Two factor authentication for Cisco ASA IPSec VPN Alternative

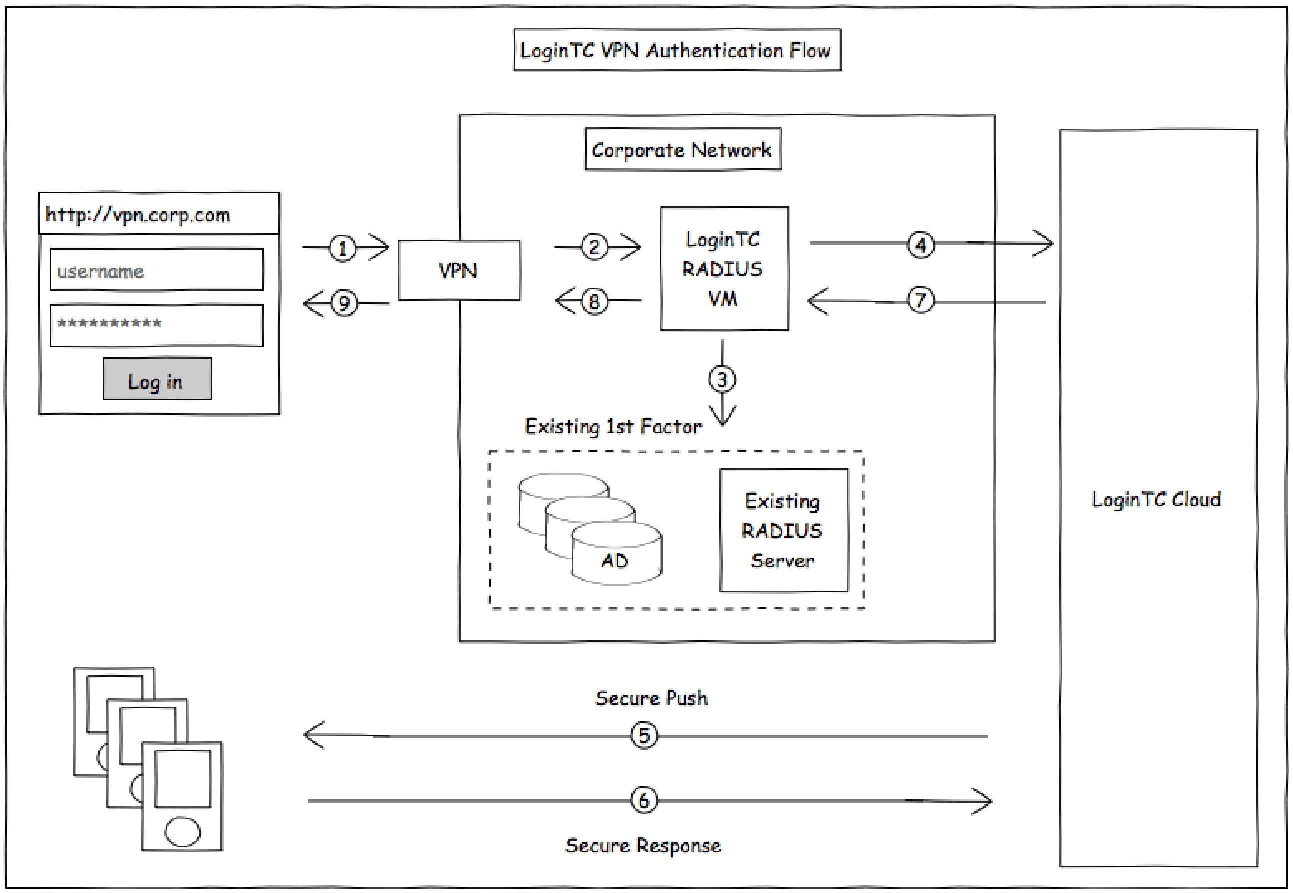
logintc.com/docs/connectors/cisco-asa-ipsec-alt.html

The LoginTC RADIUS Connector is a complete two-factor authentication virtual machine packaged to run within your corporate network. The LoginTC RADIUS Connector enables Cisco ASA to use LoginTC for the most secure two-factor authentication. For an alternate method using Challenge Response then you may be interested in: Two factor authentication for Cisco ASA IPSec VPN Alternative.

User Experience

After entering the username and password into the IPSec client, an authentication request is sent to the user's mobile device using a push notification. The user simply needs to approve the request for second factor.

Architecture



Compatibility

Cisco ASA appliance compatibility:

- Cisco ASA 5505
- Cisco ASA 5506-X Series
- Cisco ASA 5508-X
- Cisco ASA 5510-X
- Cisco ASA 5512-X
- Cisco ASA 5515-X
- Cisco ASA 5516-X
- Cisco ASA 5525-X
- Cisco ASA 5545-X
- Cisco ASA 5555-X
- Cisco ASA 5585-X Series
- Cisco appliance supporting RADIUS authentication

Appliance not listed?

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

Compatibility Guide

Any other Cisco appliance which have configurable RADIUS authentication are supported.

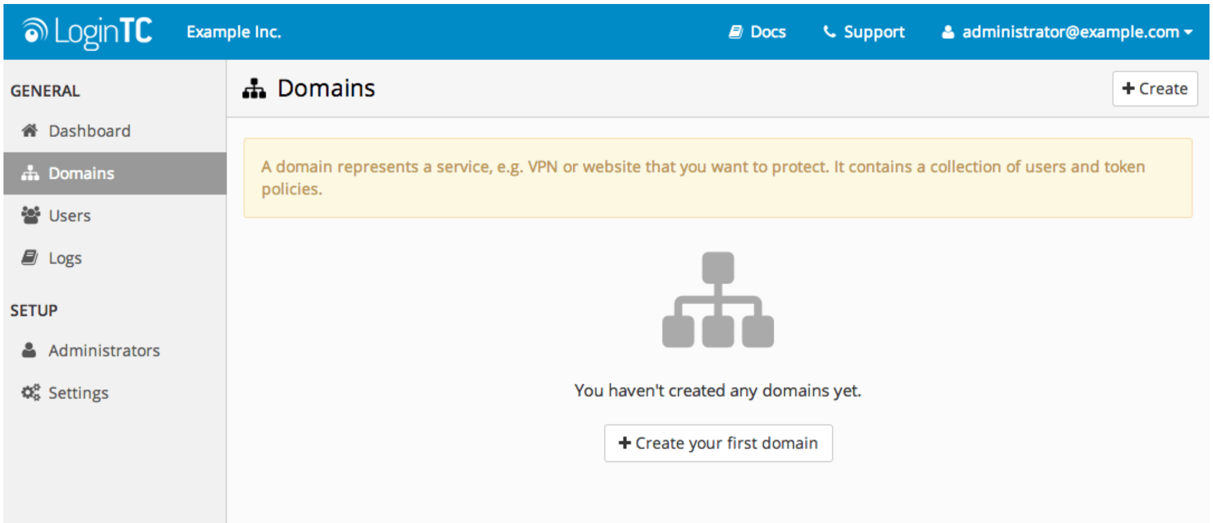
Prerequisites

Before proceeding, please ensure you have the following:

RADIUS Domain Creation

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

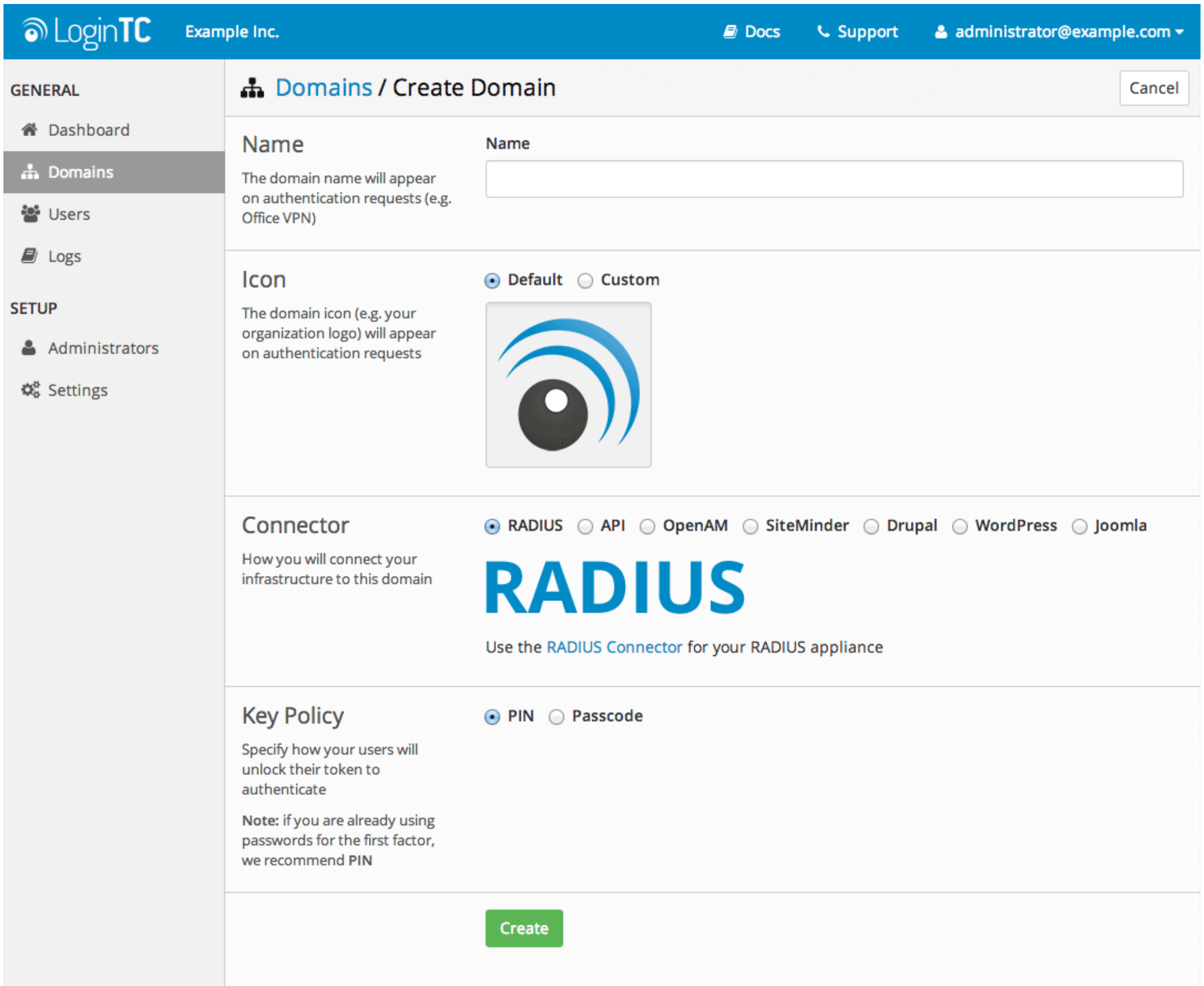
1. Log in to LoginTC Admin
2. Click **Domains**:
3. Click **Add Domain**:



A domain represents a service, e.g. VPN or website that you want to protect. It contains a collection of users and token policies.

You haven't created any domains yet.

4. Enter domain information:



Name

The domain name will appear on authentication requests (e.g. Office VPN)

Name:

Icon

The domain icon (e.g. your organization logo) will appear on authentication requests

● Default ○ Custom

Connector

How you will connect your infrastructure to this domain

● RADIUS ○ API ○ OpenAM ○ SiteMinder ○ Drupal ○ WordPress ○ Joomla

RADIUS

Use the RADIUS Connector for your RADIUS appliance

Key Policy

Specify how your users will unlock their token to authenticate

Note: if you are already using passwords for the first factor, we recommend **PIN**

● PIN ○ Passcode

Name

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

Connector

RADIUS

Installation

The LoginTC RADIUS Connector runs CentOS 6.8 with SELinux. 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 changed.

The `logintc-user` has `sudo` privileges.

Configuration

Configuration describes how the appliance will authenticate your RADIUS-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 LoginTC Admin 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 RADIUS-speaking device will be connecting to the appliance and whether to encrypt API Key, password and secret parameters.

Data Encryption

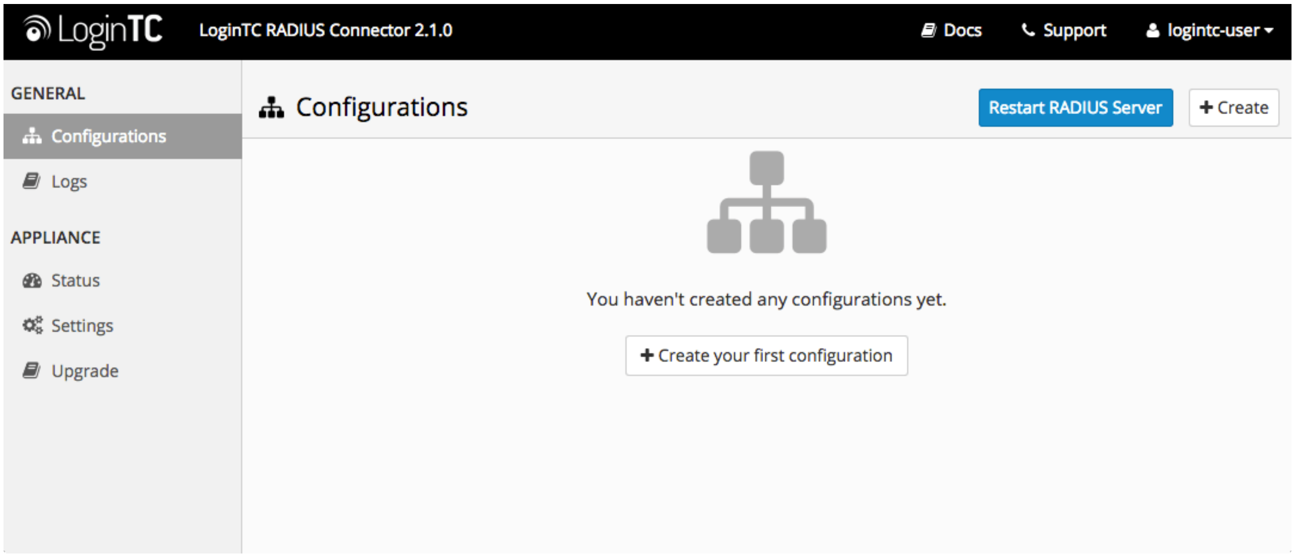
It is strongly recommended to enable encryption of all sensitive fields for both PCI compliance and as a general best practice.

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.

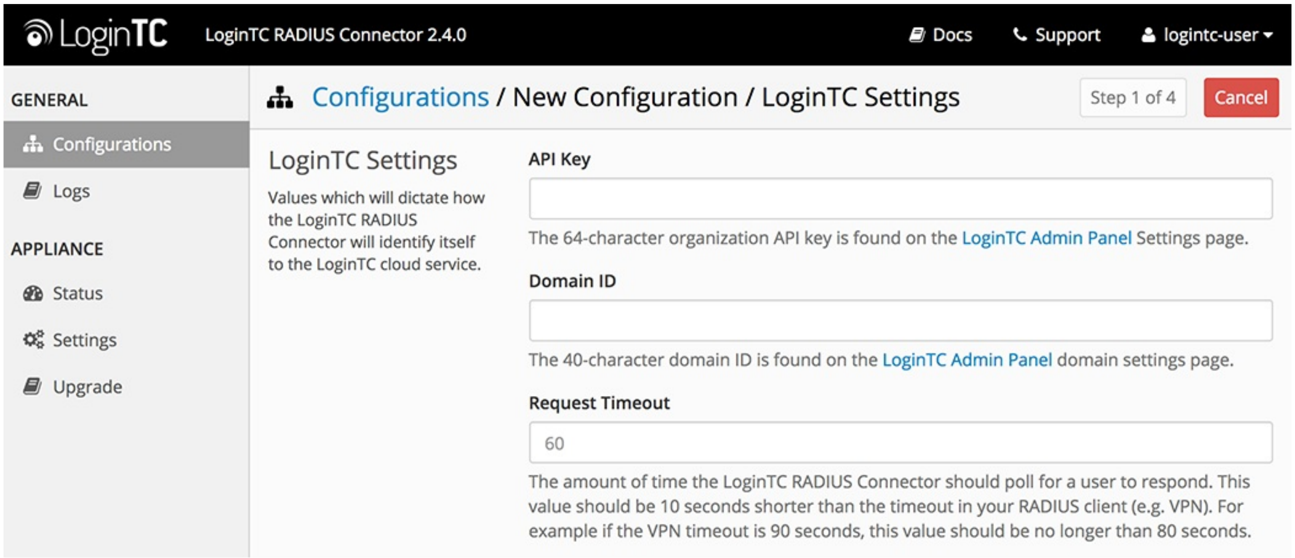
Create a new configuration file by clicking **+ Create your first configuration**:



You haven't created any configurations yet.

LoginTC Settings

Configure which LoginTC organization and domain to use:



Configurations / New Configuration / LoginTC Settings

LoginTC Settings

Values which will dictate how the LoginTC RADIUS Connector will identify itself to the LoginTC cloud service.

API Key

The 64-character organization API key is found on the LoginTC Admin Panel Settings page.

Domain ID

The 40-character domain ID is found on the LoginTC Admin Panel domain settings page.

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:

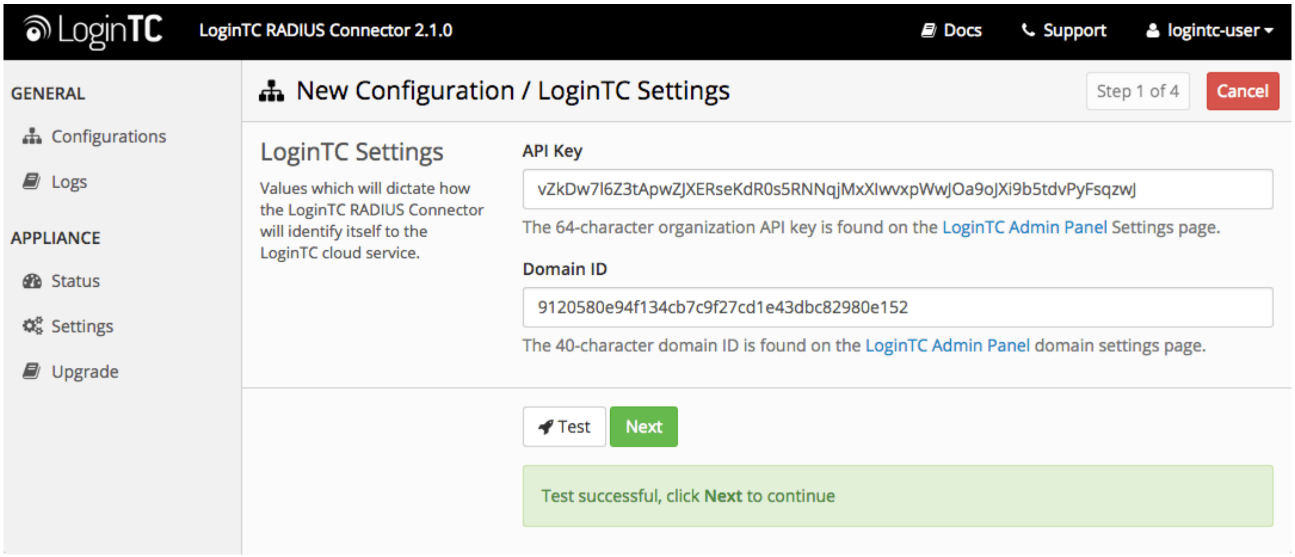
Property	Explanation
`API Key`	The 64-character organization API key
`Domain ID`	The 40-character domain ID
`Request Timeout	` Number of seconds that the RADIUS connector will wait for

The API key is found on the LoginTC Admin Settings 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 Cisco ASA. 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 Cisco ASA.

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



New Configuration / LoginTC Settings

LoginTC Settings

Values which will dictate how the LoginTC RADIUS Connector will identify itself to the LoginTC cloud service.

API Key

vZkDw7l6Z3tApwZJXERseKdR0s5RNNqjMxXIwvxpWwJOa9oJXi9b5tdvPyFsqzwJ

The 64-character organization API key is found on the LoginTC Admin Panel Settings page.

Domain ID

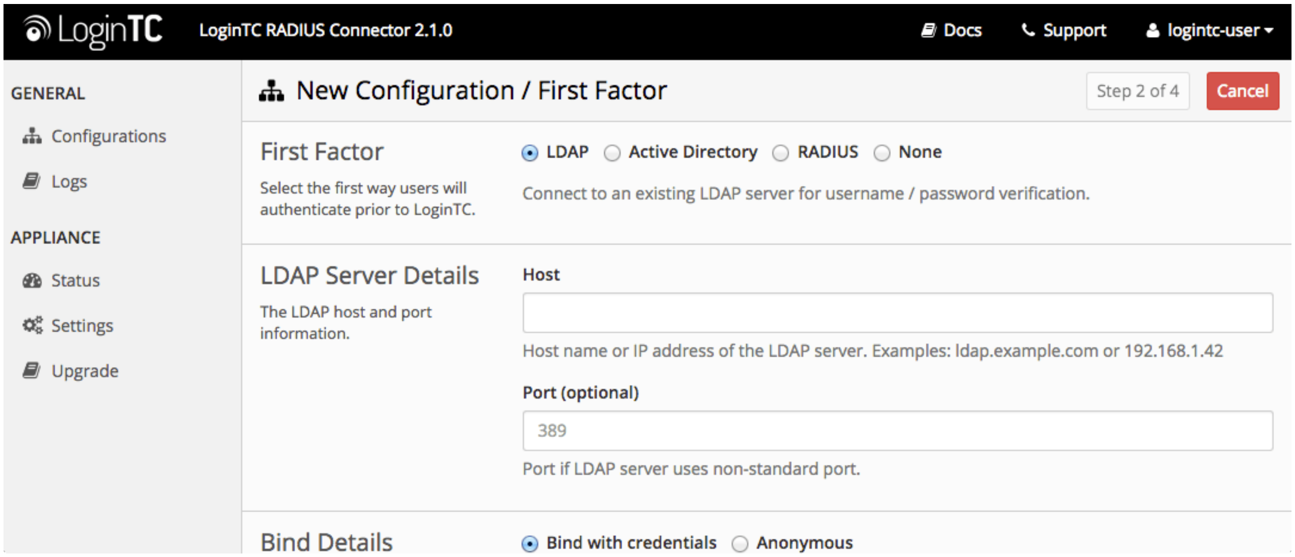
9120580e94f134cb7c9f27cd1e43dbc82980e152

The 40-character domain ID is found on the LoginTC Admin Panel domain settings page.

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.



New Configuration / First Factor

First Factor

Select the first way users will authenticate prior to LoginTC.

● LDAP ○ Active Directory ○ RADIUS ○ None

Connect to an existing LDAP server for username / password verification.

LDAP Server Details

The LDAP host and port information.

Host

Host name or IP address of the LDAP server. Examples: ldap.example.com or 192.168.1.42

Port (optional)

389

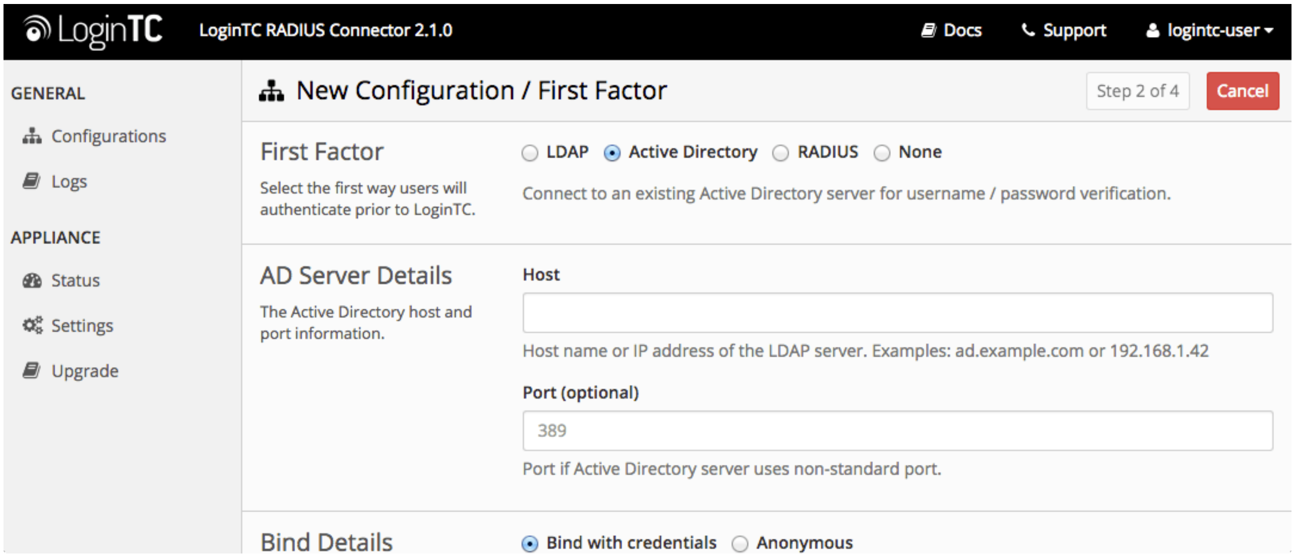
Port if LDAP server uses non-standard port.

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**:



New Configuration / First Factor

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.

AD Server Details

The Active Directory host and port information.

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:

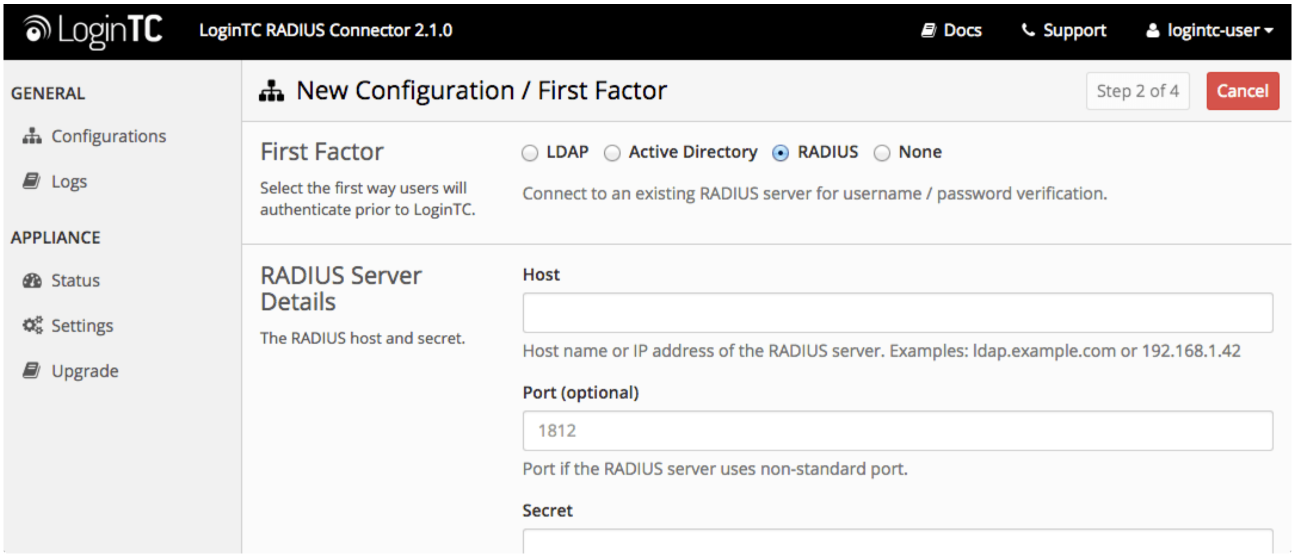
Property	Explanation	Examples
`host`	Host or IP address of the LDAP server	`ldap.example.com` or `192.168.1.42`
`port` (optional)	Port if LDAP server uses non-standard (i.e., `389` / `636`)	`4000`

Property	Explanation	Examples
`bind_dn`	DN of a user with read access to the directory	`cn=admin,dc=example,dc=com`
`bind_password`	The password for the above bind_dn account	`password`
`base_dn`	The top-level DN that you wish to query from	`dc=example,dc=com`
`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**:



New Configuration / First Factor

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.

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

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

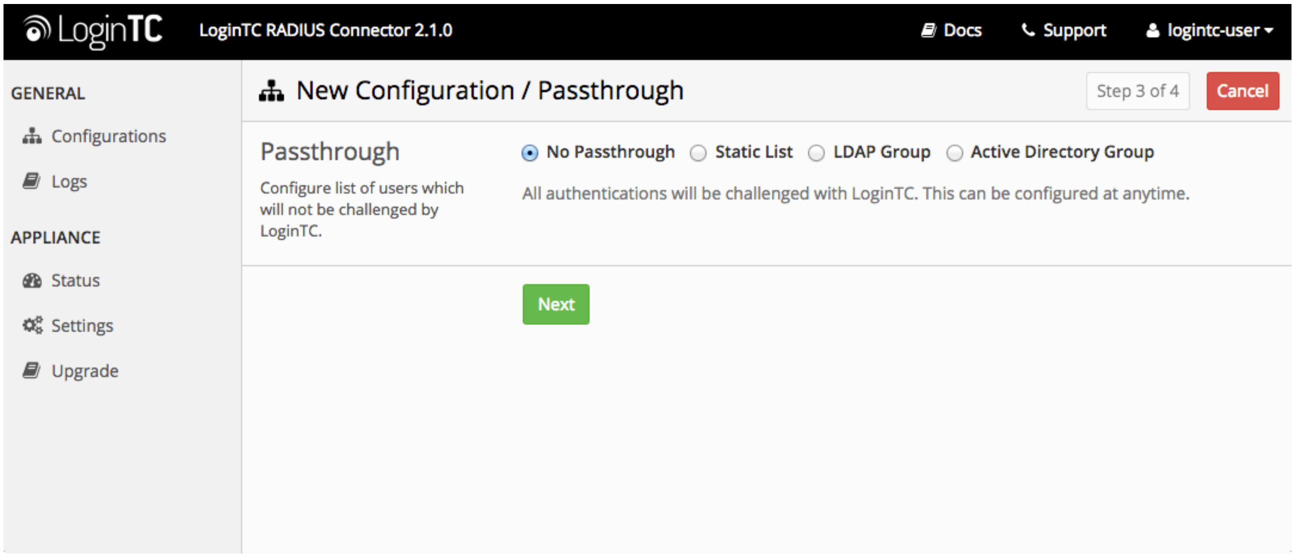
Configure which users will be challenged with LoginTC. This allows you to control how LoginTC will be phased in for your users. This flexibility allows for seamless testing and roll out.

For example, with smaller or proof of concept deployments select the Static List option. Users on the static list will be challenged with LoginTC, while those not on the list will only be challenged with the configured First Authentication Factor. 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 Active Directory or LDAP Group 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 First Authentication Factor.

No Passthrough (default)

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



New Configuration / Passthrough

Passthrough

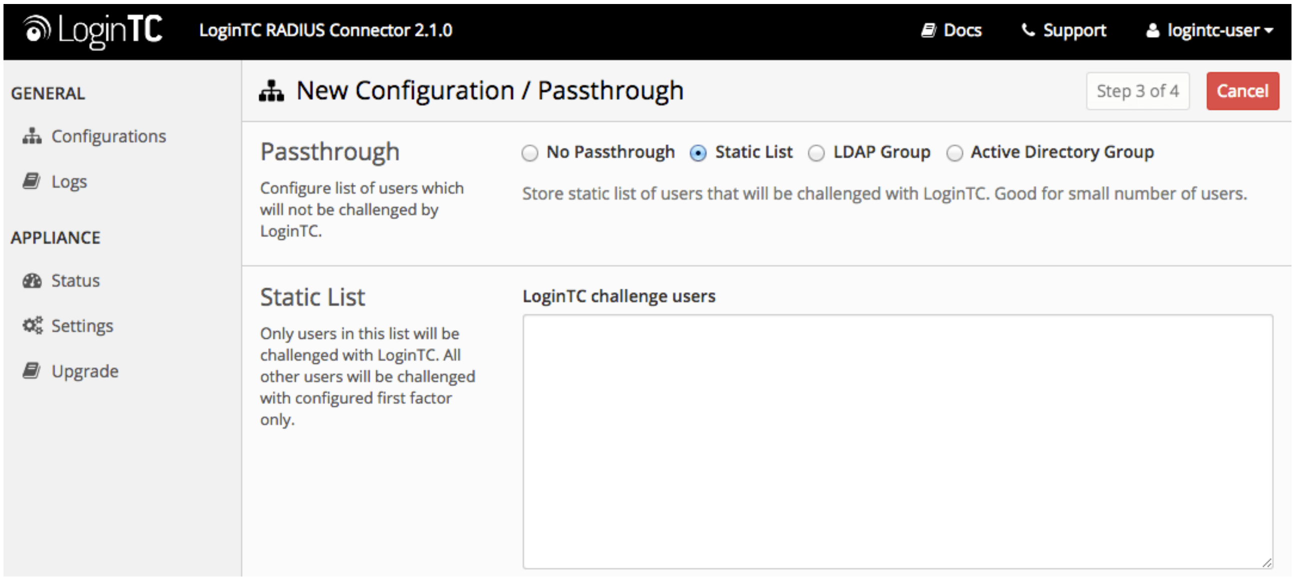
Configure list of users which will not be challenged by LoginTC.

● No Passthrough ○ Static List ○ LDAP Group ○ Active Directory Group

All authentications will be challenged with LoginTC. This can be configured at anytime.

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.



New Configuration / Passthrough

Passthrough

Configure list of users which will not be challenged by LoginTC.

○ No Passthrough ● Static List ○ LDAP Group ○ Active Directory Group

Store static list of users that will be challenged with LoginTC. Good for small number of users.

Static List

Only users in this list will be challenged with LoginTC. All other users will be challenged with configured first factor only.

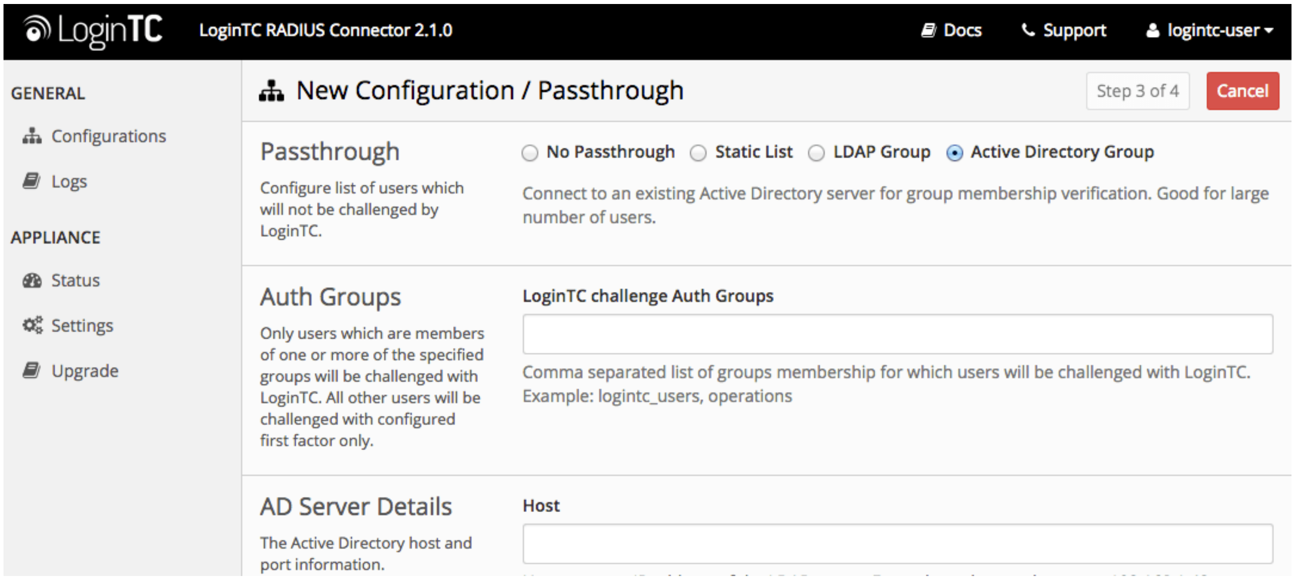
LoginTC challenge users

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

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

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.



New Configuration / Passthrough

Passthrough

Configure list of users which will not be challenged by LoginTC.

○ 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.

Auth Groups

Only users which are members of one or more of the specified groups will be challenged with LoginTC. All other users will be challenged with configured first factor only.

LoginTC challenge Auth Groups

Comma separated list of groups membership for which users will be challenged with LoginTC. Example: logintc_users, operations

AD Server Details

The Active Directory host and port information.

Host

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	`cn=admin,dc=example,dc=com`
`bind_password`	The password for the above bind_dn account	`password`
`base_dn`	The top-level DN that you wish to query from	`dc=example,dc=com`
`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`

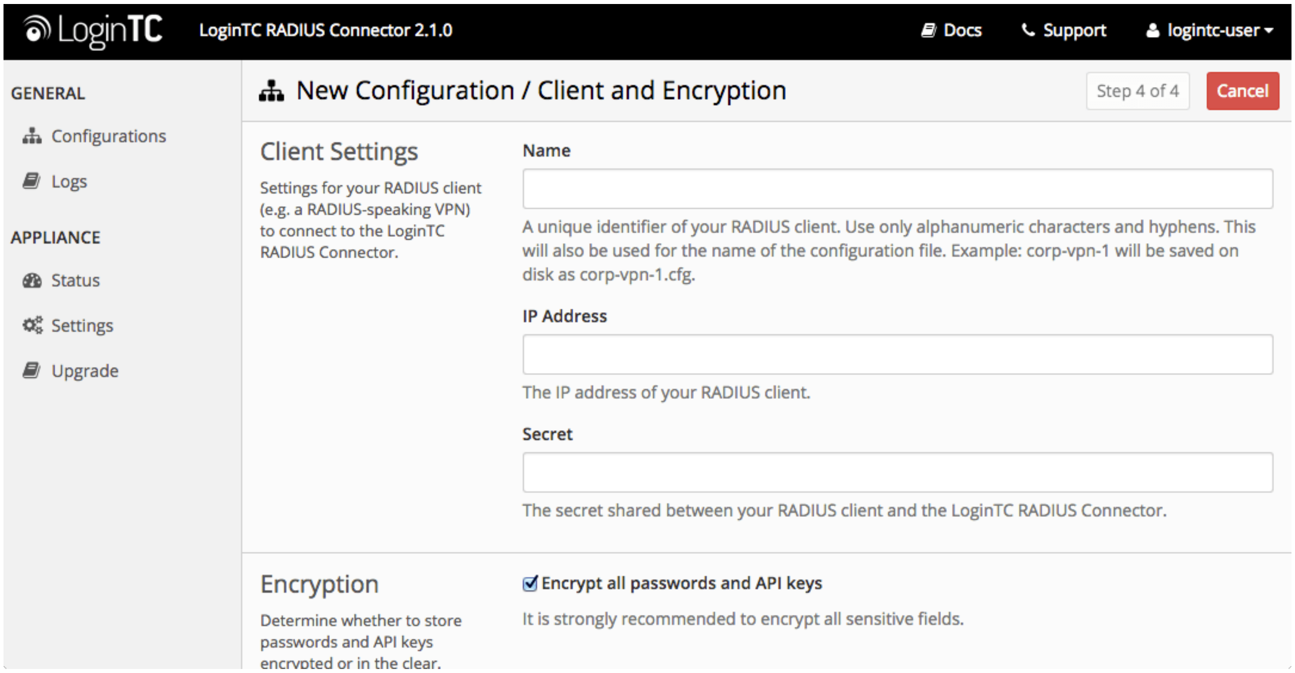
Configuration Simplified

If Active Directory / LDAP Option was selected in First Authentication Factor 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):



New Configuration / Client and Encryption

Client Settings

Settings for your RADIUS client (e.g. a RADIUS-speaking VPN) to connect to the LoginTC RADIUS Connector.

Name

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 disk as corp-vpn-1.cfg.

IP Address

The IP address of your RADIUS client.

Secret

The secret shared between your RADIUS client and the LoginTC RADIUS Connector.

Encryption

Determine whether to store passwords and API keys encrypted or in the clear.

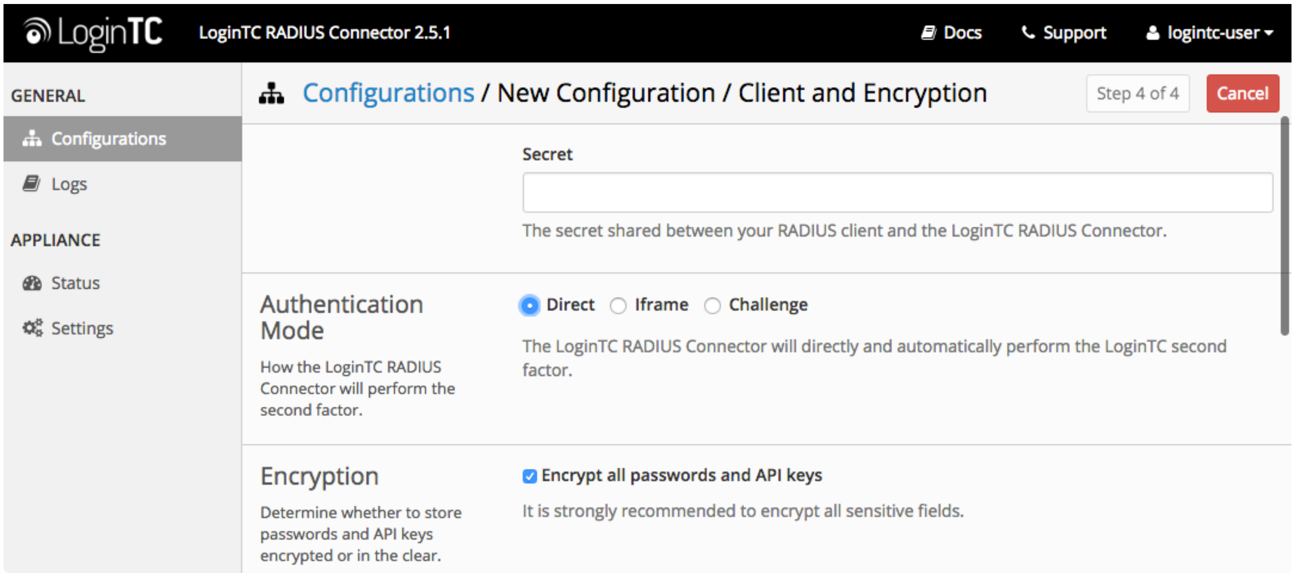
☑ Encrypt all passwords and API keys

It is strongly recommended to encrypt all sensitive fields.

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 **Direct**



Configurations / New Configuration / Client and Encryption

Secret

The secret shared between your RADIUS client and the LoginTC RADIUS Connector.

Authentication Mode

How the LoginTC RADIUS Connector will perform the second factor.

● Direct ○ Iframe ○ Challenge

The LoginTC RADIUS Connector will directly and automatically perform the LoginTC second factor.

Encryption

Determine whether to store passwords and API keys encrypted or in the clear.

☑ Encrypt all passwords and API keys

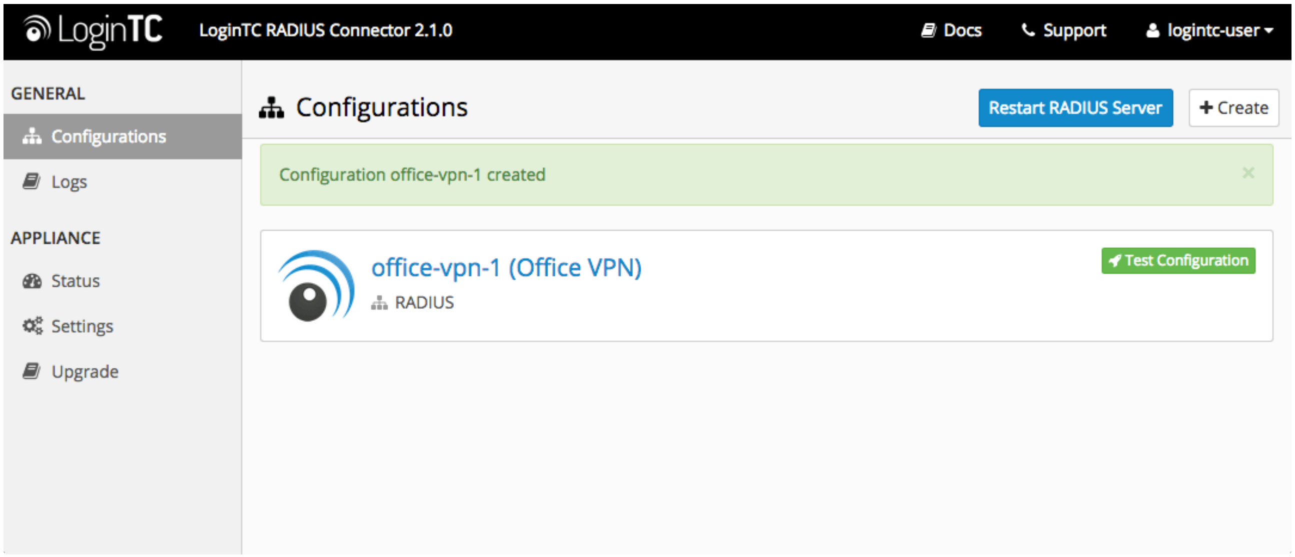
It is strongly recommended to encrypt all sensitive fields.

The LoginTC RADIUS Connector will directly and automatically perform the LoginTC second factor. See User Experience 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**.

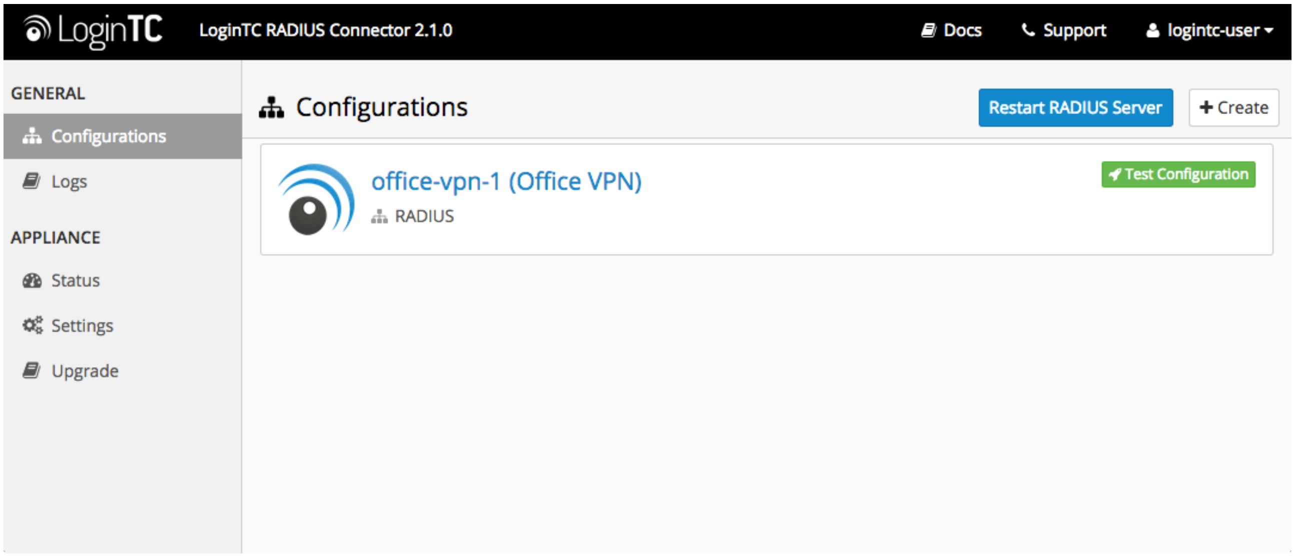


Configuration office-vpn-1 created

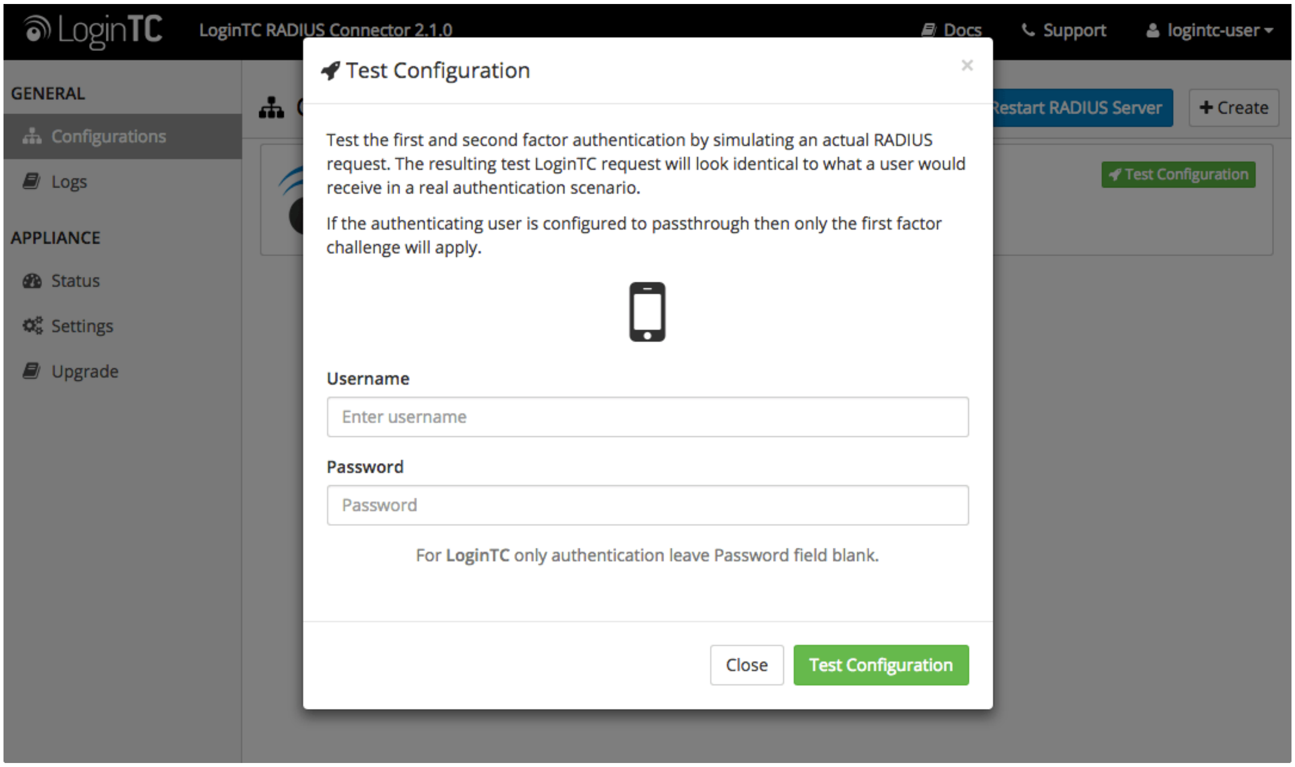
Testing

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**:



Test Configuration

Test the first and second factor authentication by simulating an actual RADIUS request. The resulting test LoginTC request will look identical to what a user would receive in a real authentication scenario.

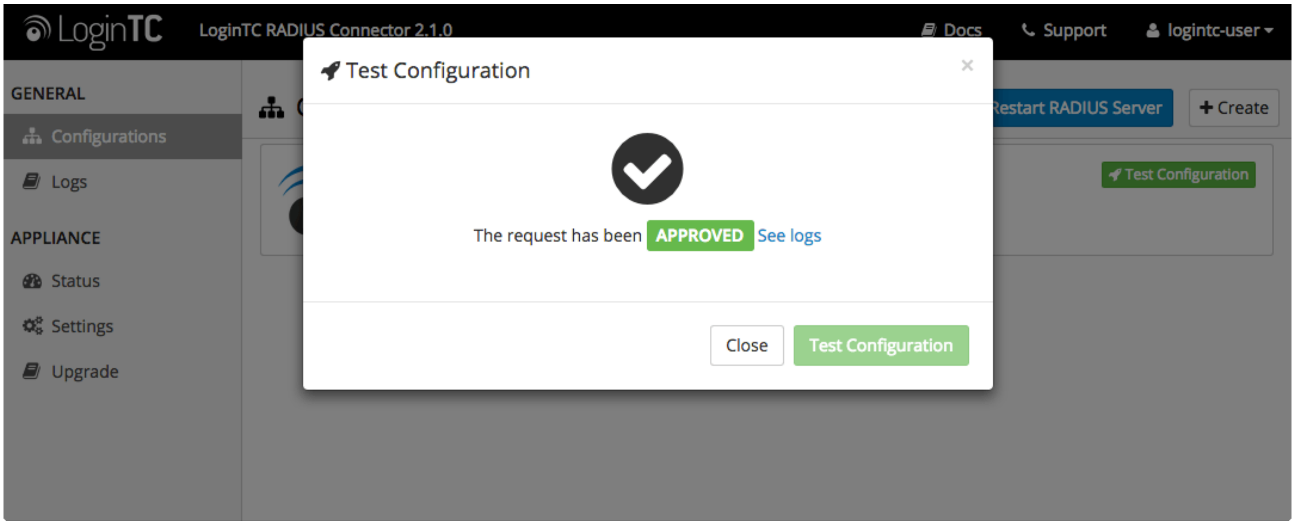
If the authenticating user is configured to passthrough then only the first factor challenge will apply.

Username: Enter username

Password: Password

For **LoginTC** only authentication leave Password field blank.

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:

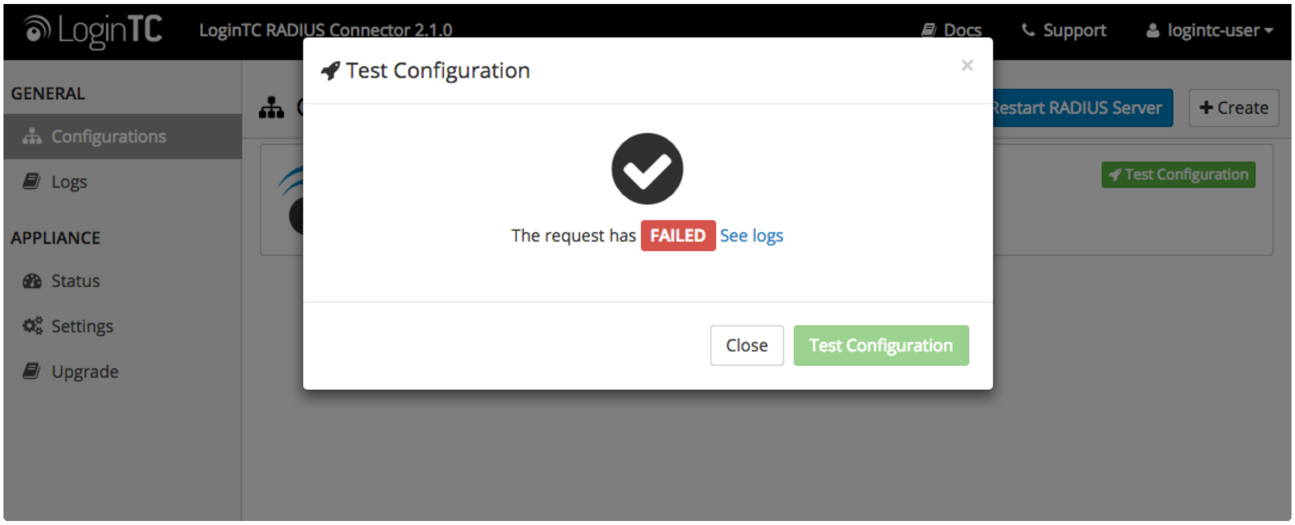


Test Configuration

The request has been **APPROVED**

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

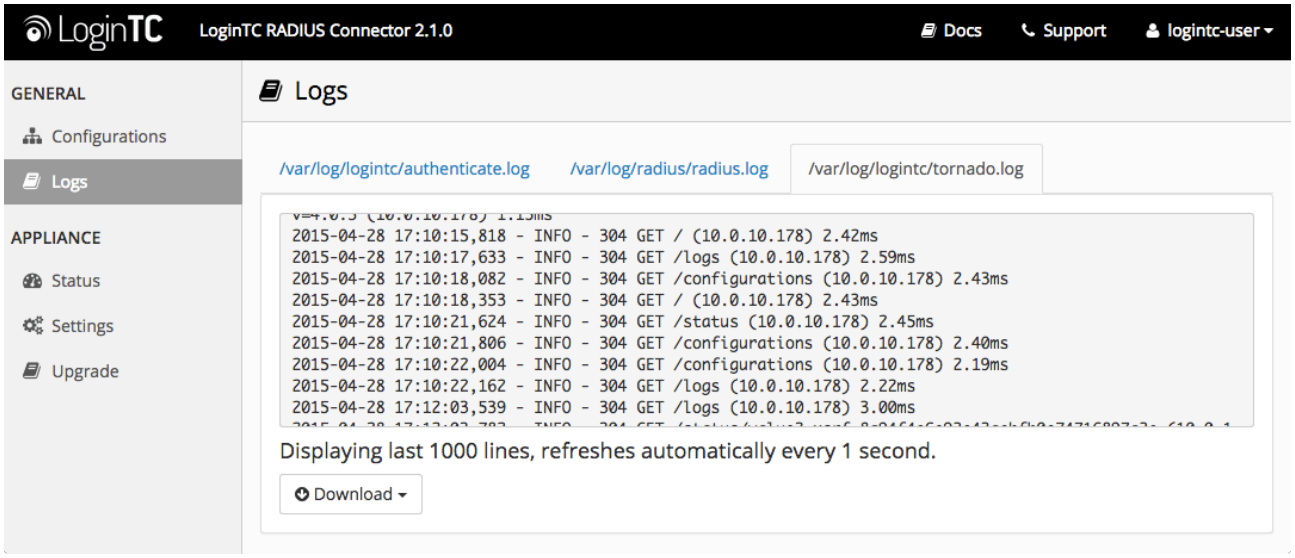
If there was an error during testing, the following will appear:



Test Configuration

The request has FAILED See logs

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



LoginTC
LoginTC RADIUS Connector 2.1.0
Docs
Support
logintc-user
GENERAL
Configurations
Logs
APPLIANCE
Status
Settings
Upgrade
Logs
/var/log/logintc/authenticate.log
/var/log/radius/radius.log
/var/log/logintc/tornado.log
Download

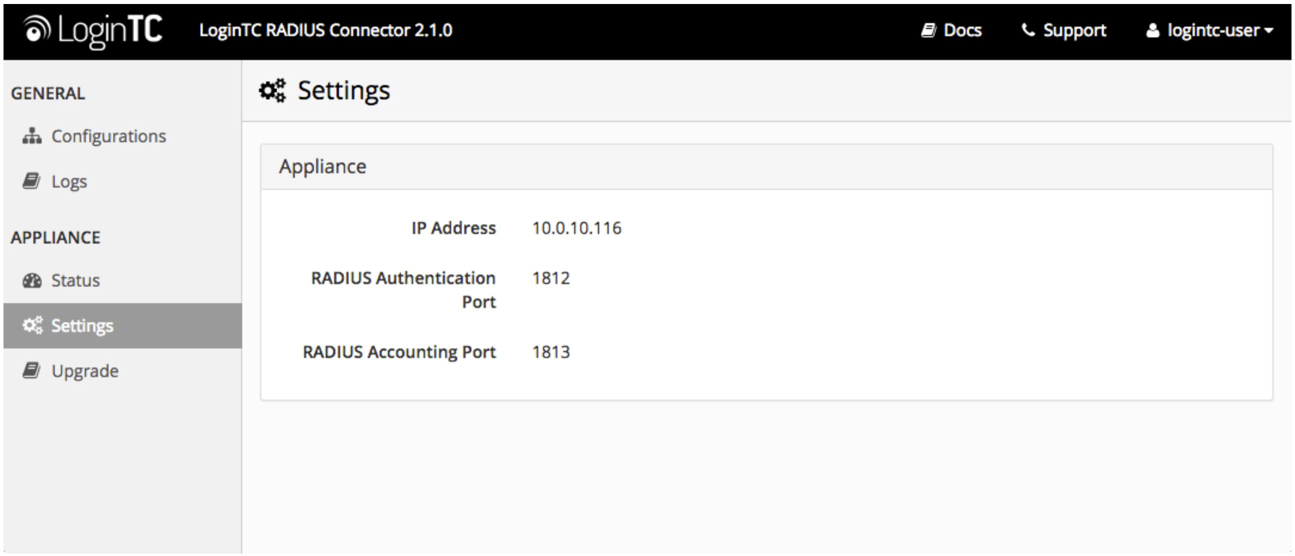
```
v=4.0.3 (10.0.10.178) 1.15ms
2015-04-28 17:10:15,818 - INFO - 304 GET / (10.0.10.178) 2.42ms
2015-04-28 17:10:17,633 - INFO - 304 GET /logs (10.0.10.178) 2.59ms
2015-04-28 17:10:18,082 - INFO - 304 GET /configurations (10.0.10.178) 2.43ms
2015-04-28 17:10:18,353 - INFO - 304 GET / (10.0.10.178) 2.43ms
2015-04-28 17:10:21,624 - INFO - 304 GET /status (10.0.10.178) 2.45ms
2015-04-28 17:10:21,806 - 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 17:12:03,539 - INFO - 304 GET /logs (10.0.10.178) 3.00ms
```

Displaying last 1000 lines, refreshes automatically every 1 second.

Cisco ASA Configuration - Quick Guide

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

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



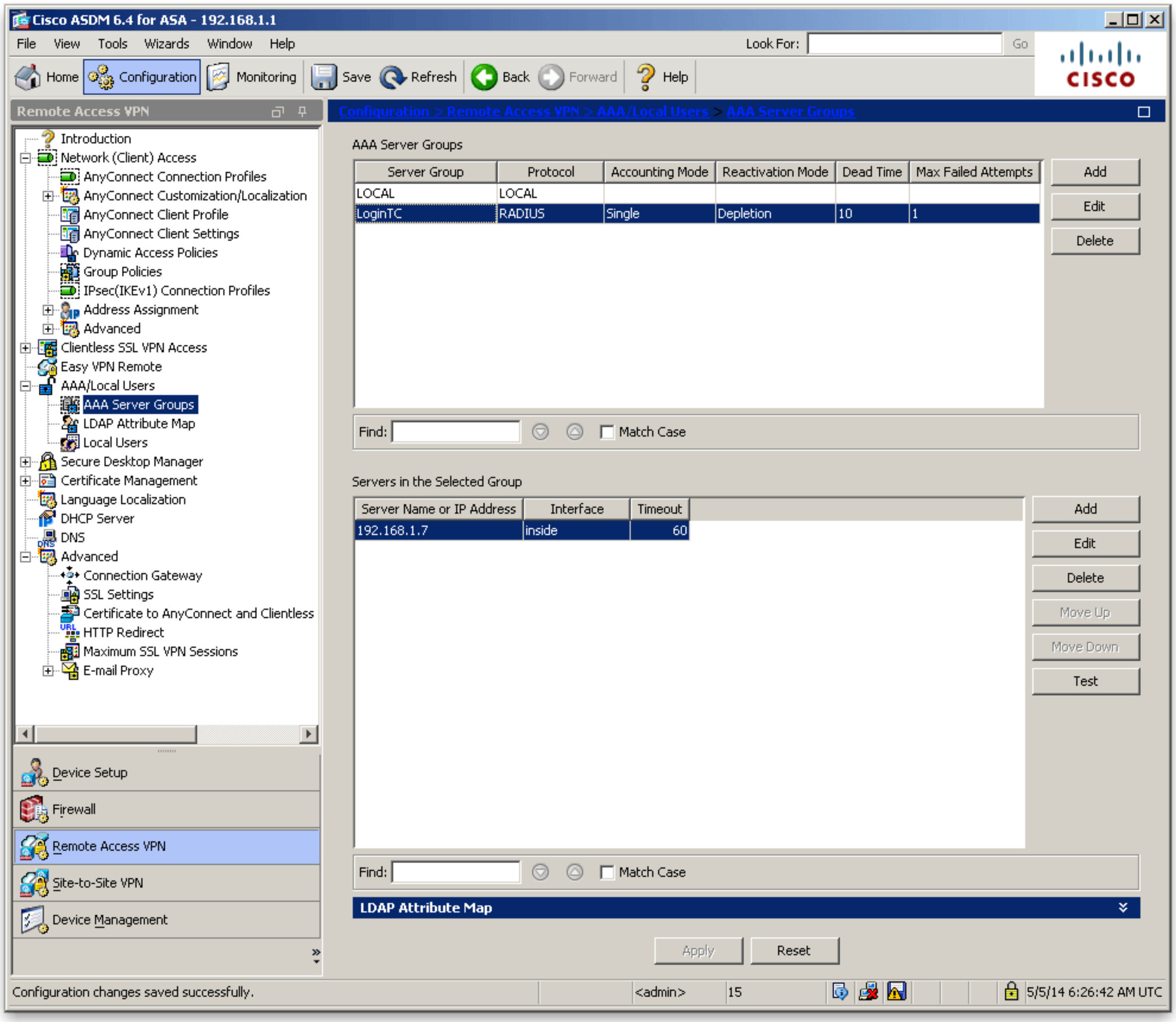
Settings

Appliance

IP Address	10.0.10.116
RADIUS Authentication Port	1812
RADIUS Accounting Port	1813

The following are quick steps to protect your IPSec VPN setup with LoginTC.

1. Launch your Cisco ASA ASDM
2. Click **AAA Local Users**:



AAA Server Groups

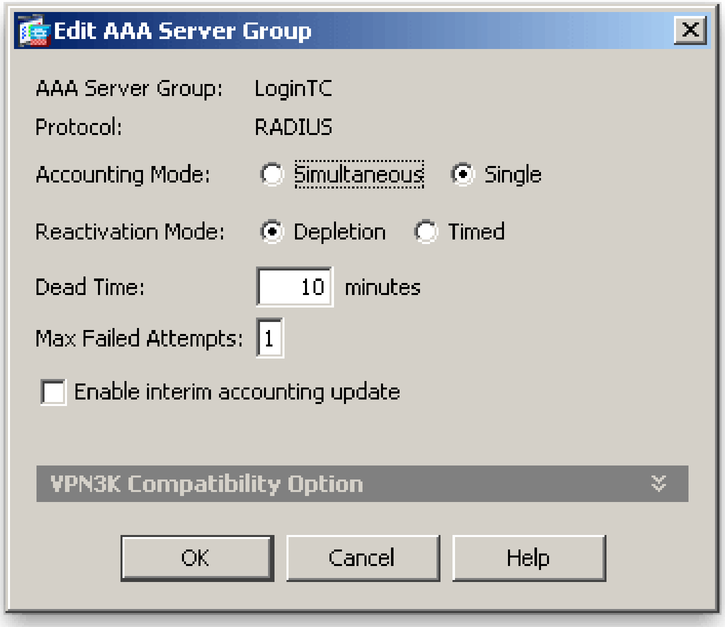
Server Group	Protocol	Accounting Mode	Reactivation Mode	Dead Time	Max Failed Attempts
LOCAL	LOCAL				
LoginTC	RADIUS	Single	Depletion	10	1

Servers in the Selected Group

Server Name or IP Address	Interface	Timeout
192.168.1.7	inside	60

Configuration changes saved successfully.

3. Under **AAA Server Groups** click **Add**:



AAA Server Group: LoginTC

Protocol: RADIUS

Accounting Mode: ○ Simultaneous ● Single

Reactivation Mode: ● Depletion ○ Timed

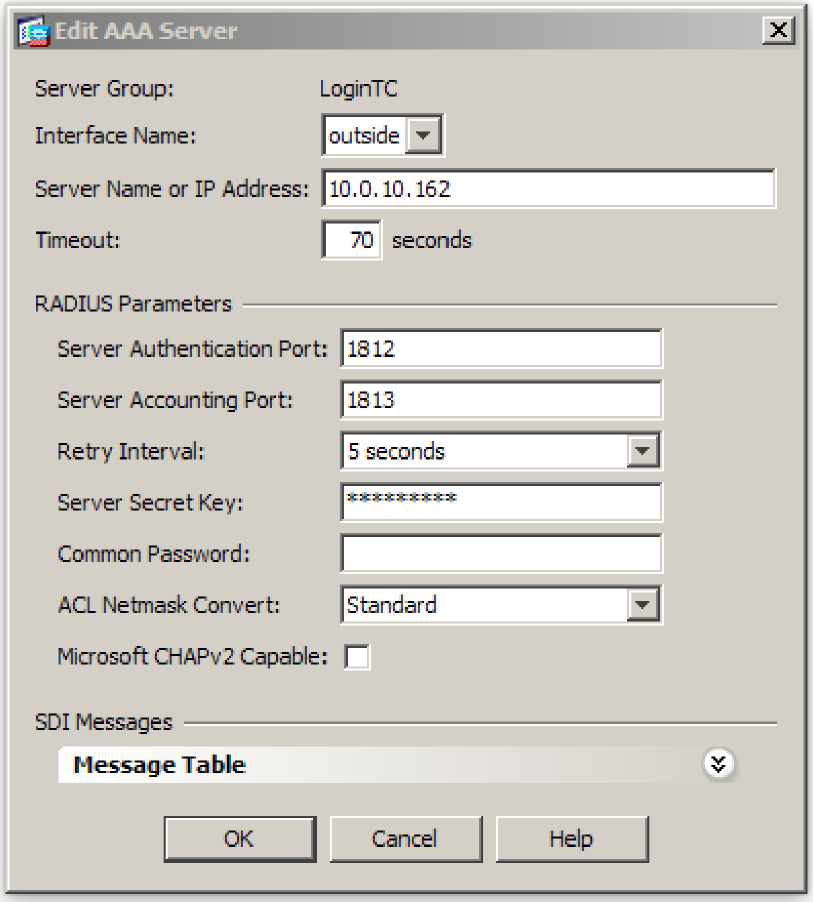
Dead Time: 10 minutes

Max Failed Attempts: 1

□ Enable interim accounting update

Property	Explanation	Example
`Accounting Mode`	Indicates how accounting messages are sent. Recommended single mode.	`single mode`
`Reactivation Mode`	Specifies the method by which failed servers are reactivated.	`depleted`
`Dead Time`	Time for which a RADIUS server is skipped over by transaction requests	`10`
`Max Failed Attempts`	Maximum number of retransmission attempts. Recommended 1.	`1`

4. Select **Protocol**: RADIUS
5. Click **Add**
6. Select the newly created group
7. Under **Servers in the Selected Group** click **Add**:



Server Group: LoginTC

Interface Name: outside

Server Name or IP Address: 10.0.10.162

Timeout: 70 seconds

RADIUS Parameters

Server Authentication Port: 1812

Server Accounting Port: 1813

Retry Interval: 5 seconds

Server Secret Key: **********

Common Password:

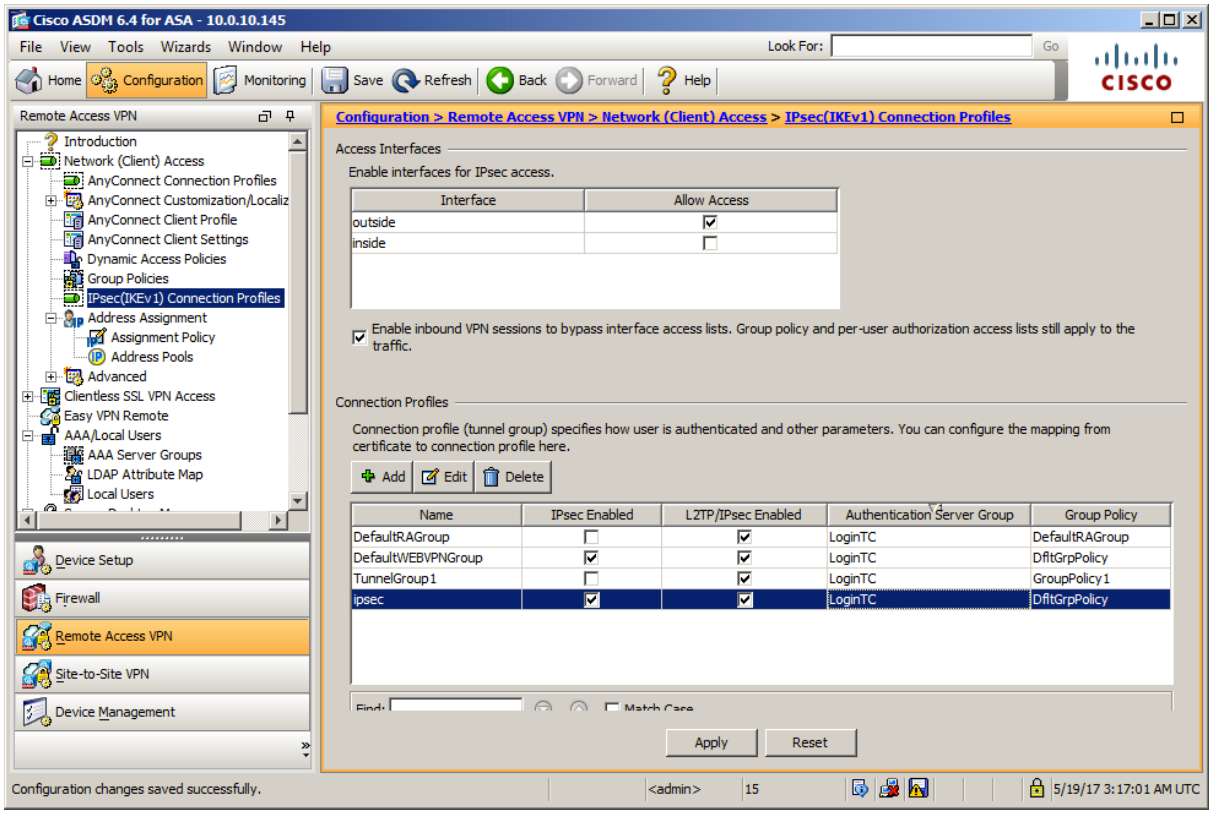
ACL Netmask Convert: Standard

Microsoft CHAPv2 Capable: □

SDI Messages

Property	Explanation	Example
`Interface Name`	Name of protected Cisco interface	`inside`
`Server name or IP Address`	Address of your LoginTC RADIUS Connector	`192.168.1.7`
`Timeout`	Authentication timeout. We recommend 70 seconds if you set the LoginTC Request timeout to 60 seconds.	`70`
`Server Authentication Port`	RADIUS authentication port. Must be 1812.	`1812`
`Server Accounting Port`	RADIUS accounting port. Must be 1813.	`1813`
`Retry Interval`	Length of time between retries	`5`
`Server Secret Key`	The secret shared between the LoginTC RADIUS Connector and its client	`bigsecret`
`Microsoft CHAPv2 Capable`	Whether or not the RADIUS server uses CHAPv2. **Must be unchecked**	

8. Click **IPsec (IKEv1) Connection Profiles**



Configuration > Remote Access VPN > Network (Client) Access > IPsec(IKEv1) Connection Profiles

Access Interfaces

Enable interfaces for IPsec access.

Interface	Allow Access
outside	☑
inside	☐

☑ Enable inbound VPN sessions to bypass interface access lists. Group policy and per-user authorization access lists still apply to the traffic.

Connection Profiles

Connection profile (tunnel group) specifies how user is authenticated and other parameters. You can configure the mapping from certificate to connection profile here.

Name	IPsec Enabled	L2TP/IPsec Enabled	Authentication Server Group	Group Policy
DefaultRAGroup	☐	☑	LoginTC	DefaultRAGroup
DefaultWEBVPNGroup	☑	☑	LoginTC	DfltGrpPolicy
TunnelGroup1	☐	☑	LoginTC	GroupPolicy1
ipsec	☑	☑	LoginTC	DfltGrpPolicy

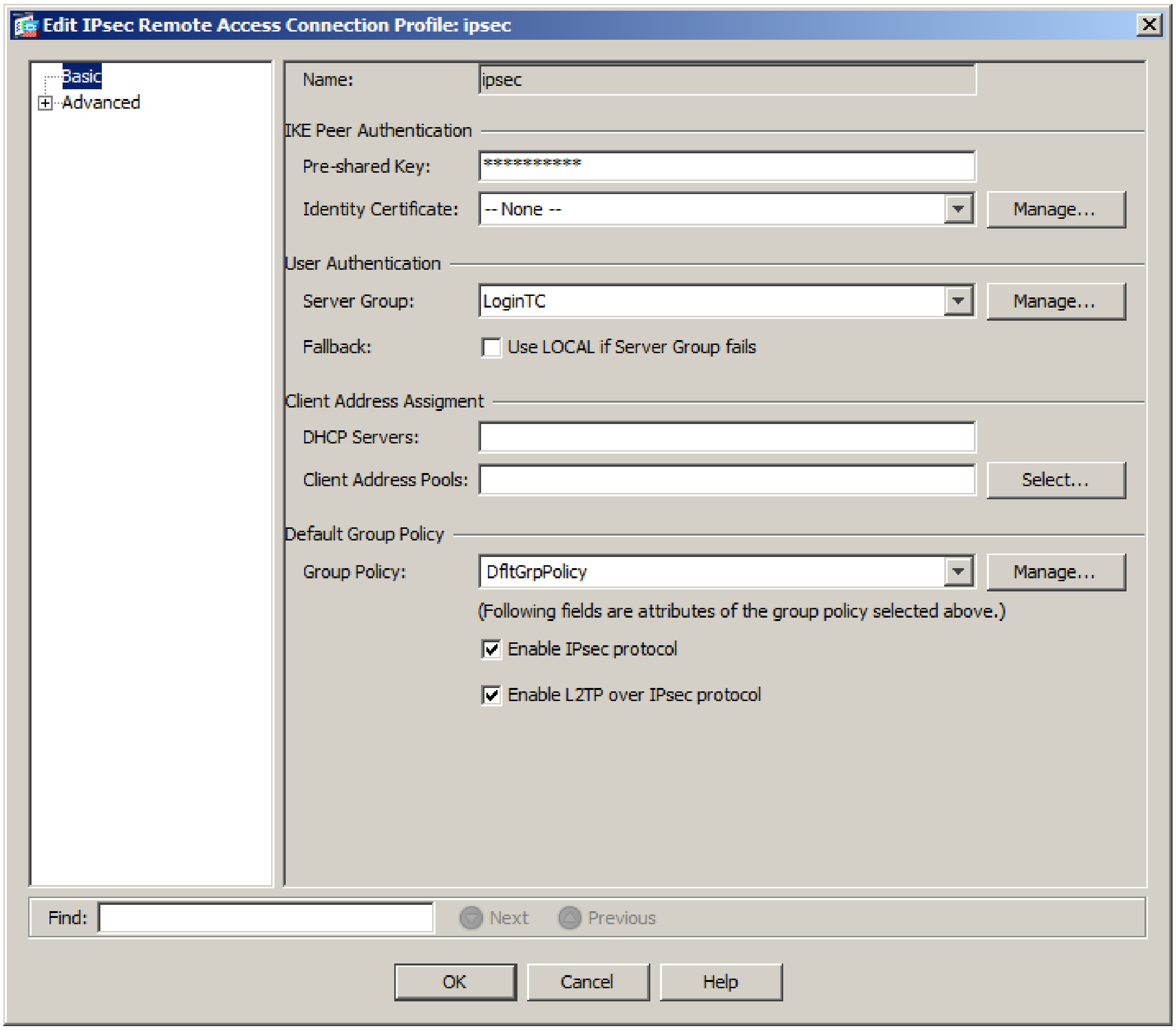
Configuration changes saved successfully. <admin> 15 5/19/17 3:17:01 AM UTC

9. Click **Connection Profiles**:
10. Select your existing IPSec Connection Profile, click **Edit**:

Note: Connection Profile Management

You can also create a new Connection Profile in order to not affect your existing configuration. The new Connection Profile can be used for testing purposes

11. Click the **Basic** tab on the left


Edit IPsec Remote Access Connection Profile: ipsec

Name: ipsec

IKE Peer Authentication

Pre-shared Key: ***********

Identity Certificate: -- None --

User Authentication

Server Group: LoginTC

Fallback: □ Use LOCAL if Server Group fails

Client Address Assigment

DHCP Servers:

Client Address Pools:

Default Group Policy

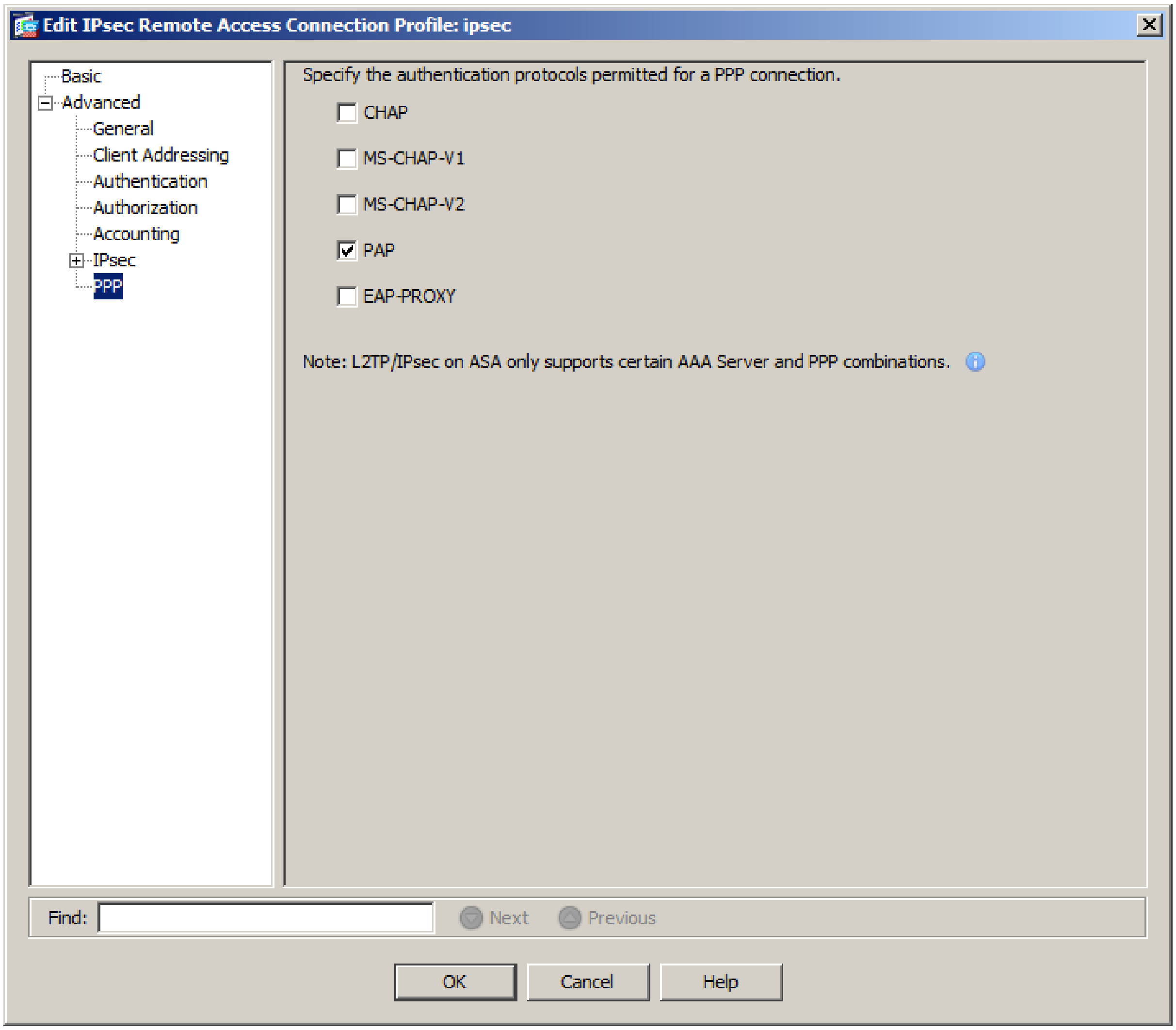
Group Policy: DfltGrpPolicy

(Following fields are attributes of the group policy selected above.)

☑ Enable IPsec protocol

☑ Enable L2TP over IPsec protocol

12. Under **IKE Peer Authentication** enter a Pre-shared Key (PSK). The key is used to secure data sent between IPsec peers and must be entered in each user's VPN client. Pick a cryptographically strong PSK.
13. Under **User Authentication** for the **Server Group** select the group made in steps 3-5
14. Expand the **Advanced** tab on the left and click **PPP**



Specify the authentication protocols permitted for a PPP connection.

- ☐ CHAP
- ☐ MS-CHAP-V1
- ☐ MS-CHAP-V2
- ☑ PAP
- ☐ EAP-PROXY

Note: L2TP/IPsec on ASA only supports certain AAA Server and PPP combinations.

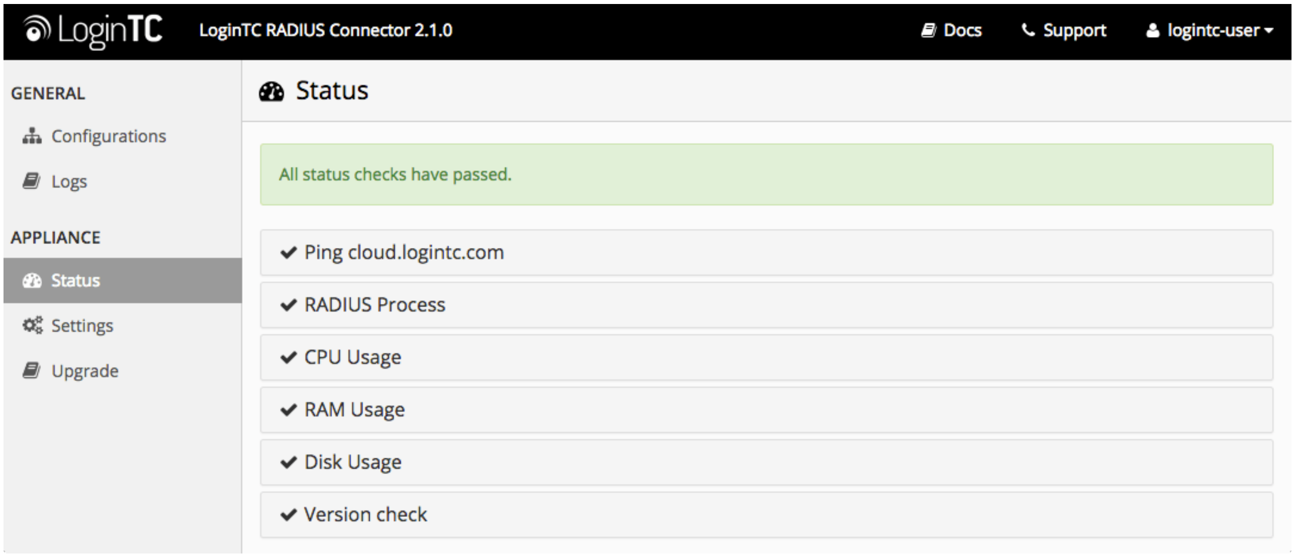
15. Ensure only **PAP** is selected
16. Click **OK**

To test, configured your IPSec client to use the newly configured Connection Profile.

Troubleshooting

Not Authenticating

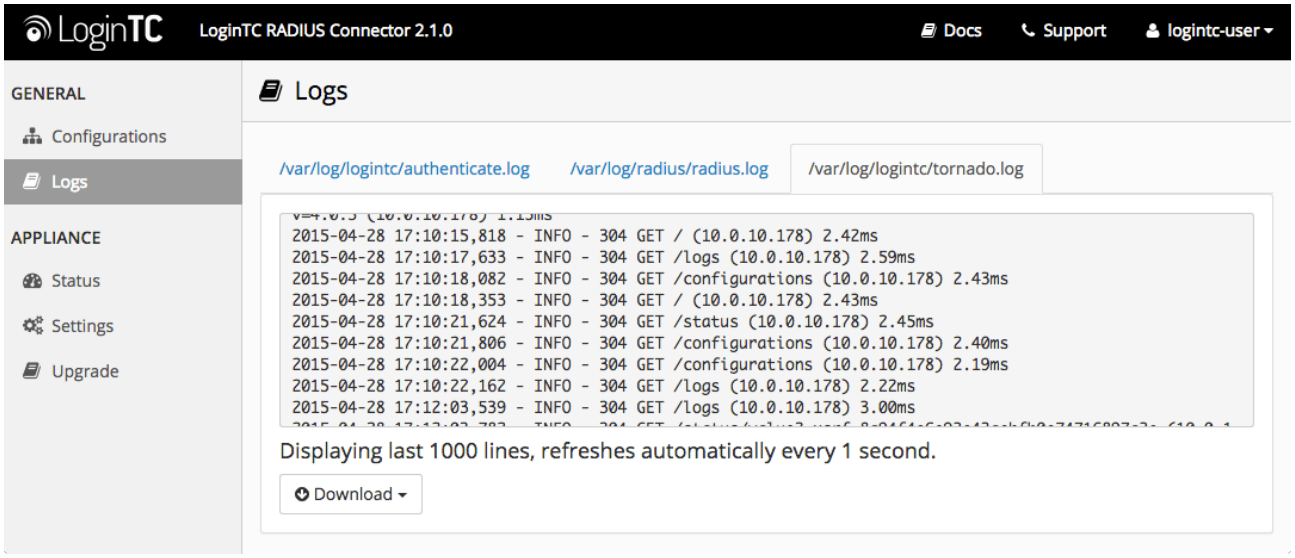
If you are unable to authenticate, navigate to your appliance **web interface** URL and click **Status**:



All status checks have passed.

- ✓ Ping cloud.logintc.com
- ✓ RADIUS Process
- ✓ CPU Usage
- ✓ RAM Usage
- ✓ Disk Usage
- ✓ Version check

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


LoginTC
LoginTC RADIUS Connector 2.1.0
Docs
Support
logintc-user
GENERAL
Configurations
Logs
APPLIANCE
Status
Settings
Upgrade
Logs
/var/log/logintc/authenticate.log
/var/log/radius/radius.log
/var/log/logintc/tornado.log

```
v=4.0.3 (10.0.10.178) 1.15ms
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 /configurations (10.0.10.178) 2.43ms
2015-04-28 17:10:18,353 - INFO - 304 GET / (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 17:10:21,806 - 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 17:12:03,539 - INFO - 304 GET /logs (10.0.10.178) 3.00ms
```

Displaying last 1000 lines, refreshes automatically every 1 second.

Email Support

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