z/OSMF Network Configuration Assistant: Configure an AT-TLS policy for FTP

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Background

This presentation will guide users on how to manage AT-TLS policies, including configuring an FTP TLS policy.

Configuration Assistant task simplifies the configuration of the TCP/IP policy-based networking functions. With it, you can create and manage policies for the following disciplines:

- IP Security (IKE)
- Network Security Services (NSS)
- Defense Manager daemon (DMD)
- Application Transparent TLS (AT-TLS)
- Intrusion Detection Services (IDS)

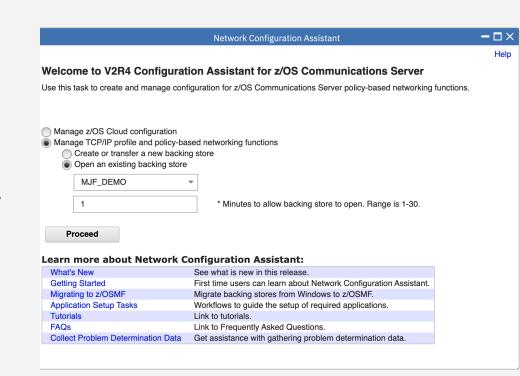
In this guide, we will be focused on AT-TLS policies.

- Policy-based Routing (PBR)
- Quality of Service (QoS)
- TCP/IP Profile configuration
- Import of existing TCP/IP configuration
- Cloud Policy (Cloud)

Logon using your z/OS User ID and password.

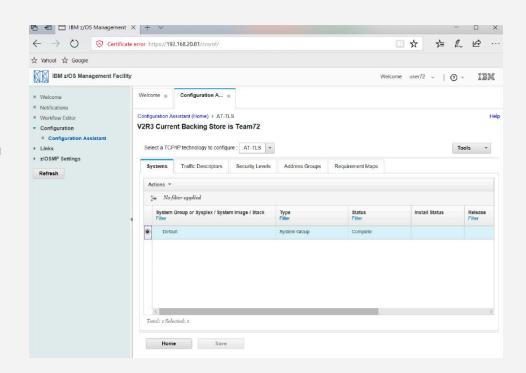
Expand the Configuration section on the left side and click on **Configuration Assistant**.

Use the pull-down to select your backing store file and click on the **Proceed** button.



If necessary, use the technology pull-down to select **AT-TLS**.

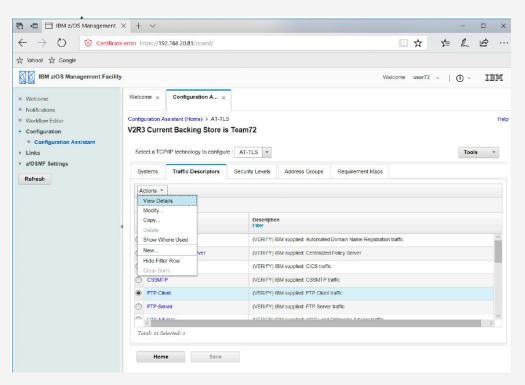
Use the radio button to select the **Default** system group.



Step 1: Create a Traffic Descriptor

Select the **Traffic Descriptor** tab.

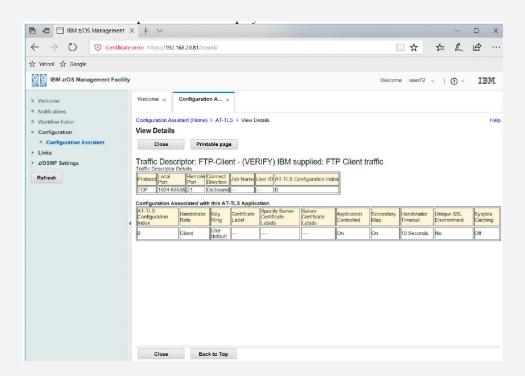
Use the radio button to select the sample FTP-Client traffic descriptor and use the actions pulldown to select **View Details**.



Step 1: Create a Traffic Descriptor

The traffic descriptor details are displayed.

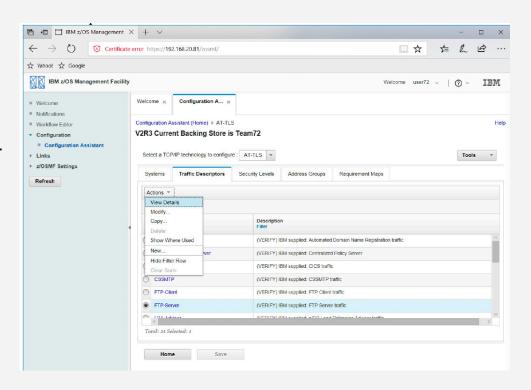
Use the **Close** button to close the View panel when you are finished reviewing the information.



Step 1: Create a Traffic Descriptor

Select the **Traffic Descriptor** tab.

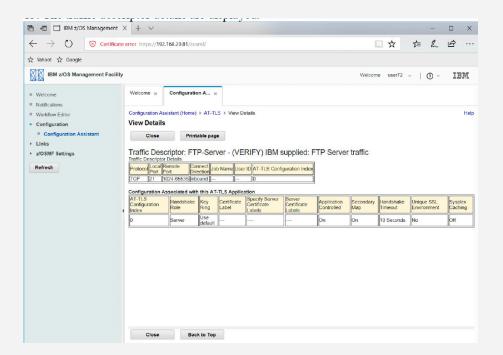
Use the radio button to select the sample FTP-Server traffic descriptor and use the actions pulldown to select **View Details**.



Step 1: Create a Traffic Descriptor

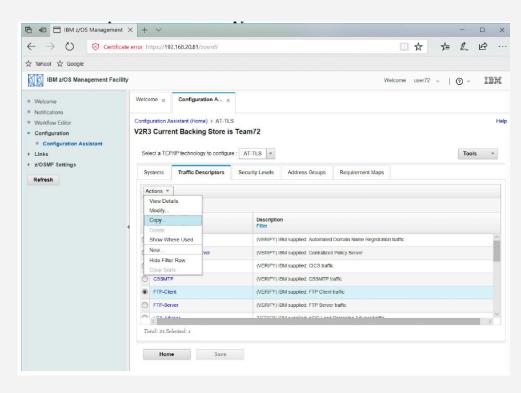
The traffic descriptor details are displayed.

Use the **Close** button to close the View panel when you are finished reviewing the information.



Step 1: Create a Traffic Descriptor

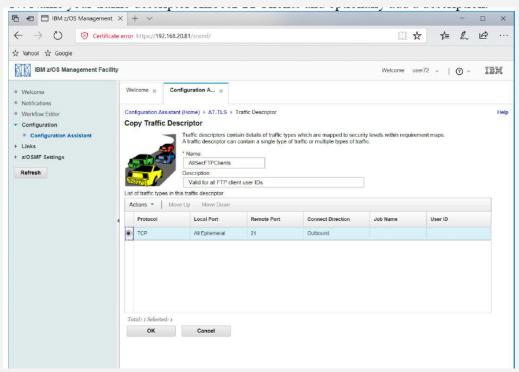
Use the radio button to select the sample FTP-Client traffic descriptor again and use the Actions pull-down to select **Copy**.



Step 1: Create a Traffic Descriptor

Name your traffic descriptor and optionally add a description.

Use the radio button to select the only traffic type listed (Protocol TCP, local port, all ephemeral, remote port 21, connection direction outbound).

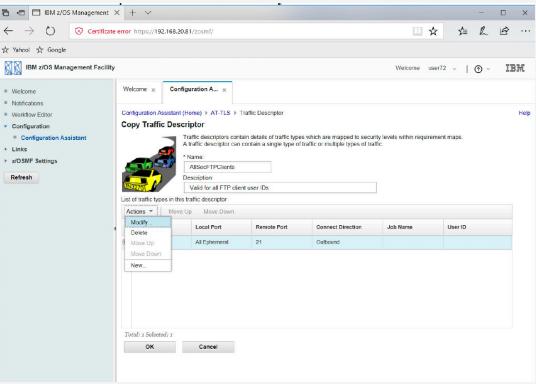


Configuring an AT-TLS policy

for FTP

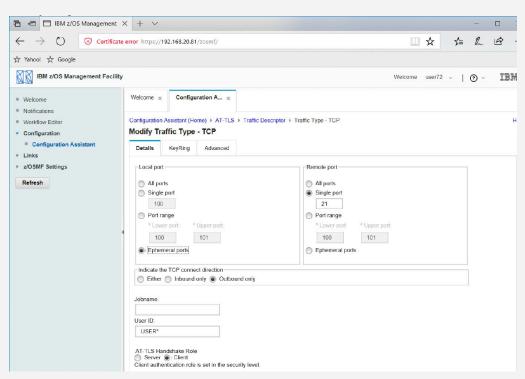
Step 1: Create a Traffic Descript

Use the Actions pull-down to select **Modify**.



Step 1: Create a Traffic Descriptor

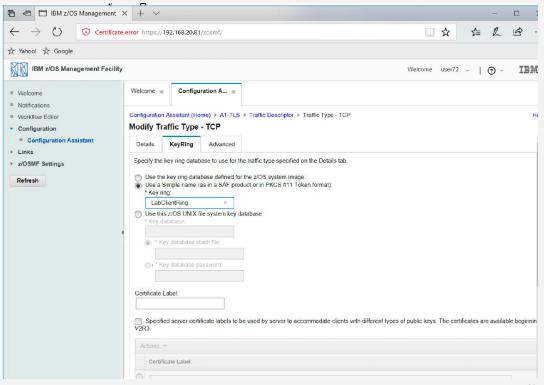
Feel free to create rules by filtering on USERID, IP Address, etc.



Step 1: Create a Traffic Descriptor

Select the **KeyRing** tab.

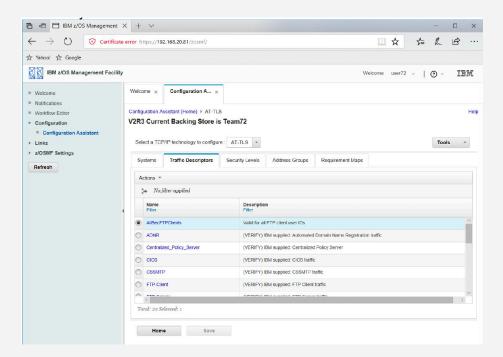
Select 'Use a Simple Name' and enter the name for the key ring.



Step 1: Create a Traffic Descriptor

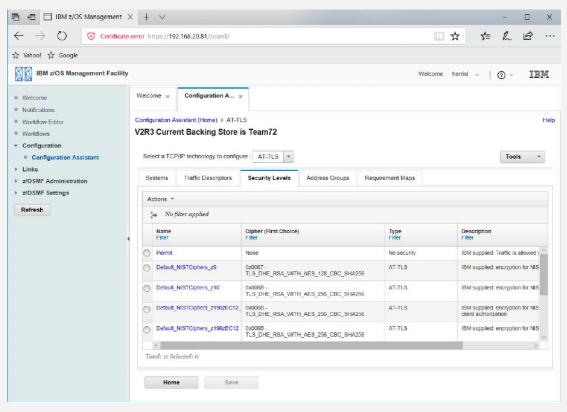
When you are finished, select the **OK** button twice.

Select **Save**, optionally add a description, and click on **OK**.



Step 2: Create a Security Level

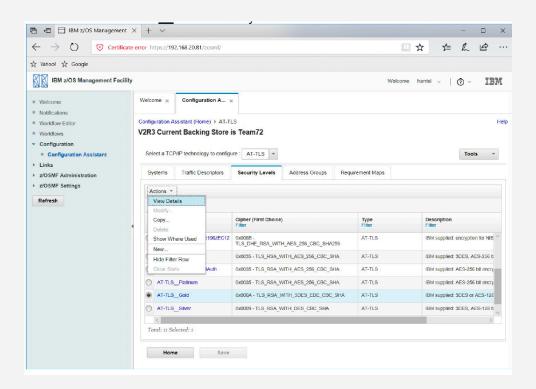
Select the **Security Levels** tab.



Step 2: Create a Security Level

Select the security level and use Actions to view it.

When you are finished reviewing this Security Level use the **Close** button.



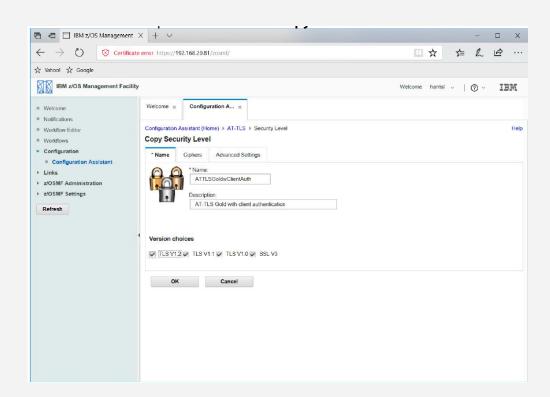
Step 2: Create a Security Level

Use the **Actions** pull-down to select **Copy**.

Name your copy and optionally add a description.

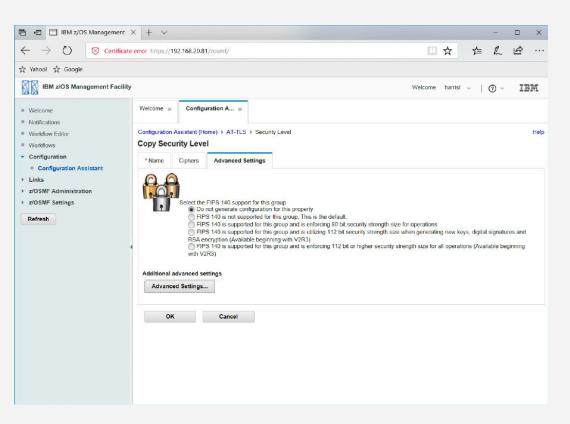
Select **TLS V1.2** and keep **TLS V1.1** selected as well.

When you are finished, select the **Advanced Settings** tab.



Step 2: Create a Security Level

Select the **Advanced Settings** button.



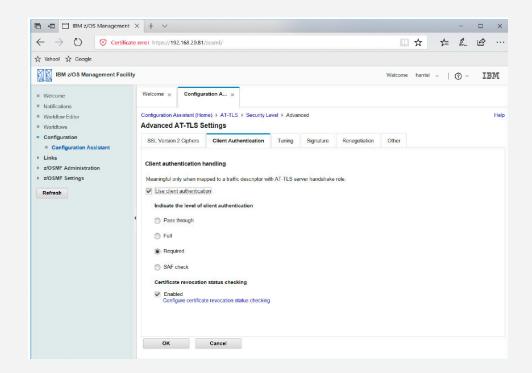
Step 2: Create a Security Level

Select the **Client Authentication** tab.

You can select **Use Client authentication.**This means that the Server will require Client Authentication during the TLS protocol negotiation and will only establish a secured connection if the client sends a Client Certificate to the server.

Click on **OK** twice.

Click on Save.

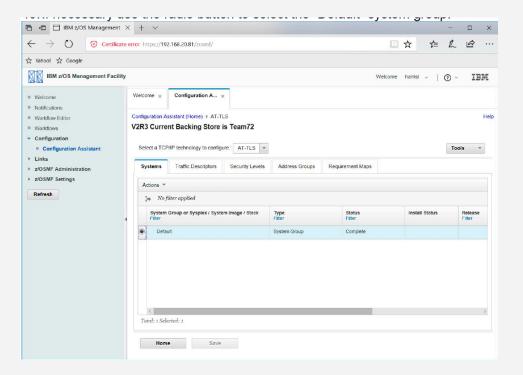


Step 3: Create a z/OS system image

Click on the **Systems** tab.

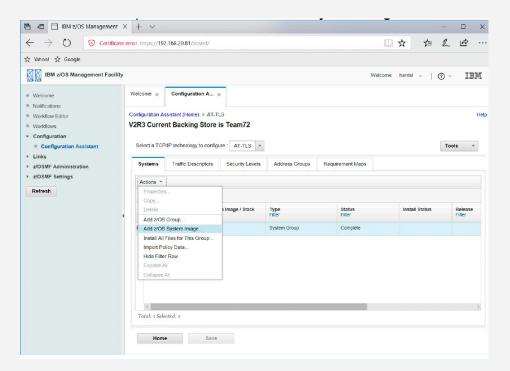
If necessary, use the technology pull-down to select AT-TLS.

If necessary, use the radio button to select the "Default" system group.



Step 3: Create a z/OS system image

Use the Actions pull-down to select **Add z/OS System Image**.

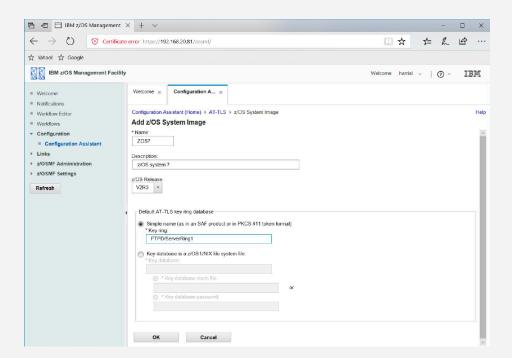


Step 3: Create a z/OS system image

Enter your z/OS system image name. Optionally add a description.

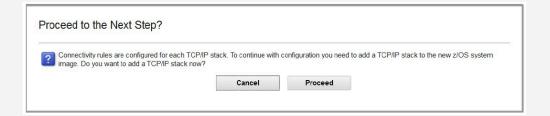
Se the z/OS release to the system version your system is running on. Change the default AT-TLS key ring if needed.

Click on the **OK** button.



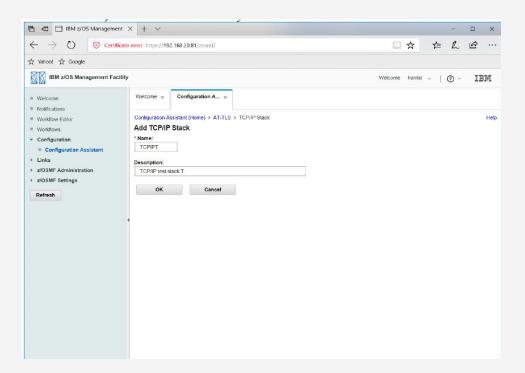
Step 3: Create a z/OS system image

You have created a z/OS system so you will be prompted to create a TCP/IP stack. Click on the **Proceed** button.



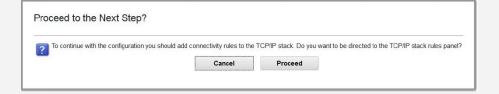
Step 4: Create a TCP/IP stack

Enter the TCP/IP stack name. Optionally add a description. Leave the default for dynamic tunnels. Click on the **OK** button.



Step 4: Create a TCP/IP stack

You have created a TCP/IP stack so you will be prompted to create a connectivity rule. Click on the **Proceed** button.



Step 4: Create a TCP/IP stack

You will be prompted to use a wizard to create your connectivity rule. Click on the **Proceed** button.

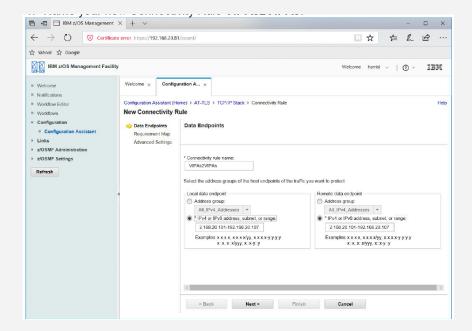


Step 5: Create a connectivity rule

Name your new Connectivity Rule.

Select the address groups of the host endpoints of the traffic you want to protect.

Press Next button.



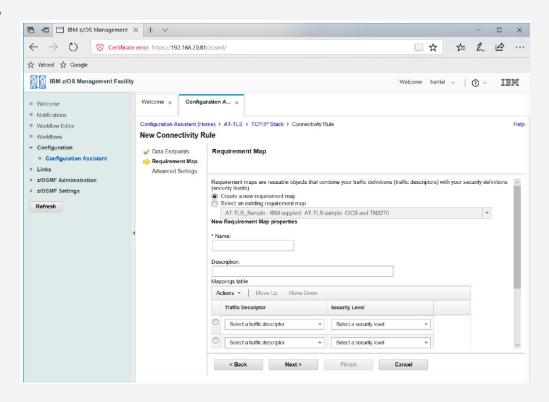
Step 5: Create a connectivity rule

Notice that you may create your own Requirement Map or use the sample the tool provides (AT-TLS_Sample).

The sample may or may not meet your needs. You are able to create a new one by selecting **Create a new requirement map**.

Click on **Next** button. Click **Finish**, **Close**, **Save**.

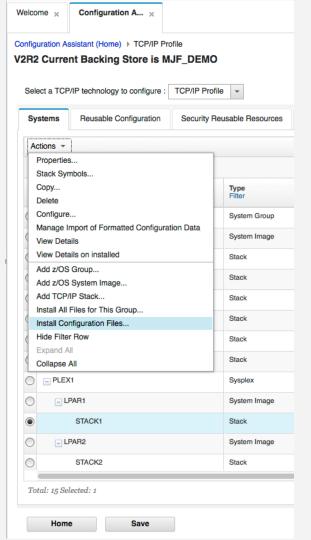
Optionally, add a comment and click on OK.



Step 6: Installing the configuration

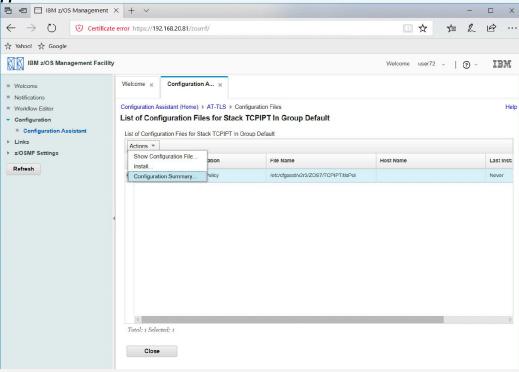
Installing the configuration means generating the TCP/IP profile and putting it in place, to be read next time the stack starts.

Use the radio button to select your stack. Click on the **Actions** menu and select 'Install Configuration Files'.



Step 6: Installing the configuration | Step 6: Installing

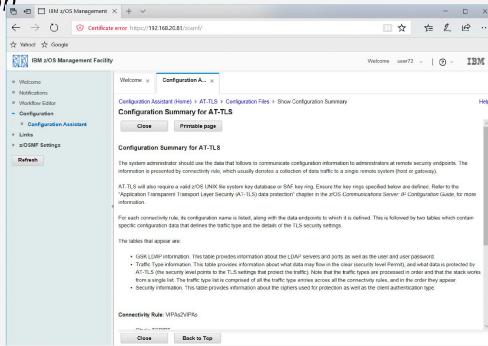
Use the **Actions** pull-down to select **Configuration Summary**.



Step 6: Installing the configuration

This panel summarizes the configuration information in a format that can be helpful to the administrator and remote connection partners.

When you finish reviewing the panel, use the **Close** button.

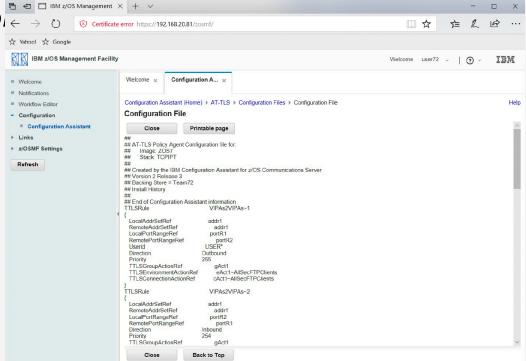


Step 6: Installing the configuration

Use the **Actions** pull-down to select **Show Configuration File**.

This is the policy file that you will next send (FTP) to your z/OS system to use.

When you finish reviewing the panel, use the **Close** button.



Step 6: Installing the configuration

Use the Actions pull-down to select "Install".

You can either save it to the file system of the image that z/OSMF is running on or FTP it to another image.

Once you select the installation method and provide the necessary information, click **Go.**

