

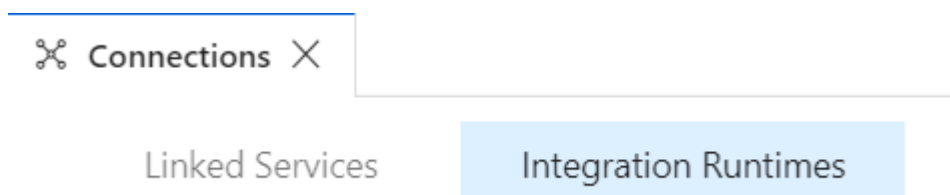
Lab 02 – Loading Data from Local SQL DB to Lake

You will need:

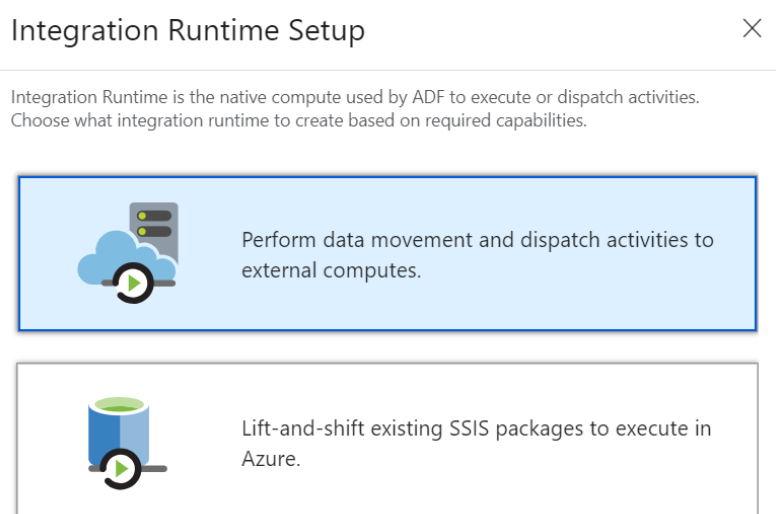
- Access to install software on your local machine
- A local copy of AdventureWorksDW

Lab 02.A – Install the Self Hosted Integration Runtime locally

1. To start off, within Azure Data Factory, navigate to the “Integration Runtimes” section to register the new self-hosted runtime.



2. Here you can click the “New” button to create our new IR. You will be presented with the following options, we’re working with external computers, so select that option.



3. Next we need to confirm that we want to create a new Self Hosted IR, rather than other types of runtime:

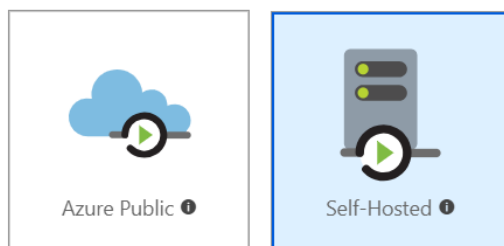


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Integration Runtime Setup



Choose the network environment of the data source/destination or external compute to which the integration runtime will connect to for data movement or dispatch activities:



- The next dialog allows us to either install an IR automatically, or install the application ourselves and register it. Let's install it manually so you can see the registration process. Click "Download and Install integration runtime" and follow the options through.

Integration Runtime Setup



Settings

Nodes

Auto update

Sharing

Install integration runtime on Windows machine or add further nodes using the Authentication Key.

Name

SAWLaptop

Option 1: Express setup

[Click here to launch the express setup for this computer](#)

Option 2: Manual setup

Step 1: [Download and install integration runtime](#)

Step 2: Use this key to register your integration runtime

Name	Authentication Key
Key1	<div><div></div><div></div></div>
Key2	<div><div></div><div></div></div>

- Once the SHIR has installed, you will be prompted for an Authentication key, these are the ones shown in step 4. Just take one and copy it in here.



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Microsoft Integration Runtime Configuration Manager ×

Register Integration Runtime (Self-hosted)

Welcome to Microsoft Integration Runtime Configuration Manager. Before you start, register your Integration Runtime (Self-hosted) node using a valid Authentication Key.

☐ Show Authentication Key [Learn how to find the Authentication Key](#)

HTTP Proxy

Current Proxy: No proxy [Change](#)

Register
Cancel

The key will be validated once entered:

✓

☐ Show Authentication Key [Learn how to find the Authentication Key](#)

- Confirm this and you will be prompted with a new SHIR registration:

New Integration Runtime (Self-hosted) Node

Integration Runtime (Self-hosted) node name: ⓘ

ACLSAWWIN10

✓

Below is the list of Integration Runtime (Self-hosted) Nodes:

SAWLaptop

ACLSAWWIN10 : Current New Node

Confirm this and the HTTP Proxy setup will run, registering your local installation with the new Integration Runtime we created in ADF.

HTTP Proxy

Current Proxy: No proxy [Change](#)

✓

Integration Runtime (Self-hosted) node has been registered successfully.

- You can now run the Configuration Manager see more details about the local installation, but it is ready to start working with Data Factory!

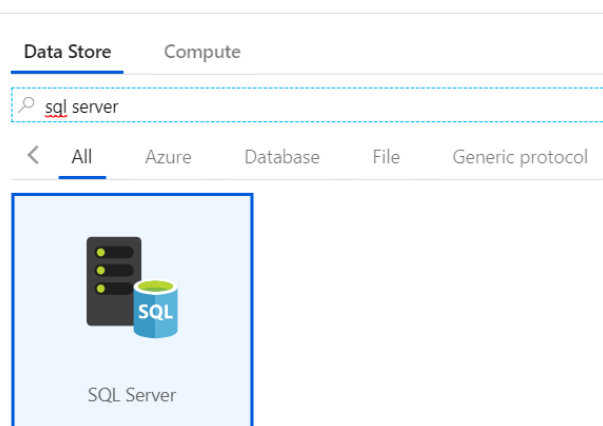


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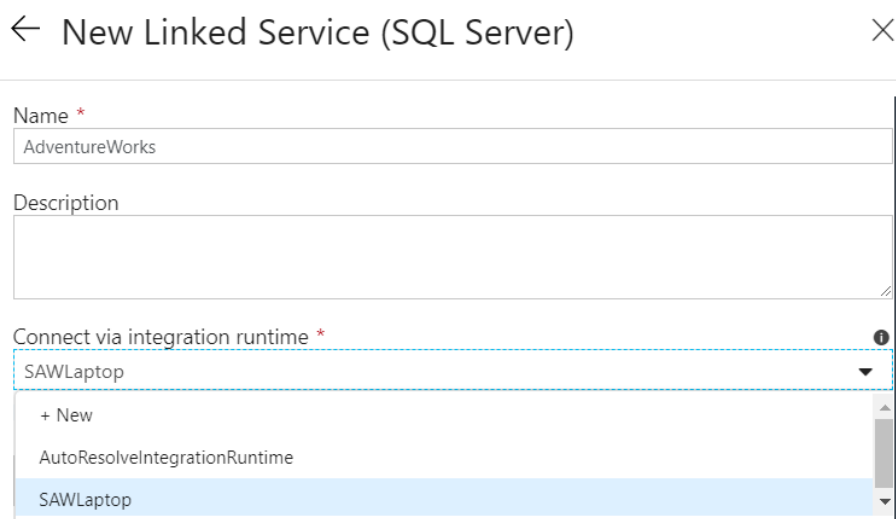
Lab 02.B – Register a local data source using the new SHIR

1. Let's create a new linked service to take advantage of the Self-Hosted Integration Runtime. Head back to the Linked Services tab under "Connections" and click to add a new Linked Service.
2. Search for "SQL Server" and click "Continue"

New Linked Service



3. You will now be able to select your Self Hosted Integration Runtime under the "Connect Via Integration Runtime" option:



4. From here on, the connection can be defined as it would be on your local machine. For demonstration, I've used "." as the server reference and a windows account. In production environments, you would always specify the full SQL address and use a service account.

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Connection String

Azure Key Vault

Server name *

Database name *
 AdventureWorksDW

Authentication type
 Windows Authentication

User name *
 ACL\SAW

Password

Azure Key Vault

Password *

Additional connection properties
+ New

Connection successful

Cancel

Test connection

Finish

- Click Finish and your new Linked Service is ready to go. We should now have linked services for our local SQL Server and the new Azure Data Lake Store Gen 2.

