# History Page

https://campus.barracuda.com/doc/48203129/

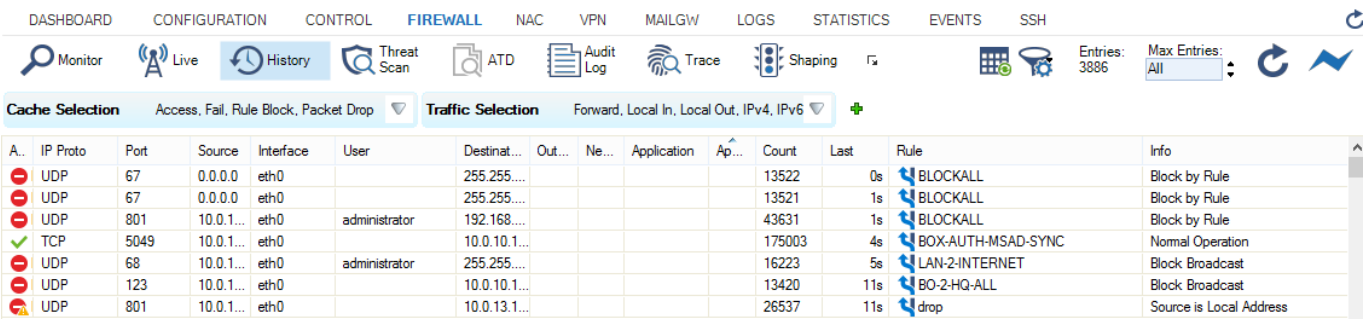
The firewall history is the most powerful tool for troubleshooting. The following article lists the functionalities of the **History** page and explains how to configure the cache settings. To open the history view, click the **History** icon, located in the ribbon bar under the **FIREWALL** tab.

## Video

To get a feel for how to use the **FIREWALL > History** page in NextGen Admin, watch the following video:


## Information Display

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**, **Last ACK timeout**. For the stateless UDP and ICMP protocols pseudo"-sessions are created which usually end with a timeout. The History page provides several filtering options. Drill down and view additional details by double-clicking an entry.



The following information is provided for each session:

| Info | Description |
|---|---|
| **AID** | Access ID, including an icon for blocked connections (red), an icon for established connections (green), and consecutive numbering for both blocked and established connections. |
| **IP Proto** | The protocol that is used. For example, TCP, UDP, or ICMP. |
| **Port** | The destination port (or internal ICMP ID). |
| **Source** | The source IP address. |
| **Interface** | The affected interface. |
| **User** | The username of the affected user and group. |
| **Destination** | The destination IP address. |
| **Output-IF** | The outgoing interface. |
| **Next Hop** | Next Hop |
| **Application** | The name of the affected application. |
| **Application Context** | The context of the affected application. |
| **Count** | 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 **Infrastructure Services > General Firewall Configuration > History Cache**. |
| **Last** | Time passed since last try. |
| **Rule** | The name of the affected firewall rule. |
| **Info** | Reason why things happen. |
| **Org** | Origin:<br>• **LIN**: Local In; incoming traffic on the box firewall.<br>• **LOUT**: Local Out; outgoing traffic from the box firewall.<br>• **LB**: Loopback; traffic via the loopback interface.<br>• **FWD**: Forwarding; outbound traffic via the forwarding firewall.<br>• **IFWD**: Inbound Forwarding; inbound traffic to the firewall.<br>• **PXY**: Proxy; outbound traffic via the proxy.<br>• **IPXY**: Inbound Proxy; inbound traffic via the proxy.<br>• **TAP**: Transparent Application Proxying; traffic via virtual interface.<br>• **LRD**: Local Redirect; redirect traffic configured in forwarding ruleset. |
| **MAC** | 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. Geo** | The geographic source of the active connection. |

| | |
|---|---|
| **Dst. Geo** | The geographic destination of the active connection. |
| **URL Category** | Category of the destination URL. |

## Filter Options

To create a filter, click the arrow icon next to the respective filter in the filter section to expand the dropdown lists and select the required checkboxes.

- **Cache Selection** – From the **Cache Selection** list, you can select the following options to filter for certain traffic types:
  - **Access** – Displays all allowed and successfully established connections.
  - **ARP** – Displays all ARP requests.
  - **Fail** – Displays all connections matching the fail reasons.
  - **Rule Block** – Displays all connections matching deny reasons.
  - **Scan** – Displays all SCAN tasks.
  - **Packet Drop** – Displays all connections matching the drop reasons.
  - **Term** – Displays all terminated sessions.
- **Traffic Selection** – From the **Traffic Selection** list, you can select the following options to filter for certain traffic types:
  - **Forward** – Displays the traffic on the Forwarding Firewall.
  - **Loopback** – Traffic over the loopback interface.
  - **Local In** – Displays the incoming traffic on the box firewall.
  - **Local Out** – Displays the outgoing traffic from the box firewall.
  - **IPv4** – Show IPv4 sessions.
  - **IPv6** – Show IPv6 sessions.
- **Source** – When checked, this field allows filtering for the traffic source IP address.

The filter section also allows you to add filters for very specific properties by clicking the **+** icon.

> Note that 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".

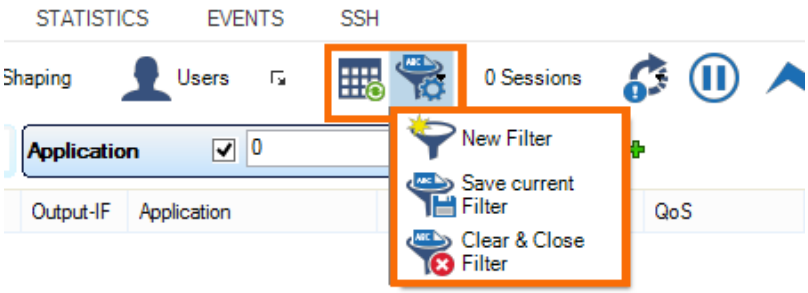
- **IP Protocol** – Displays the IP protocol.
- **Port** – Displays the port.
- **Source** – The source IP address/range.
- **Source/Destination** – IP address/range that matches either source or destination.
- **Interface** – Displays the interface (for example eth0).
- **User** – Displays the user.
- **Destination** – The destination IP address/range.
- **Output-IF** – The output interface.
- **Application** – Name of the affected application.

- **App Context** – Context of the affected application.
- **Rule** – Displays the rule that affects the traffic.
- **Any Interface** – Shows the forward or reverse interface.
- **Idle Time [s]** – The time sessions are in idle state. If specified, the idle time and less (<) in seconds is implied. Entering < and > is possible.
- **Protocol** – Shows the protocol.
- **File Content** – Shows the file type.
- **User Agent** – User agent for HTTP and HTTPS connections.
- **URL Category** – Shows the URL category.
- **Source Geo** – The source host's geographic location.
- **Destination Geo** – The destination host's geographic location.

The size of the caches is configured in the **Firewall Settings** and requires a service restart.

## Filter Icons

Clicking the first filter icon (**Open Live with same filter**) in the ribbon bar above the filters lets you switch to the Live Page with the same filters applied. Clicking the second filter icon (**Save and Restore Filter and Column Settings**) opens a drop-down menu that enables you to save, restore, or delete filter and column view settings.




## Context Menus

Right-clicking into the listing makes 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.
- **Flush Cache** – Removes all entries from the access cache, depending on the criteria selected selected in the sub-menu.
- **Show Hostnames** – Translates source and destination IPs to hostnames and vice versa. IP addresses will only be resolved to hostnames if enabled in the firewall DNS settings.
- **Apply Rule Tester** – Offers the option for firewall rule testing.

- **Find** – Opens a search window at the top of the list.
- **Select All / Deselect All** – Selects / deselects all entries displayed on the list.
- **Copy <...> to Clipboard** – Copies a selected entry to the clipboard.
- **Copy List to Clipboard** – Copies the list to the clipboard.
- **Copy selected to Clipboard** – Copies a selected row to the clipboard.
- **Export to File** – Exports a selected entry to a (*.txt) file.
- **Print List** – Prints the Firewall History list.
- **Group by User** – For better lucidity, access cache entries can be grouped by users. Grouped entries are arranged in pop-up menus topped by a labelled title bar.
- **Columns** – This option allows you to display all entries by selected columns. To add or remove a column, check or uncheck it in the sub-menu.
  - **Default Columns** – Offers the standard view.
  - **Optimize All Columns** – Adjusts the column size for best display.
  - **Adjust All Columns** – Displays all columns that are selected.

## Configure Cache Settings

1. Go to **CONFIGURATION > Configuration Tree > Box > Infrastructure Services > General Firewall Configuration**.
2. In the left menu, select **History Cache**.
3. Expand the **Configuration Mode** menu and select **Switch to Advanced View**.
4. Click **Lock**.
5. In the left menu, select **History Cache**.
6. Configure the cache settings according to your requirements.
7. Click **Send Changes** and **Activate**.

To activate changes made in this part of the configuration, you must perform a firmware restart.

## Figures

1. fw_hist_01.png
2. fw_tab_filter.png