content
URL Category
Source Geo
Destination Geo
Idle Time [s]

- 6. Select the requested filter category from the list.
- 7. Enter the exact value into the edit field of the filter criterion you want the data to match against, e.g., filter Source, filter value 10.17.84.65:

Traff	ic Selectio	n Forwar	d, Local	In, Local Out, IPv4,	IPv6∨	Status S	election	Established,	Failing, Pendin	g 🗸 🗸	Source	☑ 10.17.84.65	+
ID	State	IP Protocol	Port	Source	Interface	User	Destination	Output-IF	Application	Application Contex	t QoS	Rule	bit/s
I	€7 \$	ICMP		10.17.84.65	eth0		10.17.84.1	eth0			Interactive /	G BOX-GW-TEST	0

Some fields allow the use of wildcards (\*?; !\*?). Example: !Amazon\* excludes all entries starting with Amazon; Y\*|A\* includes all entries starting with "Y" or "A". Clicking the **Sync Filter** icon on the top right of the ribbon bar above the filters allows you to switch to the **Live** view but with the same filters applied.

#### **Managing Sessions**

You can view additional information for a specific session by double-clicking an entry.

# Barracuda CloudGen Firewall



Session Details	
ID:	138
State:	🚓 🐥
IP Protocol:	TCP
Port:	807
Source:	10.0.10.11
Interface:	eth0
User:	
Destination:	10.0.10.33
Output-IF:	eth0
Application:	
Application Context:	
QoS:	
Rule:	MGMT-ACCESS
bit/s:	0
Total:	46.0 K
Idle:	25s
TI ID:	
Type:	LIN
Src.Port:	58671
In:	25.8 K
Out:	20.1 K
Start:	1h 49m 33s
SNAT:	
DNAT:	
Status:	LOC-EST
Policy:	NOSYNC
FWD Shape:	- / Out: -
REV Shape:	- / Out: -
Protocol:	NGF-MGMT
File Content:	
Src. Geo:	Non-routable or Private IP Addresses
Dst. Geo:	Non-routable or Private IP Addresses
URL Category:	
User Agent:	
Src. Prefix:	
Dst. Prefix:	

Right-click into the listing to make the following context menus available:

- **Remove Selected** Removes selected entries from the list. To select one or more entries, select an entry and use the shift and CTRL keys.
- **Clear History** Removes all entries from the access cache, depending on the criteria selected in the sub-menu.
- Show Hostnames Translates source and destination IPs to hostnames and vice versa. IP addresses are only resolved to hostnames if enabled in CONFIGURATION > Configuration Tree > Box > Infrastructure Services > General Firewall Configuration > Firewall History.
- Apply Rule Tester Offers the option for firewall rule testing.
- Find Opens a search window at the top of the list.

For more settings, see: Barracuda Firewall Admin.



The size of the caches is configured in the General Firewall settings and requires a firmware restart. For more information, see <u>General Firewall Configuration</u>.

### Video

For a hands-on demo, please see the following training video: Firewall Policies



### Figures

- 1. firewall\_history.png
- 2. example\_source\_info\_field.png
- 3. example\_source\_info\_field.png
- 4. filter\_options.png
- 5. firewall\_live\_filter\_compound\_filter\_active.png
- 6. firewall live compound filter active with only source column.png
- 7. firewall\_live\_filter\_list\_menu.png
- 8. firewall live filter individual filter configured.png
- 9. sessions.png

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