

Two-factor authentication for WatchGuard Access Portal

logintc.com/docs/connectors/watchguard-access-portal

Overview

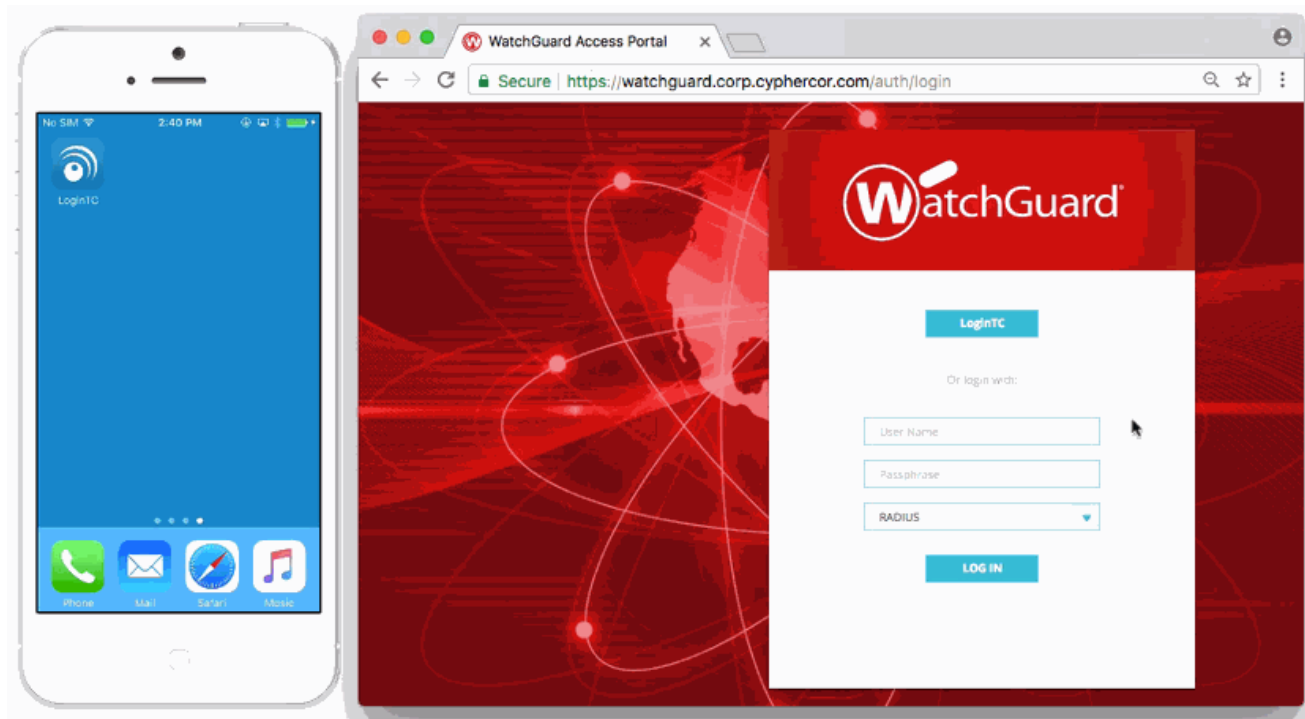
LoginTC protects access to your WatchGuard Access Portal using SAML SSO. The LoginTC AD FS Connector protects access to your Microsoft Active Directory Federation Services (AD FS) by adding a second factor LoginTC challenge to existing username and password authentication. The LoginTC AD FS Connector provides a LoginTC multi-factor authentication (MFA) method to your AD FS deployment, used by your WatchGuard Access Portal.

Subscription Requirement

Your organization requires the **Business** or **Enterprise** plan to use the LoginTC AD FS Connector. See the [Pricing](#) page for more information about subscription options.

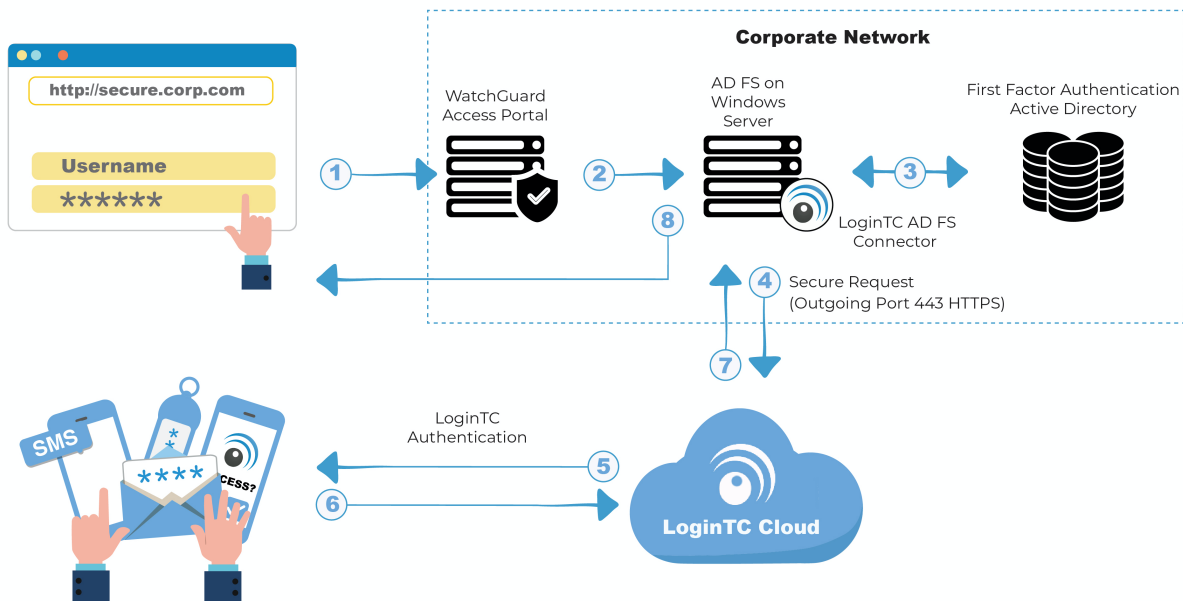
User Experience

After clicking on **LoginTC** from the WatchGuard Access Portal and entering the username and password into the AD FS login page, the user is shown a selection of second factor options. The user clicks a button to receive a LoginTC push notification, authenticates and is logged in.



- [LoginTC Push](#)
- [OTP](#)

Architecture



Authentication Flow

1. A user attempts access to WatchGuard Access Portal with username / password
2. A SAML request is made to AD FS
3. The username / password is verified against an existing first factor directory (i.e. Active Directory)
4. The request is trapped by LoginTC AD FS Connector and an authentication request is made to LoginTC Cloud Services
5. Secure push notification request sent to the user's mobile or desktop device
6. User response (approval or denial of request) sent to LoginTC Cloud Services
7. The LoginTC AD FS Connector validates the user response
8. User is granted access to WatchGuard Access Portal

Prerequisites

Before proceeding, please ensure you have the following:

- WatchGuard appliance with Access Portal support
- WatchGuard Firewall 12.1.1
- [LoginTC Admin Panel](#) account
- Active Directory Federation Services (AD FS) Host, Microsoft Windows Server 2016 (or Windows Server 2012)
- WatchGuard Access Portal configured with federation to your on-premise AD FS

WatchGuard Resources:

Working WatchGuard Access Portal Federation Deployment

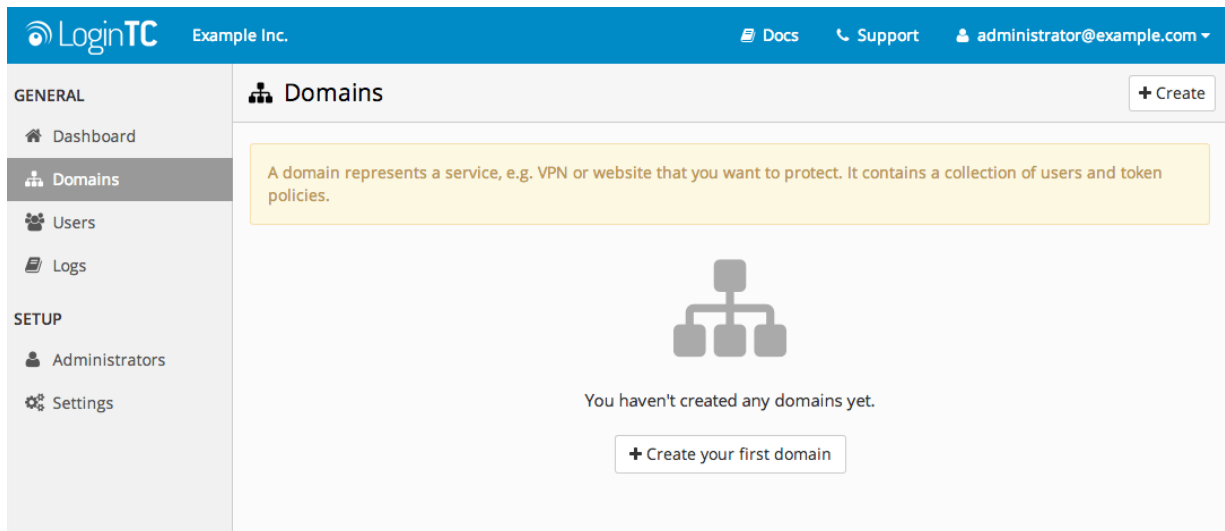
It is strongly recommended that you have a working WatchGuard Access Portal with federation against your on-premise AD FS prior to adding LoginTC multi-factor authentication.

LoginTC Domain Creation

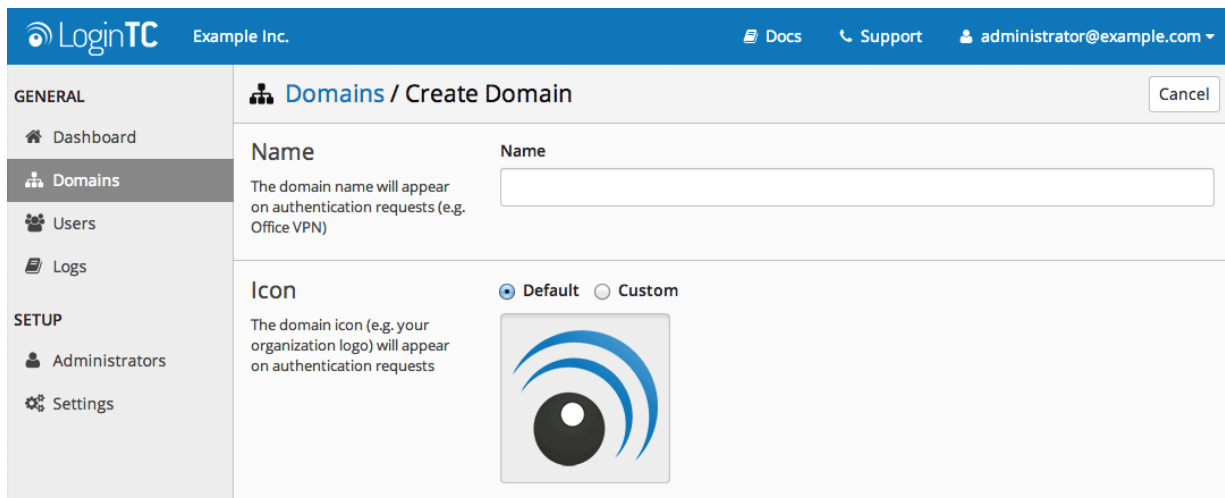
Create a LoginTC domain in [LoginTC Admin Panel](#). The domain represents a service (e.g. your corporate AD FS) that you want to protect with LoginTC. It will contain token policies and the users that access your service.

If you have already created a LoginTC domain for your AD FS deployment, then you may skip this section and proceed to [Installation](#).

1. [Log in](#) to LoginTC Admin
2. Click **Domains**:
3. Click **Create Domain**:



4. Enter a name and optionally pick an icon



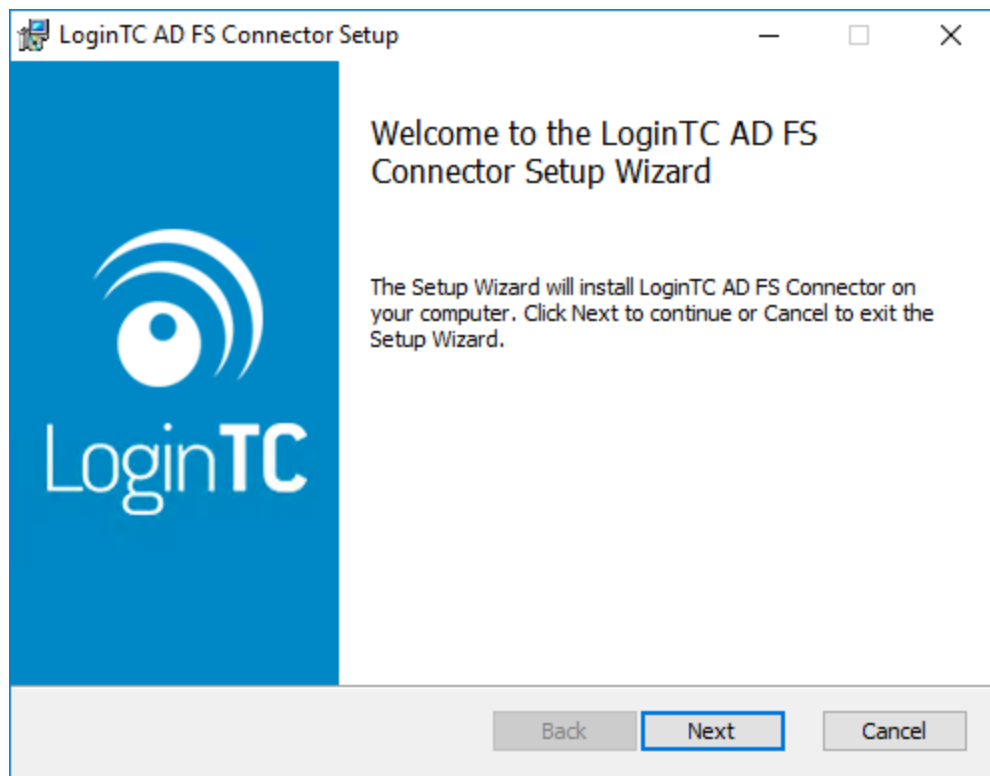
5. Scroll down and click **Create**

Use Default Domain Settings

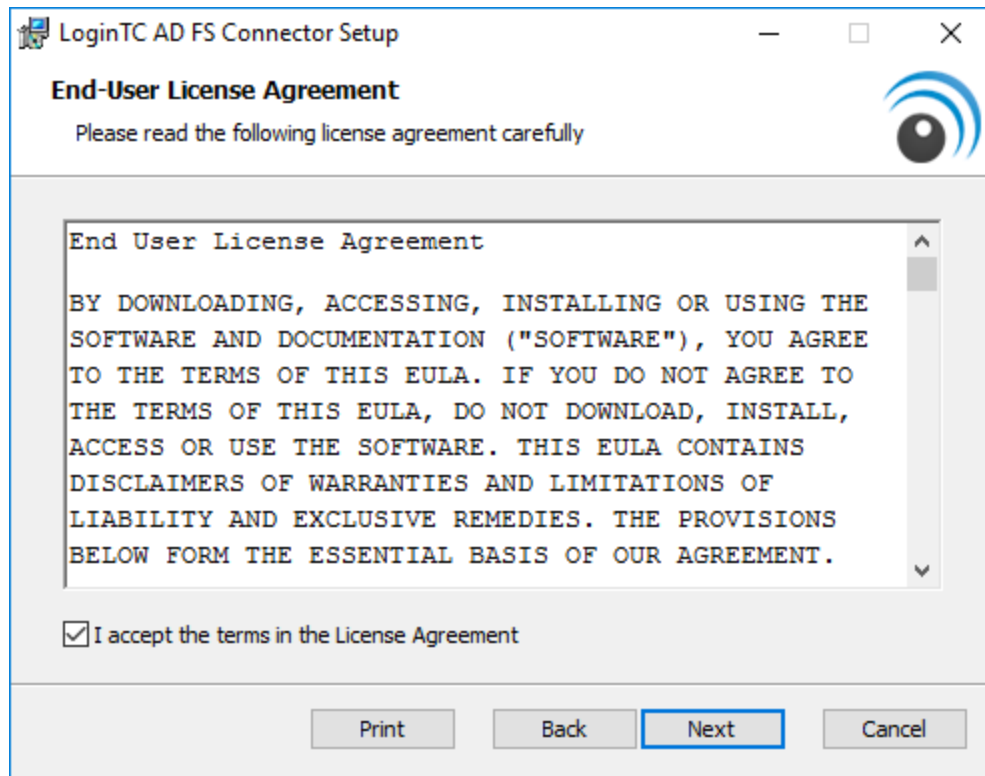
Domain settings can be modified at any time by navigating to **Domains > Your Domain > Settings**.

Installation

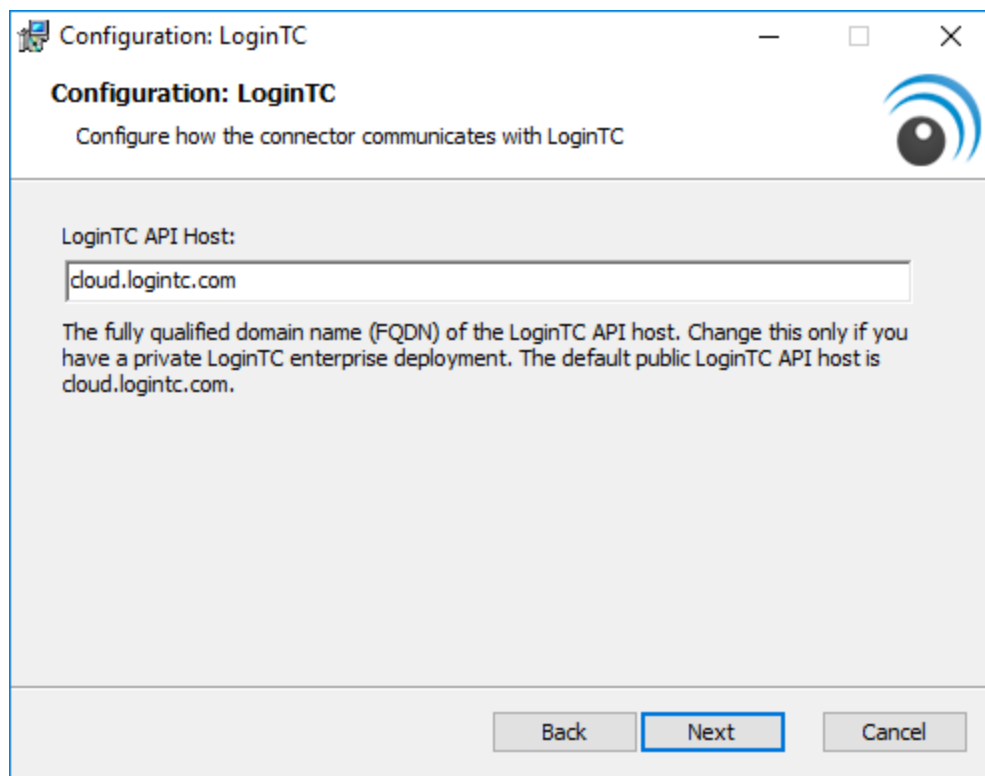
1. Download the latest version of the [LoginTC AD FS Connector](#)
2. Run the installer file as a privileged administrator user on the Windows Server with the AD FS role. Also ensure that the AD FS service is running prior to installing.
3. Press **Next**



4. Read the License Agreement and press **Next** if you accept the terms.



5. Change the **LoginTC API Host** only if you have a private enterprise LoginTC deployment. Press **Next**:



6. Enter your LoginTC **Domain ID** and **Organization API Key**. These values are found on your LoginTC Admin Panel. Press **Next**

Configuration: LoginTC

Configuration: LoginTC
Configure how the connector communicates with LoginTC

Domain ID:

The 40-character hexadecimal LoginTC domain identifier.

API Key:

The 64-character alphanumeric LoginTC organization API key.

Back Next Cancel

7. Press **Install**. Note that the AD FS service will be restarted during installation and may be temporarily unavailable to your users.

LoginTC AD FS Connector Setup

Ready to install LoginTC AD FS Connector

Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard.

Back Install Cancel

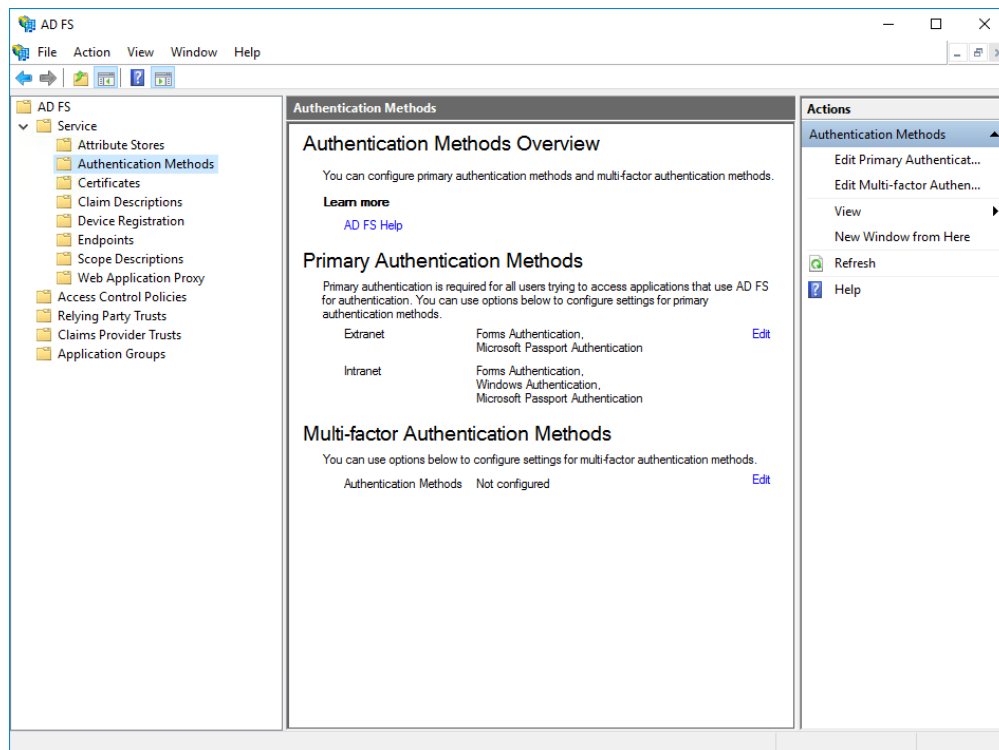
AD FS LoginTC MFA Configuration

Windows Server 2016 (AD FS version 4.0)

The instructions below are for AD FS (version 4.0) running on Windows Server 2016. If you have AD FS (3.0) running on Windows Server 2012 R2, see [AD FS Configuration in Two-factor authentication for AD FS on Windows Server 2012 R2](#).

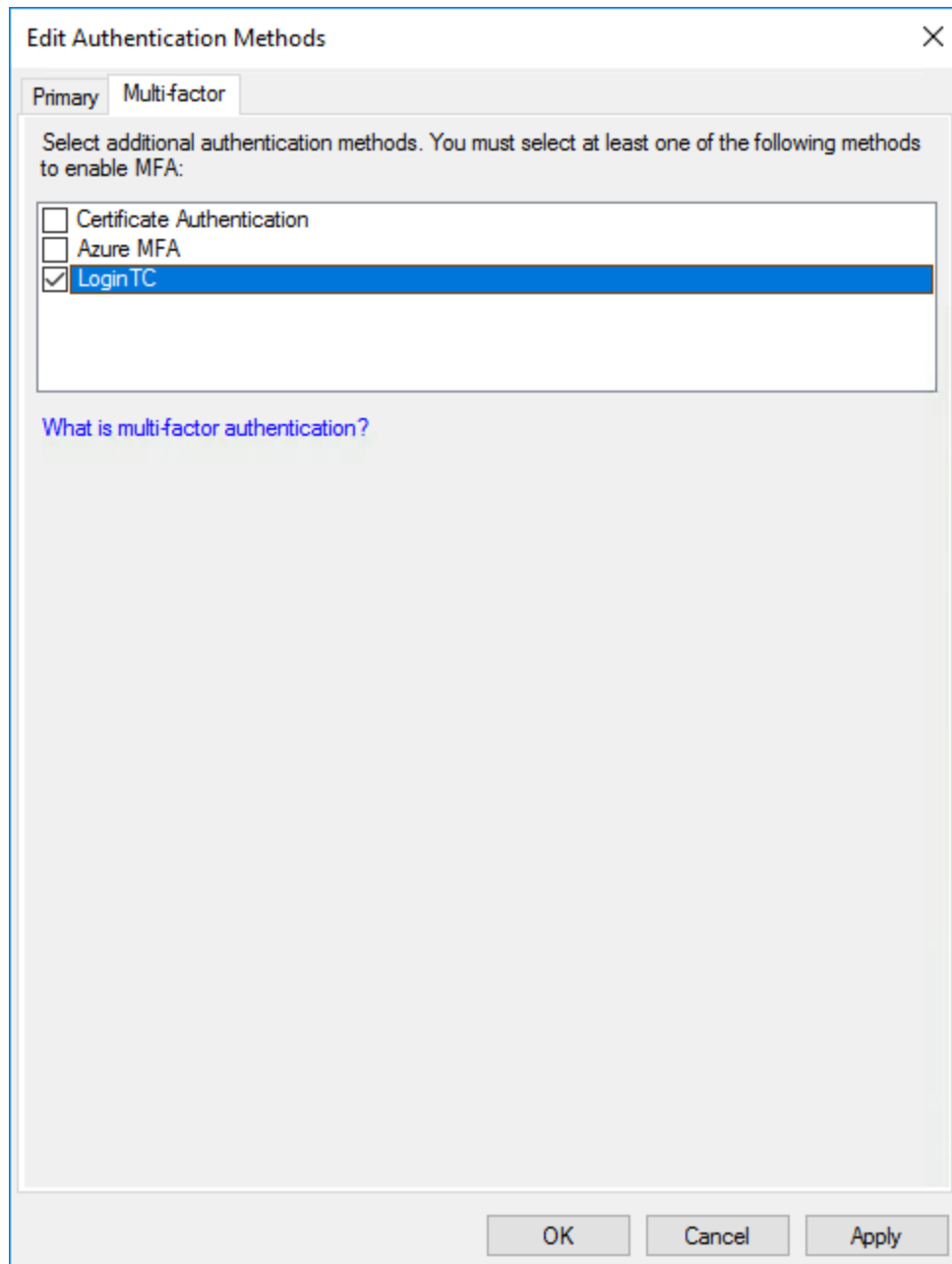
To configure your AD FS to use the LoginTC MFA method:

1. Open the **AD FS Management** console.
2. Click on the **Services > Authentication Policies** directory in the left side menu.



3. Click on **Edit Global Multi-factor Authentication...**

4. Check **LoginTC** in the list of MFA methods.



5. Press **Apply** then **Ok**

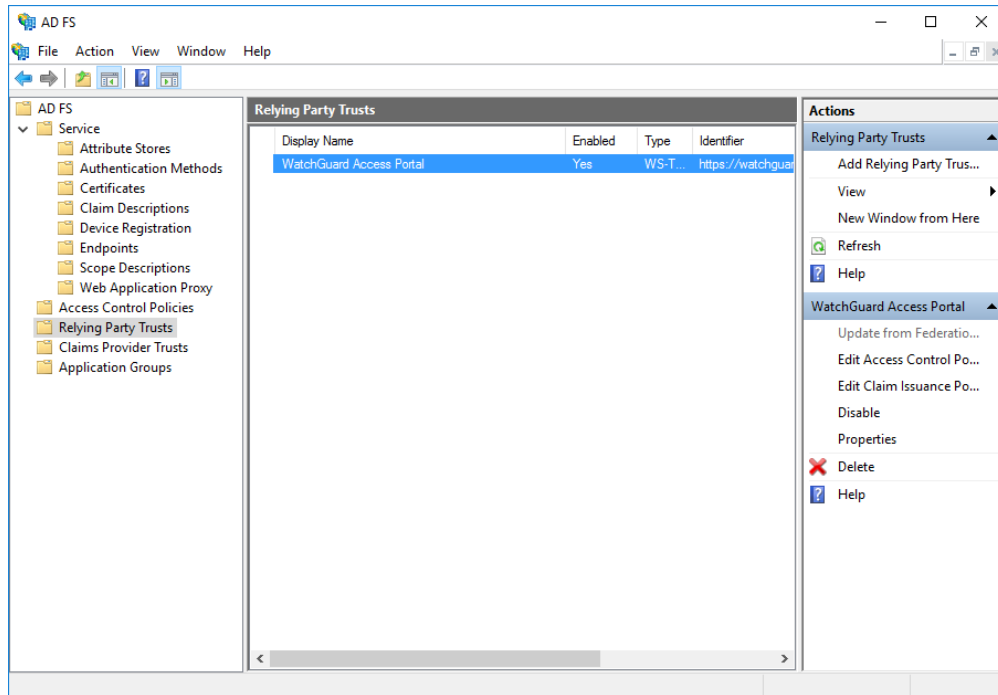
6. Click on **Relying Party Trusts** in the left side menu

7. Select the Relying Party you wish to add LoginTC MFA to

Don't have a Relying Party for WatchGuard Access Portal setup yet?

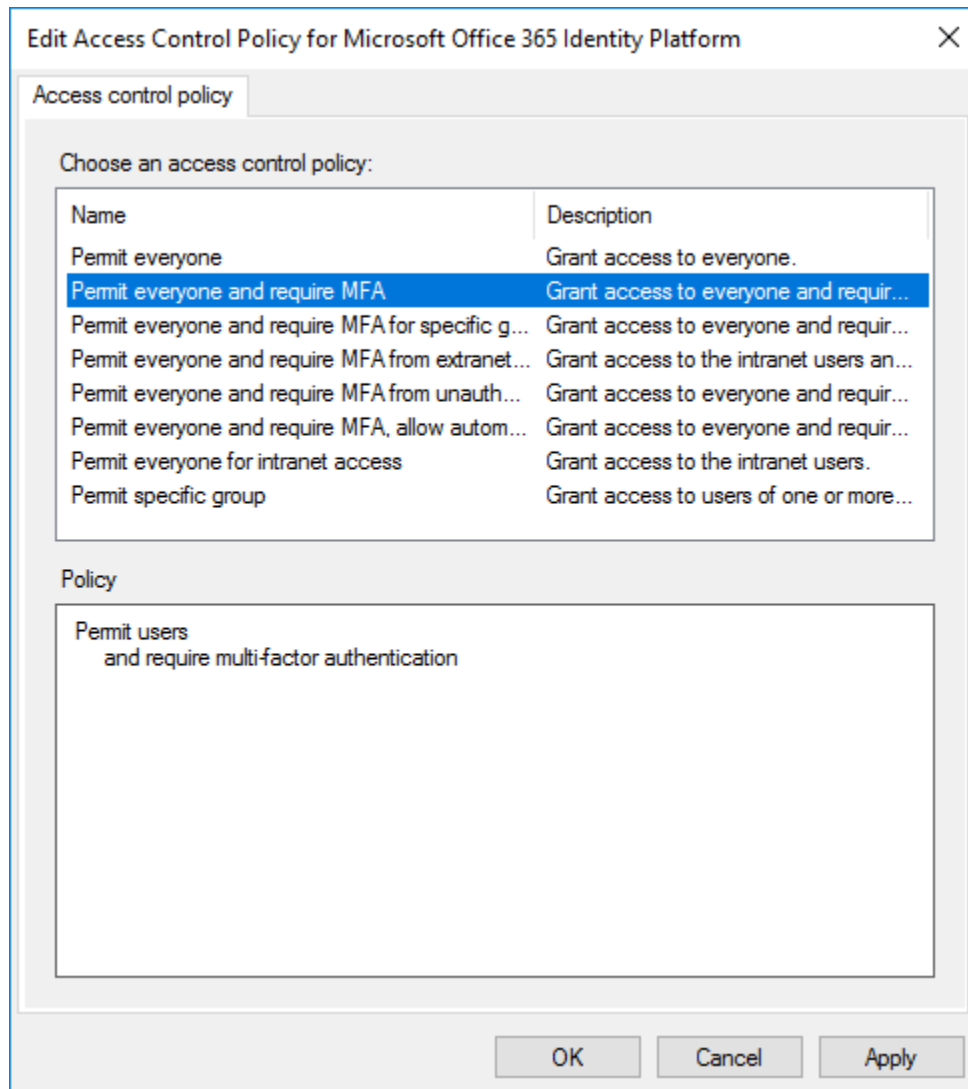
For instructions on configuring a Relying Party for Access Portal see sections [WatchGuard Access Portal Configuration](#) and [AD FS Relying Party](#).

8. Click on **Edit Access Control Policy...** under Actions in the right sidebar



9. Select an access control policy that uses MFA (e.g. **Permit everyone and require MFA**)

10. Press **Apply** and **OK**

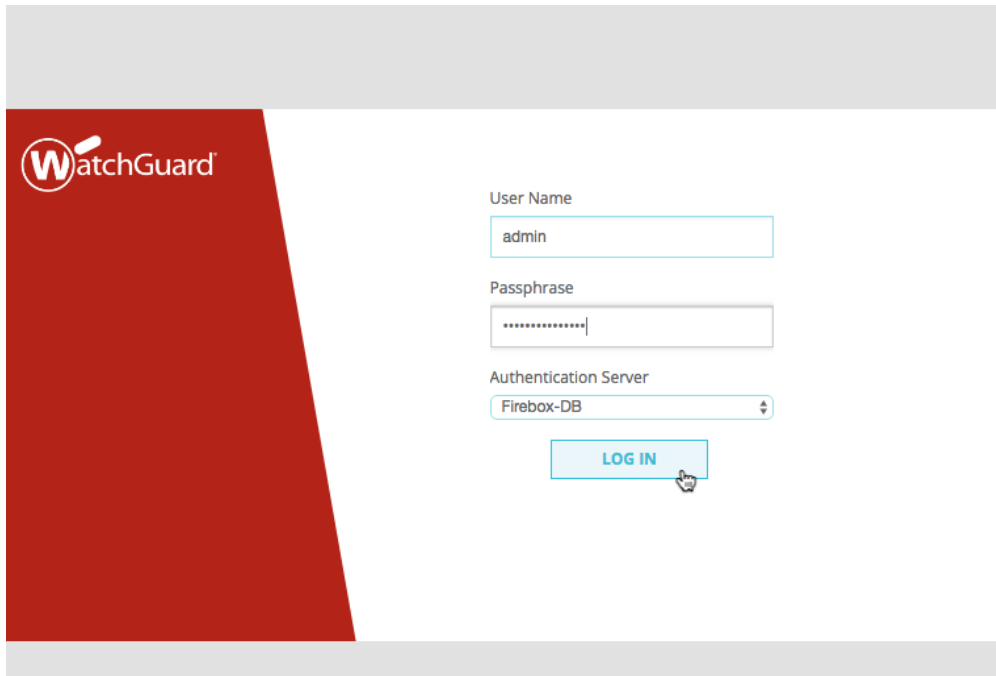


Your AD FS login will now present the user with a secondary LoginTC authentication page.

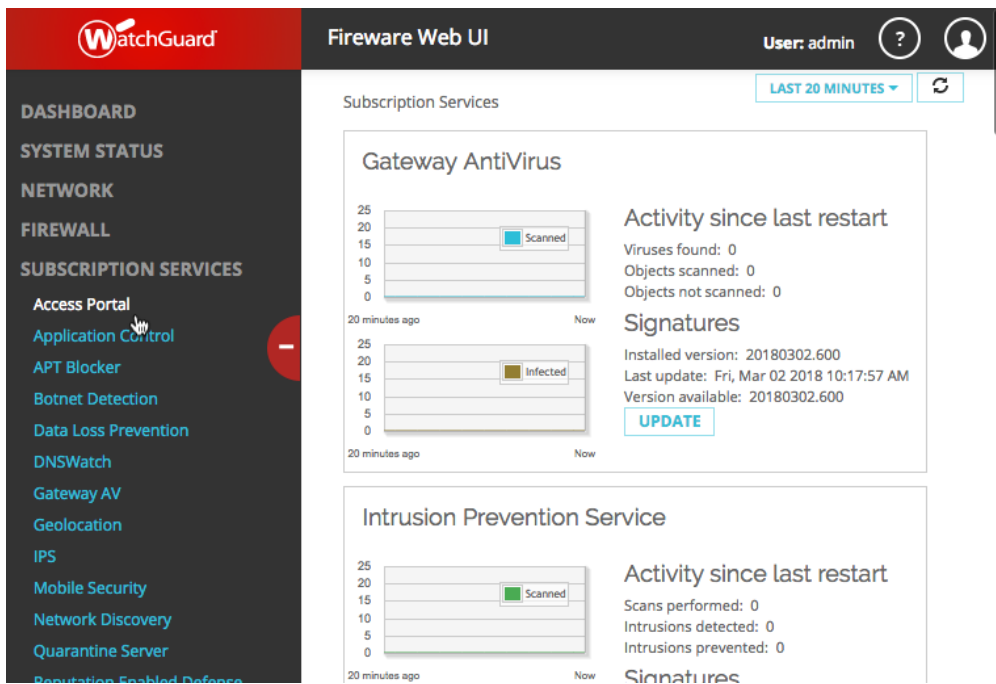
Configuration for WatchGuard Access Portal 2FA

Configure WatchGuard Access Portal for SAML Single Sign-On (SSO):

1. Log in to your WatchGuard Fireware Web UI:



2. Under **Subscription Services** click **Access Portal**:



3. Click **Enable Access Portal**:

WatchGuard Fireware Web UI User: admin

Access Portal

Enable Access Portal

Applications User Connection Settings

User Access

All applications are available to all users and groups authenticated with the VPN Portal

Specify the applications available to each user and group

NAME	TYPE	AUTHENTICATION SERVER	APPLICATIONS
web	Group	RADIUS	OWA

ADD EDIT REMOVE

VPN Portal

Interface for Connections:
Any-External

Authentication Servers:
RADIUS

4. Click on the **User Connection Settings** tab:

WatchGuard Fireware Web UI User: admin

Access Portal

Enable Access Portal

Applications User Connection Settings

Web Applications and Application Groups

Specify the applications that appear in the VPN Portal. Applications appear in the order specified in this list.

NAME	DESCRIPTION	TYPE	HOST LOCATION
▼ Applications			
Application Group			
	Office 365	Web Application	https://office365.
		Web Application	http://owa.exam

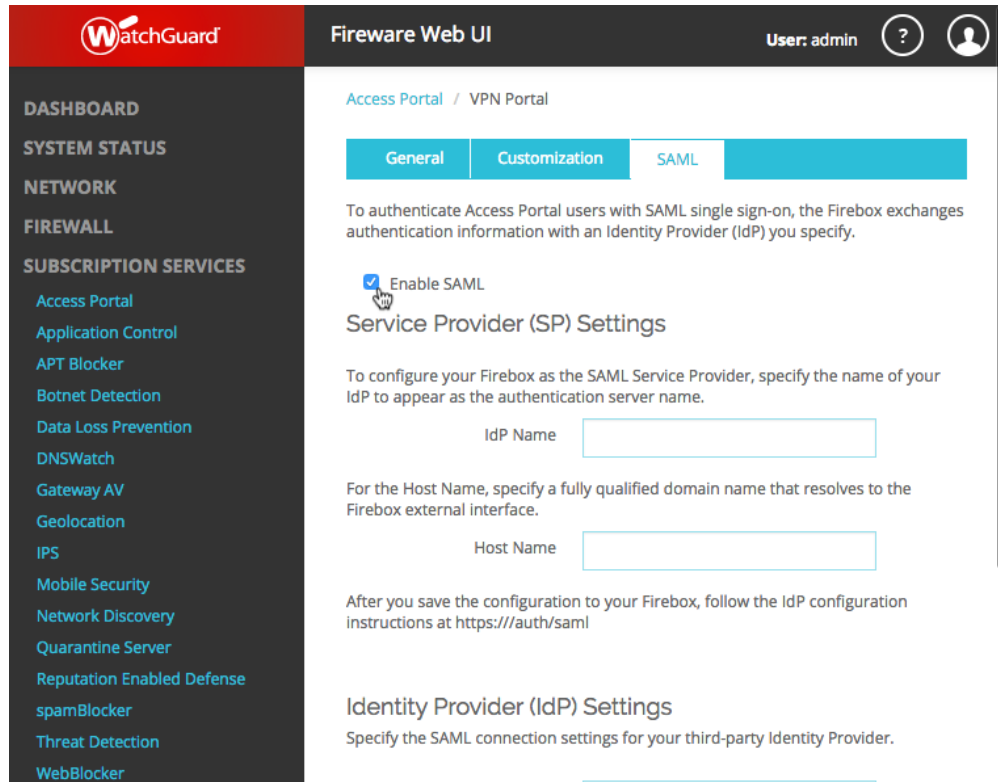
5. Scroll down and click **Configure**:

The screenshot shows the WatchGuard Fireware Web UI interface. The top navigation bar includes the WatchGuard logo, the title "Fireware Web UI", and the user "User: admin". The left sidebar shows the "VPN SYSTEM" menu. The main content area is titled "Portal" and contains a table with columns "NAME", "TYPE", "AUTHENTICATION SERVER", and "APPLICATIONS". A single row is visible with "web", "Group", "RADIUS", and "OWA". Below the table are "ADD", "EDIT", and "REMOVE" buttons. Further down, the "VPN Portal" section is shown, including "Interface for Connections" (Any-External) and "Authentication Servers" (RADIUS, Firebox-DB). A blue "CONFIGURE" button with a gear icon is highlighted by a mouse cursor, and a "SAVE" button is located below it.

6. Click on the **SAML** tab:

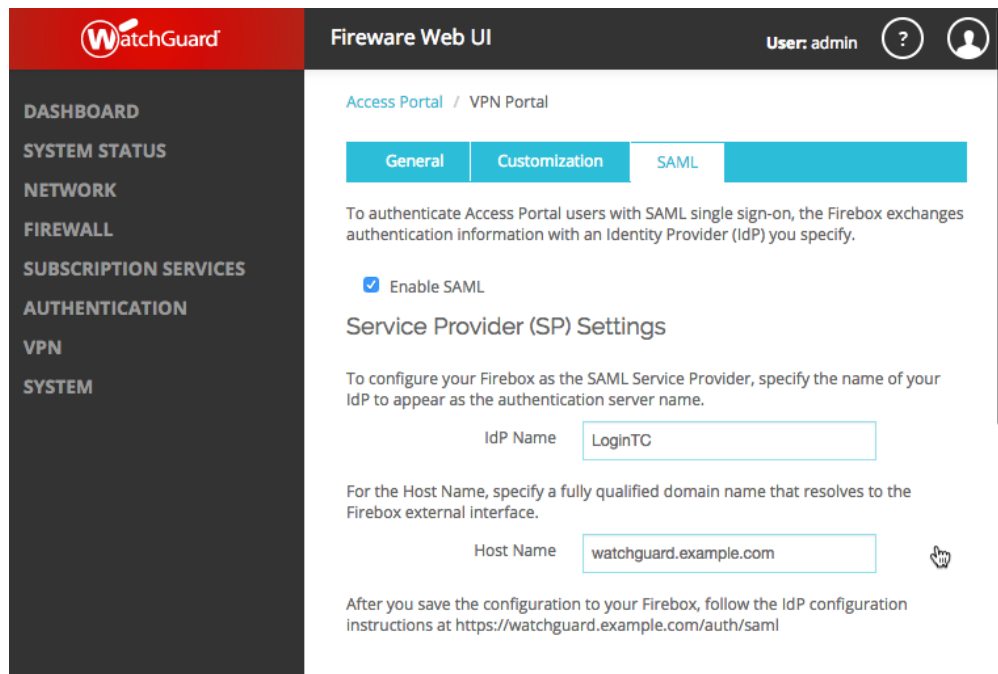
The screenshot shows the WatchGuard Fireware Web UI interface with the "SAML" tab selected. The top navigation bar is the same as in the previous screenshot. The left sidebar now shows a "SUBSCRIPTION SERVICES" section with various options, including "Access Portal". The main content area is titled "Access Portal / VPN Portal" and has tabs for "General", "Customization", and "SAML". The "SAML" tab is active. Below the tabs, the "Authentication Servers" section is shown, with a description: "Specify the authentication servers to use for connections to the VPN Portal. The first authentication server in the list is the default server." A table header "AUTHENTICATION SERVER" is visible, with one row containing "Firebox-DB". Below the table are "ADD", "REMOVE", "MOVE UP", and "MOVE DOWN" buttons. The "Interfaces" section is also visible, with a description: "Specify the interfaces for connections to the VPN Portal. These interfaces will appear in the 'WG-VPN-Portal' alias. The 'WG-VPN-Portal' alias is used in the 'WatchGuard SSLVPN' policy." A table header "INTERFACE" is visible, with one row containing "Any-External". Below the table are "ADD" and "REMOVE" buttons.

7. Click **Enable SAML**:



The screenshot shows the WatchGuard Fireware Web UI interface. The left sidebar contains a navigation menu with categories: DASHBOARD, SYSTEM STATUS, NETWORK, FIREWALL, SUBSCRIPTION SERVICES, and AUTHENTICATION. The main content area is titled 'Access Portal / VPN Portal' and has three tabs: 'General', 'Customization', and 'SAML'. The 'SAML' tab is active. Below the tabs, there is a checkbox labeled 'Enable SAML' which is checked. A mouse cursor is pointing at the checkbox. Below this, the 'Service Provider (SP) Settings' section is visible, with a text box for 'IdP Name' and a text box for 'Host Name'. The 'Host Name' field is currently empty.

8. Complete the Service Provider (SP) Settings configuration:



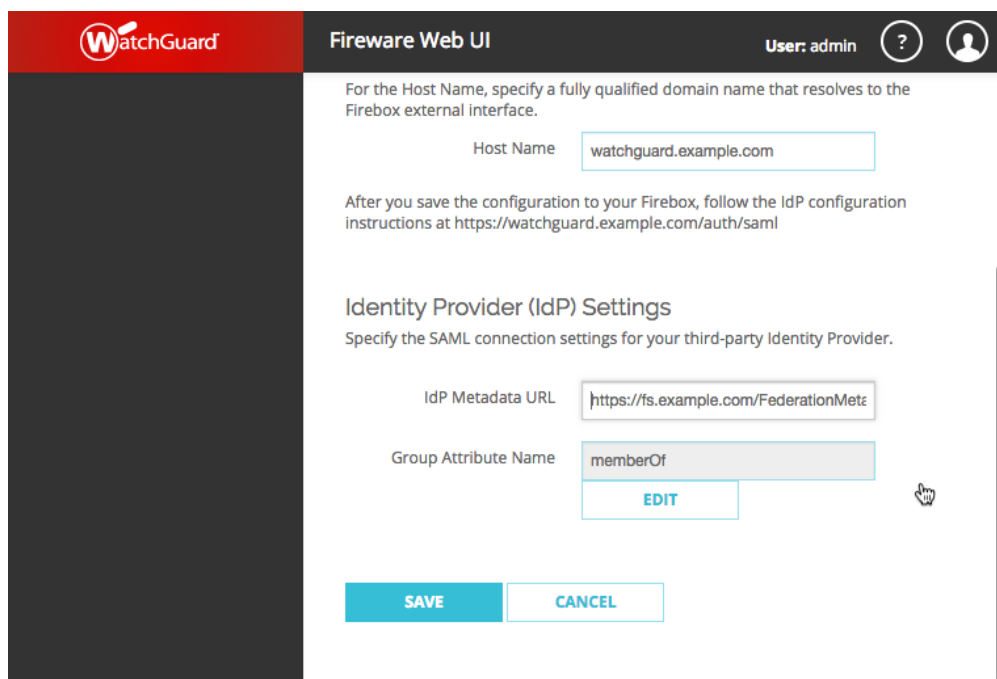
The screenshot shows the same WatchGuard Fireware Web UI interface as in step 7, but now the 'Service Provider (SP) Settings' section is completed. The 'IdP Name' field contains the text 'LoginTC'. The 'Host Name' field contains the text 'watchguard.example.com'. A mouse cursor is pointing at the 'Host Name' field. The 'Enable SAML' checkbox remains checked.

Service Provider (SP) Settings:

Property	Explanation	Example
----------	-------------	---------

Property	Explanation	Example
IdP Name	Name to appear as the authentication server name	LoginTC
Host Name	A fully qualified domain name that resolves to the Firebox external interface	watchguard.example.com

8. (Continued) Complete the Service Provider (SP) Settings configuration:

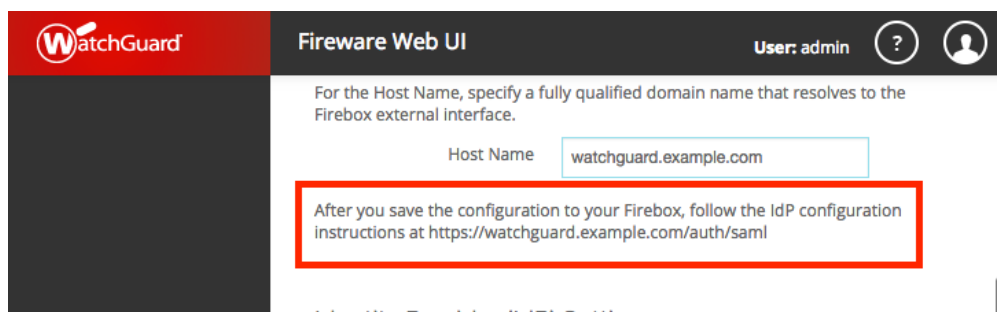


Identity Provider (IdP) Settings

Property	Explanation	Example
IdP Metadata URL	AD FS Federation Metadata URL	https://fs.example.com/FederationMetadata/2007-06/FederationMetadata.xml
Group Attribute Name	The name of the attribute returning group claims	memberOf

9. Click **SAVE**

10. Navigate to **SAML 2.0 Configuration for WatchGuard Access Portal** page (i.e. <https://watchguard.example.com/auth.saml>):



11. Copy the SP metadata URL found under **Option 1** and paste in your browser. Save the file as `metadata.xml`.

SAML 2.0 Configuration for WatchGuard Access Portal

After you enable SAML in the WatchGuard Access Portal configuration, you must follow one of the procedures on this page to provide SAML configuration information to your Identity Provider (IdP) administrator. The IdP administrator requires this information to configure the Access Portal as a Service Provider (SP). To make sure your IdP meets the requirements, see [SAML Single Sign-On Requirements](#) in *Fireware Help*.

Option 1

If your IdP accepts SP metadata, provide this URL to your IdP administrator.

<https://watchguard.corp.cyphercor.com/auth/saml/me>

COPY

Option 2

Provide these details to your IdP administrator.

SAML Entity ID

WatchGuard SAML Configuration

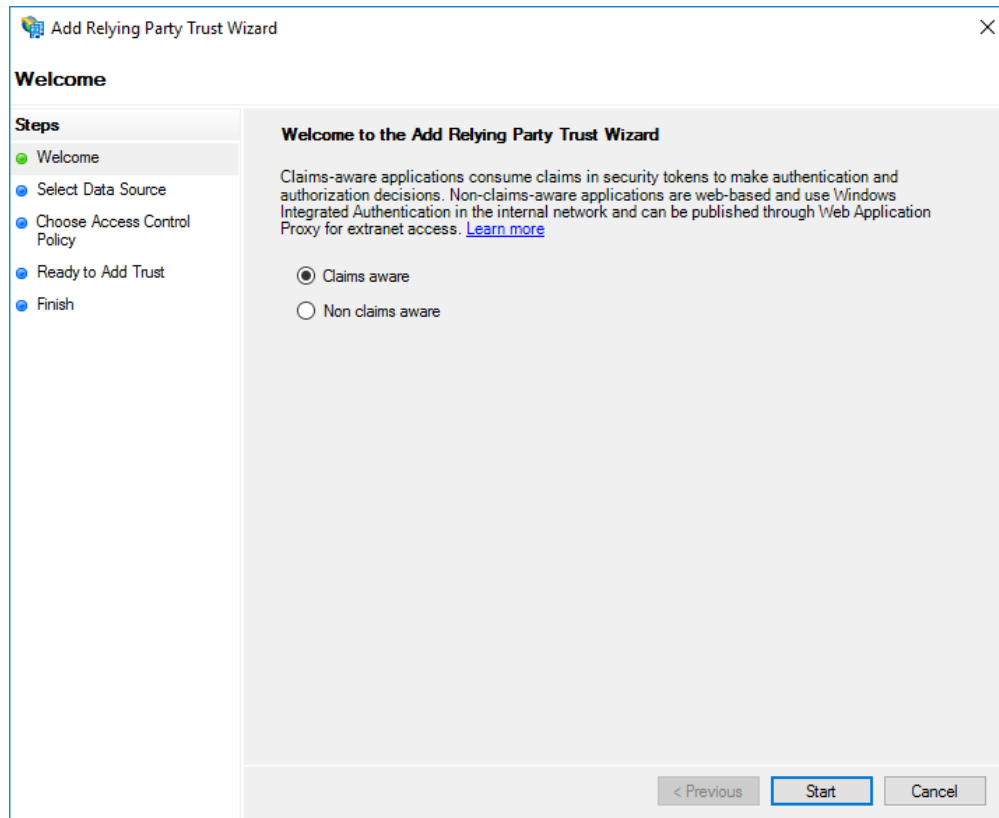
WatchGuard Access Portal is now configured to use your AD FS server to perform authentication. In the next section the `metadata.xml` file will be used to configure AD FS to properly authenticate WatchGuard Access Portal requests.

AD FS Relying Party

To configure a WatchGuard Access Portal Relying Party in AD FS:

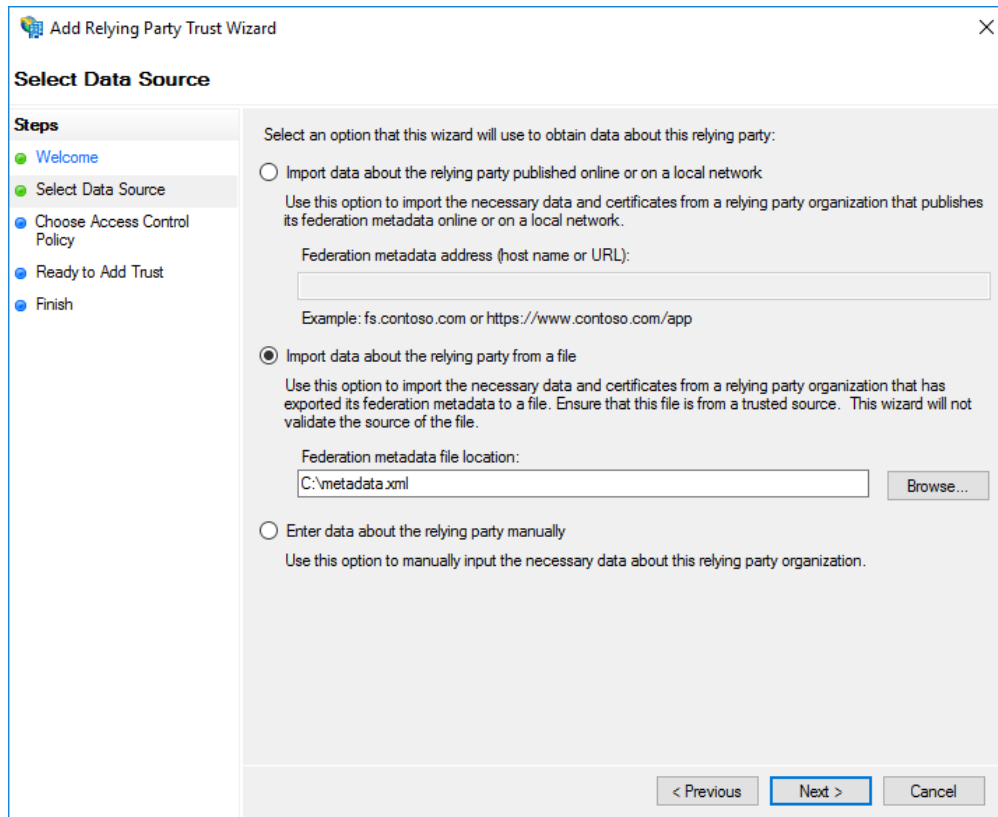
1. Open the **AD FS Management** console.
2. Click on **Relying Party Trusts** in the left side menu
3. Click on **Add Relying Party Trust...**

4. Select **Claims Aware**



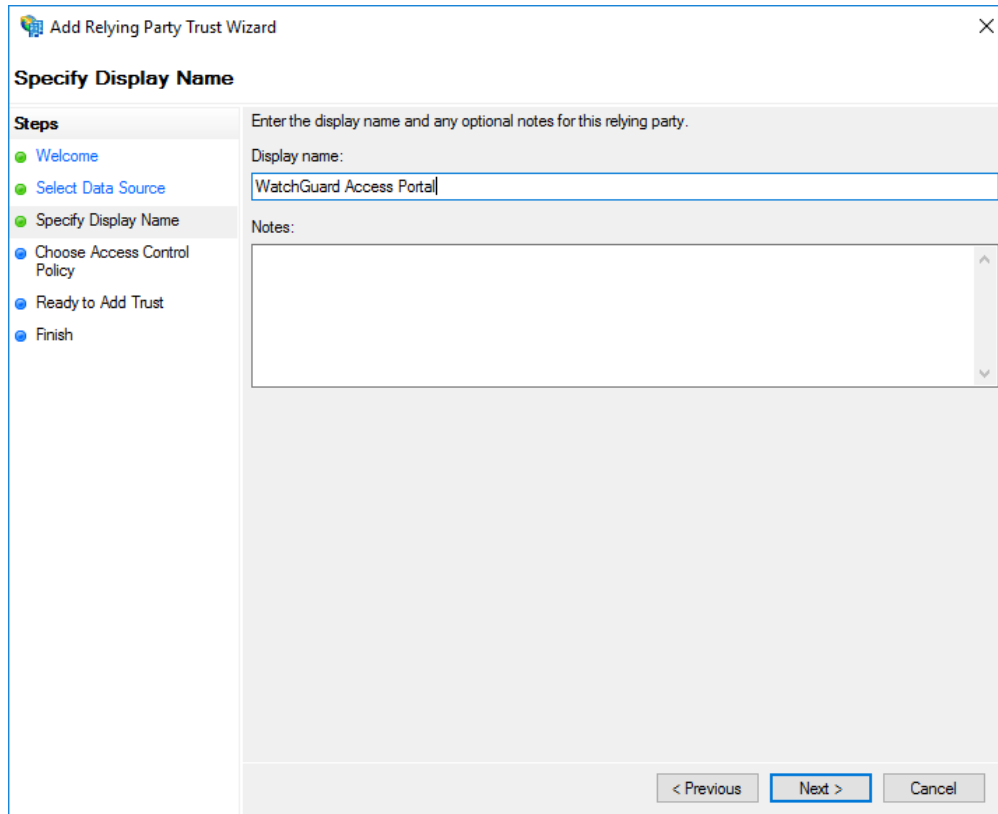
5. Click **Start**

6. Select **Import data about the relying party from a file** and then browse the where `metadata.xml` from the final section of WatchGuard Access Portal Configuration is saved.



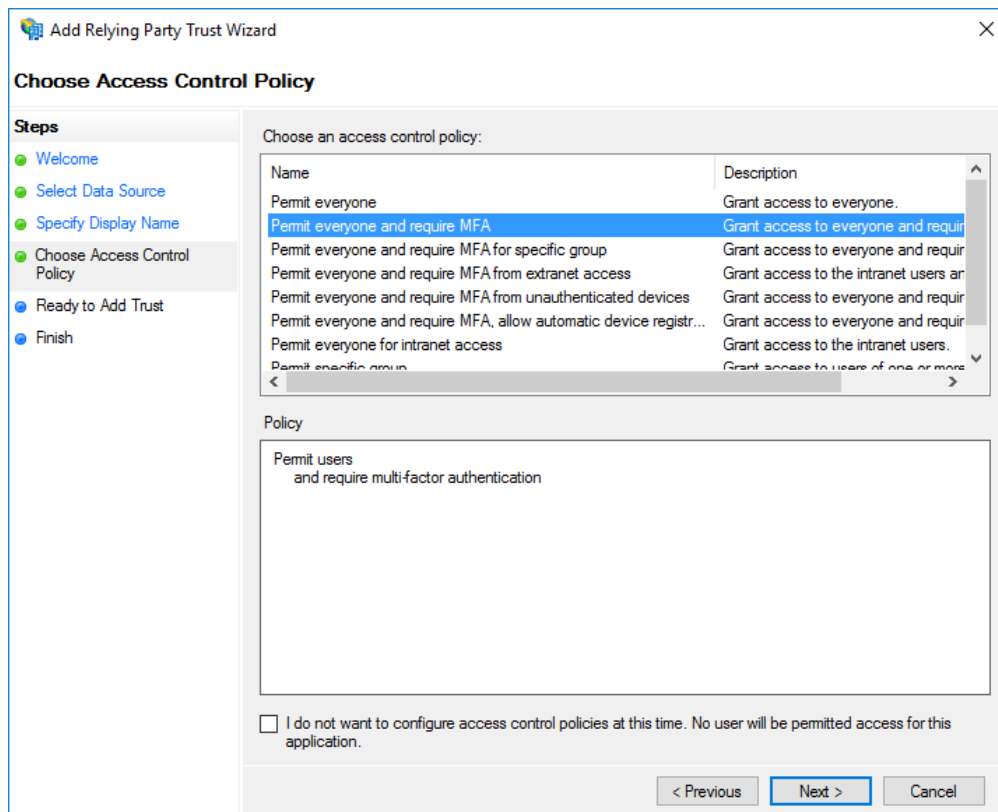
7. Click **Next**

8. Enter a **Display name** (for example: **WatchGuard Access Portal**):

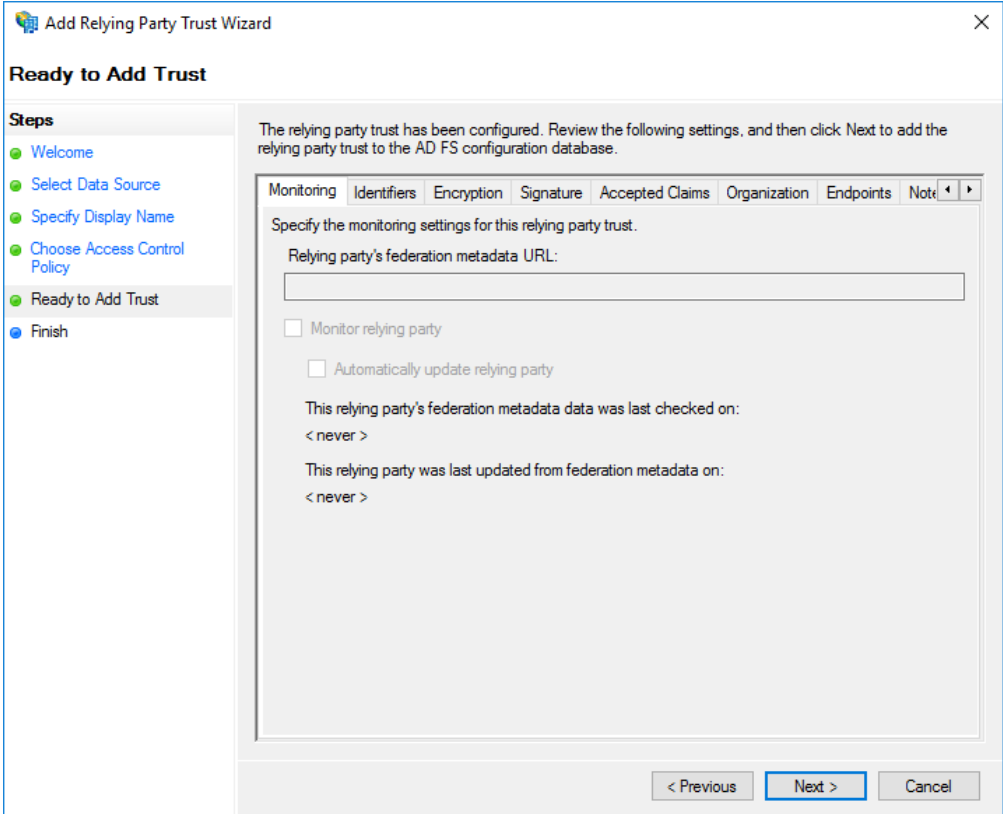


9. Click **Next**

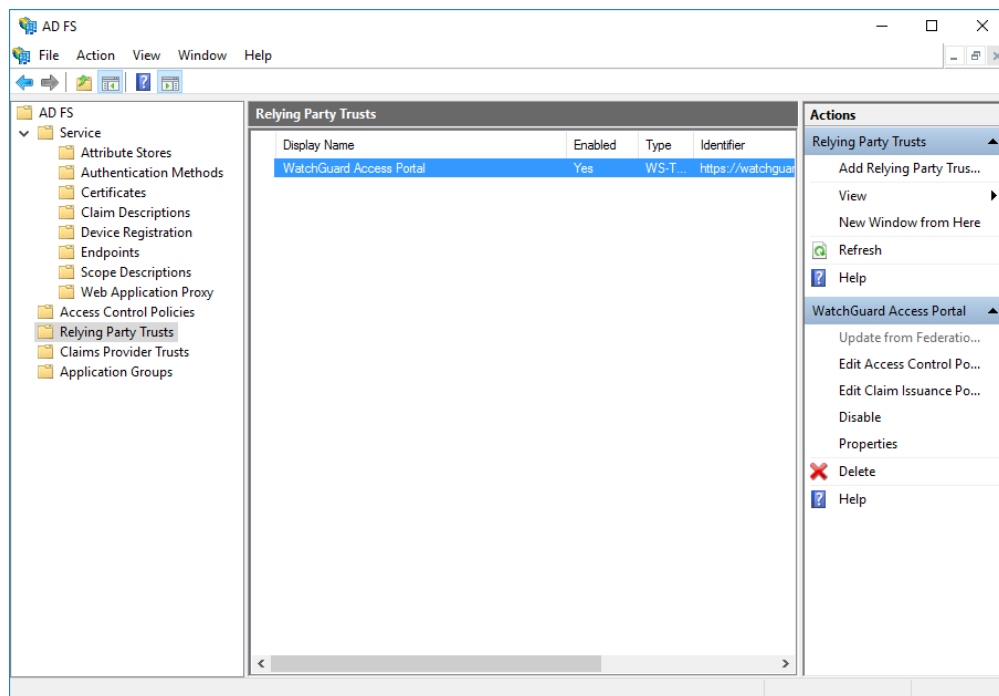
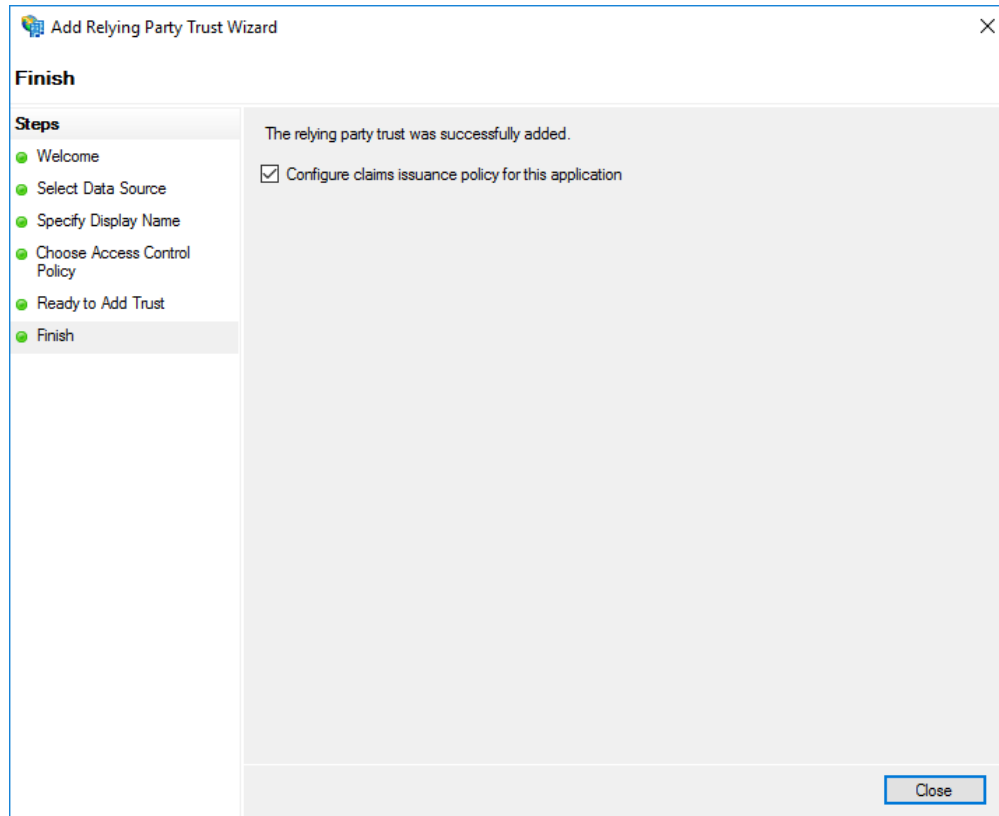
10. Under **Choose an access control policy** select **Permit everyone and require MFA**



11. Click **Next**

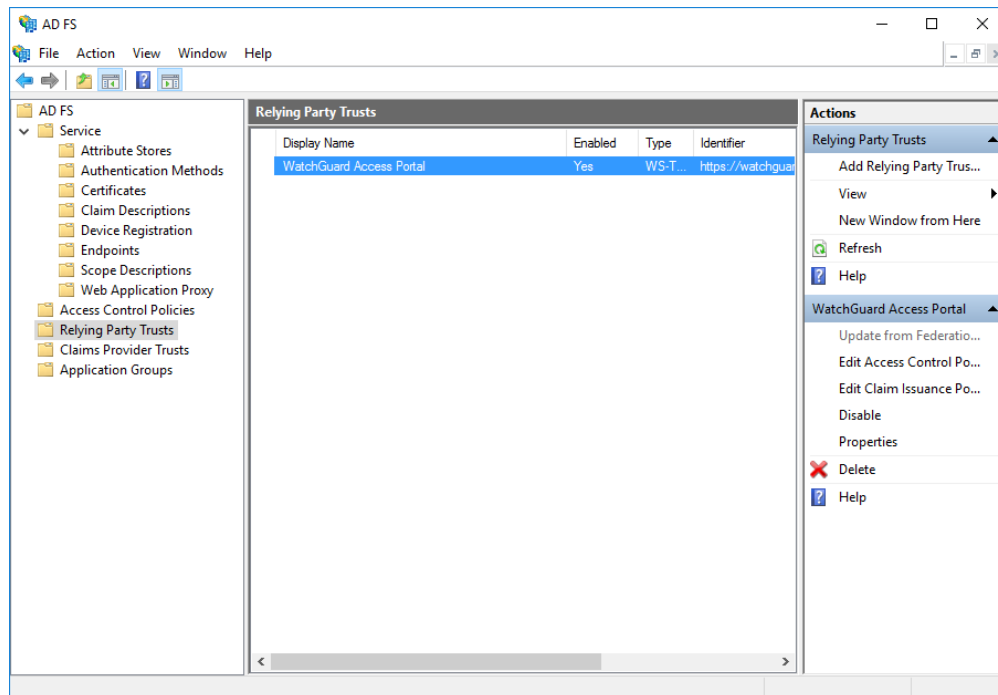


12. Click **Close**



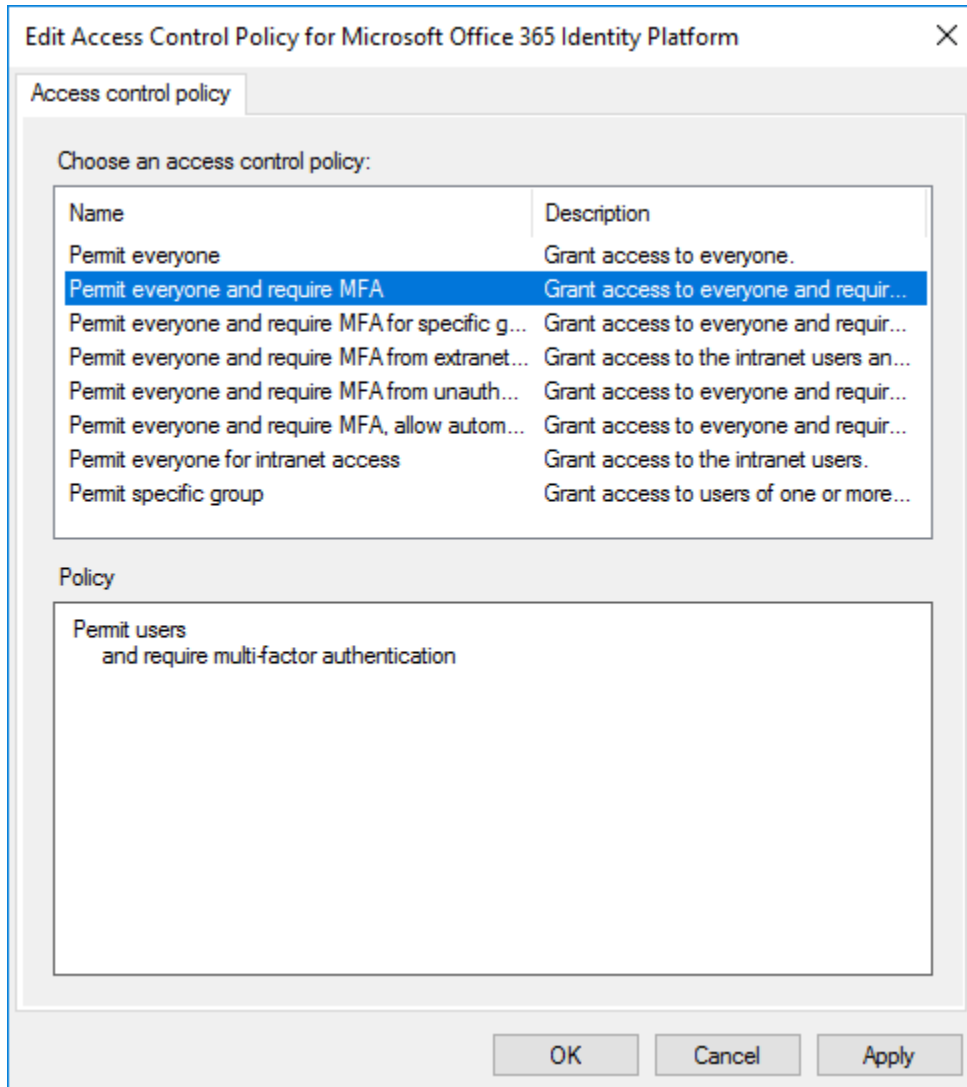
13. Select the Relying Party just created

14. Click on **Edit Access Control Policy...** under Actions in the right sidebar



15. Select an access control policy that uses MFA (e.g. **Permit everyone and require MFA**)

16. Press **Apply** and **OK**



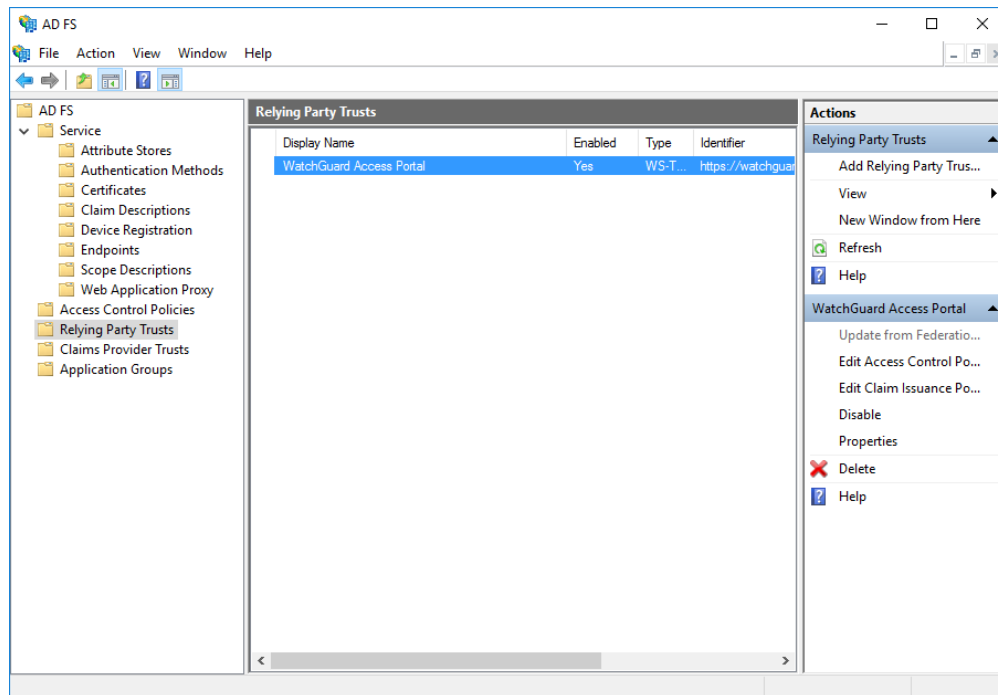
Next you will need to configured the AD FS Claims for your WatchGuard Access Portal Relying Party.

AD FS Claims

WatchGuard Access Portal requires the following claims to be configured:

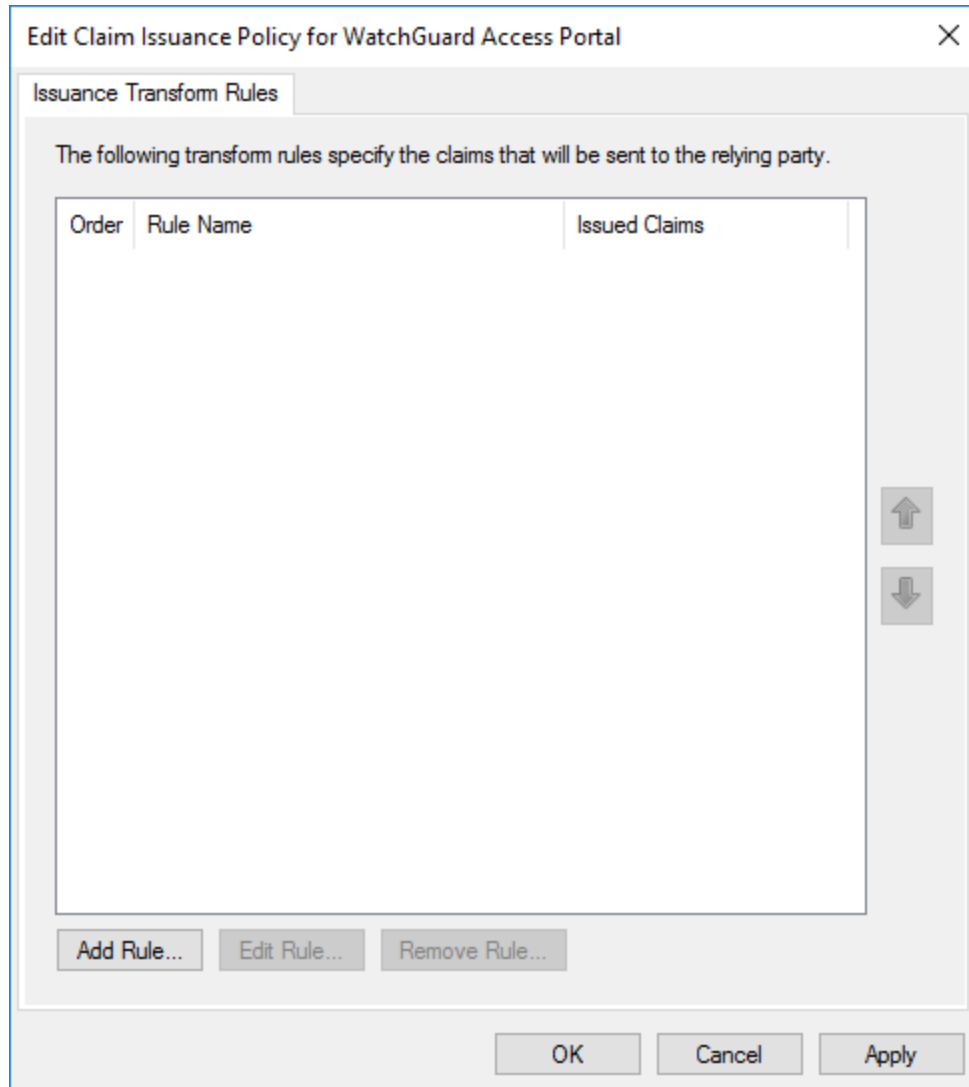
Claim 1: LDAP Attribute for SAM-Account-Name

1. Click on **Relying Party Trusts** in the left side menu



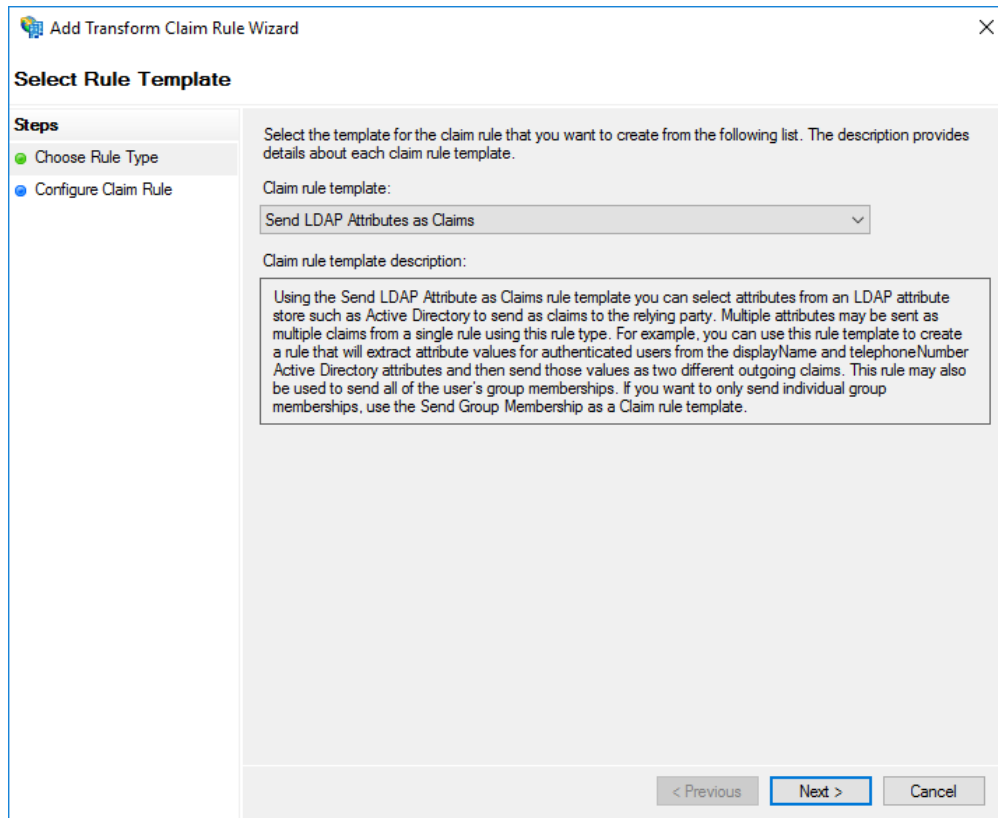
2. Select the WatchGuard Access Portal Relying Party

3. Click on **Edit Claims Issuance Policy...** under Actions in the right sidebar



4. Click **Add Rule**

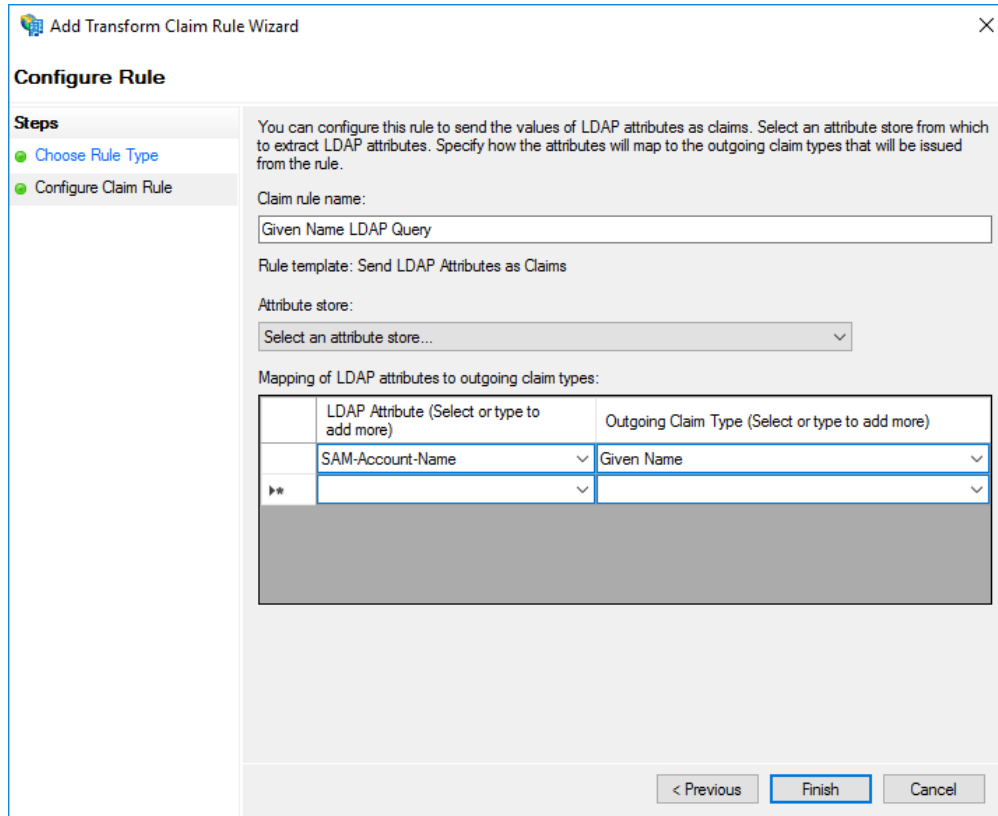
5. Select **Send LDAP Attributes as Claims** and click **Next**



6. Enter a **Claim rule name** (for example, **Given Name LDAP Query**)

7. Under **LDAP Attribute** enter **SAM-Account-Name**

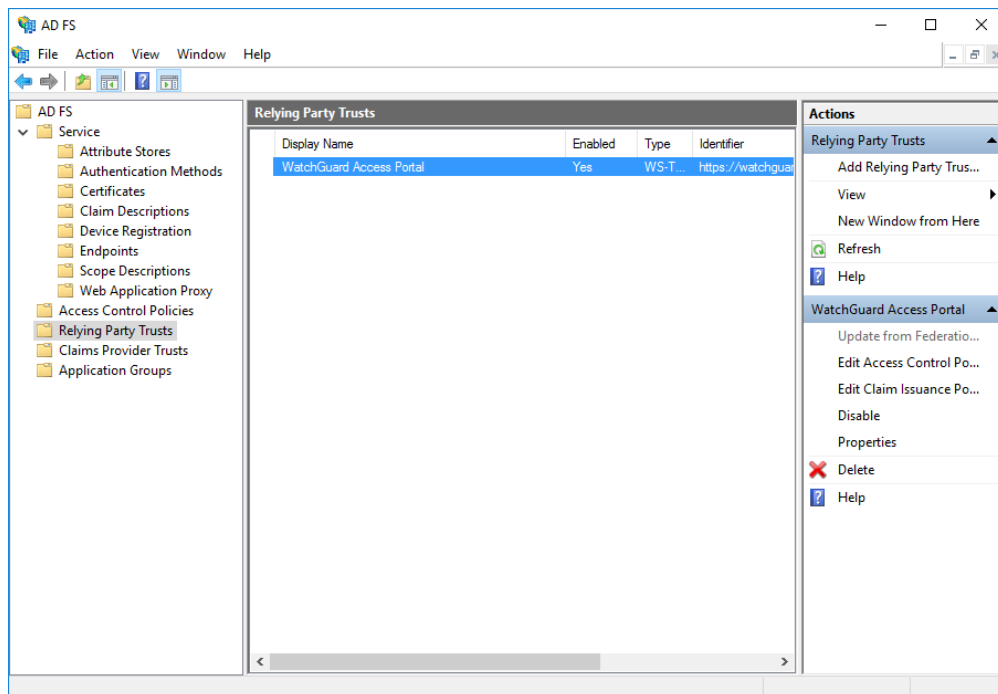
8. Under **Outgoing Claim Type** enter **Given Name**



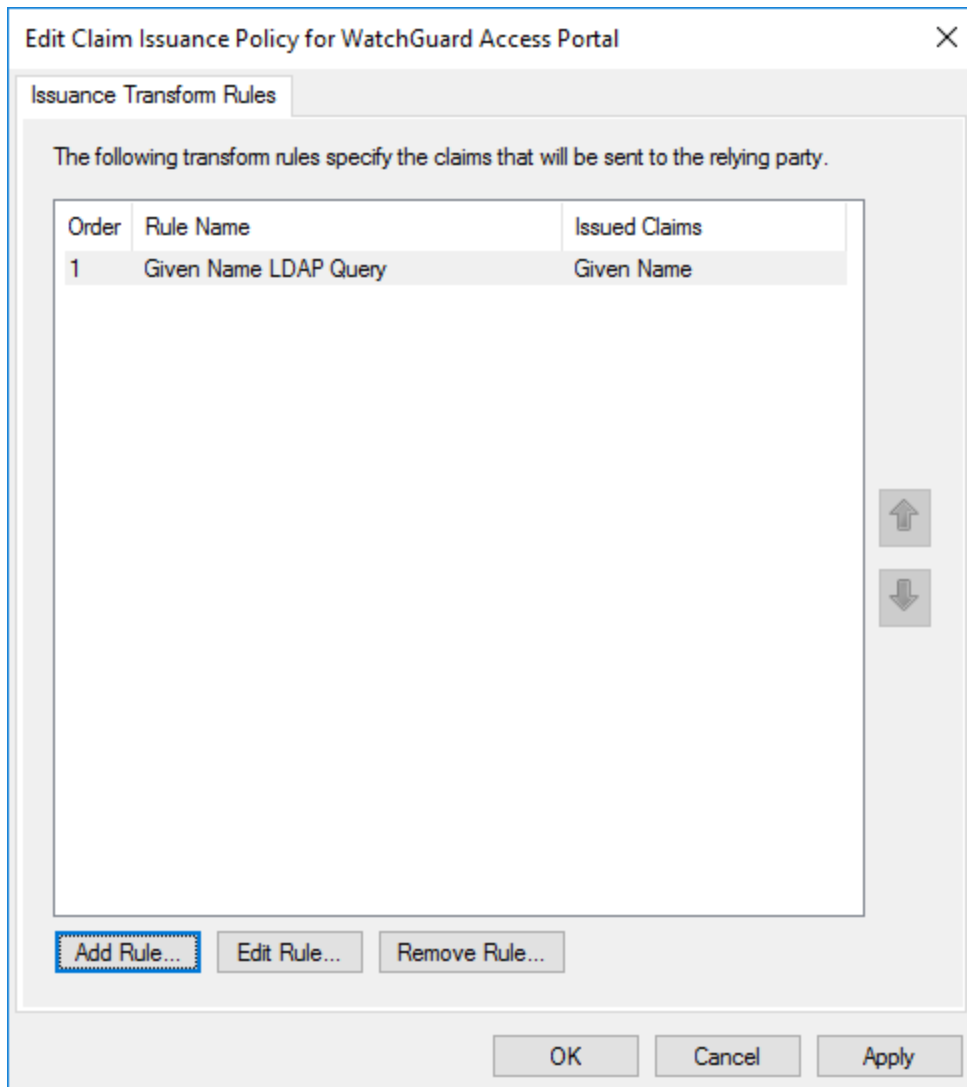
9. Click **Finish**

Claim 2: Transform Given Name to Name ID

1. Click on **Relying Party Trusts** in the left side menu

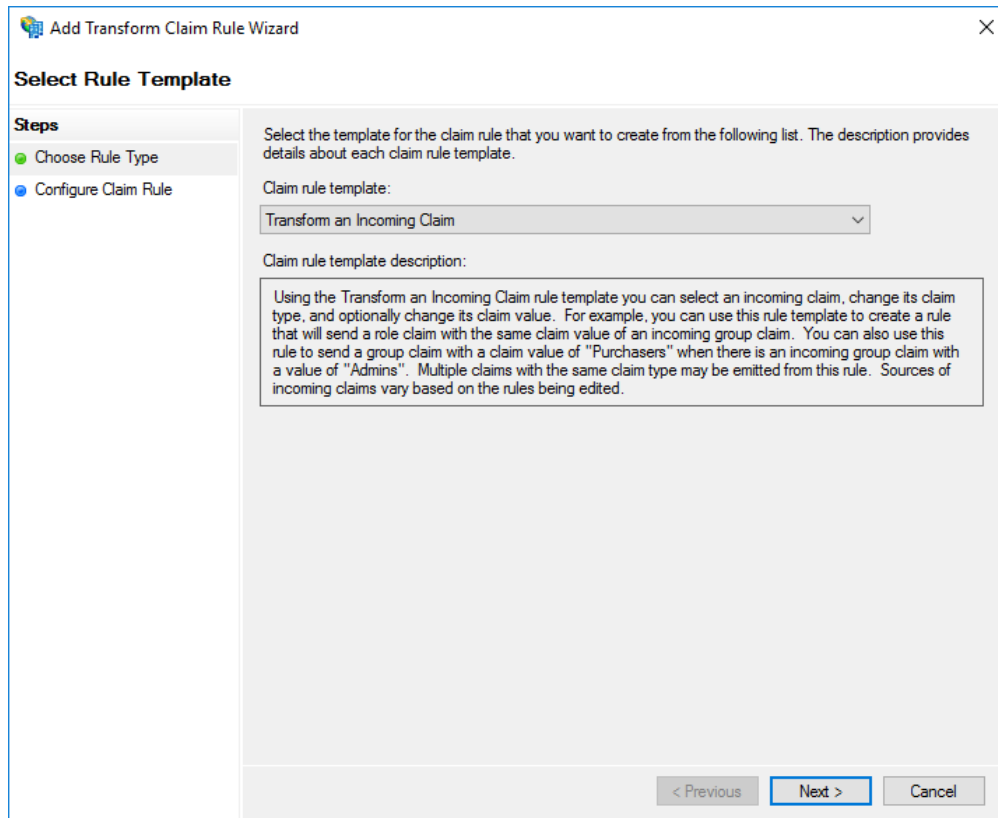


2. Select the WatchGuard Access Portal Relying Party
3. Click on **Edit Claims Issuance Policy...** under Actions in the right sidebar



4. Click **Add Rule**

5. Select **Transform an Incoming Claim** and click **Next**



6. Enter a **Claim rule name** (for example, **Transform Given Name to Name ID**)
7. Under **Incoming claim type** enter **Given Name**
8. Under **Outgoing claim Type** enter **Name ID**

9. Select **Pass through all claim values**

The screenshot shows the 'Add Transform Claim Rule Wizard' dialog box, specifically the 'Configure Rule' step. The 'Steps' pane on the left shows 'Choose Rule Type' and 'Configure Claim Rule'. The main area contains the following configuration options:

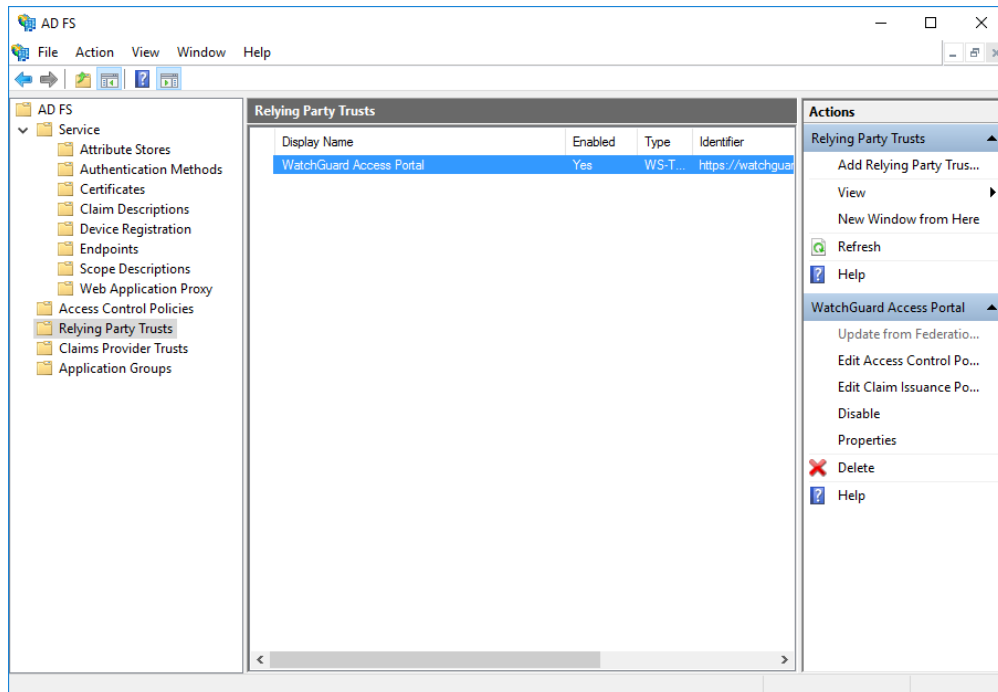
- Claim rule name: Transform Given Name to Name ID
- Rule template: Transform an Incoming Claim
- Incoming claim type: Given Name
- Incoming name ID format: Unspecified
- Outgoing claim type: Name ID
- Outgoing name ID format: Unspecified
- Selected radio button: **Pass through all claim values**
- Other options: 'Replace an incoming claim value with a different outgoing claim value' and 'Replace incoming e-mail suffix claims with a new e-mail suffix'.

At the bottom, there are buttons for '< Previous', 'Finish', and 'Cancel'.

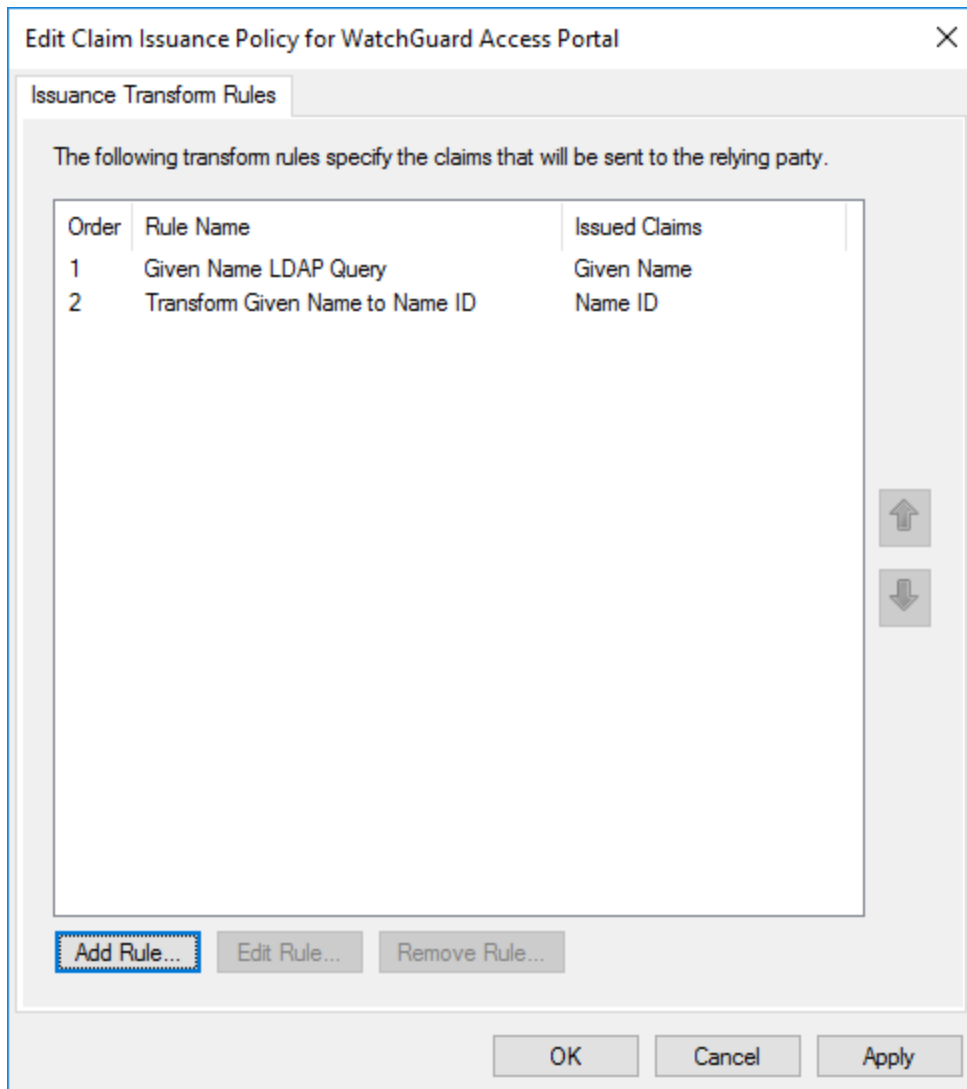
10. Click **Finish**

Claim 3: Group Membership Claim

1. Click on **Relying Party Trusts** in the left side menu

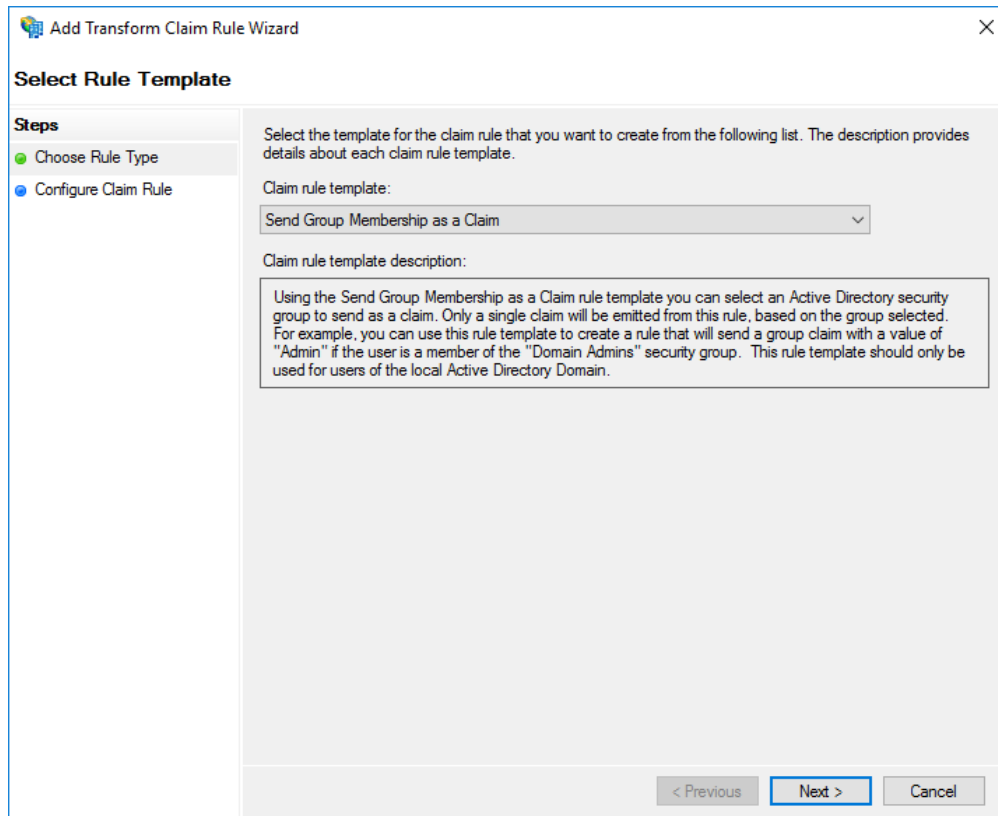


2. Select the WatchGuard Access Portal Relying Party
3. Click on **Edit Claims Issuance Policy...** under Actions in the right sidebar



4. Click **Add Rule**

5. Select **Send Group Membership as a Claim**



6. Enter a **Claim rule name** (for example, **Send Group Membership as Claim**)
7. Under **User's group** click **Browse** and select the group configured for WatchGuard Access Portal
8. Under **Outgoing claim type** enter **memberOf**

9. Under **Outgoing claim value** enter the name of the group. This should match exactly the name configured in the WatchGuard Access Portal

The screenshot shows the 'Add Transform Claim Rule Wizard' dialog box, specifically the 'Configure Rule' step. The dialog has a title bar with a close button (X) and a subtitle 'Add Transform Claim Rule Wizard'. Below the title bar, the 'Configure Rule' section contains a 'Steps' pane on the left with two items: 'Choose Rule Type' (selected) and 'Configure Claim Rule'. The main area contains the following fields and controls:

- Claim rule name:** A text box containing 'Send Group Membership as Claim'.
- Rule template:** A label 'Rule template: Send Group Membership as a Claim'.
- User's group:** A text box containing 'CORP\LoginTC-SSO' and a 'Browse...' button.
- Outgoing claim type:** A dropdown menu with 'memberOf' selected.
- Outgoing name ID format:** A dropdown menu with 'Unspecified' selected.
- Outgoing claim value:** A text box containing 'LoginTC-SSO'.

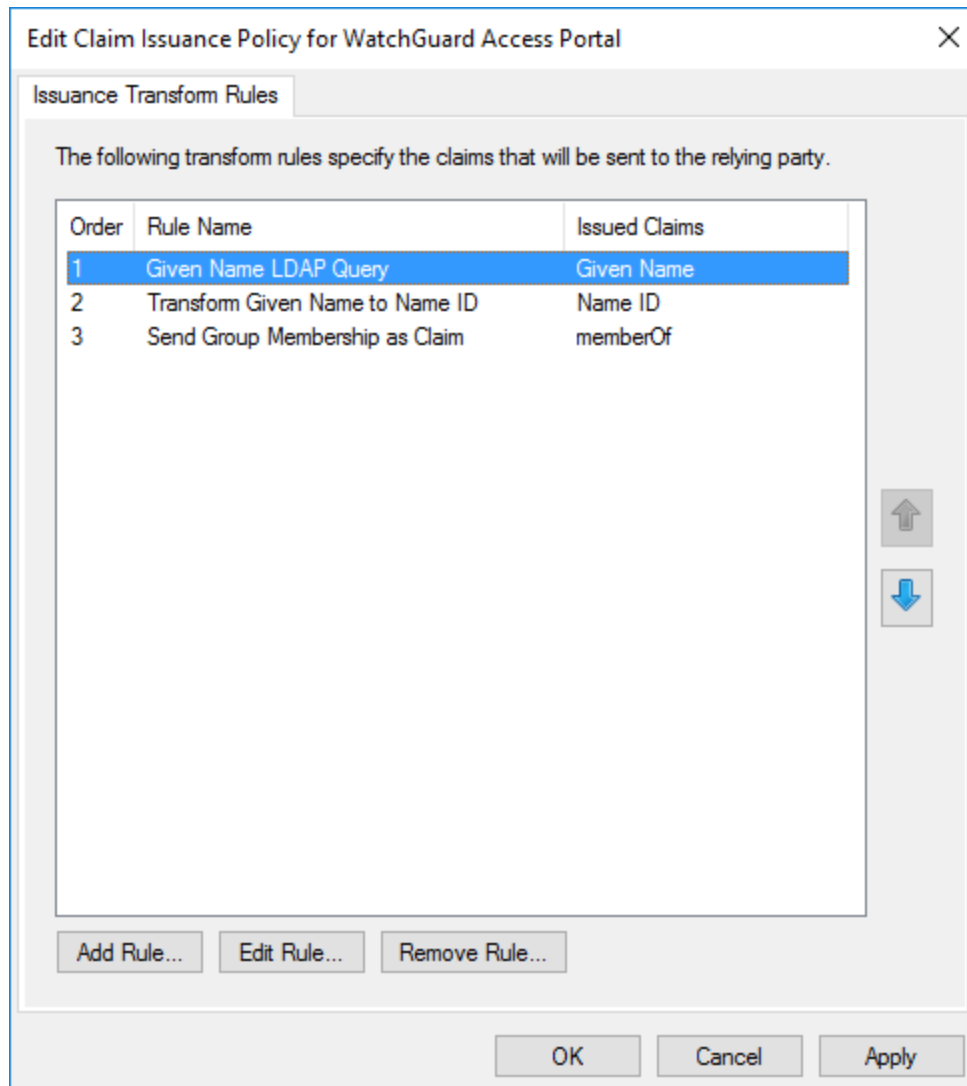
At the bottom right, there are three buttons: '< Previous', 'Finish' (highlighted with a blue border), and 'Cancel'.

10. Click **Finish**

Additional AD FS Groups

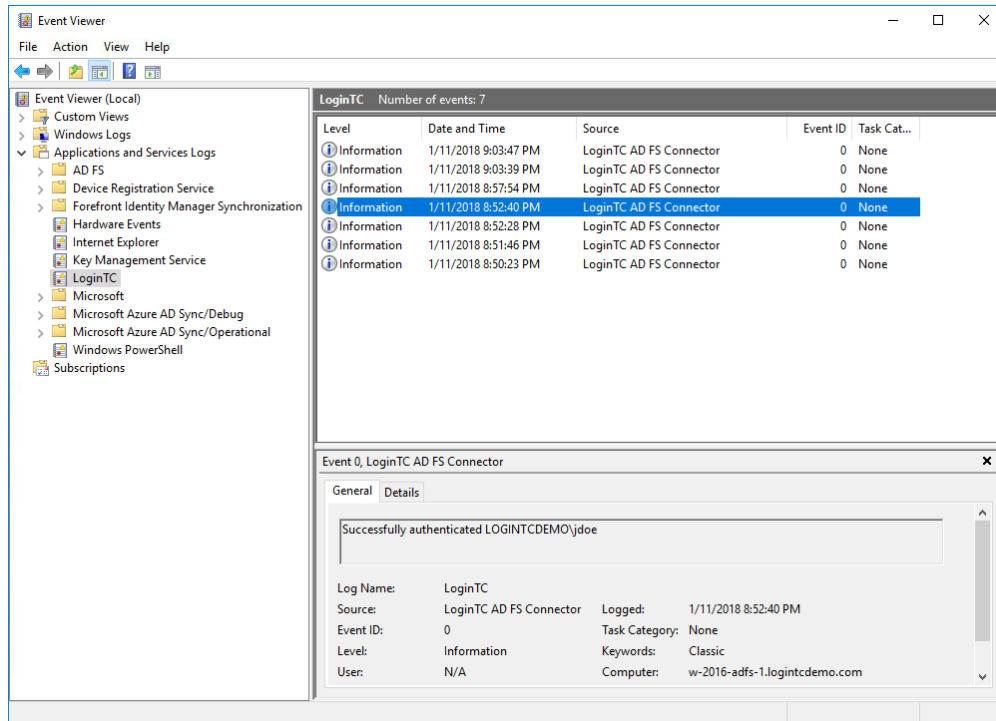
If your WatchGuard Access Portal is configured with multiple groups, subsequent groups can be added as claims following the same procedure listed above

With these claims configured you are now ready to test logging into the WatchGuard Access Portal using LoginTC and AD FS.



Logging

The LoginTC AD FS Connector logs events to the Microsoft Event Viewer under **Applications and Service Logs** → **LoginTC**. In some cases, it may be helpful to also look at the general AD FS logs under **Custom Views** → **ServerRoles** → **Active Directory Federation Services**.



Uninstallation

To uninstall the LoginTC AD FS Connector, simply navigate to the **Add or remove programs** in the Windows **Control Panel**, find LoginTC AD FS Connector in the list and follow the prompts.

Prior to Uninstalling

Prior to uninstalling the LoginTC AD FS Connector, ensure that the LoginTC MFA method is not being used in any of your AD FS authentication policies. The uninstallation will fail if the LoginTC MFA method is being used in any of your AD FS authentication policies.

Troubleshooting

Email Support

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