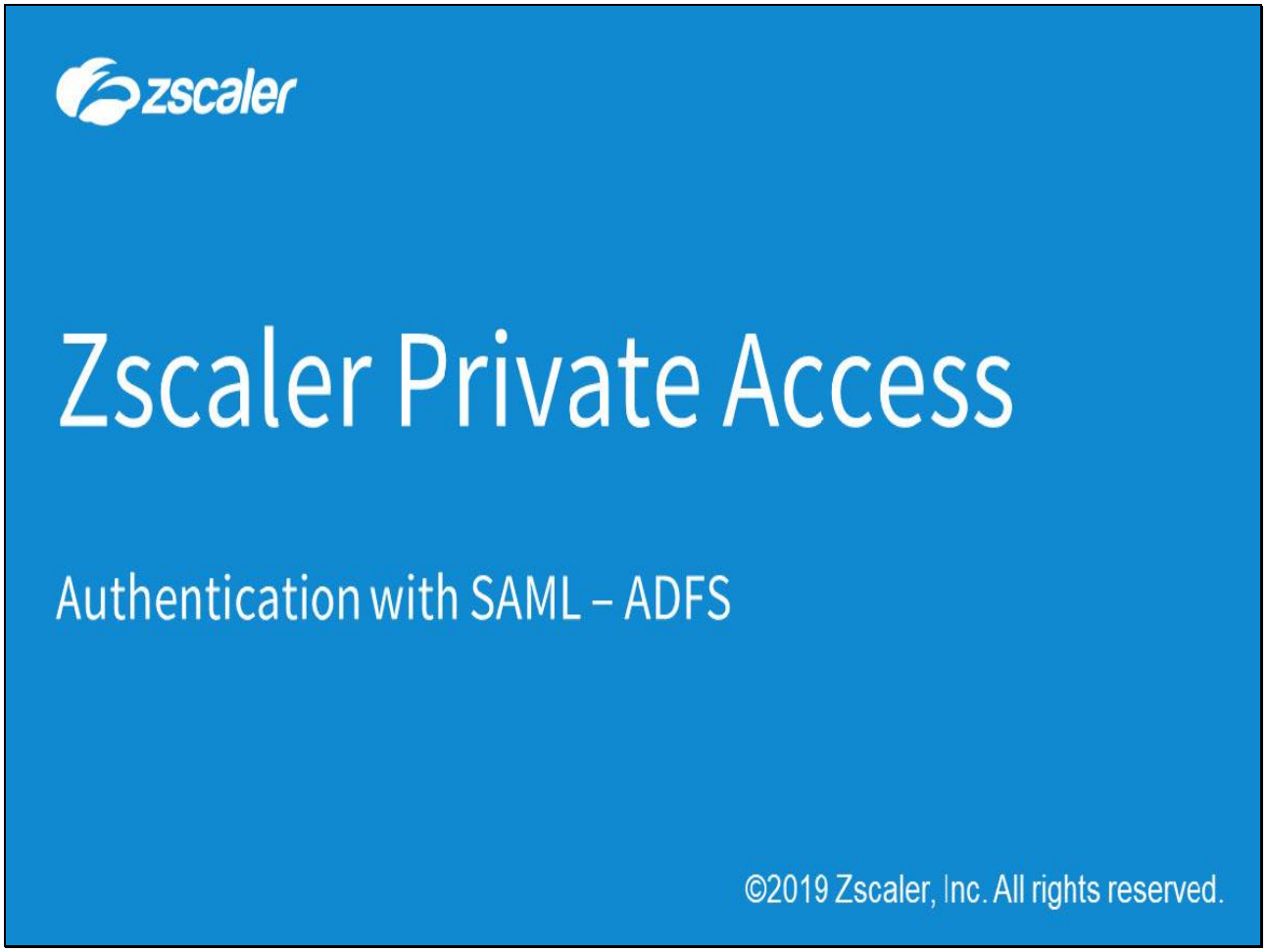
Slide 1 - Zscaler Private Access



Slide notes

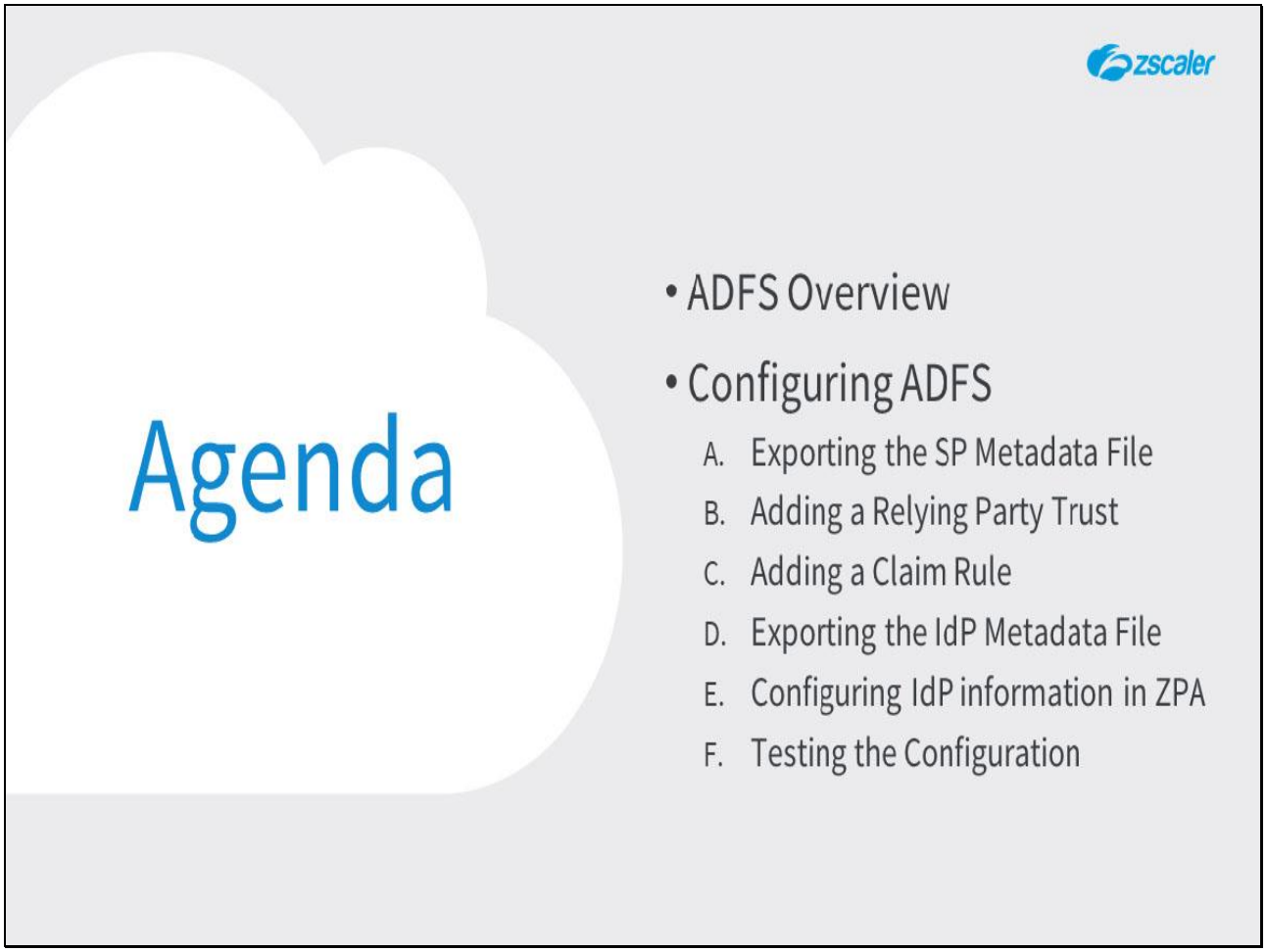
Welcome to this training module on configuring ZPA to use an ADFS server for authenticating users.

Slide 2 - Navigating the eLearning Module

Slide notes

Here is a quick guide to navigating this module. There are various controls for playback including **Play** and **Pause**, **Previous**, **Next** slide and **Fast Forward**. You can also **Mute** the audio or enable **Closed Captioning** which will cause a transcript of the module to be displayed on the screen. Finally, you can click the **X** button at the top to exit.

Slide 3 - Agenda



Slide notes

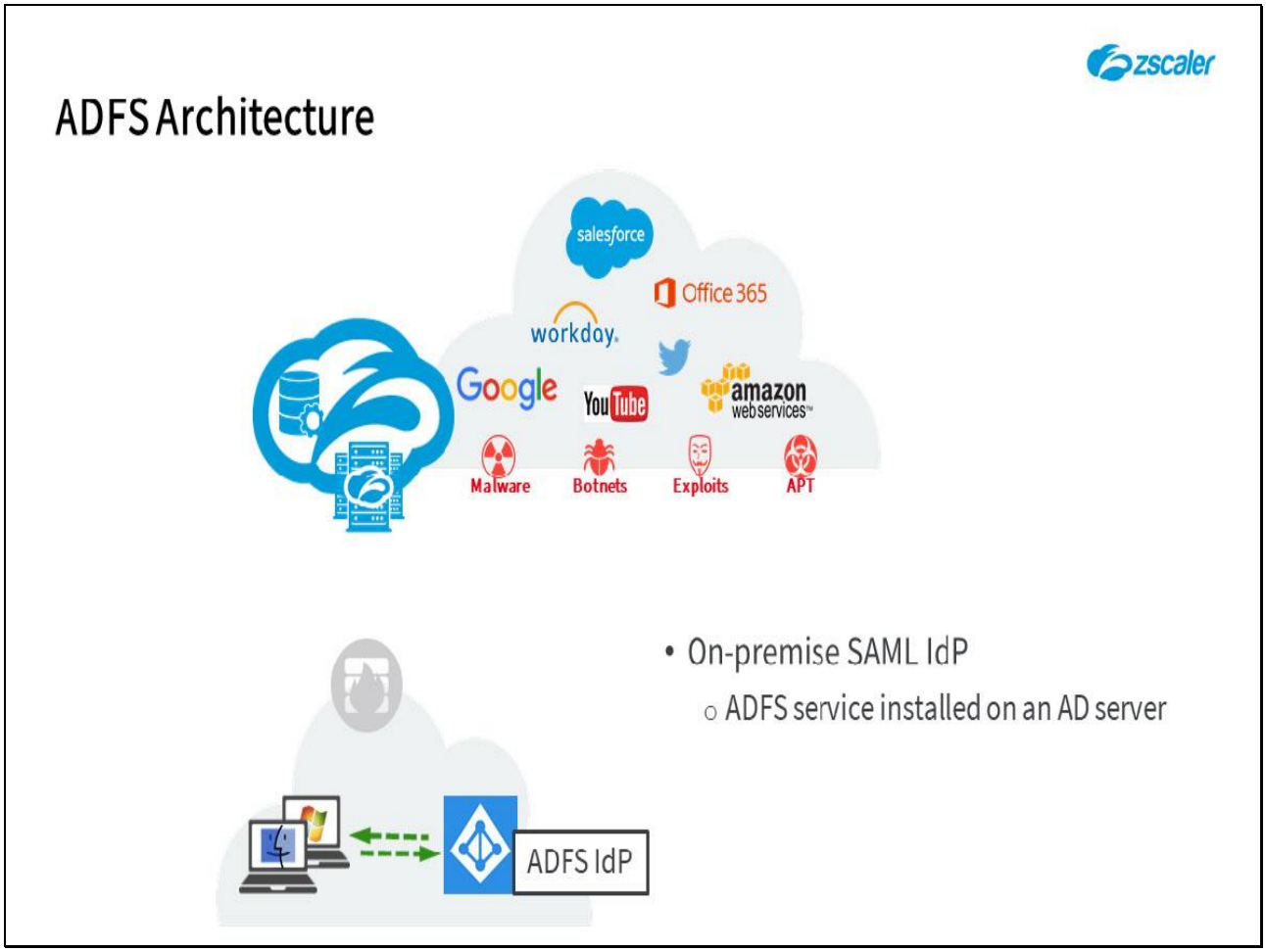
In this module we will: Provide an overview of the ADFS solution; look at the configuration of ADFS for ZPA; and look at the 6 steps to add ADFS to ZPA as an IdP.

Slide 4 - ADFS Overview

Slide notes

In the first section, we provide an overview of the Microsoft ADFS solution.

Slide 5 - ADFS Architecture

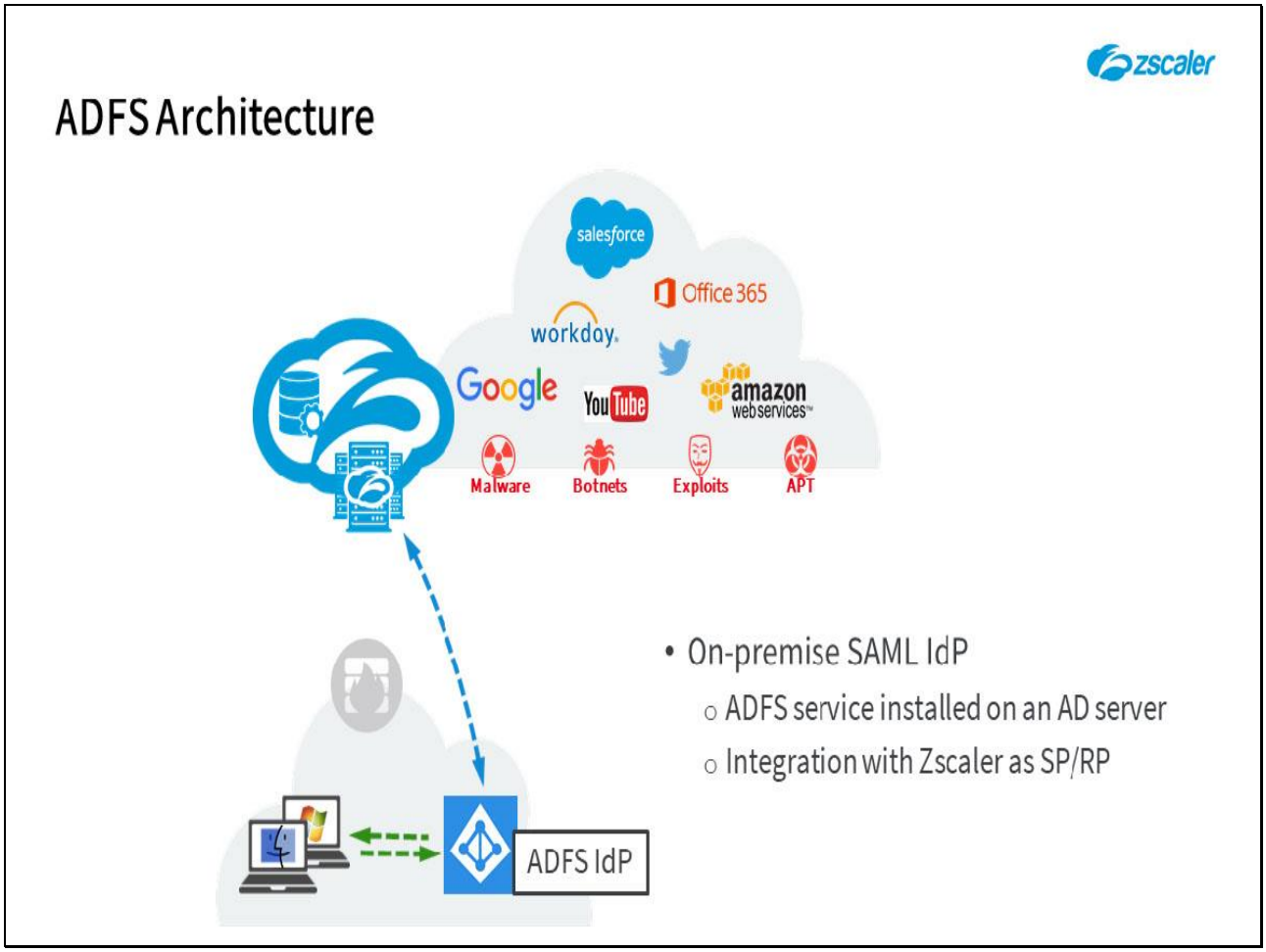


Slide notes

The Microsoft Active Directory Federated Services solution (ADFS), is an implementation of a standards-based SAML 2.0 IdP for end user SSO and is the primary on-premise example of a SAML IdP. ADFS is a service that can be installed and configured on any AD server at no extra cost.

Once enabled and configured, it is available for use for internal users (i.e. those that can reach the server across the LAN) for authentication to any SAML compliant Service Provider (or “Relying Party” in Microsoft-speak). User authentication can be **forms-based**, or for domain-joined machines can use the Integrated Windows Authentication method (IWA), or even multi-factor authentication (MFA).

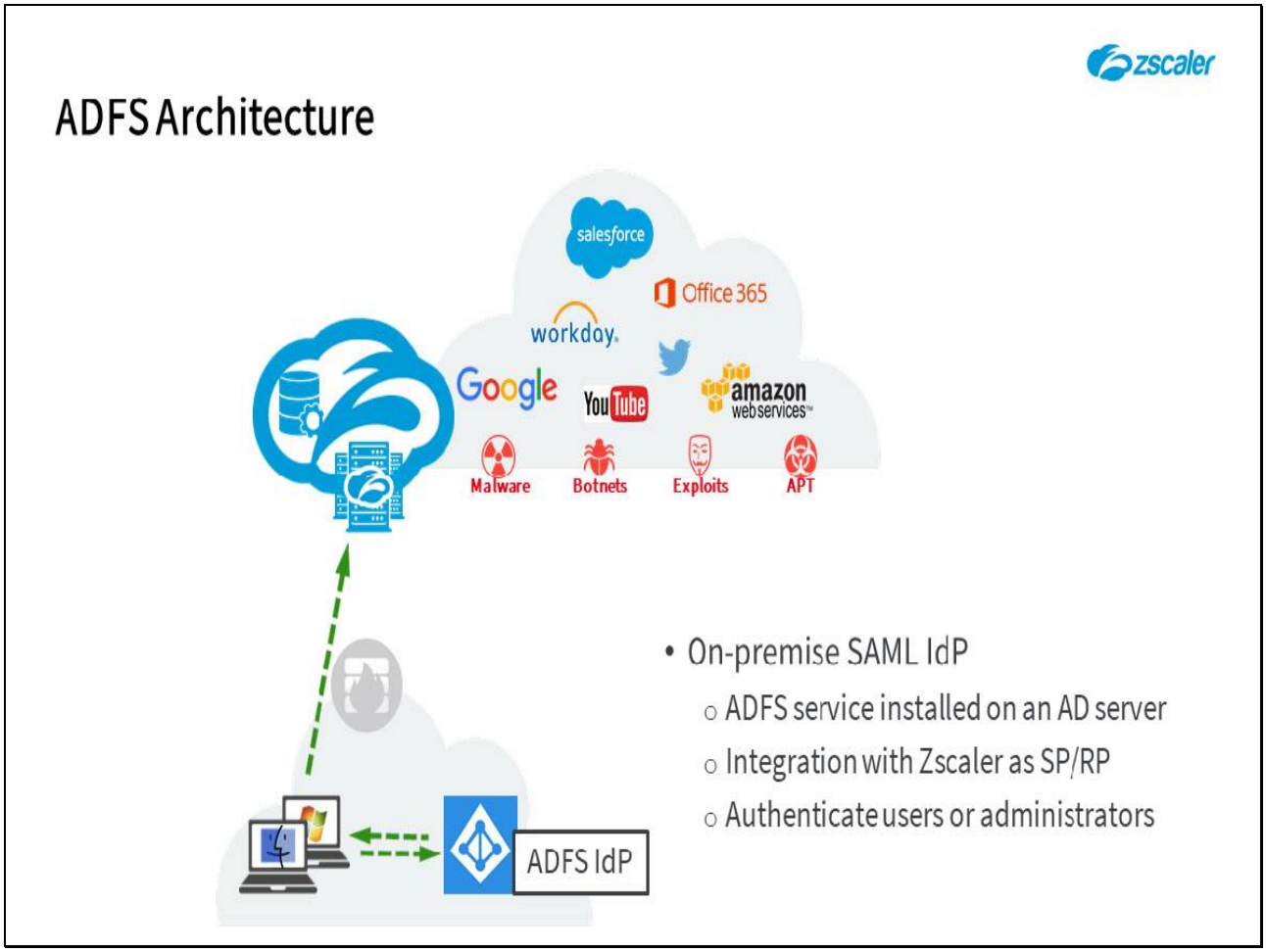
Slide 6 - ADFS Architecture



Slide notes

Authentication to Zscaler services (both ZIA and ZPA) can be done using a Microsoft ADFS solution, once Zscaler has been added to ADFS as a valid SP/RP, and the necessary trust relationship has been established.

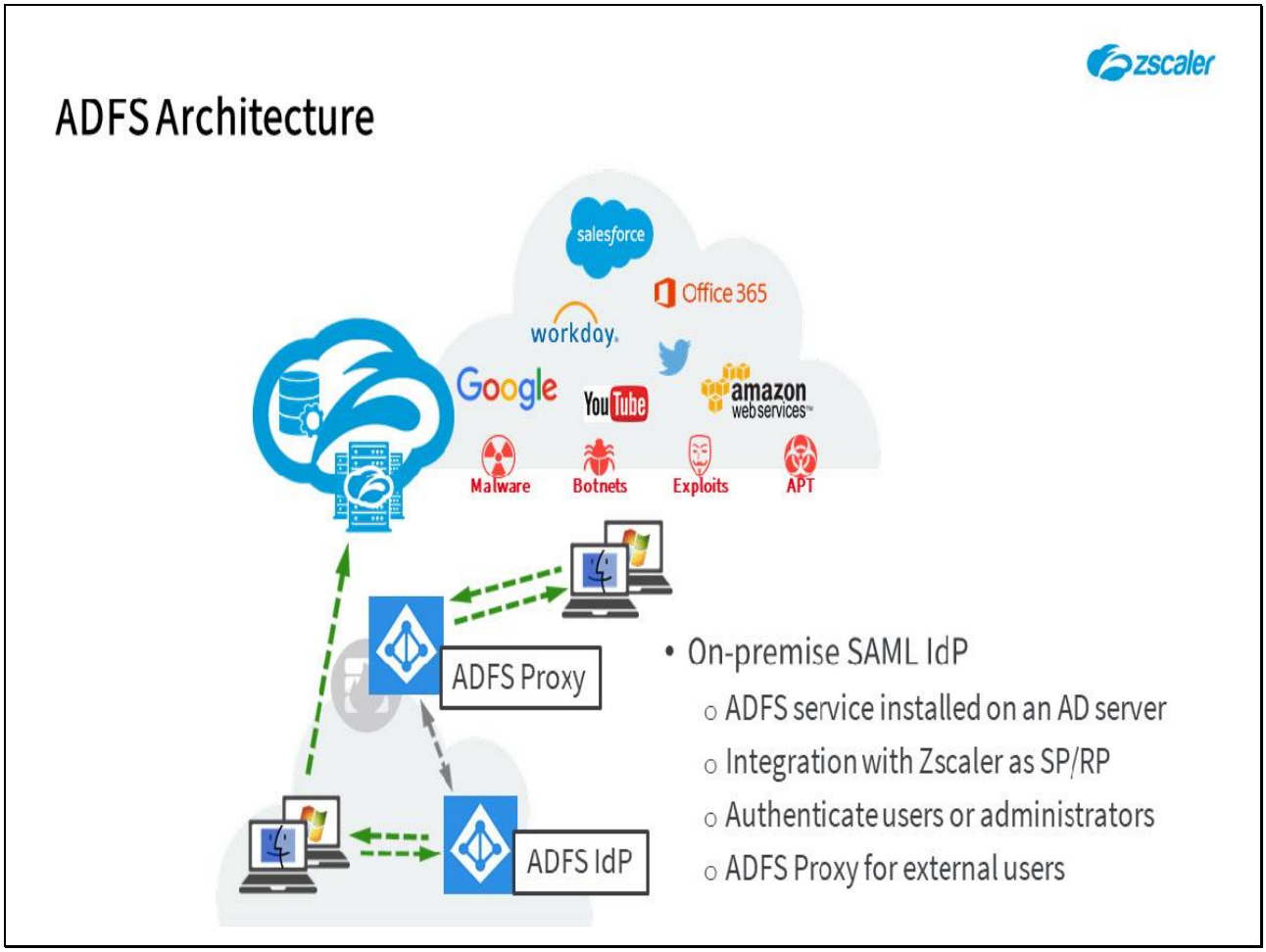
Slide 7 - ADFS Architecture



Slide notes

Both end user and administrator authentication into the ZPA service is supported using Microsoft ADFS as the IdP.

Slide 8 - ADFS Architecture



Slide notes

Note that for an ADFS server to support users on an external network (such as The Internet), then an additional component, and additional configuration is necessary. An ADFS Proxy is required on the DMZ network of your firewall, that has access to the internal ADFS server. In addition, a “split-horizon” DNS configuration is required, so that when users are local they resolve the local address of the ADFS server, but when they are remote, they resolve the public IP address of the ADFS Proxy.

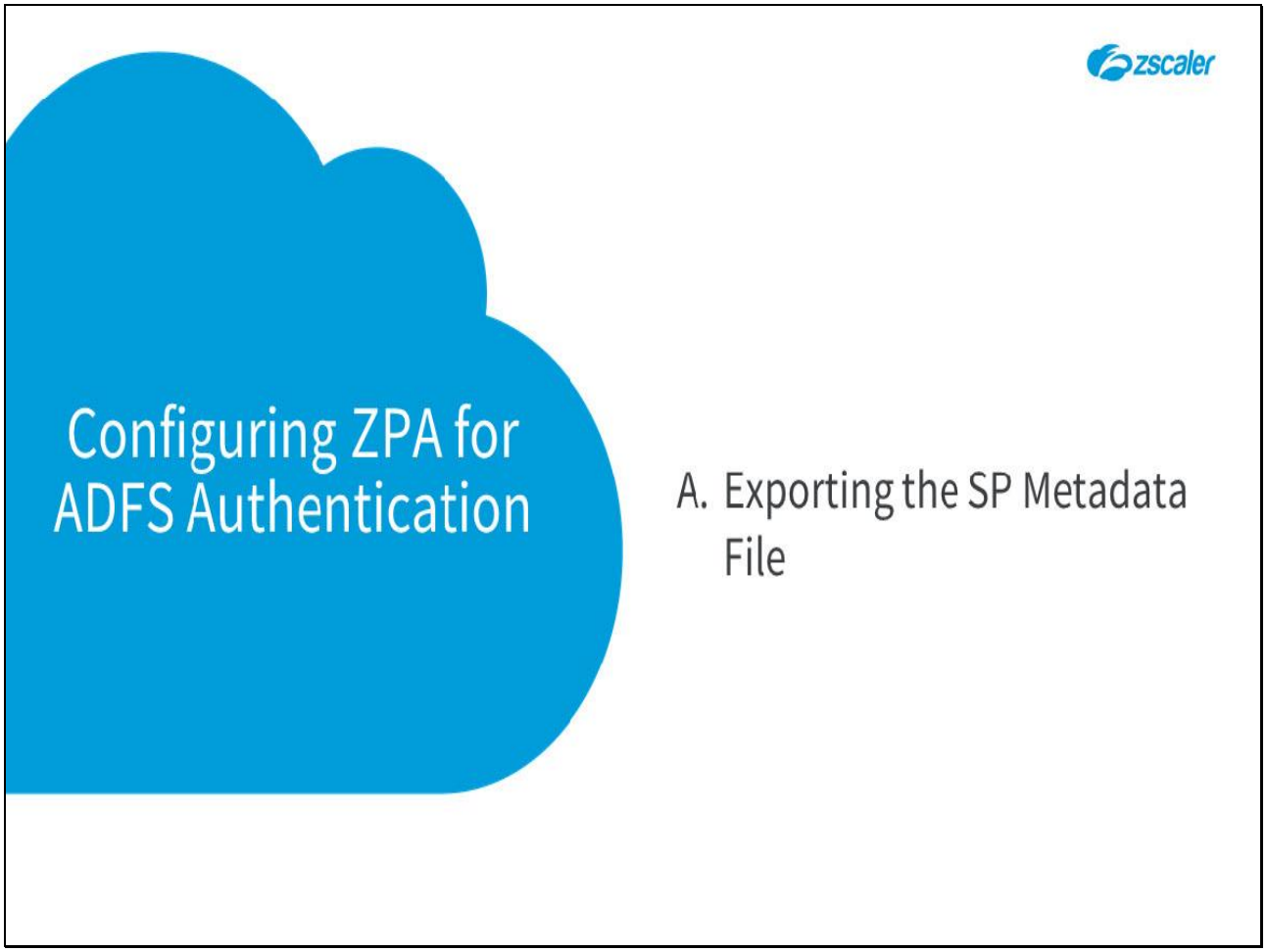
Slide 9 - SAML Overview

Slide notes

In the next section, we will look at the configuration of the ADFS server.

This section has been created as an interactive demo to give you a feel for the navigation of the Windows 2012 Server Management Console. You will be asked to select the appropriate menu options to navigate the UI. You may also use the **Play** control to proceed to the next step.

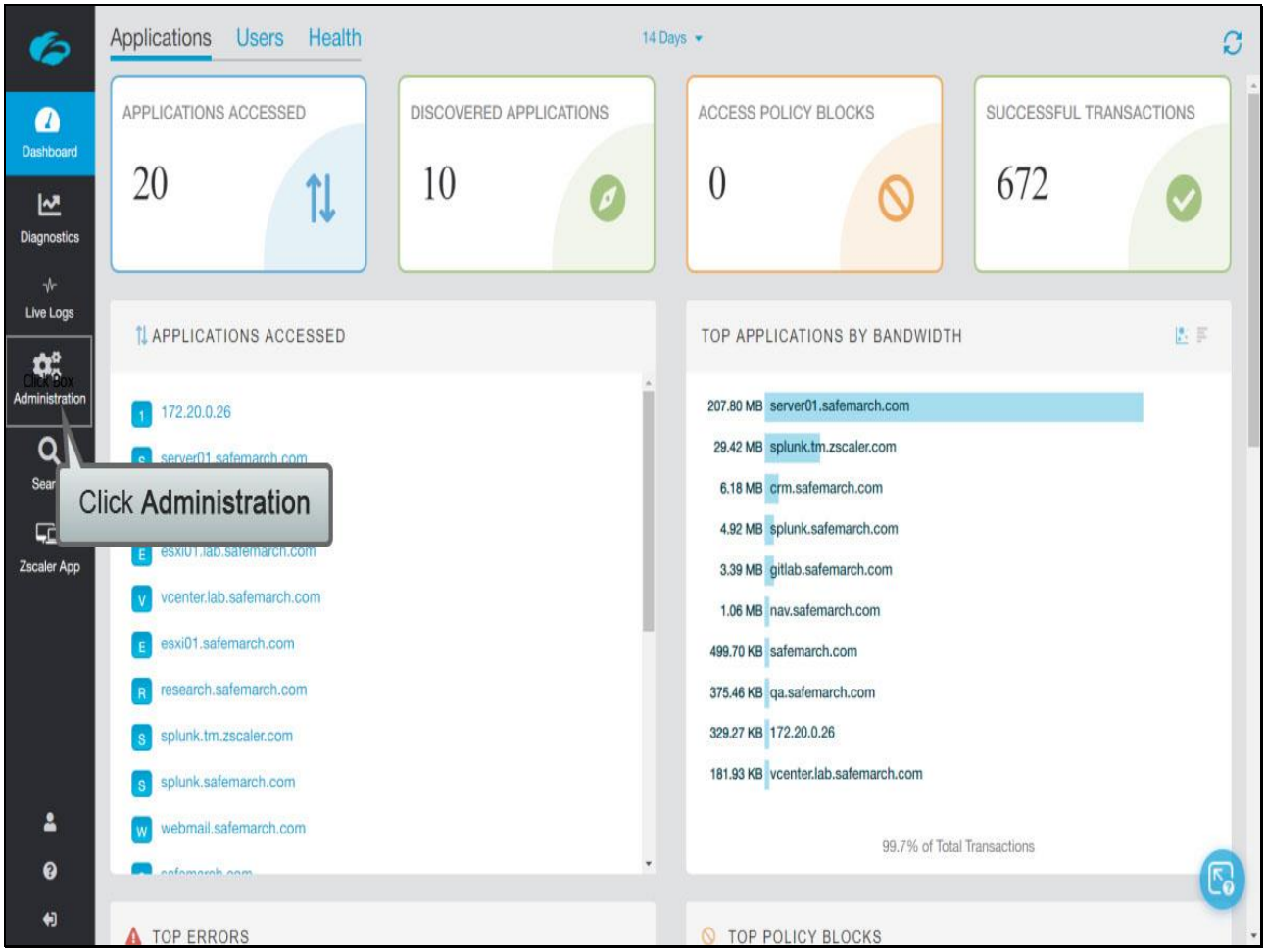
Slide 10 - Configuring ZPA for ADFS Authentication



Slide notes

First, we will look at how to export the ZPA Service Provider metadata to file, for later import to ADFS. Note that a Service Provider is known as a “Relying Party” in the Microsoft world.

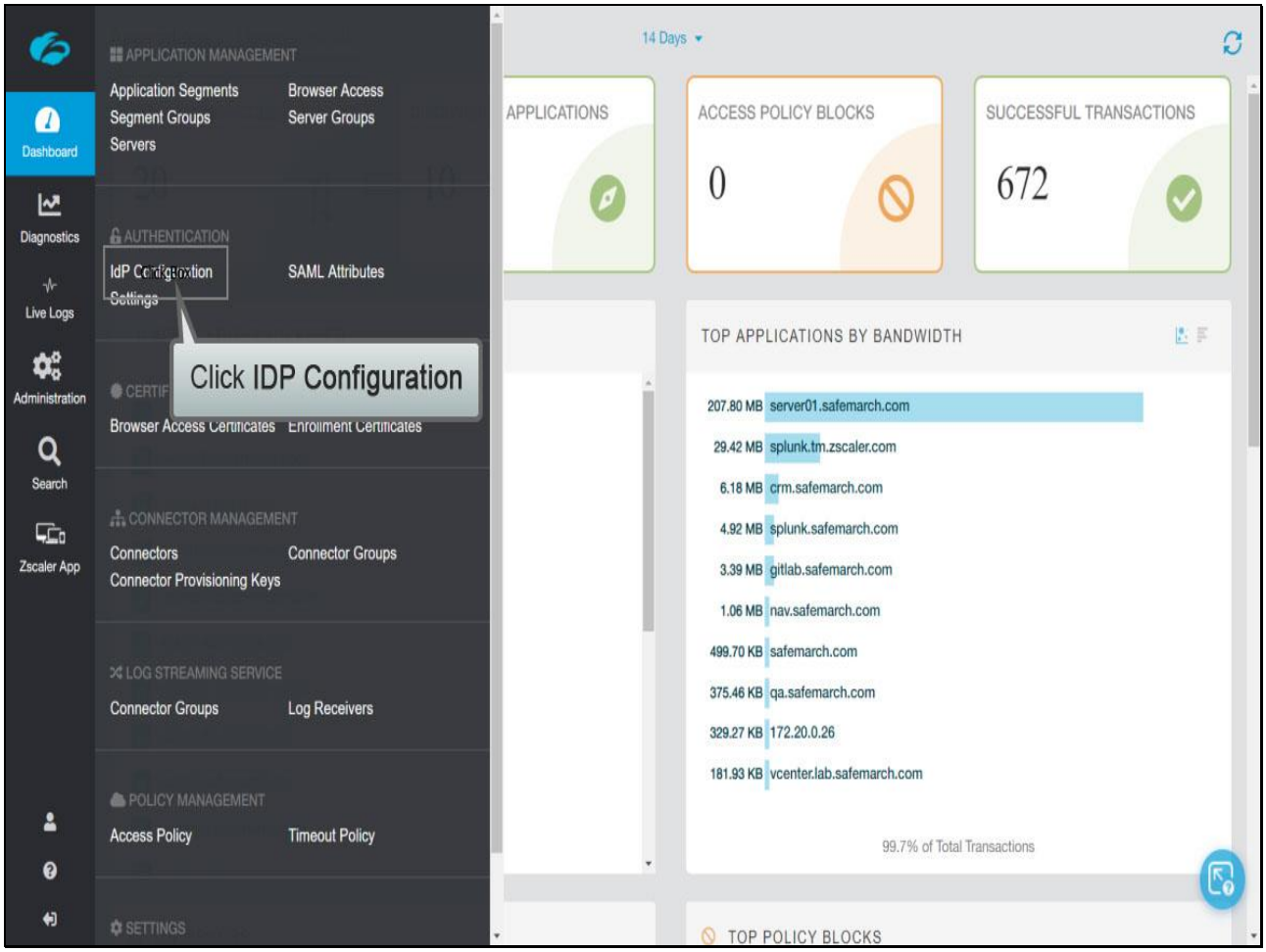
Slide 11 - Slide 11



Slide notes

To expand the configuration options menu, click **Administration**, ...

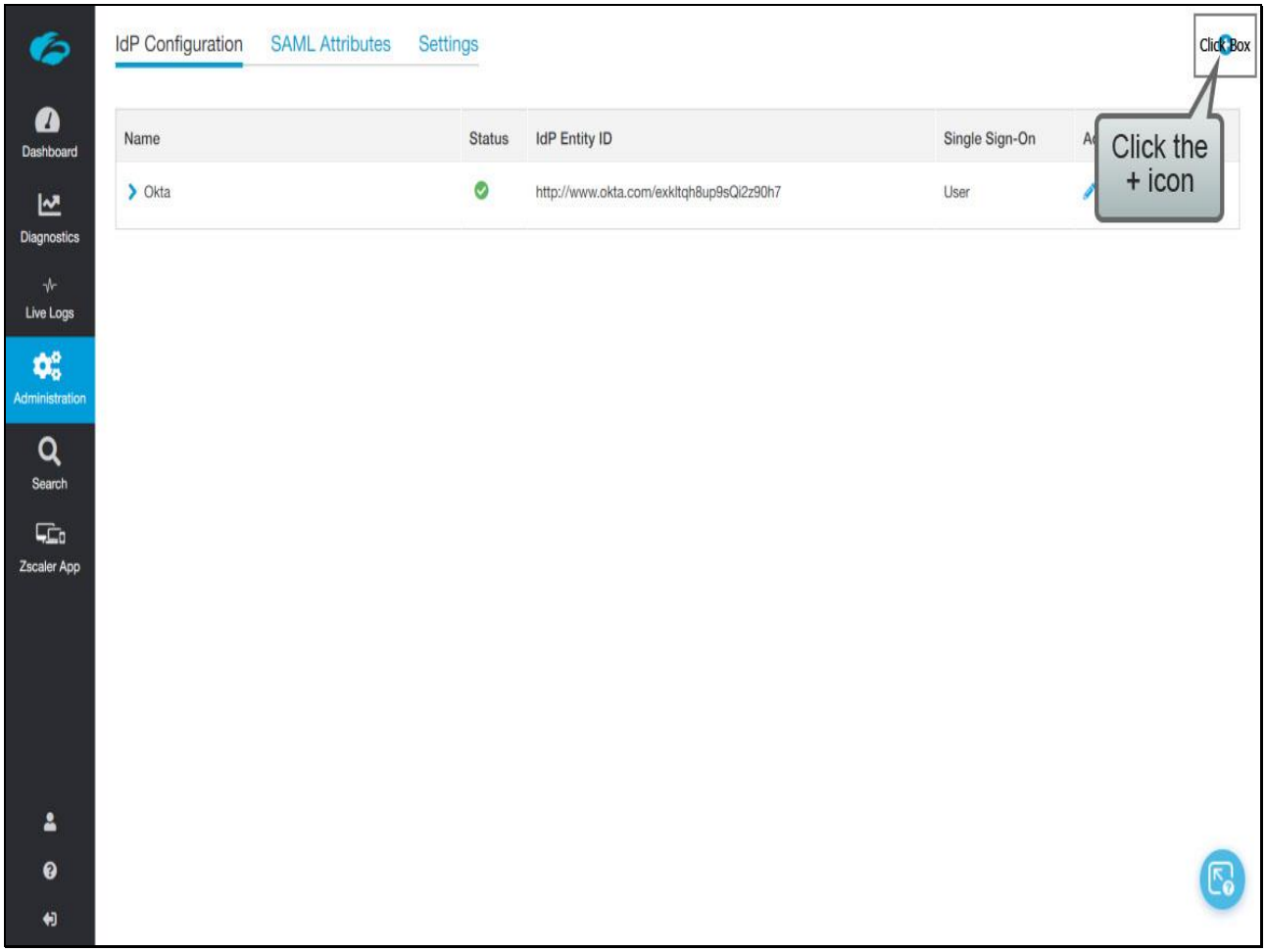
Slide 12 - Slide 12



Slide notes

...then to add a SAML IdP, click **IdP Configuration**.

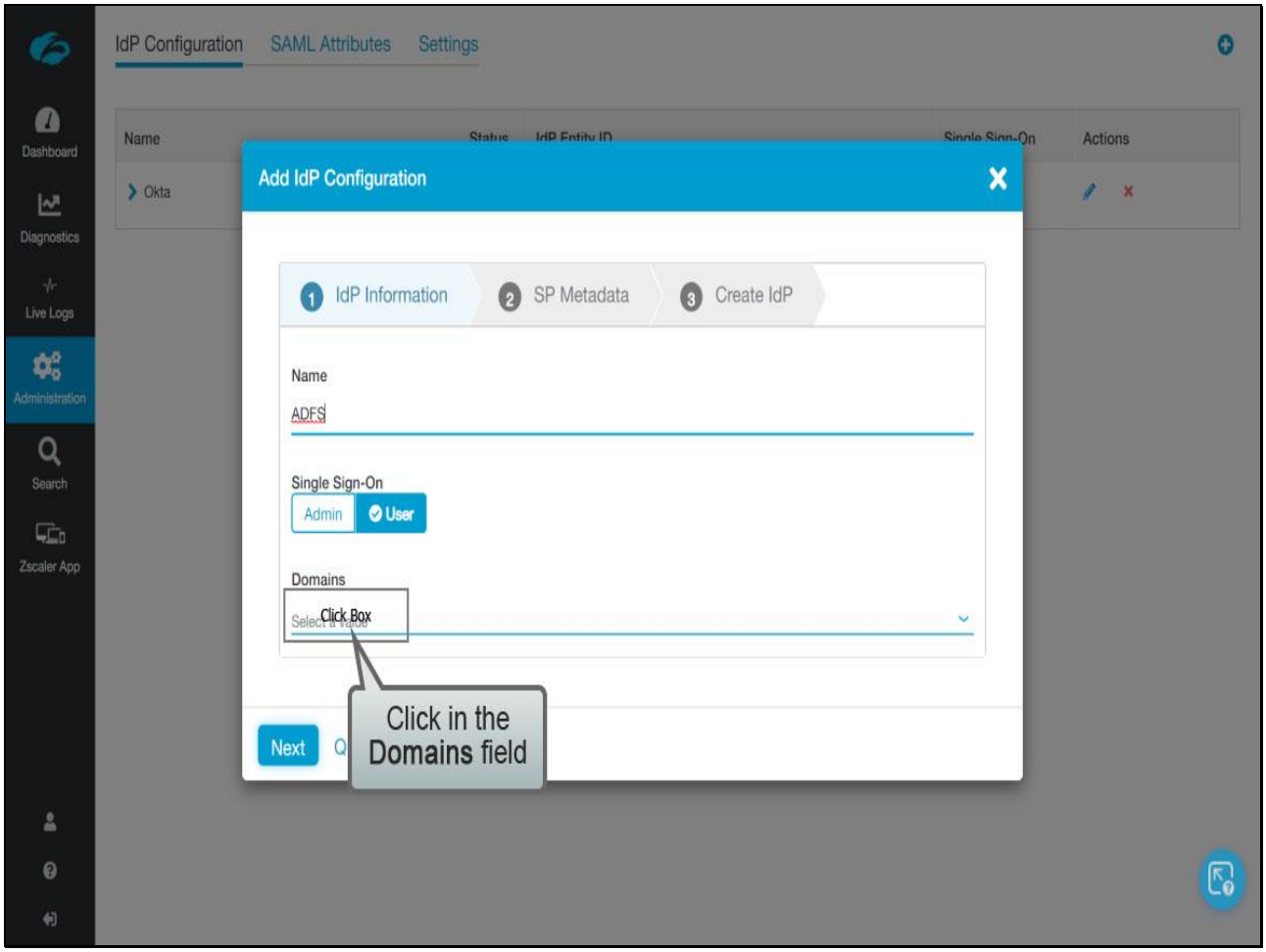
Slide 13 - Slide 13



Slide notes

To add a new IdP configuration, click the **+** icon at top right, ...

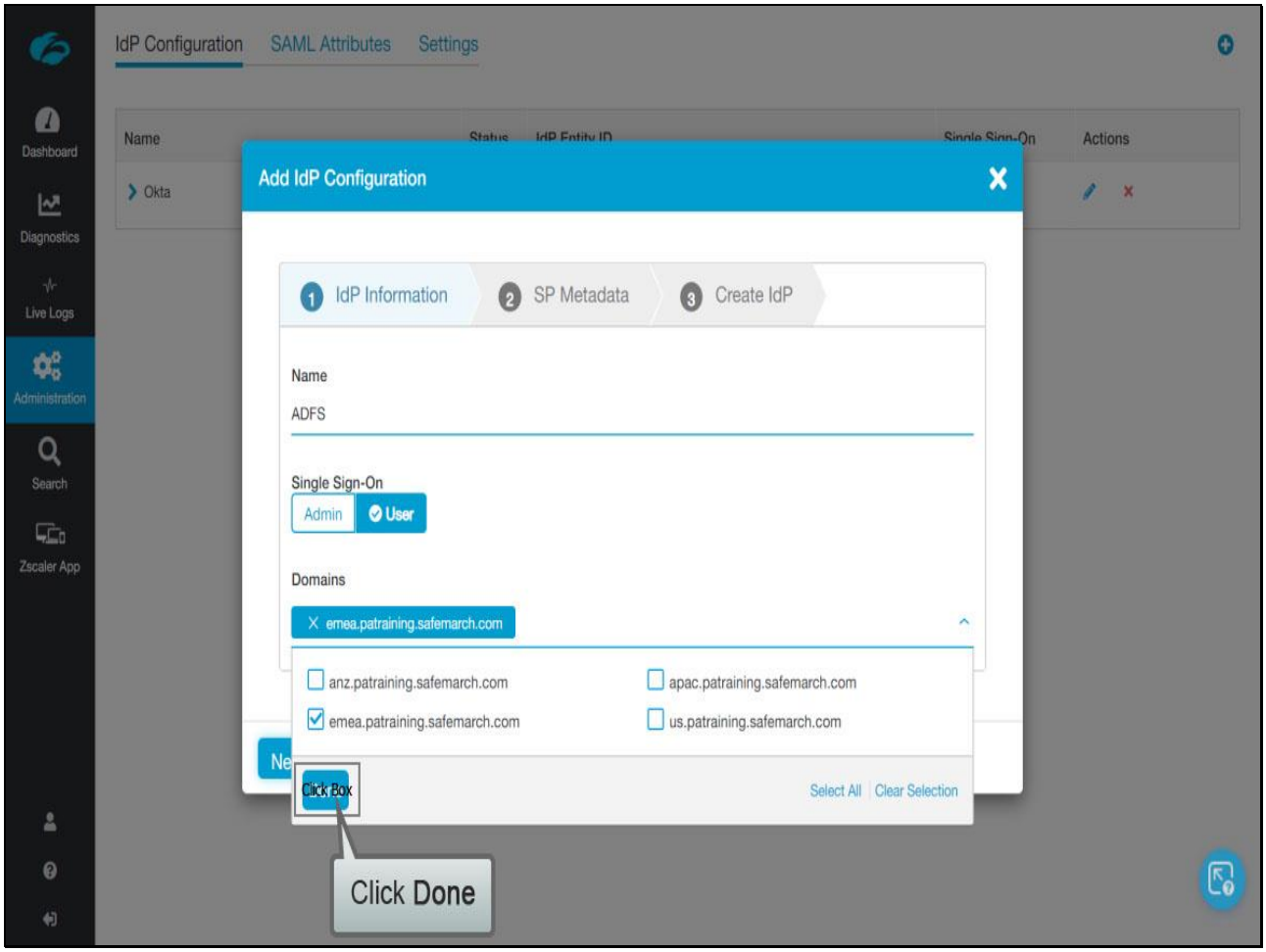
Slide 14 - Slide 14



Slide notes

...give the IdP a **Name**, select whether it is to be used for **Admin** or **User Single Sign-On** and click in the **Domains** field to select the authentication domains to match.

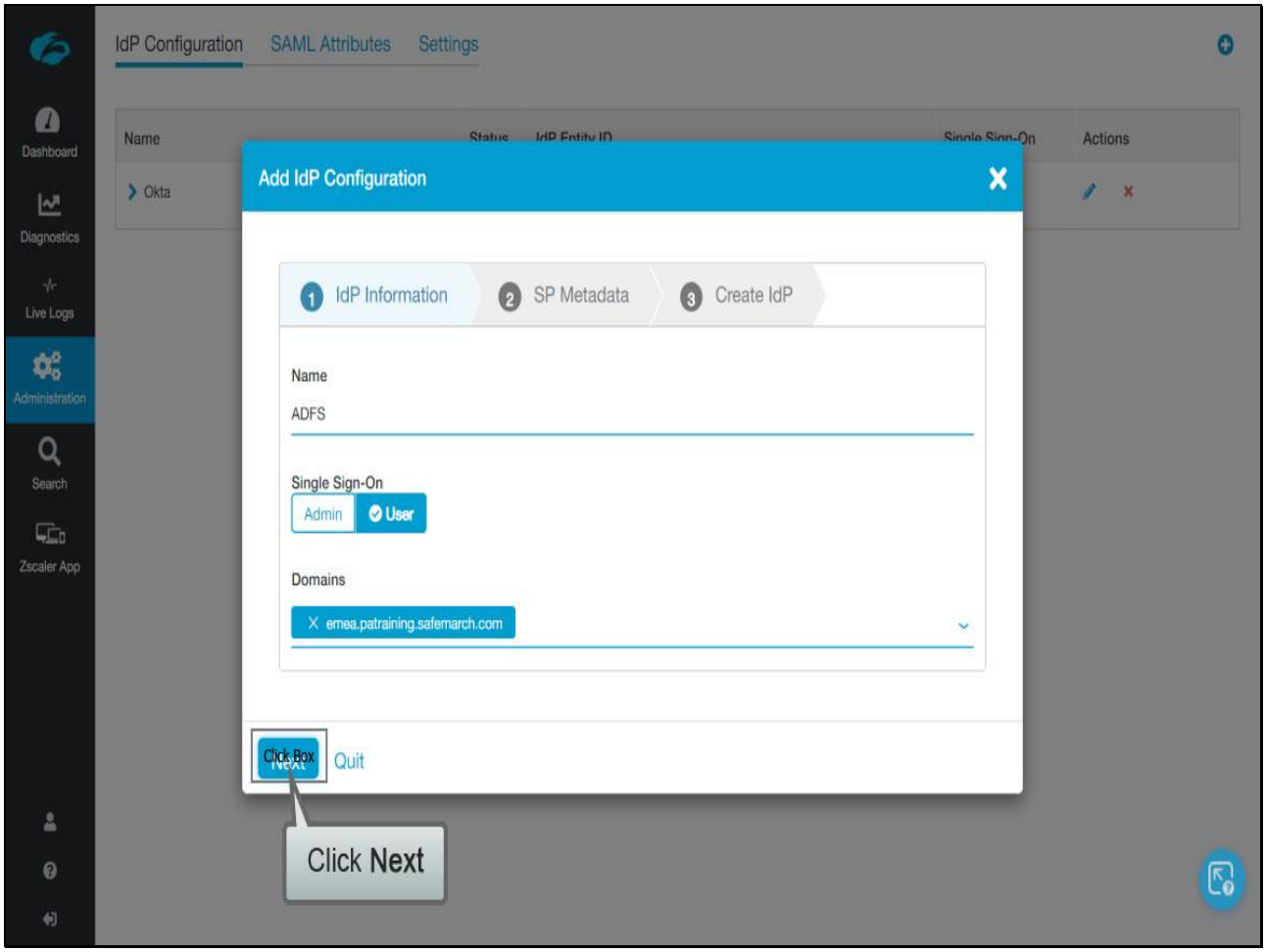
Slide 15 - Slide 15



Slide notes

Select one or more of the available domains and click **Done**, ...

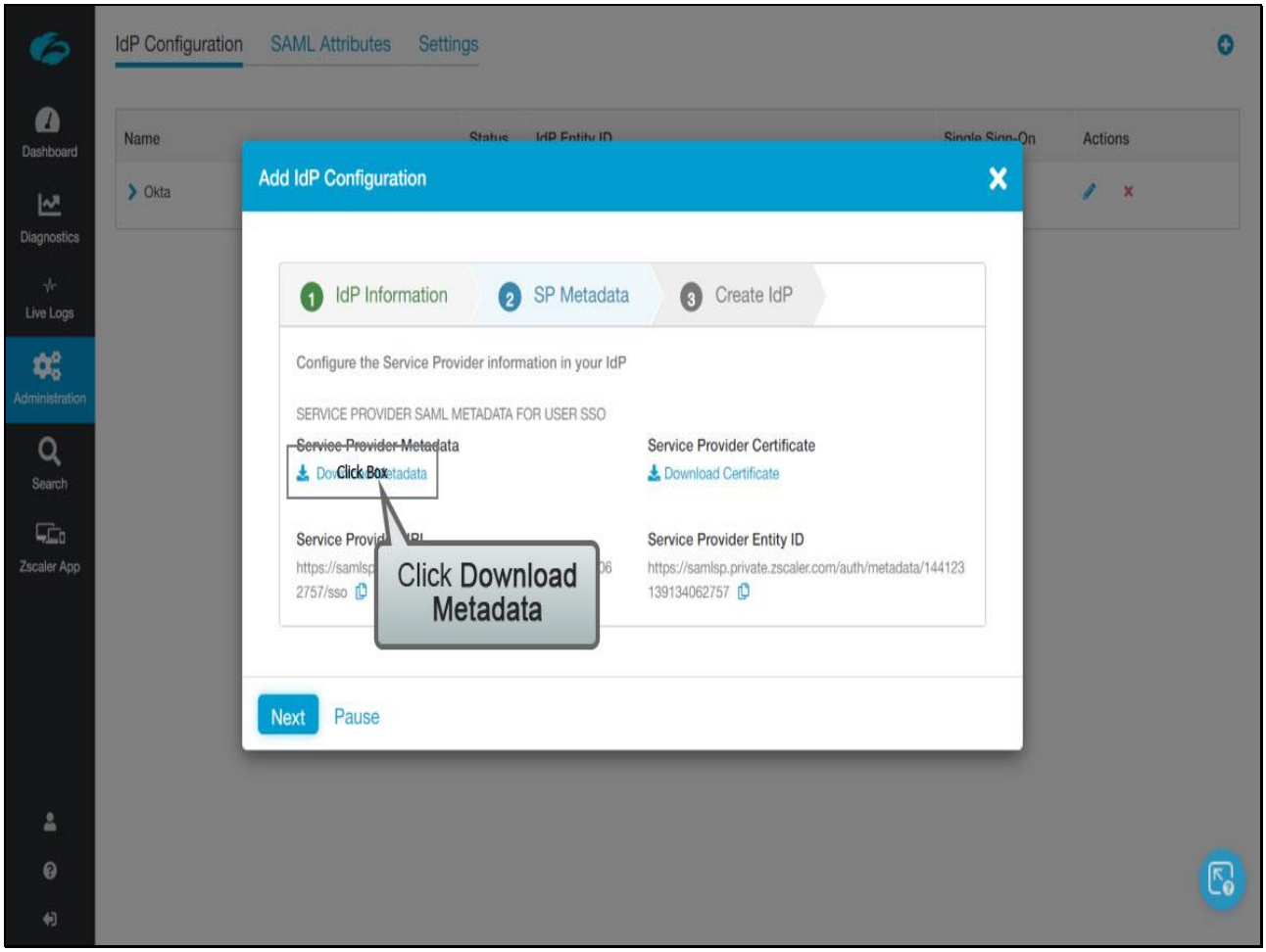
Slide 16 - Slide 16



Slide notes

...then click **Next**.

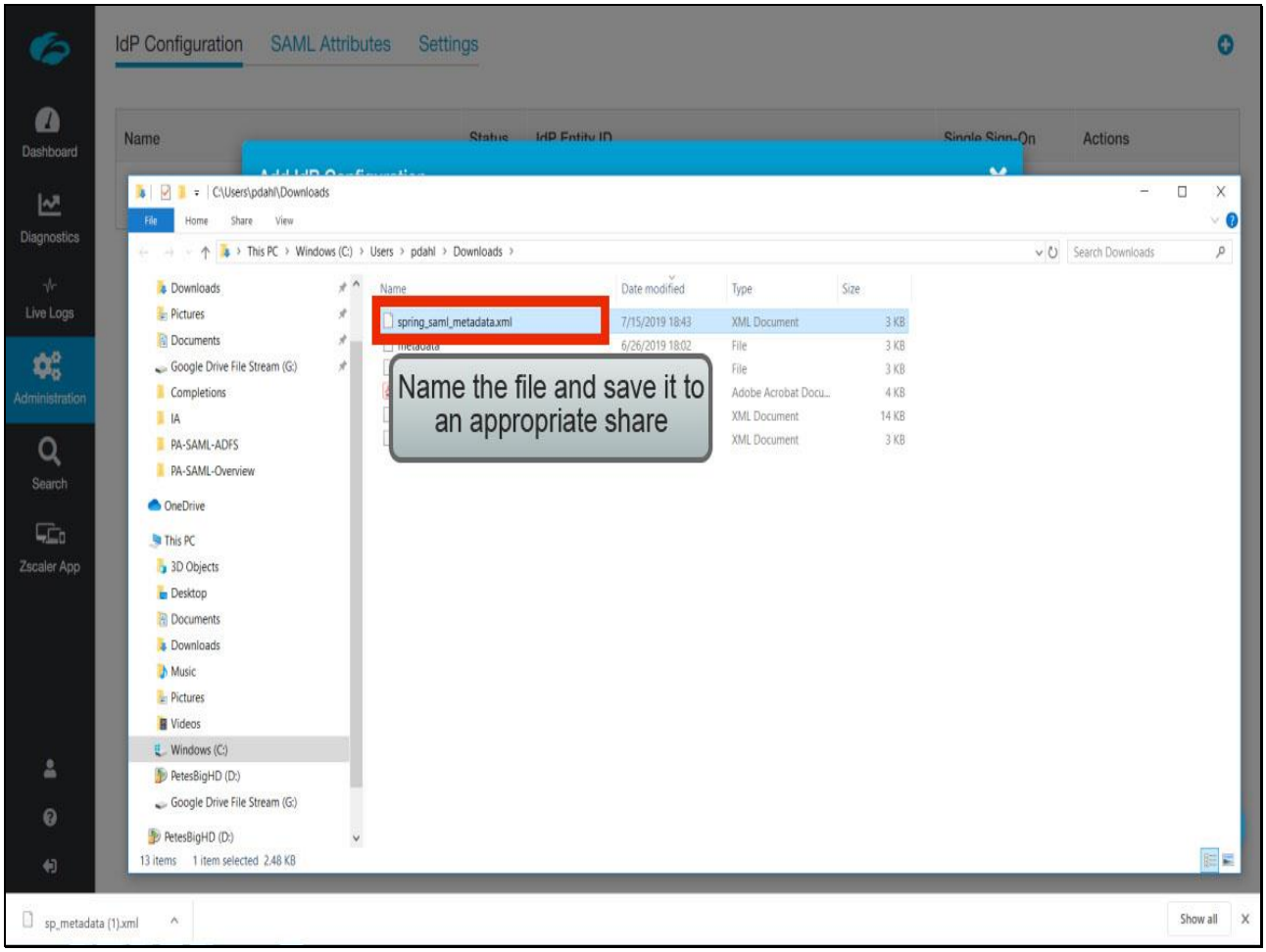
Slide 17 - Slide 17



Slide notes

Click **Download Metadata**, ...

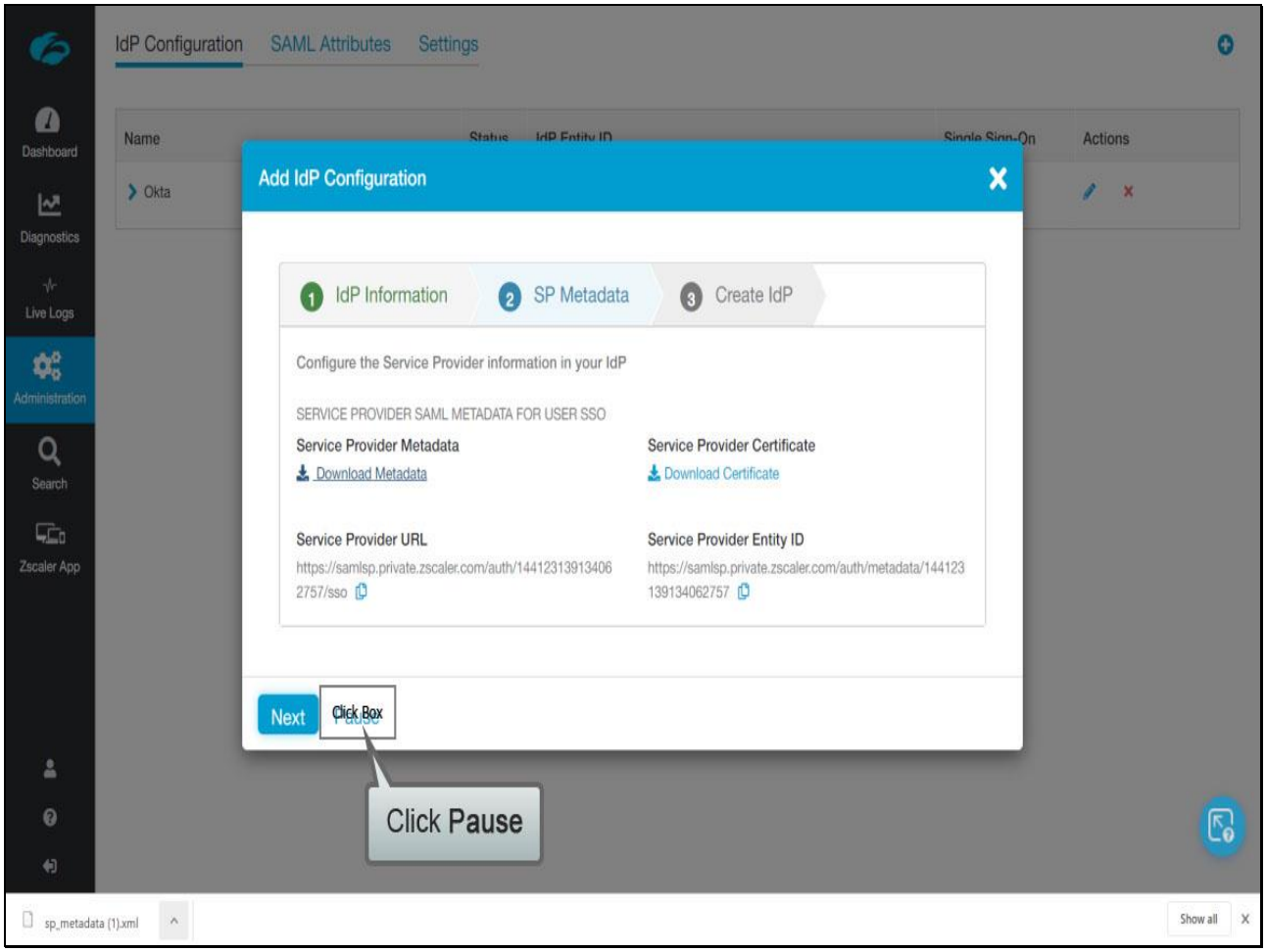
Slide 18 - Slide 18



Slide notes

Make a note of where the file is located and move it to a share accessible to the AD server if necessary.

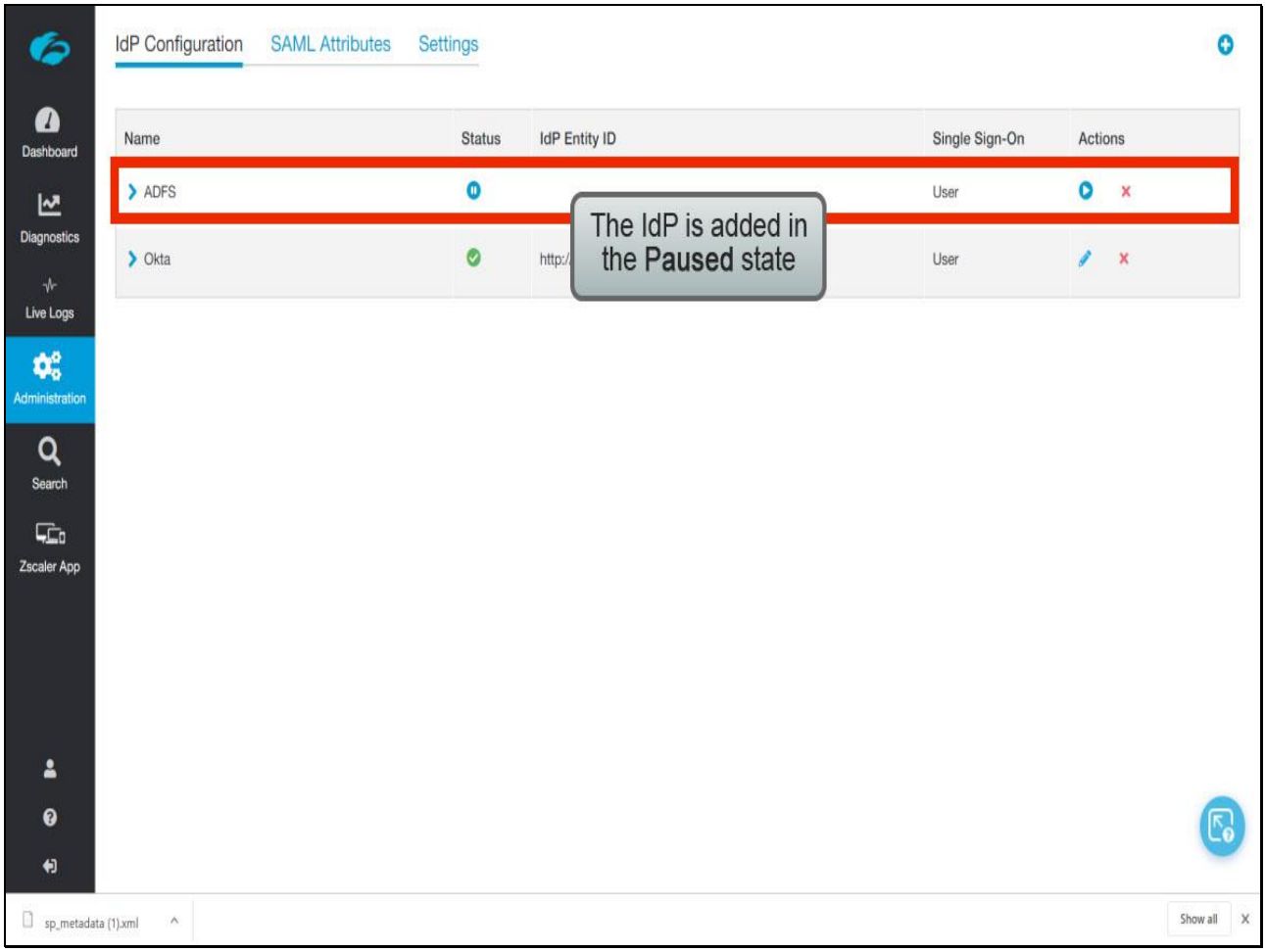
Slide 19 - Slide 19



Slide notes

Click **Pause** to save the configuration for the new IdP in its current incomplete state.

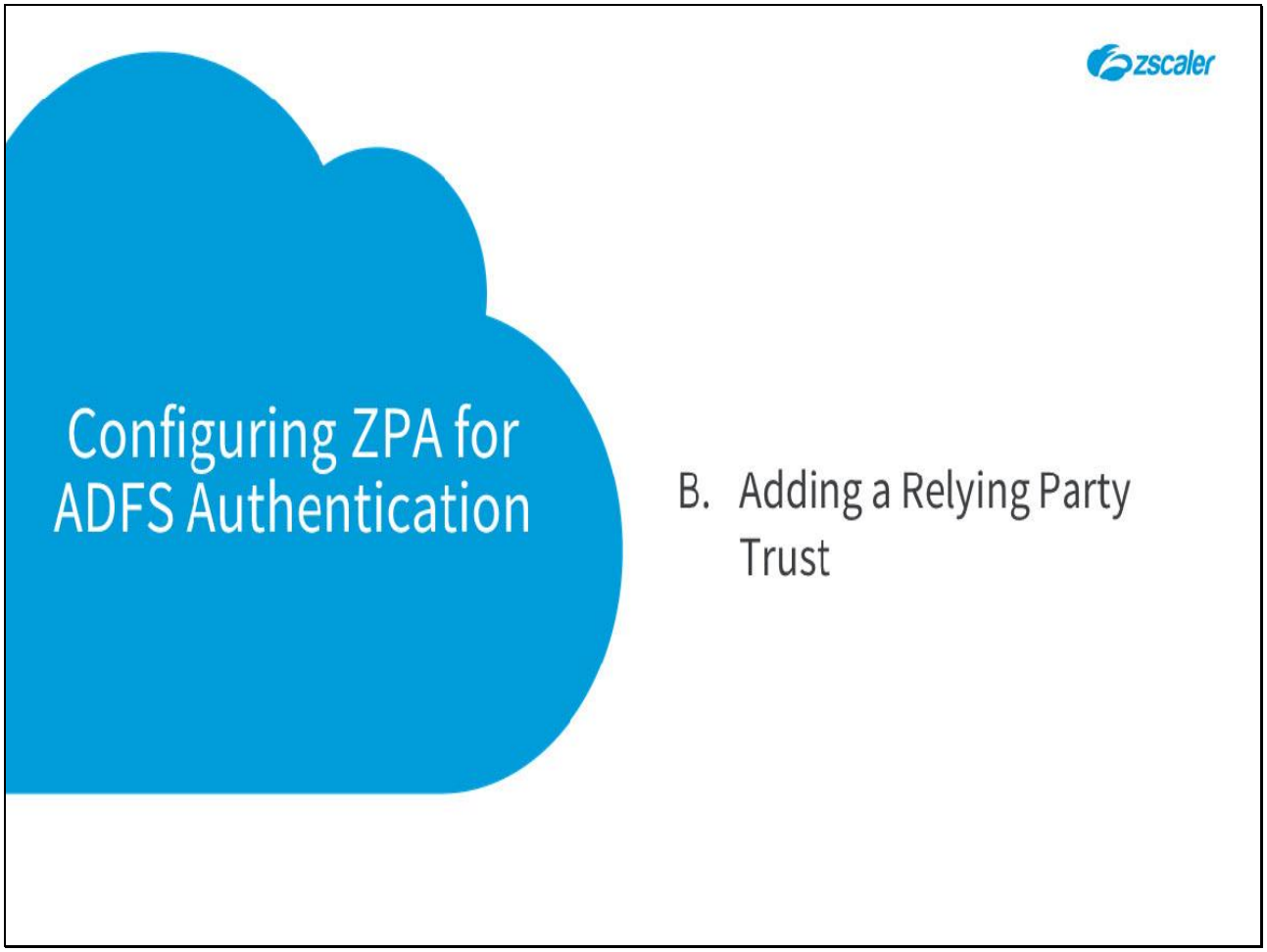
Slide 20 - Slide 20



Slide notes

The ADFS IdP is added to the list in the Paused state. As per the process discussed in the SAML Overview module, having generated the SP metadata that is unique for the ADFS IdP, you now need to step across to the IdP and configure it for ZPA.

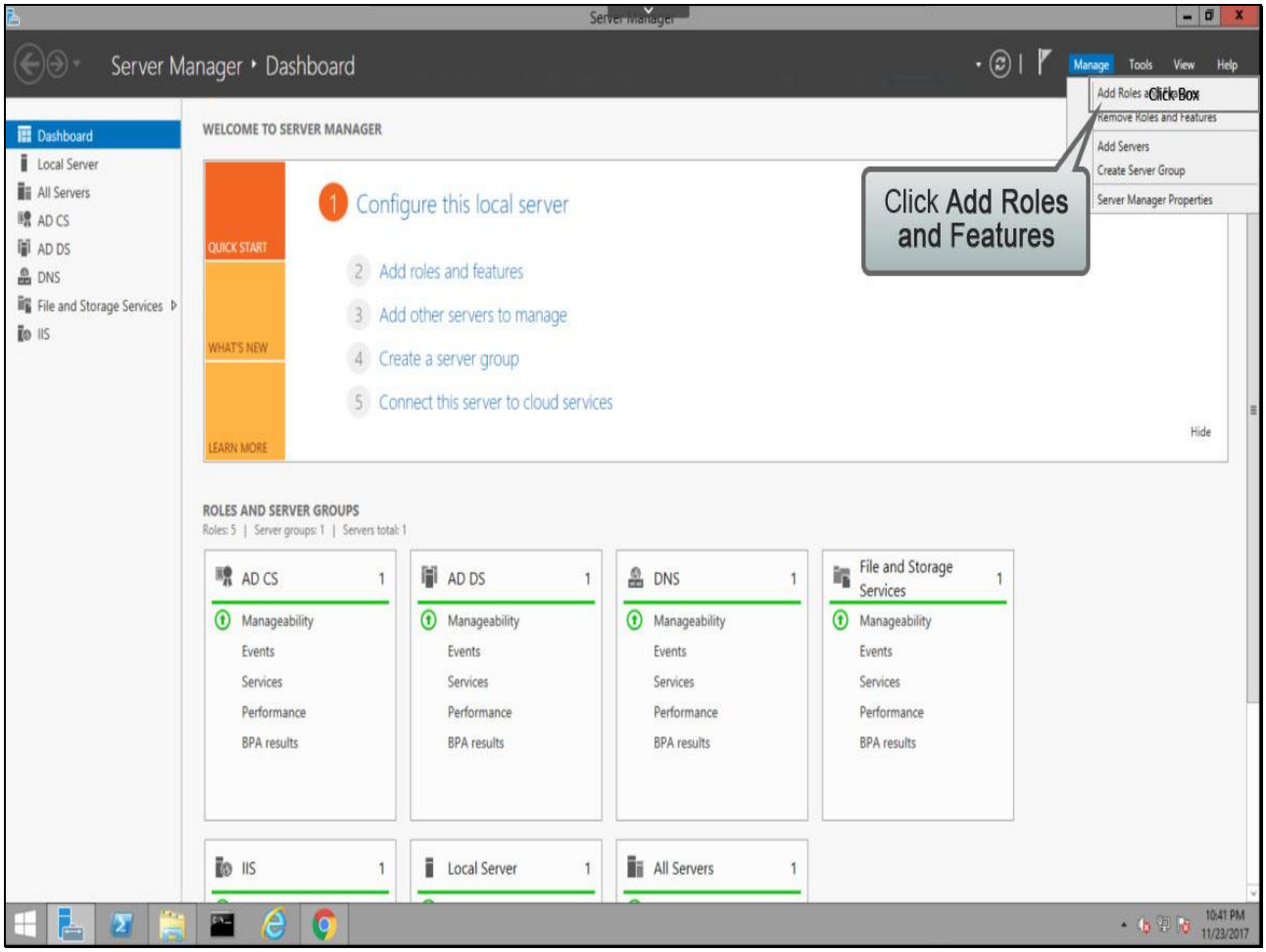
Slide 21 - Configuring ZPA for ADFS Authentication



Slide notes

Next, we will look at installing Federation Services on the AD server and adding a **Relying Party Trust**.

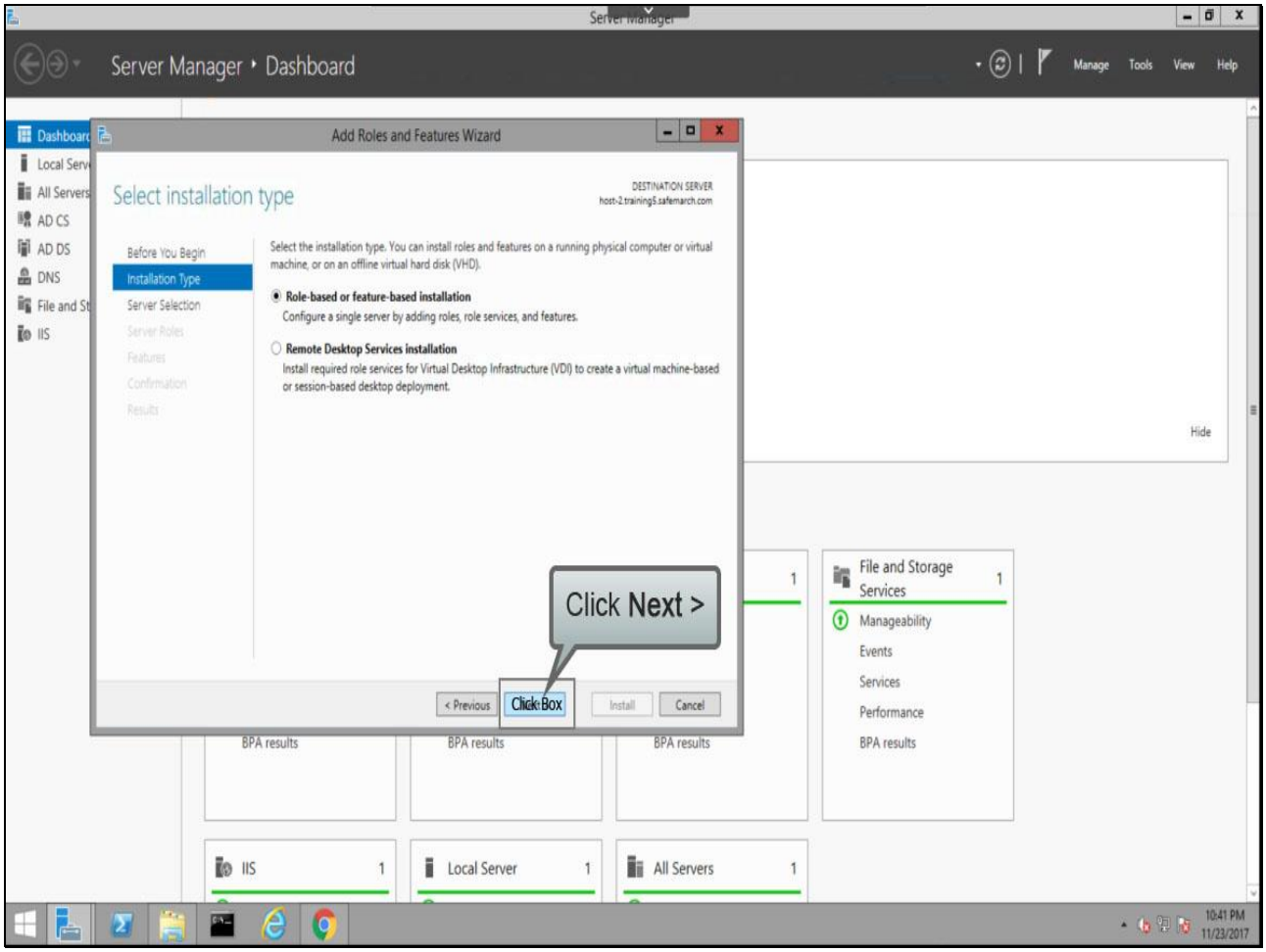
Slide 22 - Slide 22



Slide notes

On the AD server, in the **Server Manager** Dashboard, from the **Manage** menu, select **Add Roles and Features**.

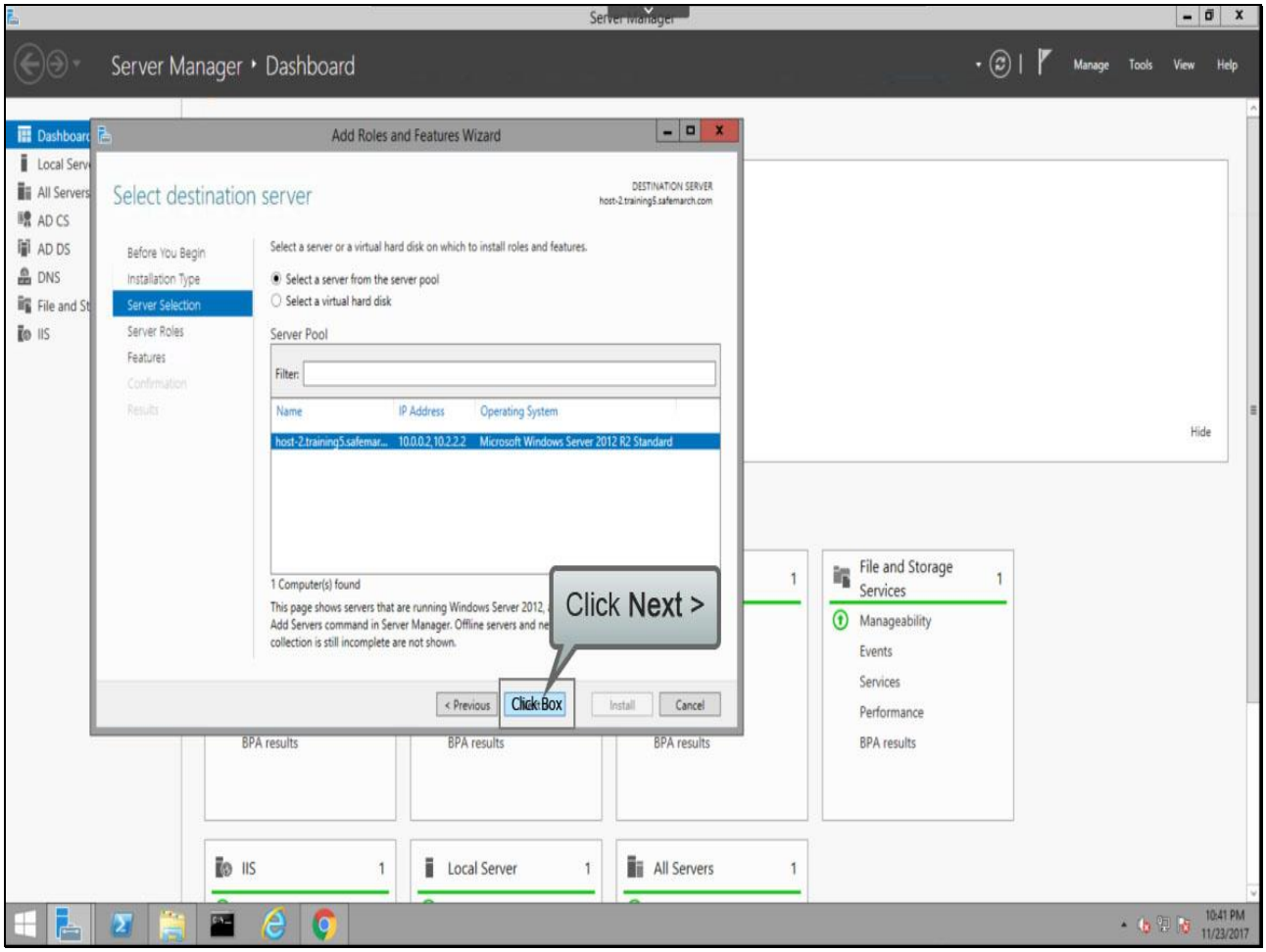
Slide 23 - Slide 23



Slide notes

Select the type of install and click **Next >**.

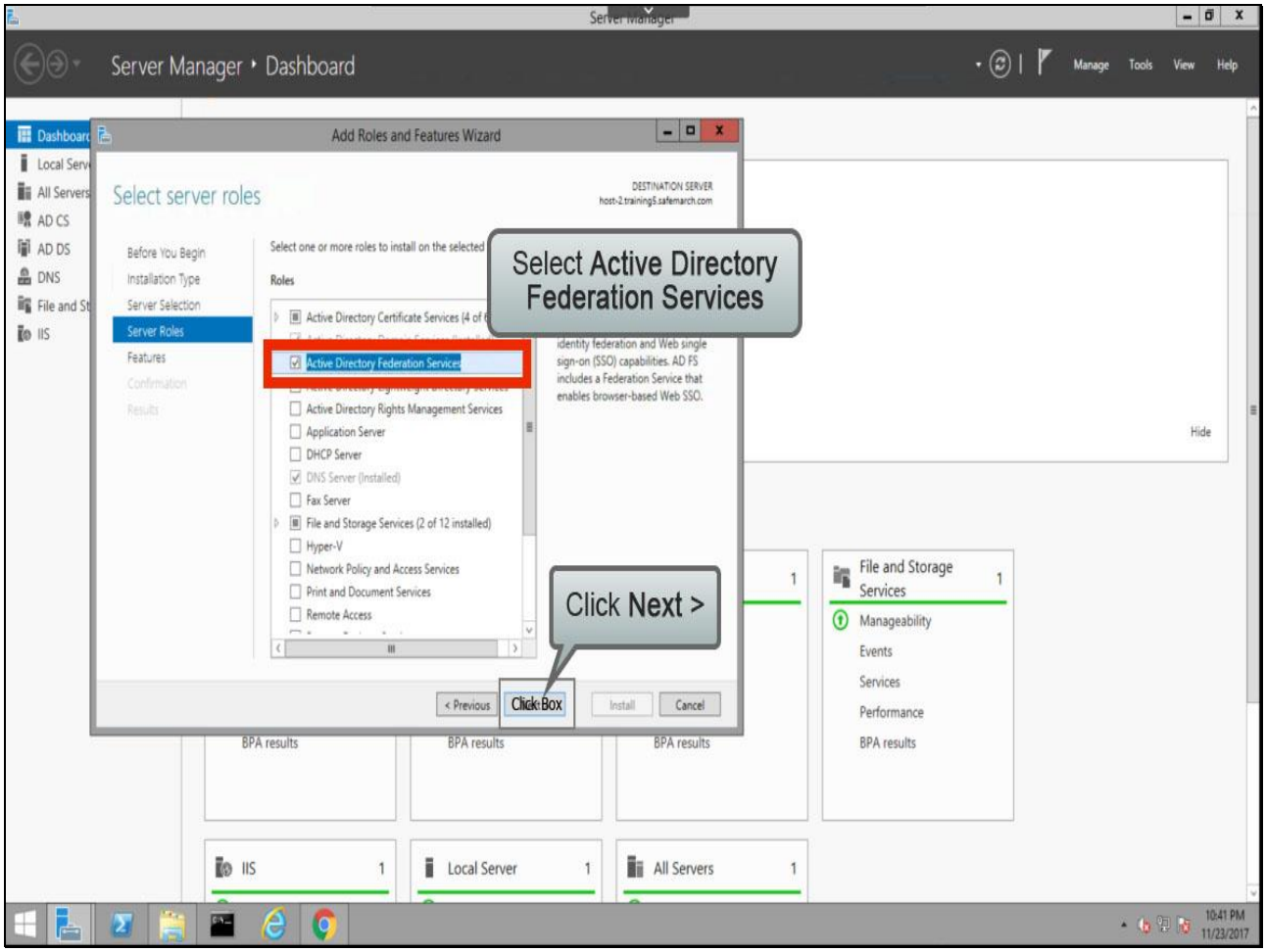
Slide 24 - Slide 24



Slide notes

Select the server to install this module on and click **Next >**.

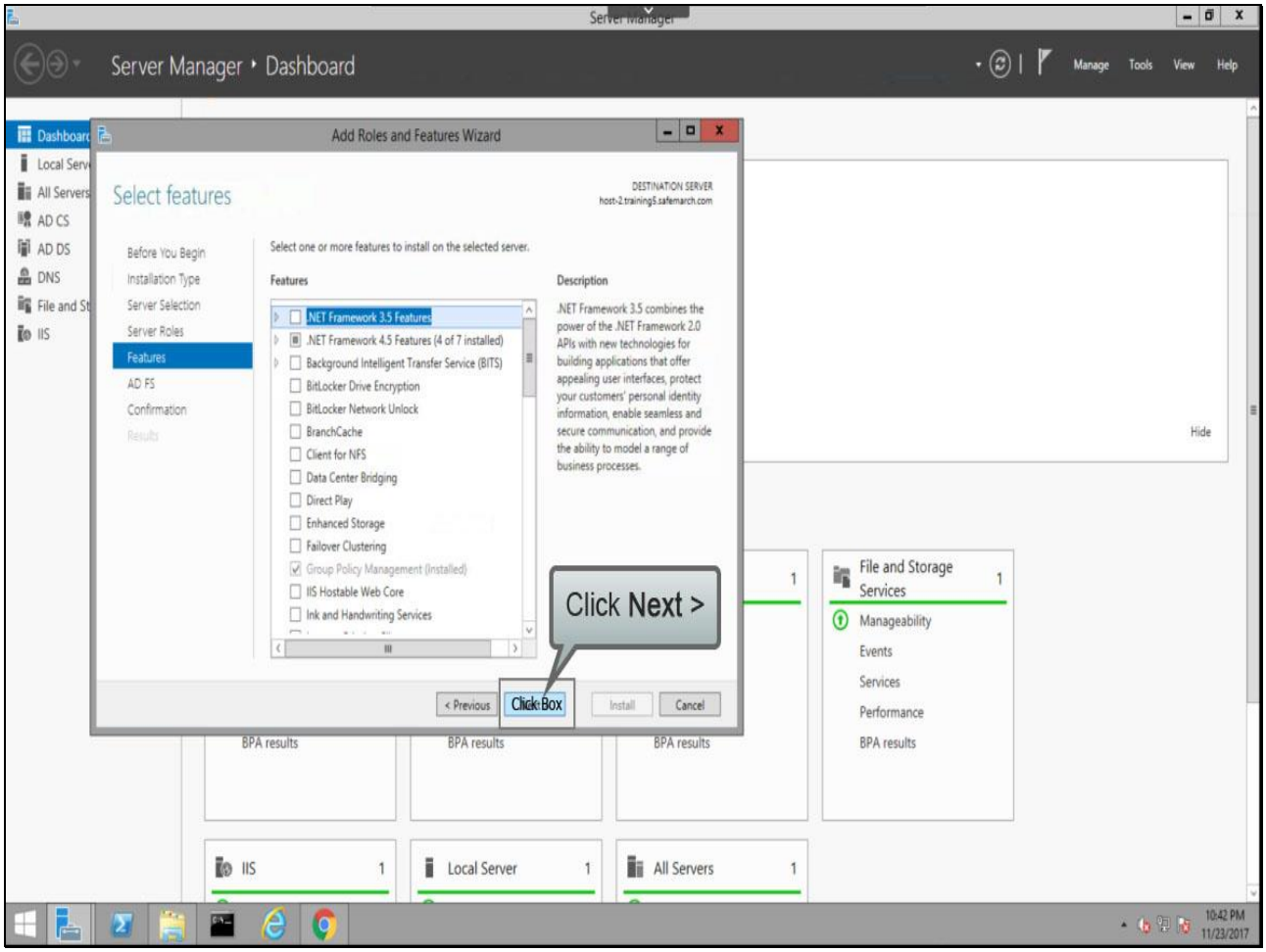
Slide 25 - Slide 25



Slide notes

Select **Active Directory Federation Services** and click **Next >**.

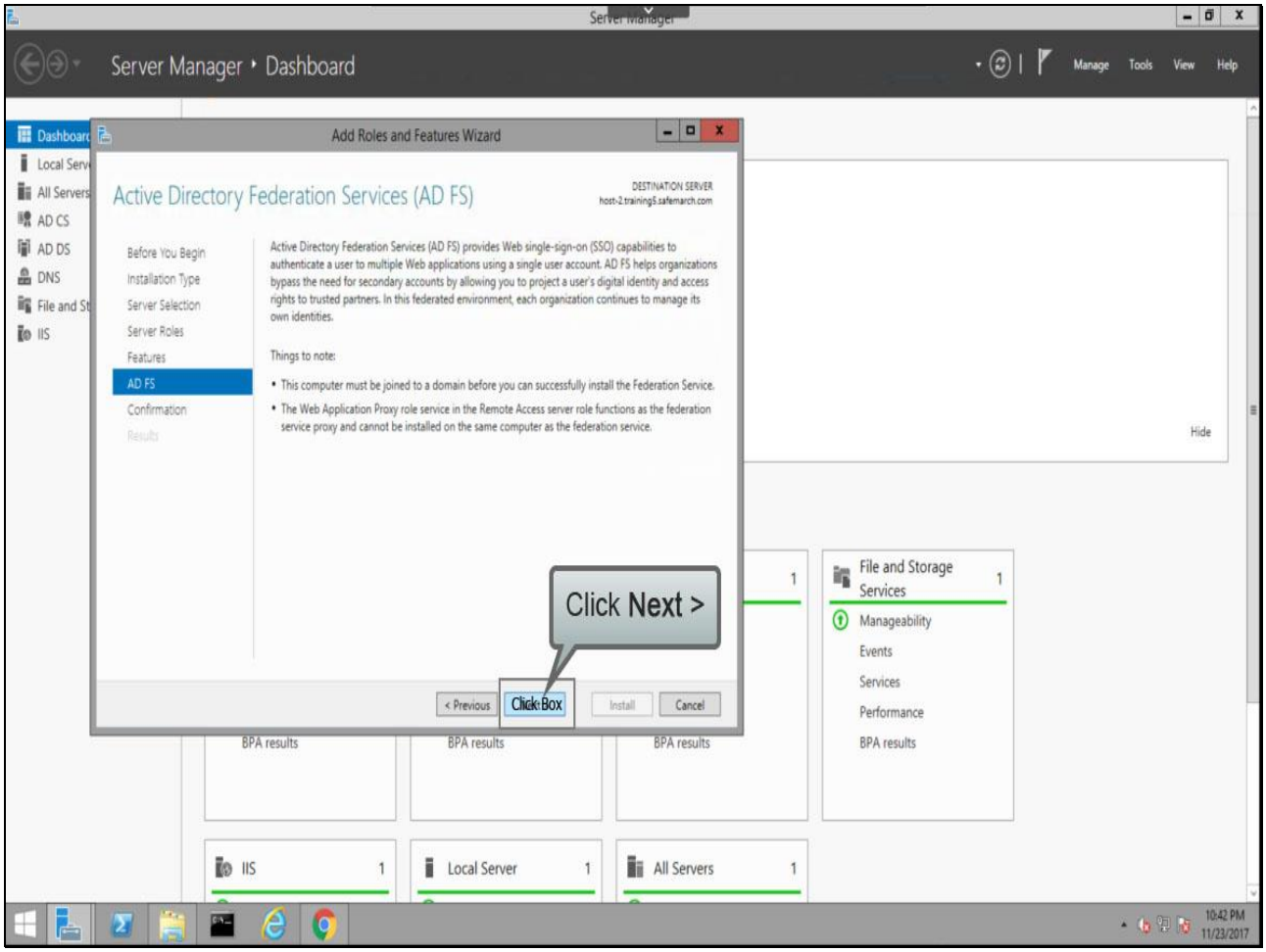
Slide 26 - Slide 26



Slide notes

We will accept the default set of features and just click **Next >**, ...

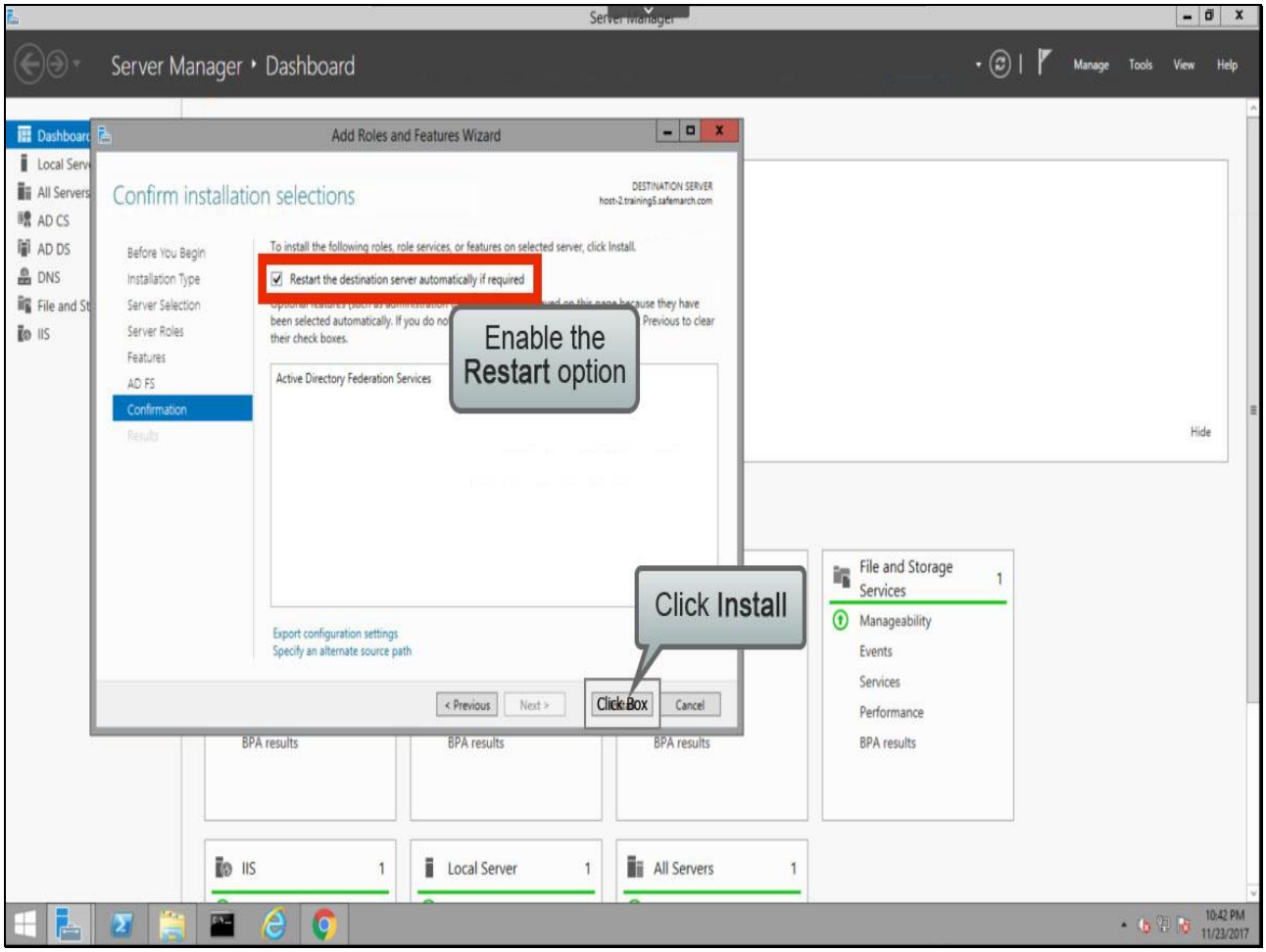
Slide 27 - Slide 27



Slide notes

...and click **Next >** again.

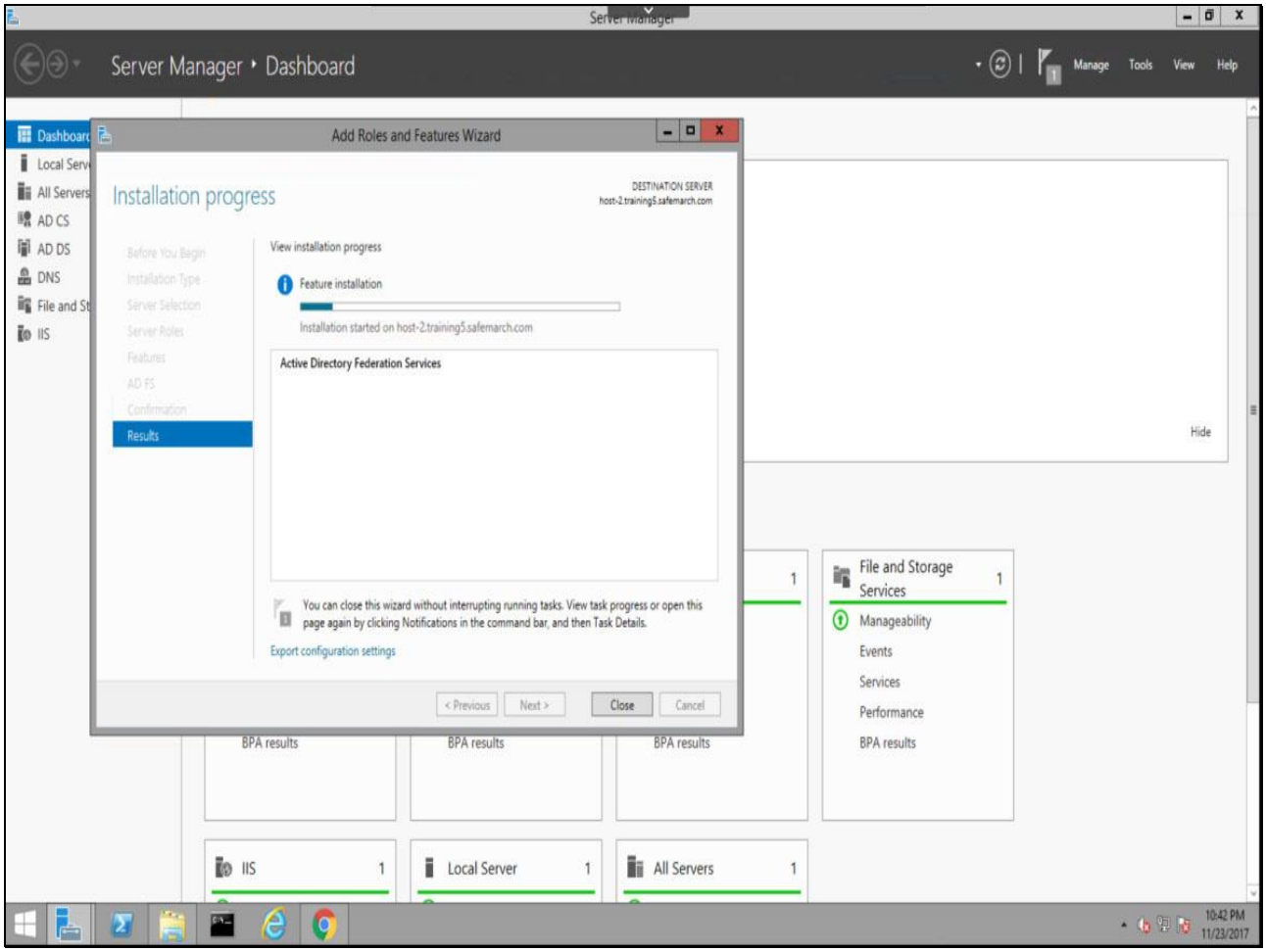
Slide 28 - Slide 28



Slide notes

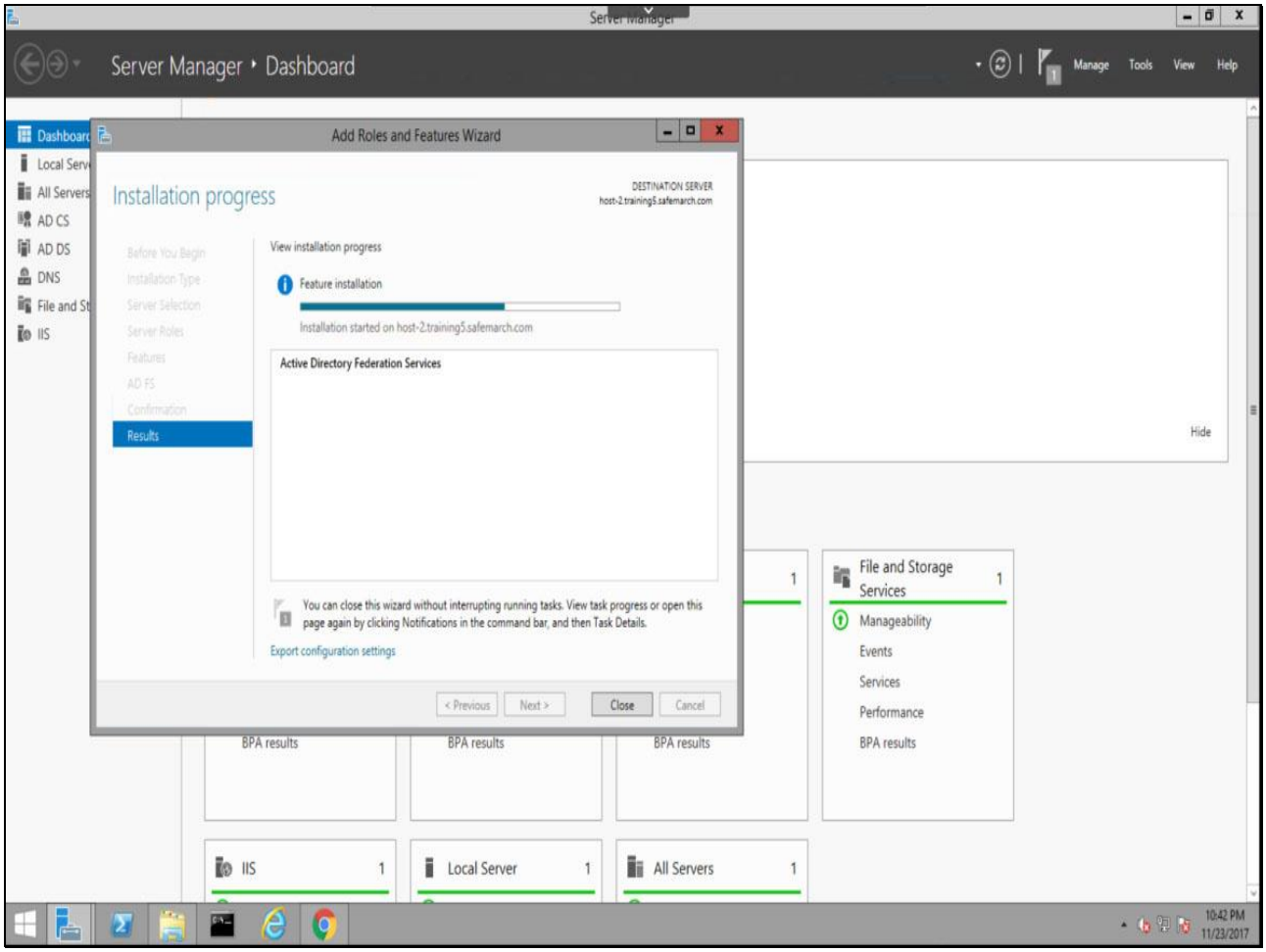
Enable the option to **Restart the destination server automatically if required**, then click **Install**.

Slide 29 - Slide 29



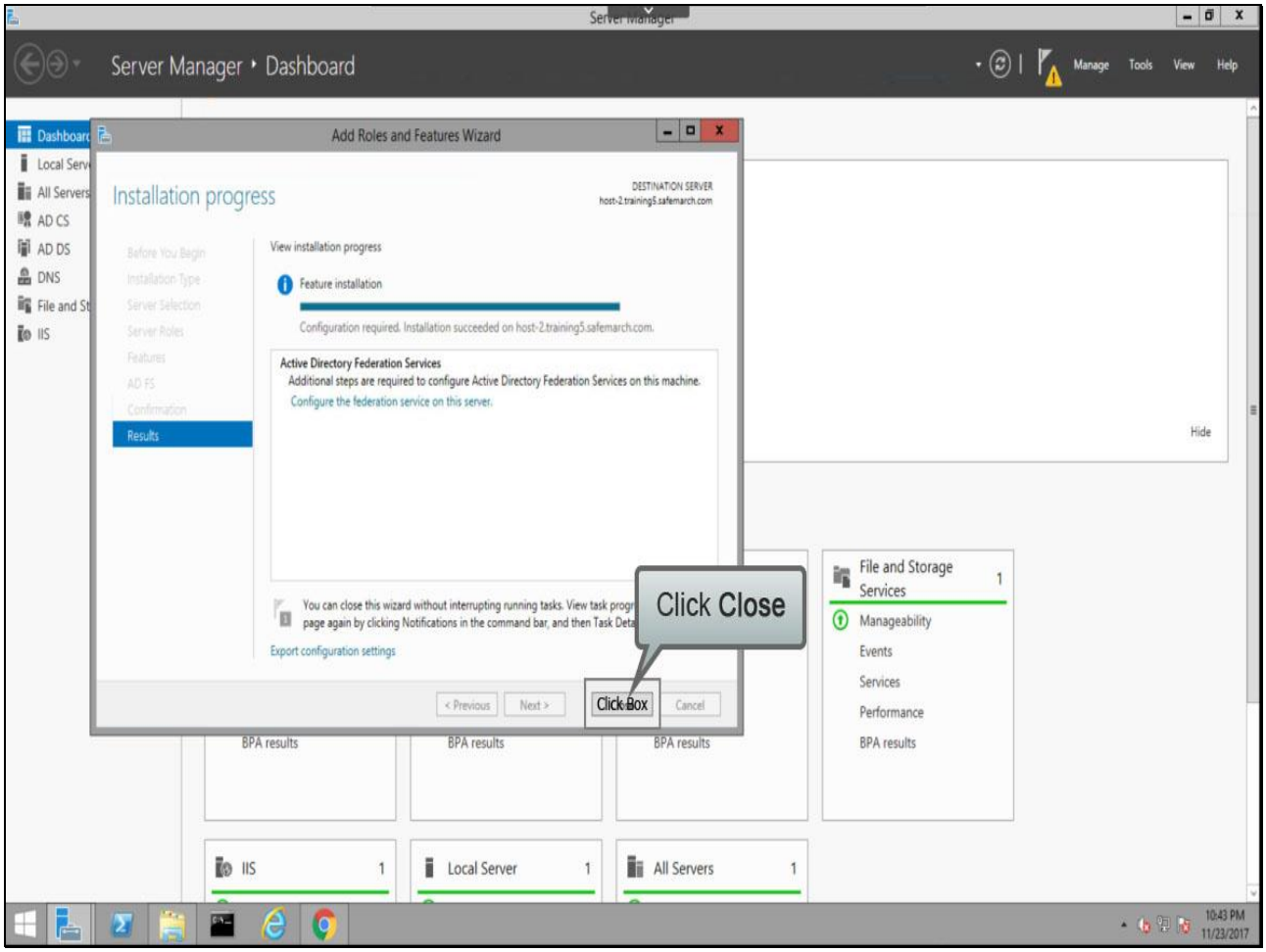
Slide notes

Slide 30 - Slide 30



Slide notes

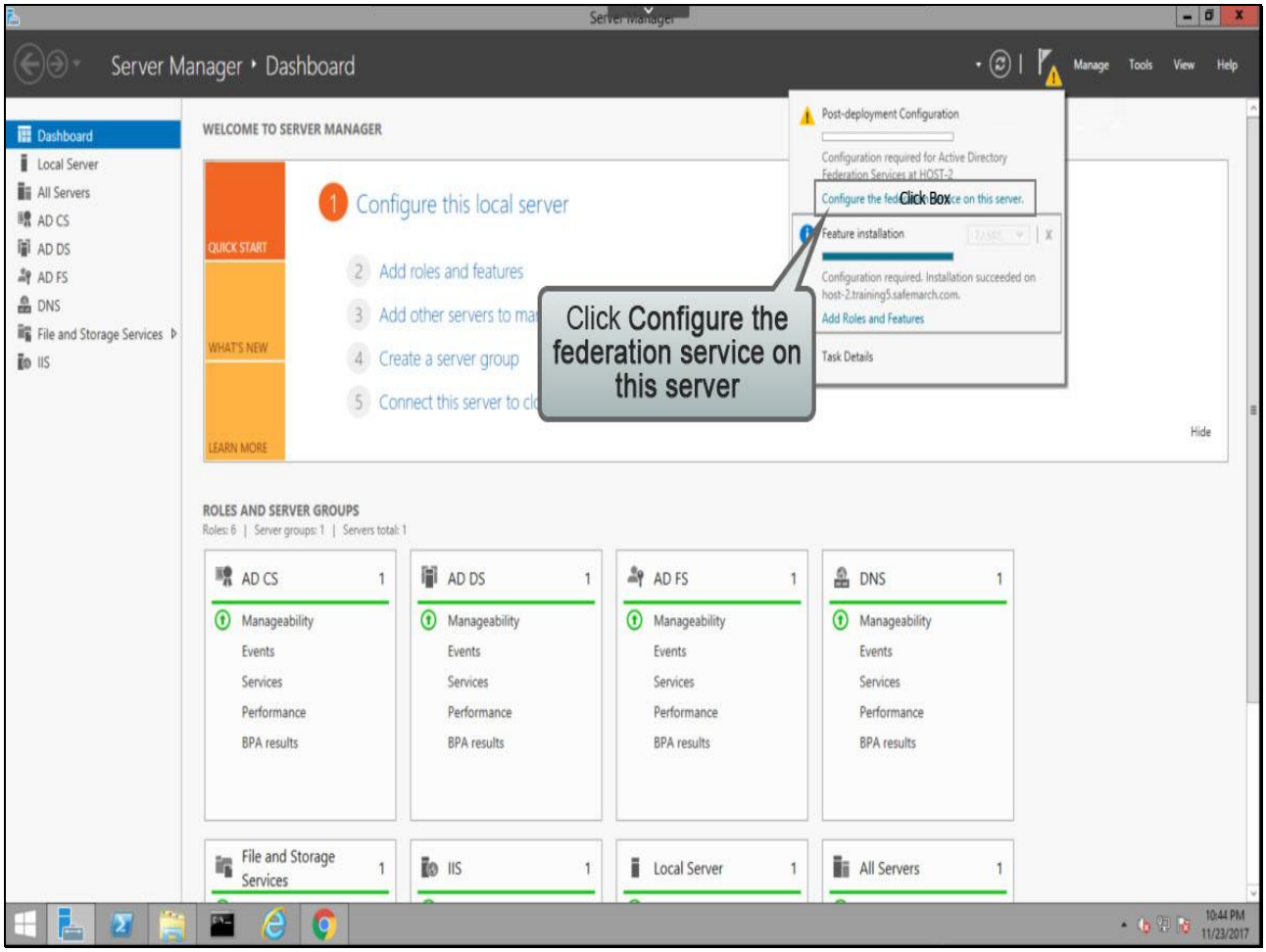
Slide 31 - Slide 31



Slide notes

Once the installation is complete, click **Close**.

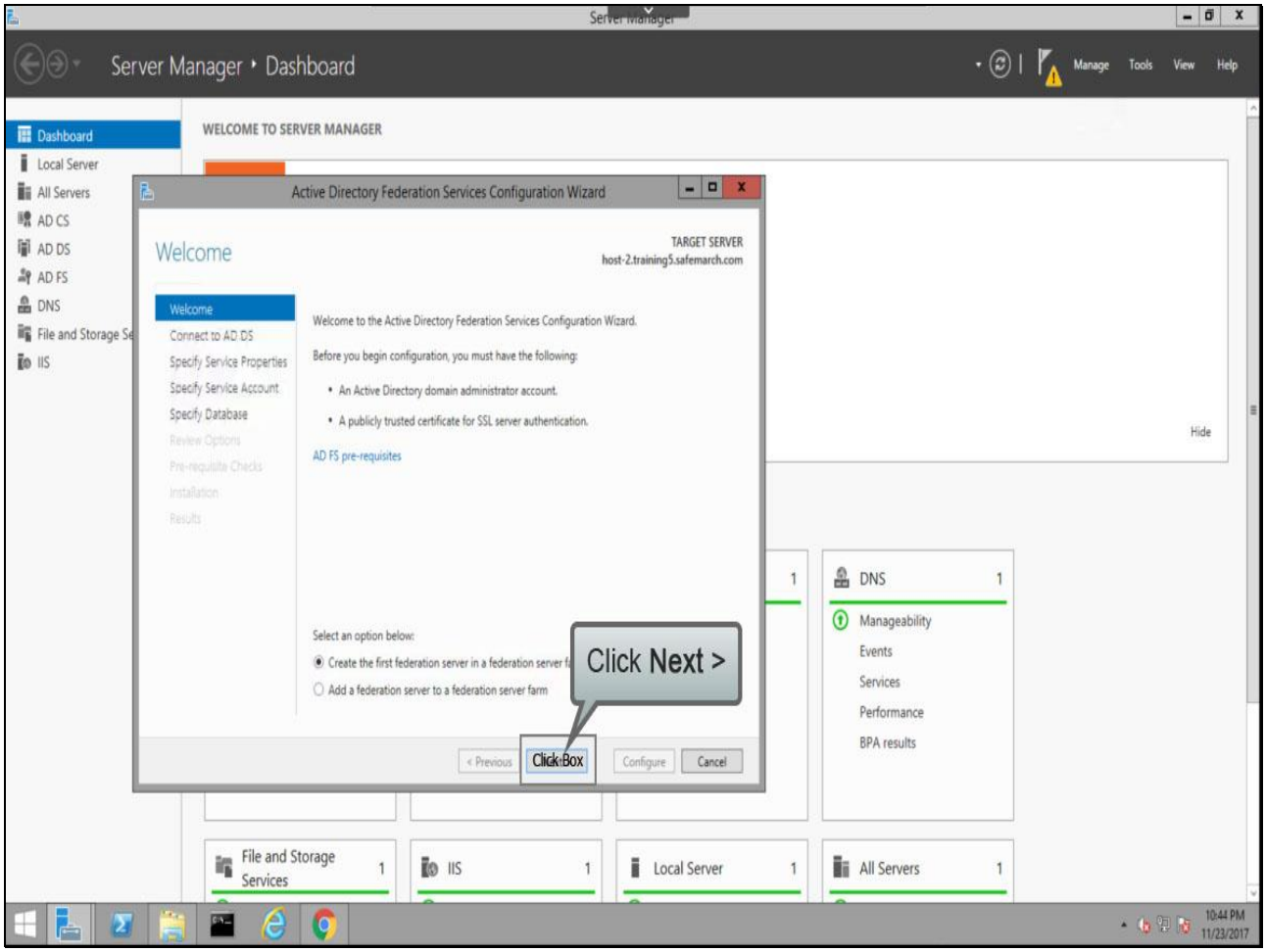
Slide 32 - Slide 32



Slide notes

Click the **warning triangle** in the Server Manager Dashboard and click **Configure the federation service on this server**.

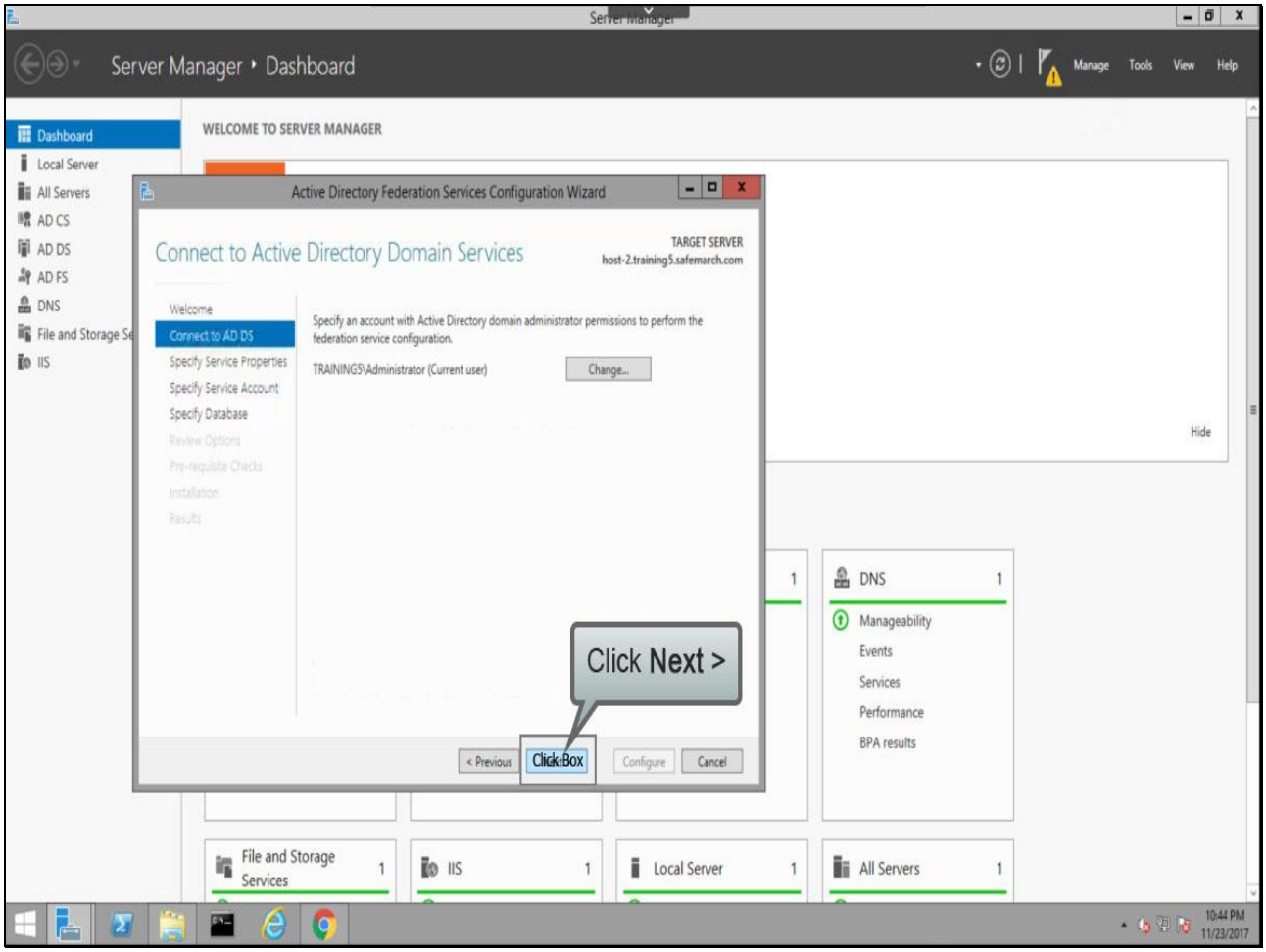
Slide 33 - Slide 33



Slide notes

In this case we are creating the first federation server in a server farm, so we just need to click **Next >**.

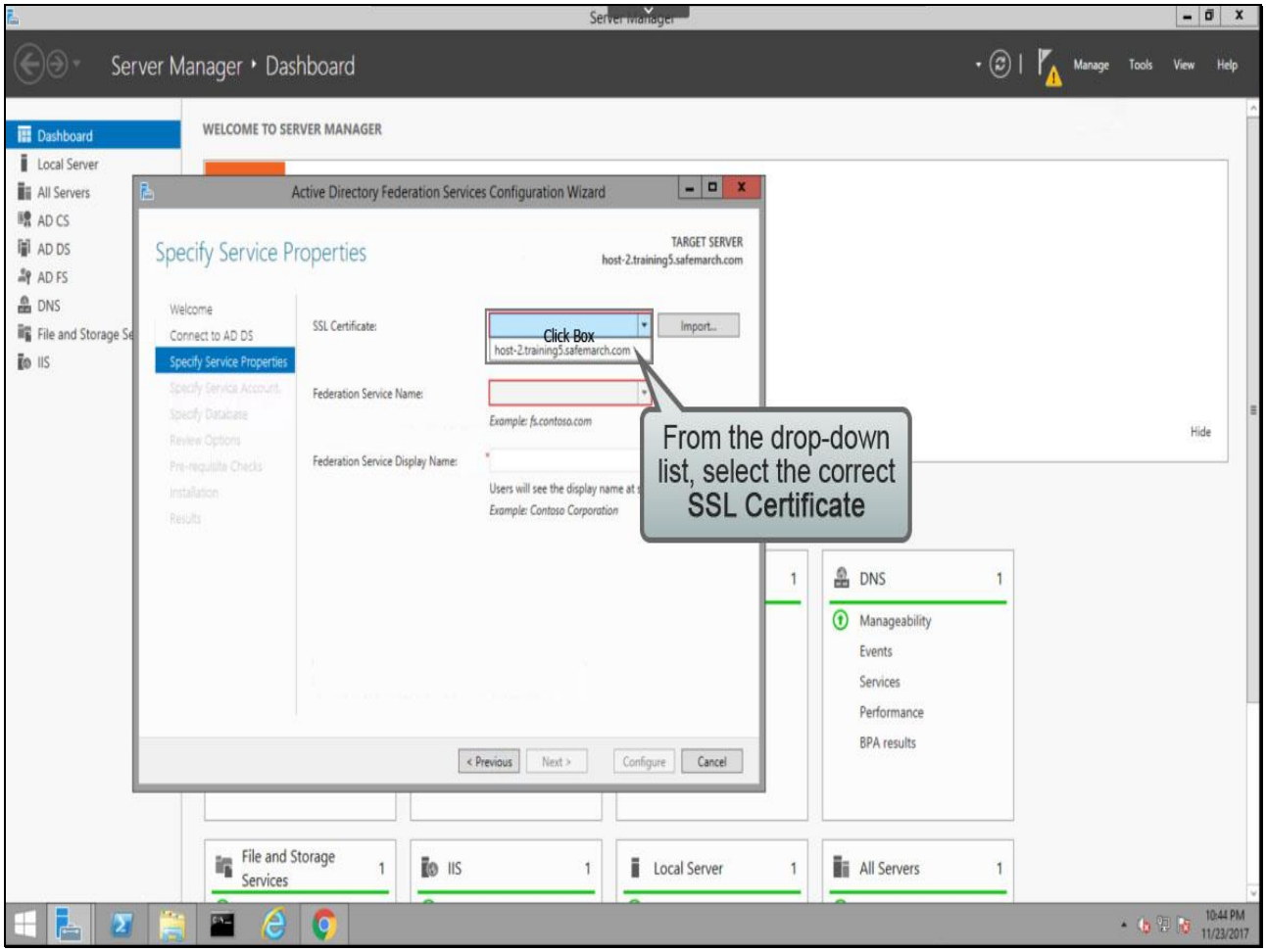
Slide 34 - Slide 34



Slide notes

To use the current admin user account for the configuration, click **Next >**.

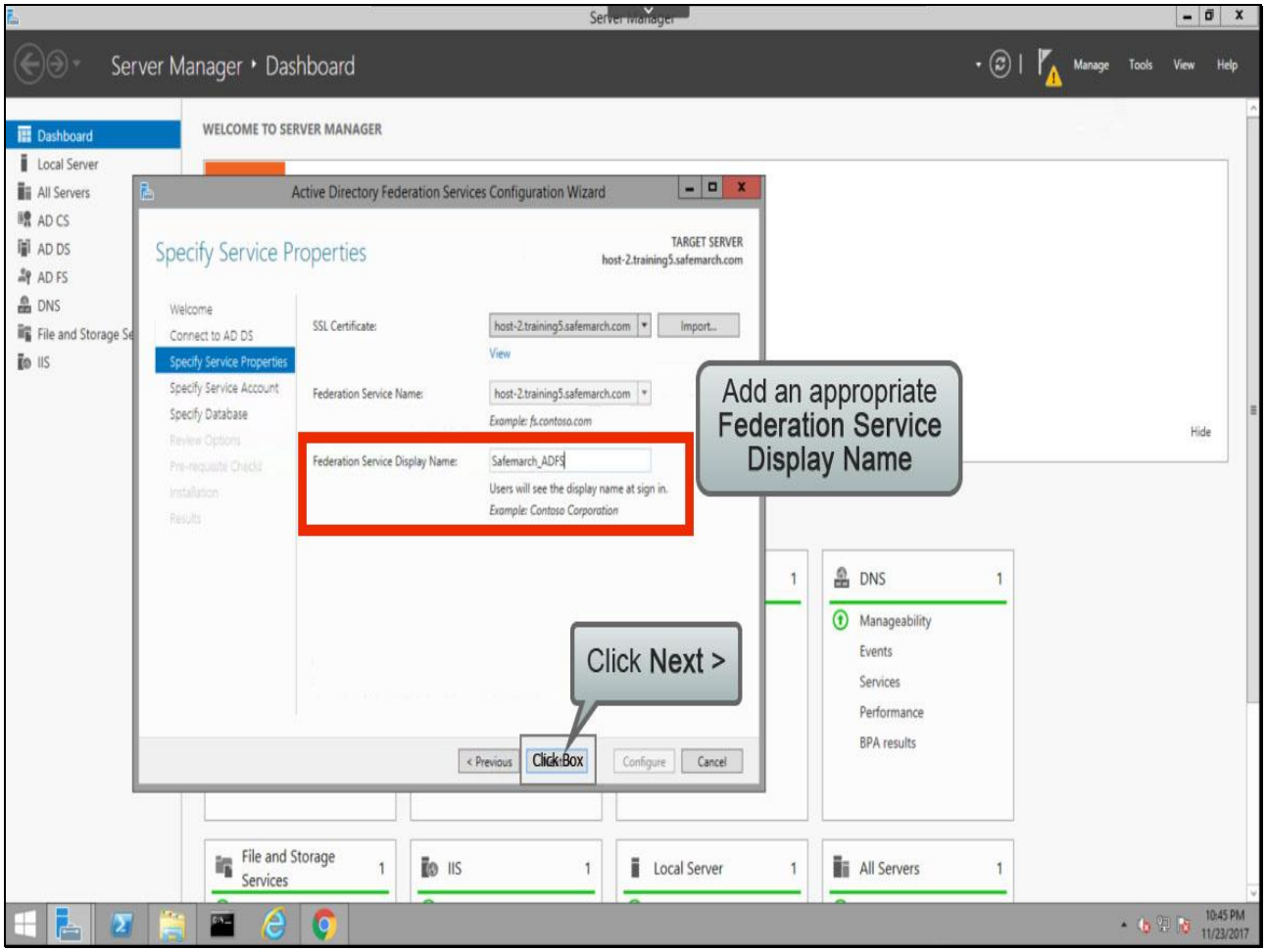
Slide 35 - Slide 35



Slide notes

From the drop-down list, select the correct **SSL Certificate** to use for signing the assertions.

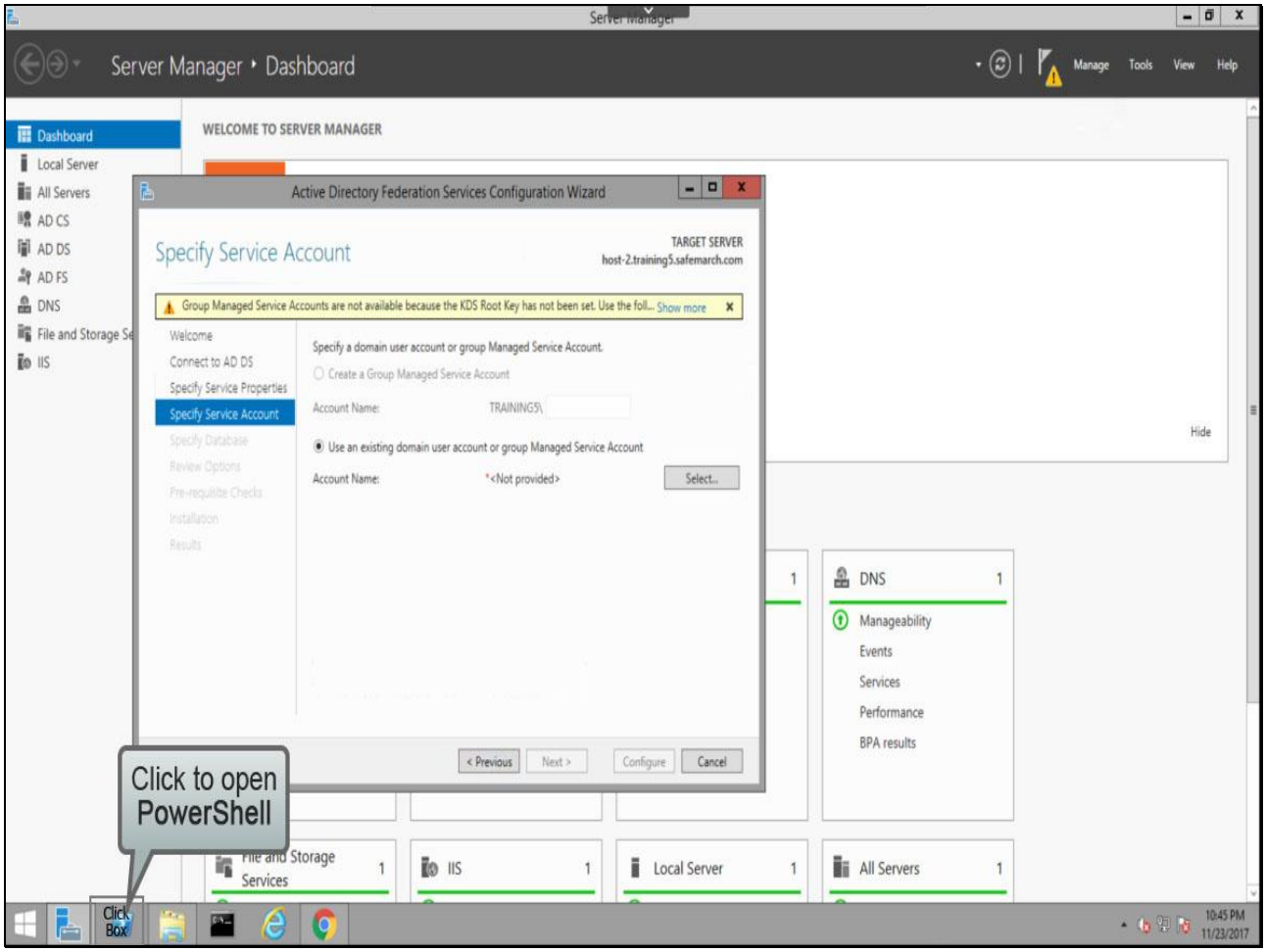
Slide 36 - Slide 36



Slide notes

Provide an appropriate **Federation Service Display Name** and click **Next >**.

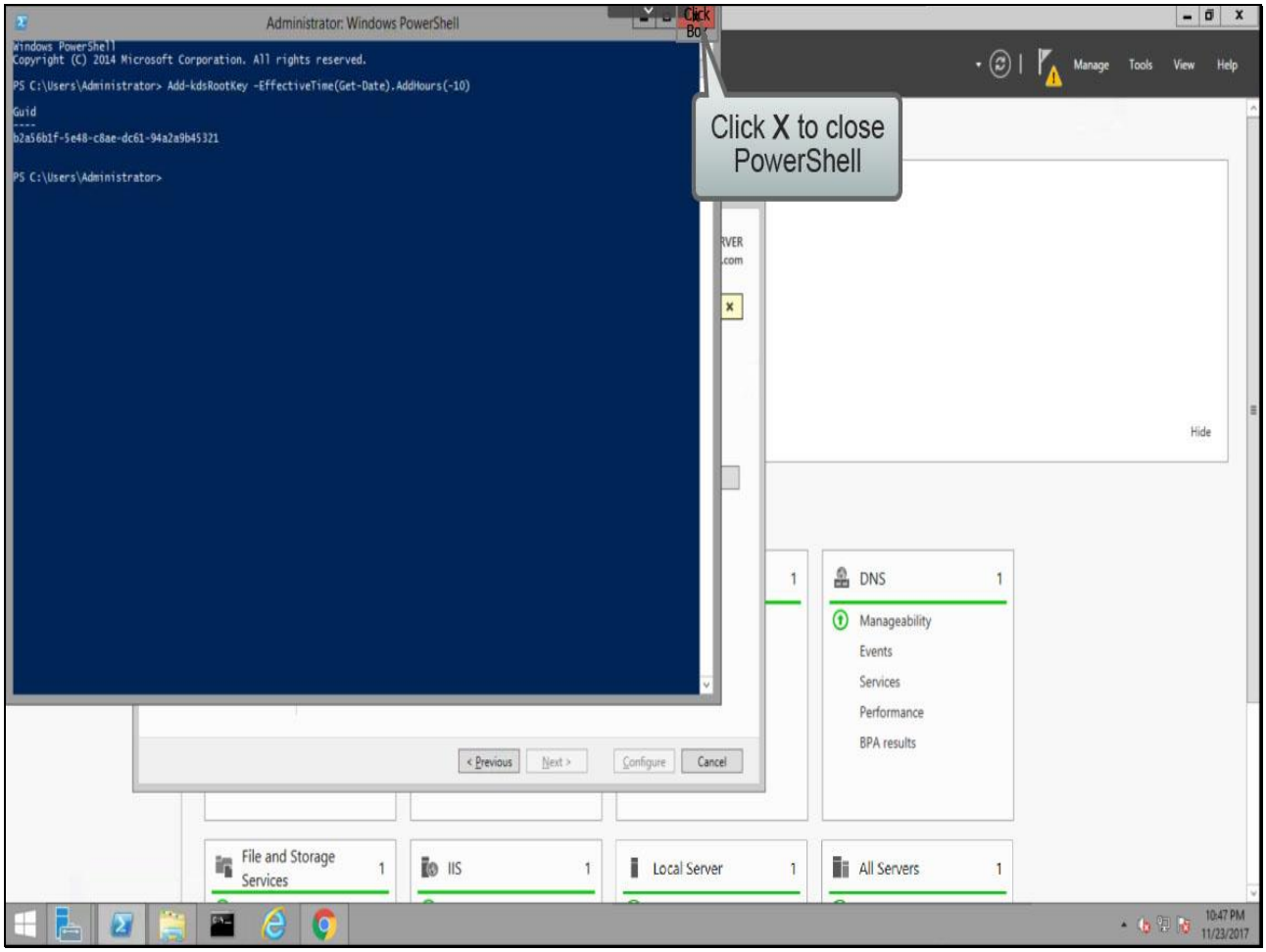
Slide 37 - Slide 37



Slide notes

At this point, we could use a regular domain user account for the service, however best practice is to create a **Group Managed Service Account**, however before we can do that there's a command we have to run in PowerShell, ...so click to open a **PowerShell** window, ...

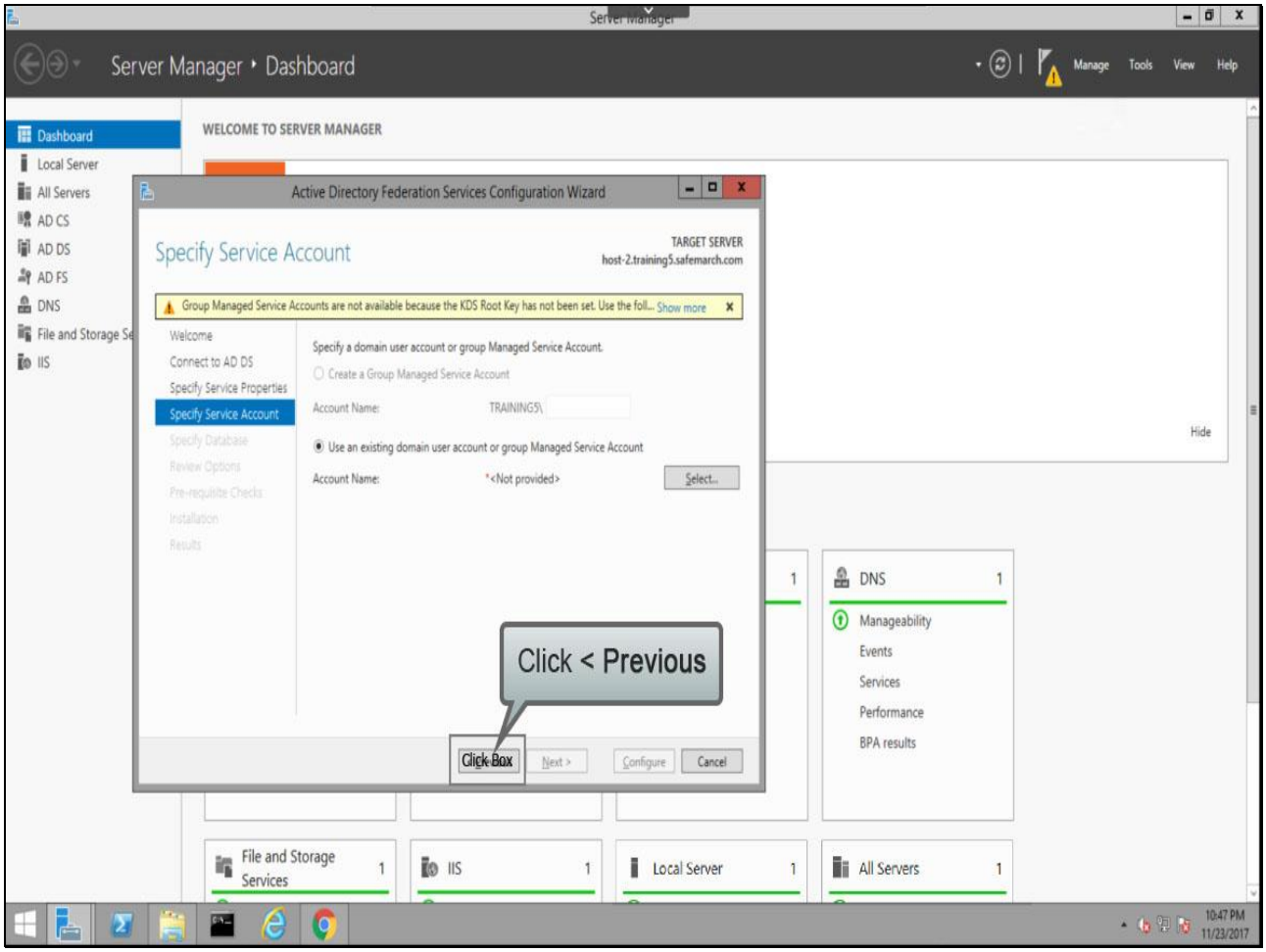
Slide 38 - Slide 38



Slide notes

...and enter the command shown here (**Add-kdsRootKey -EffectiveTime(Get-Date).AddHours(-10)**), then close the **PowerShell** window. Note that this command is case sensitive.

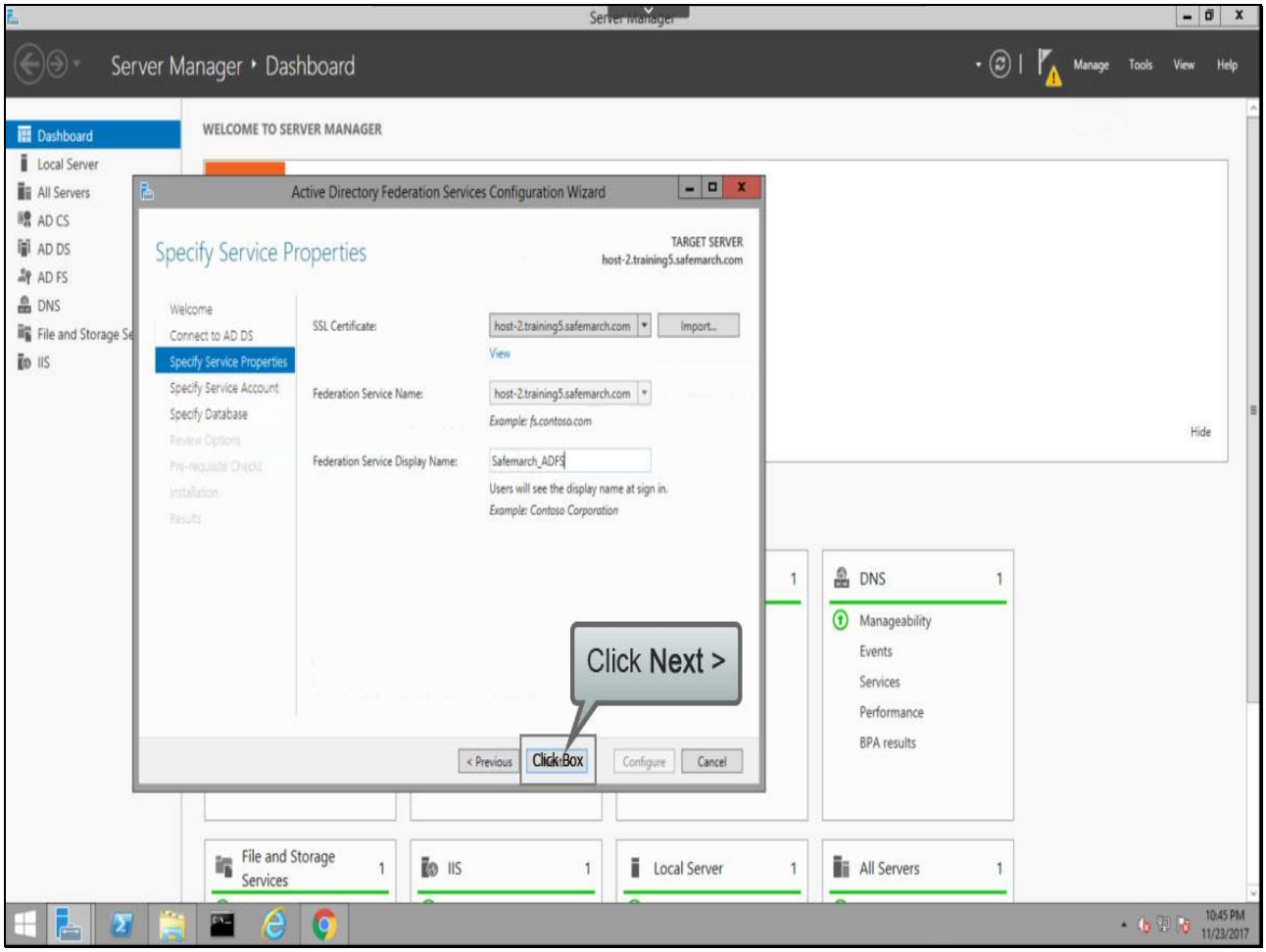
Slide 39 - Slide 39



Slide notes

Back in the ADFS configuration wizard, click **< Previous**, ...

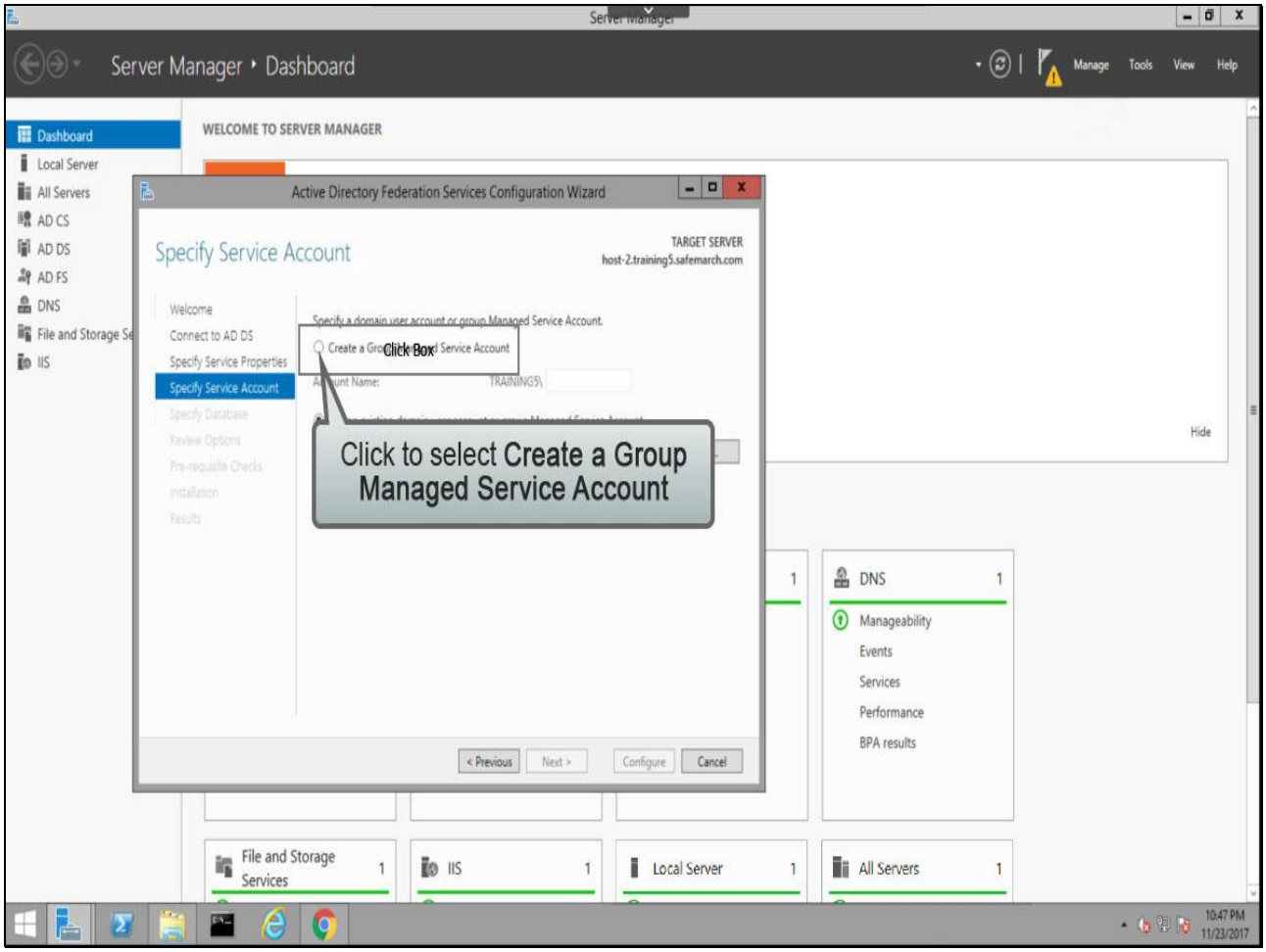
Slide 40 - Slide 40



Slide notes

...then click **Next >**, ...

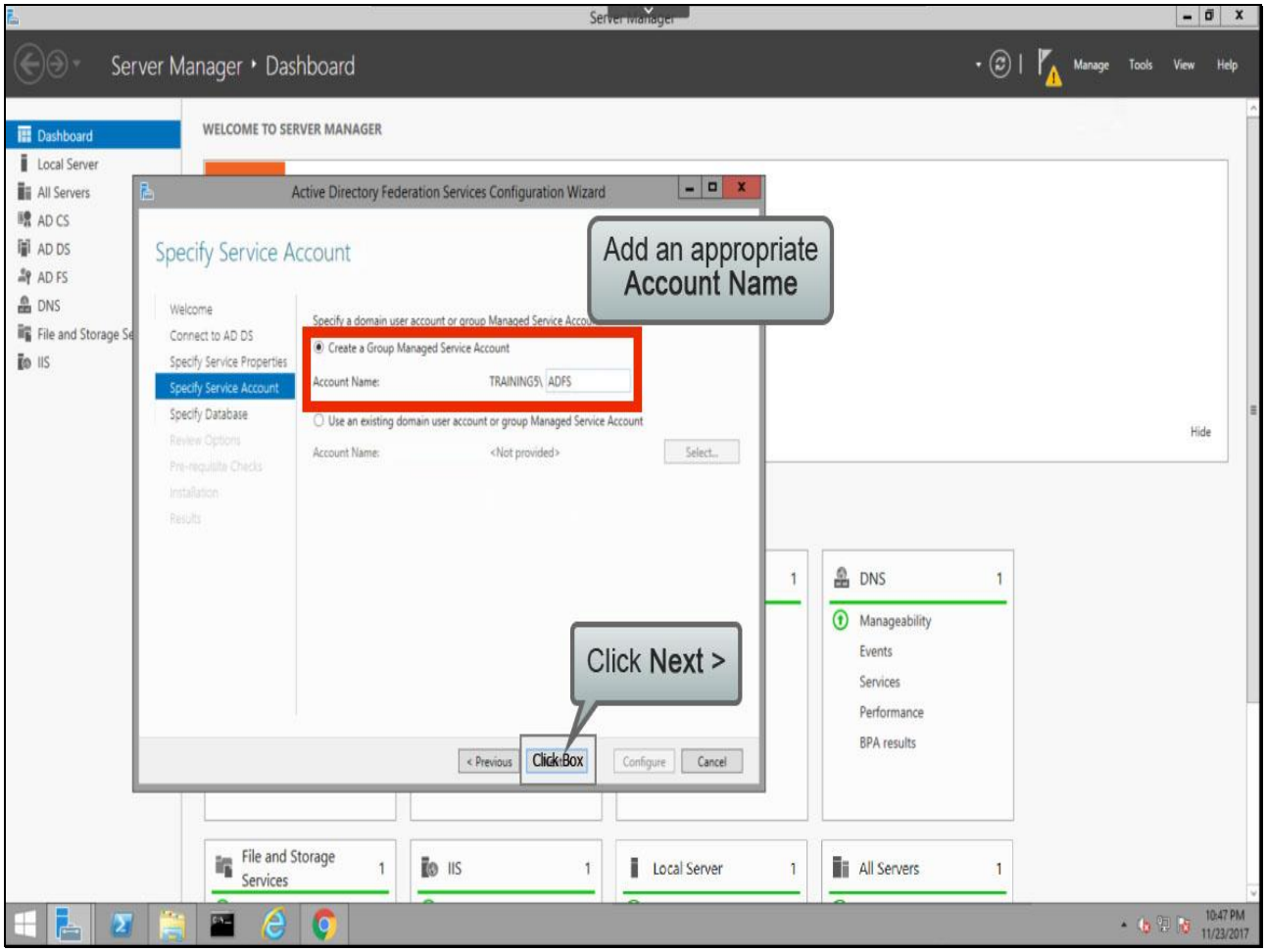
Slide 41 - Slide 41



Slide notes

...and now you have the possibility to select the **Create a Group Managed Service Account** option.

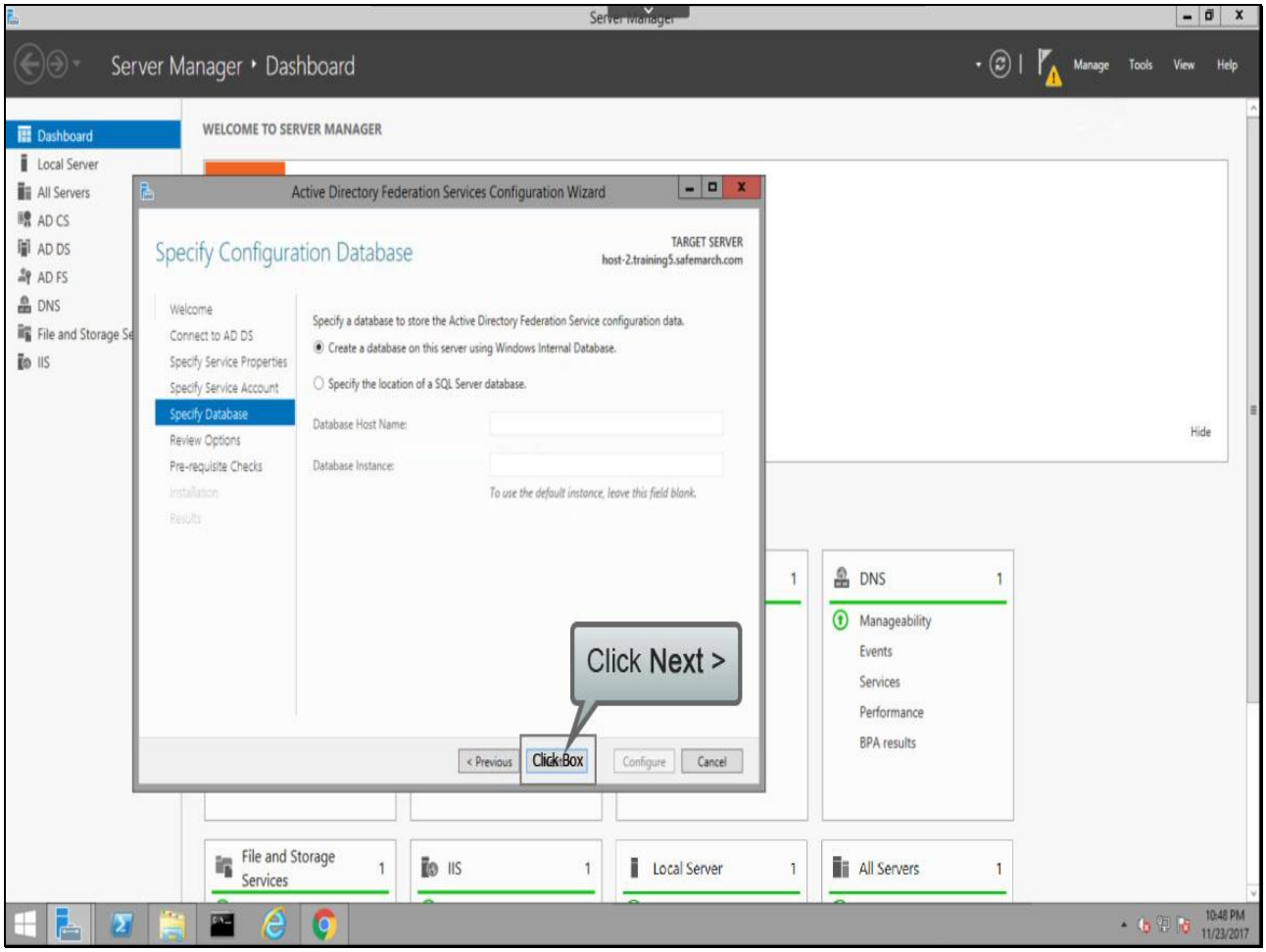
Slide 42 - Slide 42



Slide notes

Specify an appropriate **Account Name** and click **Next >**.

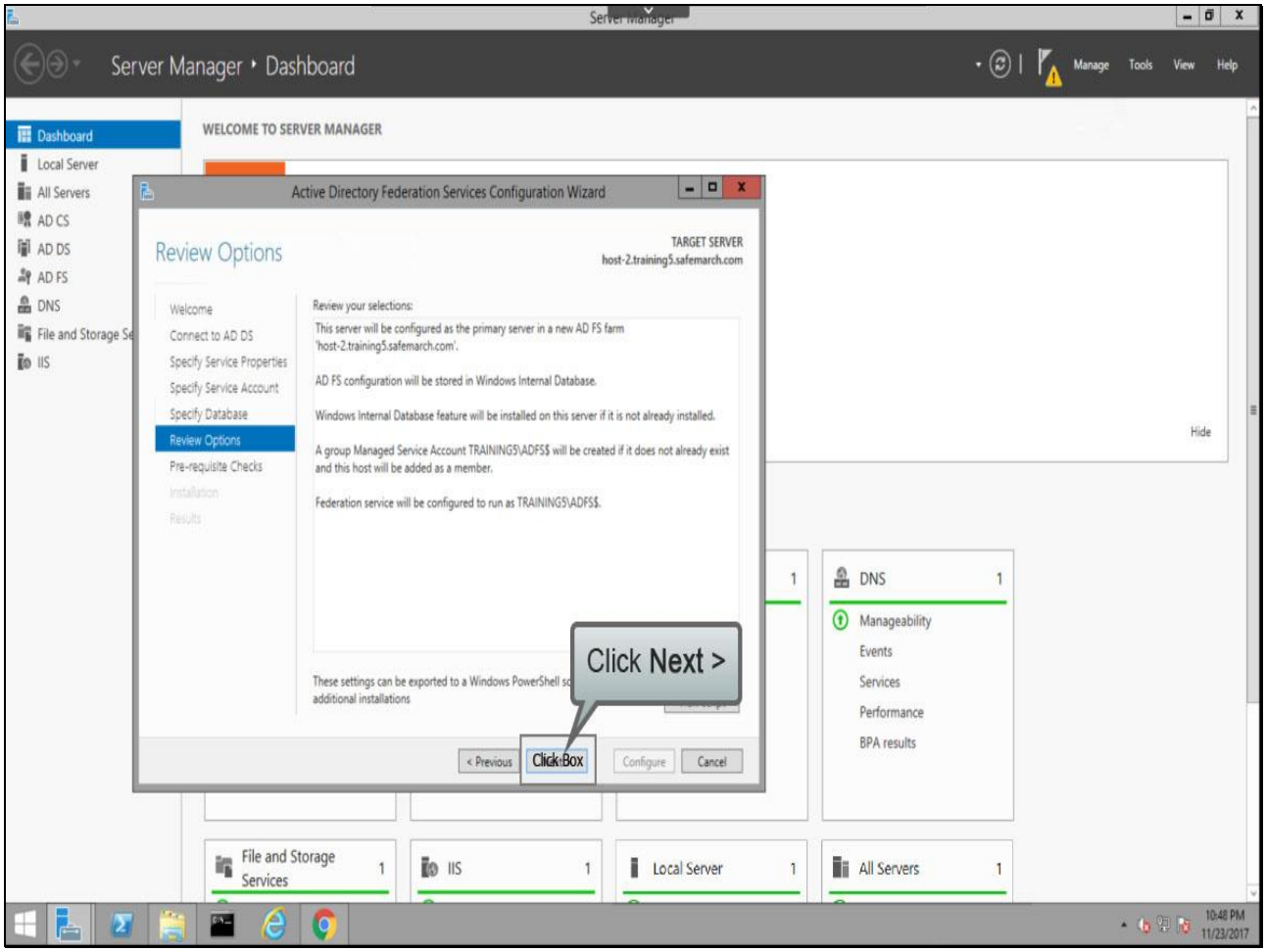
Slide 43 - Slide 43



Slide notes

Specify the location of the **Database** and click **Next >**.

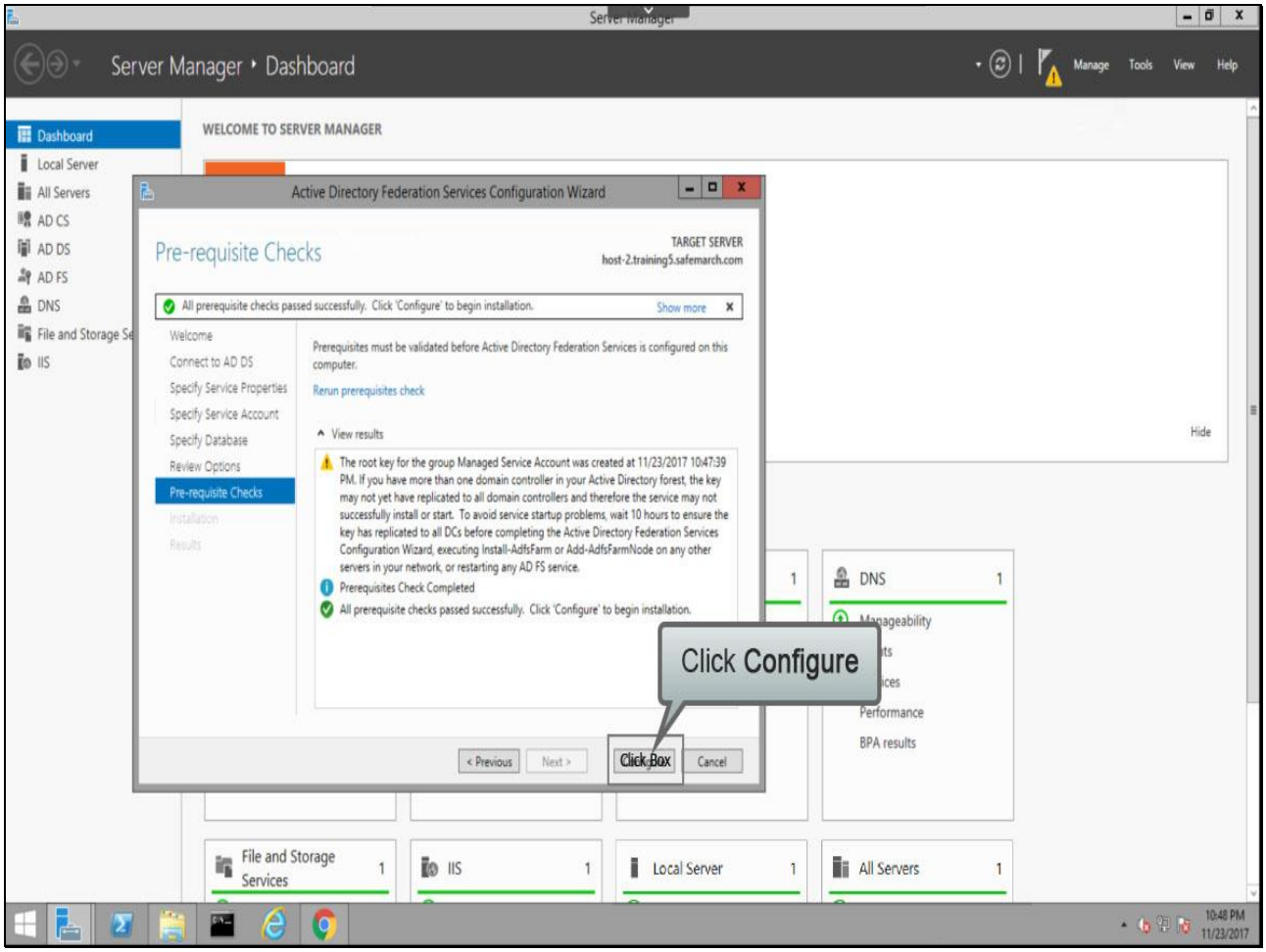
Slide 44 - Slide 44



Slide notes

Review the options selected and click **Next >**, ...

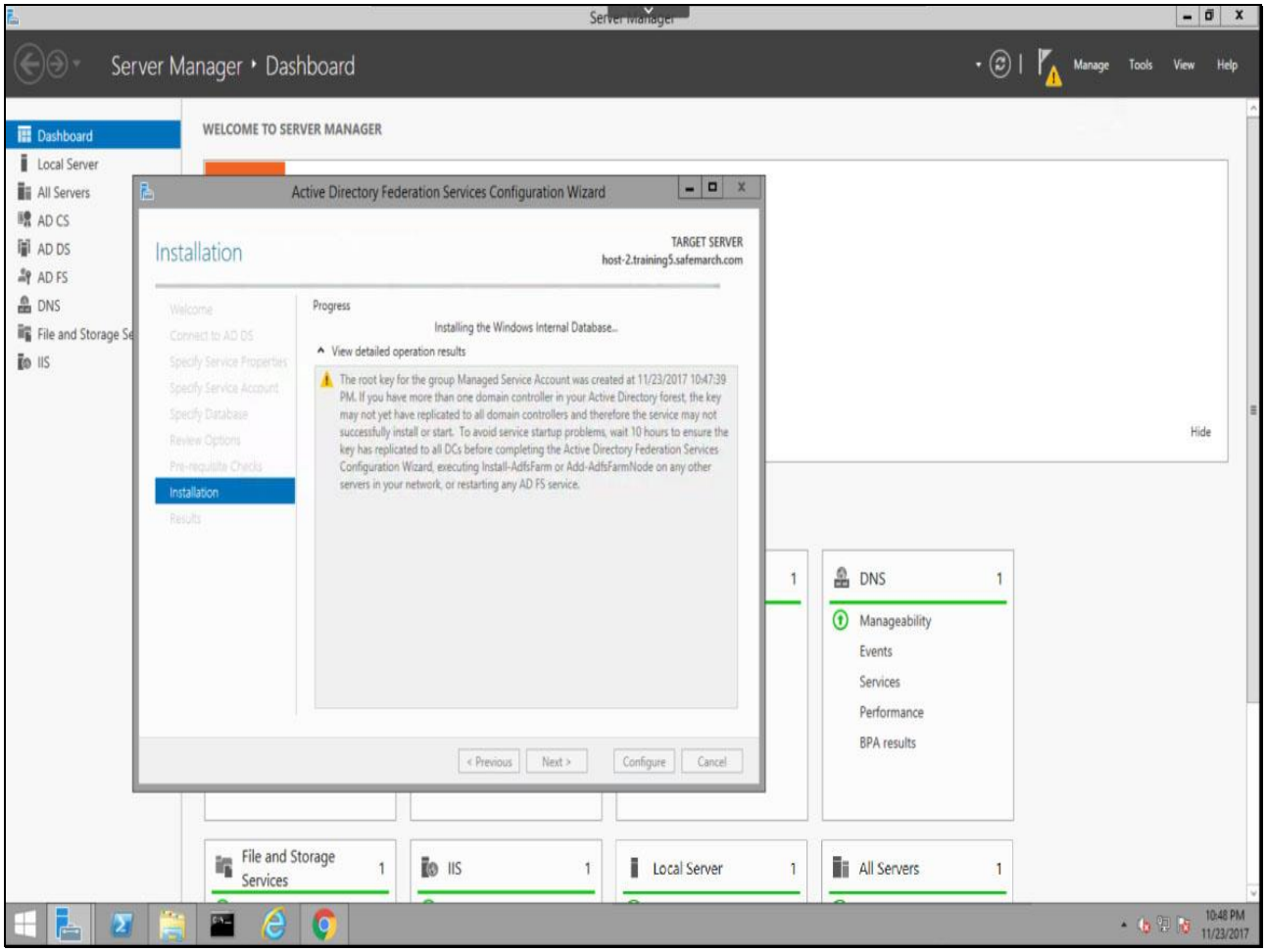
Slide 45 - Slide 45



Slide notes

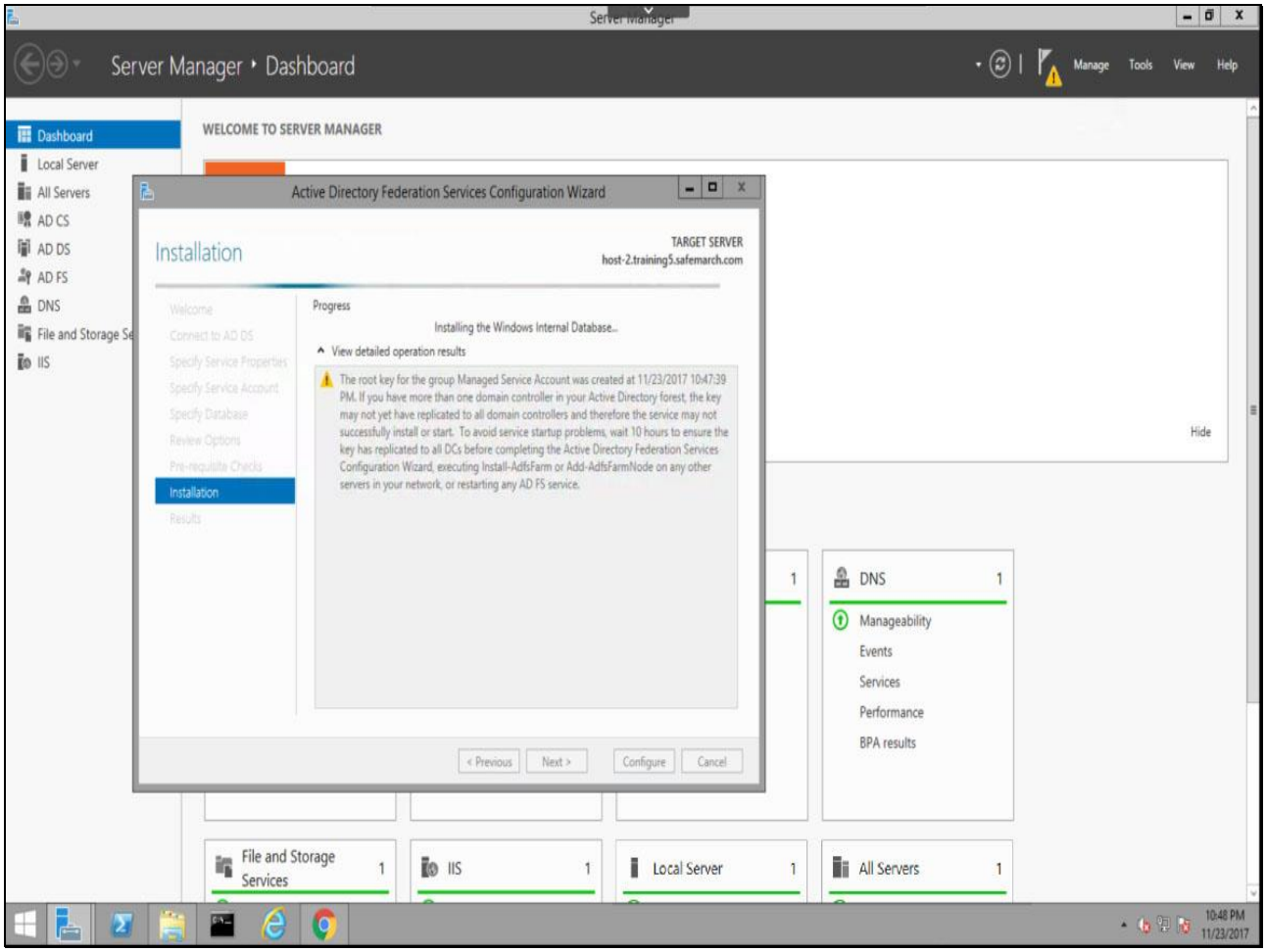
...then click **Configure**.

Slide 46 - Slide 46



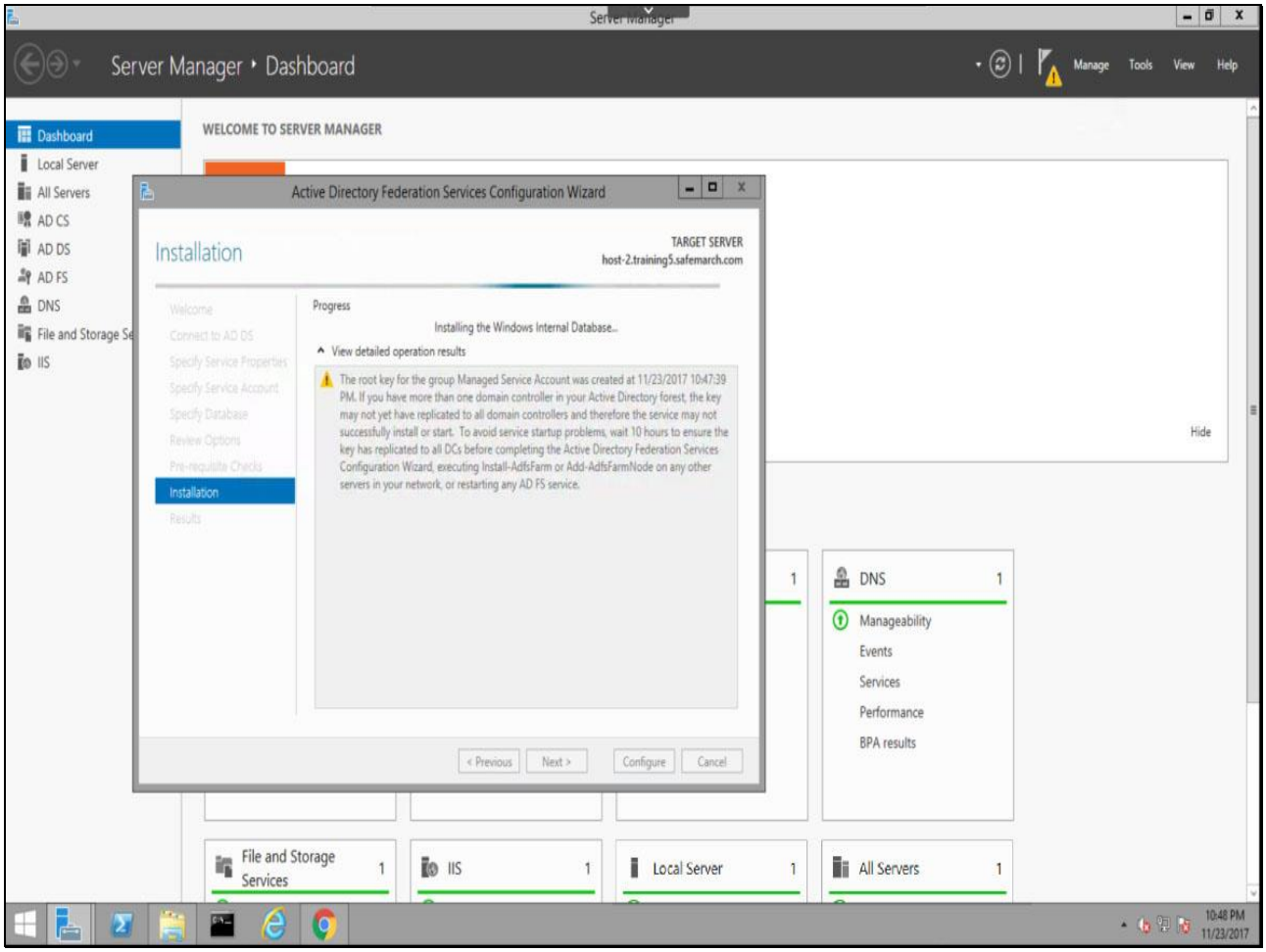
Slide notes

Slide 47 - Slide 47



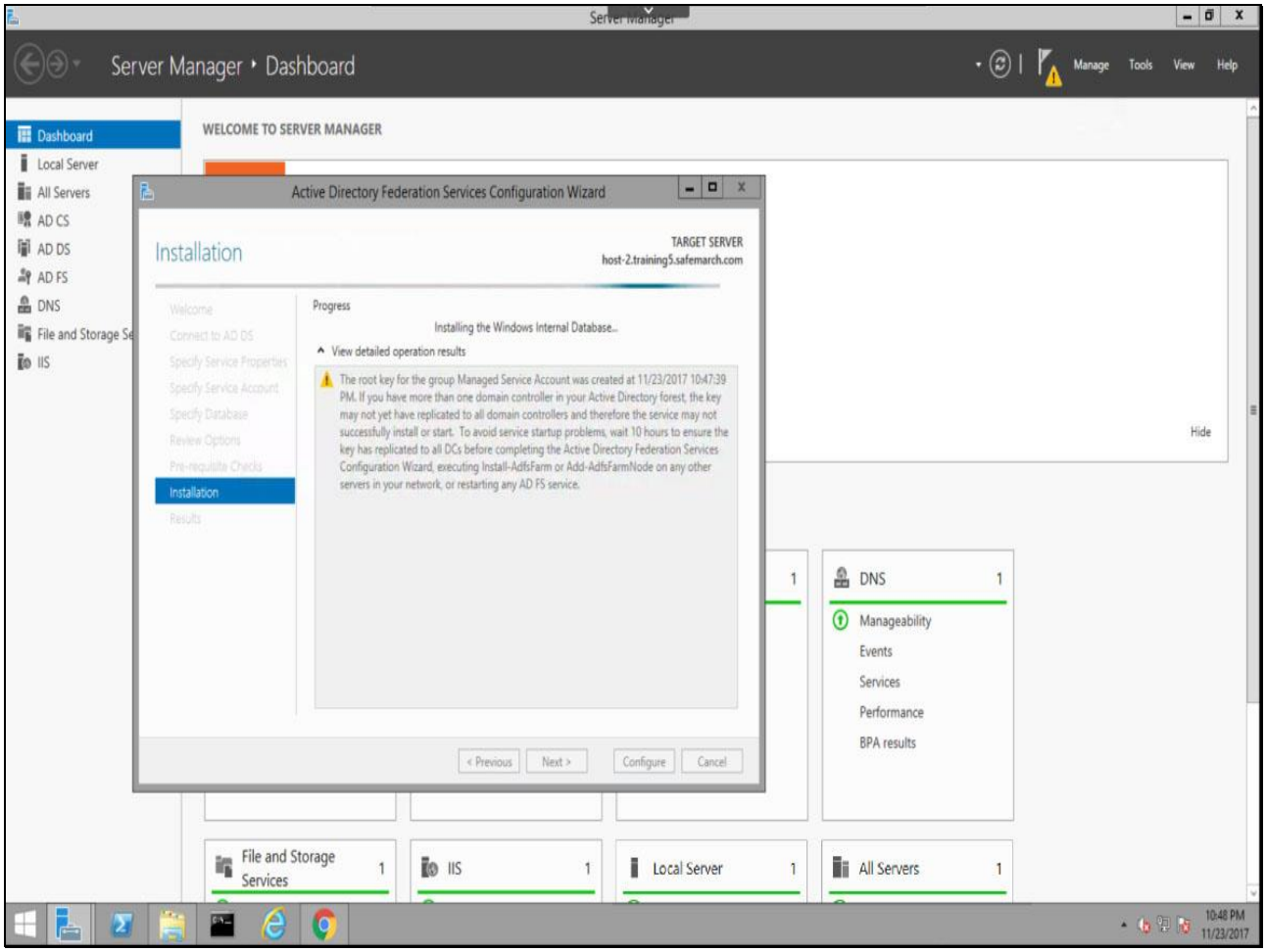
Slide notes

Slide 48 - Slide 48



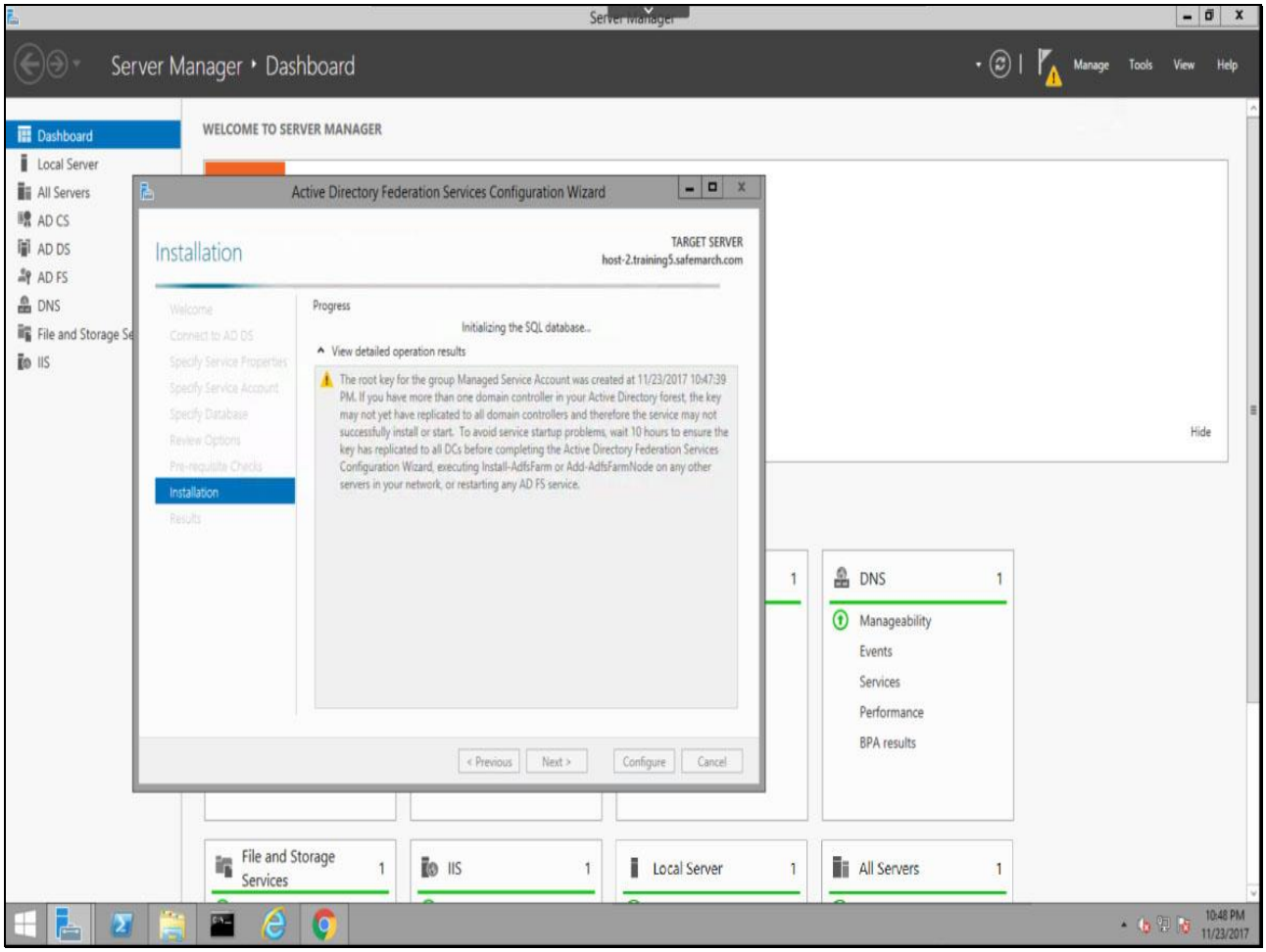
Slide notes

Slide 49 - Slide 49



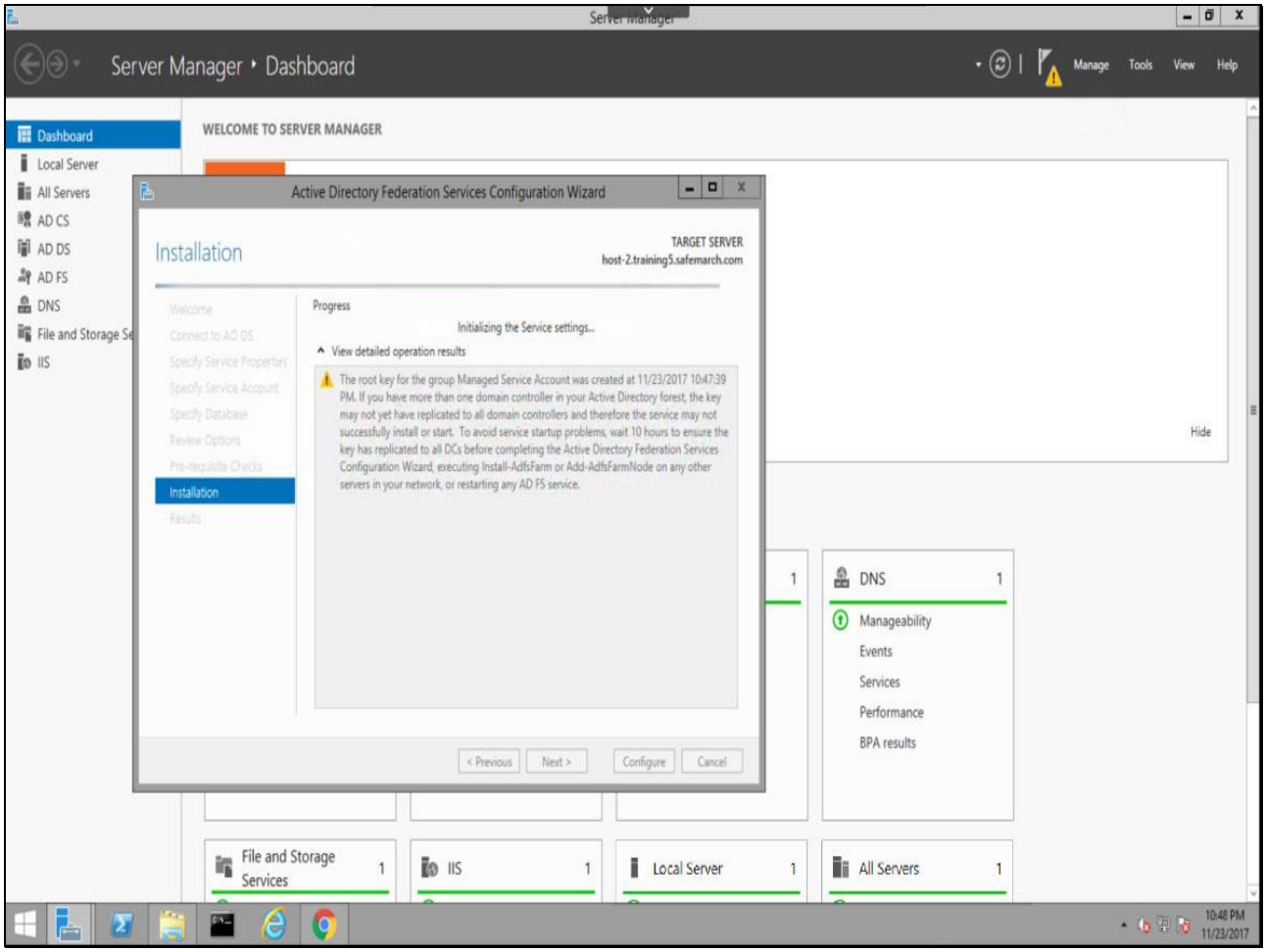
Slide notes

Slide 50 - Slide 50



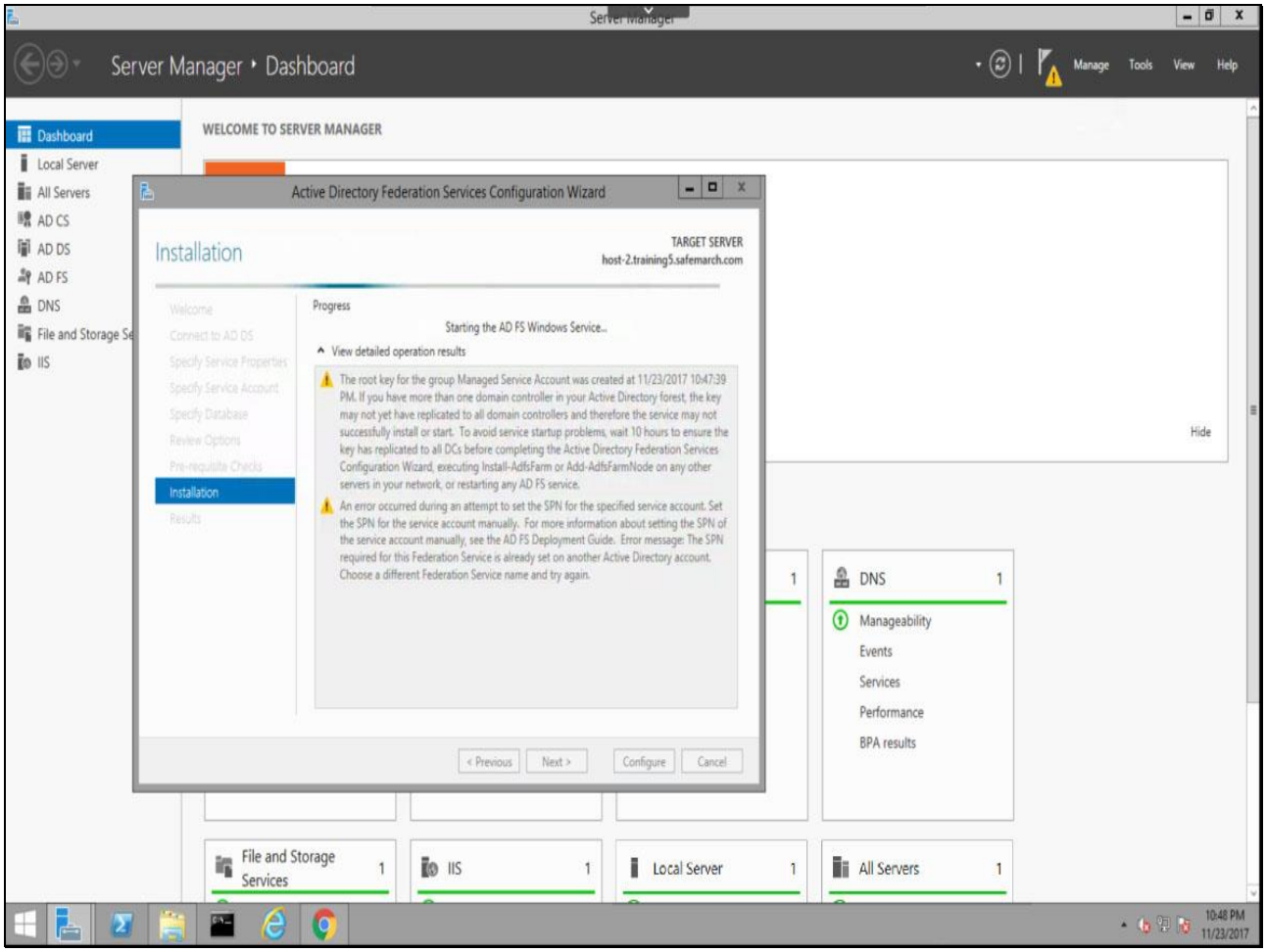
Slide notes

Slide 51 - Slide 51



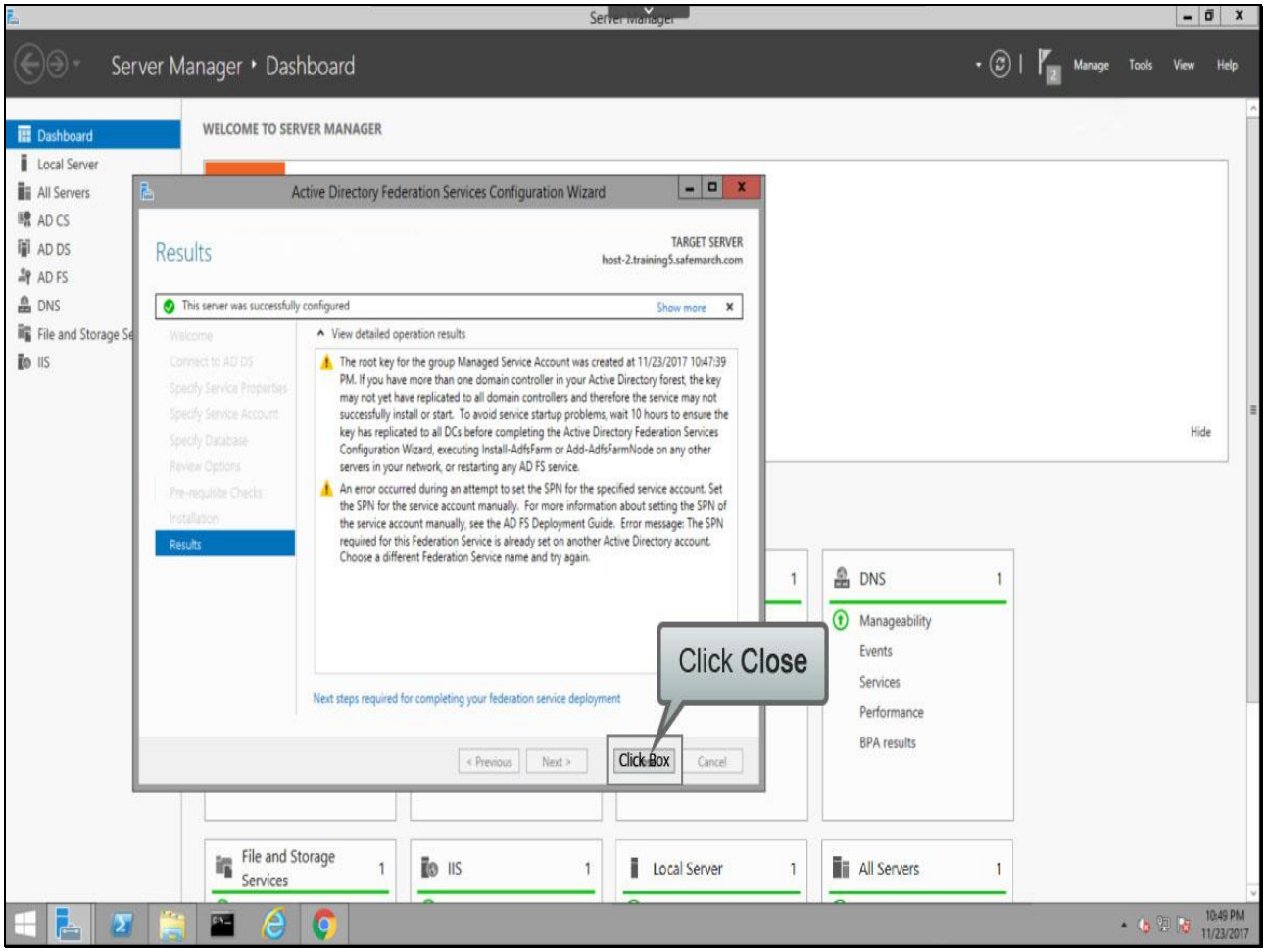
Slide notes

Slide 52 - Slide 52



Slide notes

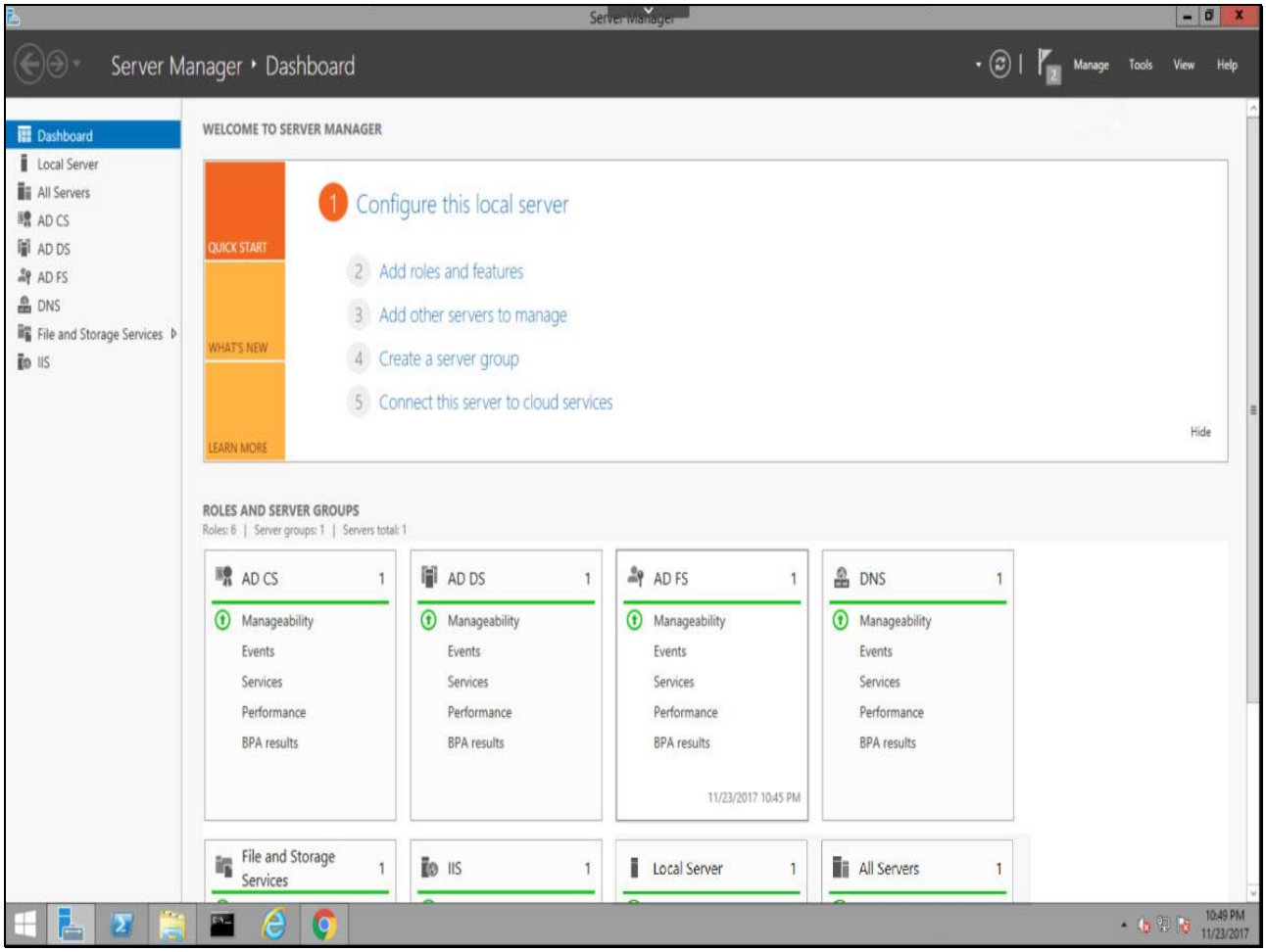
Slide 53 - Slide 53



Slide notes

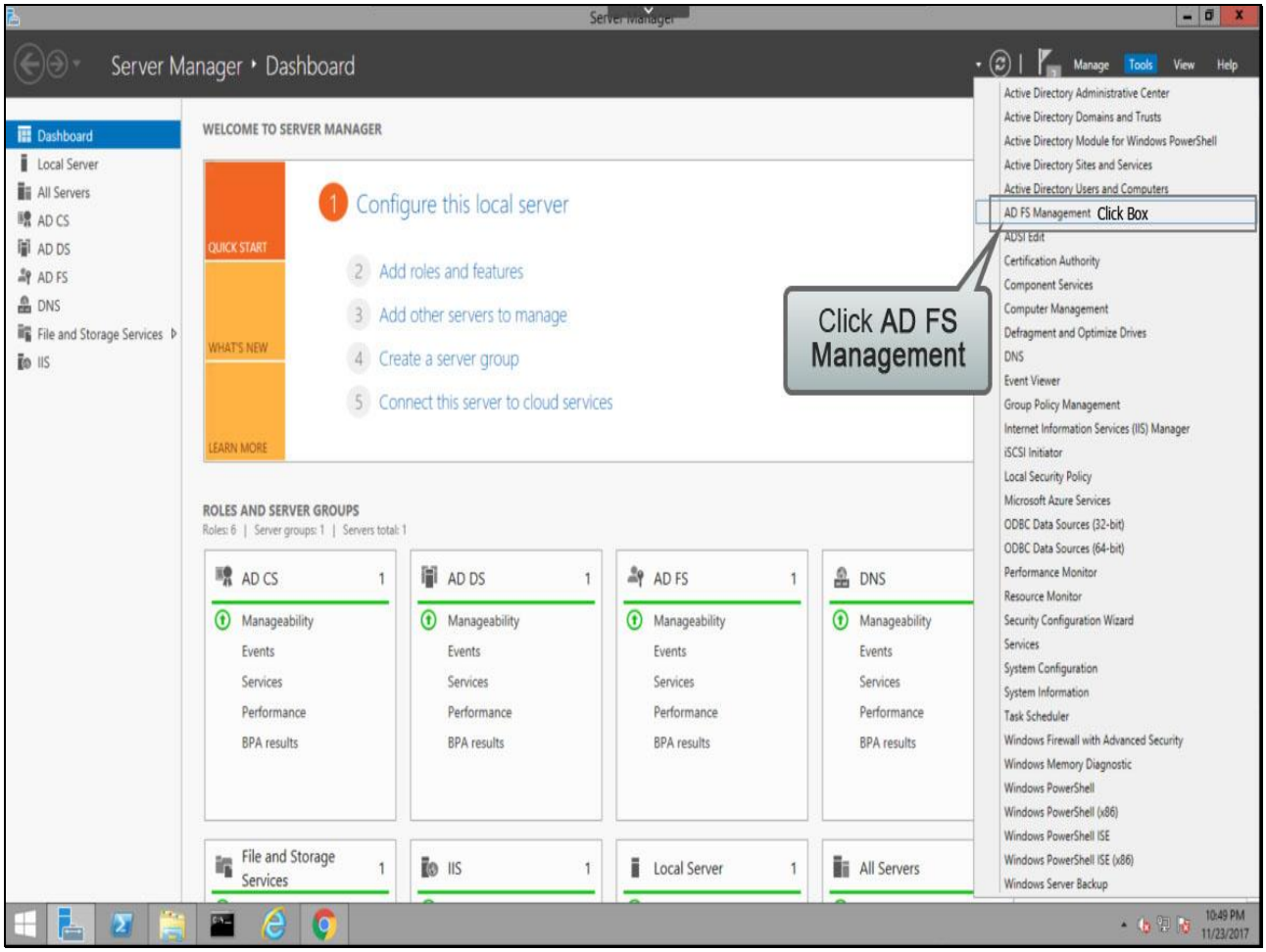
Once the configuration is complete, click **Close** to exit the wizard.

Slide 54 - Slide 54



Slide notes

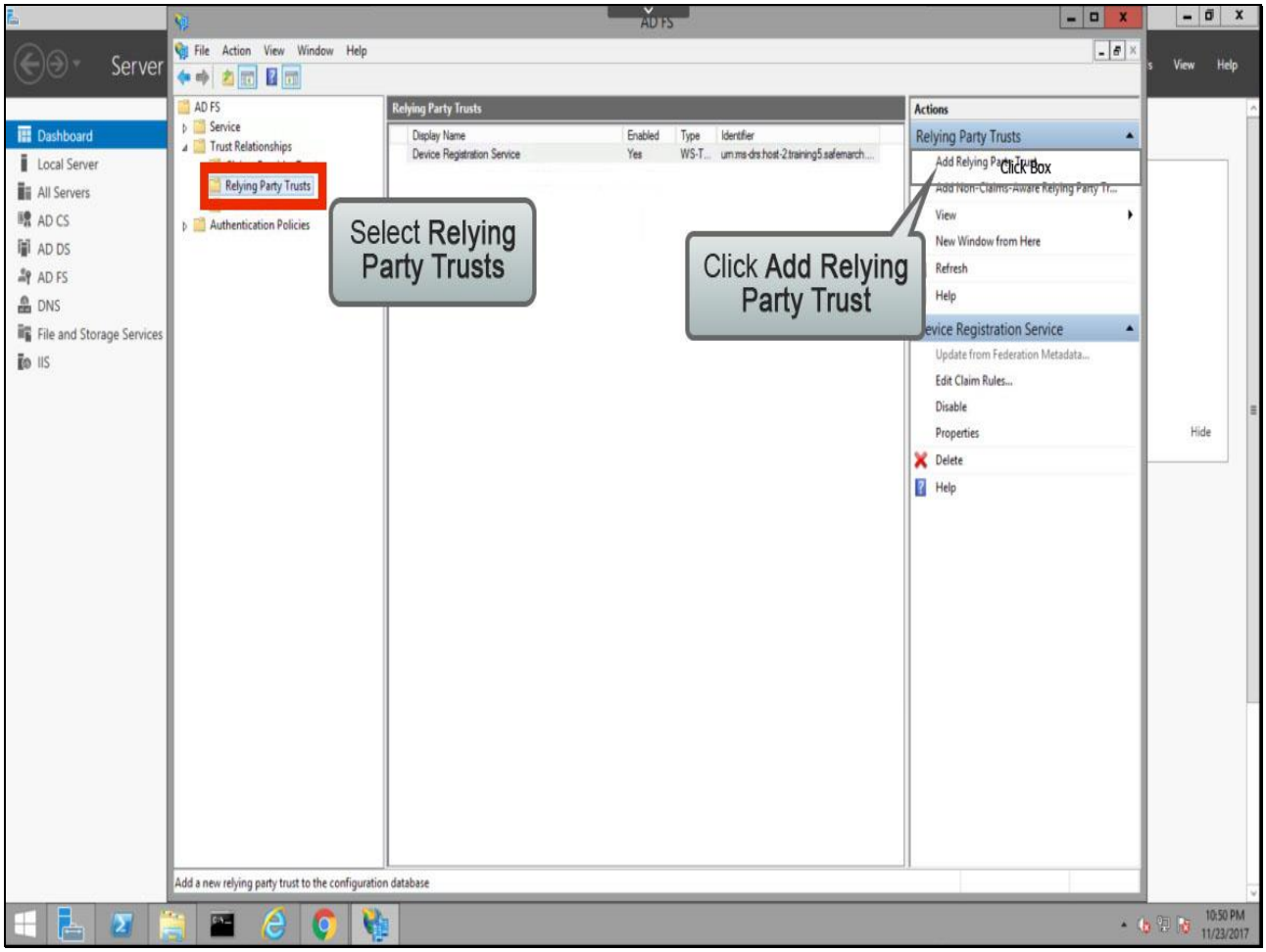
Slide 55 - Slide 55



Slide notes

At the Server Manager Dashboard, from the **Tools** menu, click **AD FS Management**.

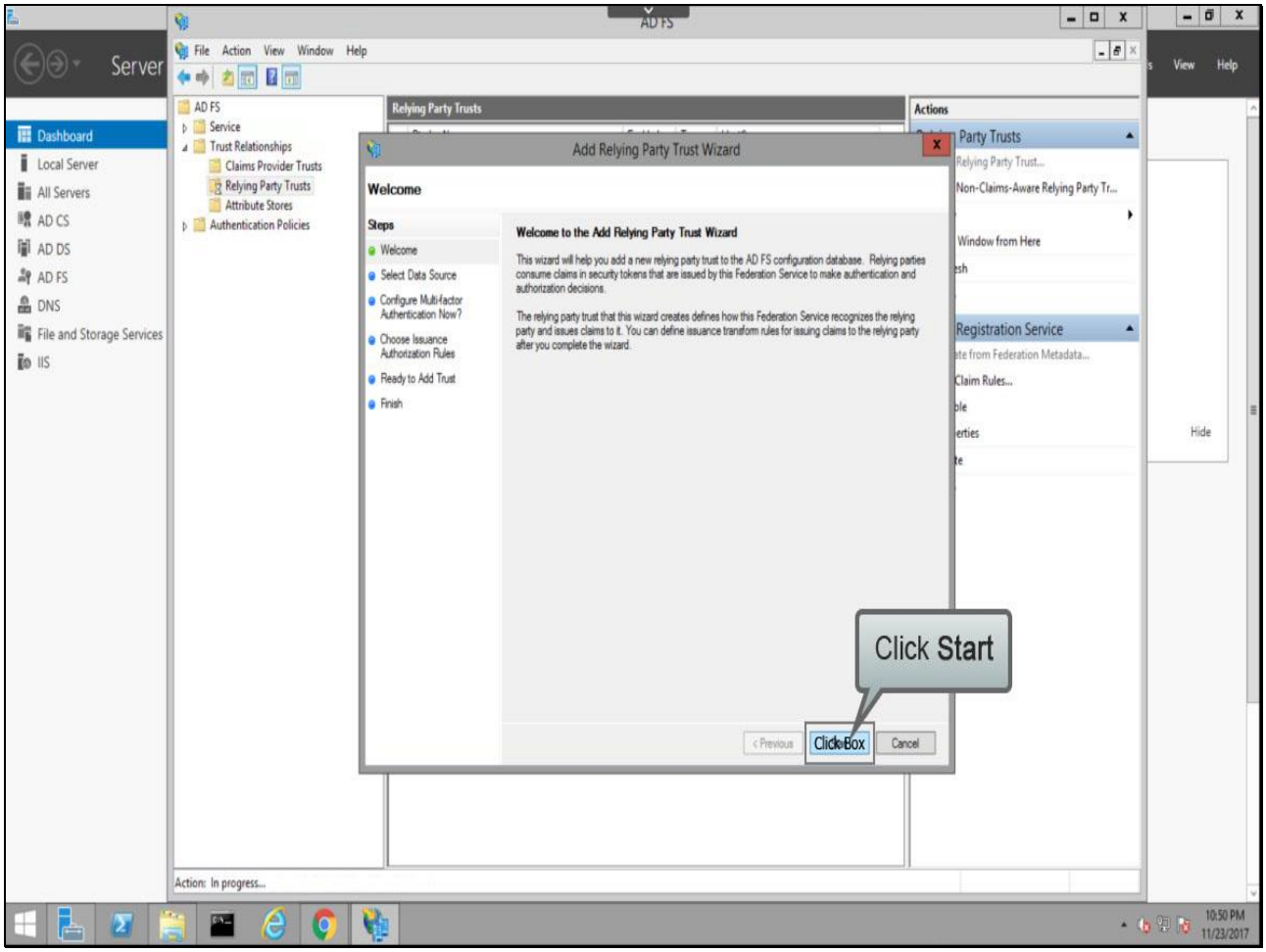
Slide 56 - Slide 56



Slide notes

In the left-hand navigation panel, expand the **Trust Relationships** folder, and select **Relying Party Trusts**. Then in the **Actions** panel, click **Add Relying Party Trust**.

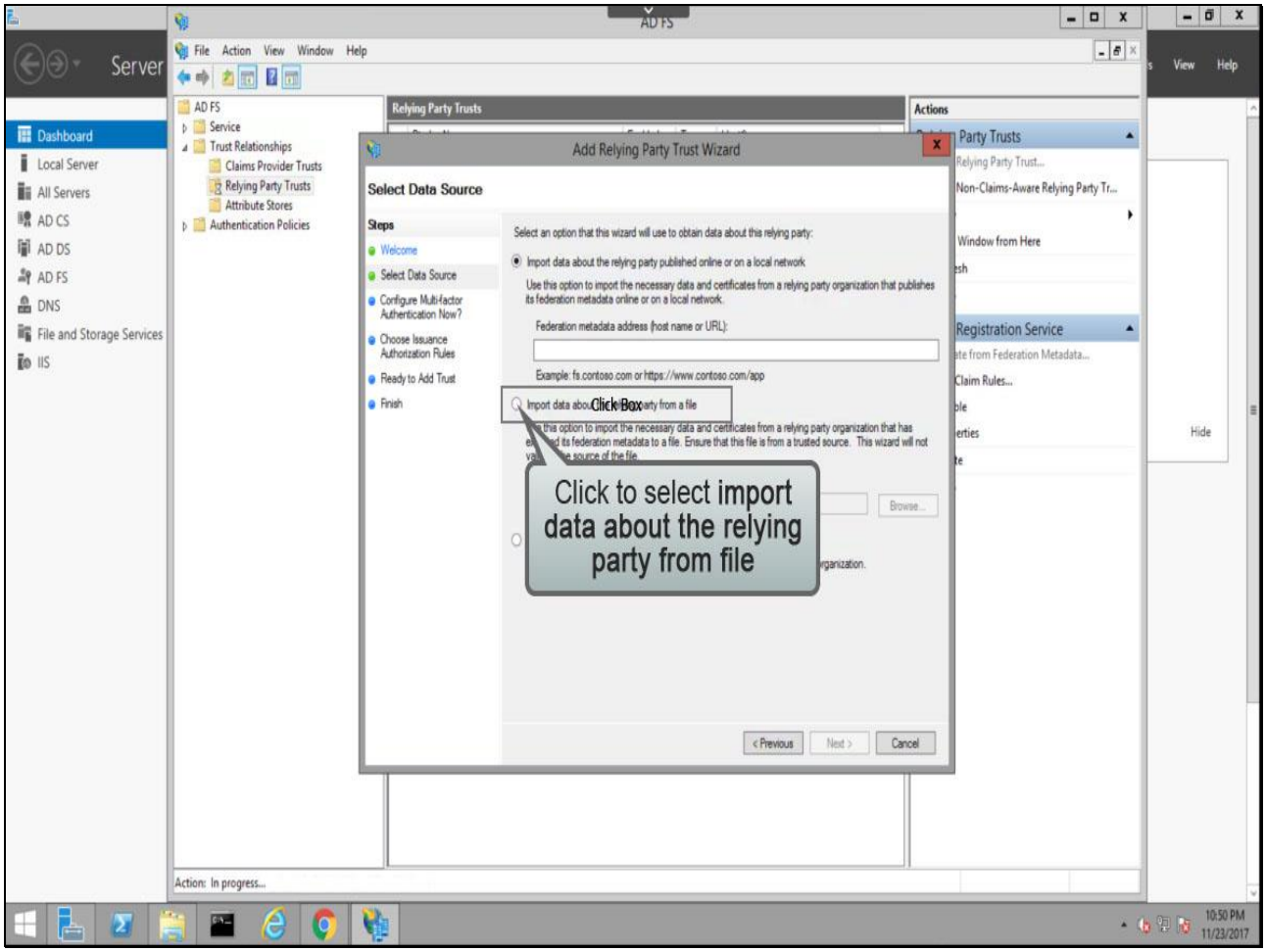
Slide 57 - Slide 57



Slide notes

To start the wizard, click **Start**, ...

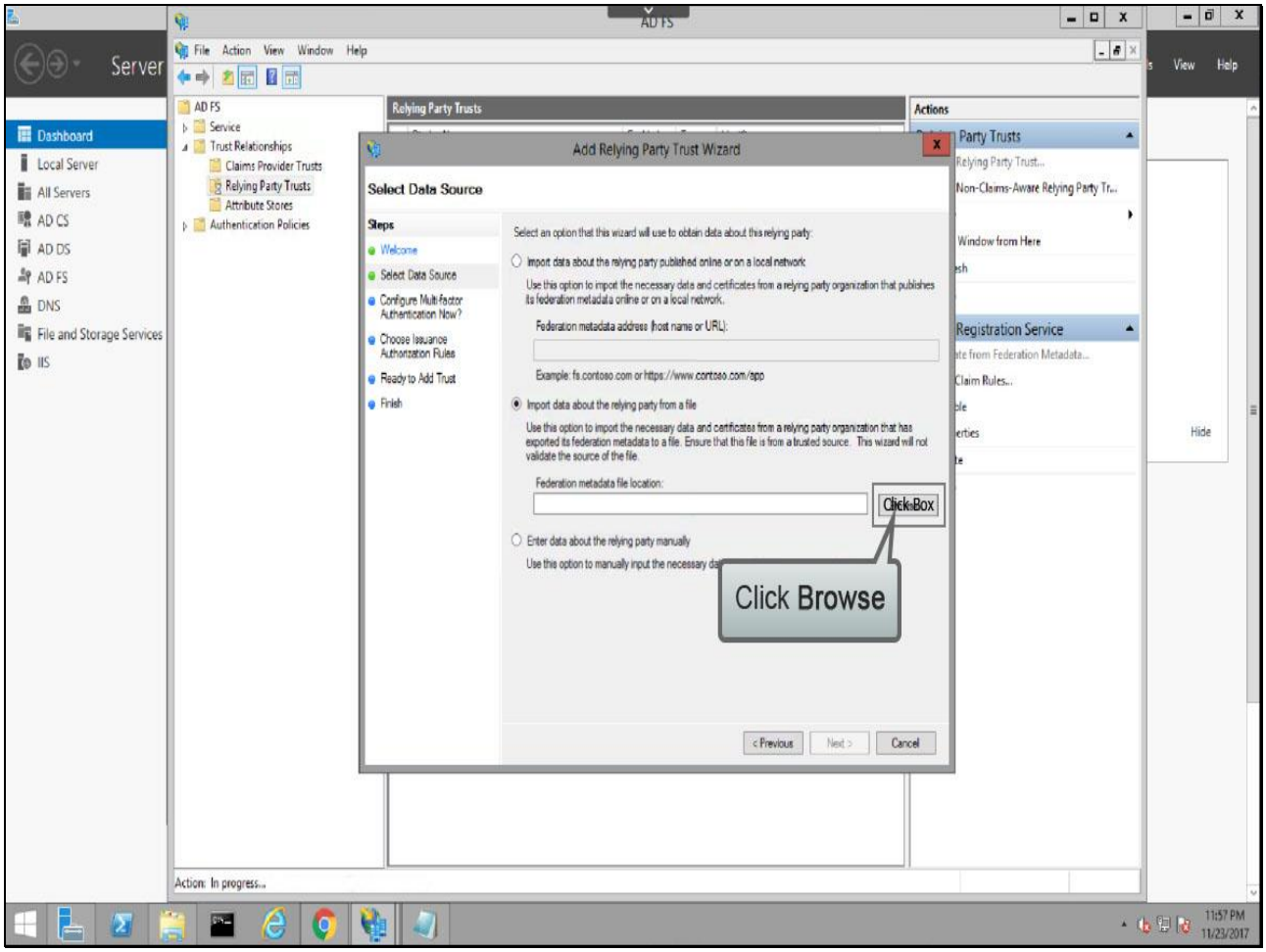
Slide 58 - Slide 58



Slide notes

You can add the details for a **Relying Party** manually, however we will do it using the Metadata file we saved earlier. Click to select **import data about the relying party from file**, ...

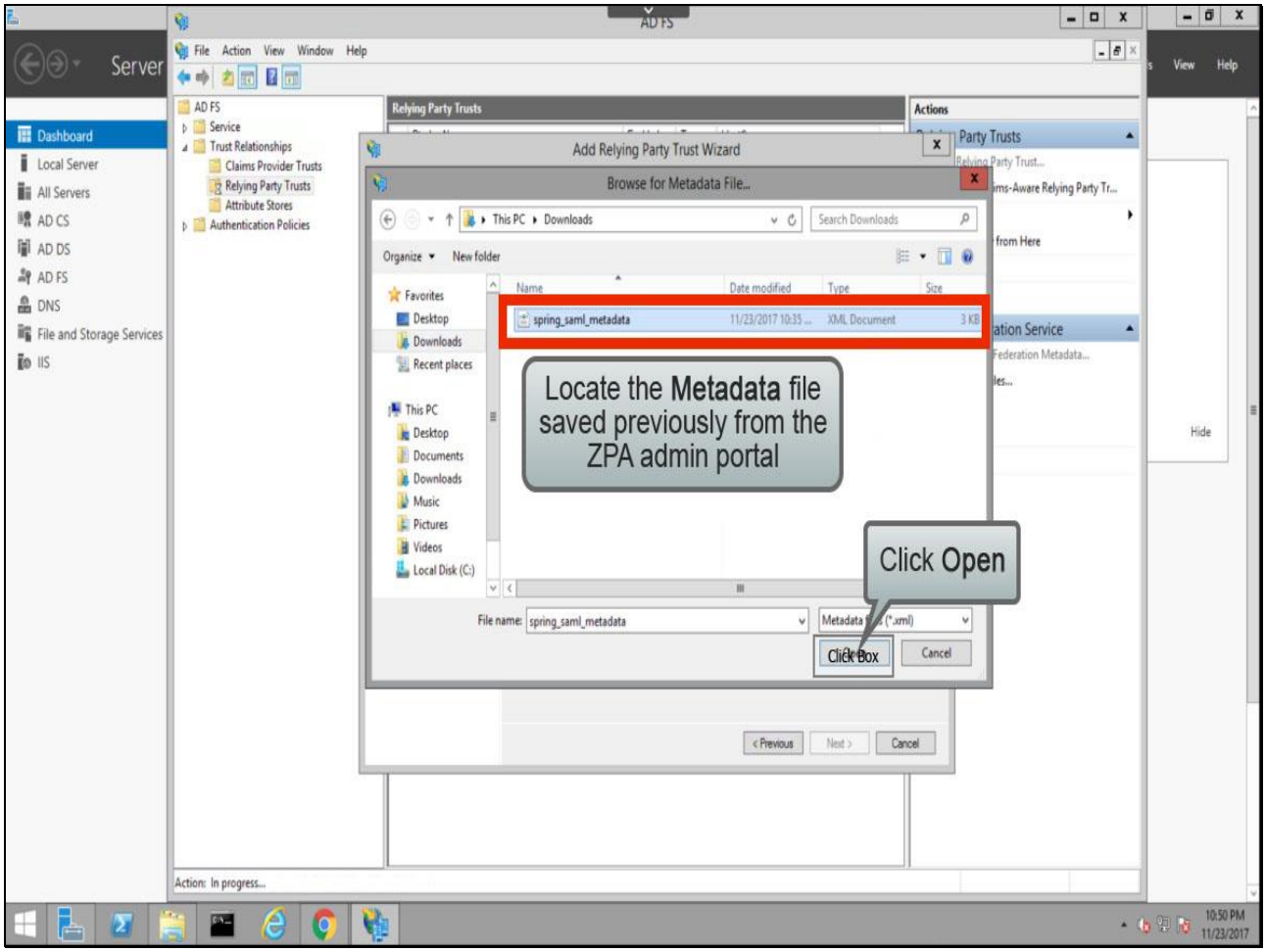
Slide 59 - Slide 59



Slide notes

...then click **Browse** to locate the file.

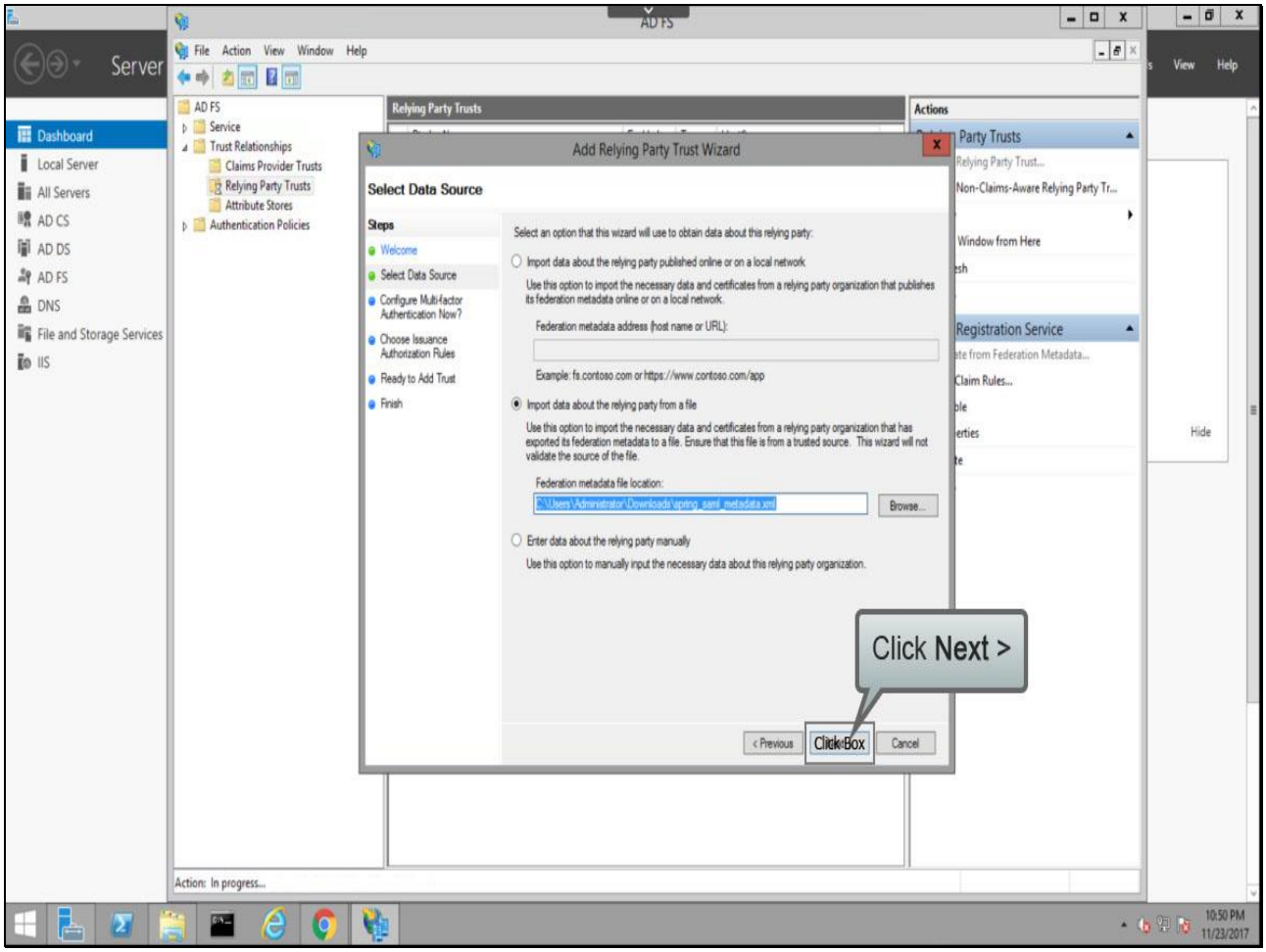
Slide 60 - Slide 60



Slide notes

Find the metadata file that you exported from the ZPA admin portal earlier, select it, click **Open**, …

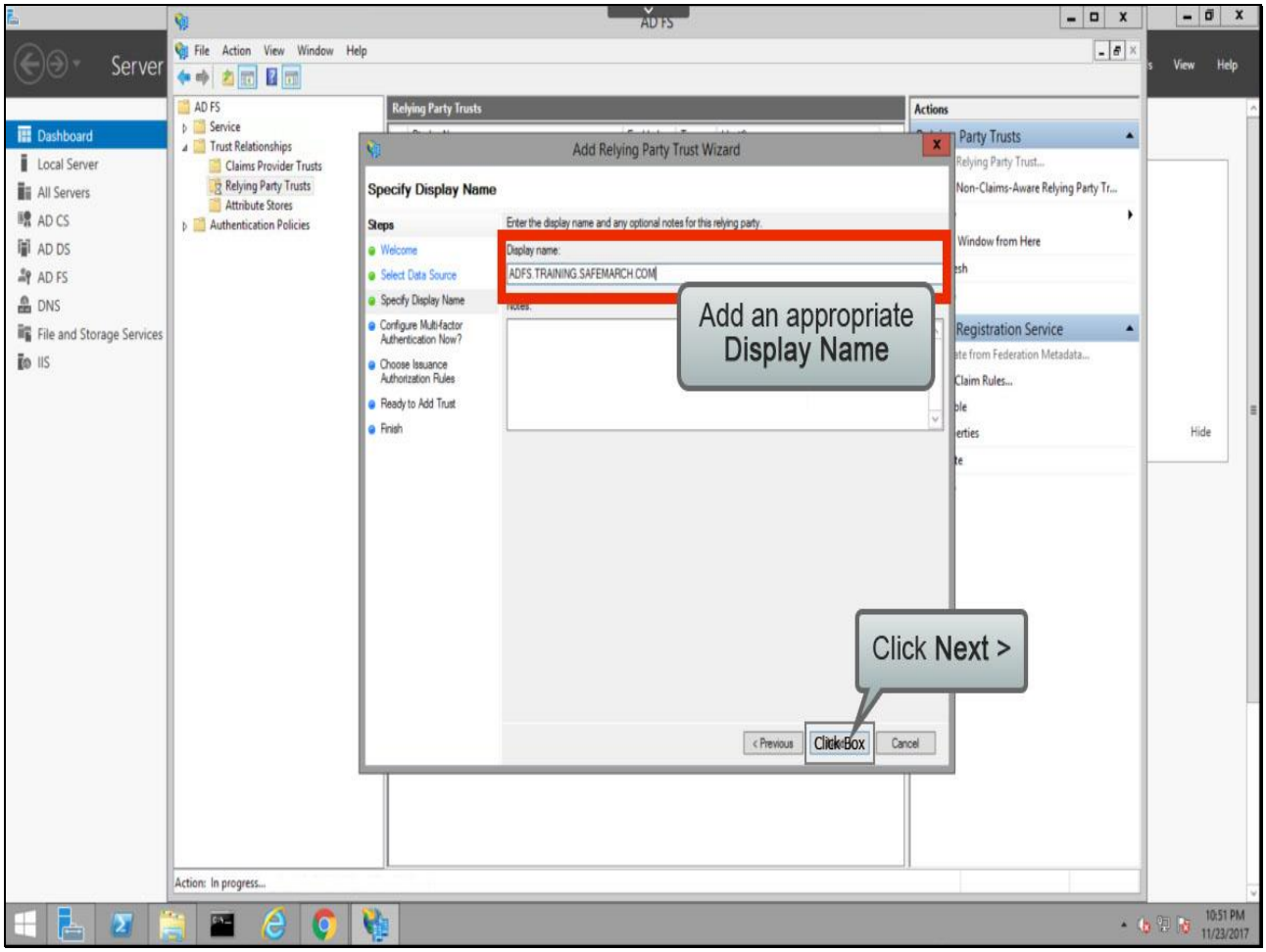
Slide 61 - Slide 61



Slide notes

…then click **Next >**.

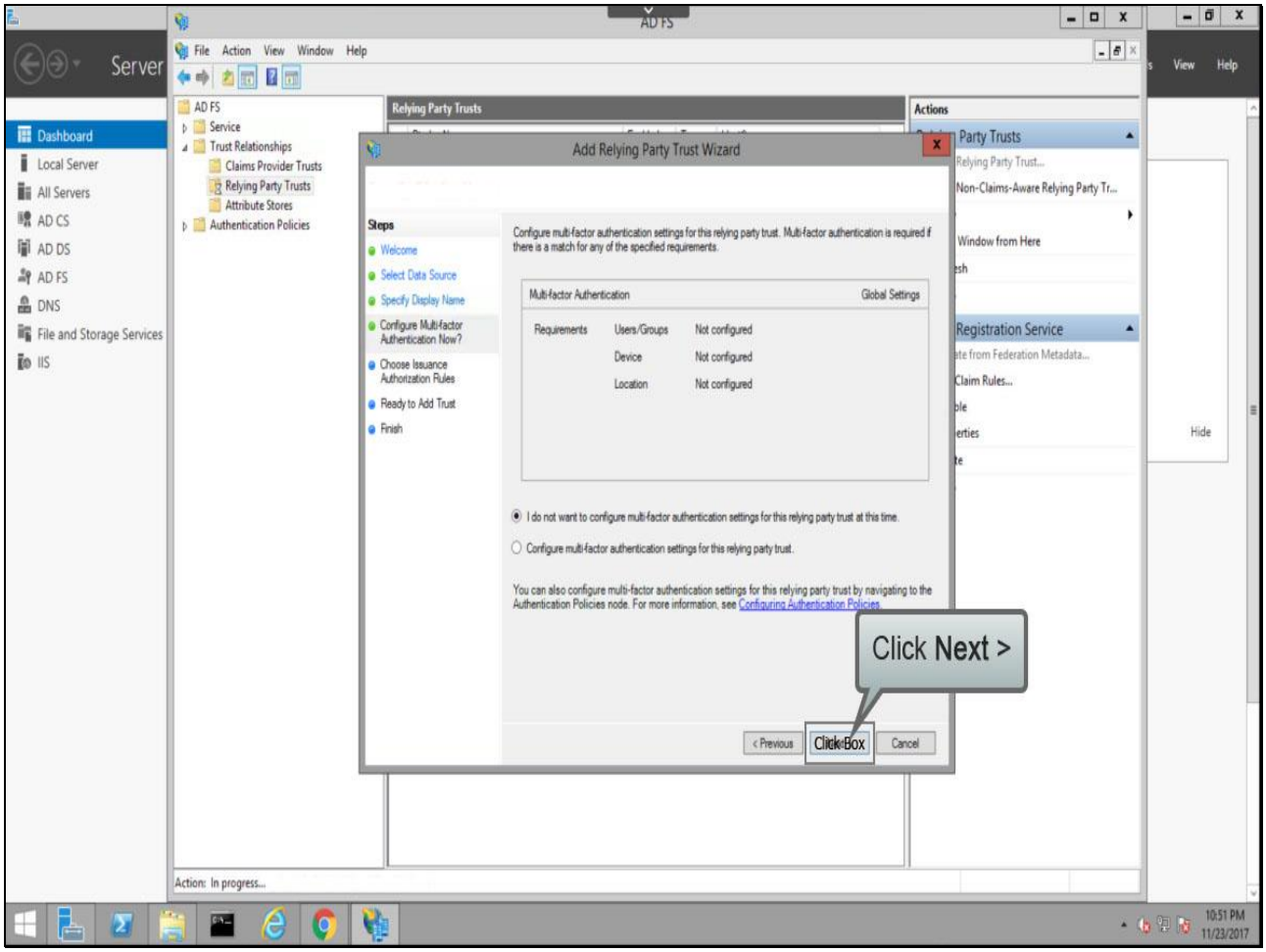
Slide 62 - Slide 62



Slide notes

Add an appropriate **Display Name** and click **Next >**.

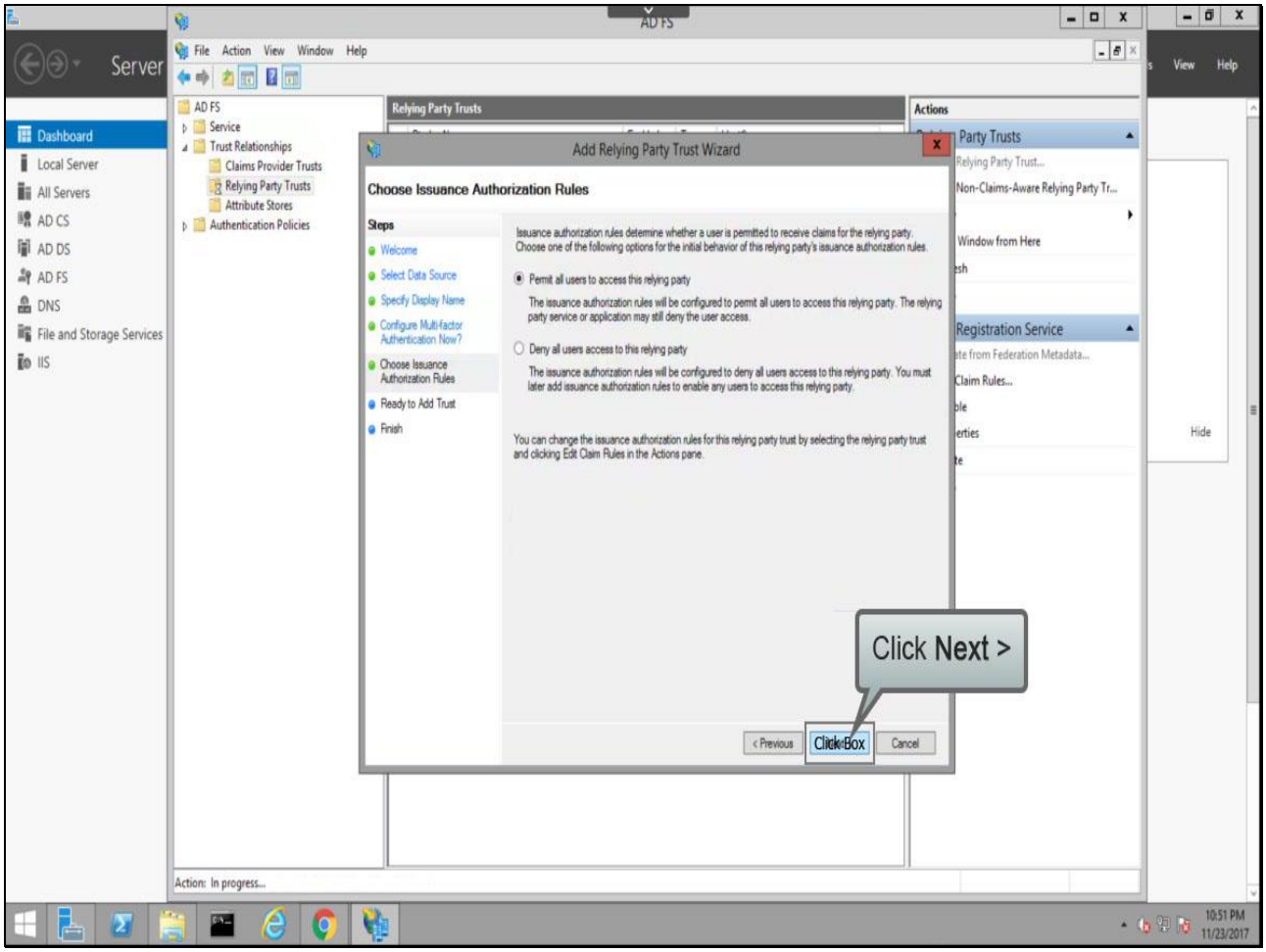
Slide 63 - Slide 63



Slide notes

It is possible to use multifactor authentication; however, we will skip this for now, and just click **Next >**.

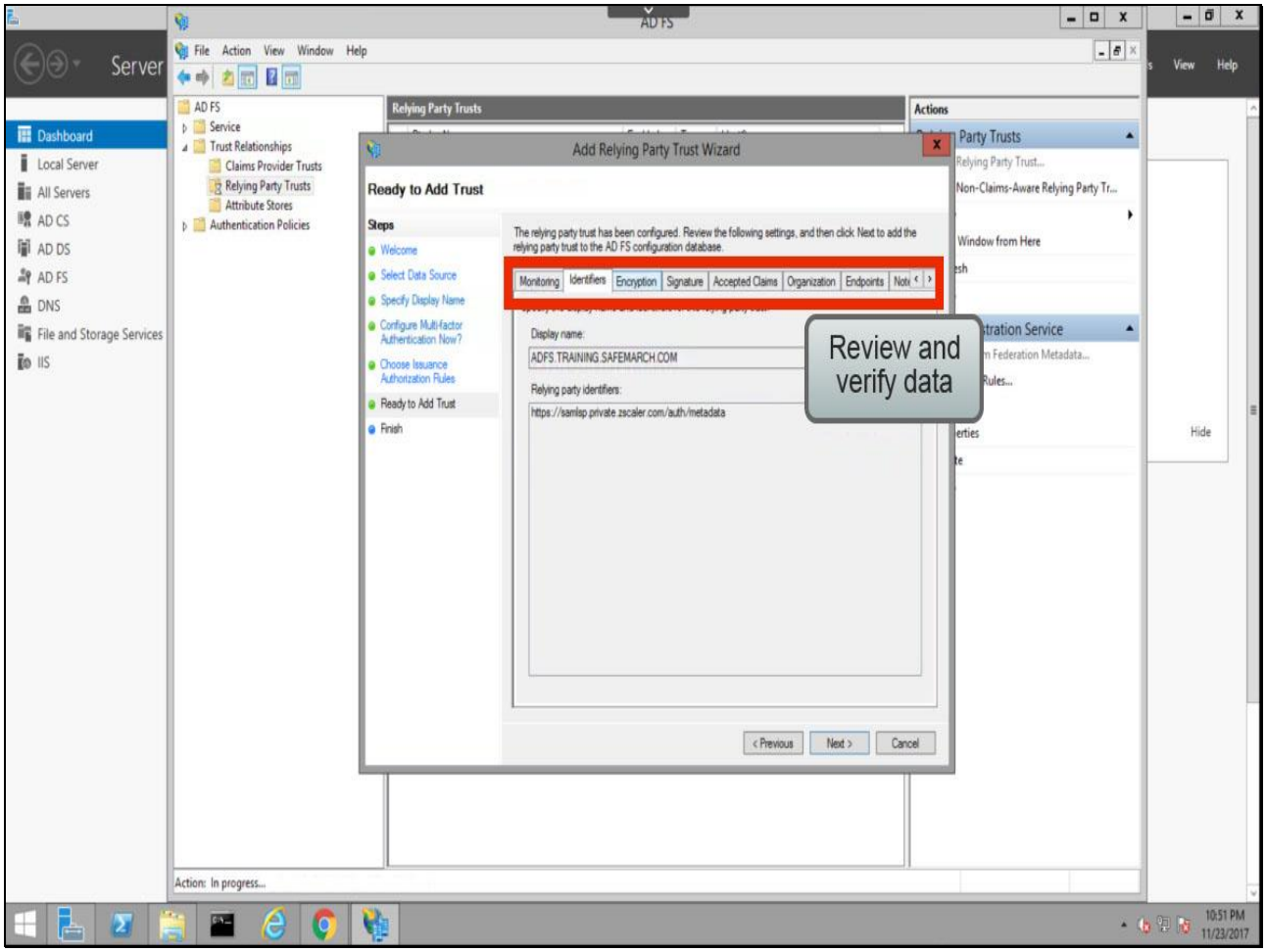
Slide 64 - Slide 64



Slide notes

We will allow all users to access this **Relying Party**, ...so click **Next >** again.

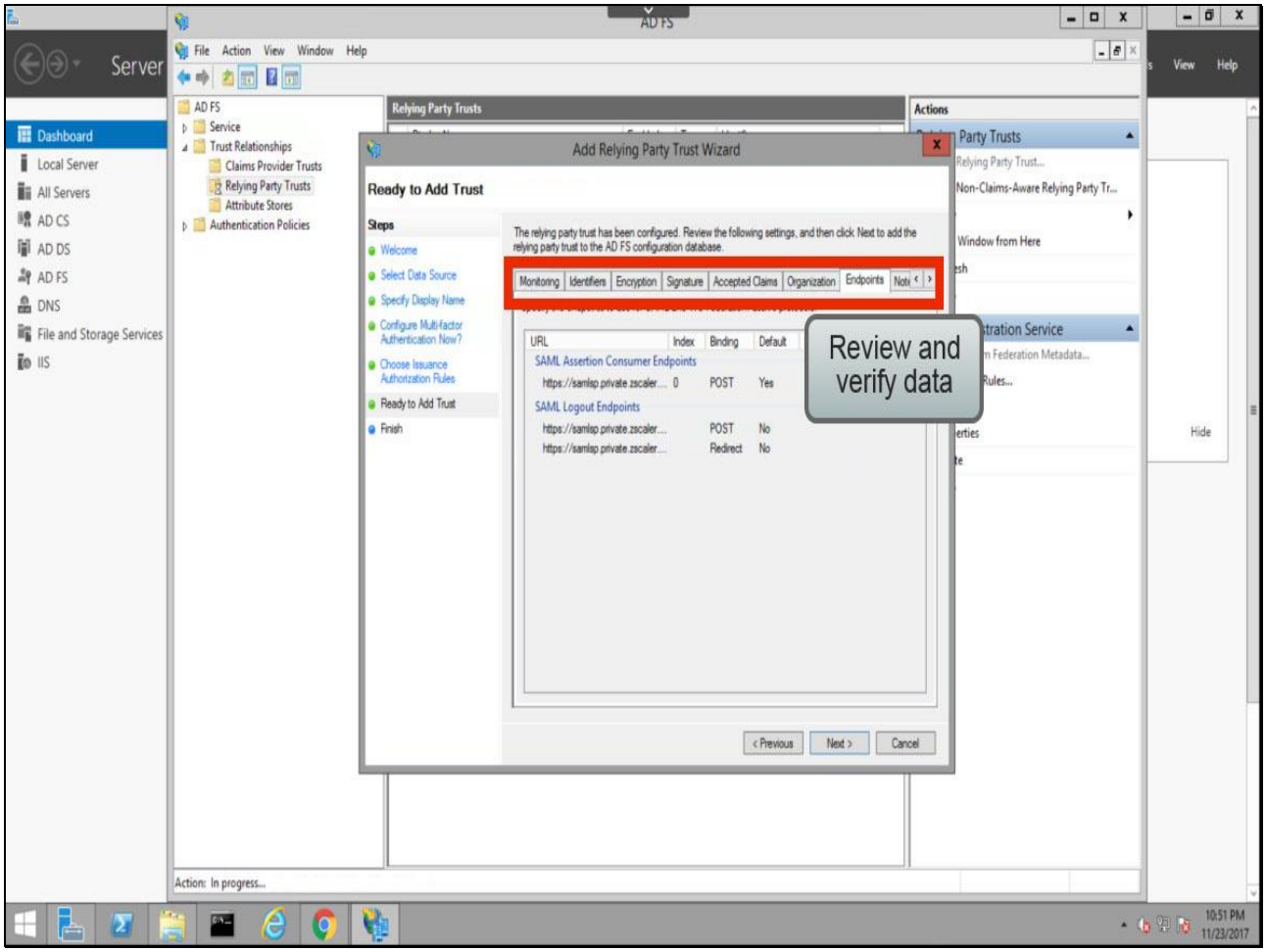
Slide 65 - Slide 65



Slide notes

Review the entered data carefully, in particular on the **Identifiers** tab, ...

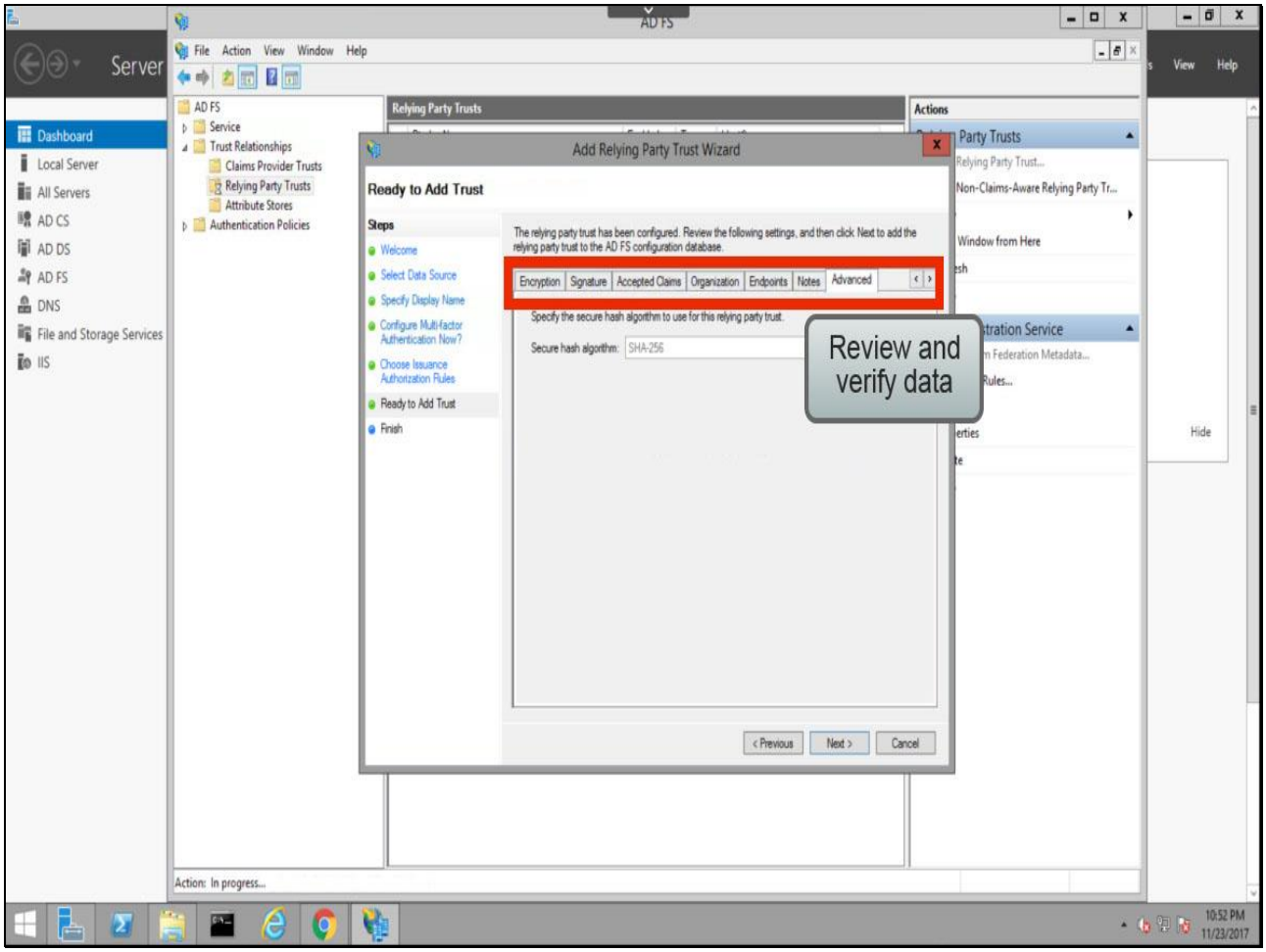
Slide 66 - Slide 66



Slide notes

...the **Endpoints** tab, ...

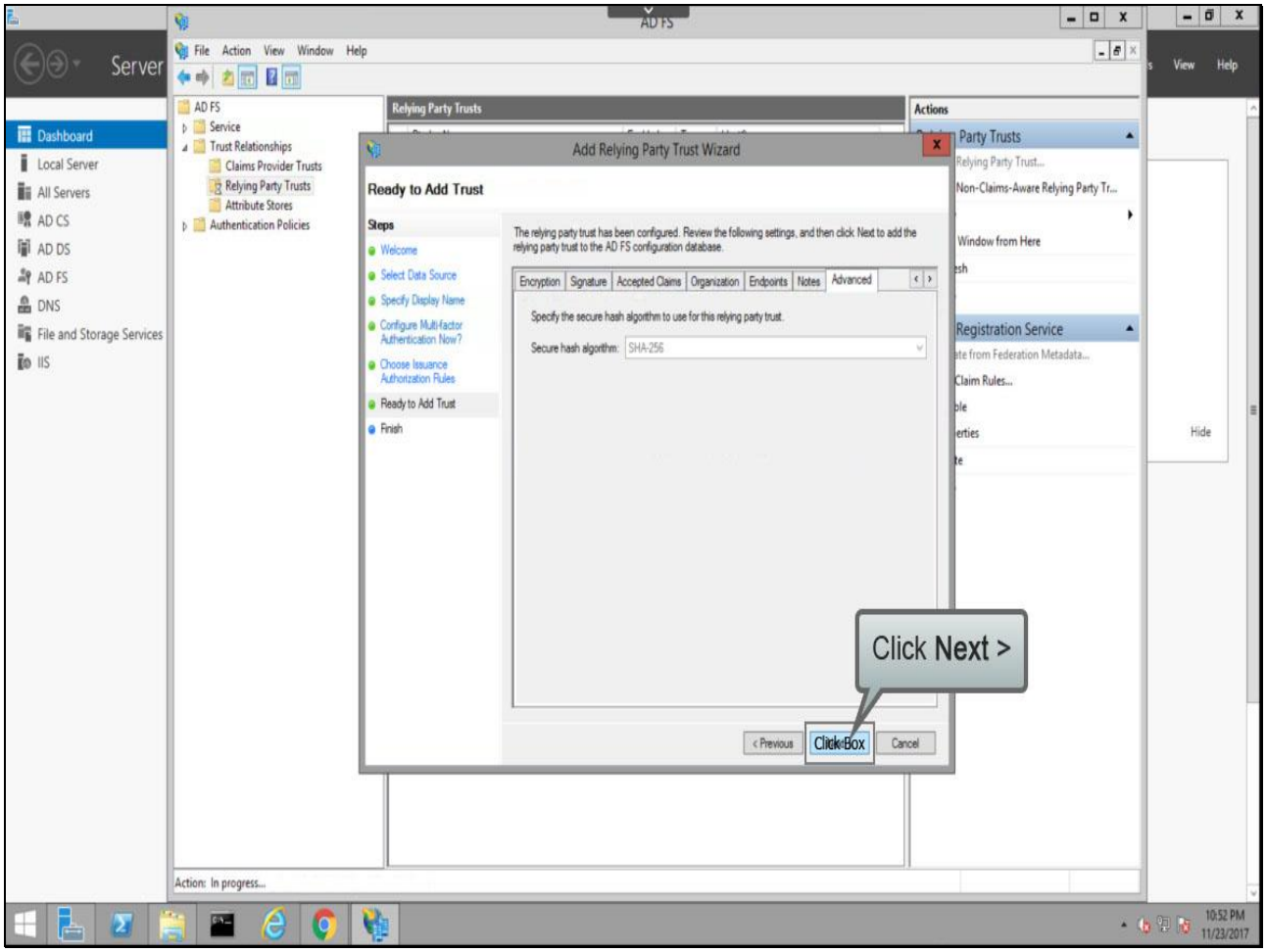
Slide 67 - Slide 67



Slide notes

...and the **Advanced** tab.

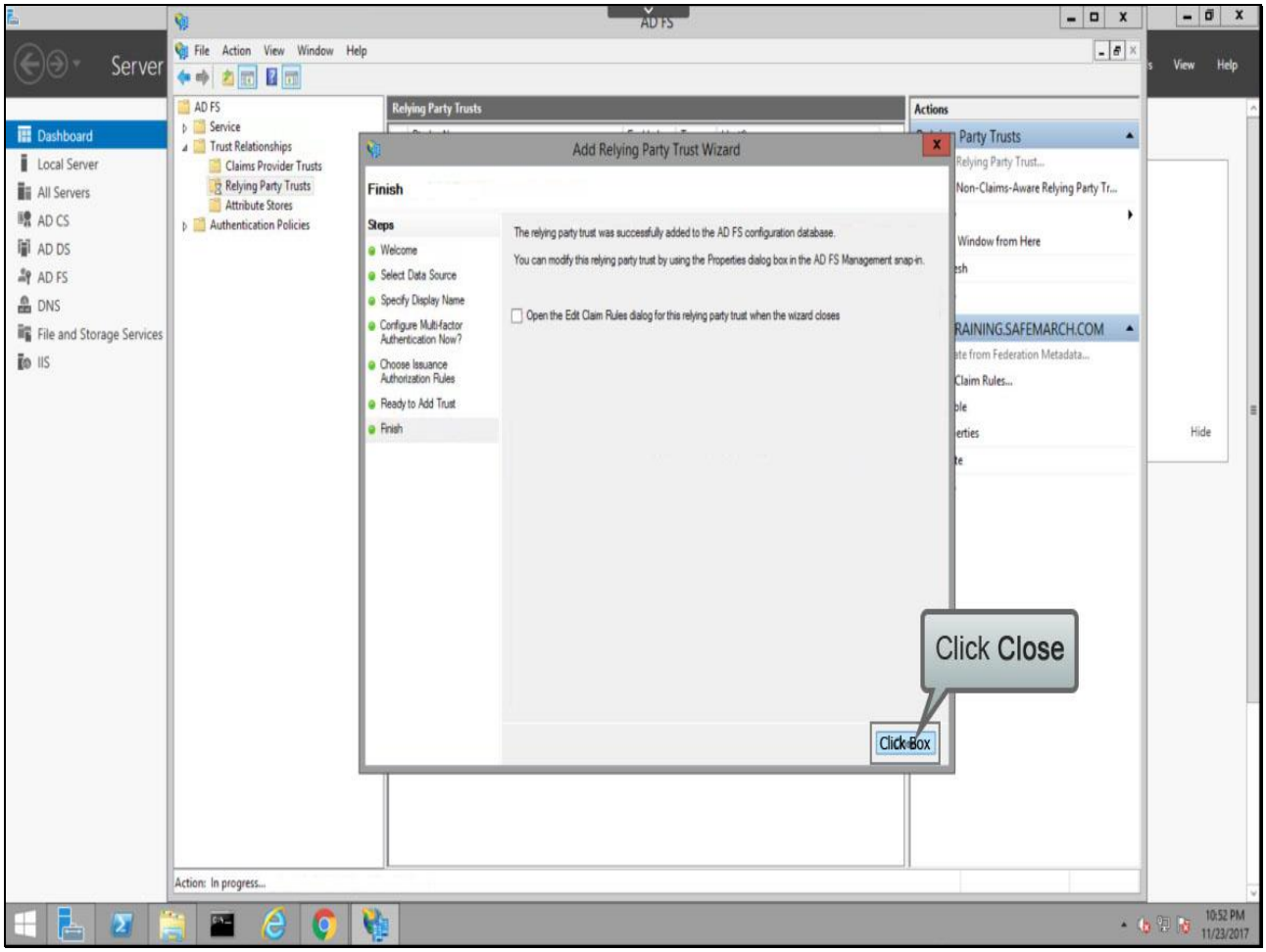
Slide 68 - Slide 68



Slide notes

Once you are happy, click **Next >** once more, ...

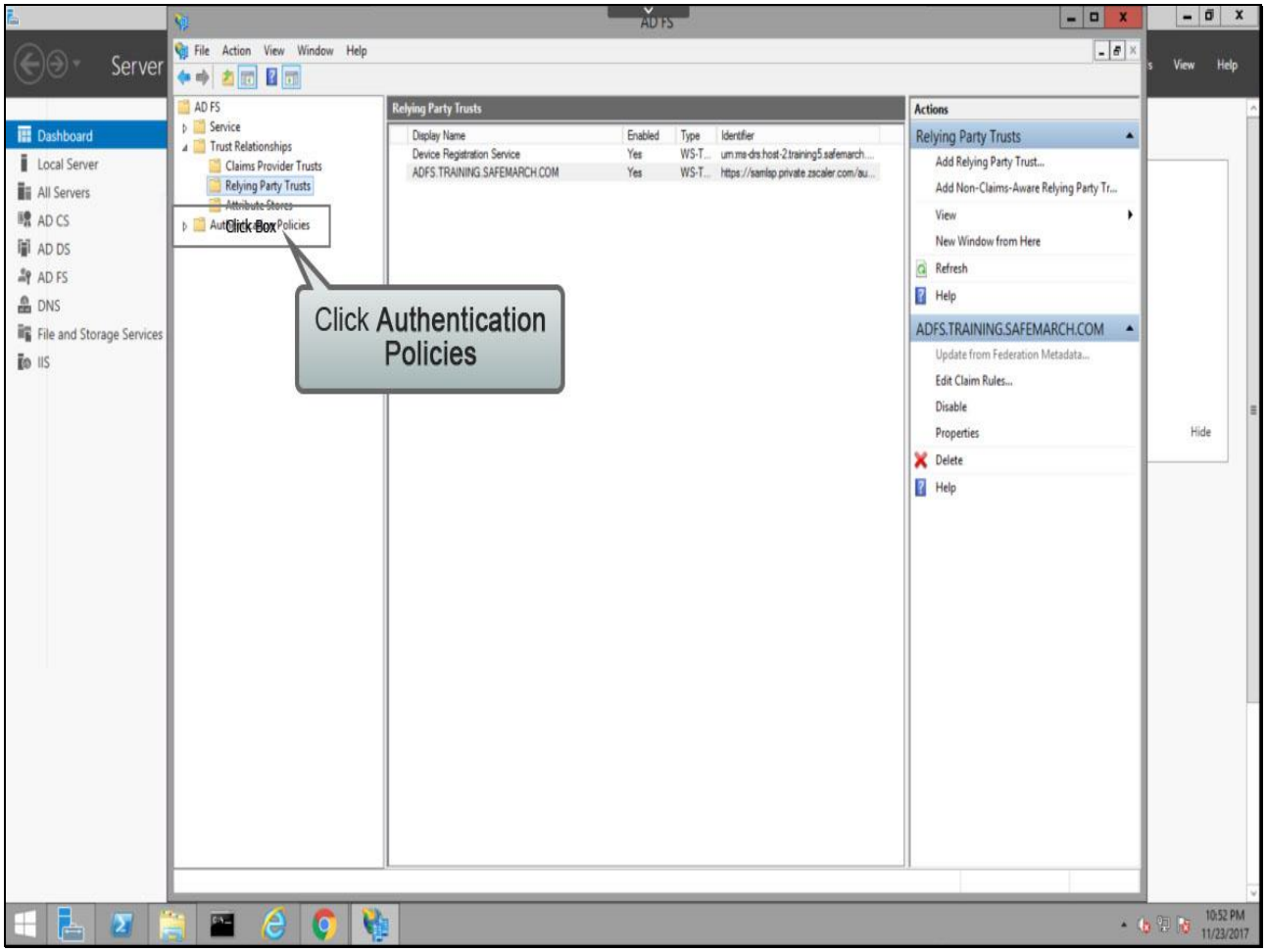
Slide 69 - Slide 69



Slide notes

...then select whether or not to open the **Edit Claims Rules** dialog immediately and click **Close**.

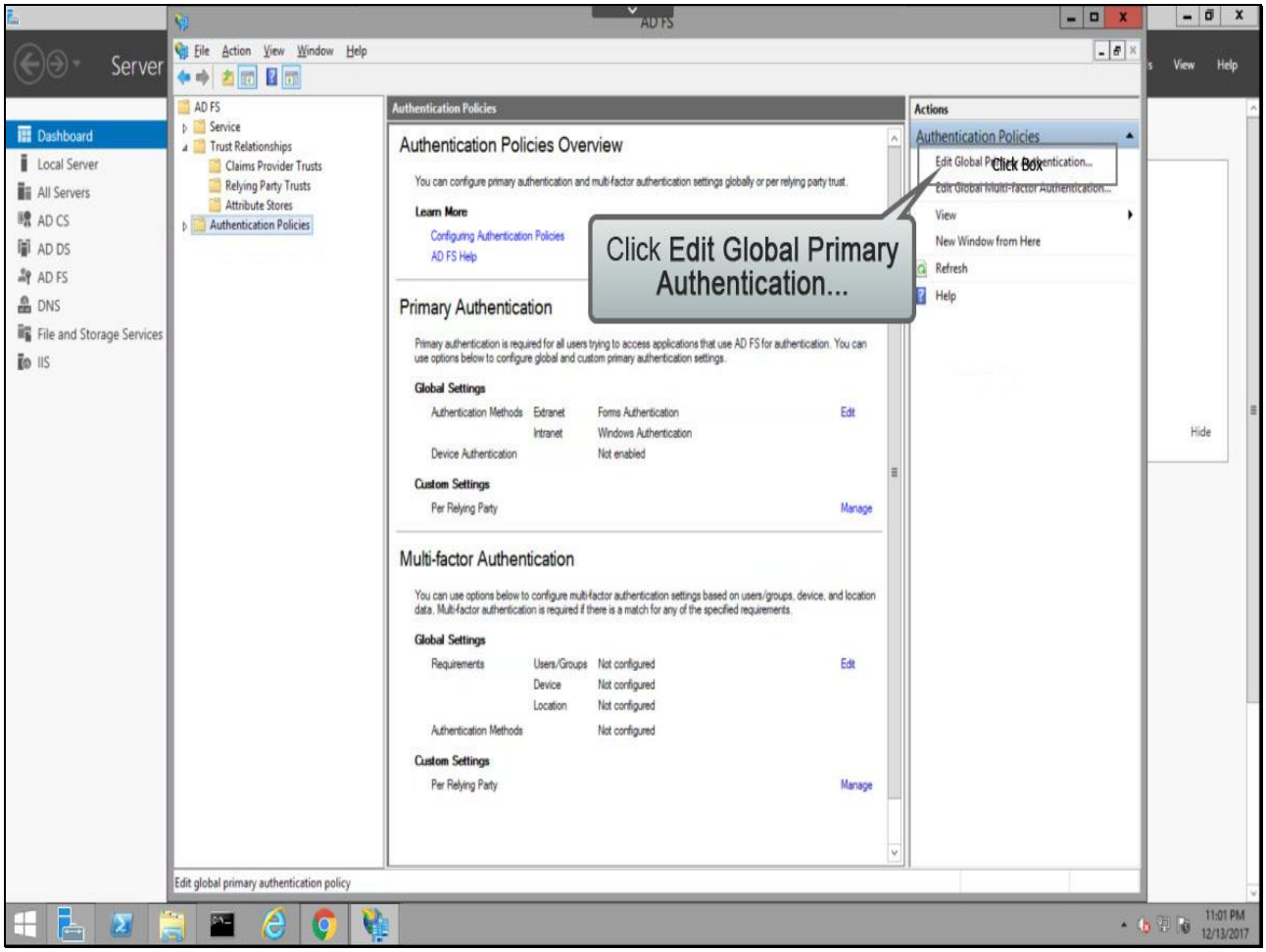
Slide 70 - Slide 70



Slide notes

To configure the authentication method to be used, click **Authentication Policies**, ...

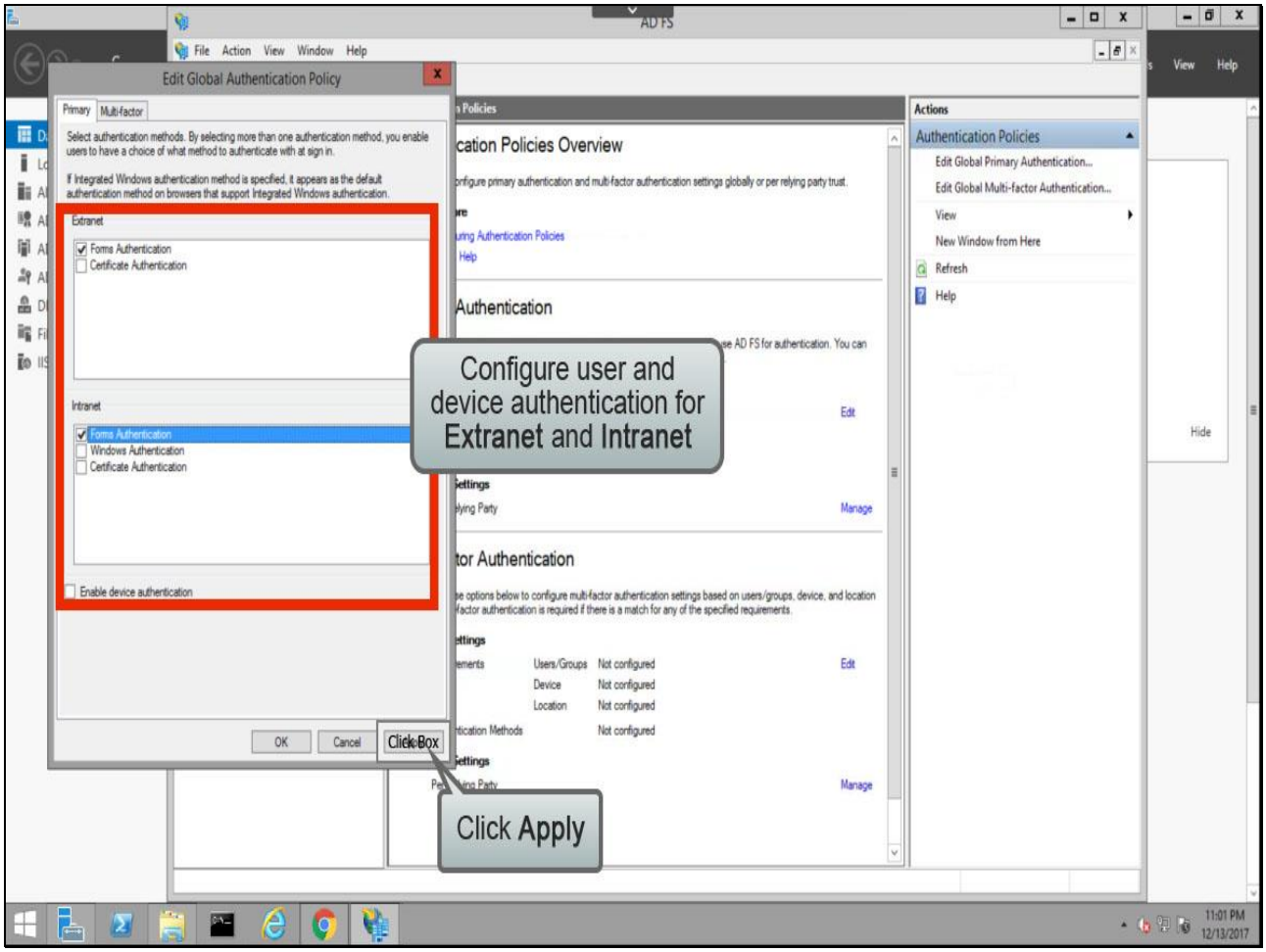
Slide 71 - Slide 71



Slide notes

...then in the **Actions** panel, click **Edit Global Primary Authentication...**.

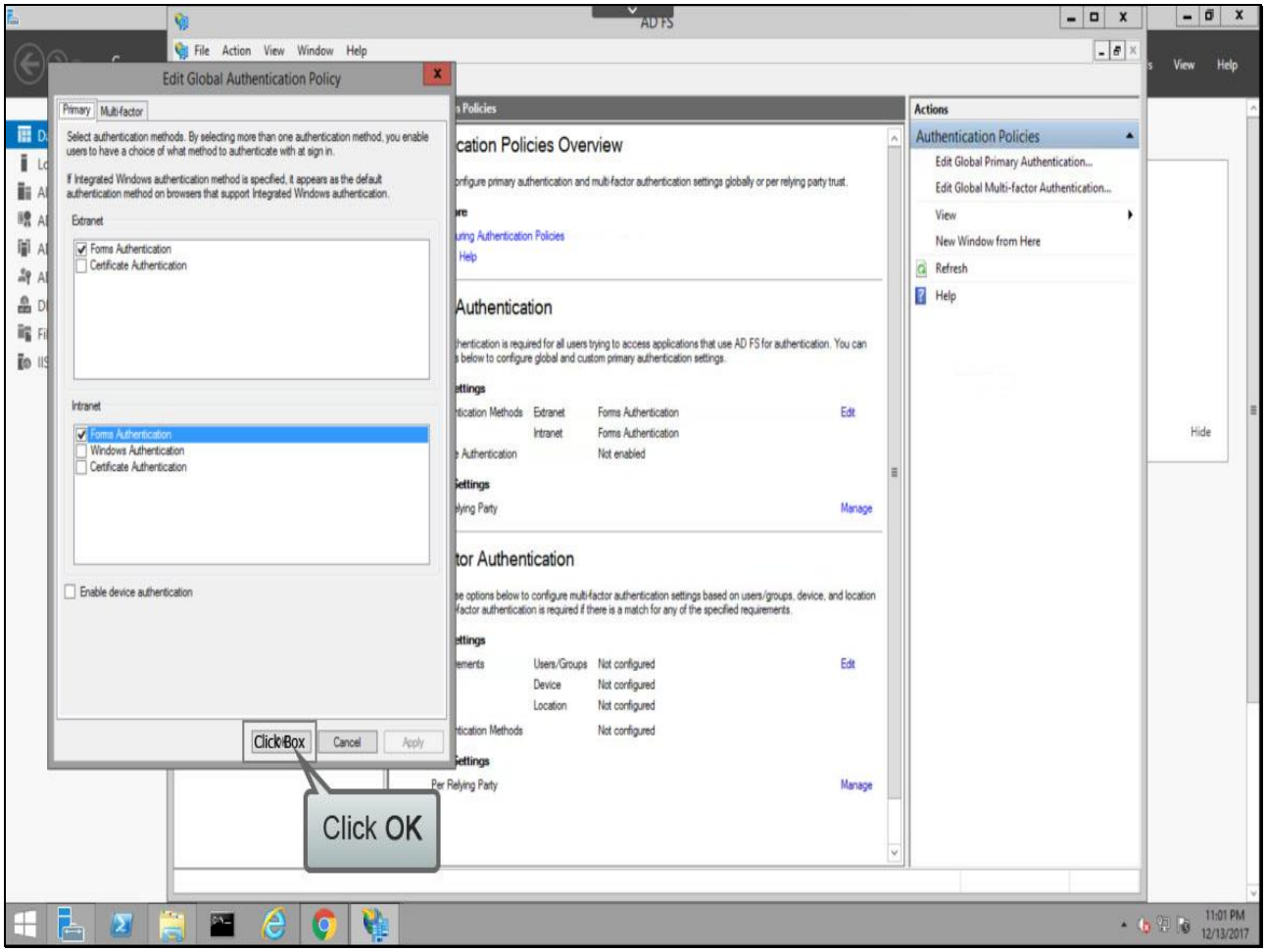
Slide 72 - Slide 72



Slide notes

Configure the authentication to be used by users on the **Extranet**, and **Intranet**, and select whether to enable **device authentication**. In this instance we will use **Forms Authentication** for both networks. Click **Apply**, ...

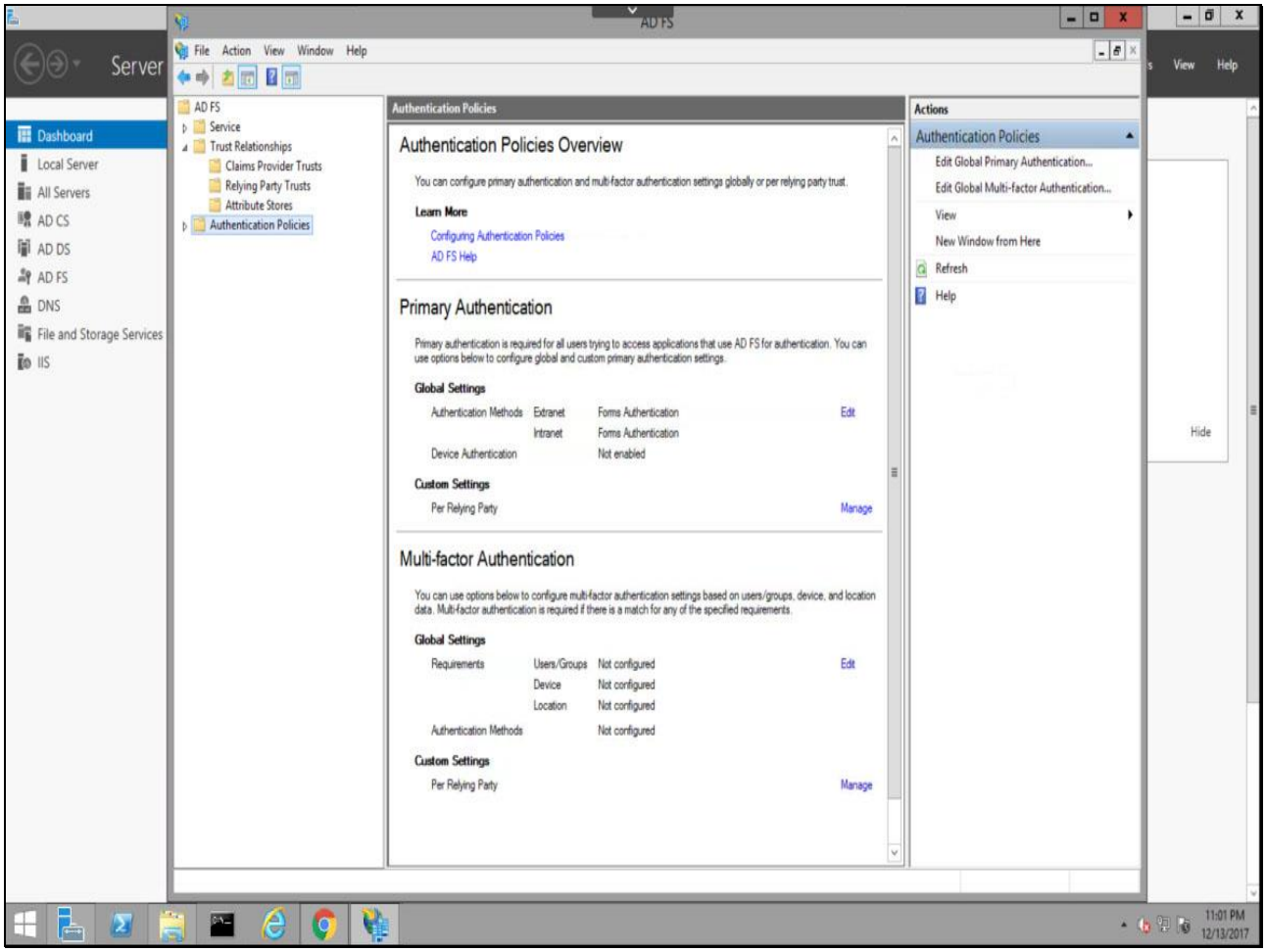
Slide 73 - Slide 73



Slide notes

...then **OK**.

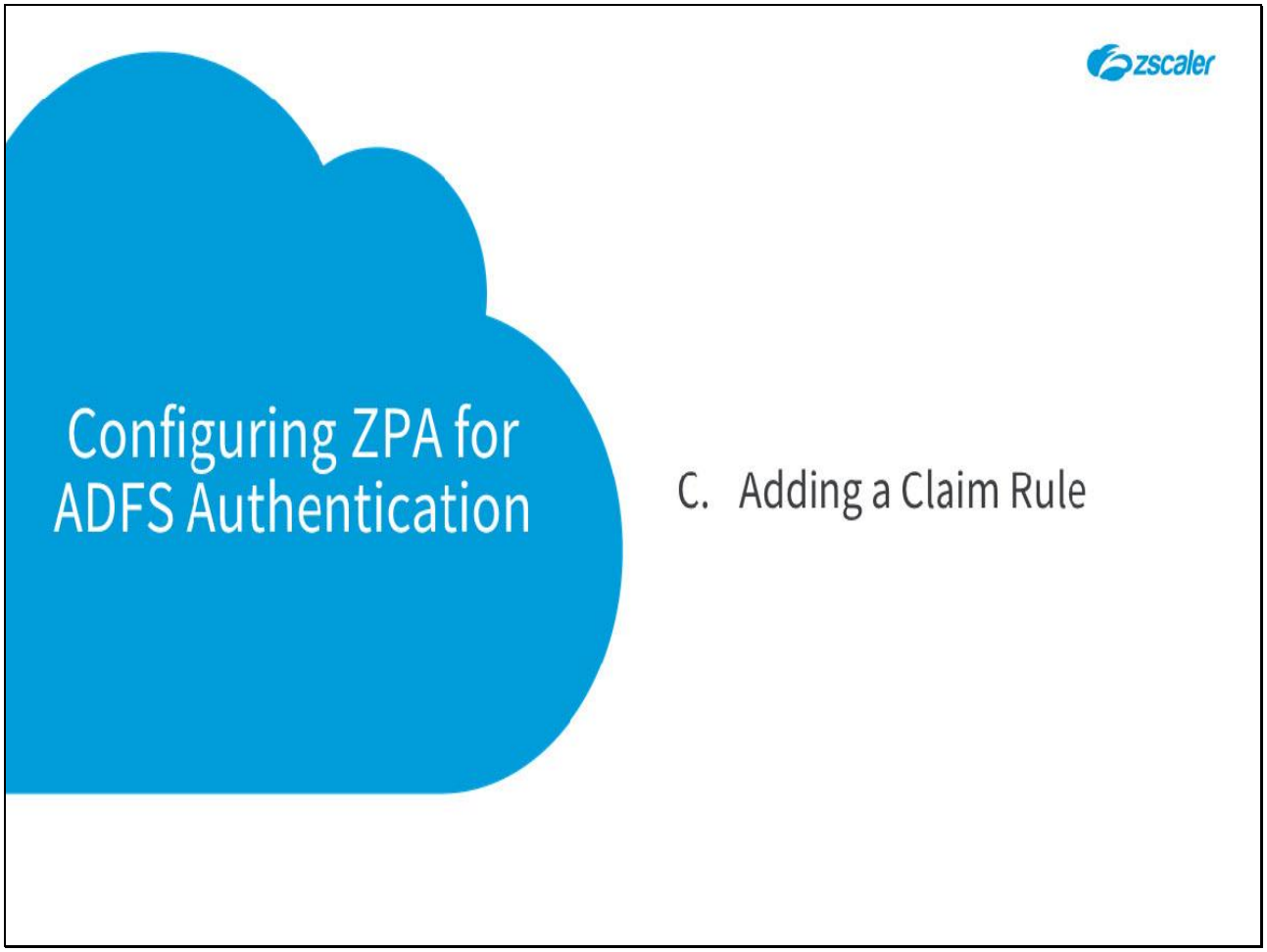
Slide 74 - Slide 74



Slide notes

Note, this is also where you would come to configure ADFS for multi-factor authentication.

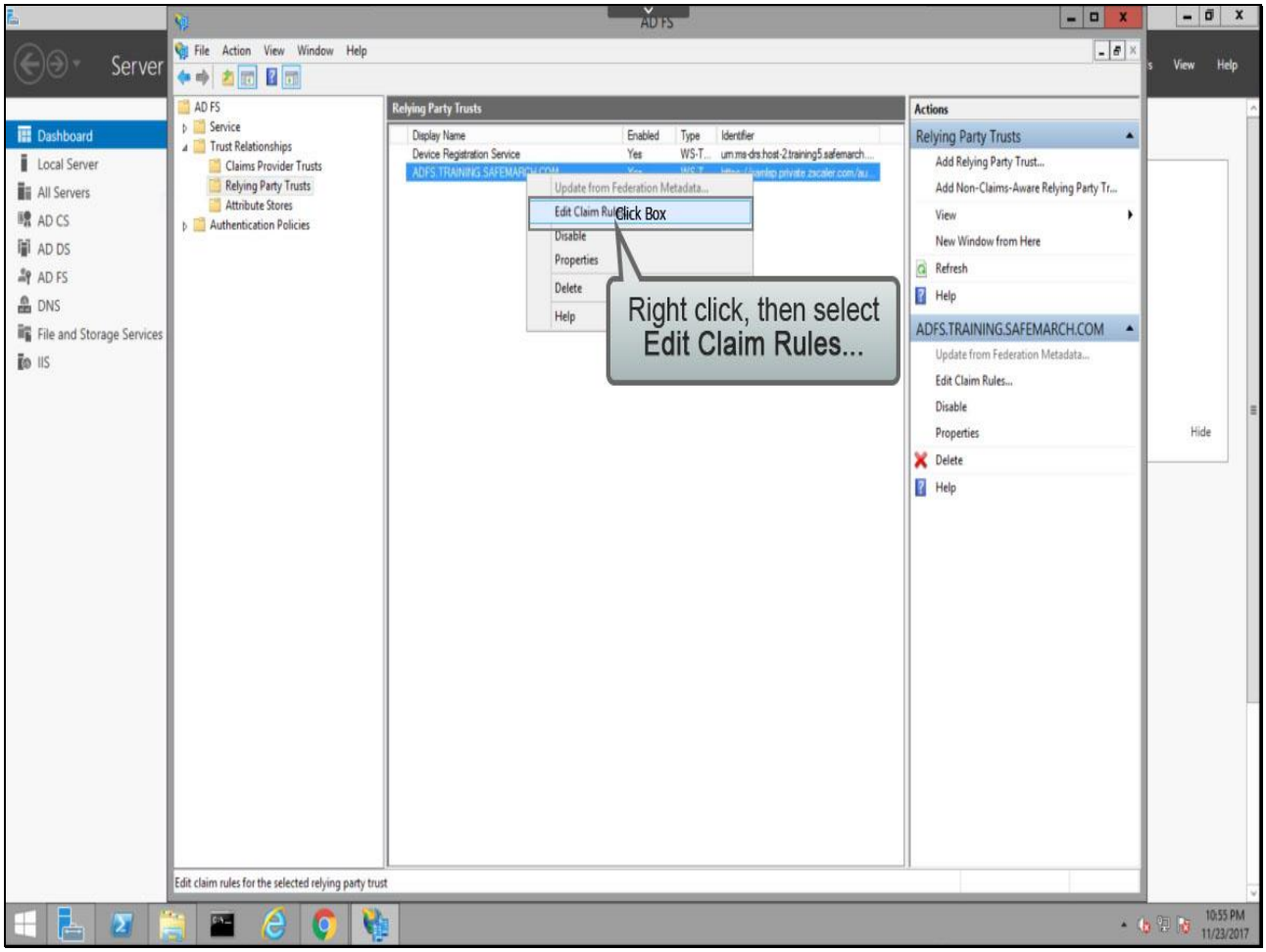
Slide 75 - Configuring ZPA for ADFS Authentication



Slide notes

Having added ZPA as a **Relying Party**, we will next look at how to configure the **Claims** (authorization attributes) to be returned to ZPA on a successful authentication.

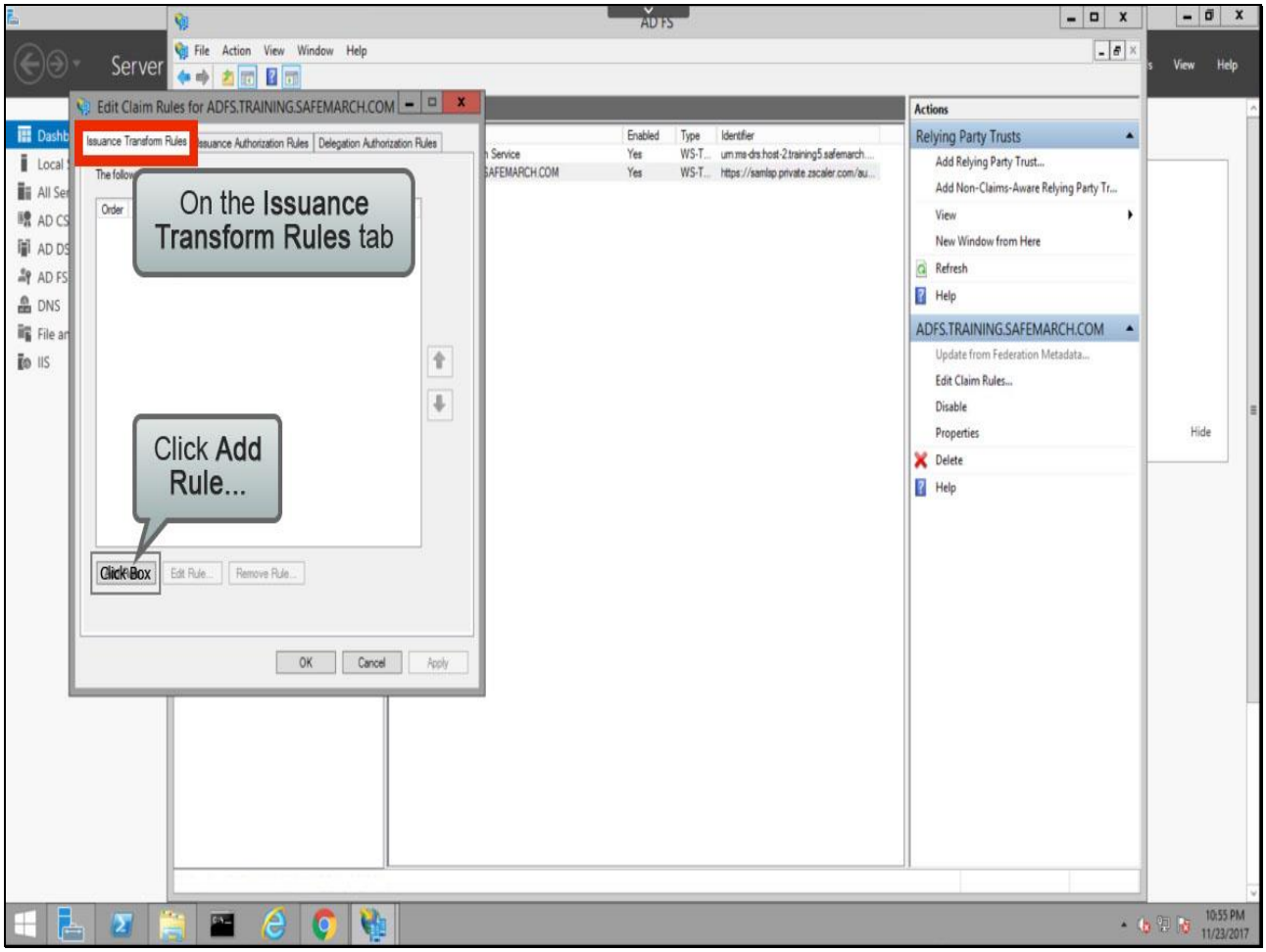
Slide 76 - Slide 76



Slide notes

To add claims rules for this **Relying Party**, right-click on the **Relying Party Trust** that you just added and select **Edit Claim Rules...**.

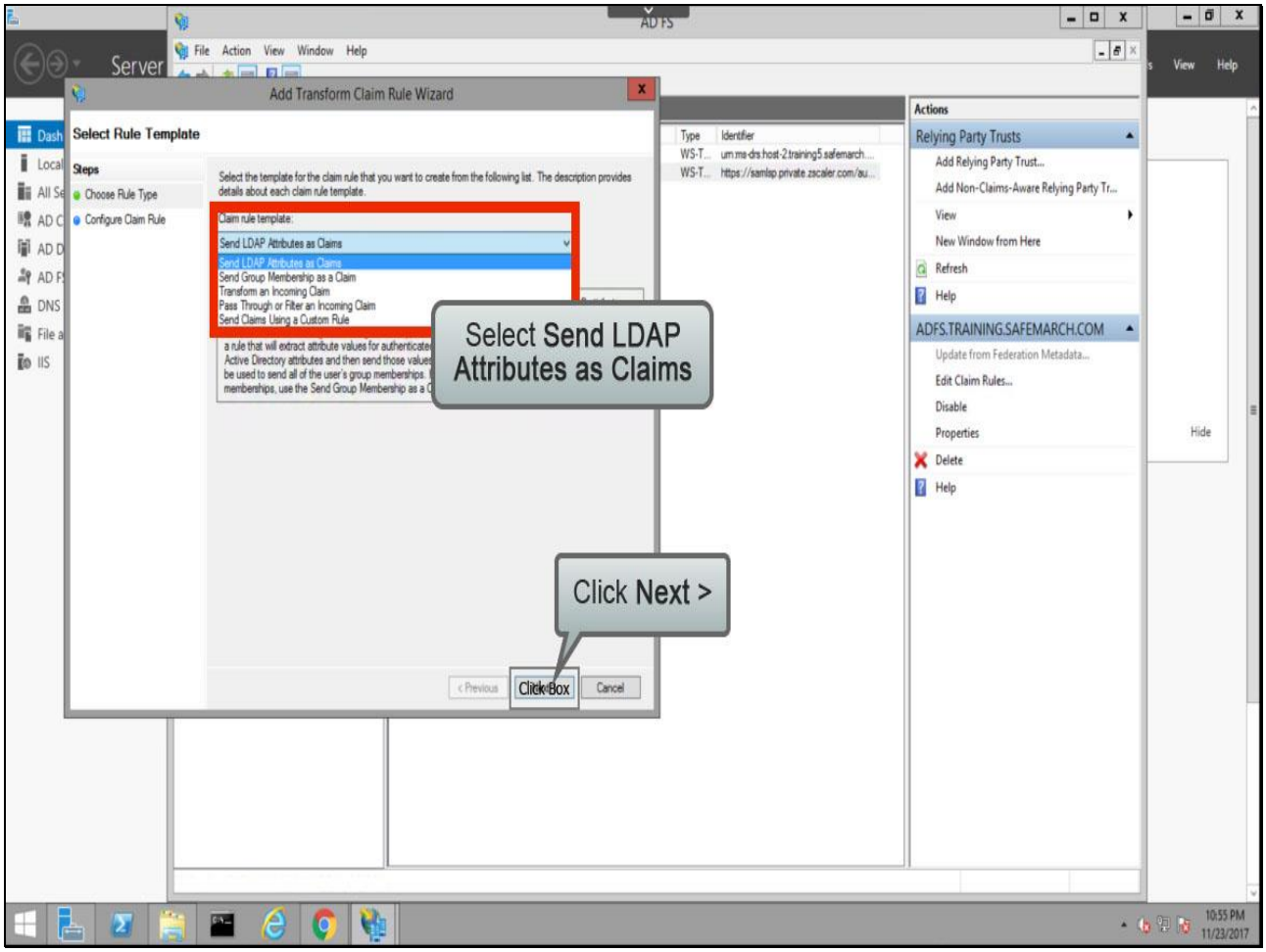
Slide 77 - Slide 77



Slide notes

On the **Issuance Transform Rules** tab, click **Add Rule...**.

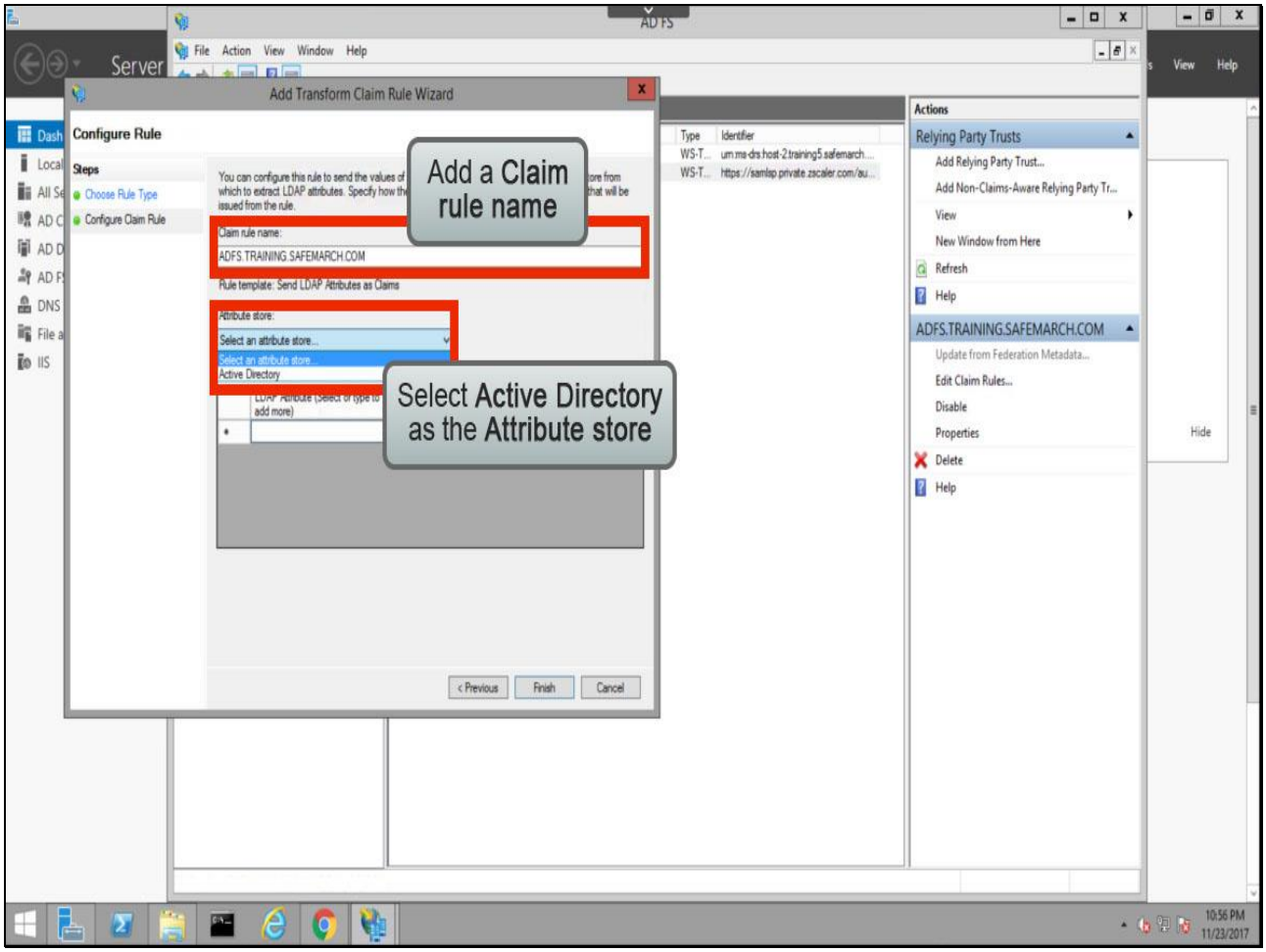
Slide 78 - Slide 78



Slide notes

In the **Claim rule template** field, select **Send LDAP Attributes as Claims**, and click **Next >**.

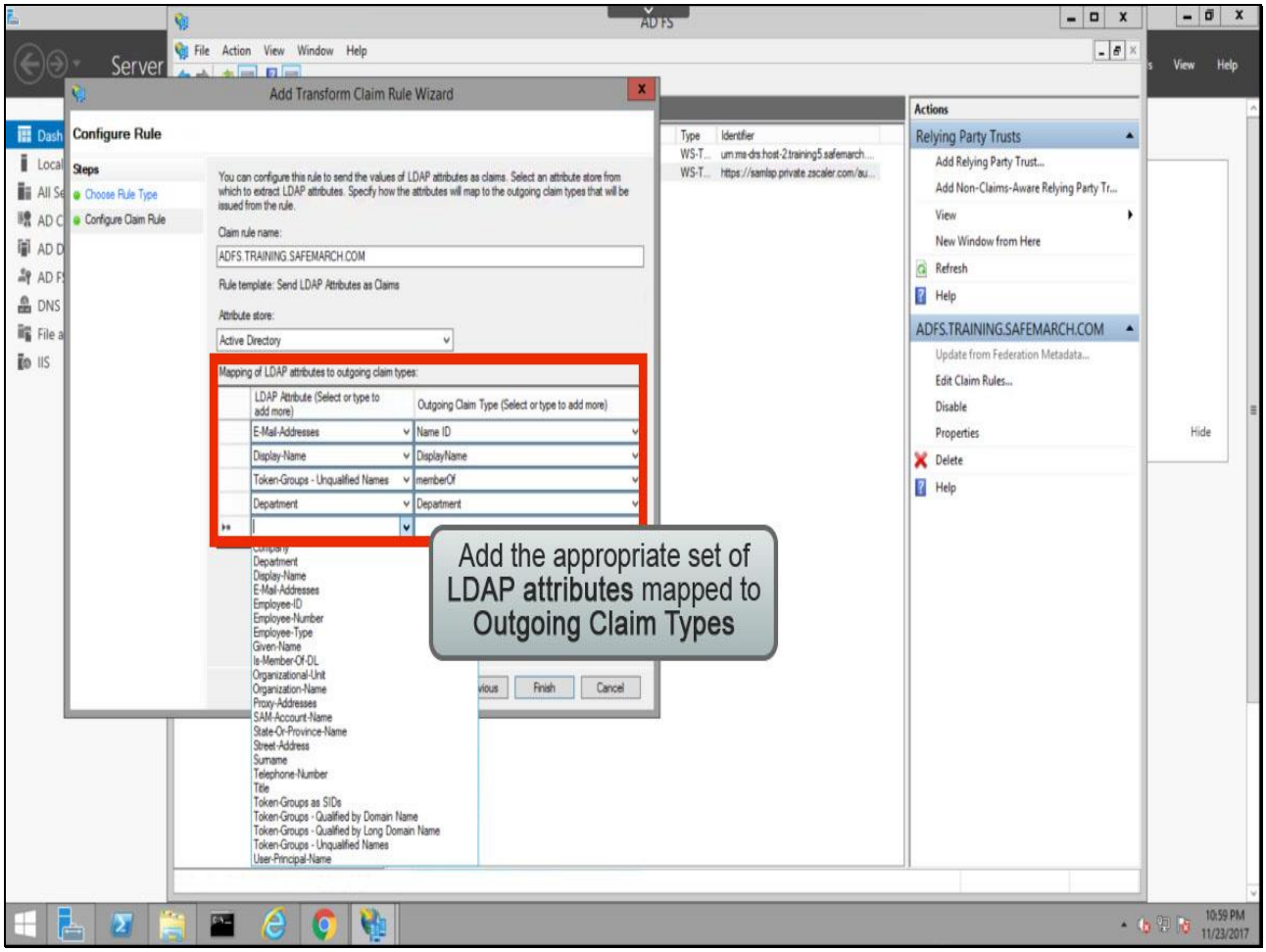
Slide 79 - Slide 79



Slide notes

Give the claim rule set an appropriate name and select **Active Directory** as the **Attribute store**.

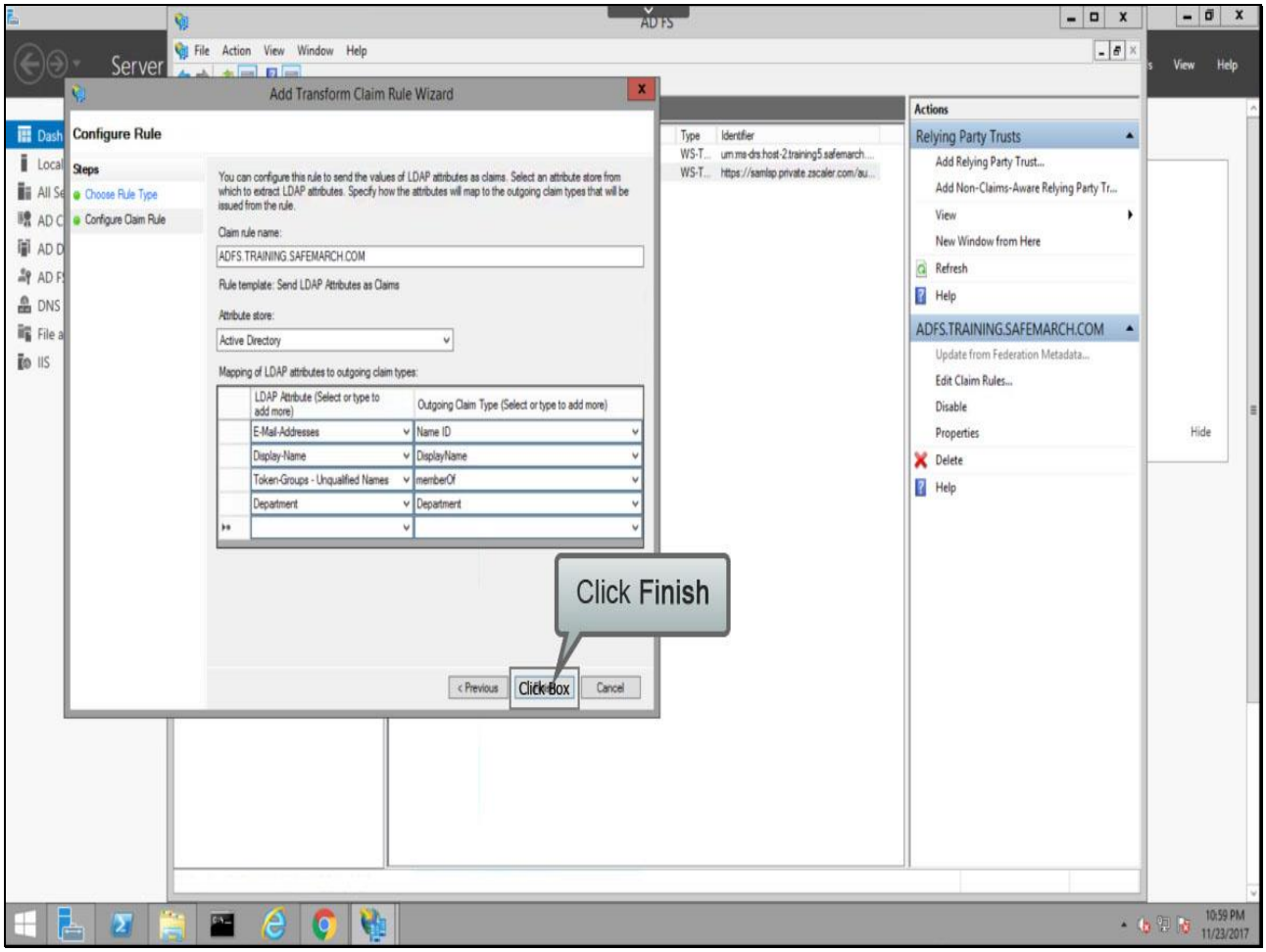
Slide 80 - Slide 80



Slide notes

Add attributes from the list of LDAP attributes available and specify what the **Outgoing Claim Type** should be for each.

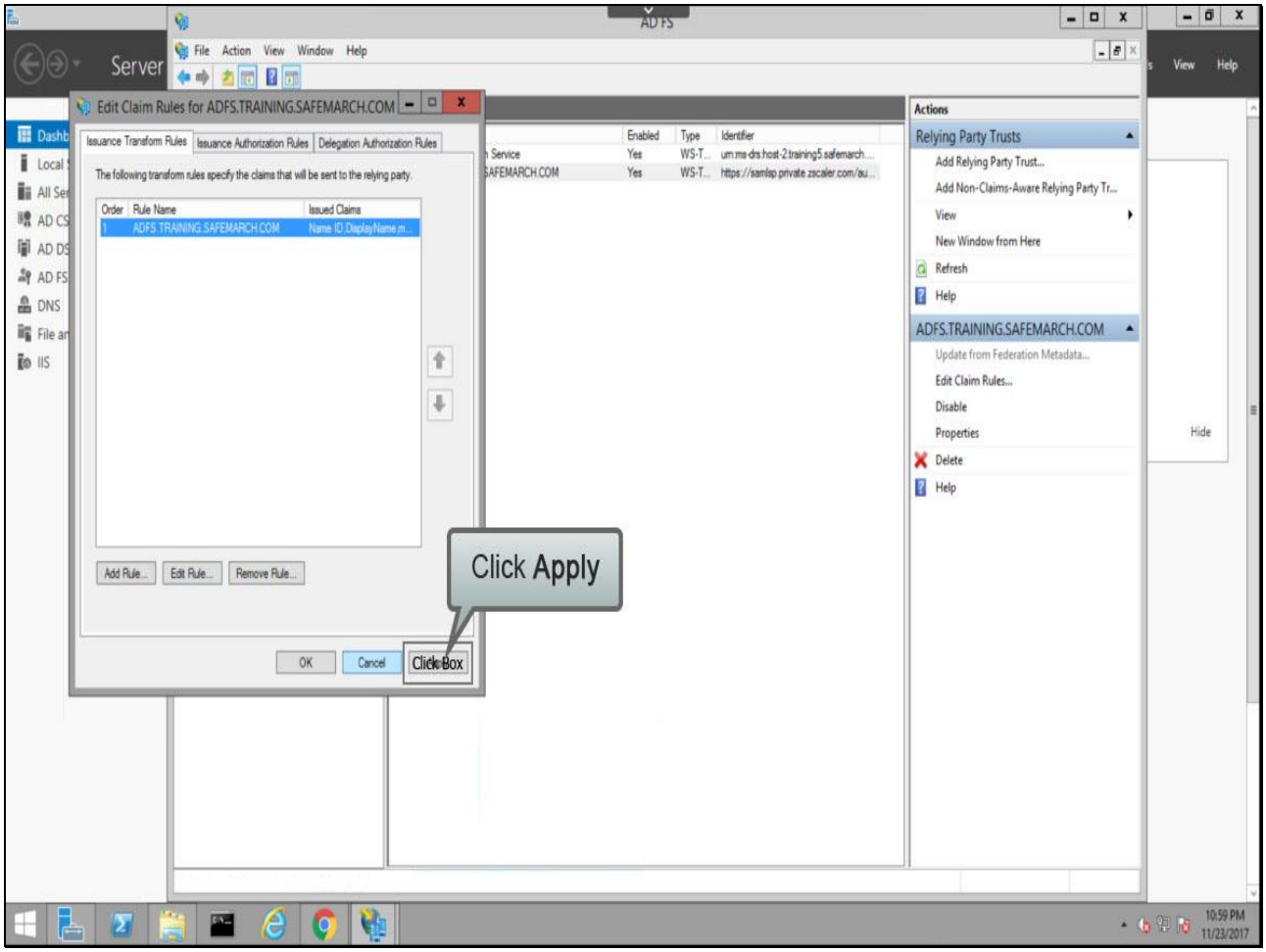
Slide 81 - Slide 81



Slide notes

Once the attribute to claims configuration is complete, click **Finish**.

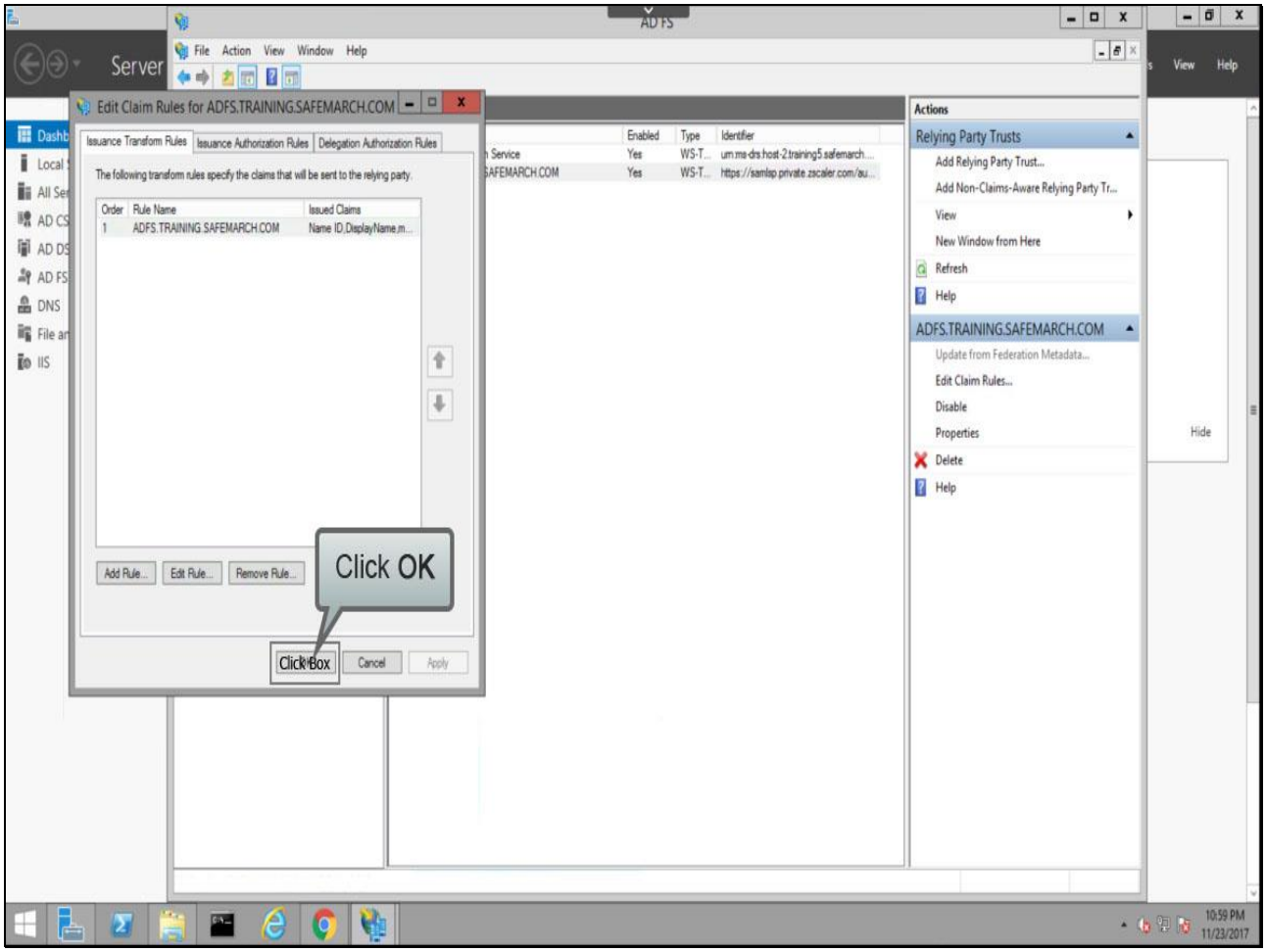
Slide 82 - Slide 82



Slide notes

Click **Apply**, ...

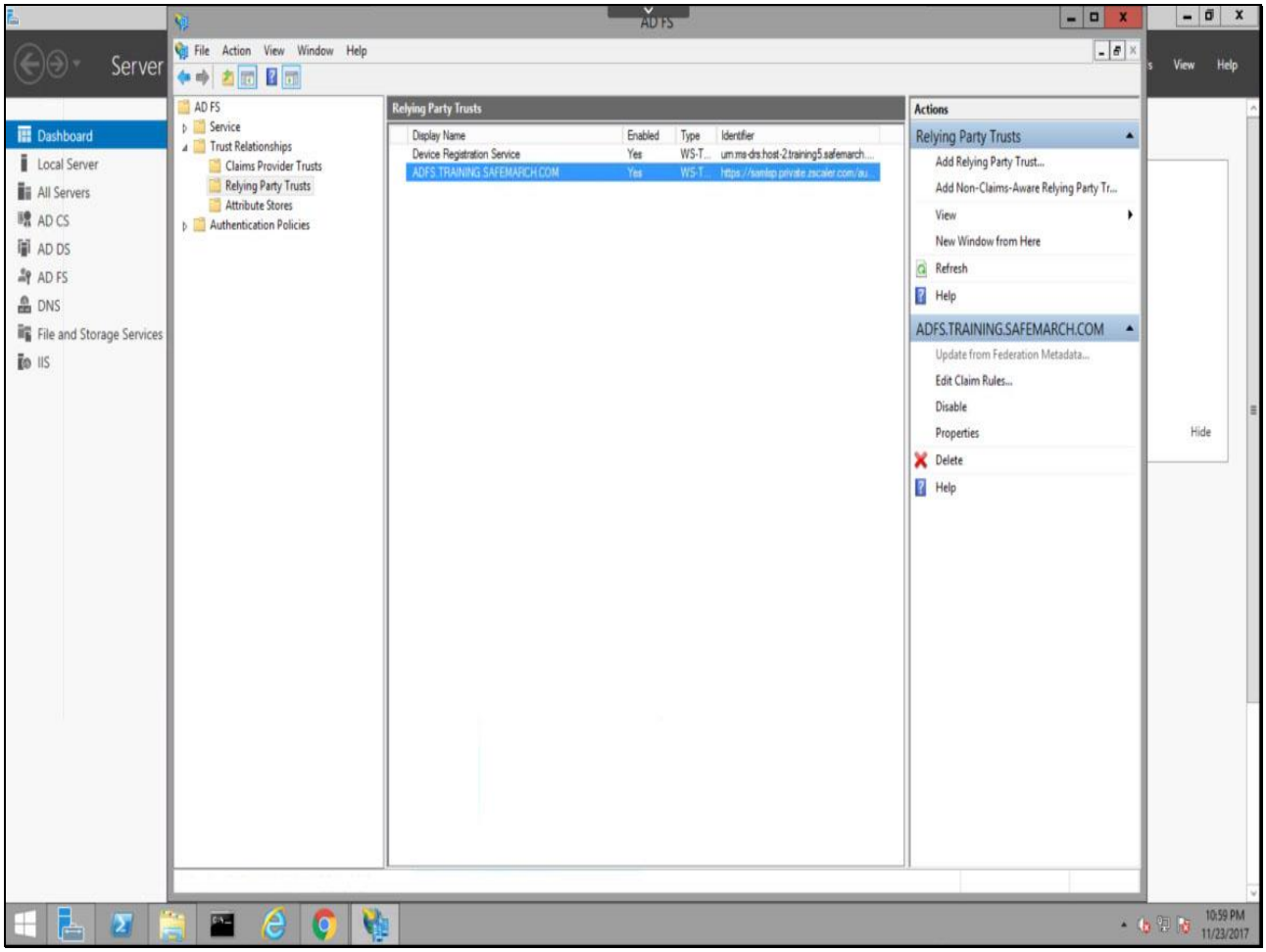
Slide 83 - Slide 83



Slide notes

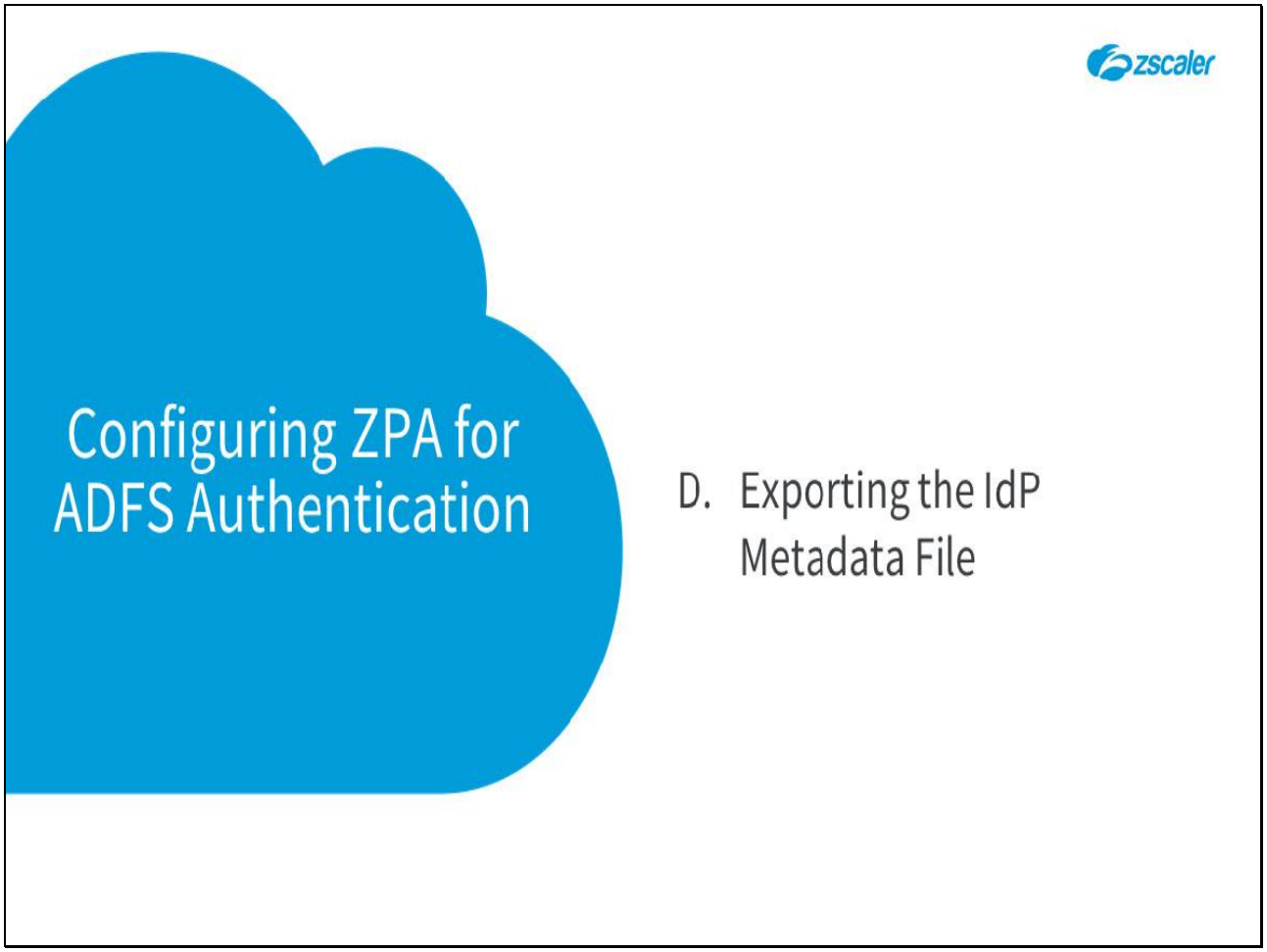
...then **OK**.

Slide 84 - Slide 84



Slide notes

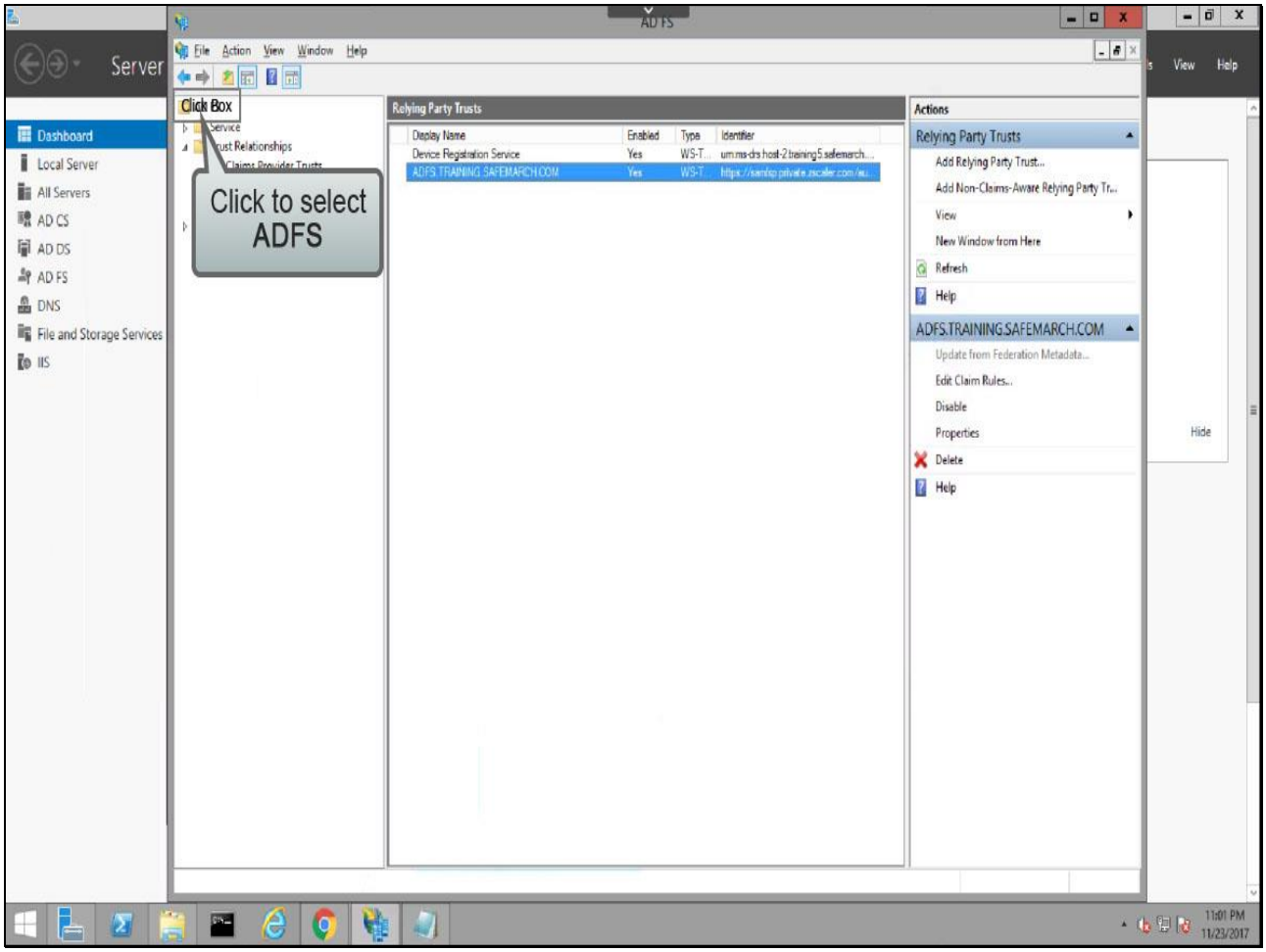
Slide 85 - Configuring ZPA for ADFS Authentication



Slide notes

Having fully configured the IdP, we'll next look at how to export the metadata for it to file, for import to the ZPA admin portal.

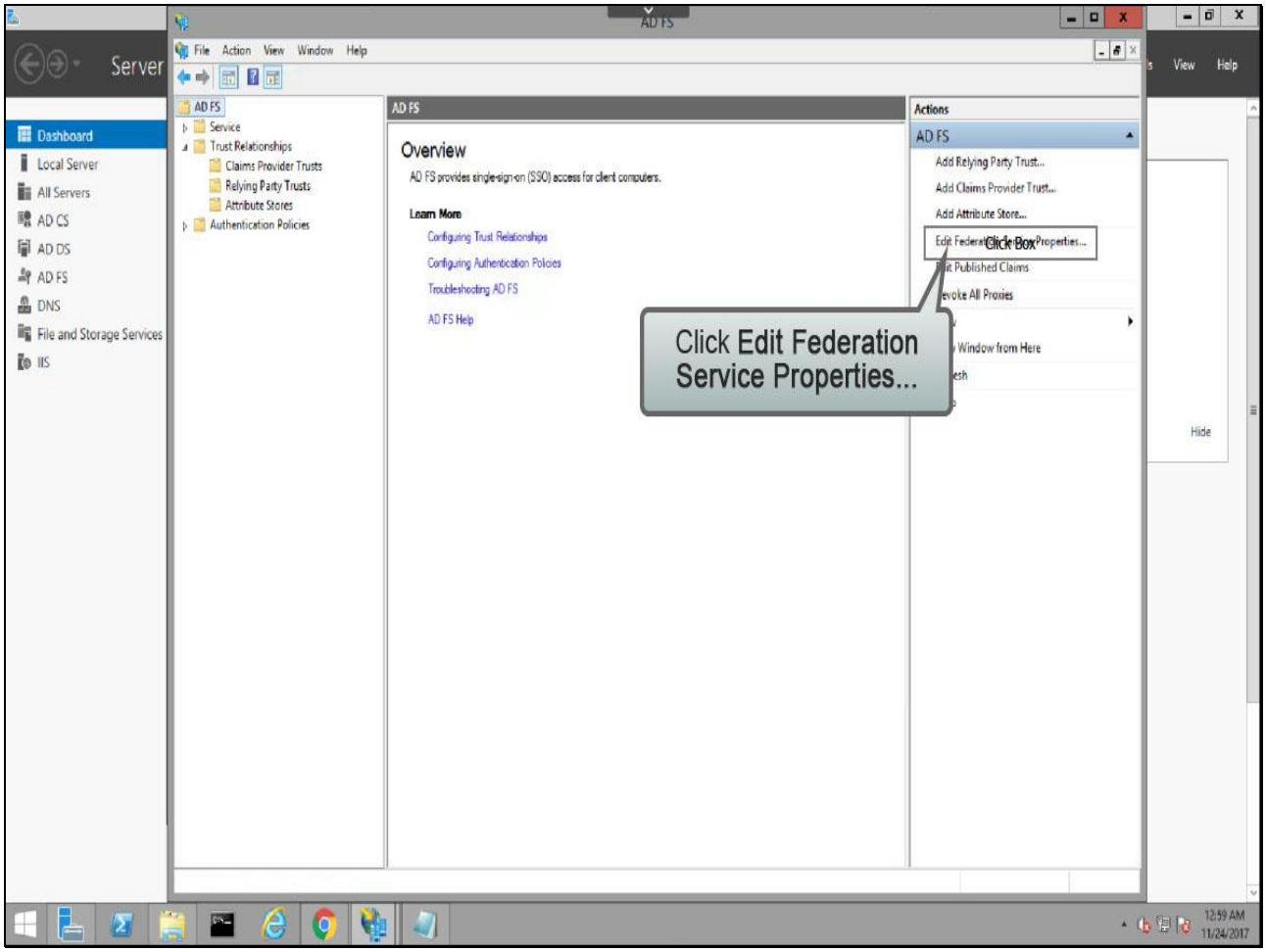
Slide 86 - Slide 86



Slide notes

To export the IdP metadata, in the ADFS Manager, in the left-hand navigation panel, select the top-level folder named **AD FS**, ...

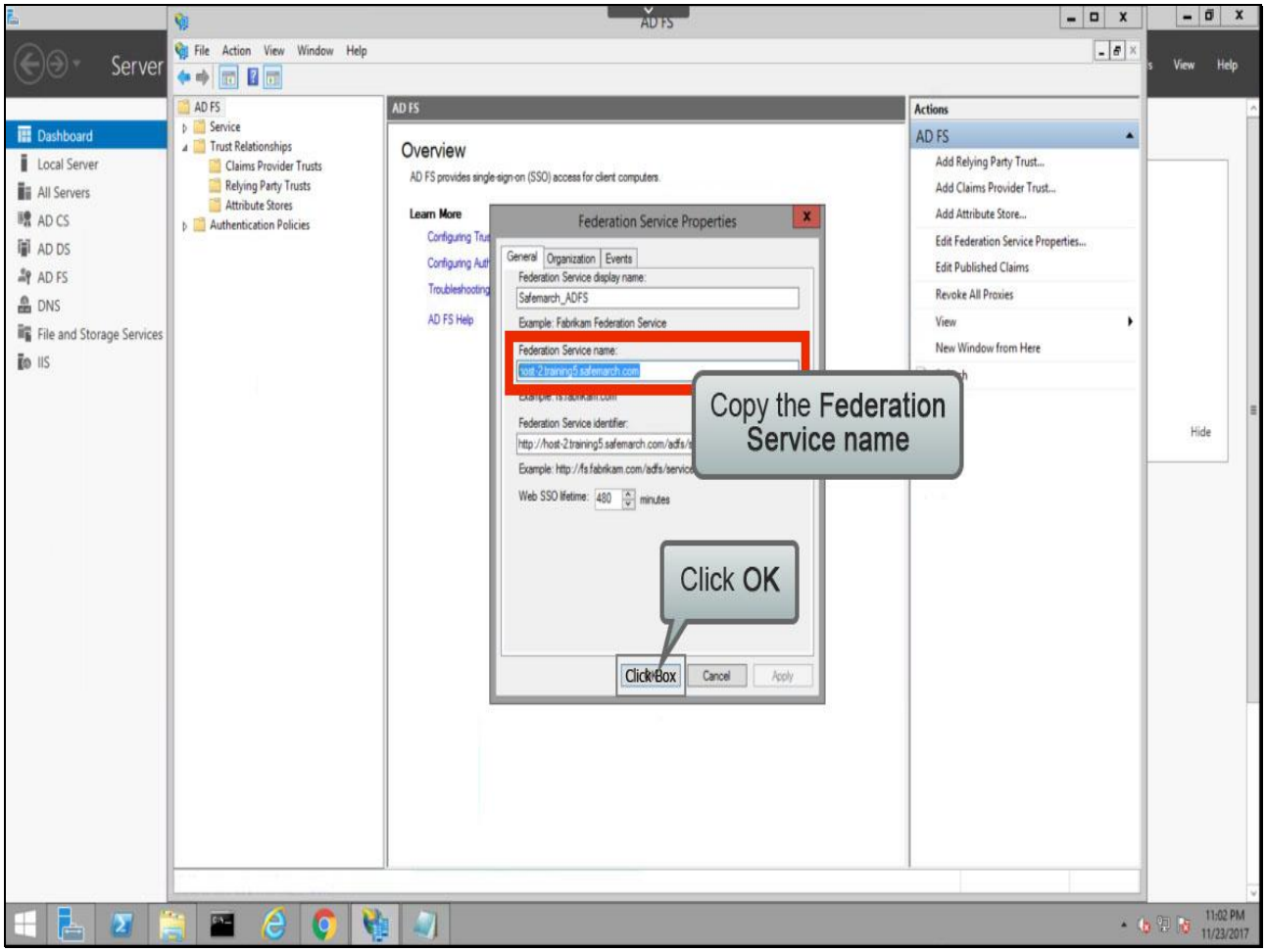
Slide 87 - Slide 87



Slide notes

...then in the **Actions** panel, click **Edit Federation Service Properties...**.

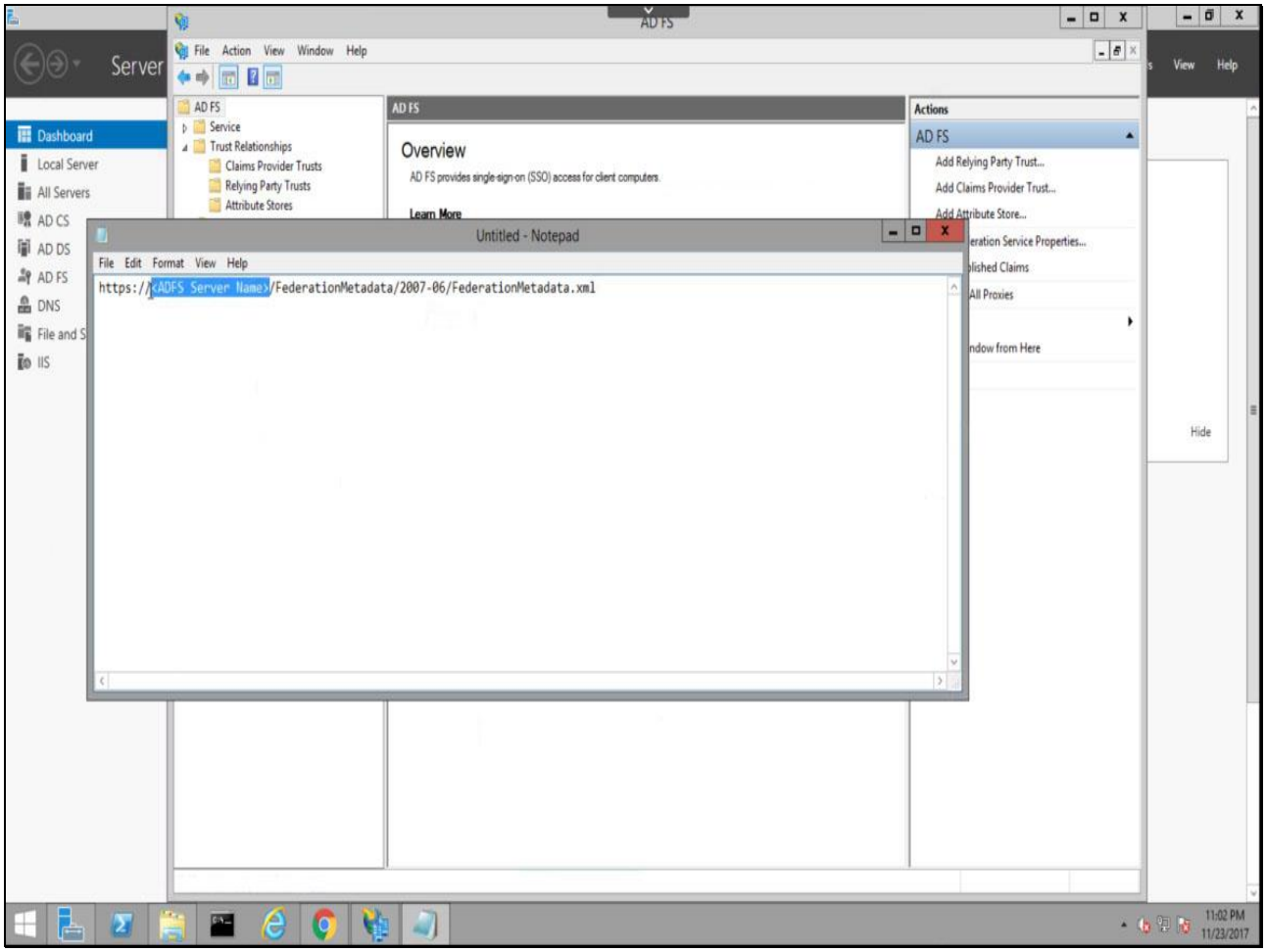
Slide 88 - Slide 88



Slide notes

On the **General** tab, copy the **Federation Service name** and click **OK** to close the dialog.

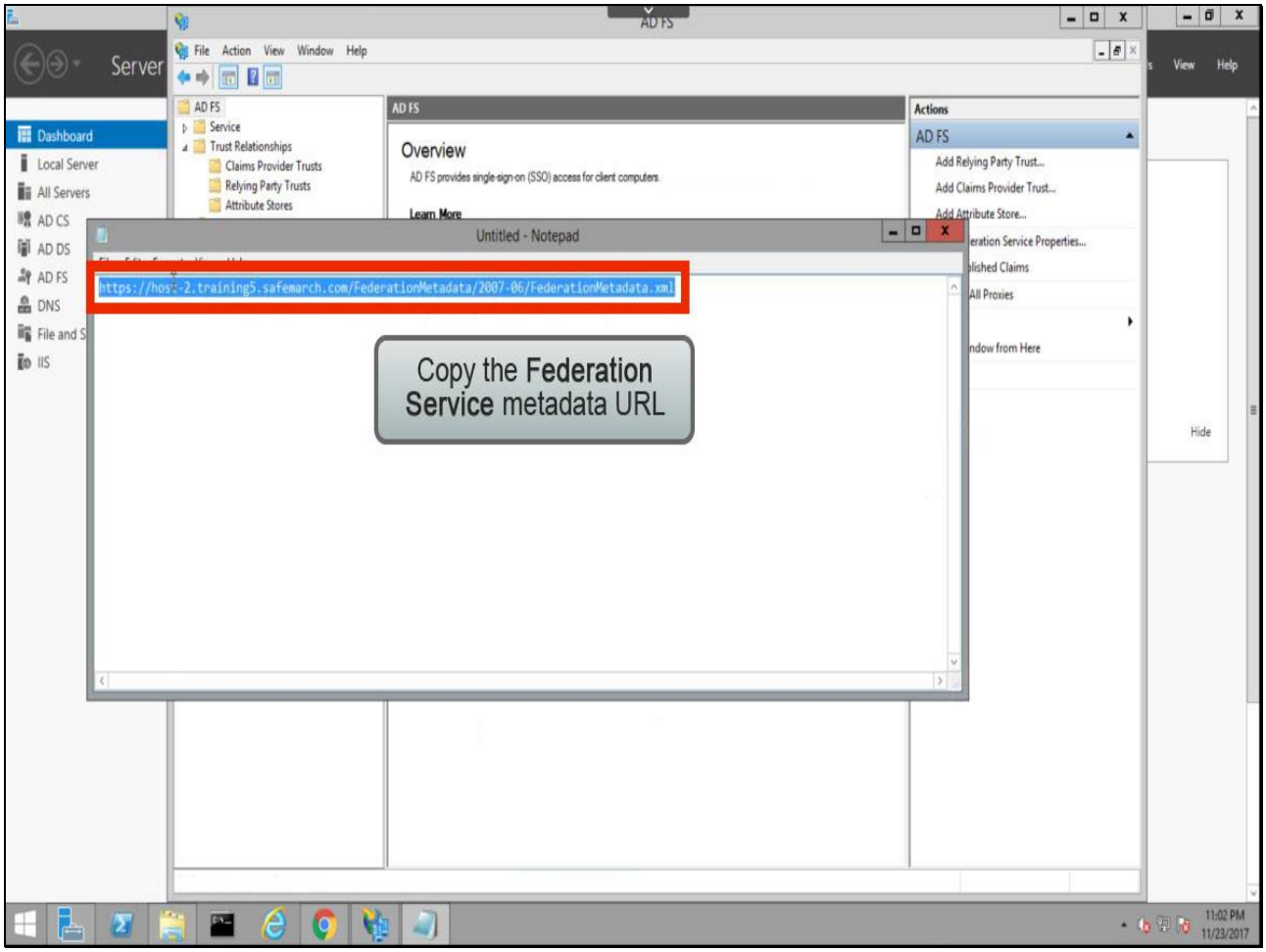
Slide 89 - Slide 89



Slide notes

You then need to paste the **Federation Server name** into the host portion of the URL shown here (**https://<ADFS Server Name>/FederationMetadata/2007-06/FederationMetadata.xml**)...

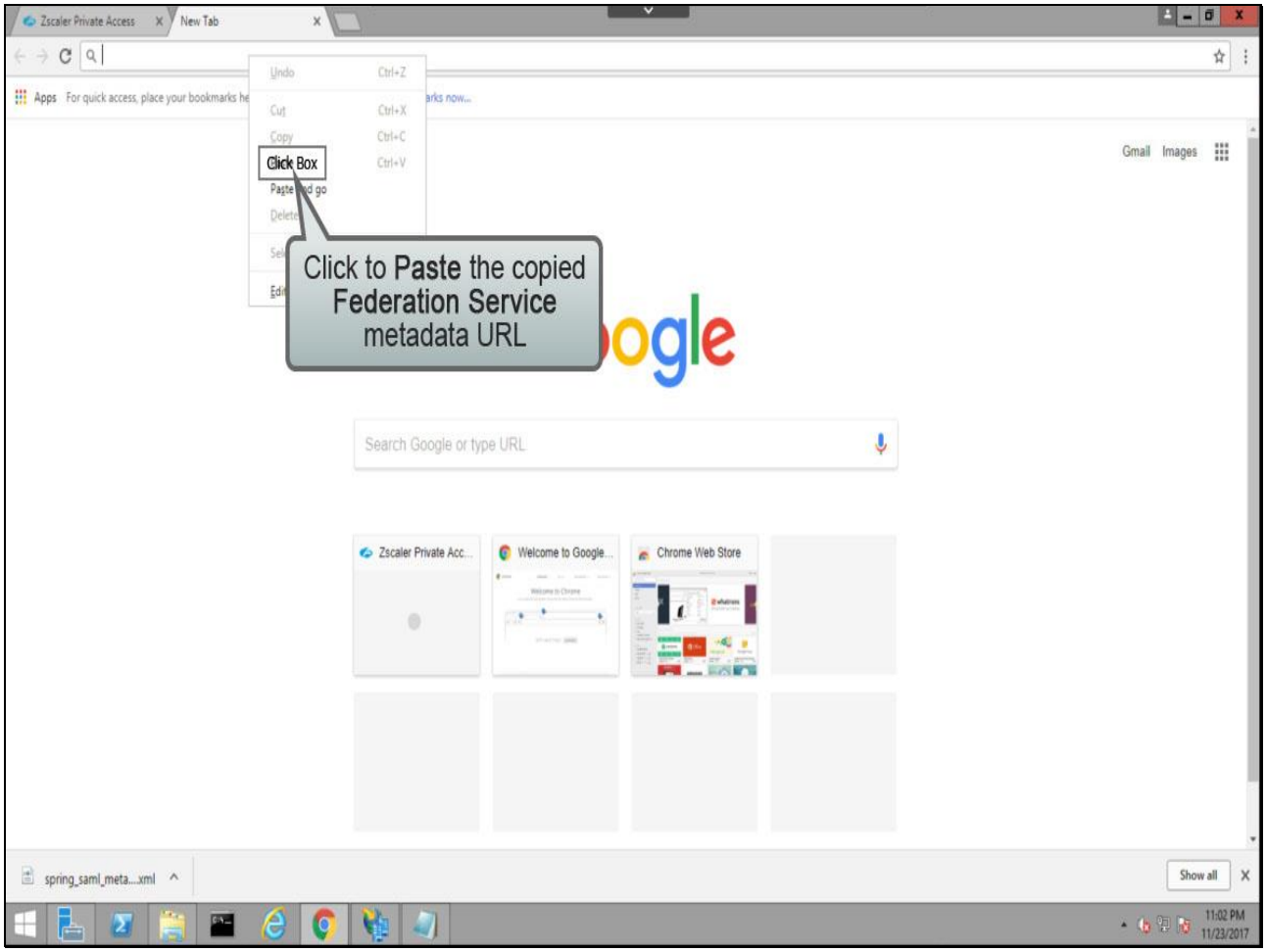
Slide 90 - Slide 90



Slide notes

...then copy the entire URL, ...

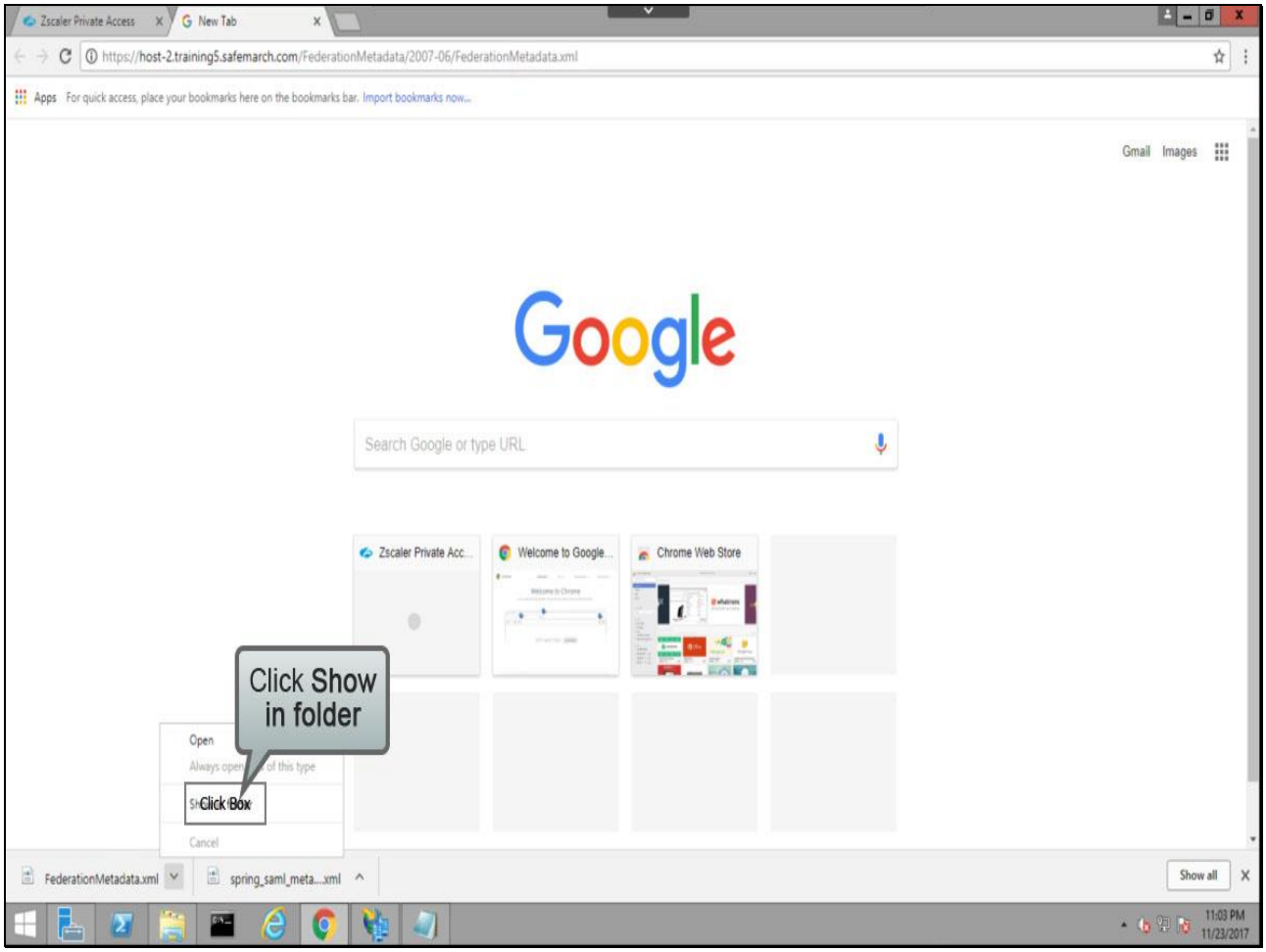
Slide 91 - Slide 91



Slide notes

…and paste it into the address bar of a Browser.

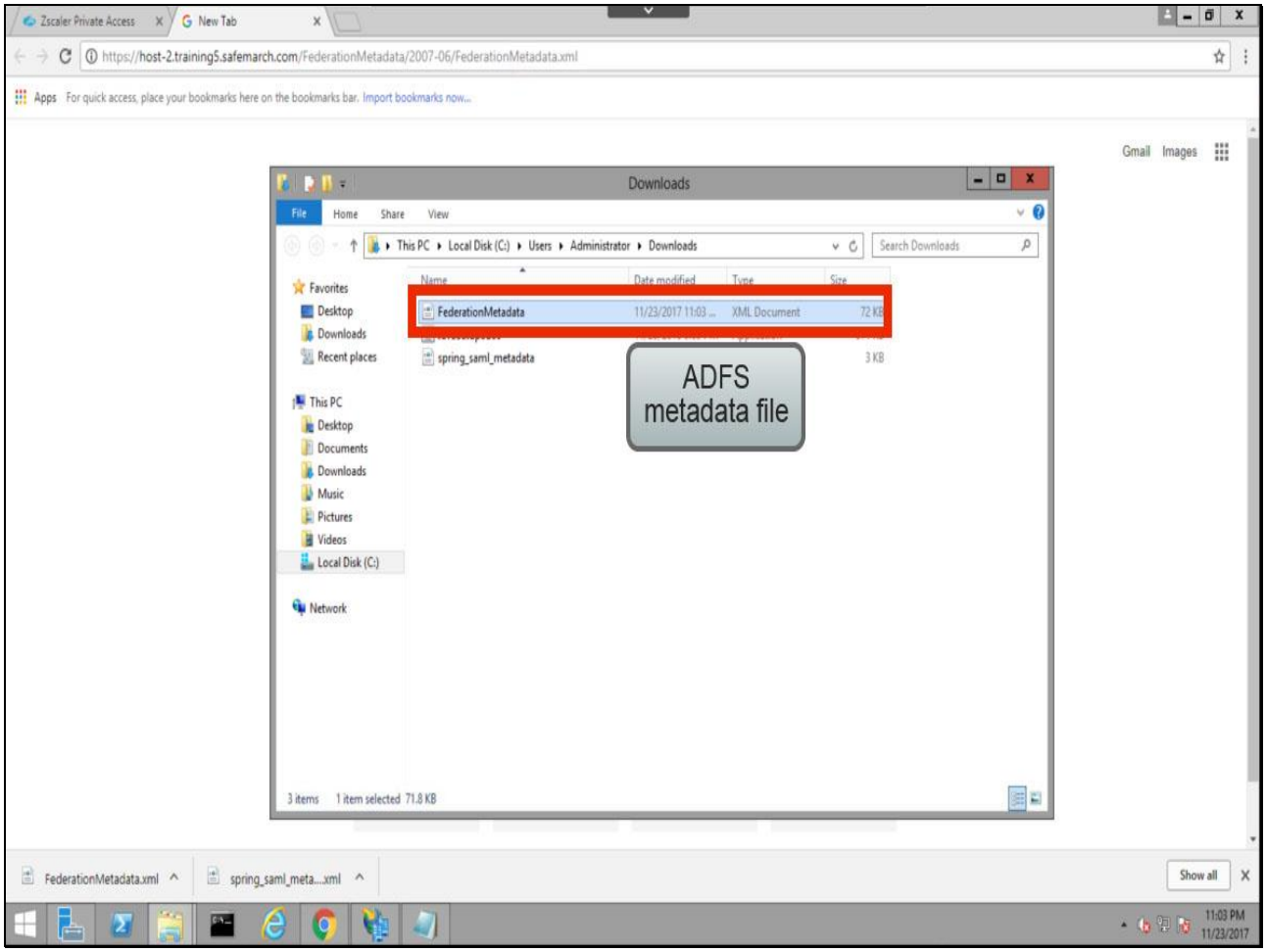
Slide 92 - Slide 92



Slide notes

In the Chrome Browser, click **Show in Folder** to see where the file has been saved.

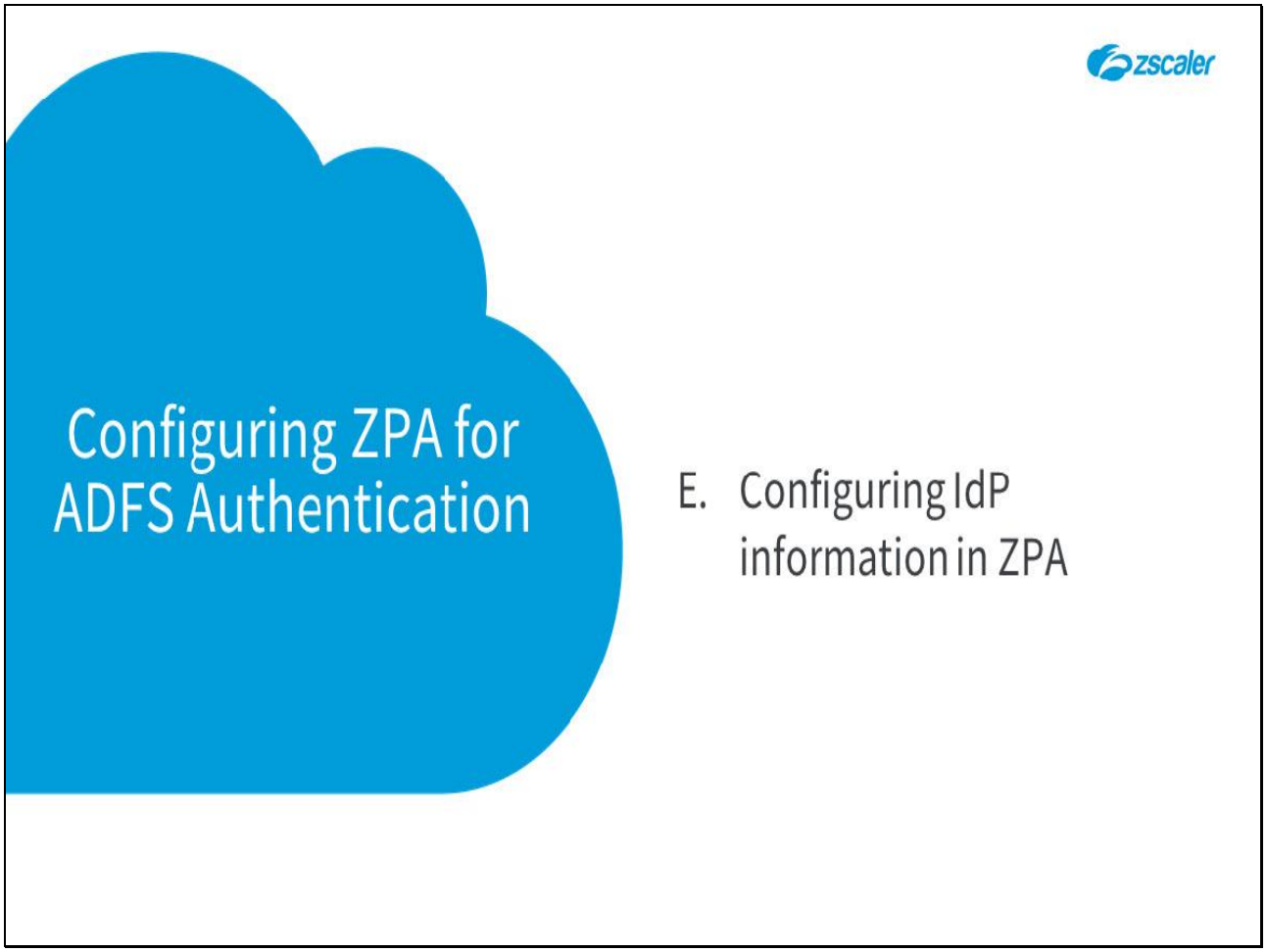
Slide 93 - Slide 93



Slide notes

As before, make a note of where the file is located, and move it to a share accessible to the ZPA admin portal if necessary.

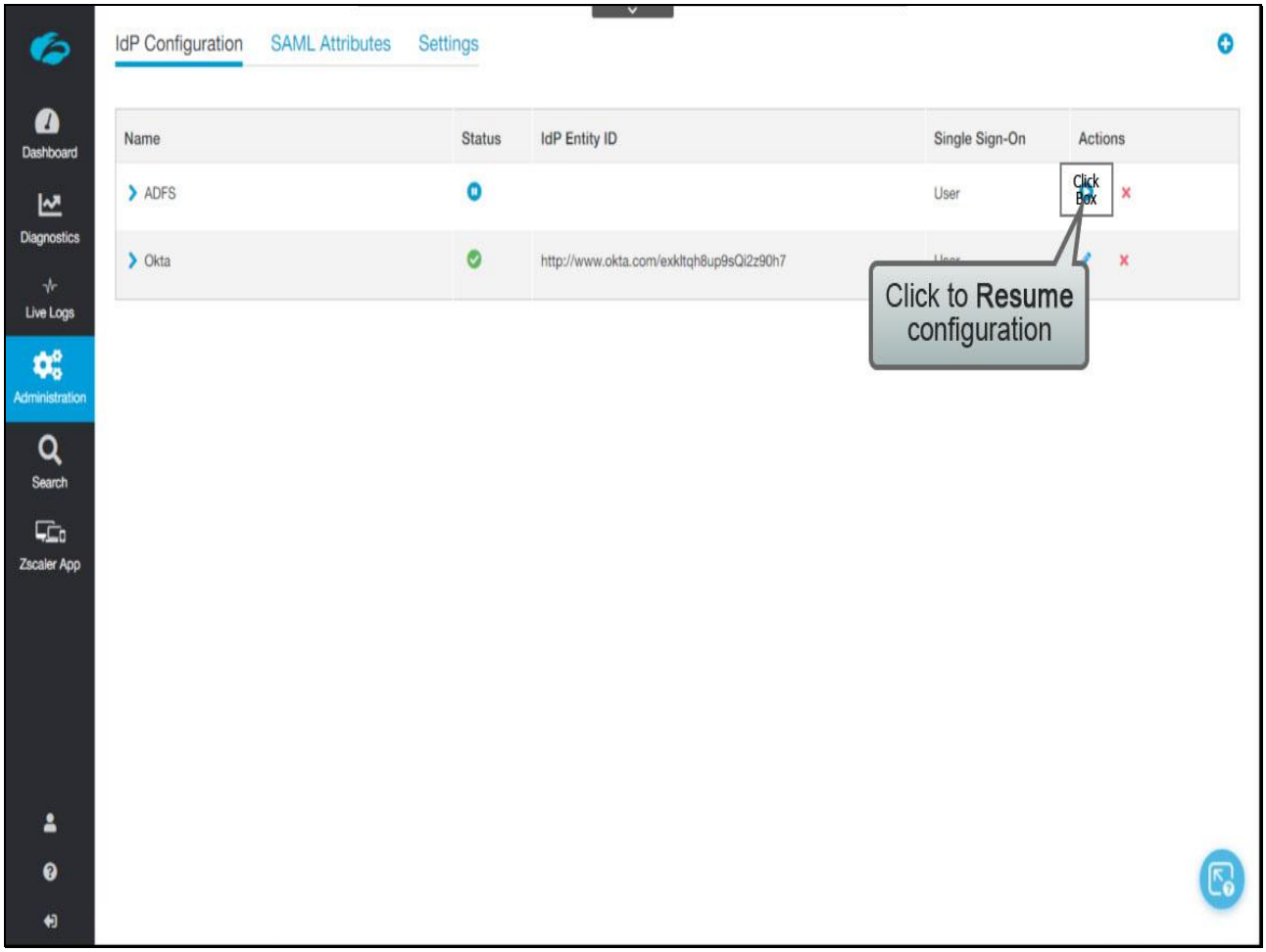
Slide 94 - Configuring ZPA for ADFS Authentication



Slide notes

Next, we'll look at how to import that metadata file, to add the IdP to the ZPA configuration.

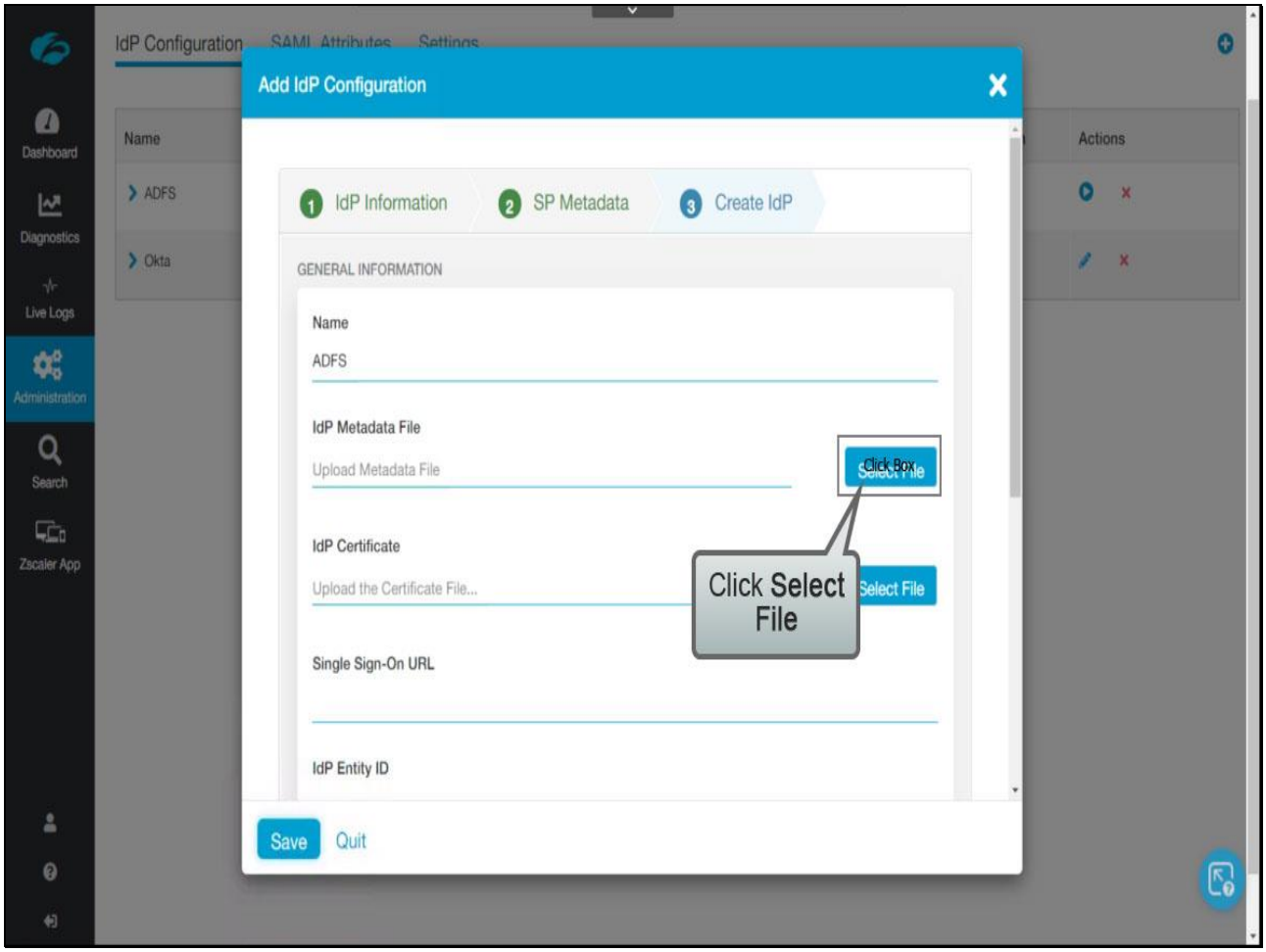
Slide 95 - Slide 95



Slide notes

In the ZPA Admin Portal, on the **Administration > AUTHENTICATION > IdP Configuration** page, click to **Resume** configuration of the ADFS IdP that you paused previously.

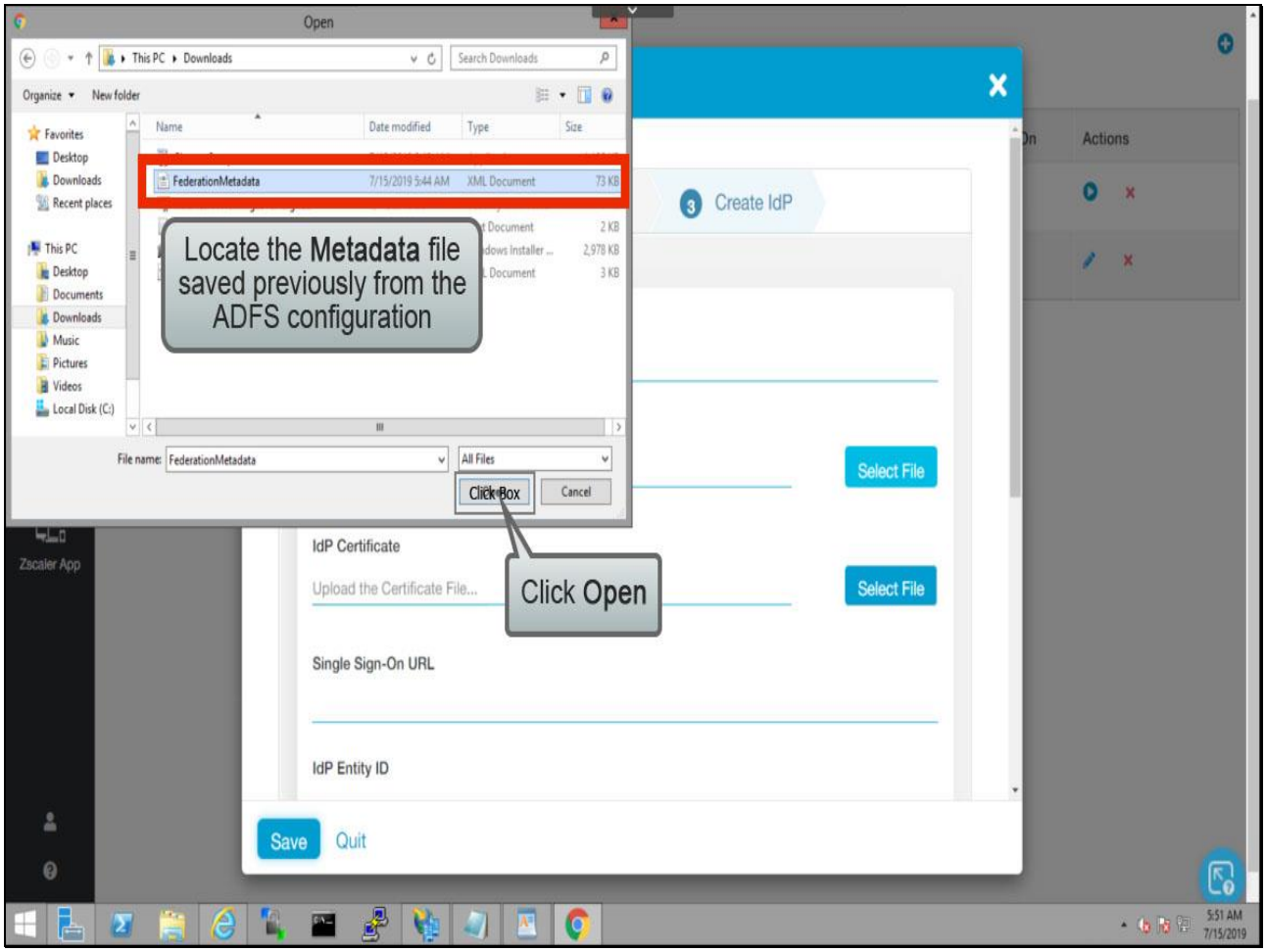
Slide 96 - Slide 96



Slide notes

To import the IdP metadata file we just saved from ADFS, click **Select File**.

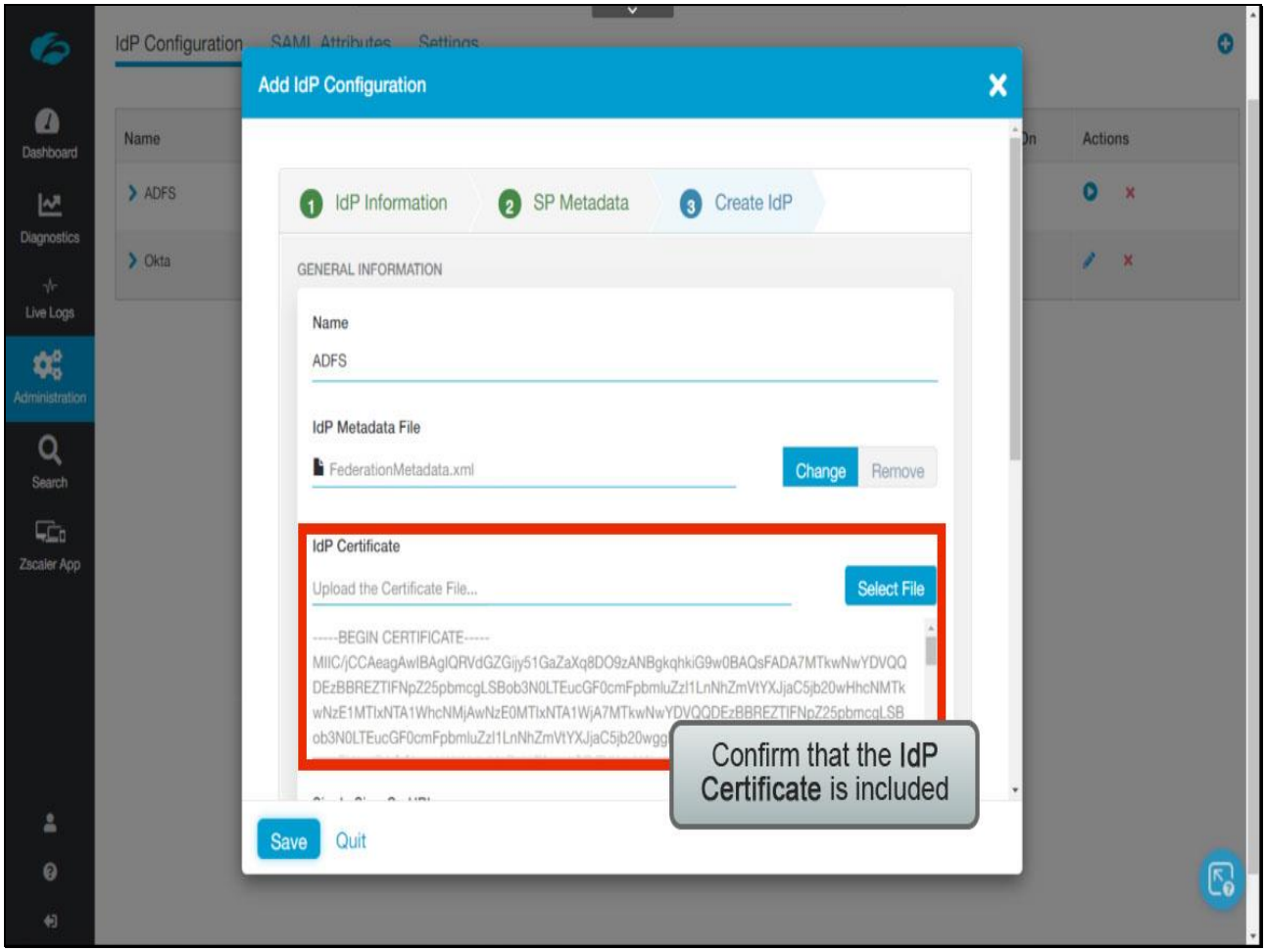
Slide 97 - Slide 97



Slide notes

Browse to the share and folder containing the ADFS metadata file, select it, and click **Open**.

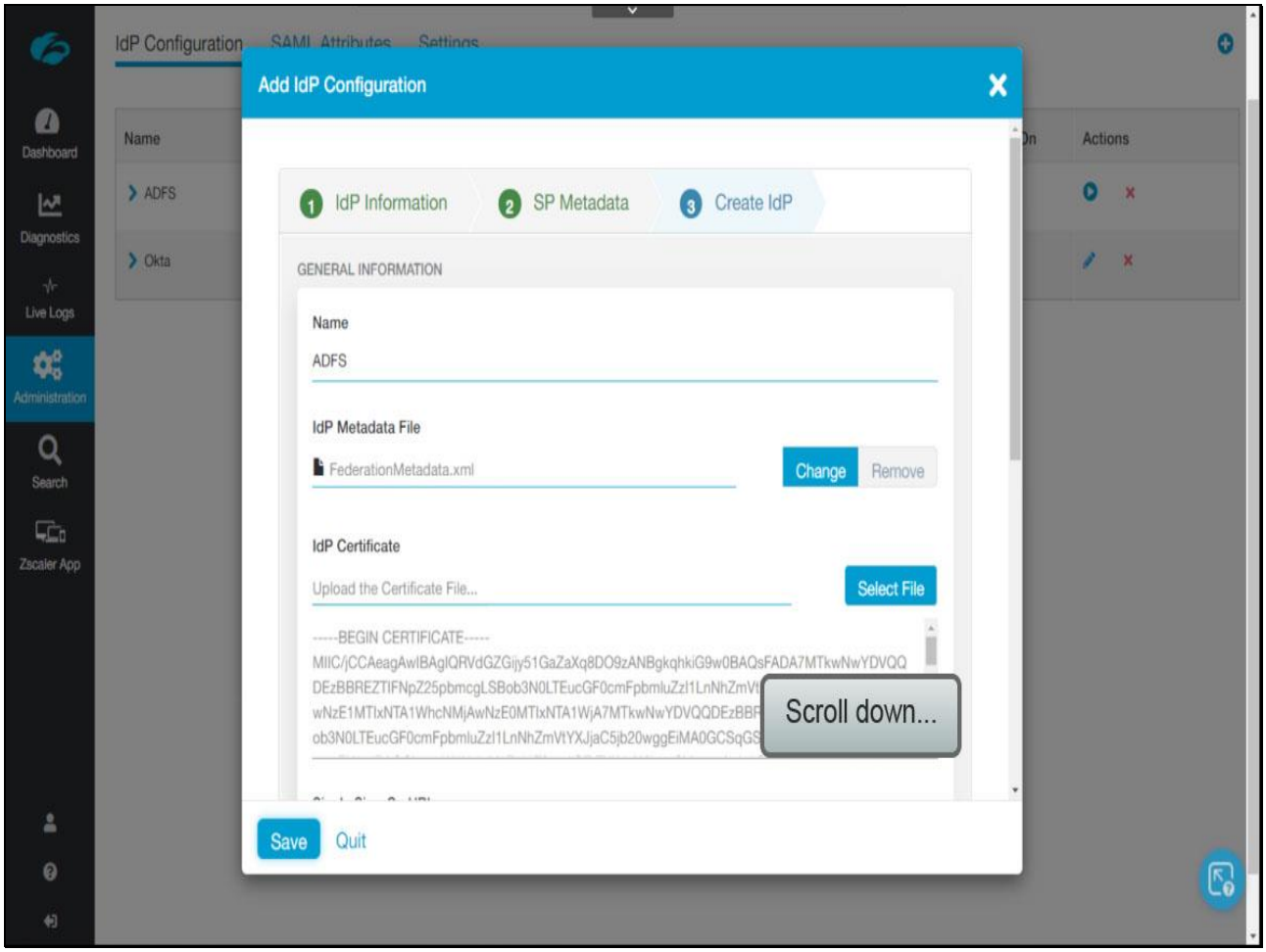
Slide 98 - Slide 98



Slide notes

Confirm that the file imports successfully and that the **IdP Certificate** is included.

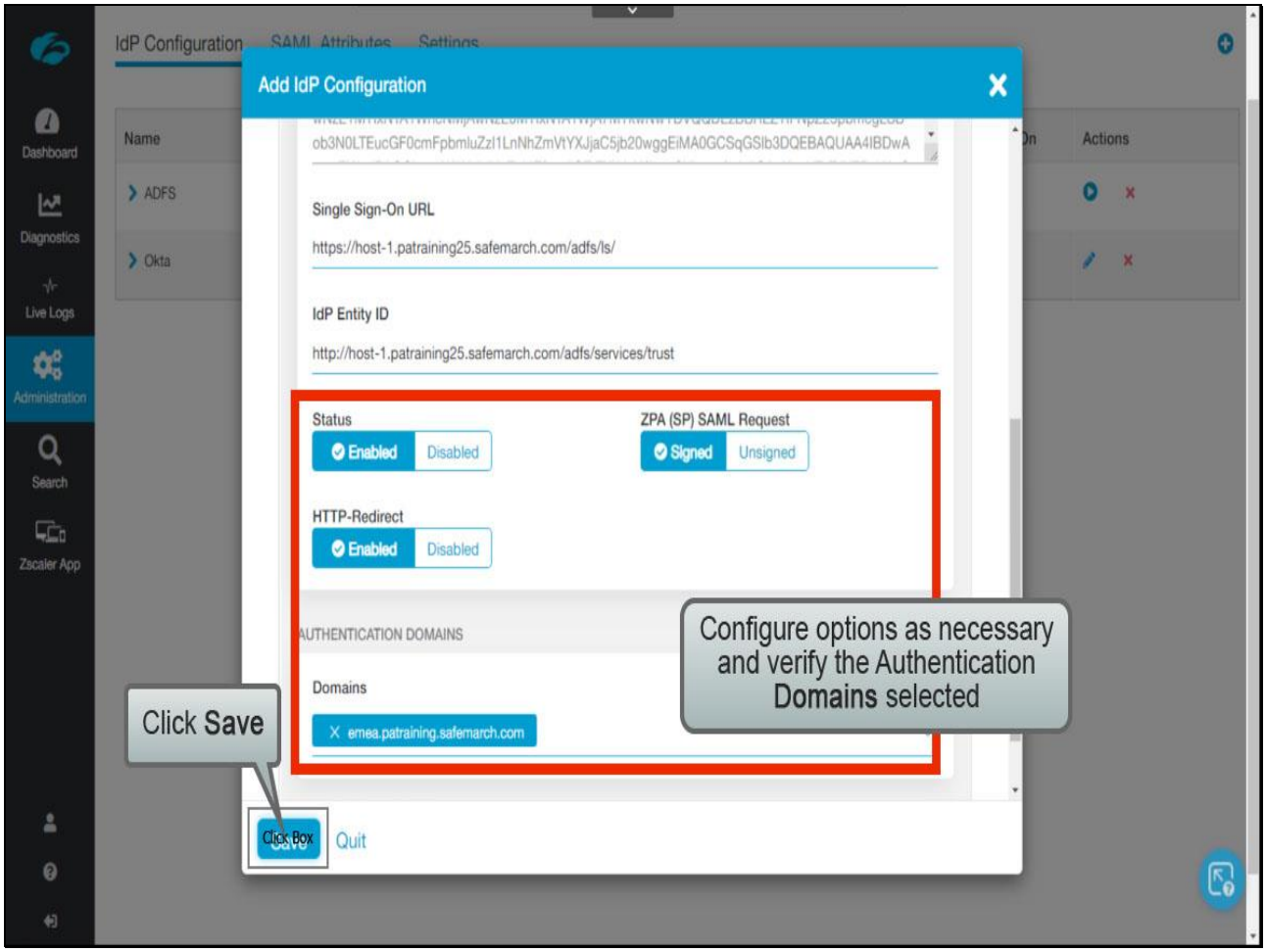
Slide 99 - Slide 99



Slide notes

Scroll down, ...

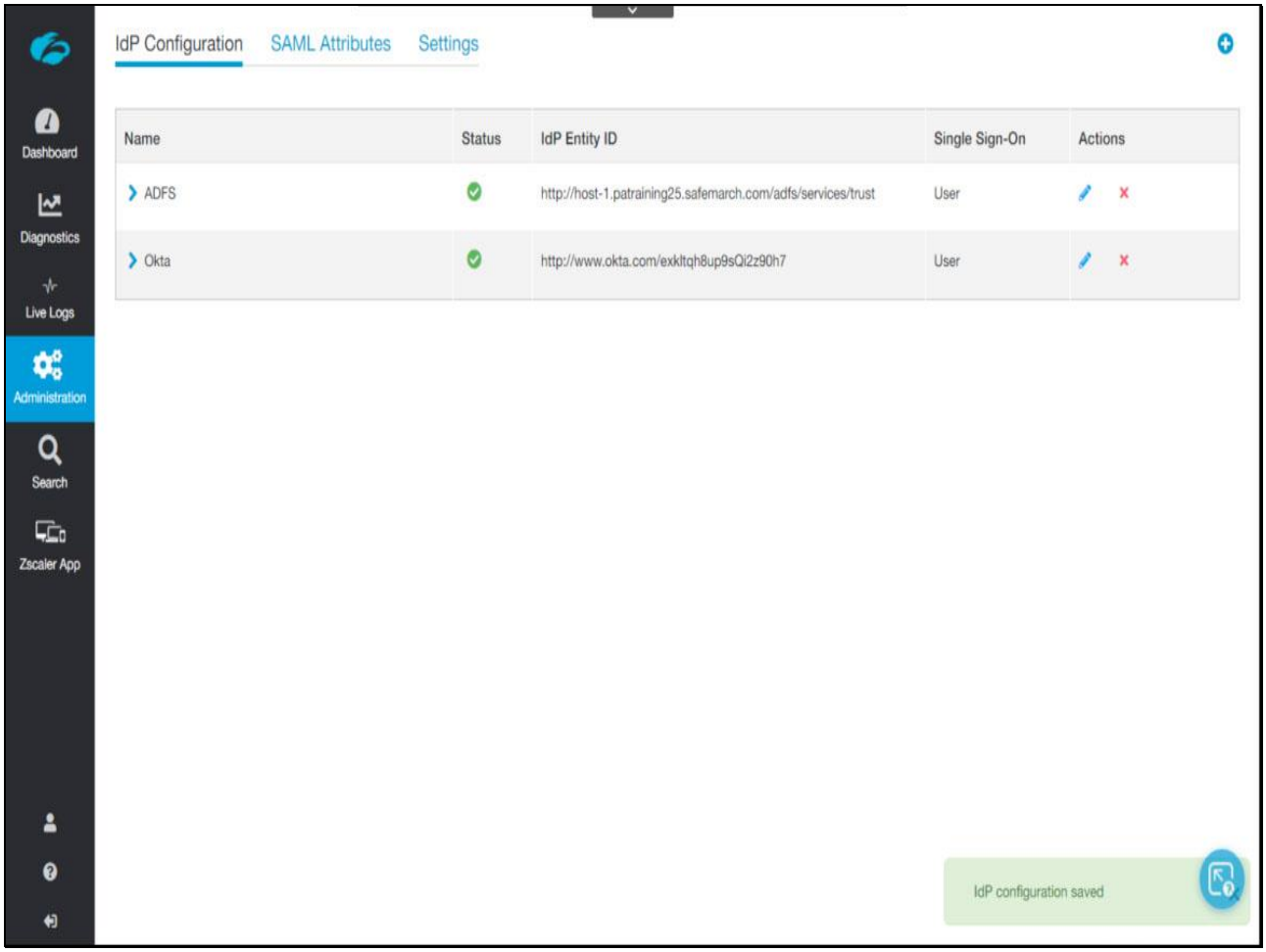
Slide 100 - Slide 100



Slide notes

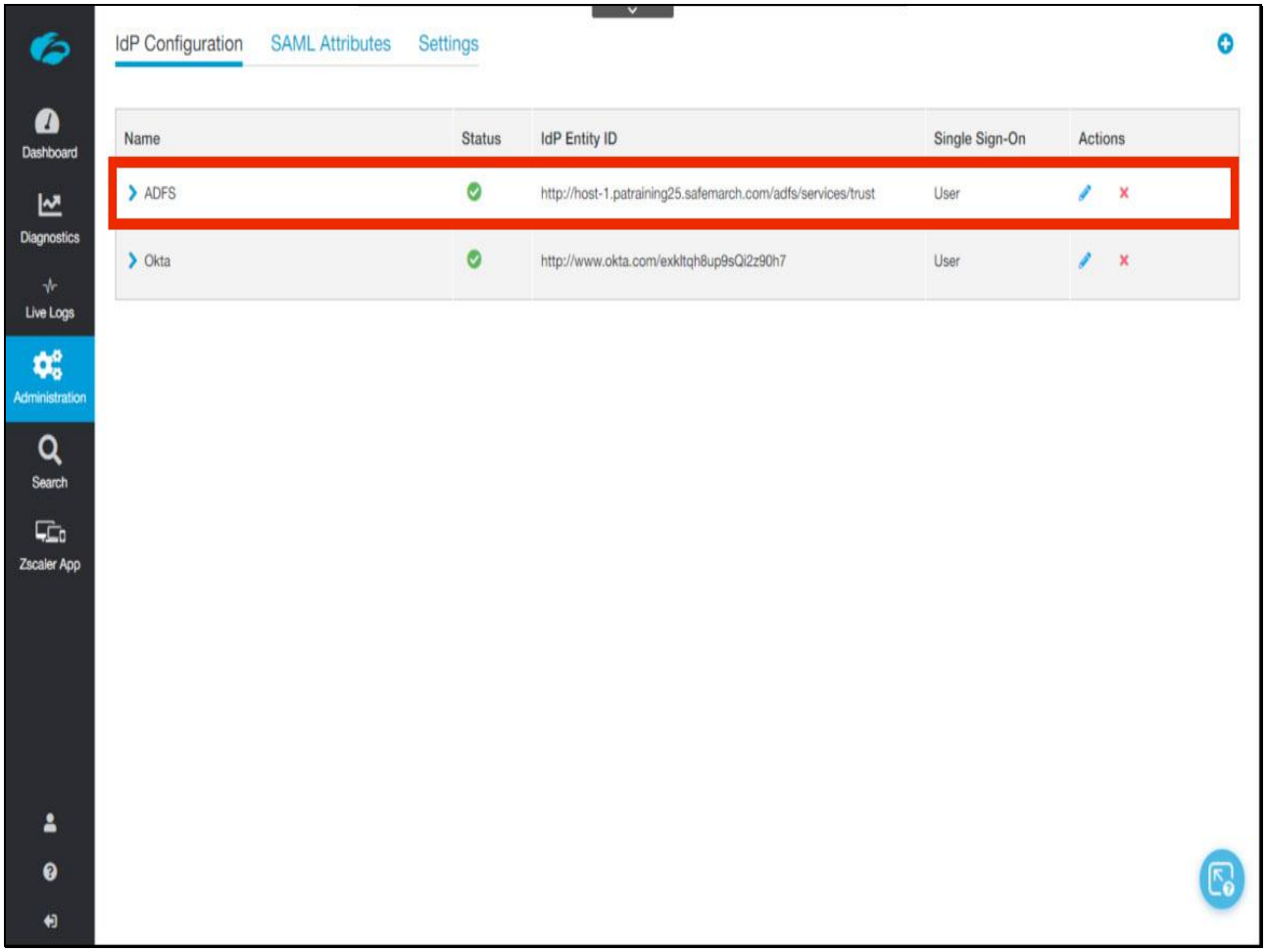
...configure IdP options as necessary and confirm the correct **Domains** are included, then click **Save**.

Slide 101 - Slide 101



Slide notes

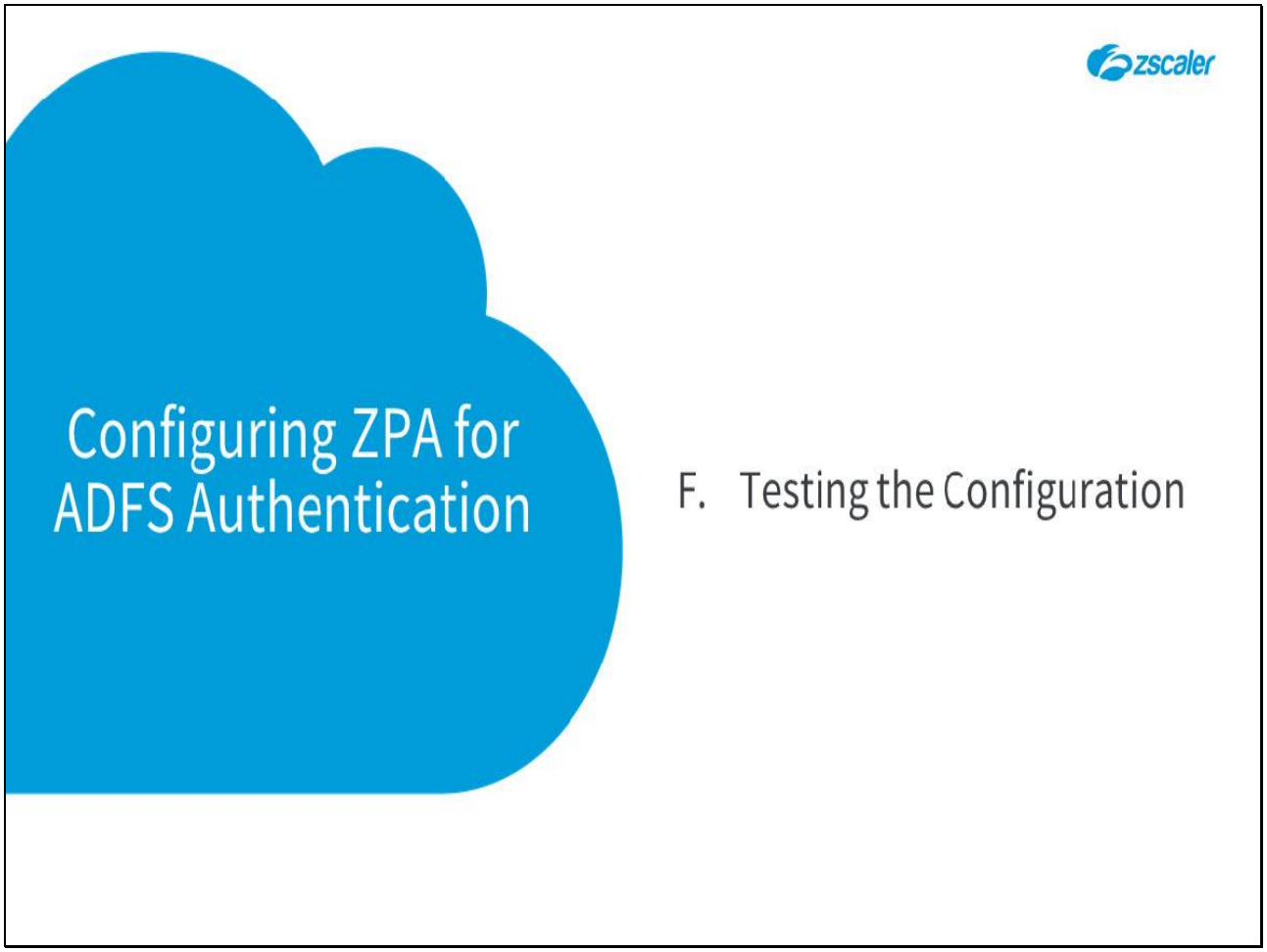
Slide 102 - Slide 102



Slide notes

The IdP will be saved and is ready for use.

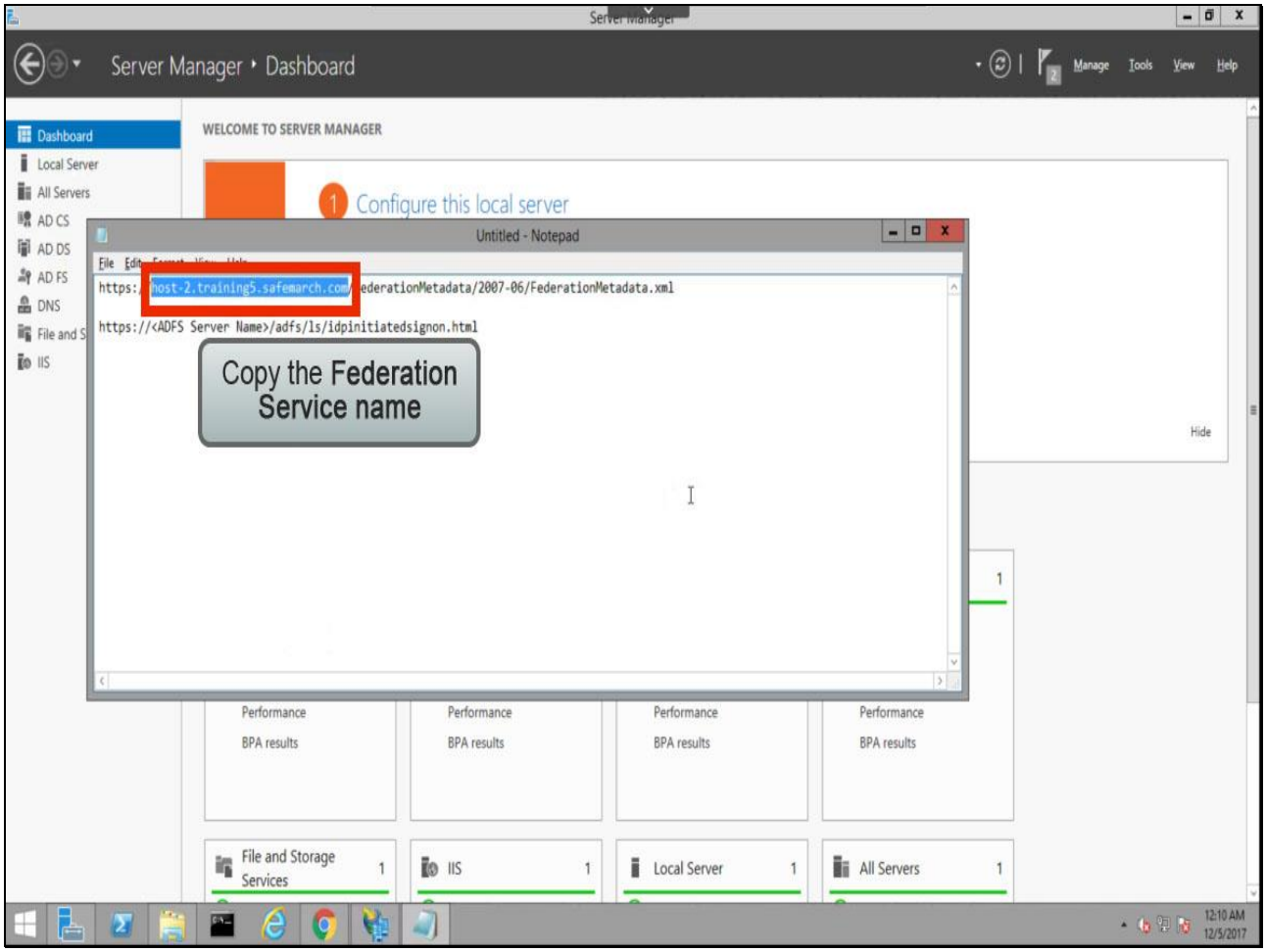
Slide 103 - Configuring ZPA for ADFS Authentication



Slide notes

Finally, we'll look at how to test the IdP configuration, and import attributes if necessary.

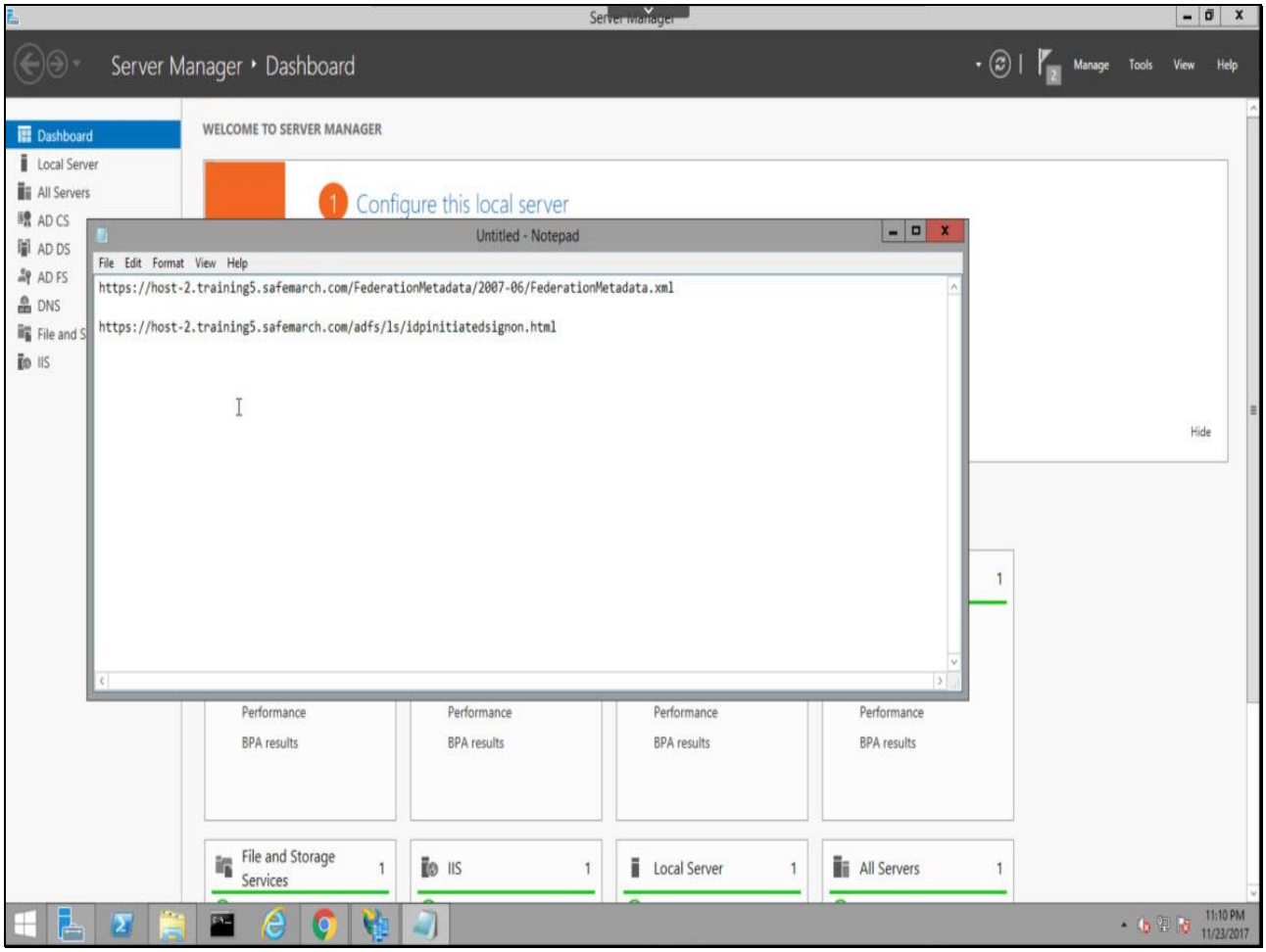
Slide 104 - Slide 104



Slide notes

Copy the Federation Service name once more, ...

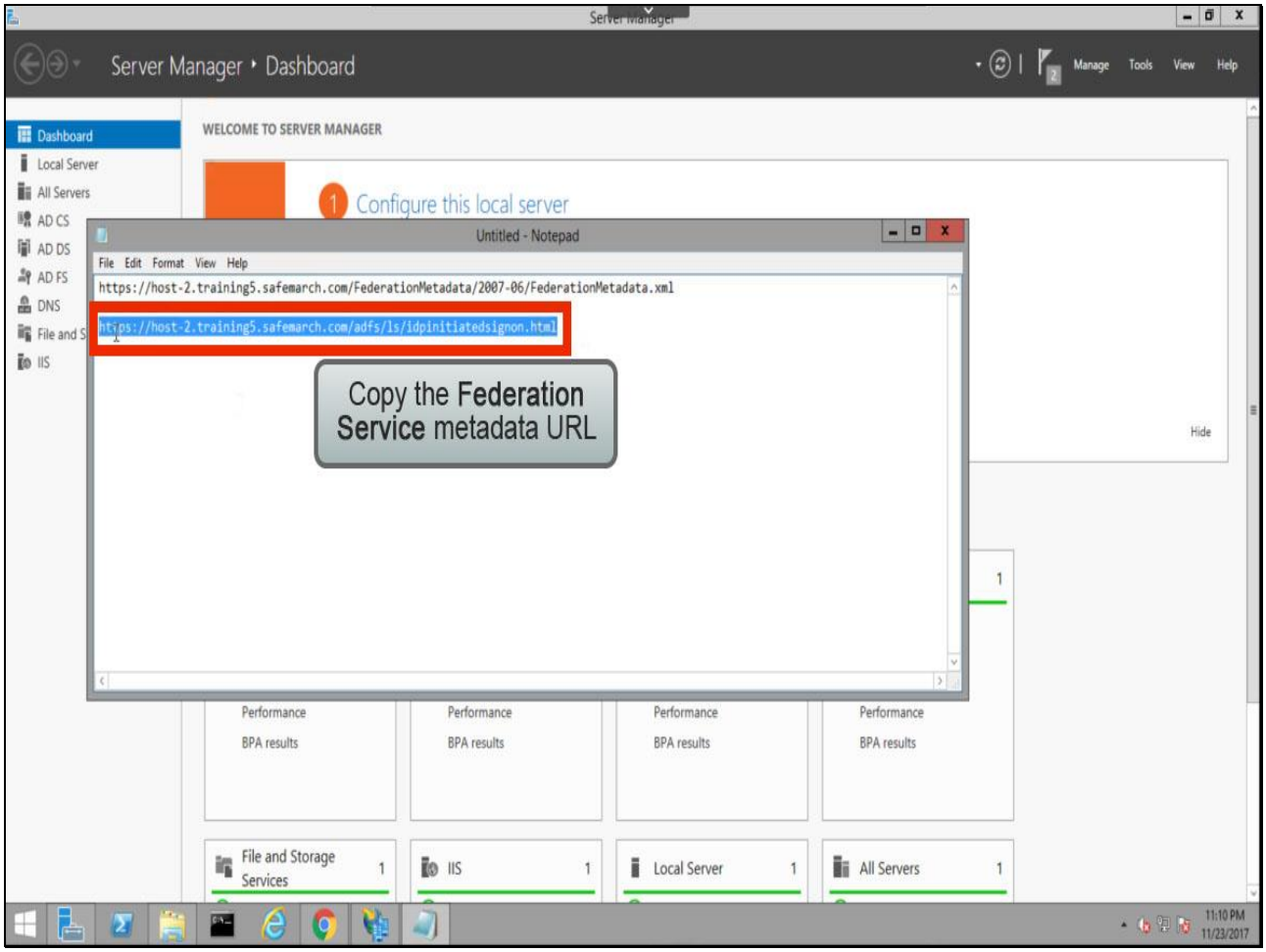
Slide 105 - Slide 105



Slide notes

...and paste it into the URL shown here (**https://<ADFS Server Name>/adfs/ls/idpinitiatedsignon.html**).

Slide 106 - Slide 106



Slide notes

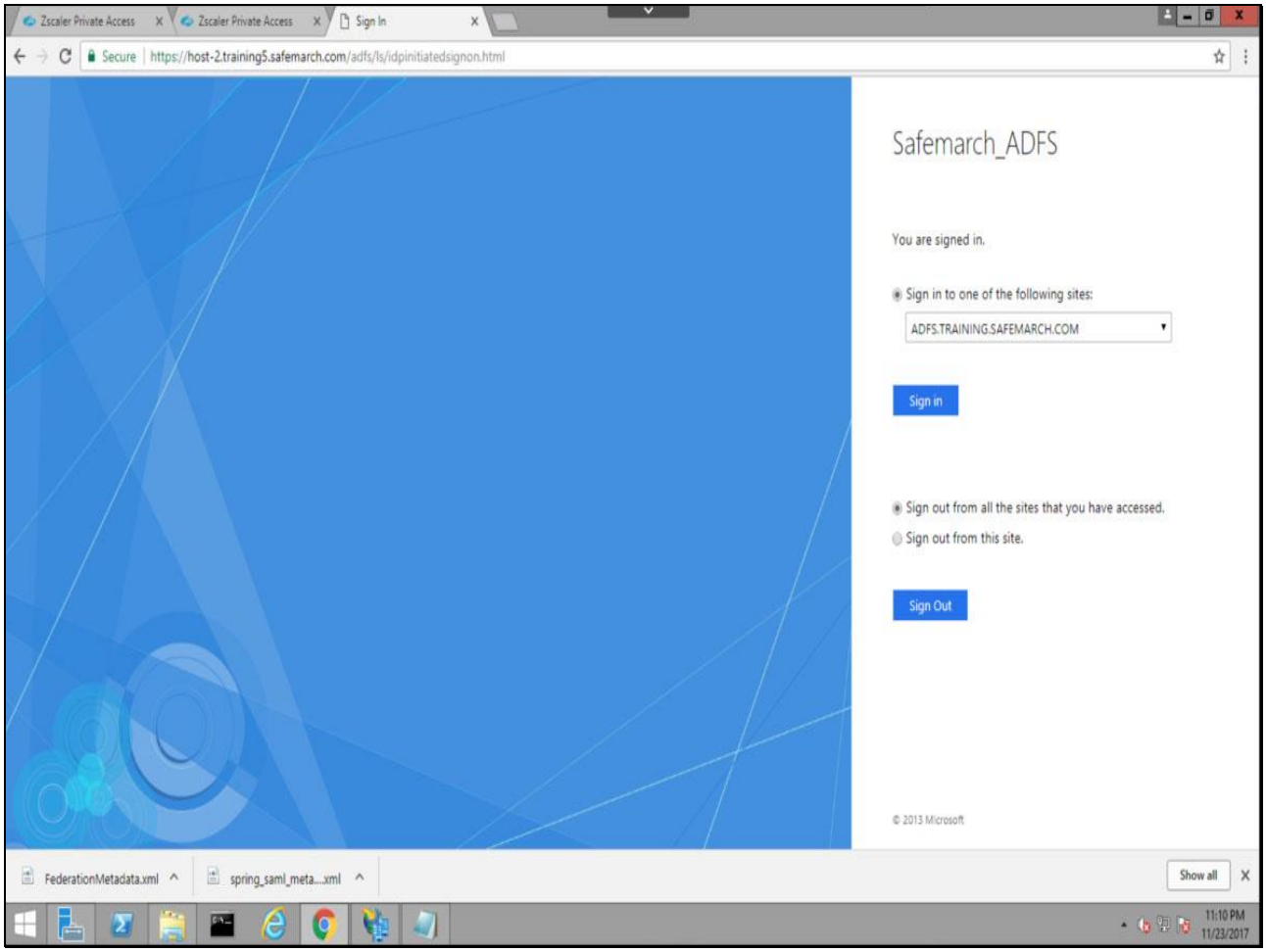
Copy the entire URL, ...

Slide 107 - Slide 107

Slide notes

...and paste it into a new Browser tab.

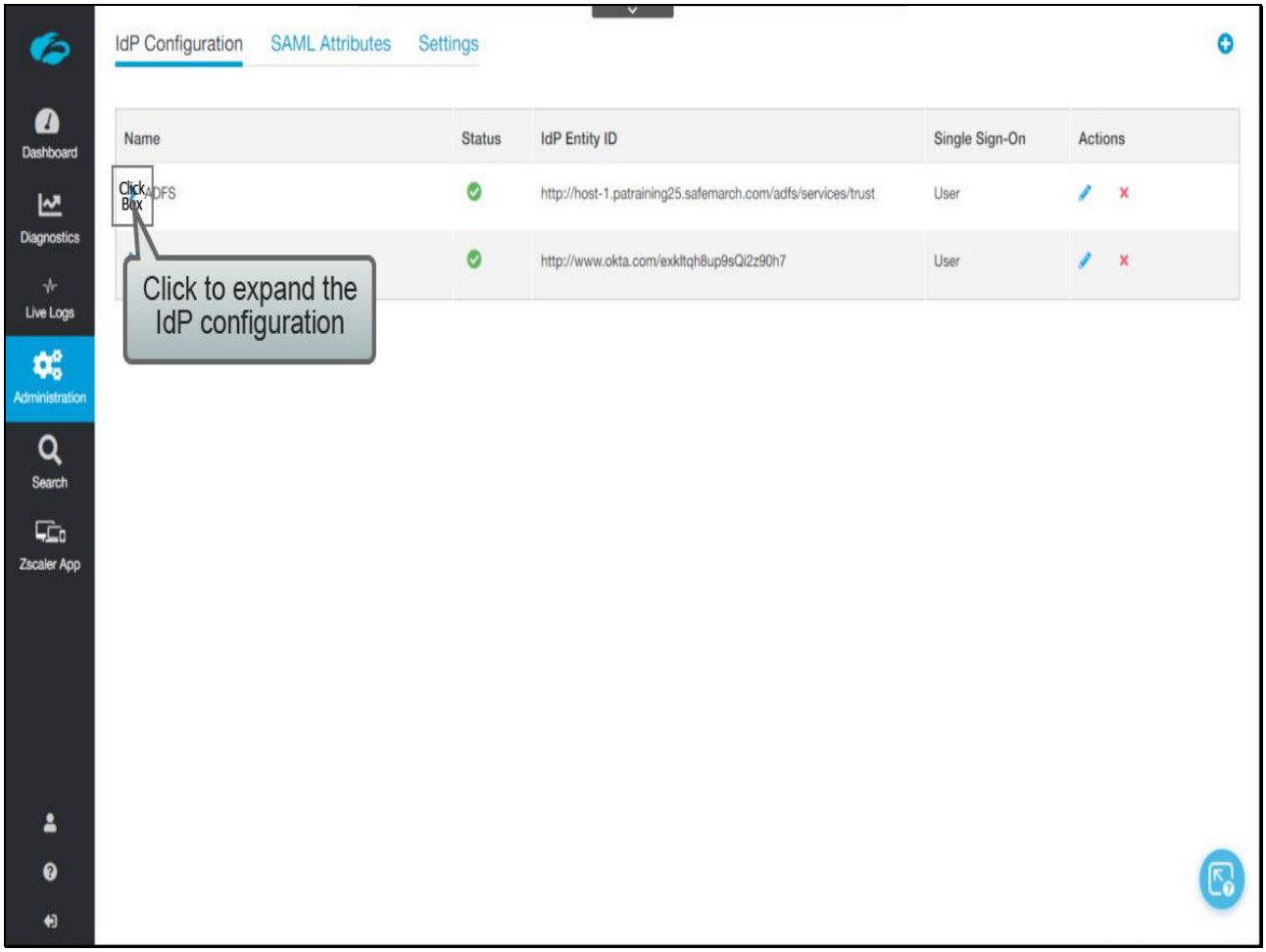
Slide 108 - Slide 108



Slide notes

Confirm that you are taken to the ADFS sign in page.

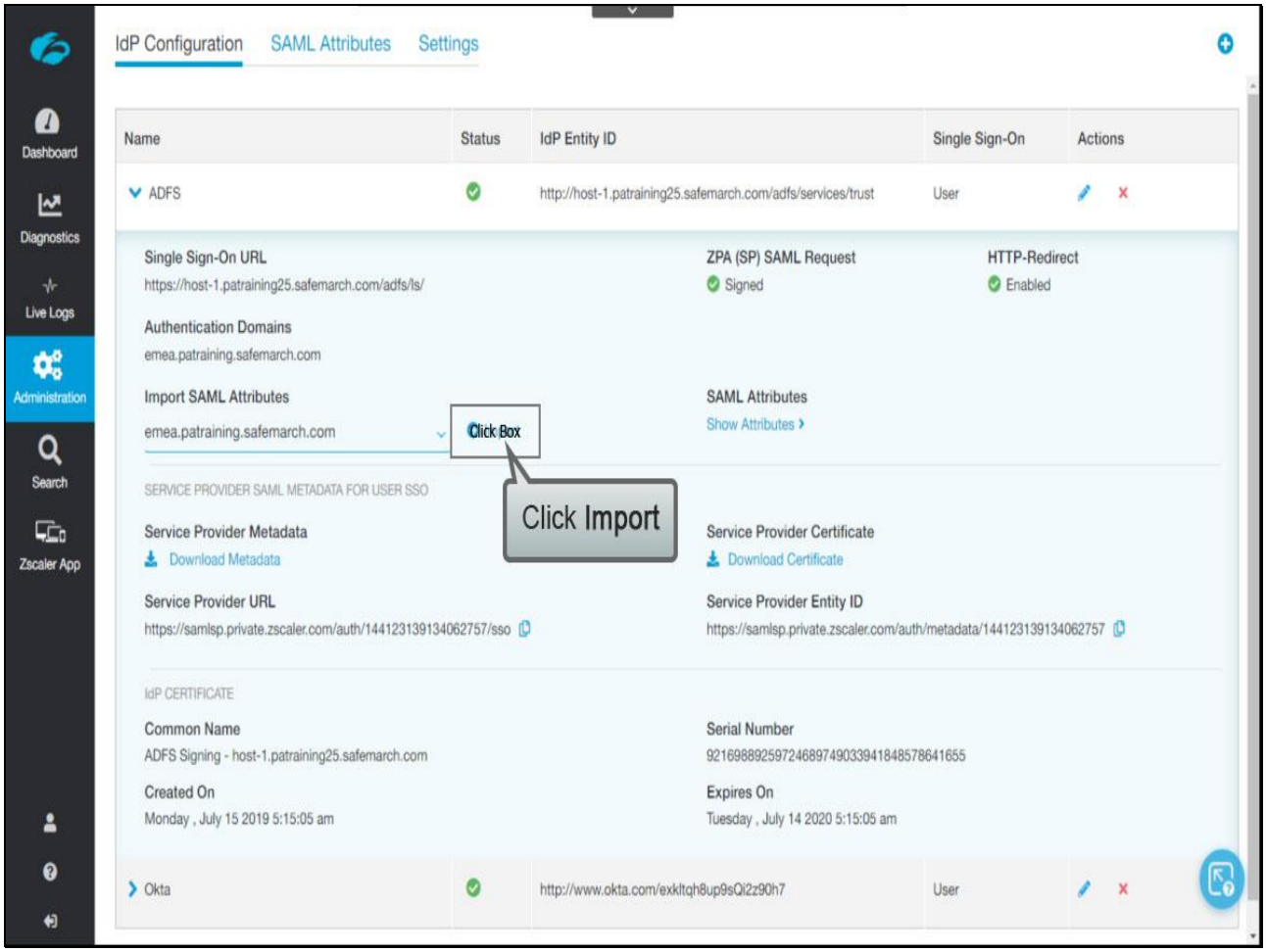
Slide 109 - Slide 109



Slide notes

In the ZPA admin portal, on the **Administration > AUTHENTICATION > IdP Configuration** page, expand the details for the ADFS IdP that you just added, ...

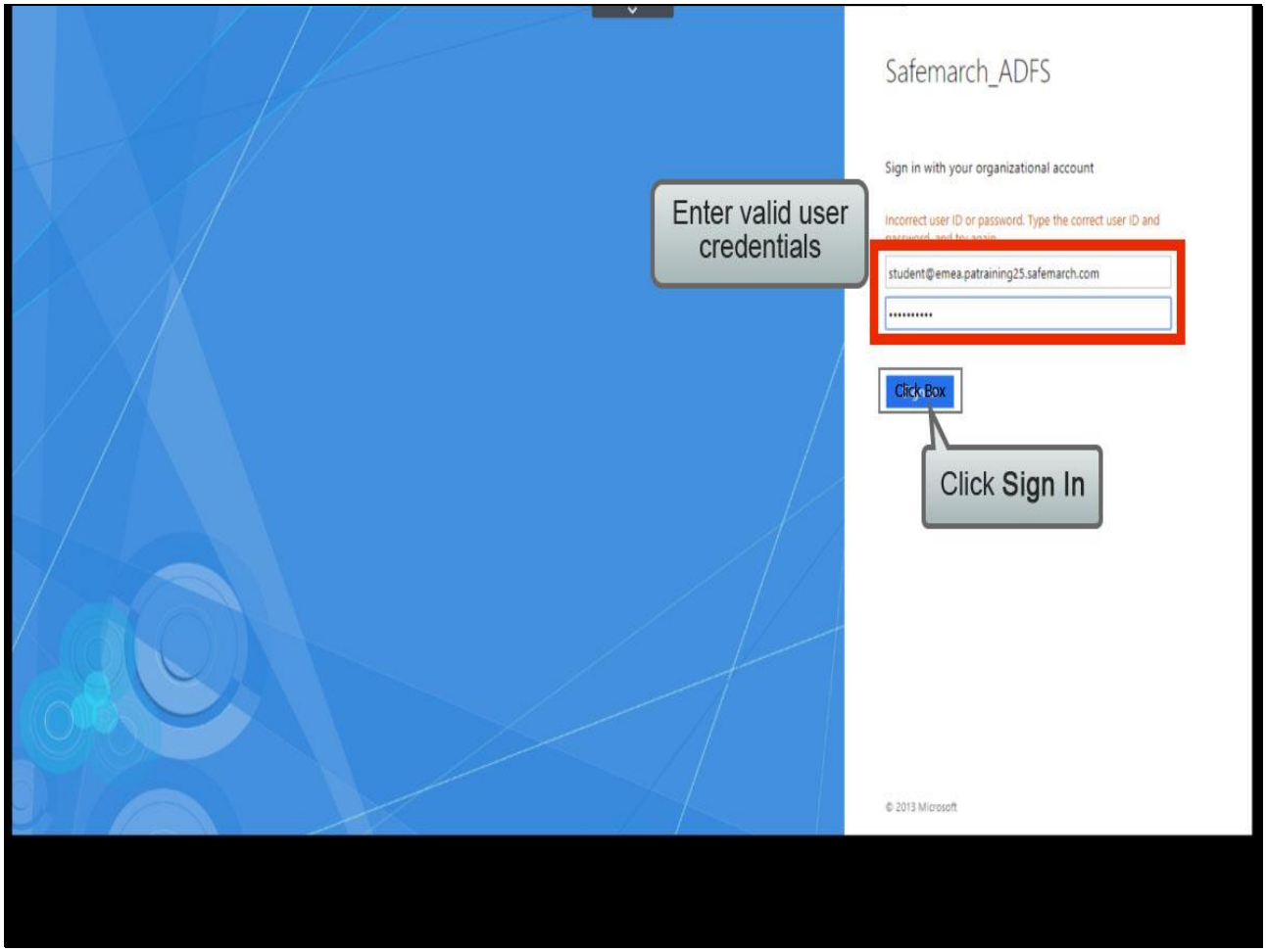
Slide 110 - Slide 110



Slide notes

...and click to **Import** SAML Attributes from the IdP.

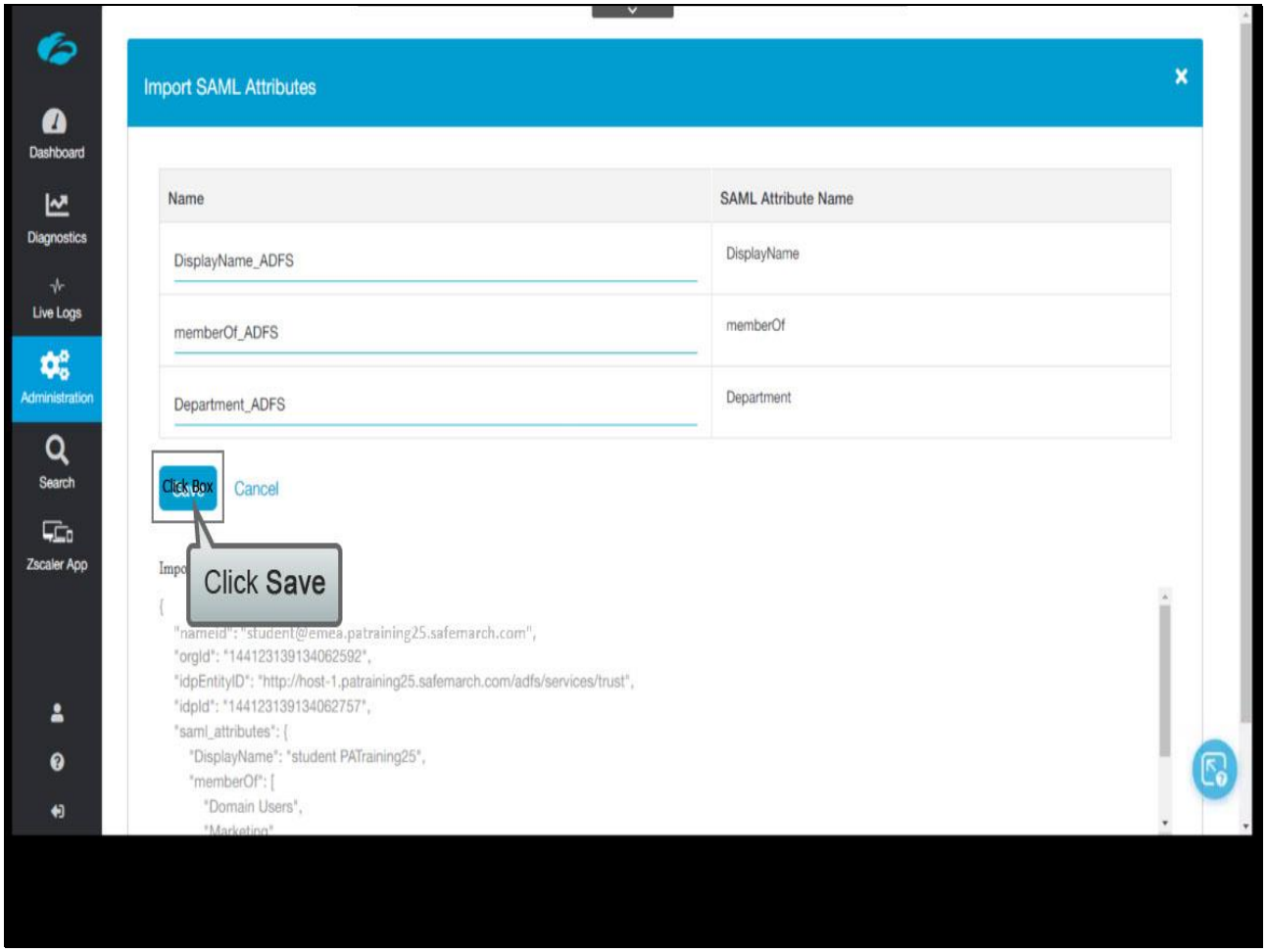
Slide 111 - Slide 111



Slide notes

Verify that you are taken to the ADFS sign-in page, enter valid user credentials and click **Sign In**.

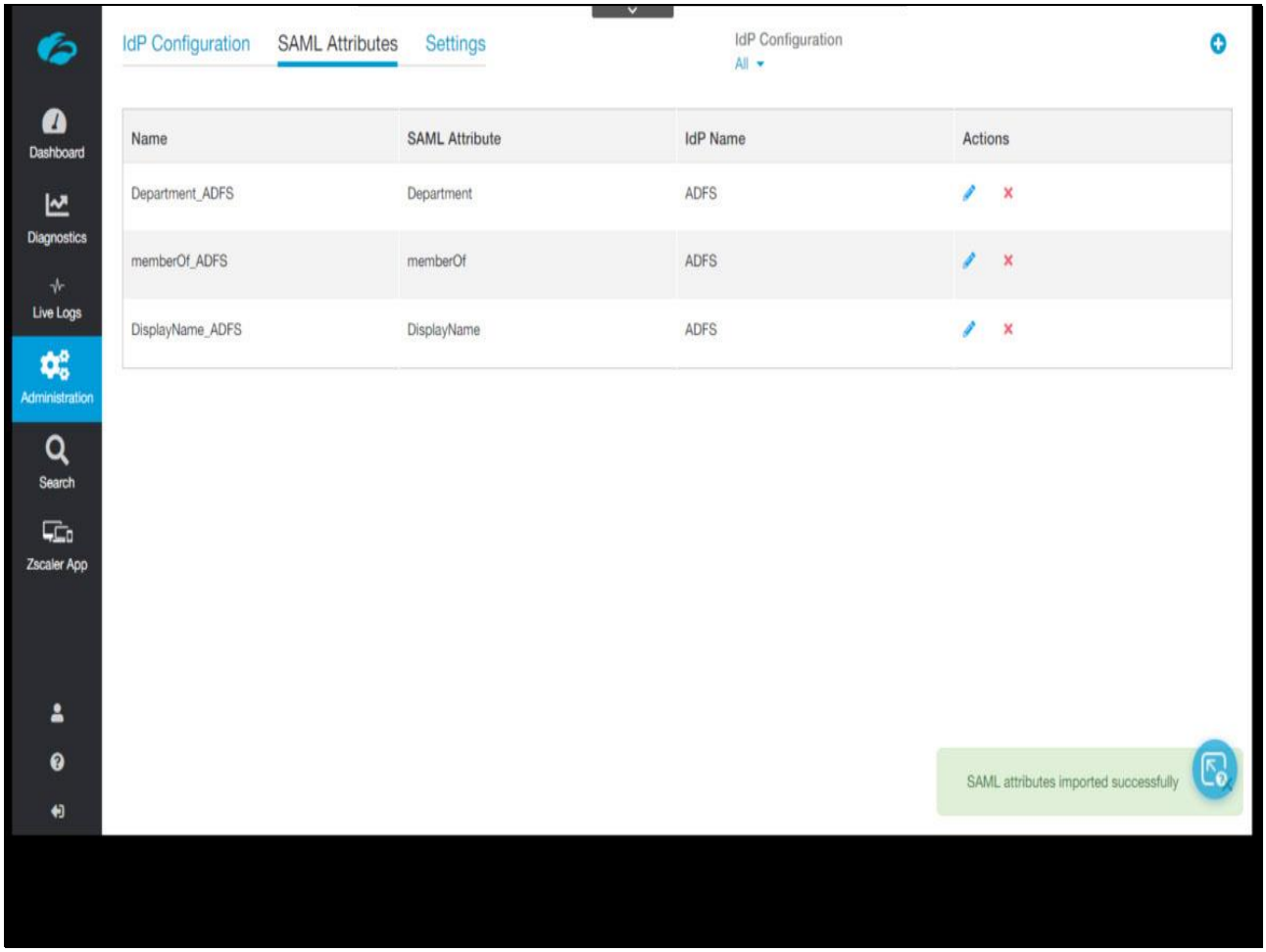
Slide 112 - Slide 112



Slide notes

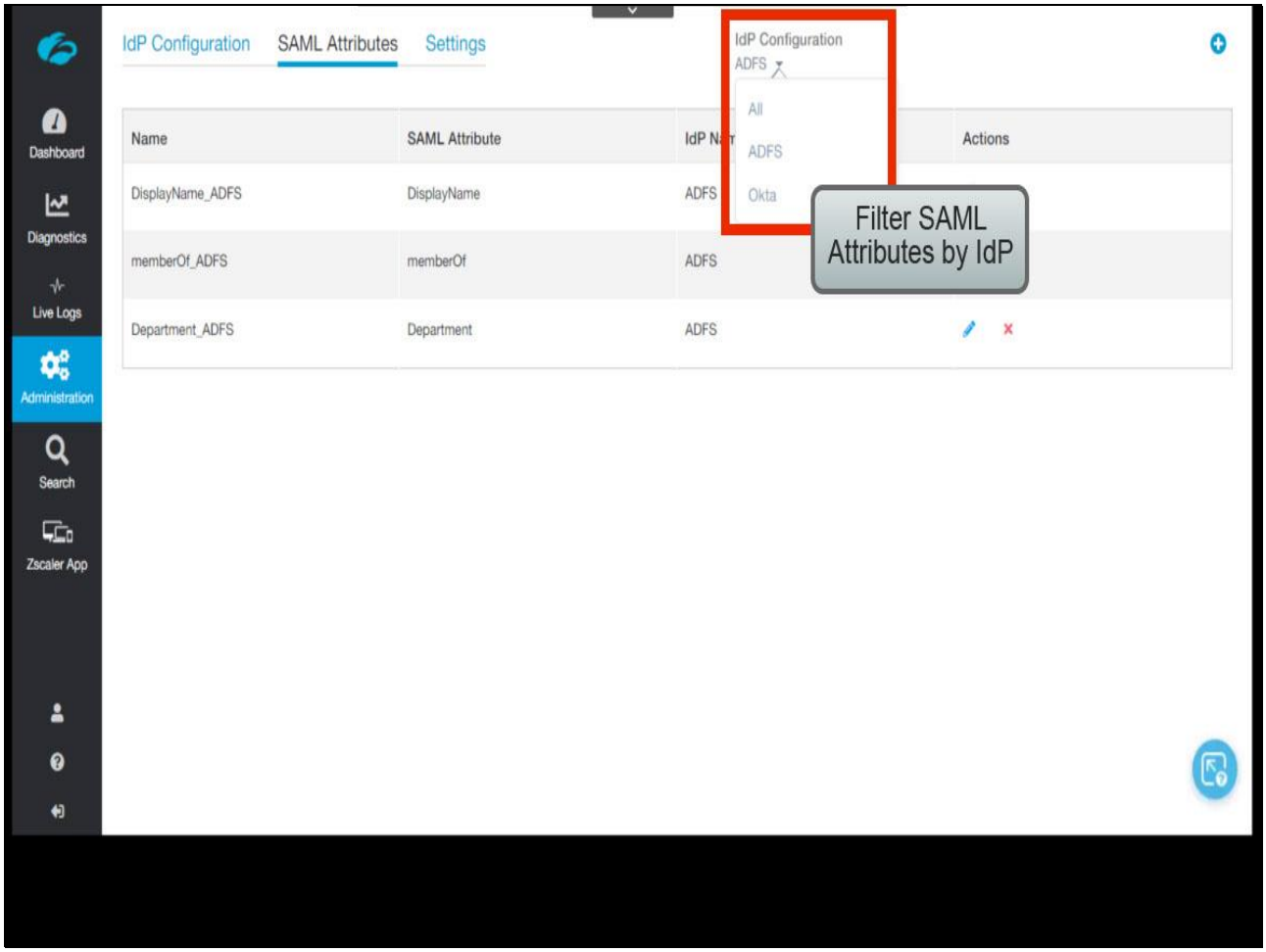
On a successful authentication, you will be shown the JSON script showing the returned attributes for the user. If you have not yet imported these, you can click **Save** to import any new attributes to the ZPA **SAML Attributes** configuration.

Slide 113 - Slide 113



Slide notes

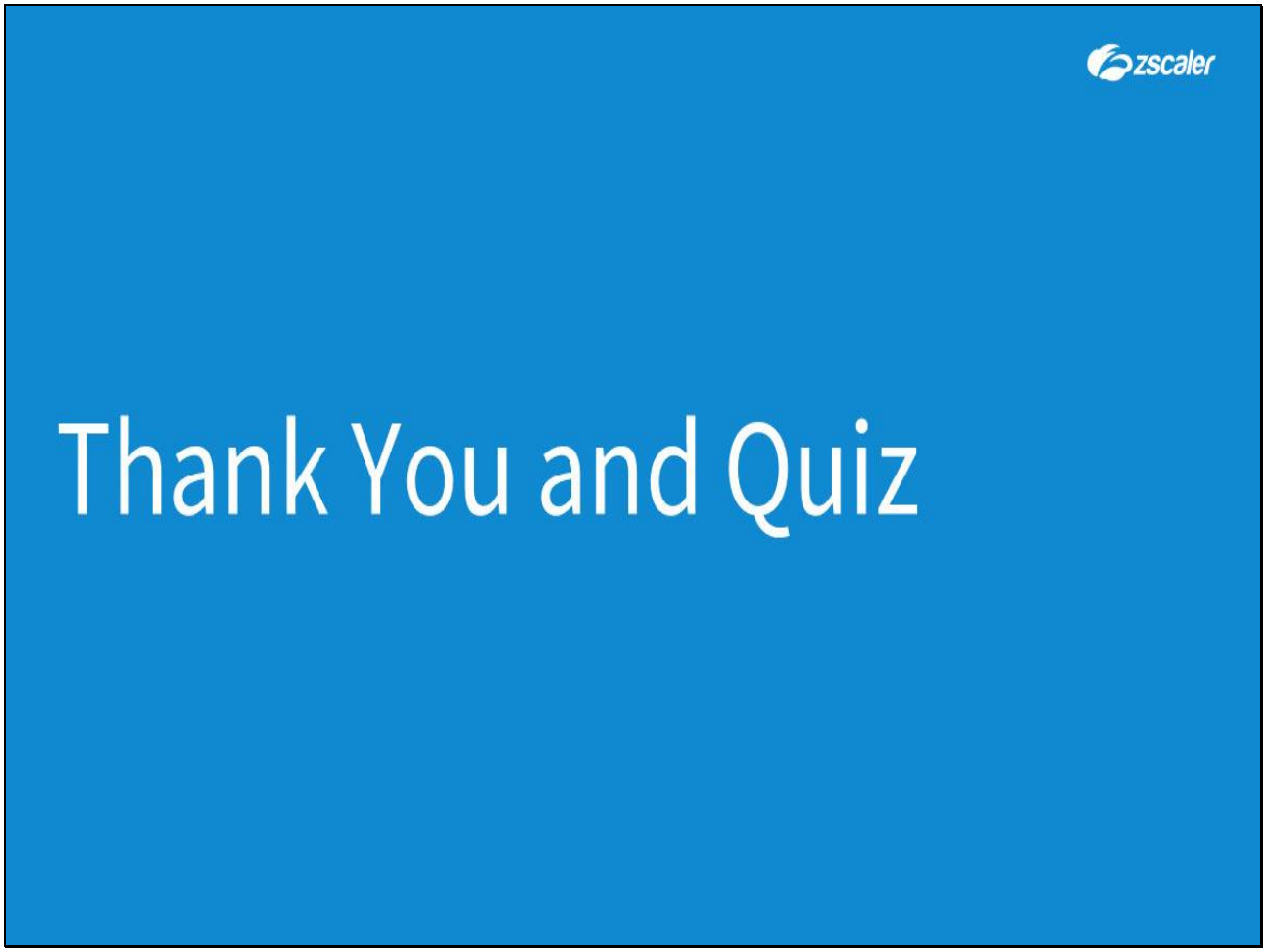
Slide 114 - Slide 114



Slide notes

On the **Administration > AUTHENTICATION > SAML Attributes** page, you have the option to filter the view to see only those attributes from the ADFS IdP that you just added.

Slide 115 - Thank You and Quiz



Slide notes

This completes the SAML module. We hope this module has been useful to you and thank you for your time.

What will follow is a short quiz to test your knowledge of the material presented in this module. You may retake the quiz as many times as necessary to pass.