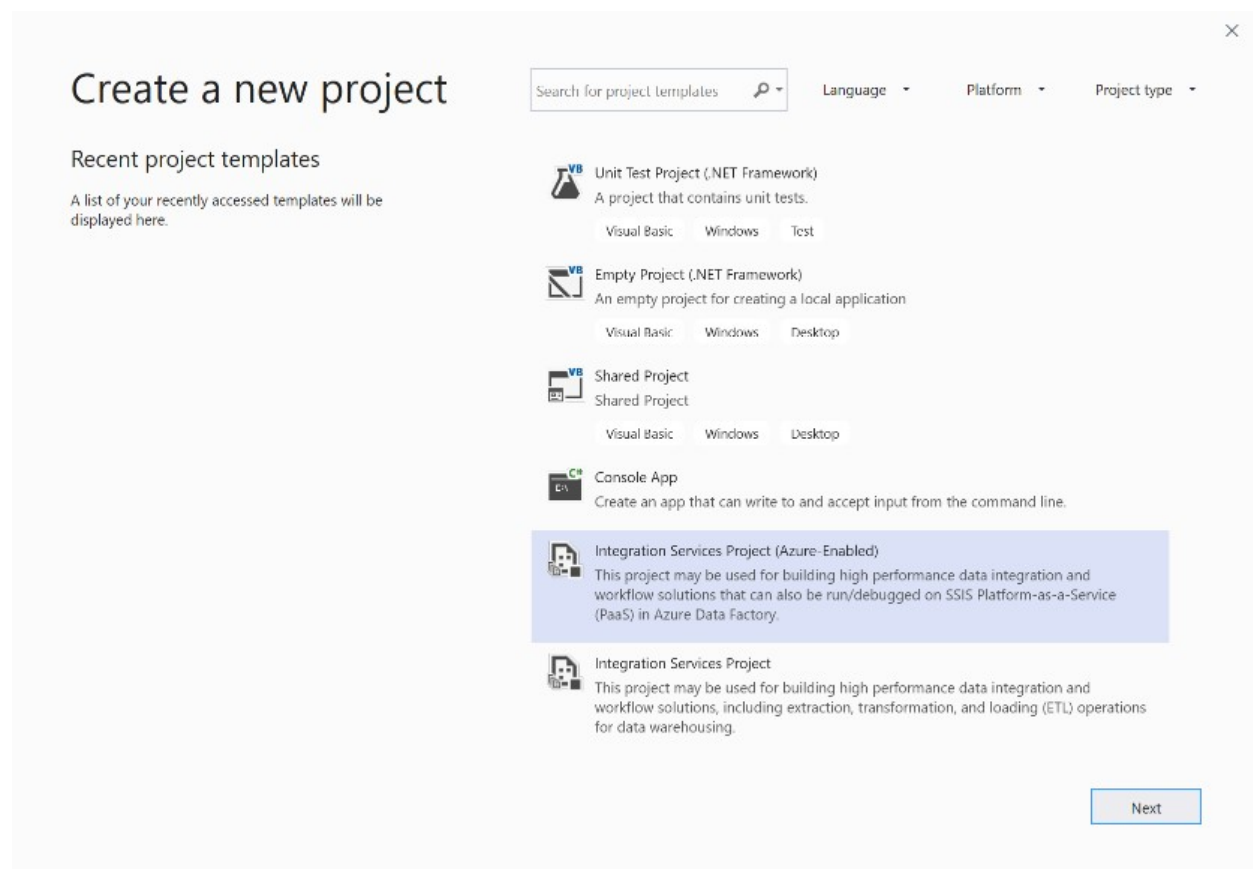


# Example - Run SSIS packages in Azure Data Factory

## Note:

You are not required to complete the processes, tasks, activities, or steps presented in this example. The various samples provided are for illustrative purposes only and it's likely that if you try this out you will encounter issues in your system.

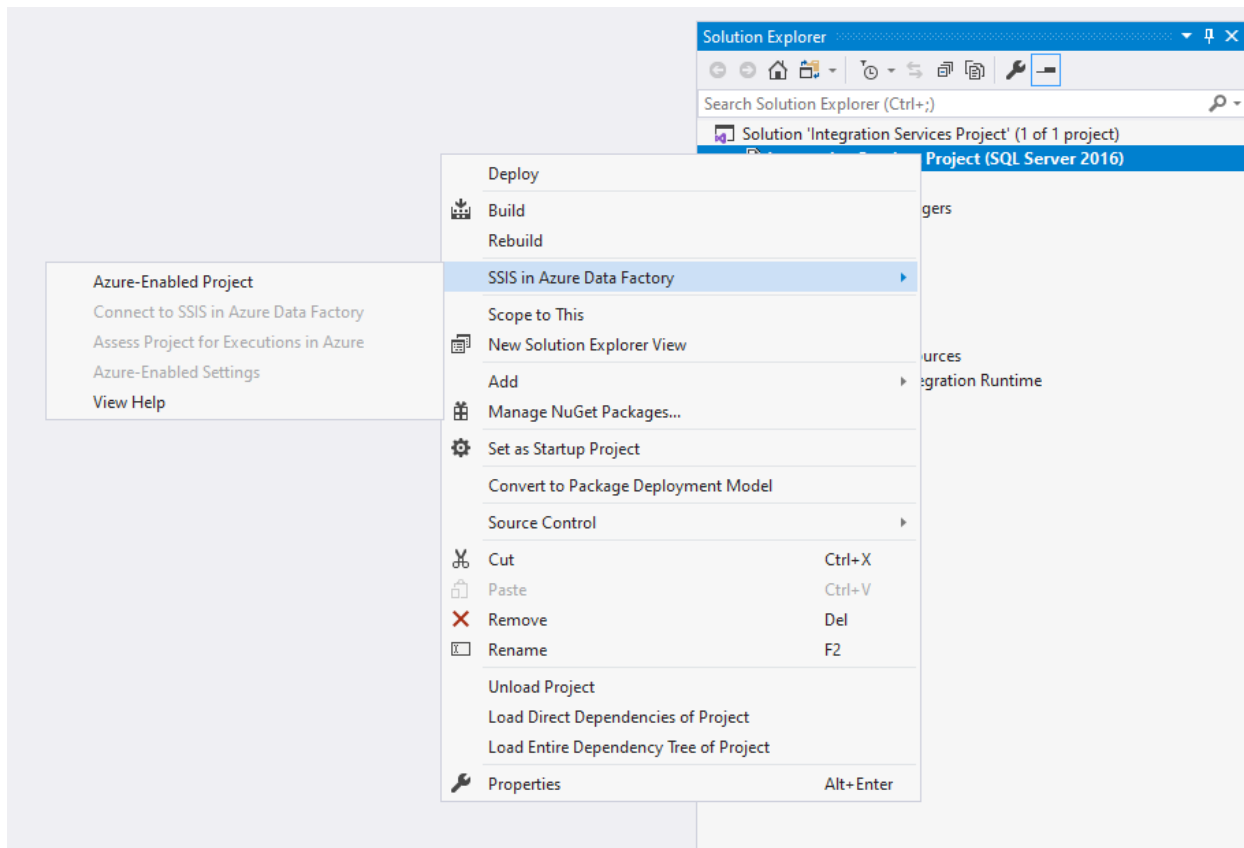
**SQL Server Data Tools (SSDT)** is typically used to create and deploy **SQL Server Integration Services (SSIS)** packages. It can be used for both on-premises SSIS packages, and for packages that will be used in Azure through Azure Data Factory. When creating a new SSIS package that is to be used in Azure, you first should select an Azure-enabled Integration Services Project, which will prompt you to connect to an instance of Azure Data Factory.



Create a new project in SSDT

**You may already have SSIS packages that you wish to have enabled for Azure. In this case, there is the option to open up the project in SSDT, and then right-click the project and click on Azure-Enabled**

**Project** menu item under the **SSIS in Azure Data Factory** submenu to launch the **Azure-Enabled Project Wizard**. You may already have SSIS packages that you wish to have enabled for Azure. In this case, there is the option to open up the project in SSDT, and then right-click the project and click on **Azure-Enabled Project** menu item under the **SSIS in Azure Data Factory** submenu to launch the **Azure-Enabled Project Wizard**.



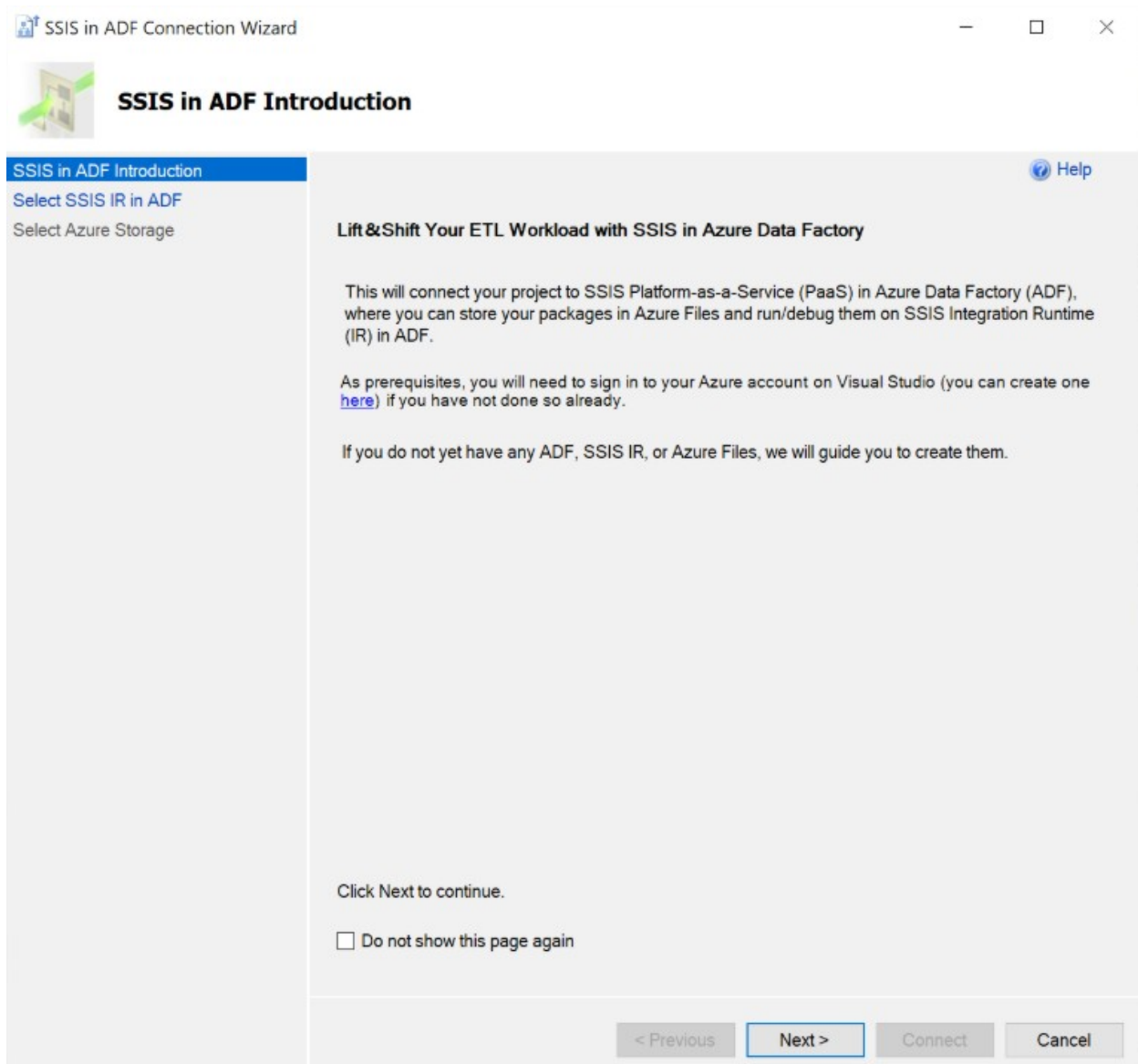
Enabling SSIS in Azure Data Factory

This opens up the **Azure-Enabled Project Wizard** where you can select the **Visual Studio** configuration to apply package execution settings in **Azure**. Select the target version supported by the **Azure-SSIS Integration Runtime (IR)**, which is currently **SQL Server 2017**, and finally connect to the **Azure-SSIS IR**. By connecting your **Azure-enabled** projects to **SSIS in ADF**, you can upload your packages into **Azure Files** and run them on **Azure-SSIS IR**. It also provides you with the capability to lift and shift **SSIS** packages to

## **SSIS in ADF connection wizard**

Lifting and shifting SSIS packages is achieved by running the SSIS in ADF Connection Wizard. This is a two-step wizard that takes SSIS projects stored in SSIS, and store them in Azure Files in a storage account that can then be run in an Azure-SSIS Integration Runtime.


On the **SSIS in ADF Introduction** page, review the introduction and click on the **Next** button to continue.



SSIS in ADF Introduction screen

On the **Select SSIS IR in ADF** page, select your existing ADF and Azure-SSIS IR to run packages or create new ones if you do not have any.

SSIS in ADF Connection Wizard

 **Select SSIS IR in ADF**

SSIS in ADF Introduction  
**Select SSIS IR in ADF**  
Select Azure Storage

<your account>

This will create/select an SSIS Integration Runtime (IR) in Azure Data Factory (ADF), where you can run/debug your packages.

**Azure Subscription:** <your subscription>

This is the subscription, under which you can first select your ADF displayed with its location below, and in turn you can then select your SSIS IR under it.

**Data Factory:** <your ADF>

This is the ADF, under which you can select your SSIS IR displayed with its location and status below.

**Integration Runtime:** <your SSIS IR>

This is the SSIS IR, where you can run/debug your packages.

If you do not yet have any ADF or SSIS IR, we will guide you to create them. Please click on the button below.

**Create SSIS IR**

< Previous   Next >   Connect   Cancel

Select the SSIS IT in ADF

**On the **Select Azure Storage** page, select your existing Azure Storage account to upload packages into Azure Files or create a new one if you do not have any.**

SSIS in ADF Connection Wizard

**Select Azure Storage**

SSIS in ADF Introduction  
Select SSIS IR in ADF  
Select Azure Storage

<your account>

This will create/select an Azure Storage to store your packages in [Azure Files](#).

**Azure Subscription:** <your subscription>

This is the subscription, under which you can select your Azure Storage displayed with its location below.

**Azure Storage:**

This is the storage account that will be used to store your packages in Azure Files.

If you do not yet have any Azure Storage, we will guide you to create one - If your SSIS IR is also under the same subscription, we will create one on your behalf in the same location as your SSIS IR, named by combining a prefix of your SSIS IR name and its time of creation as " <xxxxxxxxxxxxxxxxxxxxxxxx> ", otherwise we will direct you to create one on Azure portal. Please click on the button below.

Create Azure Storage

< Previous Next > Connect Cancel

Select Azure Storage

Click on the **Connect** button to complete your connection.

## Executing SSIS packages

There are pre-execution steps that you should perform before executing an SSIS package. These include a variety of setting such as project settings and authentication settings for the SSIS package. This can be done by performing the following steps

Right-click on the project node in Solution Explorer panel of SSDT to pop up a menu and then selecting the **Azure-Enabled Settings** menu

item under the **SSIS in Azure Data Factory** submenu. Click the **Enable Windows Authentication** drop-down list and choose **True**. Then click the edit button for **Windows Authentication Credentials** option to enter the credentials.

The screenshot shows the 'Integration Services Project Property Pages' dialog box. At the top, 'Configuration' is set to 'Azure' and 'Platform' is 'N/A'. The left sidebar shows 'Configuration Properties' with 'General' selected. The main area displays 'Azure-Enabled Settings' and 'Deployment Target Version'. Under 'Azure-Enabled Settings', 'Azure-Enabled Project' and 'Enable Windows Authentication' are both set to 'True'. 'Suppressed Assessment Rule IDs' is empty. 'Windows Authentication Credentials' is highlighted in blue with an edit button (three dots) to its right. Under 'Deployment Target Version', 'TargetServerVersion' is set to 'SQL Server 2017'. At the bottom, there is a section for 'Windows Authentication Credentials' with the description 'Specifies the domain/username/password for Windows authentication'. The 'OK', 'Cancel', and 'Apply' buttons are at the bottom right.

Azure-Enabled Settings	
Azure-Enabled Project	True
Enable Windows Authentication	True
Suppressed Assessment Rule IDs	
Windows Authentication Credentials	...

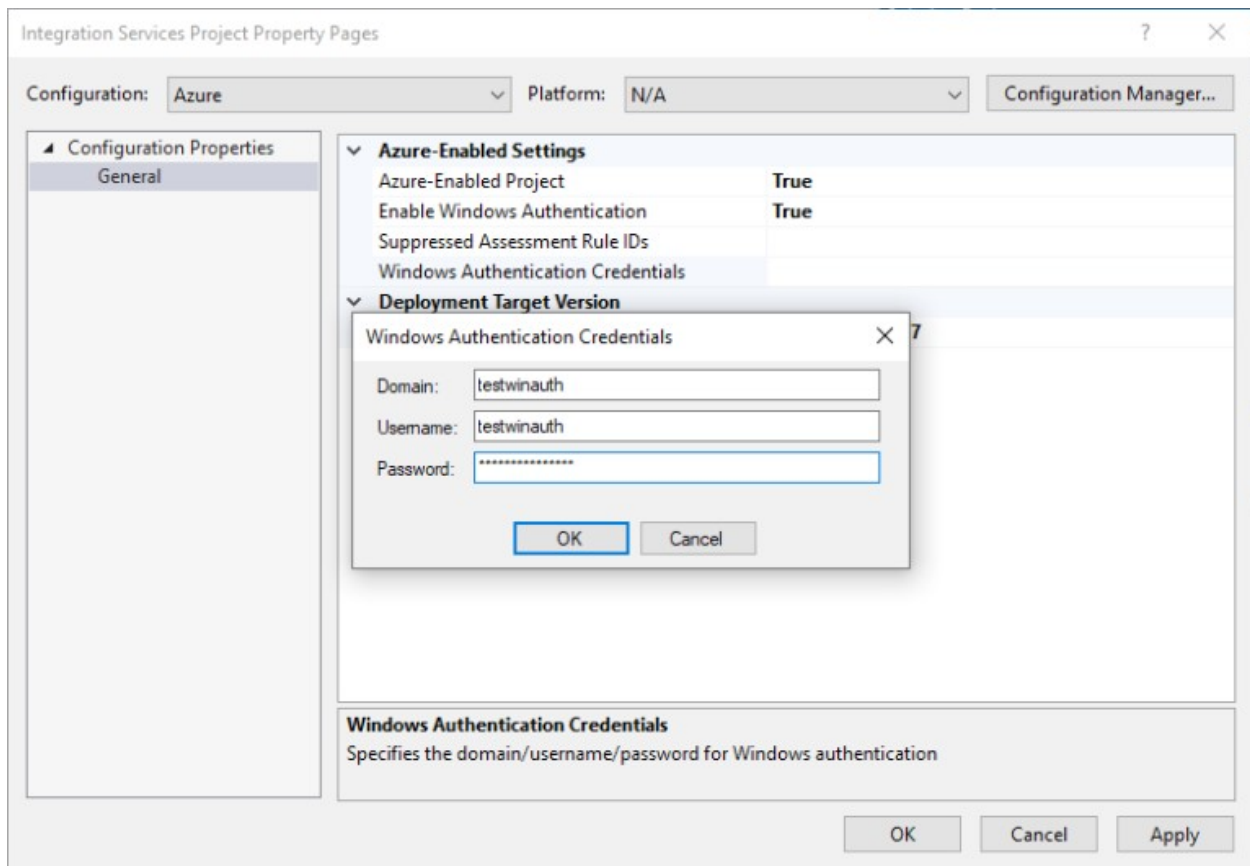
Deployment Target Version	
TargetServerVersion	SQL Server 2017

**Windows Authentication Credentials**  
Specifies the domain/username/password for Windows authentication

OK Cancel Apply

Integration Services Project Property Pages

**Provide credentials in the Windows Authentication Credentials editor.**



Configuring Windows Authentication

**With these settings configured, you can then execute the packages in Azure from within SSDT by either clicking on the Start button, and then clicking on Execute in Azure. Alternatively right-click on the package node in Solution Explorer panel of SSDT to pop up a menu and select the Execute Package in Azure menu item.**

