Two factor authentication for Check Point appliances

logintc.com/docs/connectors/check-point.html

The LoginTC RADIUS Connector is a complete two-factor authentication virtual machine packaged to run within your corporate network. The LoginTC RADIUS Connector enables <u>Check Point</u> appliances to use <u>LoginTC</u> for the most secure two-factor authentication.



Compatibility

Check Point appliance compatibility:

- Check Point 600 Series
- Check Point 1100 Series
- Check Point 2200 Appliance
- Check Point 4000 Series
- Check Point 12000 Series
- Check Point 13000 Series
- Check Point 21000 Series
- Check Point Next Generation Firewalls (NGW)
- Check Point appliances supporting RADIUS authentication

Check Point VPN client compatibility:

• Check Point Endpoint Security VPN E80.60 and later

Appliance not listed?

We probably support it. Contact us if you have any questions.

Compatibility Guide

Check Point appliances which have configurable RADIUS authentication are supported.

Prerequisites

Before proceeding, please ensure you have the following:

RADIUS Domain Creation

Create a RADIUS domain in <u>LoginTC Admin</u>. The domain represents a service (e.g. VPN) that you want to protect with LoginTC. It will contain token policies and the users that access your service.

If you have already created a LoginTC domain for your LoginTC RADIUS Connector, then you may skip this section and proceed to <u>Installation</u>.

- 1. Log in to LoginTC Admin
- 2. Click Domains:
- 3. Click Create Domain:

ခာ Login TC ၊	cample Inc. 🖉 Docs 🕓 Support 🛔 administrator@example.com 🕶
GENERAL	+ Create
🖀 Dashboard	
🍰 Domains	A domain represents a service, e.g. VPN or website that you want to protect. It contains a collection of users and token policies.
📽 Users	
🗐 Logs	
SETUP	
Administrators	
📽 Settings	You haven't created any domains yet.
	+ Create your first domain

4. Enter domain information:



Installation

The LoginTC RADIUS Connector runs <u>CentOS</u> 6.8 with <u>SELinux</u>. A firewall runs with the following open ports:

Port	Protocol	Purpose
22	TCP	SSH access
1812	UDP	RADIUS authentication
1813	UDP	RADIUS accounting
8888	TCP	Web interface
443	TCP	Web interface
80	TCP	Web interface
80	TCP	Package updates (outgoing)
123	UDP	NTP, Clock synchronization (outgoing)

Note: Username and Password

logintc-user is used for SSH and web access. The default password is logintcradius .
You will be asked to change the default password on first boot of the appliance and will not be

able to access the web interface unless it is change.

The logintc-user has sudo privileges.

Configuration

Configuration describes how the appliance will authenticate your <u>RADIUS</u>-speaking device with an optional first factor and LoginTC as a second factor. Each configuration has **4 Sections**:

1. LoginTC

This section describes how the appliance itself authenticates against<u>LoginTC Admin</u> with your LoginTC organization and domain. Only users that are part of your organization and added to the domain configured will be able to authenticate.

2. First Factor

This section describes how the appliance will conduct an optional first factor. Either against an existing LDAP, Active Directory or RADIUS server. If no first factor is selected, then only LoginTC will be used for authentication (since there are 4-digit PIN and Passcode options that unlock the tokens to access your domains, LoginTC-only authentication this still provides two-factor authentication).

3. Passthrough

This section describes whether the appliance will perform a LoginTC challenge for an authenticating user. The default is to challenge all users. However with either a static list or Active Directory / LDAP Group you can control whom gets challenged to facilitate seamless testing and rollout.

4. Client and Encryption

This section describes which <u>RADIUS</u>-speaking device will be connecting to the appliance and whether to encrypt API Key, password and secret parameters.

Data Encryption

It is strongly recommended to enable encryption of all sensitive fields for both PCI compliance and as a general best practice.

The **web interface** makes setting up a configuration simple and straightforward. Each section has a **Test** feature, which validates each input value and reports all potential errors. Section specific validation simplifies troubleshooting and gets your infrastructure protected correctly faster.

First Configuration

Close the console and navigate to your appliance **web interface** URL. Use username **logintc-user** and the password you set upon initial launch of the appliance. You will now configure the LoginTC RADIUS Connector.

Create a new configuration file by clicking + Create your first configuration:

စာ Login TC Login	ITC RADIUS Connector 2.1.0	🗐 Docs	Support 🔒	logintc-user -
GENERAL	🚓 Configurations		Restart RADIUS Server	+ Create
Configurations Cogs APPLIANCE Status Settings Upgrade	You haven' + Cre	t created any configurations yet.		

LoginTC Settings

Configure which LoginTC organization and domain to use:

ခာ Login TC Login	TC RADIUS Connector 2.4.0	🗐 Docs 🍾 Support 🔮 logintc-user 🗸
GENERAL	Configurations /	New Configuration / LoginTC Settings Step 1 of 4 Cancel
🚓 Configurations	LoginTC Settings	API Key
🖻 Logs	Values which will dictate how	
APPLIANCE	Connector will identify itself to the LoginTC cloud service.	The 64-character organization API key is found on the LoginTC Admin Panel Settings page.
🍘 Status		Domain ID
✿Settings		The 40-character domain ID is found on the LoginTC Admin Panel domain settings page.
🗐 Upgrade		Request Timeout
		60
		The amount of time the LoginTC RADIUS Connector should poll for a user to respond. This value should be 10 seconds shorter than the timeout in your RADIUS client (e.g. VPN). For example if the VPN timeout is 90 seconds, this value should be no longer than 80 seconds.

Configuration values:

Property	Explanation
api_key	The 64-character organization API key
domain_id	The 40-character domain ID

The API key is found on the LoginTC Admin <u>Settings</u> page. The Domain ID is found on your domain settings page.

Click **Test** to validate the values and then click **Next**:

ခာ Login TC မဖ	ginTC RADIUS Connector 2.1.0	🖻 Docs 🌜 Support 🚢 logintc-user 🕶					
GENERAL	🚠 New Configuration	n / LoginTC Settings Step 1 of 4 Cancel					
📥 Configurations	LoginTC Settings	API Key					
Logs	Values which will dictate how	vZkDw7l6Z3tApwZJXERseKdR0s5RNNqjMxXlwvxpWwJOa9oJXi9b5tdvPyFsqzwJ					
APPLIANCE	will identify itself to the	The 64-character organization API key is found on the LoginTC Admin Panel Settings page.					
Status Sta	Logini C cloud service.	Domain ID					
📽 Settings		9120580e94f134cb7c9f27cd1e43dbc82980e152					
┛ Upgrade		The 40-character domain ID is found on the LoginTC Admin Panel domain settings page.					
		Test Next					
		Test successful, click Next to continue					

First Authentication Factor

Configure the first authentication factor to be used in conjunction with LoginTC. You may use Active Directory / LDAP or an existing RADIUS server. You may also opt not to use a first factor, in which case LoginTC will be the only authentication factor.

ခာ Login TC ဖား	nTC RADIUS Connector 2.1.0	🖻 Docs 🥾 Support 🚢 logintc-user 🗸
GENERAL	🚠 New Configuratio	n / First Factor Step 2 of 4 Cancel
 Configurations Logs APPLIANCE 	First Factor Select the first way users will authenticate prior to LoginTC.	• LDAP O Active Directory RADIUS None Connect to an existing LDAP server for username / password verification.
StatusSettingsUpgrade	LDAP Server Details The LDAP host and port information.	Host Host Host name or IP address of the LDAP server. Examples: Idap.example.com or 192.168.1.42 Port (optional) 389 Port if LDAP server uses non-standard port.
	Bind Details	Bind with credentials Anonymous

Active Directory / LDAP Option

Select **Active Directory** if you have an AD Server. For all other LDAP-speaking directory services, such as OpenDJ or OpenLDAP, select **LDAP**:

ခာ Login TC	oginTC RADIUS Connector 2.1.0	🖻 Docs 🕓 Support 🔺 logintc-user 🗸
GENERAL	📥 New Configuratio	n / First Factor Step 2 of 4 Cancel
Configurations Logs	First Factor Select the first way users will authenticate prior to LoginTC.	○ LDAP • Active Directory ○ RADIUS ○ None Connect to an existing Active Directory server for username / password verification.
Status Settings Upgrade	AD Server Details The Active Directory host and port information.	Host Host Host name or IP address of the LDAP server. Examples: ad.example.com or 192.168.1.42 Port (optional) 389 Port if Active Directory server uses non-standard port.
	Bind Details	Bind with credentials Anonymous

Configuration values:

Property	Explanation	Examples		
host	Host or IP address of the LDAP server	ldap.example.com or 192.168.1.42		
port (optional)	Port if LDAP server uses non-standard (i.e., 389 / 636)	4000		
bind_dn	DN of a user with read access to the directory	<pre>cn=admin,dc=example,dc=com</pre>		
bind_password	The password for the above bind_dn account	password		
base_dn	The top-level DN that you wish to query from	<pre>dc=example,dc=com</pre>		
attr_username	The attribute containing the user's username	sAMAccountName or uid		
attr_name	The attribute containing the user's real name	displayName or cn		
attr_email	The attribute containing the user's email address	mail or email		
Group Attribute (optional)	Specify an additional user group attribute to be returned the authenticating server.	4000		
RADIUS Group Attribute (optional)	Name of RADIUS attribute to send back	Filter-Id		
LDAP Group (optional)	The name of the LDAP group to be sent back to the authenticating server.	SSLVPN-Users		
encryption (optional)	Encryption mechanism	ssl or startTLS		
cacert (optional)	CA certificate file (PEM format)	/opt/logintc/cacert.pem		

Click **Test** to validate the values and then click **Next**.

Existing RADIUS Server Option

If you want to use your existing RADIUS server, select RADIUS:

ම Login TC	LoginTC RADIUS Connector 2.1.0	🗟 Docs 🥾 Support 🔮 logintc-user 🗸
GENERAL	🛔 New Configuratio	n / First Factor Step 2 of 4 Cancel
Configurations Configurations Logs	First Factor Select the first way users will authenticate prior to LoginTC.	○ LDAP ○ Active Directory
Status Status Settings Upgrade	RADIUS Server Details The RADIUS host and secret.	Host Host Host name or IP address of the RADIUS server. Examples: Idap.example.com or 192.168.1.42 Port (optional) 1812 Port if the RADIUS server uses non-standard port. Secret

Configuration values:

Property	Explanation	Examples		
host	Host or IP address of the RADIUS server	radius.example.com or 192.168.1.43		
port (optional)	Port if the RADIUS server uses non-standard (i.e., 1812)	1812		
secret	The secret shared between the RADIUS server and the LoginTC RADIUS Connector	testing123		

RADIUS Vendor-Specific Attributes

Common Vendor-Specific Attributes (VSAs) found in the FreeRADIUS dictionary files will be relayed.

Click Test to validate the values and then click Next.

Passthrough

Configure which users will be challenged with LoginTC. This allows you to control how LoginTC will be phased in for your users. This flexibility allows for seamless testing and roll out.

For example, with smaller or proof of concept deployments select the <u>Static List</u> option. Users on the static list will be challenged with LoginTC, while those not on the list will only be challenged with the configured <u>First Authentication Factor</u>. That means you will be able to test LoginTC without affecting existing users accessing your VPN.

For larger deployments you can elect to use the <u>Active Directory or LDAP Group</u> option. Only users part of a particular LDAP or Active Directory Group will be challenged with LoginTC. As your users are migrating to LoginTC your LDAP and Active Directory group policy will ensure

that they will be challenged with LoginTC. Users not part of the group will only be challenged with the configured <u>First Authentication Factor</u>.

No Passthrough (default)

Select this option if you wish every user to be challenged with LoginTC.

ි Login TC	Logir	TC RADIUS Connector 2.1.0		Docs	Support	占 logint	tc-user -	
GENERAL		🚠 New Configuratio	on / Passthrough		Step	o 3 of 4	Cancel	
📥 Configurations		Passthrough	💿 No Passthrough 🔘 Static List 🔘 LDAP Gr	oup 🔾 Acti	ve Directory Gr	oup		
Logs		Configure list of users which	All authentications will be challenged with LoginTC. This can be configured at anytime.					
APPLIANCE		LoginTC.						
Status			Next					
🗱 Settings			NEAL					
┛ Upgrade								

Static List

Select this option if you wish to have a static list of users that will be challenged with LoginTC. Good for small number of users.

ခာ Login TC ဖ	inTC RADIUS Connector 2.1.0		Docs	📞 Support	🛎 logintc-user 🗸
GENERAL	🛔 New Configuration	n / Passthrough		Step	p 3 of 4 Cancel
Configurations Cogs APPLIANCE	Passthrough Configure list of users which will not be challenged by LoginTC.	○ No Passthrough	up 🔾 Acti	ve Directory Gr	oup umber of users.
 Mathematical Status Mathem	Static List Only users in this list will be challenged with LoginTC. All other users will be challenged with configured first factor only.	LoginTC challenge users			

LoginTC challenge users: a new line separated list of usernames. For example:

jane.doe
jane.smith
john.doe
john.smith

Select this option if you wish to have only users part of a particular Active Directory or LDAP group to be challenged with LoginTC. Good for medium and large number of users.

ا Login TC	LoginTC RADIUS Connector 2.1.0	🗐 Docs 🕓 Support 🛔 logintc-user 🗸
GENERAL	🛔 New Configuration	A / Passthrough Step 3 of 4 Cancel
ConfigurationsLogs	Passthrough Configure list of users which will not be challenged by	 No Passthrough Static List LDAP Group Active Directory Group Connect to an existing Active Directory server for group membership verification. Good for large number of users.
APPLIANCE	Auth Groups	LogisTC challenge Auth Groups
📽 Settings	Only users which are members of one or more of the specified	
🔊 Upgrade	groups will be challenged with LoginTC. All other users will be challenged with configured first factor only.	Comma separated list of groups membership for which users will be challenged with LoginTC. Example: logintc_users, operations
	AD Server Details	Host
	The Active Directory host and port information.	

Configuration values:

Property	Explanation	Examples
LoginTC challenge auth groups	Comma separated list of groups for which users will be challenged with LoginTC	SSLVPN-Users or two- factor-users
host	Host or IP address of the LDAP server	ldap.example.com or 192.168.1.42
port (optional)	Port if LDAP server uses non-standard (i.e., 389 / 636)	4000
bind_dn	DN of a user with read access to the directory	<pre>cn=admin,dc=example,dc=com</pre>
<pre>bind_password</pre>	The password for the above bind_dn account	password
base_dn	The top-level DN that you wish to query from	<pre>dc=example,dc=com</pre>
attr_username	The attribute containing the user's username	sAMAccountName or uid
attr_name	The attribute containing the user's real name	displayName or cn
attr_email	The attribute containing the user's email address	mail or email
encryption (optional)	Encryption mechanism	ssl or startTLS
cacert (optional)	CA certificate file (PEM format)	/opt/logintc/cacert.pem

Configuration Simplified

If <u>Active Directory / LDAP Option</u> was selected in <u>First Authentication Factor</u> the non-sensitive values will be pre-populated to avoid retyping and potential typos.

Client and Encryption

ه Login TC	oginTC RADIUS Connector 2.1.0	🖻 Docs 🕓 Support 🛔 logintc-user 🗸
GENERAL	📥 New Configuration	n / Client and Encryption Step 4 of 4 Cancel
🛔 Configurations	Client Settings	Name
Logs	Settings for your RADIUS client (e.g. a RADIUS-speaking VPN)	
APPLIANCE	to connect to the LoginTC RADIUS Connector.	A unique identifier of your RADIUS client. Use only alphanumeric characters and hyphens. This will also be used for the name of the configuration file. Example: corp-vpn-1 will be saved on
🍘 Status		disk as corp-vpn-1.cfg.
🌣 Settings		IP Address
┛ Upgrade		The IP address of your RADIUS client.
		Secret
		The secret shared between your RADIUS client and the LoginTC RADIUS Connector.
	Encryption	C Encrypt all passwords and API keys
	Determine whether to store passwords and API keys encrypted or in the clear.	It is strongly recommended to encrypt all sensitive fields.

Configure RADIUS client (e.g. your RADIUS-speaking VPN):

Client configuration values:

Property	Explanation	Examples
name	A unique identifier of your RADIUS client	CorporateVPN
ip	The IP address of your RADIUS client (e.g. your RADIUS-speaking VPN)	192.168.1.44
secret	The secret shared between the LoginTC RADIUS Connector and its client	bigsecret

Data Encryption

It is strongly recommended to enable encryption of all sensitive fields for both PCI compliance and as a general best practice.

Click **Test** to validate the values and then click **Save**.



Testing (Connector)

When you are ready to test your configuration, create a LoginTC user (if you haven't already done so). The username should match your existing user. Provision a token by following the steps:

When you have loaded a token for your new user and domain, navigate to your appliance**web** interface URL:



Click Test Configuration:

ົ Login TC	LoginTC RADI	JS Connector 2.1.0	Docs	📞 Support	💄 logintc-user 👻
GENERAL	÷.(🗲 Test Configuration	×		
🖧 Configurations		Test the first and second factor authentication by simulating an actual R request. The resulting test LoginTC request will look identical to what a t receive in a real authentication scenario.	ADIUS user would		est Configuration
APPLIANCE		If the authenticating user is configured to passthrough then only the firs challenge will apply.	st factor		
Status		Ē			
📽 Settings					
┛ Upgrade		Username			
		Enter username			
		Password			
		Password			
		For LoginTC only authentication leave Password field blank.			
		Close Test Conf	iguration		

Enter a valid username and password; if there is no password leave it blank. A simulated authentication request will be sent to the mobile or desktop device with the user token loaded. Approve the request to continue:

ම Login TC	LoginTC RAD	US Connector 2.1.0		Docs	📞 Support	🛎 logi	intc-user -
GENERAL		🖋 Test Configuration		×	estart RADIUS Se	erver	+ Create
📥 Configurations					_		
🗐 Logs					4	Test Config	guration
APPLIANCE		The request has been APPROVE	D See logs				
Status							
😋 Settings			Close Test Configuration				
┛ Upgrade				_			

Congratulations! Your appliance can successfully broker first and second factor authentication. The only remaining step is to configure your RADIUS device!

If there was an error during testing, the following will appear:



In this case, click **See logs** and then click the <a>/var/log/logintc/authenticate.log tab to view the log file and troubleshoot:

ခါ Login TC ၊ogin	IC RADIUS Connector 2.1.0	Docs	📞 Support	🛎 logintc-user -
GENERAL	🗐 Logs			
📥 Configurations				
🗐 Logs	/var/log/logintc/authenticate.log /var/log/radius/radius.log /va	var/log/logintc/tornado.lo	g	
APPLIANCE	2015-04-28 17:10:15,818 - INFO - 304 GET / (10.0.10.178) Z 2015-04-28 17:10:17,633 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:18,982 - INFO - 304 GET / configurations (2015-04-28 17:10:18,353 - INFO - 304 GET / (10.0.10.178) Z 2015-04-28 17:10:21,606 - INFO - 304 GET / configurations (2015-04-28 17:10:21,606 - INFO - 304 GET / configurations (2015-04-28 17:10:22,004 - INFO - 304 GET / configurations (2015-04-28 17:10:22,162 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:22,162 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:22,162 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:12:203,539 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:12:203,539 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:22,162 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:22,162 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:22,162 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:22,162 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:22,162 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:22,162 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:22,162 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:20,379 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:20,379 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:20,379 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:20,379 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:20,379 - INFO - 304 GET / logs (10.0.10.17 2015-04-28 17:10:20,379 - INFO - 304 GET / logs (10.0.10.17) 2015-04-28 17:10:20,379 - INFO - 304 GET / logs (10.0.10.17) 2015-04-28 17:10:20,379 - INFO - 304 GET / logs (10.0.10.17) 2015-04-28 17:10:20,379 - INFO - 304 GET / logs (10.0.10.17) 2015-04-28 17:10:20,379 - INFO - 304 GET / logs (10.0.10.17) 2015-04-28 17:10:20,379 - INFO - 304 GET / logs (10.0.10.17) 2015-04-28 17:10:20,379 - INFO - 304 GET / logs (10.0.10.17) 2015-04-28 17:10:20,379 - INFO - 304 GET / logs (10.0.10.17) 2015-04-28 17:1000 lines, refreshes automatically every	2.42ms 178) 2.59ms (10.0.10.178) 2.43ms 2.43ms 0.178) 2.45ms (10.0.10.178) 2.40ms (10.0.10.178) 2.19ms 178) 2.22ms 178) 3.00ms 178) 3.00ms 179 1 second.	- 61-0 - 7474 6007	

Check Point Quick Config Guide

Once you are satisfied with your setup, configure your Check Point Appliance to use the LoginTC RADIUS Connector.

For your reference, the appliance **web interface Settings** page displays the appliance IP address and RADIUS ports:

ි Login TC	Login	TC RADIUS Connector 2.1.0		🖻 Docs	📞 Support	🛎 logintc-user -
GENERAL		📽 Settings				
🛔 Configurations						
🖻 Logs		Appliance				
APPLIANCE		IP Address	10.0.10.116			
🌇 Status		RADIUS Authentication	1812			
🕫 Settings		For				
┛ Upgrade		RADIUS Accounting Port	1813			

The following are quick steps to get VPN access protected with LoginTC. The instructions can be used for existing setups as well. Although these were performed on Check Point 600, the same is true for other Check Point appliances.

- 1. Log into your Check Point Web UI
- 2. Click on the VPN tab



3. Under Remote Access, select Authentications Servers from the left-hand menu

Check Point 600 Appliance	✓ admin ⓒ Log Out ④ Help / Support Type to search	م						
📷 Home 🛛 📾 Device	🟬 Access Policy 🔍 Threat Prevention 🕵 VPN 🛛 🚳 Users & Objects 🛛 🏨 Logs & Monitoring							
Remote Access	VPN Remote Access Control	р						
Blade Control	Remote Access							
Remote Access Users	No local users and groups, are defined with VPN Remote Access permissions							
Authentication Servers		The focal users and groups are defined with VEN Remote Access permissions						
Advanced	Off A It is recommended to configure DDNS or static IP Internet connection	▲ It is recommended to configure DDNS or static IP Internet connection						
Site to Site	✓ Allow traffic from Remote Access users							
Blade Control	✓ Log traffic from Remote Access users							
VPN Sites	VIDI Domoto Assoss usors con connect vice							
Community								
VPN Tunnels	Cancel							
Connected	Firmware Upgrade Upgrade available Status Update available Status Update available	ne						

4. Under RADIUS Servers, click configure

Check Point 600 Appliance	Admin Co Log Out P Help / Support Type to search
📷 Home 🛛 📾 Devic	:e 🐘 Access Policy 🖤 Threat Prevention 🧏 VPN 🔉 Users & Objects 眞 Logs & Monitoring
Remote Access	Authentication Servers: Create and edit authentication services that will be used in user definition
Blade Control	RADIUS Servers
Remote Access Users	No RADIUS servers exist Configure
Authentication Servers	
Advanced	Remote access permissions for RADIUS users are disabled
Site to Site	Active Directory
Blade Control	
VPN Sites	Type to filter 🔎 🚍 New 🔪 Edit 👹 Delete 🍥 Configure
Community	Domain Server IP User Name
VPN Tunnels	
Certificates	<u>Add</u> new AD Domain
Connected	Firmware Upgrade Upgrade available Status Update available Ovice Time Option

5. Complete the Configure RADIUS Servers Form

Check Point 600 Appliance		Configure RADIUS Servers				Q
🚮 Home 🛛 📾 Device	Access P	Primary Secondary		Objects	🗓 Logs & Monitoring	
Remote AccessBlade ControlRemote Access UsersAuthentication ServersAdvancedSite to SiteBlade Control	Authenticati RADIUS Ser No RADIUS se Remote a Active Dire	IP address: Port: Shared secret: Timeout (seconds): Clear	10.0.10.130 1812 Show 60	n user defi	inition (Help
VPN Sites Community VPN Tunnels Certificates Trusted CAs Installed Certificates	Type to filte Domain		Apply O Cancel	onfigure User	^r Name	

Property	Explanation	Example
IP Address	Address of LoginTC RADIUS Connector	10.0.10.130
Port	RADIUS authentication port. Must be 1812.	1812
Secret	The secret shared between the LoginTC RADIUS Connector and its client	bigsecret
Timeout (seconds)	Amount of time in seconds to wait. At least 90s.	90

Warning: Connection Timeouts

Some Check Point appliances do not respect the RADIUS Timeout setting. For a workaround see: <u>RADIUS Timeout Workaround</u>.

Note: you can also configure a <u>Secondary Radius Server</u> to provide failover. This prevents the RADIUS Server from dropping authentication requests if it goes offline or receives too many requests.

6. Click Apply

Check Point 600 Appliance		Configure RADIUS Servers ×		× pe to sea	e to search		
🚮 Home 📾 Device	Access P	Primary Sec	condary		bjects	🚉 Logs & I	Vonitoring
Remote Access Blade Control Remote Access Users Authentication Servers Advanced Site to Site	Authenticati RADIUS Ser No RADIUS se	IP address: Port: Shared secret: Timeout (secor	nds):	10.0.10.130 1812 Show 60	n user d	₽finition	Help
Blade Control VPN Sites Community VPN Tunnels Certificates Trusted CAs Installed Certificates	Type to filte	Clear		Apply O Cancel	Configure Us	er Name	

7. Click on the permissions for RADIUS users link

Check Point 600 Appliance		🖊 admin 🕞 🛓	og Out ? Help / S	upport Type to searc	h ,	
🚮 Home 🕋 Device	Access Policy	🖤 Threat Prevention	👷 VPN 🛛 🎎	Users & Objects	眞 Logs & Monitoring	
Remote Access	Authentication Serv	vers: Create and edit authentic	ation services that v	will be used in user defi	nition (2) Help	
Blade Control	RADIUS Servers					
Remote Access Users	Primary RADIUS serve	er: 10.0.10.232:1812 Remove				
Authentication Servers	Secondary RADIUS se	Secondary RADIUS server: Configure				
Advanced	Remote access p	ermissions for RADIUS users a	e disabled			
Site to Site	Activo Directory	C.D				
Blade Control	Active Directory					
VPN Sites	Type to filter	P 🔤 New	💊 Edit 🛛 🚈 Del	ete 💮 Configure		
Community	Domain	Serve	r IP	User	Name	
VPN Tunnels						
Certificates		<u>Ac</u>	l <mark>d</mark> new AD L	Domain		
Trusted CAs						
Installed Certificates						
<u> </u>						

8. Check Enable RADIUS authentication for Remote Access Users

Check Point 600 Appliance	Admin C Log Out Alep / Support Type to search
📷 Home 🛛 📻 Device	🐘 Access Policy 🛛 Threat Prevention 🕵 VPN 🛛 🚳 Users & Objects 🔋 🚉 Logs & Monitoring
Remote Access Blade Control Remote Access Users Authentication Servers Advanced Site to Site Blade Control	Au RADIUS Authentication × nition × Nit
VPN Sites Community VPN Tunnels Certificates Trusted CAs	RADIUS authentication applies only to users defined in the RADIUS server Apply Cancel
Connected	Eirmware Upgrade Upgrade Upgrade available Status Update available Ostitus Update available Ostitus Update available

9. Click Apply

Check Point 600 Appliance	✓ admin ⓒ Log Out ④ Help / Support Type to search ♀
📷 Home 🕋 Device	🟬 Access Policy 🤍 Threat Prevention 🕵 VPN 🚳 Users & Objects 📋 Logs & Monitoring
Remote Access	Au RADIUS Authentication × nition
Remote Access Users	Pr ✓ Enable RADIUS authentication for remote access users
Authentication Servers	Se: All users defined on RADIUS server
Advanced	For specific RADIUS groups only
Site to Site	RADIUS-group1, RADIUS-class2,
Blade Control	Read-only Administrators
VPN Sites	
Community	RADIUS authentication applies only to users defined in the RADIUS server
VPN Tunnels	
Certificates	O Apply O Cancel
Trusted CAs	
Internet Connected	Firmware Upgrade Upgrade available Status Update available OS:10 PM

You are now ready to start testing your configuration.

RADIUS Timeout Workaround

A few Check Point appliances do not respect the RADIUS server timeout settings. As a result, all requests are rejected after 15-20 seconds. The following appliances have been reported as having this issue:

- Check Point 600 Series
- Check Point 1100 Series
- Check Point 1200R Series

In order to ensure the timeout is properly set on appliances experiencing the issue follow these steps:

1. SSH into the Check Point Appliance

- 2. Enter expert mode
- vi \$FWDIR/conf/local.cfg.conv
- 4. Add the following line below :golbal_props (props :

:radius_retrant_timeout (90)

- 5. mv \$FWDIR/conf/local.cfg.conv.post \$FWDIR/conf/local.cfg.conv.post.orig
- 6. runAllFeatures.lua

Wait a few minutes for the change to take effect.

Failover

Check Point appliances have built-in settings that makes it easy to configure a secondary RADIUS server to provide failover. To set up another RADIUS server, deploy the downloaded LoginTC Connector again (you can deploy it multiple times) and configure it using the same settings as the first one. <u>Click here</u> to review the Connector configuration process. Then, log into your **Check Point Web UI**

- 1. Log into your Check Point Web UI
- 2. Click on the VPN tab



3. Under Remote Access, select Authentications Servers from the left-hand menu



4. Under RADIUS Servers, click the Configure... link next to Secondary RADIUS Server

Check Point 600 Appliance		🖋 admin 🕑 <u>L</u>	og Out 🕐 Help	/ <u>Support</u> Type to se	arch	م
📷 Home 🛛 📻 Device	🐘 Access Policy 🔰	Threat Prevention	👷 VPN 【	🍇 Users & Object	s 🔋 🏨 Logs 8	& Monitoring
Remote Access	Authentication Servers:	Create and edit authentic	ation services that	at will be used in user o	definition	Help
Blade Control	RADIUS Servers					
Remote Access Users	Primary RADIUS server: 1	0.0.10.232:1812 Remove				
Authentication Servers	Secondary RADIUS server	: Configure				
Advanced	Remote access permi	ssions for RADIUS users ar	e given to all use	ers in all RADIUS server	5	
Site to Site	Activo Directory		- 8		-	
Blade Control	Active Directory					
VPN Sites	Type to filter	P 🔚 New	💊 Edit 🛛 🚈 🛙	Delete 💮 Configu	e	
Community	Domain	Serve	r IP	U	ser Name	
VPN Tunnels						
Certificates		<u>Add</u> new AD Domain				
Trusted CAs						
Internet Connected		Firmwar Upgrad	re Upgrade le available	Status Update	available	Device Time 05:10 PM

5. Complete the Configure RADIUS Servers form using the same settings as the first one

Check Point 600 Appliance		🥒 adr	min 🕞 Log Out 🚱 Help / Support	Type to search	م
📷 Home 📻 Device	Access P		Constant Constant	bjects 🔒 Log	s & Monitoring
Remote Access	Authenticati	Configure RADI	US Servers	× user definition	() Help
Blade Control	RADIUS Ser	Primary Secondary	,	_	
Remote Access Users	Primary RADI	IP address:	10.0.10.131		
Authentication Servers	Secondary RA	Port:	1812		
Advanced	 Remote a 	Shared secret:	[servers	
Site to Site	Active Dire		Show		
Blade Control	Active bire				
VPN Sites	Type to filte	Timeout (seconds):	60	onfigure	
Community	Domain	Clear		User Name	
VPN Tunnels					
Certificates			Apply O Cance		
Trusted CAs			Cance		
Internet Connected			Firmware Upgrade	Status Update available	Device Time 05:11 PM

Property	Explanation	Example
IP Address	Address of Secondary LoginTC RADIUS Connector	10.0.10.131
Port	RADIUS authentication port. Must be 1812.	1812
Secret	The secret shared between the LoginTC RADIUS Connector and its client	bigsecret
Timeout (seconds)	Amount of time in seconds to wait. At least 90s.	90

Warning: Connection Timeouts

Some Check Point appliances do not respect the RADIUS Timeout setting. For a workaround see: <u>RADIUS Timeout Workaround</u>.

6. Click Apply

Troubleshooting

Connection Times Out

If your connection times out after 15-20 seconds it is probably because some Check Point appliances do not respect the RADIUS Timeout setting. For a workaround see: <u>RADIUS</u> <u>Timeout Workaround</u>.

Not Authenticating

If you are unable to authenticate, navigate to your appliance **web interface** URL and click **Status**:

ခာ Login TC မဖ	inTC RADIUS Connector 2.1.0	Docs	📞 Support	占 logintc-user -
GENERAL	🔁 Status			
📥 Configurations				
┛ Logs	All status checks have passed.			
APPLIANCE	✓ Ping cloud.logintc.com			
🆚 Status	✓ RADIUS Process			
🔅 Settings				
┛ Upgrade	✓ CPU Usage			
	✓ RAM Usage			
	✓ Disk Usage			
	✓ Version check			

Ensure that all the status checks pass. For additional troubleshooting, click Logs:

ခါ Login TC ၊ogin	TC RADIUS Connector 2.1.0	E/ Docs	📞 Support	💄 logintc-user -
GENERAL	Logs			
Configurations				
🗐 Logs	/var/log/logintc/authenticate.log /var/log/radius/radius.log	/var/log/logintc/tornado.log	5	
APPLIANCE	2015-04-28 17:10:15,818 - INFO - 304 GET / (10.0.10.17 2015-04-28 17:10:17,633 - INFO - 304 GET /logs (10.0.1 2015-04-28 17:10:18,082 - INFO - 304 GET /configuratio 2015-04-28 17:10:18,353 - INFO - 304 GET /configuratio 2015-04-28 17:10:21,624 - INFO - 304 GET /configuratio 2015-04-28 17:10:22,064 - INFO - 304 GET /configuratio 2015-04-28 17:10:22,004 - INFO - 304 GET /logs (10.0.1 2015-04-28 17:10:20,000 Inres, refreshes automatically en	8) 2.42ms 0.178) 2.59ms ins (10.0.10.178) 2.43ms 8) 2.43ms 1.10.178) 2.45ms ins (10.0.10.178) 2.40ms ins (10.0.10.178) 2.19ms 0.178) 2.22ms 0.178) 3.00ms 2.115 2.450 2.450 2.450 4.5000 4.500 4.500 4.500 4.500 4.500 4.500 4.500 4.50	6.0.7474.0007	

Email Support

For any additional help please email support@cyphercor.com. Expect a speedy reply.