

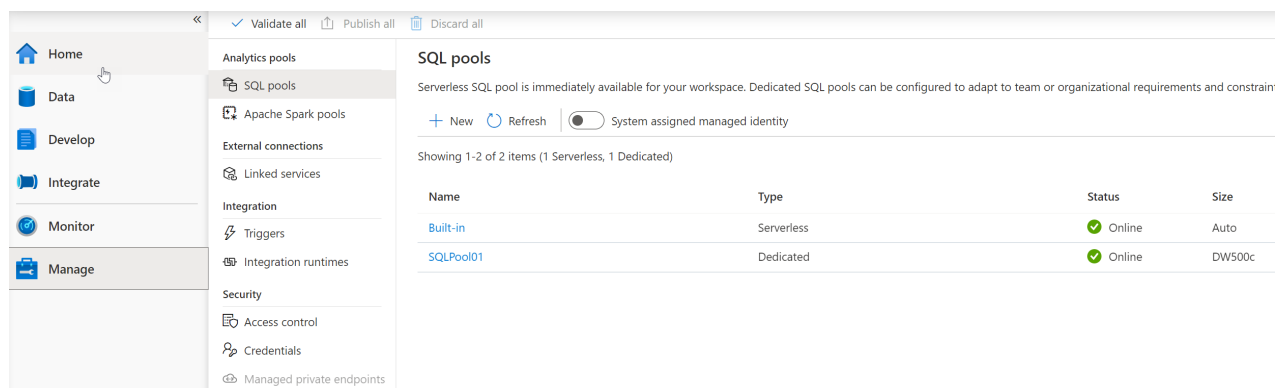
# Exercise - Create pools in Azure Synapse Analytics

9 minutes

To create an Azure Synapse Analytics pool, perform the following steps:

## For Azure Synapse SQL pool

1. Launch Azure Synapse Studio. The URL can be found in the Azure Synapse Workspace created in the Azure portal.
2. In Azure Synapse Studio, navigate to the **Management Hub** in the left navigation by selecting the **Manage** icon.



3. Once in the Management Hub, navigate to the **SQL pools** section to see the current list of SQL pools that are available in the workspace.
4. Select + **New** command and the new SQL pool create wizard will appear.

### Create dedicated SQL pool

Basics \* Additional settings \* Tags Review + create

Create a dedicated SQL pool with your preferred configurations. Complete the **Basics** tab then go to **Review + create** to provision with smart defaults. [Learn more](#)

#### Dedicated SQL pool details

Name your dedicated SQL pool and choose its initial settings.

Dedicated SQL pool name \*

Performance level ⓘ  DW1000c

Estimated price ⓘ

5. Enter the following details in the **Basics** tab:

- SQL pool name: SQLPool01
- Performance level: DW100c

6. In the next tab, **Additional settings**, select **none** to provision the SQL pool without data. Leave the default collation as selected.

### Create dedicated SQL pool

Basics \* Additional settings \* Tags Review + create

Customize additional configuration parameters including collation.

#### Data source

Start with a blank dedicated SQL pool or restore from a backup to populate your new dedicated SQL pool.

Use existing data \* ☒ None ☐ Backup ☐ Restore point

#### SQL pool collation

Collation defines the rules that sort and compare data, and cannot be changed after SQL compute creation. The default collation is SQL\_Latin1\_General\_CP1\_CI\_AS. [Learn more](#)

Collation \* ⓘ

7. We won't add any tags for now, so next select **Review + create**.

8. In the **Review + create** tab, make sure that the details look correct based on what was previously entered, and press **create**

Create dedicated SQL pool

Basics

Additional settings

Tags

Review + create

Product details

Azure Synapse Analytics dedicated SQL pool by Microsoft

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Est. cost per hour

[View pricing details](#)

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By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. For additional details see Azure Marketplace Terms. [Azure Marketplace Terms](#)

Data source

Dedicated SQL pool name

Performance level

DW1000c

Additional settings

Use existing data

Blank

Collation

SQL\_Latin1\_General\_CP1\_CI\_AS

At this point, the resource provisioning flow will start. After the provisioning completes, navigating back to the workspace will show a new entry for the newly created SQL pool.

- Once the SQL pool is created, it will be available in the workspace for loading data, processing streams, reading from the lake, etc.

Home

Data

Develop

Integrate

Monitor

Manage

Validate all

Publish all

Discard all

Analytics pools

SQL pools

Apache Spark pools

External connections

Linked services

Integration

Triggers

Integration runtimes

Security

Access control

Credentials

Managed private endpoints

SQL pools

Serverless SQL pool is immediately available for your workspace. Dedicated SQL pools can be configured to adapt to team or organizational requirements and constraints. [Learn more](#)

+ New

Refresh

System assigned managed identity

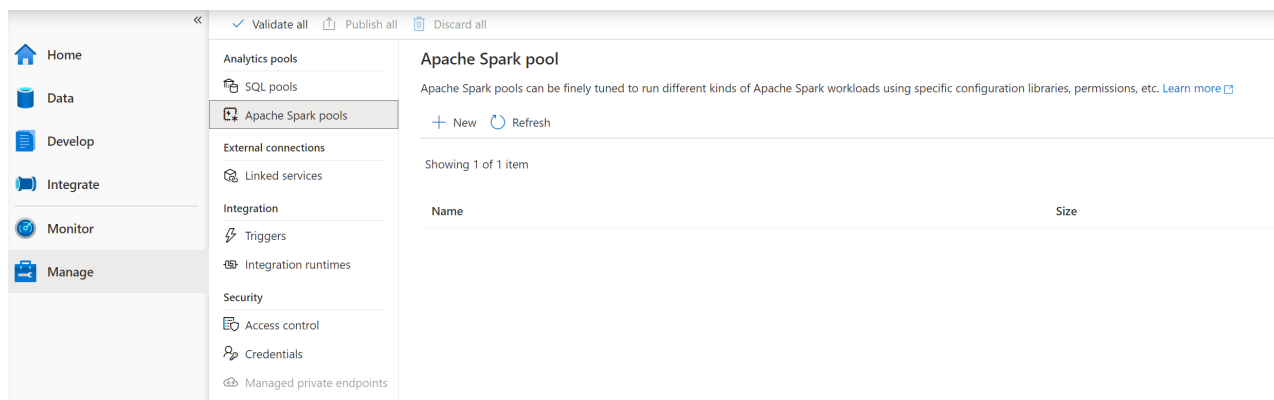
Search

Showing 1-2 of 2 items (1 Serverless, 1 Dedicated)

Name	Type	Status	Size
Built-in	Serverless	Online	Auto
SQLPool01	Dedicated	Online	DW500c

## Azure Synapse Spark pool

- Launch Azure Synapse Studio. The URL can be found in the Azure Synapse Workspace created in the Azure portal.
- In Azure Synapse Studio, navigate to the **Management Hub** in the left navigation by selecting the **Manage** icon.
- Once in the Management Hub, navigate to the **Apache Spark pools** section to see the current list of Apache Spark pools that are available in the workspace.



4. Select **+ New** and the new Apache Spark pool create wizard will appear.

5. Enter the following details in the **Basics** tab:

- Apache Spark Pool name: Sparkpool01
- Node size: Small (4 vCPU / 32 GB)
- Autoscale: Disabled
- Number of Nodes: 8

The screenshot shows the 'Create Apache Spark pool' wizard, Basics tab. The form has the following fields and values:

- Apache Spark pool name \***: Sparkpool01
- Node size family**: MemoryOptimized
- Node size \***: Small (4 vCPU / 32 GB)
- Autoscale \***: Disabled
- Number of nodes \***: 8
- Estimated price**: Est. cost per hour

6. In the next tab (Additional settings), leave all settings as defaults.

7. We won't add any tags for now, so select **Review + create**.

8. In the **Review + create** tab, make sure that the details look correct based on what was previously entered, and press **Create**.

## Create Apache Spark pool

Basics \* Additional settings \* Tags **Review + create**

✓ Validation succeeded.

### Product details

Azure Synapse Analytics Apache Spark pool by Microsoft

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Est. cost per hour

### Terms

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### Basics

Subscription

Resource group

Apache Spark pool name	Sparkpool01
Node size	Small (4 vCPU / 32 GB)
Autoscale	Disabled
Number of nodes	8 nodes

### Additional settings

Auto-pause	Enabled
Number of minutes idle	15
Apache Spark version	2.4
Python	3.6.1
Scala	2.11.12
Java	1.8.0_222
.NET Core	3.1
.NET for Apache Spark	0.10.0
Delta Lake	0.6.1

**Create** < Previous Download template for automation Cancel

9. The Apache Spark pool will start the provisioning process. Once the provisioning is complete, the new Apache Spark pool will appear in the list.

Publish all
Validate all
Discard all

### Analytics pools

- SQL pools
- Apache Spark pools**
- External connections
- Linked services
- Integration
- Triggers
- Integration runtimes
- Security
- Access control
- Credentials
- Managed private endpoints

## Apache Spark pool

Apache Spark pools can be finely tuned to run different kinds of Apache Spark workloads using specific configuration libraries, permissions, etc. [Learn more](#)

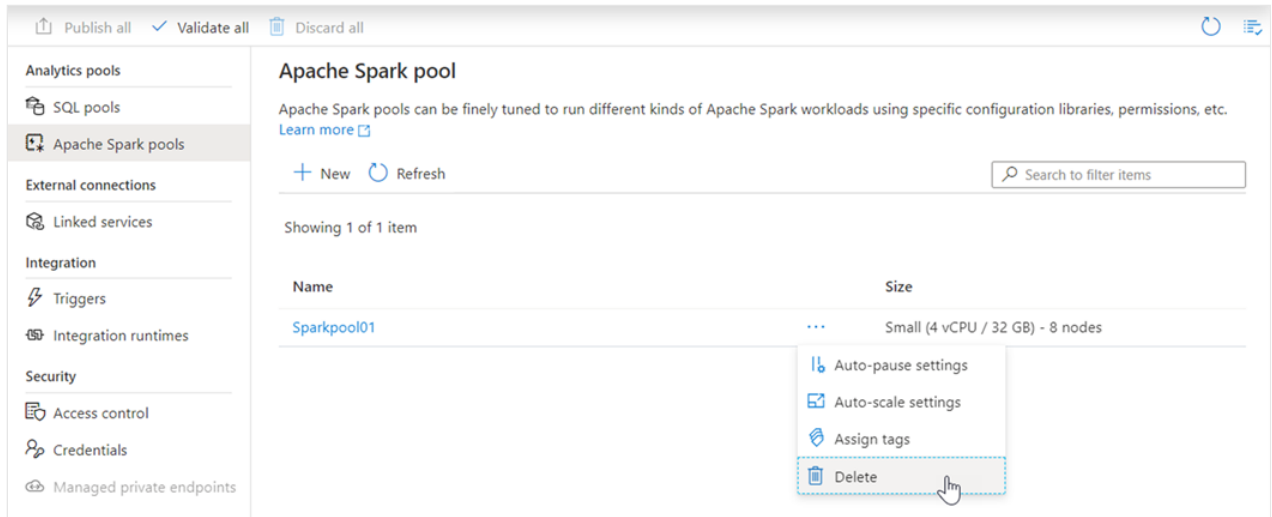
[+ New](#) [Refresh](#)

Showing 1 of 1 item

Name	Size
<a href="#">Sparkpool01</a>	Small (4 vCPU / 32 GB) - 8 nodes

## Delete a pool.

1. Navigate to the pools in the Management Hub in Synapse Studio. In this case Apache Spark
2. Select the ellipsis next to the Apache pool to be deleted (in this case, **Sparkpool01**) to show the commands for the Apache Spark pool.



3. Press **delete**.
4. Confirm the deletion, and press **Delete** button.
5. When the process completes successfully, the Apache Spark pool will no longer be listed in the workspace resources.