

VPN Tab

https://campus.barracuda.com/doc/96026494/

The Barracuda Firewall Admin **VPN** tab provides information on all VPN connections configured on the CloudGen Firewall. Go to the **VPN** tab in the ribbon bar for live information on all site-to-site and client-to-site VPN tunnels.

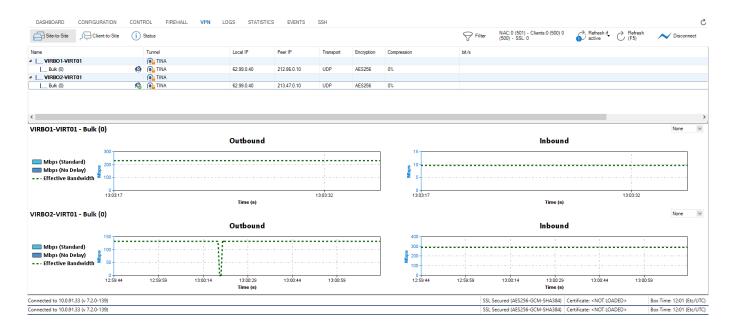
The **VPN** tab provides three separate pages:

- Site-to-Site
- Client-to-Site
- Status

Site-to-Site

The **Site-to-Site** page lists all TINA and IPsec site-to-site VPN tunnels.

Go to **VPN > Site-to-Site**.



The standard columns in the table provide the following information:

- Name The name of the VPN tunnel.
- Tunnel The type of VPN tunnel, either TINA or IPsec.
- Local IP The local VPN point of entry.
- Peer IP The remote VPN point of entry.



- **Transport** The VPN tunnel transport protocol.
- **Encryption** The tunnel encryption method.
- Compression The current compression rate and type of TINA VPN tunnel.
- **bit/s** The current transfer speed in bits per second.
- Start The duration of VPN connection in minutes (m) or days (d).

To show or hide additional columns, right-click in the window, select **Columns**, and then either select or deselect the columns you want displayed or hidden.

The following additional columns are available:

- **SD-WAN** The SD-WAN transport class IDs.
- Info Depending on the tunnel type, this column displays either the tunnel type, the state, or the certificate subject. As soon as a tunnel is passive and down, **DOWN (passive)** is displayed.
 For group tunnels with a certificate, the x.509 subject is displayed.
- Auth. The packet authentication method.
- Total (Byte) The total amount of traffic.
- Idle The time (in seconds) passed since the last activity within the connection.
- Duration Displays how long the tunnel is up and running.
- **Key** The age of issued key in minutes (m) or days (d).
- Internal Information about the tunnel name.
- Effective Bandwidth Inbound [bit/s] Effective bandwidth of inbound traffic in bits per second as measured by Dynamic Bandwidth and Latency Detection.
- Effective Bandwidth Outbound [bit/s] Effective bandwidth of outbound traffic in bits per second as measured by Dynamic Bandwidth and Latency Detection.
- **Latency** The traffic latency (round-trip time) in seconds as measured by Dynamic Bandwidth and Latency Detection.
- **Dynamic Bandwidth State Local** Last Dynamic Bandwidth and Latency Detection probing state for the firewall acting as the local VPN endpoint.
- **Dynamic Bandwidth State Peer** Last Dynamic Bandwidth and Latency Detection probing state for the remote firewall.
- **Dynamic Bandwidth Detection** This column shows if Dynamic Bandwidth and Latency Detection is enabled for the VPN transport.

To reset the columns to default, select **Default Columns**.

Context Menu

To open the context menu, right-click a VPN tunnel.

The following operations can be selected:

- Show Details Opens a window with detailed information about the selected VPN tunnel.
- **Show Transport Details** Opens a window with detailed information about the selected VPN transport.



- (TINA only) Last VPN Access Opens a window with a detailed VPN access and connection history.
- (TINA only) **Monitor Traffic** Provides two monitors for SD-WAN features for TINA UDP transports.
- (TINA only) **Trigger Active Probing** Initiates probing for TINA UDP transports for which **Bandwidth and Latency Detection** is enabled.
- Show VPN Run-Time Info Opens a window with details for the VPN service this VPN tunnel is using.
- Show Sessions Displays information about the VPN sessions.
- Show on Status Page Opens the VPN Status window and highlights the corresponding VPN tunnel.
- Enable Tunnel Enables the selected VPN tunnel or transport.
- **Temporary Enable Tunnel** Enter the desired time period in minutes for which the VPN tunnel or transport should be enabled.
- **Disable Tunnel** Permanently disables the selected VPN tunnel or transport. Use **Enable Tunnel** to re-enable the VPN tunnel or transport.
- Initiate Tunnel Manually re-establishes the selected VPN tunnel.
- (TINA only) **Terminate Tunnel** This method kills Phase2 of the IPsec tunnel. Phase2 is reinitialized immediately.
- (IPsec only) Terminate Phase 1 This method kills Phase1 of the VPN tunnel. Because there is no exchange between the tunnel partners, Phase1 can only be re-established if the partner kills its own Phase 1.

Do not use the **Terminate Phase 1** function unless it is absolutely necessary. In case of doubt, please contact Barracuda Networks Technical Support to get assistance. After terminating Phase1, the tunnel can be re-initiated either manually or with the next re-keying.

• (IPsec only) **Terminate Phase 2** – This method kills Phase2 of the IPsec tunnel. Phase2 is reinitialized immediately.

For more information about the standard context menu, see <u>Barracuda Firewall Admin</u>.

Client-to-Site

The **Client-to-Site** page lists all client-to-site VPN tunnels configured on the firewall.

Go to **VPN > Client-to-Site**.

Site-to-Site	Site-to-Site Client-to-Site									5	Filter NAC:0 (501) - Clients:0 (500) 0 (500) - SSL: 0		(500) 0	Refresh if active		(F5)	sh 🔨 Disconnect			
Name	Tunnel	Туре	Group	Local IP	Peer IP	Virtual IP	Info	Transport	Encryption	Auth.	Compression	NAC	bit/s	Total (Byte)	Start	Key	CN Name	ldle	Duration	Internal
4 🔳 Barracud													1	220.0	2017-0	0s		0s	1h 08m 13s	
🗰 AUTH	PGRP	SS GROUP	NAC	10.17.8	10.17.8	10.4.99	SM:Au	TCP	AES 128	MD5	0% (Packet)	-	1	9.0	2017-0	14s		0s	14s	PGRP-AUTH-user61-APAICS
AUTH	PGRP	SS GROUP	NAC	10.17.8	10.17.8	10.4.99	SM:Au	TCP	AES 128	MD5	0% (Packet)	-	0	198.0	2017-0	8m 02s		53s	1h 08m 13s	PGRP-AUTH-user67-HSWYMW
SubCA	PGRP	S GROUP	NAC	10.17.8	10.17.8	10.4.99	SM:Au	TCP	AES 128	MD5	0% (Packet)	-	0	13.0	2017-0	4m 47s	CN=User	17s	4m 47s	PGRP-SubCA-05-user8-YNSBLW



The standard columns in the table provide the following information:

- Name The name of the VPN tunnel.
- **Tunnel** The type of VPN tunnel, either PGRP, PPTP, L2TP, or IPsec.
- Local IP The local VPN point of entry.
- **Peer IP** The remote VPN point of entry.
- Virtual IP The assigned virtual IP address.
- **Transport** The VPN tunnel transport protocol.
- **Encryption** The tunnel encryption method.
- **Compression** The current compression rate and type of VPN tunnel.
- **bit/s** The current transfer speed in bits per second.
- **Start** The duration of VPN connection in minutes (m) or days (d).

To show or hide additional columns, right-click in the window, select **Columns**, and then select or unselect the columns you want displayed or hidden.

The following additional columns are available:

- Type The type of network used for the VPN client.
- **Group** The group that the logged-in VPN user belongs to.
- Info Either a person's name (defined during configuration) and an IP address assigned by the license, separated by "@" (the "at" character), or the certificate subject.
- Auth. The packet authentication method.
- NAC Displays information if the VPN tunnel is established by the Barracuda Network Access Client.
- Total (Byte) The total amount of traffic.
- Idle The time (in seconds) passed since the last activity within the connection.
- Duration How long the tunnel is up and running.
- Key The age of issued key in minutes (m) or days (d).
- Internal Information about the tunnel name.
- **CN Name** Displays the certificate CN name.

For more information about the standard context menu, see <u>Barracuda Firewall Admin</u>.

Context Menu

To open the context menu, right-click on a VPN tunnel.

The following operations can be selected:

- Show Details Opens a window with detailed information about the selected VPN tunnel.
- Show Transport Details Opens a window with detailed information about the selected VPN transport.
- Last VPN Access Shows the time passed since the last access.



- Trigger Active Probing I nitiates probing for TINA UDP transports for which Bandwidth and Latency Detection is enabled.
- Show VPN Run-Time Info Opens a window with details for the VPN service this VPN tunnel is using.
- Show Sessions Displays information about the VPN sessions.
- Show on Status Page Opens the VPN Status window and highlights the corresponding VPN tunnel.
- Enable Tunnel Enables the selected VPN tunnel.
- **Disable Tunnel** Permanently disables the selected VPN tunnel. The VPN tunnel will be established again by clicking **Enable Tunnel** within the context menu.
- Initiate Tunnel Manually re-establishes the selected VPN tunnel.
- **Terminate Tunnel** This method kills Phase2 of the IPSEC tunnel. Phase2 can be re-initialized immediately.

Filter Options

The **VPN** page provides several filtering options.

DASHBOAR	D CONFIGURATION	C	ONTROL	FIREWALL VPN	LOGS S	TATISTI	CS	EVENTS	SSH						Ċ
Site-to-S	Site 📃 Client-to-Site	(i) Status		@ Ac	ccess ache	@8	Drop Cache	Client Downloads	Selection		Show CRL	C Refresh (F5)	Not Disconnect	Client Downloads
Selection							Filte	r i i i i i i i i i i i i i i i i i i i							
Site to Site		Sec IKEv	1 IPSec	IKEv2			Nar	ne	Local	🗆 V	rtual				
Client to Site	e 🗌 Barracuda Grc 🗹 IP:	Sec Grou	Jp	2TP 🗹 Barracuda Clier	nt Connect		Gro	up C2SPolicy	Peer		fo				
Tunnel	Name	Туре	Group	Info	State	Succ.	Fail	Last Access	Last Peer	Last Info	Last Duration	Last Client	Last OS		
PGRP	AUTH-testuser-EZFWKB		C2SPolicy	SM:Auth-testuser	Ready	4	0	16h 23m 24s	192.168.253.171	Disconnect	1m 45s	Barracuda Ne	Windows 10(x64) - Direct virtual Adapter	
PGRP	AUTH-testuser-DGqQF2		C2SPolicy	SM:Auth-testuser	ACTIVE	1	0	18h 27m 43s	192.168.253.171	Access Granted	18h 27m 43s	Linux 4.0.0	64e05ad0d8bc L	inux 4.9.17-8.31.amzn1.x	(86_64 x86_64
PGRP	AUTH-testuser-LmnF1M		C2SPolicy	SM:Auth-testuser	ACTIVE	2	0	18h 27m 43s	192.168.253.171	Access Granted	18h 27m 43s	Linux 4.0.0	27739557a3a2 L	inux 4.9.17-8.31.amzn1.x	86_64 x86_64
PGRP	AUTH-testuser-Q6vobv		C2SPolicy	SM:Auth-testuser	ACTIVE	2	0	18h 27m 44s	192.168.253.171	Access Granted	18h 27m 44s	Linux 4.0.0	e80a7ac526aa L	inux 4.9.17-8.31.amzn1.x	86_64 x86_64
PGRP	AUTH-testuser-3srbqL	85	C2SPolicy	SM:Auth-testuser	ACTIVE	2	0	18h 27m 45s	192.168.253.171	Access Granted	18h 27m 45s	Linux 4.0.0	d8af38e57c93 Li	nux 4.9.17-8.31.amzn1.x	86_64 x86_64

Click the **Selection** icon to open the **Selection** menu, which provides the following options:

- Site to Site Select the following options to filter for site-to-site tunnels:
 - **TINA** Allows a filter to be set for TINA tunnels.
 - **IPSec IKEv1** Allows a filter to be set for IPSec IKEv1 tunnels.
 - IPSec IKEv2 Allows a filter to be set for IPSec IKEv2 tunnels.
- Client to Site Select the following options to filter for client-to-site tunnels:
 - Barracuda Group Allows a filter to be set for Barracuda Group tunnels.
 - **IPSec Group** Allows a filter to be set for IPSec tunnels.
 - **PPTP/LTPD** Allows a filter to be set for PPTP/LTPD tunnels.
 - **Barracuda Client Connect** Allows a filter to be set for Barracuda Client Connect tunnels.

Click the **Filter** icon in the ribbon bar to open the **Filter** menu, which provides the following options:

- Name Allows a filter to be set for a specific tunnel name.
- **Group** Allows a filter to be set for a specific VPN group.



- Local Allows a filter to be set for the local tunnel IP address.
- **Peer** Allows a filter to be set for the local tunnel peer IP address.
- Virtual Allows a filter to be set for a shared IP address.
- Info Allows a filter to be set for content in the Info column.

To apply a filter and / or selection, click the **Refresh** icon on the top right of the service bar.

Status

The **Status** page lists all configured VPN connections on the given system. It consists of four sections, which you can access via the main screen or by clicking the corresponding icons in the ribbon bar:

- Status section
- Access Cache section
- Drop Cache section
- VPN Client Downloads section

Go to VPN > Status.

Tunnel	Name		Тур	e Group Infi		State		Succ.	ast Peer 001:db8:2::10 12:86.0.10 13:47.0.10 001:db8:3::10	Last Info Access Granted Access Granted Request Timeou Request Timeou	Last Dur Fail 1d 21h 5 1d 21h 5 2d 23h 1 2d 23h 1	Last Access	8	Last Peer	Last Info		Last	Duration	Last Client	Last OS	Last WSC CN Nar	me
PEF		Unne		SMidfedf	Ready Ready	0	0															
PEF				SMmzoller	Ready	0	0															
ccess (ache:												Drop	Cache:								
AID	funnel	Name	Peer	Info		Last ^	Succe	ess Fai	Last Status			^	AID	Tunnel	Name	Peer	Local	Count	Last ^	Info	Param	
	TINA	VIRT1-VIRBO2:1		FW Tunnel		18 s	46	51			ouest RegState=Init R	eo	3	<none></none>	<unknown></unknown>	0.0	0.0.0.0		2 d	No Tunnel Match Fou		
5	FINA	VIRT1-VIRBO2	213	FW Tunnel		18 s	0	50	12 Request Tin	neout (HandshakeRei	quest RegState=Init R	ep	0	<none></none>	<unknown></unknown>	213	62.9		2 d	No SPI		
15	FINA	VIRT1-VIRBO2	212	FW Tunnel		44 m	0	24	15 Request Tin	neout (HandshakeRe	quest RegState=Init R	lep	6	<none></none>	<unknown></unknown>	212	62.9	38	2 d	No SPI		
	FINA	VIRT1-VIRBO2:1	212			44 m	0	14			quest ReqState=Init R		8	<none></none>	<unknown></unknown>	200	2001	36	2 d	No SPI		
	fina	VIRT1-VIRBO2:1	200			74 m	0	28			quest ReqState=Init R		1	TINA	VIRT1-VIRB01:1	62.9	212		2 d	No Route		
	FINA	VIRT1-VIRBO2	200			74 m	0	24			quest ReqState=Init R	lep	2	TINA	VIRT1-VIRBO2:1	62.9	213		2 d	No Route		
	FINA	VIRT1-VIRBO1:1	212			45 h	44	72		inted			9	<none></none>	<unknown></unknown>	200	2001	42	2 d	No SPI		
	FINA	VIRT1-VIRBO1	200			45 h	43	13					4	<none></none>	<unknown></unknown>				20 d	No Tunnel Match Fou		
	FINA	VIRT1-VIRBO1:1		FW Tunnel		45 h	0	47			quest ReqState=Int R		5	<none></none>	<unknown></unknown>	0.0	0.0.0.0	36	20 d	No Tunnel Match Fou	nd fe80::200fffe00:0 -> ff02	2::2
	fina	VIRT1-VIRBO1		FW Tunnel		45 h	0	45			quest ReqState=Init R		7	<none></none>	<unknown></unknown>	200	2001	45	24 d	No SPI		
	FINA	VIRT1-VIRB01		FW Tunnel		45 h	0	25			quest ReqState=Init R	lep										
	FINA	VIRT1-VIRBO2		FW Tunnel		2 d	34	72		ed (HandshakeRequ												
	FINA	VIRT1-VIRBO2:1		FW Tunnel		15 d	0	71			quest ReqState=Init R											
	FINA	VIRT1-VIRBO1		FW Tunnel		15 d	0	85			quest RegState=Init R											
	FINA	VIRT1-VIRBO1:1	200	FW Tunnel		15 d	0	53	7 Request Tin	neout (HandshakeRe	quest RegState=Init R	ер										
PN Clie	nt Downloa	ts:																				
Descripti	n	File																				

Status Section

The Status section is the upper section of the **Status** page and lists the status of all configured VPN tunnels.

The table provides the following information:

- **Tunnel** The description of the VPN tunnel.
- Name The name of the VPN tunnel.
- **Type** The type of the VPN tunnel.



- **Group** The group that the VPN tunnel belongs to.
- Info (optional) Displays additional information.
- State The status of the VPN connection (ACTIVE, Ready, or Disabled).
- Succ. The number of successful connections.
- Fail The number of failed connections.
- Last Access The time passed since the last access.
- Last Peer The client IP address of the last connection.
- **Last Info** The most recent information concerning the connection (e.g., Access Granted, Disconnect, etc.).
- Last Duration The duration of the last connection.
- Last Client The client (including version number) used for the last connection.
- Last OS The operating system (including kernel number) used by the last connection's client.
- Last WSC The WSC information.
- CN Name The certificate CN name.

To enable, disable, or temporarily enable a tunnel, right-click a connection. The context menu opens. You can then select the option you need. If selecting "Temporarily Enable Tunnel", enter the period (in minutes) for which the tunnel should be enabled.

For each entry in the **Status** section, colored icons indicate the current status of a VPN tunnel:

- green Tunnel is terminated, but ready.
- **blue** Tunnel is active.
- gray Tunnel is disabled.

Within the **Type** column, the type of VPN tunnel is indicated. The icons indicate information as follows:

- 1 user Personal VPN tunnel.
- 2 users Group VPN tunnel.
- Server lock Firewall-to-firewall VPN tunnel.

Access Cache Section

The **Access Cache** section displays the history of successful VPN connection attempts for site-to-site and client-to-site VPN connections. To open the **Access Cache** section, click the **Access Cache** icon in the ribbon bar.

Cache	Client Downloads	Selection	Filter
Last OS	Last WSC	CN Name	
Linux 2.6.38.7-9ph7.1.0.02 x86_64			
Linux 2.6.38.7-9ph7.1.0.02x86_64			
Linux 2.6.38.7-9ph7.1.0.01x86_64			
Linux 2.6.38.7-9ph7.1.0.01 x86_64			

Double-click a specific VPN tunnel for detailed information.



cces	s Cache:							
AID	Tunnel	Name	Peer	Info	Last	Success	Fail	Last Status
2	TINA	VIRT1-VIRBO2:1	213	FW Tunnel	18 s	46	51645	Request Timeout (HandshakeRequest ReqState=Init Rep
5	TINA	VIRT1-VIRBO2	213	FW Tunnel	18 s	0	50312	Request Timeout (HandshakeRequest ReqState=Init Rep
15	TINA	VIRT1-VIRBO2	212	FW Tunnel	44 m	0	2445	Request Timeout (HandshakeRequest ReqState=Init Rep
16	TINA	VIRT1-VIRBO2:1	212	FW Tunnel	44 m	0	1442	Request Timeout (HandshakeRequest ReqState=Init Rep
18	TINA	VIRT1-VIRBO2:1	200	FW Tunnel	74 m	0	2884	Request Timeout (HandshakeRequest ReqState=Init Rep
19	TINA	VIRT1-VIRBO2	200	FW Tunnel	74 m	0	2437	Request Timeout (HandshakeRequest ReqState=Init Rep
7	TINA	VIRT1-VIRBO1:1	212	FW Tunnel	45 h	44	722	Granted Granted
8	TINA	VIRT1-VIRBO1	200	FW Tunnel	45 h	43	1306	Granted Granted
1	TINA	VIRT1-VIRBO1:1	213	FW Tunnel	45 h	0	47184	Request Timeout (HandshakeRequest ReqState=Init Rep
4	TINA	VIRT1-VIRBO1	213	FW Tunnel	45 h	0	45189	Request Timeout (HandshakeRequest ReqState=Init Rep
14	TINA	VIRT1-VIRBO1	212	FW Tunnel	45 h	0	2592	Request Timeout (HandshakeRequest ReqState=Init Rep
6	TINA	VIRT1-VIRBO2	200	FW Tunnel	2 d	34	7200	Resp. Granted (HandshakeRequest
12	TINA	VIRT1-VIRBO2:1	200	FW Tunnel	15 d	0	7130	Request Timeout (HandshakeRequest ReqState=Init Rep
11	TINA	VIRT1-VIRBO1	200	FW Tunnel	15 d	0	8547	Request Timeout (HandshakeRequest ReqState=Init Rep
25	TINA	VIRT1-VIRBO1:1	200	FW Tunnel	15 d	0	5397	Request Timeout (HandshakeRequest ReqState=Init Rep

Drop Cache Section

The **Drop Cache** section shows details about unsuccessful VPN connection attempts. To open the **Drop Cache** section, click the **Drop Cache** icon in the ribbon bar.

Cache	Drop Cache Client Downloads	Selection	n 🌱 Filter
Last OS	Last WSC	CN Name	
Linux 2.6.38.7-9ph7.1.0.02.x86_64			
Linux 2.6.38.7-9ph7.1.0.02.x86_64			
Linux 2.6.38.7-9ph7.1.0.01x86_64			
Linux 2.6.38.7-9ph7.1.0.01x86_64			

AID	Tunnel	Name	Peer	Local	Count	Last	Info	Param
3	<none></none>	<unknown></unknown>	0.0	0.0.0.0	153	2 d	No Tunnel Match Found	:: -> ff02::1.ff00:0
0	<none></none>	<unknown></unknown>	213	62.9	6	2 d	No SPI	
6	<none></none>	<unknown></unknown>	212	62.9	38	2 d	No SPI	
8	<none></none>	<unknown></unknown>	200	2001	36	2 d	No SPI	
1	TINA	VIRT1-VIRBO1:1	62.9	212	122	2 d	No Route	
2	TINA	VIRT1-VIRBO2:1	62.9	213	111	2 d	No Route	
9	<none></none>	<unknown></unknown>	200	2001	42	2 d	No SPI	
4	<none></none>	<unknown></unknown>	0.0	0.0.0.0	36	20 d	No Tunnel Match Found	fe80::200;ff;fe00:0 -> ff02::2
5	<none></none>	<unknown></unknown>	0.0	0.0.0.0	36	20 d	No Tunnel Match Found	fe80::200;ff;fe00:0 -> ff02::2
7	<none></none>	<unknown></unknown>	200	2001	45	24 d	No SPI	

VPN Client Downloads Section

The **VPN Client Downloads** section allows you to copy Network Access Client update files to the firewall. To open the **VPN Client Downloads** section, click the **Client Downloads** icon in the ribbon bar. Please note that this feature is limited to the Barracuda Network Access Client and is not available with the Barracuda VPN Client only.



	Access Cache	Cache	Client Download	s Selection	Filter
Last OS			Last WSC	CN Name	
Linux 2.6.38.7-9ph7.1.	0.02.x86_64				
Linux 2.6.38.7-9ph7.1.	0.02x86_64				
Linux 2.6.38.7-9ph7.1.	0.01 x86_64				
Linux 2.6.38.7-9ph7.1.	0.01x86_64				

The next time a Network Access Client connects to the VPN server, you can download the uploaded version:

- 1. Click **Upload** on the right of the section to open the uploading window.
- 2. Use the **Browse** option within this window to select the desired installation file.
- 3. Click **Upload** to store the update file on the Barracuda CloudGen Firewall.

If an uploaded file becomes obsolete, select it and click **Delete** to remove the file from the VPN client downloads list.

Barracuda CloudGen Firewall



Figures

- 1. vpn_s2s1.png
- 2. vpn_c2s.png
- 3. filter_select.png
- 4. vpn_status.png
- 5. ac_icon.png
- 6. vpn_ac.png
- 7. dc_icon.png
- 8. vpn_dc.png
- 9. cd_icon.png

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