Two factor authentication for WatchGuard XTM and Firebox IPSec

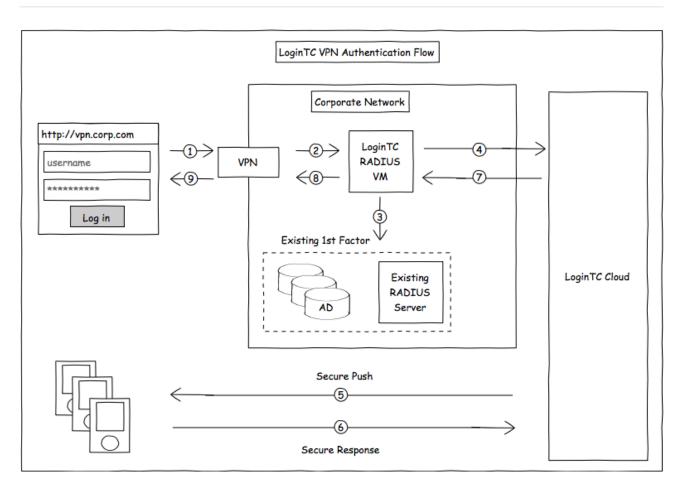
S logintc.com/docs/connectors/watchguard-ipsec.html

The LoginTC RADIUS Connector is a complete two-factor authentication virtual machine packaged to run within your corporate network. The LoginTC RADIUS Connector enables the <u>WatchGuard</u> XTM and Firebox VPN (e.g. **Mobile VPN with SSL or IPSec**) to use <u>LoginTC</u> for the most secure two-factor authentication. For instructions using direct authentication then you may be interested in: <u>Two factor authentication for WatchGuard IPSec</u>.

User Experience

After entering the username and password into the Mobile VPN client, the user is presented with an Authentication Message. The user may enter '1' to receive a push notification to their device to approve or enter a valid One-Time Password (OTP).

Architecture / Compatibility



Compatibility

WatchGuard appliance compatibility:

- WatchGuard Firebox T10 Series
- WatchGuard XTM 2 Series
- WatchGuard XTM 3 Series
- WatchGuard XTM 5 Series
- WatchGuard Unified Threat Management (UTM)
- WatchGuard Next-Generation Firewall (NGFW)
- WatchGuard appliance supporting RADIUS authentication

Appliance not listed?

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

Compatibility Guide

WatchGuard XTM, Firebox and any other appliance which have configurable RADIUS authentication supported.

Prerequisites

Before proceeding, please ensure you have the following:

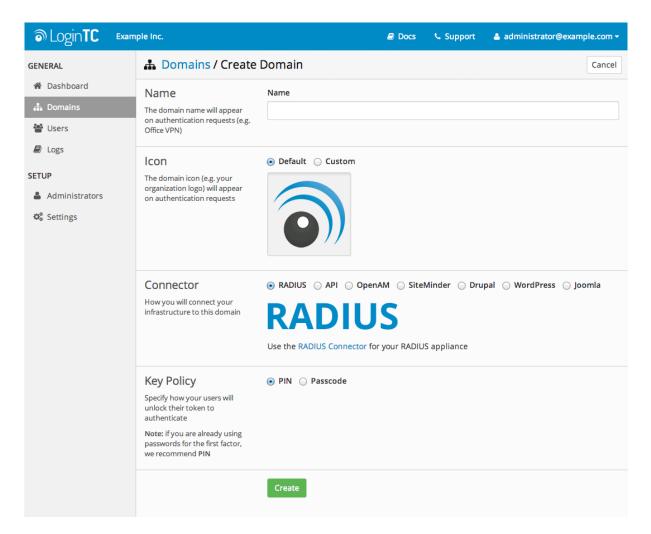
RADIUS Domain Creation

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 Add Domain:

ခါ Login TC ေ	ample 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:



Name

Choose a name to identify your LoginTC domain to you and your users

Connector

RADIUS

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)

Port	Protocol	Purpose
------	----------	---------

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.

<u>ا</u> ھ	_ogin TC	Login	TC RADIUS Connector 2.1.0			E Doc	s & Support	🛓 log	gintc-user -
GENER	AL		🛔 Configurations				Restart RADIUS S	erver	+ Create
 Co	onfigurations				-				
┛ Lo	ogs								
APPLIA	NCE								
🚯 St	atus			You	haven't created any configu	urations yet.			
🕸 Se	ettings								
🗐 U	pgrade				+ Create your first configu	ration			

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

LoginTC Settings

Configure which LoginTC organization and domain to use:

ခာ Login TC ၊၀။	inTC RADIUS Connector 2.4.0	🖻 Docs 🍾 Support 🗳 logintc-user 🗸
GENERAL	A Configurations /	New Configuration / LoginTC Settings Step 1 of 4 Cancel
📥 Configurations	LoginTC Settings	API Key
Logs	Values which will dictate how the LoginTC RADIUS	
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

`Request Timeout `Number of seconds that the RADIUS connector will wait for

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

Request Timeout

Make a note of what you set the Request Timeout to as you will need to use a larger timeout value in your WatchGuard. We recommend setting the Request Timeout value to 60 seconds in the LoginTC RADIUS Connector and setting the RADIUS authentication server timeout to 70 seconds in WatchGuard.

Click Test to validate the values and then click Next:

ခာ Login TC မဖ	inTC 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	the LoginTC RADIUS 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	Log.in e cloud berneel	Domain ID		
🕫 Settings		9120580e94f134cb7c9f27cd1e43dbc82980e152		
_		The 40-character domain ID is found on the LoginTC Admin Panel domain settings page.		
🗐 Upgrade				
		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 ဖ	ginTC RADIUS Connector 2.1.0	🖻 Docs 🕓 Support 🛔 logintc-user 🗸
GENERAL	🚠 New Configuratio	n / First Factor Step 2 of 4 Cancel
Configurations Configurations Configurations	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.
 Status Settings Upgrade 	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 မ	oginTC RADIUS Connector 2.1.0	🗐 Docs 🕓 Support 🛔 logintc-user 🗸
GENERAL	击 New Configuratio	n / First Factor Step 2 of 4 Cancel
Configurations Configurations Configurations Configurations	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.
APPLIANCE	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>
<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>

Property	Explanation	Examples
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.	Office VPN
RADIUS Group Attribute (optional)	Name of RADIUS attribute to send back	Filter-Id
LDAP Group / AD Group (optional)	A comma delimited list of the names of possible LDAP groups to be sent back to the authenticating server. The user must be a member of a group for the attribute to be sent back. Groups membership is checked in priority order, if the user is a member of multiple groups the first group matched is returned.	Office VPN or Administrators,Sales,Engineers
encryption (optional)	Encryption mechanism	ssl or startTLS
cacert (optional)	CA certificate file (PEM format)	/opt/logintc/cacert.pem

Group Attribute and Access Control

In order to use Mobile VPN with IPSec, you must properly configure the **Group Attribute** in your RADIUS Connector. WatchGuard devices use the Group Attribute value to set the attribute that carries the User Group information. This information is used for access control.

LDAP Group / AD Group : The name of a group in the LDAP Directory that all authenticating users belong to. The group name must match exactly the Mobile VPN with IPSec group profile name.

ි Login TC	LoginTC RADIUS Connector 2.1.0	😂 Docs 🥾 Support 🚢 logintc-user 🗸
GENERAL	📥 New Configuratio	n / First Factor Step 2 of 4 Cancel
📥 Configurations		
┛ Logs	Group Attribute (Advanced)	○ None
APPLIANCE	Specify an additional user	RADIUS Group Attribute
Status	group attribute to be returned	Filter-Id
Settings	the authenticating server.	Name of RADIUS attribute to send back. For example, for WatchGuard this is the named value of the Group Attribute, e.g. for a Group Attribute value of 11, use: Filter-Id.
🗐 Upgrade		LDAP Group
		The name of the LDAP group to be sent back to the authenticating server. The user must be a member of the group for the attribute to be sent back. of Examples: SSLVPN-Users.
	Connection	

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:

■ Login TC □	ginTC 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 RADIUS server for username / password verification.
APPLIANCE	RADIUS Server Details The RADIUS host and secret.	Host Host name or IP address of the RADIUS server. Examples: ldap.example.com or 192.168.1.42
Upgrade		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)

ခာ Login TC ဖ	inTC RADIUS Connector 2.1.0		Docs	📞 Support	💄 logintc-user 🗸
GENERAL	📥 New Configuratio	on / Passthrough		Step	3 of 4 Cancel
📥 Configurations	Passthrough	💿 No Passthrough 🔘 Static List 🔘 LDAP Group	o 🔾 Activ	ve Directory Gro	oup
Logs	Configure list of users which will not be challenged by	All authentications will be challenged with LoginTC. 1	This can b	e configured at a	anytime.
APPLIANCE	LoginTC.				
🚯 Status		Next			
Ø₿ Settings					
🗐 Upgrade					

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

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 မား	inTC RADIUS Connector 2.1.0	🗐 Docs 🔍 Support 🔒 logintc-user 🗸
GENERAL	🛔 New Configuratio	n / Passthrough Step 3 of 4 Cancel
🚠 Configurations	Passthrough	No Passthrough ③ Static List
Logs	Configure list of users which will not be challenged by	Store static list of users that will be challenged with LoginTC. Good for small number of users.
APPLIANCE	LoginTC.	
Status	Static List	LoginTC challenge users
✿ Settings	Only users in this list will be challenged with LoginTC. All	
🔊 Upgrade	other users will be challenged with configured first factor	
	only.	

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

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

Active Directory / LDAP Group

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.

ခါ Login TC ၊ Login	TC RADIUS Connector 2.1.0	🗐 Docs 🕓 Support 🔒 logintc-user 🗸
GENERAL	🛔 New Configuration	A / Passthrough Step 3 of 4 Cancel
Configurations	Passthrough	○ No Passthrough ○ Static List ○ LDAP Group ④ Active Directory Group
🖅 Logs	Configure list of users which will not be challenged by	Connect to an existing Active Directory server for group membership verification. Good for large number of users.
APPLIANCE	LoginTC.	
🚯 Status	Auth Groups	LoginTC challenge Auth Groups
📽 Settings	Only users which are members	
┛ Upgrade	of one or more of the specified 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	Office VPN or two-factor- users
host	Host or IP address of the LDAP server	<pre>ldap.example.com or 192.168.1.42</pre>
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

Property	Explanation	Examples
encryption (optional)	Encryption mechanism	ssl or startTLS
cacert (optional)	CA certificate file (PEM format)	<pre>/opt/logintc/cacert.pem</pre>

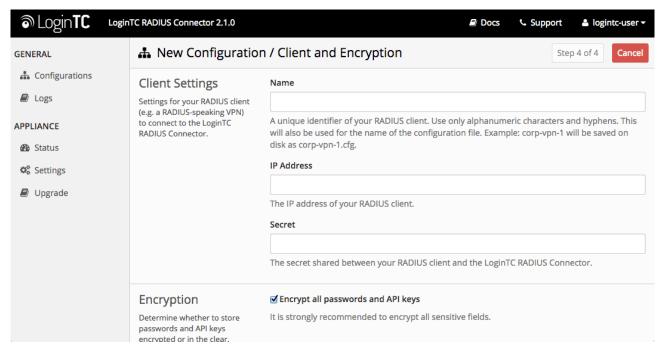
Configuration Simplified

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.

Click Test to validate the values and then click Next.

Client and Encryption

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

Under Authentication Mode select Challenge

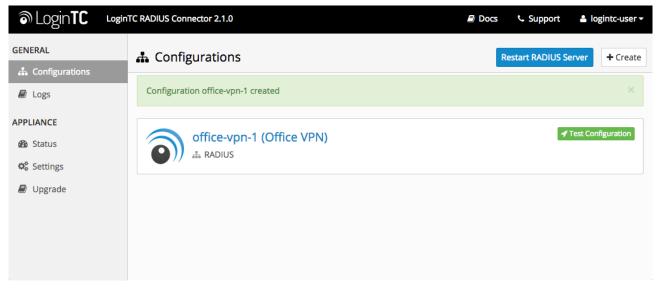
ခါ Login TC Login	TC RADIUS Connector 2.5.1	🗐 Docs 💪 Support 🛔 logintc-user 🗸
GENERAL	A Configurations /	New Configuration / Client and Encryption Step 4 of 4 Cancel
📥 Configurations		
Logs	Authentication Mode	○ Direct ○ Iframe ○ Challenge The user will be prompted on how they wish to proceed with second-factor authentication (e.g.
APPLIANCE Status	How the LoginTC RADIUS Connector will perform the second factor.	LoginTC Push, OTP, bypass code). Your RADIUS client must support RADIUS challenges to use this. Challenging the user will often result in a better user experience.
🗱 Settings		Challenge Message
		Press 1 to authenticate with the LoginTC app or enter an OTP or bypass code.
		The message that will appear to the user for the challenge. Note that the user must enter 1 for a LoginTC Push, or must enter an OTP or bypass code.
	Encryption	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.

The user will be prompted on how they wish to proceed with second-factor authentication (e.g. LoginTC Push, OTP, bypass code). Your RADIUS client must support RADIUS challenges to use this. Challenging the user will often result in a better user experience. See <u>User Experience</u> for more information.

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:

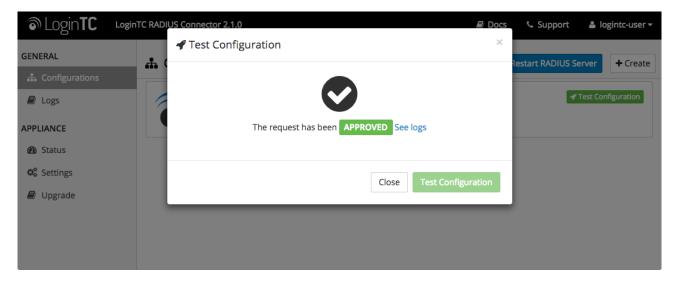
When you have loaded a token for your new user and domain, navigate to your appliance**web** interface URL:

ි Login TC	Login	TC RADIUS Connector 2.1.0	Docs	📞 Support	🐣 logintc-user -
GENERAL	_	🚓 Configurations	Re	start RADIUS Se	rver + Create
ConfigurationsLogs		office-vpn-1 (Office VPN)		* 1	est Configuration
APPLIANCE		🕒)) 🎄 RADIUS			
Status					
😂 Settings					
Upgrade					

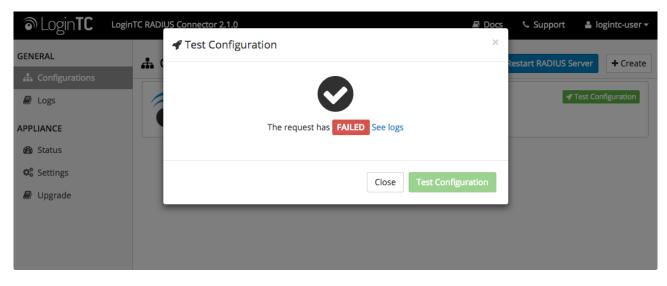
Click Test Configuration:

ົ Login TC	LoginTC RADI	US Connector 2.1.0	Docs	📞 Support	🛎 logintc-user 👻
GENERAL		A Test Configuration	×	Restart RADIUS Sei	ver + Create
Configurations Logs		Test the first and second factor authentication by simulating an actual f request. The resulting test LoginTC request will look identical to what a receive in a real authentication scenario.			est Configuration
APPLIANCE		If the authenticating user is configured to passthrough then only the fir challenge will apply.	st factor		
🕐 Status		8			
😋 Settings					
🗐 Upgrade		Username			
		Enter username			
		Password			
		Password			
		For LoginTC only authentication leave Password field blank.			
		Close Test Con	figuration		

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:



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 /var/log/logintc/authenticate.log tab to view the log file and troubleshoot:

GENERAL Image: Configurations Image: Configurations /var/log/logintc/authenticate.log /var/log/radius/radius.log /var/log/logintc/tornado.log Image: Configurations /var/log/logintc/authenticate.log /var/log/radius/radius.log /var/log/logintc/authenticate.log Image: Configurations /var/log/logintc/authenticate.log /var/log/radius/radius.log /var/log/logintc/authenticate.log Image: Configurations /var/log/logintc/authenticate.log /var/log/radius/radius.log /var/log/logintc/authenticate.log Image: Configurations /var/log/logintc/authenticate.log /var/log/logintc/authenticate.log /var/log/logintc/authenticate.log <td< th=""><th>ခါ LoginTC ၊ ဖား</th><th>nTC RADIUS Connector 2.1.0 🖻 Docs 🕓 Support 🚢 logintc-user 🗸</th></td<>	ခါ Login TC ၊ ဖား	nTC RADIUS Connector 2.1.0 🖻 Docs 🕓 Support 🚢 logintc-user 🗸
Image: Status Var/log/logintc/authenticate.log Var/log/radius/radius.log /var/log/logintc/tornado.log Image: Status 2015-04-28 17:10:15,818 - INFO - 304 GET / (10.0.10.178) 2.42ms 2015-04-28 2015-04-28 2015-04-28 17:10:17,633 - INFO - 304 GET / logs (10.0.10.178) 2.43ms Image: Status 2015-04-28 17:10:18,082 - INFO - 304 GET / logs (10.0.10.178) 2.43ms 2015-04-28 17:10:18,082 - INFO - 304 GET / logs (10.0.10.178) 2.43ms Image: Status 2015-04-28 17:10:18,082 - INFO - 304 GET / (10.0.10.178) 2.43ms 2015-04-28 17:10:21,624 - INFO - 304 GET / configurations (10.0.10.178) 2.43ms Image: Status 2015-04-28 17:10:21,806 - INFO - 304 GET / configurations (10.0.10.178) 2.43ms 2015-04-28 17:10:21,806 - INFO - 304 GET / logs (10.0.10.178) 2.43ms 2015-04-28 17:10:21,806 - INFO - 304 GET / logs (10.0.10.178) 2.43ms 2015-04-28 17:10:21,806 - INFO - 304 GET / logs (10.0.10.178) 2.43ms 2015-04-28 17:10:22,004 - INFO - 304 GET / logs (10.0.10.178) 2.43ms 2015-04-28 17:10:22,004 - INFO - 304 GET / configurations (10.0.10.178) 2.40ms 2015-04-28 17:10:22,004 - INFO - 304 GET / logs (10.0.10.178) 2.19ms 2015-04-28 17:10:22,102 - INFO - 304 GET / logs (10.0.10.178) 2.22ms 2015-04-28 17:12:20,35:39 - INFO - 304 GET / logs (10.0.10.178) 2.02ms 2015-04-28 17:12:20,35:39 - INFO - 304 GET / logs (10.0.10.178) 2.02ms 2	GENERAL	🛢 Logs
Image: Second and the second	📥 Configurations	
APPLIANCE 2015-04-28 17:10:15,818 - INFO - 304 GET / (10.0.10.178) 2.42ms 2015-04-28 17:10:17,633 - INFO - 304 GET /logs (10.0.10.178) 2.59ms 2015-04-28 17:10:18,082 - INFO - 304 GET /logs (10.0.10.178) 2.43ms 2015-04-28 17:10:18,082 - INFO - 304 GET / (10.0.10.178) 2.43ms 2015-04-28 17:10:18,082 - INFO - 304 GET / (10.0.10.178) 2.43ms 2015-04-28 17:10:12,624 - INFO - 304 GET / status (10.0.10.178) 2.43ms 2015-04-28 17:10:21,624 - INFO - 304 GET /status (10.0.10.178) 2.45ms 2015-04-28 17:10:21,624 - INFO - 304 GET /configurations (10.0.10.178) 2.45ms 2015-04-28 17:10:21,624 - INFO - 304 GET /configurations (10.0.10.178) 2.45ms 2015-04-28 17:10:21,624 - INFO - 304 GET /configurations (10.0.10.178) 2.49ms 2015-04-28 17:10:22,004 - INFO - 304 GET /configurations (10.0.10.178) 2.49ms 2015-04-28 17:10:22,162 - INFO - 304 GET /configurations (10.0.10.178) 2.19ms 2015-04-28 17:10:22,162 - INFO - 304 GET /logs (10.0.10.178) 3.00ms 2015-04-28 17:12:20,3539 - INFO - 304 GET /logs (10.0.10.178) 3.00ms 2015-04-28 17:12:20,3539 - INFO - 304 GET /logs (10.0.10.10.178) 3.00ms	🗐 Logs	/var/log/logintc/authenticate.log /var/log/radius/radius.log /var/log/logintc/tornado.log
	APPLIANCE	2015-04-28 17:10:15,818 - INFO - 304 GET / (10.0.10.178) 2.42ms
⁶⁶ Settings ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:10:21,624 - INFO - 304 GET /status (10.0.10.178) 2.45ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:10:21,806 - INFO - 304 GET /configurations (10.0.10.178) 2.40ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:10:22,004 - INFO - 304 GET /configurations (10.0.10.178) 2.19ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:10:22,162 - INFO - 304 GET /logs (10.0.10.178) 2.22ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,533 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,533 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,533 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,533 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,533 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,533 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,533 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,533 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,533 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,533 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,533 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,533 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,533 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,530 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,530 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,530 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,530 - INFO - 304 GET /logs (10.0.10.178) 3.00ms ²⁰¹⁵⁻⁰⁴⁻²⁸ 17:12:203,530 - INFO - 304 GET /logs (10.0.10.178) 3.00ms	Status	
Upgrade 2015-04-28 17:10:22,004 - INFO - 304 GET /configurations (10.0.10.178) 2.19ms 2015-04-28 17:10:22,162 - INFO - 304 GET /logs (10.0.10.178) 2.22ms 2015-04-28 17:12:03,539 - INFO - 304 GET /logs (10.0.10.178) 3.00ms	Settings	2015-04-28 17:10:21,624 - INFO - 304 GET /status (10.0.10.178) 2.45ms
Displaying last 4000 lines, as fee share extense that he even at a second	🔊 Upgrade	2015-04-28 17:10:22,004 - INFO - 304 GET /configurations (10.0.10.178) 2.19ms 2015-04-28 17:10:22,162 - INFO - 304 GET /logs (10.0.10.178) 2.22ms 2015-04-28 17:12:03,539 - INFO - 304 GET /logs (10.0.10.178) 3.00ms
Displaying last 1000 lines, refreshes automatically every 1 second.		Displaying last 1000 lines, refreshes automatically every 1 second. O Download -

WatchGuard - Quick Config Guide

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

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

ຈ Login TC	Login	TC RADIUS Connector 2.1.0			Docs	📞 Support	🛎 logintc-user -
GENERAL		o: Settings					
📥 Configurations							
🖉 Logs		Appliance					
APPLIANCE		IP Address	10.0.10.116				
🚯 Status		RADIUS Authentication Port	1812				
🕫 Settings							
┛ 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 WatchGuard Fireware XTM Web UI, the same is true for other devices in the XTM series.

Mobile VPN with IPsec

1. Log in to your WatchGuard (Fireware XTM Web UI)

WatchGuard Fireware >	(TM Web UI
	Username admin Password

2. Click Authentication:

re XTM Web UI				User: admin Help Logout
Front Panel				C
Top Clients				System
Name	Rate ≑	Bytes	Hits	Name XTMv
10.0.1.5	150 Kbps	341 KB	17	Model XTMv
10.0.10.178	13 Kbps	1 KB	1	Version 11.8.B432340 Serial Number V1C5000000000
				System Time 12:48 US/Eastern
Top Destination	s			System Date 2013-12-13
Name	Rate 🔤	Bytes	Hits	Uptime 0 days 00:14
23.60.247.88	109 Kbps	142 KB	6	Log Server Disabled
173.194.43.111	19 Kbps 🚪	113 КВ	1	Reboot
10.0.10.183	13 Kbps	1 КВ	1	
23.61.177.207	7 Kbps	9 КВ	1	
184.150.152.18	6 Kbps	52 КВ	2	Last 20 Minutes \$
<u>63.140.54.90</u>	3 Kbps	3 КВ	1	External Bandwidth
	Front Panel Top Clients Name 10.0.1.5 10.0.10.178 Top Destination Name 23.60.247.88 173.194.43.111 10.0.10.183 23.61.177.207 184.150.152.18	Front Panel Top Clients Name Rate ♀ 10.0.1.5 150 Kbps 10.0.10.178 13 Kbps Top Destinations Rate ♀ 23.60.247.88 109 Kbps 173.194.43.111 19 Kbps 10.0.10.183 13 Kbps 23.61.177.207 7 Kbps 184.150.152.18 6 Kbps	Top Clients Name Rate ♀ Bytes 10.0.1.5 150 Kbps 341 KB 10.0.10.178 13 Kbps 1 KB Top Destinations Bytes 23.60.247.88 109 Kbps 142 KB 10.0.10.183 13 Kbps 113 KB 10.0.10.183 13 Kbps 1 KB 123.61.177.207 7 Kbps 9 KB 184.150.152.18 6 Kbps 52 KB	Front Panel Top Clients Name Rate Bytes Hits 10.0.1.5 150 Kbps 341 KB 17 10.0.1.5 150 Kbps 341 KB 17 10.0.10.178 13 Kbps 1 KB 1 Top Destinations Bytes Hits 23.60.247.88 109 Kbps 142 KB 6 6 173.194.43.111 19 Kbps 113 KB 1 1 23.61.177.207 7 Kbps 9 KB 1 1 184.150.152.18 6 Kbps 52 KB 2 1

3. Under Authentication click Servers:

WatchGuard Firewa	re XTM Web UI				User: admin Help Logout
DASHBOARD Front Panel Subscription Services FireWatch Interfaces	Front Panel				System
Traffic Monitor Gateway Wireless Controller	Name	Rate 🜲	Bytes	Hits	Name XTMv
SYSTEM STATUS	10.0.10.178	13 Kbps	1 КВ	1	Model XTMv
NETWORK	10.0.1.5	4 Kbps	58 КВ	3	Version 11.8.B432340 Serial Number V1C5000000000
FIREWALL SUBSCRIPTION SERVICES	Top Destination	s			System Time 12:50 US/Eastern System Date 2013-12-13
AUTHENTICATION	Name	Rate 🗘	Bytes	Hits	Uptime 0 days 00:16
Hotspot	10.0.10.183	13 Kbps	1 KB	1	Log Server Disabled
<u>Servers</u> Settings	184.150.152.18	2 Kbps 📕	48 КВ	1	Reboot
Users and Groups Web Server Certificate	66.196.113.5	1 Kbps	4 КВ	1	
Single Sign-On Terminal Services	173.192.82.194	208 bps	6 КВ	1	Last 20 Minutes 💠
VPN	Top Policies				
SYSTEM	Name	Rate 🚖	Rytes	Hits	External Bandwidth

4. Under Authentication Servers click RADIUS:

WatchGuard Firev	User: admin Help Logout		
DASHBOARD SYSTEM STATUS	Servers		
NETWORK	Authentication Servers		
SUBSCRIPTION SERVICES AUTHENTICATION Hotspot	Server	Status	
	Firebox	0 Users	0 Groups
Servers Settings	RADIUS	Primary	Disabled
Users and Groups Web Server Certificate		Secondary	Disabled
Single Sign-On Terminal Services	SecurID	Primary	Disabled
VPN SYSTEM		Secondary	Disabled
	LDAP	Primary	Disabled
		Secondary	Disabled
	Active Directory	0 domains	

5. Under Primary Server Settings click Enable RADIUS Server:

WatchGuard Firewa	are XTM Web UI		User: admin Help Logout			
DASHBOARD SYSTEM STATUS	Servers / RADIUS					
NETWORK FIREWALL SUBSCRIPTION SERVICES	Before you configure your XTM device to use a RADIUS authentication server, make sure the server can successfully accept and process RADIUS authentication requests. Primary Server Settings					
AUTHENTICATION Hotspot Servers Settings	Enable RADIUS Server					
Users and Groups Web Server Certificate Single Sign-On	Port	1812	٢			
Terminal Services VPN	Passphrase					
SYSTEM	Confirm					
	Timeout	5	(t) seconds			
×.	Retries	3	٢			

6. Complete Primary Server Settings form:

FIREWALL	successfully accept and process F	RADIUS authentication requests.	
SUBSCRIPTION SERVICES	Primary Server Settings		
Hotspot	Server Enable RADIUS Server		_
Servers Settings	IP Address	10.0.10.130 I	
Users and Groups Web Server Certificate	Port	1812	٢
Single Sign-On Terminal Services	Passphrase		
VPN SYSTEM	Confirm		
	Timeout	60	seconds
	Retries	1	٢
	Group Attribute	11	•
	Dead Time	10 (*) Minutes (*)	
	Secondary Server Settings	I Minutes V	

Property	Explanation	Example
IP Address	Address of LoginTC RADIUS Connector	10.0.10.130
Port	RADIUS authentication port. Must be 1812.	1812
Passphrase	The secret shared between the LoginTC RADIUS Connector and its client	bigsecret
Confirm	The secret shared between the LoginTC RADIUS Connector and its client	bigsecret
Timeout	Amount of time in seconds to wait. At least 90s.	90
Retries	Amount of times to retry authentication. Must be 1.	1
Group Attribute	RADIUS Attribute to be populated with user group info. Must be 11 when using SSL.	11
Dead Time	Amount of time an unresponsive RADIUS server is marked as inactive	10

Group Attribute and Access Control

WatchGuard devices can use the **Group Attribute** value to set the attribute that carries the User Group information. This information is used for access control by certain VPN protocols.

If you are using multiple VPN protocols (such as SSL) then you may need to set the value to match their requirements.

7. Click VPN:

WatchGuard Firev	User: admin Help Logout		
DASHBOARD SYSTEM STATUS	Servers		
NETWORK	Authentication Servers		
SUBSCRIPTION SERVICES	Server	Status	
AUTHENTICATION Hotspot	Firebox	0 Users	0 Groups
Servers Settings	RADIUS	Primary	10.0.10.130
Users and Groups Web Server Certificate		Secondary	Disabled
Single Sign-On Terminal Services	SecurID	Primary	Disabled
SYSTEM		Secondary	Disabled
	LDAP	Primary	Disabled
		Secondary	Disabled
	Active Directory	0 domains	

8. Under VPN click Mobile VPN with IPsec

WatchGuard Firewa	are XTM Web UI	Us	ser: admin Help Logout
DASHBOARD SYSTEM STATUS	Servers		
NETWORK FIREWALL	Authentication Servers		
SUBSCRIPTION SERVICES	Server	Status	
AUTHENTICATION VPN	Firebox	0 Users	2 Groups
Branch Office VPN BOVPN Virtual Interfaces	RADIUS	Primary	10.0.10.83
Phase2 Proposals Mobile VPN with IPSec		Secondary	Disabled
Mobile VPN The PTP Mobile VPN with SSL Mobile VPN with L2TP Global Settings	SecurID	Primary	Disabled
		Secondary	Disabled
SYSTEM	LDAP	Primary	Disabled
		Secondary	Disabled

9. Click **Add** to create a new group. Note that the name of the group does not have to match any of the groups names in the LDAP Directory

WatchGuard Fire	ware XTM Web UI
DASHBOARD SYSTEM STATUS NETWORK FIREWALL SUBSCRIPTION SERVICES	Mobile VPN with IPSec Groups Name Authentication Serv Allowed Access Virtual IP Pool IPSec Settings
SUBSCRIPTION SERVICES AUTHENTICATION VPN Branch Office VPN BOVPN Virtual Interfaces Phase2 Proposals Mobile VPN with IPSec Mobile VPN with IPSEc Mobile VPN with SSL Mobile VPN with SSL Mobile VPN with L2TP Global Settings SYSTEM	Add Edit Remove Configuration File Generation Image: Configuration File Generation To generate a mobile VPN client configuration file, select a mobile user group from the list above, then select a VPN client and click Generate. The Shrew Soft VPN client does not support all WatchGuard Mobile VPN with IPSec configuration settings. For a list of settings not supported by the Shrew Soft VPN client, click Help. Client WatchGuard Mobile VPN Image: Generate Global Settings Settings

- Make security policies read-only in the WatchGuard Mobile VPN client
- 10. In General Settings, complete the form and select RADIUS as the authentication server.

WatchGuard Firew	are XTM Web UI	User: admin Help Logout
DASHBOARD SYSTEM STATUS NETWORK FIREWALL SUBSCRIPTION SERVICES	Mobile VPN with IPSec / Add Name Office VPN	
AUTHENTICATION VPN Branch Office VPN BOVPN Virtual Interfaces Phase2 Proposals	General IPSec Tunnel Resources Advanced General Settings Authentication Server RADIUS	
Mobile VPN with IPSec Mobile VPN with PPTP Mobile VPN with SSL Mobile VPN with L2TP Global Settings SYSTEM	Passphrase Confirm	
	Firebox IP Addresses	

Property	Explanation	Example
Name	A unique name for this group configuration. This name must match exactly the LDAP / AD group name configured in First Factor authentication Group Attribute (advanced).	Office VPN
Authentication Server	The type of device that users of this group will be authenticated with.	Radius
Passphrase	The secret shared between the Mobile VPN client and the RADIUS server. The secret must be provided to all IPsec users.	sharedsecret
Confirm	The secret shared between the Mobile VPN client and the RADIUS server.	sharedsecret
Primary	Primary IP address or domain name Firebox users connect to.	10.0.10.130

Property	Explanation	Example
Backup (optional)	Secondary IP address or domain name Firebox users connect to.	10.0.10.131

Mobile VPN with IPSec group profile name

In order to use Mobile VPN with IPSec, the Mobile VPN with IPSec group profile name must match exactly the LDAP / AD group name configured in First Factor authentication Group Attribute (advanced).

11. Fill out the forms under the **IPsec Tunnel**, **Resources**, and **Advanced** tabs to match the settings of your client. For more information about IPsec client configurations, check the <u>WatchGuard Documentation</u>

WatchGuard Firew	are XTM Web UI		User: admin Help Logout
DASHBOARD SYSTEM STATUS	Mobile VPN with IPSec / Add	д	
NETWORK FIREWALL SUBSCRIPTION SERVICES	Name Office VPN		
AUTHENTICATION	General IPSec Tunnel	Resources Advanced	
VPN Branch Office VPN BOVPN Virtual Interfaces Phase2 Proposals Mobile VPN with IPSec Mobile VPN with IPSP Mobile VPN with SSL Mobile VPN with L2TP Global Settings SYSTEM	General Settings Authentication Server RADIUS Passphrase Passphrase Confirm	\$ •••••••••	
	Firebox IP Addresses		
Click Save			
	Timeouts		
	If the session and idle timeouts a over these settings	re configured on your authenticatio	n server, they will take precedence
	Session Timeout	480	minutes
	Idle Timeout	30	minutes
	Cancel		

You are now ready to test your configuration.

To test IPsec connections, use an IPsec VPN client such as the WatchGuard Mobile Application.

User Management

12.

There are several options for managing your users within LoginTC:

Failover

WatchGuard devices have built-in settings that make it easy to configure a secondary RADIUS server to provide failover.

After three authentication attempts fail, Fireware XTM uses the secondary RADIUS server for the next authentication attempt. If the secondary server also fails to respond after three authentication attempts, Fireware XTM waits for the **Dead Time** interval (10 minutes by default) to elapse. After the Dead Time interval has elapsed, Fireware XTM tries to use the primary RADIUS server again.

— WatchGuard System Manager Help

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. Afterwards, login to your **WatchGuard Web UI** and make the following changes:

1. Select Authentication from the left-hand navigation bar

WatchGuard	Firewa	re XTM Web	UI			User: admir	n Help Logout
DASHBOARD SYSTEM STATUS NETWORK		Front Panel					m ^e
FIREWALL		Top Clients				System	
SUBSCRIPTION SERVIC	CES	Name	Rate 🌲	Bytes	Hits	Name	XTM_2_Series-W
AUTHENTICATION	ŝ	10.0.88.100	531 Kbps	21 MB	21	Model	XTM26-W
VPN SYSTEM		10.0.88.104	211 Kbps 📒	9 MB	14	Version Serial Number	11.9.5.B470931 70A70CDC3D640
STSTEM		10.0.88.102	29 Kbps	9 MB	13	System Time	14:42 US/Eastern
		Top Destinatio	ns			System Date Uptime	2015-06-17 2 days 01:55

2. Click Servers

WatchGuard Firewa	re XTM Web L	Л			User: admir	n Help Logout
DASHBOARD SYSTEM STATUS NETWORK	Front Panel					٢
FIREWALL	Top Clients				System	
SUBSCRIPTION SERVICES	Name	Rate 😓	Bytes	Hits	Name	XTM 2 Series-W
AUTHENTICATION Hotspot	10.0.88.100	151 Kbps	3 MB	22	Model	XTM26-W
Settings	10.0.88.104	105 Kbps	8 MB	118	Version Serial Number	11.9.5.B470931 70A70CDC3D640
Setfus Users and Groups	10.0.88.102	28 Kbps	9 МВ	14	System Time	14:43 US/Eastern
Web Server Certificate Single Sign-On	Top Destination	S			System Date	2015-06-17 2 days 01:56
Terminal Services Authentication Portal	Name	Rate 🜩	Bytes	Hits	Log Server	Disabled
VPN	184.150.152.14	126 Kbps	2 MB	1	Reboot	
SYSTEM	74.125.29.101	20 Kbps	646 КВ	1		
	136.146.210.32	19 Kbps	177 КВ	2		
	184.150.152.18	18 Kbps	137 KB	2	Last 20 Mir	nutes 🛊

3. Select RADIUS

WatchGuard Fire	ware XTM Web UI		User: admin Help Logout
DASHBOARD SYSTEM STATUS	Servers		
NETWORK FIREWALL	Authentication Servers		
SUBSCRIPTION SERVICES	Server	Status	
AUTHENTICATION	Firebox	0 Users	2 Groups
Servers Settings	RADIUS	Primary	10.0.10.83
Users and Groups Web Server Certificate	Ê	Secondary	Disabled
Single Sign-On Terminal Services	SecurID	Primary	Disabled
Authentication Portal VPN SYSTEM		Secondary	Disabled
	LDAP	Primary	Disabled
		Secondary	Disabled

4. Check the box to Enable Secondary RADIUS Server

	Dead Time	24	Hours	\$
Secondary Serve	-			
C Enable Secon	ndary RADIUS Se	erver		
1	IP Address			
	Port	1812		
	Passphrase			
	Confirm			
	Timeout	5		seconds
	Retries	3		

5. Complete the Secondary Server Settings Form using the same settings as the primary one

Secondary Server Settings		
Enable Secondary RADIUS S	erver	
IP Address	10.0.10.131	
Port	1812)
Passphrase]
Confirm]
Timeout	120	seconds
Retries	1]
Group Attribute	11]
Dead Time	10 Minutes \$	
Save		

Property	Explanation	Example
IP Address	Address of Secondary LoginTC RADIUS Connector	10.0.10.131
Port	RADIUS authentication port. Must be 1812.	1812
Passphrase	The secret shared between the LoginTC RADIUS Connector and its client	newsecret
Confirm	The secret shared between the LoginTC RADIUS Connector and its client	newsecret
Timeout	Amount of time in seconds to wait. Must be at least 10 seconds longer than the LoginTC Request Timeout.	70
Retries	Amount of times to retry authentication. Must be 1.	1
Group Attribute	RADIUS Attribute to be populated with user group info. Must be 11.	11
Dead Time	Amount of time an unresponsive RADIUS server is marked as inactive before the WatchGuard device attempts to connect to it again	10

6. Click Save

Retries	1
Group Attribute	11
Dead Time	10 Minutes \$
Save	

User Receives Multiple LoginTC Requests

See the Knowledge Base articles:

- My WatchGuard SSL VPN users receive multiple LoginTC requests. What can I do?
- My WatchGuard IPSec VPN users receive multiple LoginTC requests. What can I do?

Authentication times out

See the Knowledge Base articles:

- My WatchGuard SSL VPN users receive multiple LoginTC requests. What can I do?
- My WatchGuard IPSec VPN users receive multiple LoginTC requests. What can I do?

No Network Connection

- 1. First ensure that your LoginTC RADIUS Connector is configured to have a virtual network adapter on etho
- 2. Ensure that the virtual network adapter MAC address matches the one in the file /etc/sysconfig/network-scripts/ifcfg-eth0
- 3. Restart the networking service:

service network restart

4. If you notice the error that etho is not enabled, then check driver messages for more information:

dmesg | grep eth

5. It's possible that the virtualization software renamed the network adapter to eth1. If this is the case, rename /etc/sysconfig/network-scripts/ifcfg-eth0 to ifcfg-eth1.

```
mv /etc/sysconfig/network-scripts/ifcfg-eth0 /etc/sysconfig/network-
scripts/ifcfg-eth1
```

Open the file and update the DEVICE="eth0" line to DEVICE="eth1"

Not Authenticating

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

ه Login TC	oginTC RADIUS Connector 2.1.0	🗐 Docs	Support	🛓 logintc-user 🗸
GENERAL	🔁 Status			
🖧 Configurations				
🖻 Logs	All status checks have passed.			
APPLIANCE	A Ding aloud logists som			
🚯 Status	✓ Ping cloud.logintc.com			
📽 Settings	✓ RADIUS Process			
Upgrade	✓ CPU Usage			
	✓ RAM Usage			
	✓ Disk Usage			
	✓ Version check			

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

ခါ Login TC Login	FC RADIUS Connector 2.1.0	🛿 Docs 🥾 Support 🚢 logintc-user -
GENERAL	Logs	
A Configurations		
🗐 Logs	/var/log/logintc/authenticate.log /var/log/radius/radius.log	/var/log/logintc/tornado.log
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 17:10:22,064 - INFO - 304 GET /configuratio 2015-04-28 17:10:22,064 - INFO - 304 GET /logs (10.0.1 2015-04-28 17:10:22,064 - INFO - 304 GET /logs (10.0.1) 2015-04-28 17:10:20,162 - INFO - 304 GET /logs (10.0.1) 2015-04-28 17:1000 lines, refreshes automatically en	<pre>10.178) 2.59ms ons (10.0.10.178) 2.43ms 78) 2.43ms 9.10.178) 2.45ms ons (10.0.10.178) 2.40ms ons (10.0.10.178) 2.40ms ons (10.0.10.178) 2.19ms 10.178) 2.22ms 10.178) 3.00ms </pre>

Unsuccessful authentication may be caused by premature timeouts

If you have activated Mobile VPN with SSL, check that your<u>Group Attributes</u> are configured correctly.

Incorrect Group Settings

If you are using a Mobile VPN protocol such as SSL and are unable to authenticate, check that your Group Attributes are configured correctly. Navigate to your **WatchGuard Web UI** and click **Dashboard** in the left-hand navigation bar:

WatchGuard Firew	are XTM Web	UI				User: admir	n Help Logout
DASHBOARD SYSTEM STATUS	Front Panel						C
FIREWALL	Top Clients					System	
SUBSCRIPTION SERVICES	Name	Rate ≑	By	tes	Hits	Name	XTM_2_Series-W
AUTHENTICATION	10.0.88.104	166 Kbps	11 MB		64	Model	XTM26-W
VPN	10.0.88.100	107 Kbps	720 KB		37	Version Serial Number	11.9.5.B470931 70A70CDC3D640
SYSTEM	10.0.88.102	73 Kbps 📕	9 MB		17	System Time	14:52 US/Eastern
						System Date	2015-06-17
	Top Destination	ons				Uptime	2 days 02:05

Log Server

Disabled

Click on Traffic Monitor:

WatchGuard Firewa	are XTM Web L	II			User: admir	n Help Logout
DASHBOARD Front Panel Subscription Services FireWatch	Front Panel					C
Interfaces Traffic Monitor	Top Clients				System	
Gatew Wireless Controller	Name	Rate 😓	Bytes	Hits	Name	XTM_2_Series-W
SYSTEM STATUS	10.0.88.104	138 Kbps	11 MB	57	Model	XTM26-W
NETWORK	10.0.88.100	61 Kbps 📒	873 KB	36	Version Serial Number	11.9.5.B470931 70A70CDC3D640
FIREWALL	10.0.88.102	35 Kbps	10 MB	14	System Time	14:53 US/Eastern
SUBSCRIPTION SERVICES		_			System Date	2015-06-17
AUTHENTICATION	Top Destination	IS			Uptime	2 days 02:06
VPN	Name	Rate 😓	Bytes	Hits	Log Server	Disabled
SYSTEM	184.150.152.15	65 Kbps 📕	1 MB	3	Reboot	
	74.125.22.139	53 Kbps 📒	2 MB	1		
	10.0.10.164	14 Kbps	11 MB	2		

Select **Diagnostic** from the table header options:

WatchGuard Firew	are XTM Web UI	User: admin Help Logout
DASHBOARD Front Panel	Traffic Monitor	-
Subscription Services	I rame monitor	п
FireWatch		
Interfaces	i 😤 😕 👿 💐 🖬 😑	Q
Traffic Monitor	2015-06-17 15:03:23 sessiond sessiond: sessiond WGAPI call	
Gateway Wireless Controller	2015-06-17 15:03:23 sessiond sessiond: wgapi: rcved cmd=1 '/toS	Sessiond/updateActivity' fromIPC=-61236
SYSTEM STATUS	2015-06-17 15:03:23 sessiond sessiond: get into sess_prcs_status	s(): xpath=/toSessiond/updateActivity
NETWORK	2015-06-17 15:03:23 sessiond OK! sess update oK, sessId=28 2015-06-17 15:03:26 Deny 10.0.10.176 10.0.10.255 netbios-ns/ud	p 137 137 0-External Firebox Denied 78
FIREWALL	2015-06-17 15:03:32 hostapd ath1: STA 7c:d1:c3:7b:ff:62 IEEE 80 2015-06-17 15:03:32 hostapd ath1: STA 7c:d1:c3:7b:ff:62 IEEE 80	
SUBSCRIPTION SERVICES	2015-06-17 15:03:32 hostapd ath1: STA 7c:d1:c3:7b:ff:62 WPA: p	
AUTHENTICATION	2015-06-17 15:03:37 Deny 10.0.88.100 255.255.255.255 17500/u 2015-06-17 15:03:39 Deny 10.0.20.30 10.0.10.1 dns/udp 58082 5	dp 17500 17500 1-WG-Wireless-Access
VPN	2015-06-17 15:03:39 Deny 10.0.20.30 10.0.10.1 dns/udp 51650 5	
SYSTEM	2015-06-17 15:03:43 iked ******** RECV message on fd_server(7) 2015-06-17 15:03:43 iked recv CMD XPATH(/ping), need to proce 2015-06-17 15:03:43 sessiond sessiond: sessiond WGAPI call	•******** ess it
	2015-06-17 15:03:43 sessiond sessiond: wgapi: rcved cmd=7 '/pin 2015-06-17 15:03:46 Deny 10.0.10.176 10.0.10.8 2054/udp 54312	

If you can find the following error message then there is a problem with your Group Attribute

settings:

2015-XX-XX 16:52:41 admd Authentication failed: user username@RADIUS isn't in the authorized SSLVPN group/user list!

Search for the following error message:

2015-XX-XX 16:59:52 admd RADIUS: no attribute-value pair is retrieved from packet

If found, it means that the RADIUS Connector is not sending back any Group Attribute information. Navigate to your appliance **web interface** and click **Configurations**. Select the domain you're having problems with:

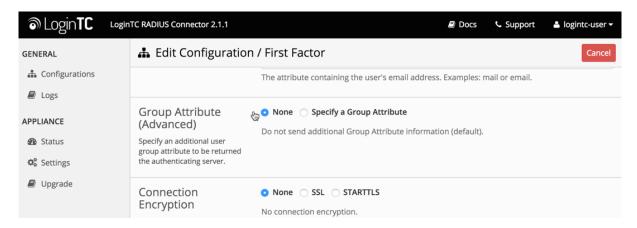
ි Login TC	LoginTC RADIUS Connector 2.1.1	🗐 Docs 🕓 Support 🖀 logintc-user 🕶
GENERAL	🚓 Configurations	Restart RADIUS Server + Create
🖧 Configurations		
🗐 Logs	test-radius-1 (TestDomain)	✓ Test Configuration
APPLIANCE	()) m RADIUS	
🚯 Status		
🗱 Settings		
🗐 Upgrade		

Click the Edit Button in the First Factor section:

ම Login TC යැ	ginTC RADIUS Connector 2.1.1	🖻 Docs 🕓 Support 🔒 logintc-user 🗸					
GENERAL	A Configurations / to	est-radius-1 Test Configuration Back Delete					
Logs		The 40-character domain ID is found on the LoginTC Admin Panel domain settings page.					
APPLIANCE		C Edit					
ℬ Status✿ Settings	First Factor Select the first way users will	○ LDAP ④ Active Directory ○ RADIUS ○ None Connect to an existing Active Directory server for username / password verification.					
┛ Upgrade	authenticate prior to LoginTC.	Car Edit 👆					
	Passthrough	No Passthrough Static List LDAP Group Active Directory Group					
	Configure list of users which will not be challenged by	All authentications will be challenged with LoginTC. This can be configured at anytime.					

Scroll down to the to the Group Attribute section:

1. If "None" is selected, change it to "Specify a group attribute".<u>Click here</u> to review how to configure the Group Attribute for SSL



2. Otherwise, check that your user is a member of the specified group in the LDAP Directory. If they are not, it will cause RADIUS to return a blank attribute.

ه Login TC	oginTC RADIUS Connector 2.1.1	Docs Support & logintc-user •						
GENERAL	📥 Edit Configuration	A / First Factor Cancel						
Lonfigurations		The attribute containing the user's email address. Examples: mail or email.						
Logs	Course Attaillants							
APPLIANCE	Group Attribute (Advanced)	RADIUS Group Attribute						
Status	Specify an additional user group attribute to be returned	filter-id						
📽 Settings 🗐 Upgrade	the authenticating server.	Name of RADIUS attribute to send back. For example, for WatchGuard this is the named value of the Group Attribute, e.g. for a Group Attribute value of 11, use: Filter-Id.						
		AD Group						
		SSLVPN-Users						
		The name of the AD group to be sent back to the authenticating server. The user must be a member of the group for the attribute to be sent back. of Examples: SSLVPN-Users.						

If you find a log message similar to this:

2015-XX-XX 16:52:41 admd RADIUS: finished parsing attribute-value pairs 2015-XX-XX 16:52:41 admd RADIUS: group 1, type=11 value=L2TP-Users 2015-XX-XX 16:52:41 admd RADIUS: retrieve VP:Filter-Id(11) int=10

Then the RADIUS server is sending back a Group Attribute, but it may not be the correct one.

Check that the **value** is the name of the group that has been added to list of groups authorized to authenticate with SSL. Log into the **WatchGuard Web UI** and select **VPN** from the left-hand navigation bar. Click on **Mobile VPN with SSL** :

WatchGuard Fire	ware XTM Web UI
DASHBOARD SYSTEM STATUS	Traffic Monitor
NETWORK FIREWALL	🗐 😤 😻 📆 💥 🔟 🚍
SUBSCRIPTION SERVICES	2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)******** RECV an IKE packet at 10.0.10.8:500(socke 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)ike_match_if_name: Match pcy [RandomR_mu] dev 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)ike_match_if_name: Match pcy [L2TP-IPSec_I2] dev
VPN Branch Office VPN BOVPN Virtual Interfaces Phase2 Proposals Mobile VPN with IPSec Mobile VPN with PBTP	2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Found IKE Policy [RandomR_mu, dev=anyE] for per 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)IkeNotifyPayloadNtoH : SPI Size 16 first4(0x95b525 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Process Notify Payload : NOTIFY-TYPE : 36136 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Process ISAKMP Notify : from peer 0x0a000a8c pro 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Received DPD R_U_THERE message from 10.0.10 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Received DPD R_U_THERE message from 10.0.10 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Received DPD R_U_THERE message from 10.0.10 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Received DPD R_U_THERE message from 10.0.10 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Received DPD R_U_THERE message from 10.0.10 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Received DPD R_U_THERE message from 10.0.10 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Received DPD R_U_THERE message from 10.0.10 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Received DPD R_U_THERE message from 10.0.10 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Received DPD R_U_THERE message from 10.0.10 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Received DPD R_U_THERE message from 10.0.10 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Received DPD R_U_THERE message from 10.0.10 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Received DPD R_U_THERE Message from 10.0.10 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Received PD R_U_THERE Message from 10.0.10 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140)Received PD R_U_RECEIVER RECEIVER RUBER
Mobile VPN with PPTP <u>Mobile VPN with SSL</u> Mobile VPN With L2TP Global Settings SYSTEM	2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140/ike_DI_status_crig: kePcyName=RandomR_mu, sta 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140/ikeMutiWanVpnFailBack:> 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140/ikeNotifyPayloadHtoN : net order spi(0x95 0xb5 0x2 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140/ikeNotifyPayloadHtoN : net order spi(0x95 0xb5 0x2 2015-06-17 15:04:23 iked (10.0.10.8<->10.0.10.140/ikeNotifyPayloadHtoN : net order spi(0x95 0xb5 0x2 2015-06-17 15:04:43 iked ************************************

Click on the Authentication tab:

WatchGuard Firewa	are XTM Web UI	User: admin Help Logout
DASHBOARD SYSTEM STATUS NETWORK FIREWALL SUBSCRIPTION SERVICES AUTHENTICATION VPN Branch Office VPN BOVPN Virtual Interfaces Phase2 Proposals Mobile VPN with IPSec Mobile VPN with IPSec Mobile VPN with PPTP Mobile VPN with SSL Mobile VPN with SSL Mobile VPN with L2TP Global Settings SYSTEM		VPN-Users" group and the "WatchGuard SSLVPN" onnections from the Internet to the external interface.
	Networking and IP address pool	

The bottom table contains the list of groups that are authorized to connect with SSL. If the group returned by the RADIUS server is not part of it, it must be added. Click the **Add** button:

)	Name	Туре	Authentication Server
5	SSLVPN-Users	Group	Any

Type in the group name and select **RADIUS** as the Authentication Server:

Mobile VPN with Global Settings	L2TP	fault)	nementication derrei		
SYSTEM	Add User or Grou	qı		×	
	Туре	 Group User 			
	Name	GroupName			s you define are
	Authentication Server	RADIUS	\$		
			ОК	Cancel	

Authentication Timing Out

If authentication is failing, it is possible that the authentication requests are timing out too quickly. By default, LoginTC push requests will timeout after 90 seconds. Another timeout value is defined by the RADIUS server configuration. If it is set too low, it will cause requests to prematurely timeout. To check, login to your **WatchGuard Web UI**

WatchGuard	Firewa	re XTM Web I	UI			User: admir	n Help Logout
DASHBOARD SYSTEM STATUS NETWORK FIREWALL		Front Panel				System	n.
FIREWALL SUBSCRIPTION SERVICES AUTHENTICATION VPN SYSTEM		Name 10.0.88.100 10.0.88.104 10.0.88.102	Rate 🖨	Bytes 21 MB 9 MB 9 MB	Hits 21 14 13	Name Model Version Serial Number System Time	XTM_2_Series-W XTM26-W 11.9.5.B470931 70A70CDC3D640 14:42 US/Eastern
		Top Destination	ns			System Date Uptime	2015-06-17 2 days 01:55

1. Select Authentication from the left-hand navigation bar, then click Servers

WatchGuard Firewa	re XTM Web L	Л			User: admir	n Help Logout		
DASHBOARD SYSTEM STATUS NETWORK	Front Panel					٢		
FIREWALL	Top Clients				System			
SUBSCRIPTION SERVICES	Name	Rate 🔶	Bytes	Hits	Name	XTM 2 Series-W		
AUTHENTICATION Hotspot	<u>10.0.88.100</u> 10.0.88.104	151 Kbps	3 MB	22	Model Version	XTM26-W 11.9.5.B470931		
Servers Setters Users and Groups	<u>10.0.88.104</u> <u>10.0.88.102</u>	28 Kbps	9 MB	14	System Time 14:43 US/Ea	70A70CDC3D640 14:43 US/Eastern		
Web Server Certificate Single Sign-On	Top Destination	\$			System Date 2015-06-17 Uptime 2 days 01:56			
Terminal Services Authentication Portal	Name	Rate 🜩	Bytes	Hits	Log Server	Disabled		
VPN	184.150.152.14	126 Kbps 🔜	2 MB	1	Reboot			
SYSTEM	74.125.29.101	20 Kbps	646 KB	1				
	136.146.210.32	19 Kbps	177 KB	2				
	184.150.152.18	18 Kbps	137 KB	2	Last 20 Mir	nutes 🛊		

2. Click **RADIUS**

WatchGuard Fire	ware XTM Web UI		User: admin Help Logout
DASHBOARD SYSTEM STATUS	Servers		
NETWORK FIREWALL	Authentication Servers		
SUBSCRIPTION SERVICES	Server	Status	
AUTHENTICATION Hotspot Servers Settings Users and Groups Web Server Certificate Single Sign-On Terminal Services Authentication Portal VPN SYSTEM	Firebox	0 Users	2 Groups
	RADIUS	Primary	10.0.10.83
	L.	Secondary	Disabled
	SecurID	Primary	Disabled
		Secondary	Disabled
	LDAP	Primary	Disabled
		Secondary	Disabled

3. Check the **Timeout** attribute field. It should be at least 10 seconds longer than the LoginTC Request Timeout set in the LoginTC RAIDUS Connector.

WatchGuard Fire	ware XTM Web UI		Usei	r: admin Heip Logout
DASHBOARD SYSTEM STATUS NETWORK FIREWALL SUBSCRIPTION SERVICES AUTHENTICATION Hotspot Servers Settings Users and Groups	Servers / RADIUS Before you configure your XTM of	device to use a RADIUS authenticatio RADIUS authentication requests.		
Single Sign-On Terminal Services Authentication Portal	Passphrase	[
VPN SYSTEM	Confirm	120	n 0	seconds
	Timeout	V V		: 1-120 Default: 5

See the <u>Knowledge Base</u> articles for more information:

- My WatchGuard SSL VPN users receive multiple LoginTC requests. What can I do?
- <u>My WatchGuard IPSec VPN users receive multiple LoginTC requests. What can I do?</u>

Email Support

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