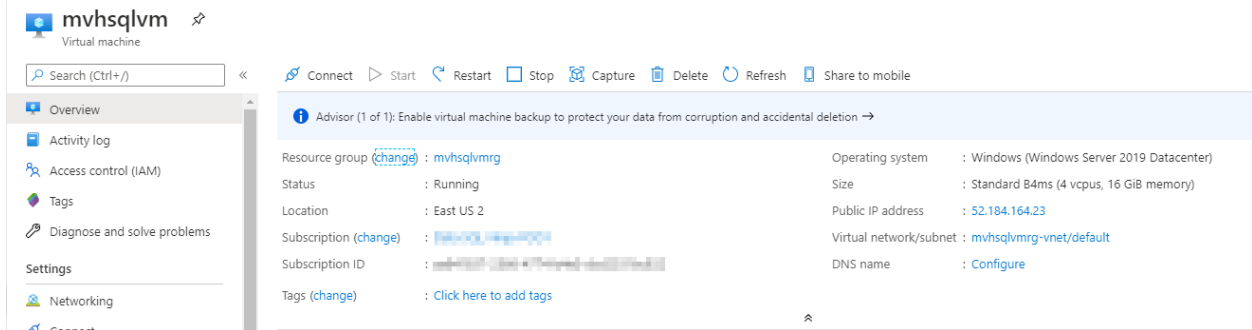


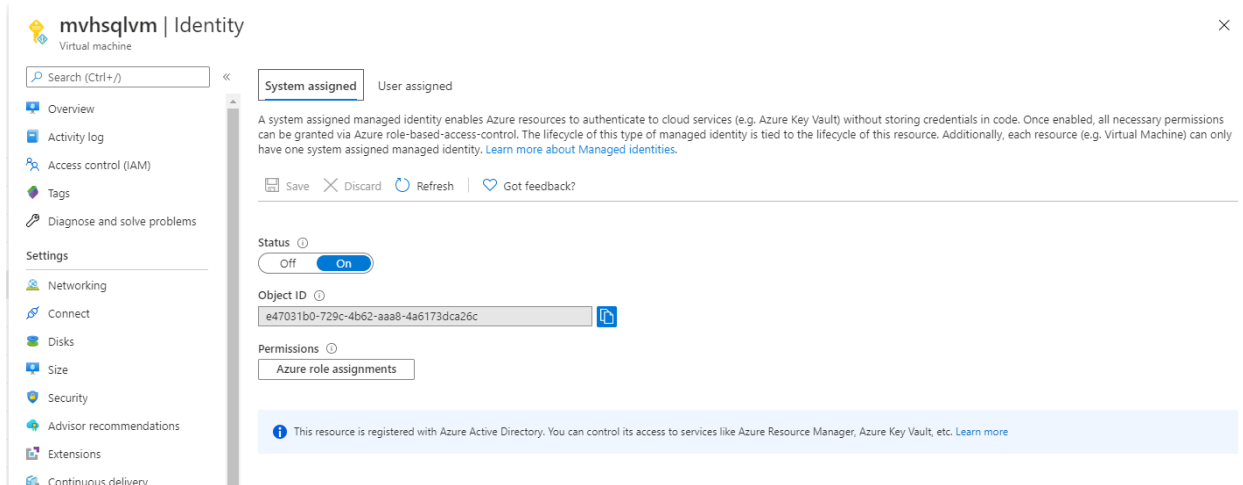
Using an Managed Identity from SSIS on an Azure IaaS VM

The following document describes how to connect to Azure SQL DB using an AAD managed identity.

1. Provision a VM (in my case I provisioned a SQL 2019 VM on Windows 2019)



2. Configure the Identity tab to use a System assigned or User assigned identity



3. Click on Azure role assignments to add give the principal access to the Azure SQL instance.

[Dashboard](#) > [All resources](#) > [mvhsqlvm | Identity](#) >

Azure role assignments

[+ Add role assignment \(Preview\)](#) [Refresh](#)

If this identity has role assignments that you don't have permission to read, they won't be shown in the list. [Learn more](#)

Subscription *
 [▼](#)

4. Add role assignment

Add role assignment (Preview) ✕

Scope ⓘ

SQL

Subscription

Subscription ID: 12345678-9012-3456-7890-123456789012

Resource ⓘ

mvhsql ⓘ

Role ⓘ

Contributor ⓘ

[Learn more about RBAC](#)

Reader and owner roles are also available. There are specific SQL roles, but note that they do not give you access to the database.

5. Click on Save

Dashboard > All resources > mvhsqlvm | Identity >

Azure role assignments

+ Add role assignment (Preview)

Refresh

If this identity has role assignments that you don't have permission to read, they won't be shown in the list. [Learn more](#)

Subscription *

Subscription ID: 12345678-9012-3456-7890-123456789012

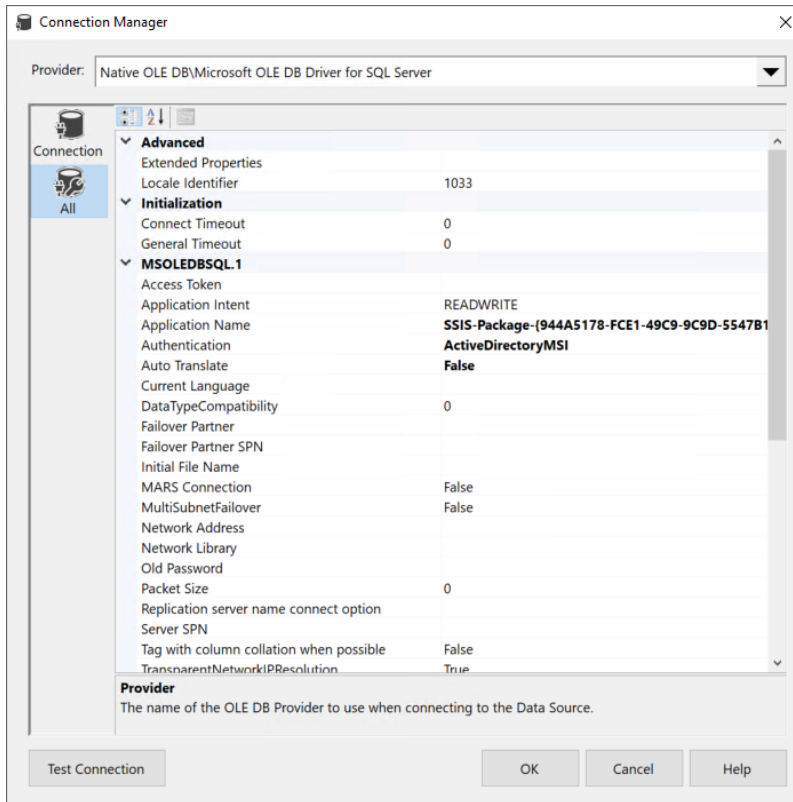
Role	Resource Name	Resource Type	Assigned To
Contributor	mvhsql	Azure SQL Server	mvhsqlvm

6. Log into the Azure SQL Database – add the Managed Identity principal to the database as a user and assign it to a role

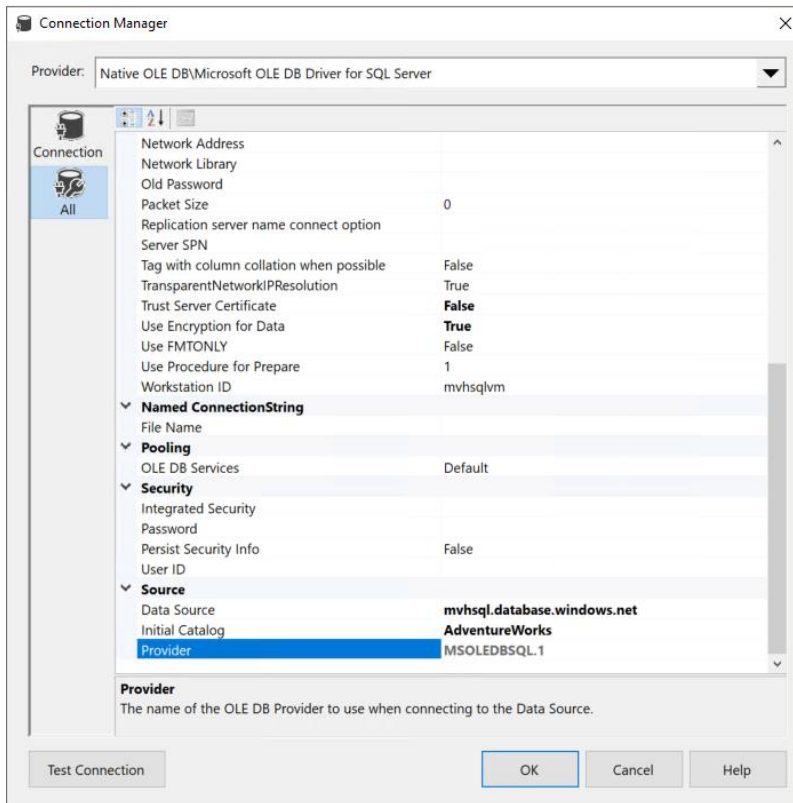
```
SQLQuery1.sql - tc...microsoft.com (52)) * ✕  
1 CREATE USER [mvhsqlvm] FROM EXTERNAL PROVIDER WITH DEFAULT_SCHEMA = dbo  
2 GO  
3 EXEC sp_addrolemember N'db_owner', N'mvhsqlvm'  
4 GO  
5
```

7. Open or create an SSIS package (in my case I installed [VS 2019 Community Edition](#) with SSDT enabled and added the [SSIS component from the Marketplace](#). I then installed the [OLEDB 18.4 driver package](#)).

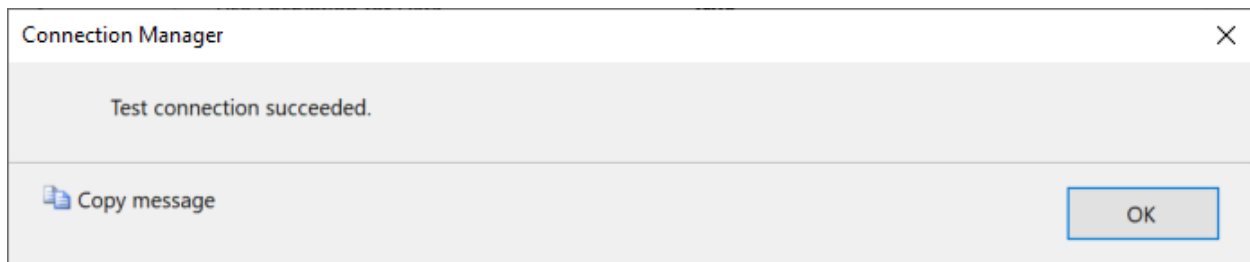
8. Create a new OLEDB connection, ensure you select the right OLEDB driver (Microsoft OLE DB Driver for SQL Server not the Native Client driver) and go to the “All” setting tab and set Authentication to ActiveDirectoryMSI



9. Clear the Integrated Security/SSPI setting and do not specify a password. Only set the User if you use a User assigned Managed Identity. Set the Use Encryption for Data to True.



10. Test the connection and be happy. 😊



11. To quickly test – I created a source and target data source and tried to transfer one table;

Package.dtsx [Design]

Control FlowData FlowParametersEvent Handle...Package Explorer...Progress...

Data Flow TaskData Flow Task

OLE DB Source

1 rows

OLE DB Destination

OLE DB Source Output Data Viewer at Data Flow Task

DetachCopy Data

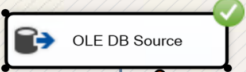
Sale...	R...	OrderDate	DueDate	ShipDate	S...	O...	SalesOrderNumber	PurchaseOrderNumber	AccountNum...	Cust...	Sale...	Terri...
1	1	2020-01...	2020-02...	2020-03...	1	T...	501	NULL	12345	1234	1	1

Attached: Total rows: 0, buffers: 0Rows displayed = 1

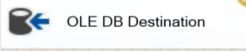
Connection Managers

mvhsq database.windows.net AdventureWorks

localhost test



1 rows



OLE DB Source Output Data Viewer at Data Flow Task												
DetachCopy Data												
Sale...	R...	OrderDate	DueDate	ShipDate	S...	O...	SalesOrderNumber	PurchaseOrderNumber	AccountNum...	Cust...	Sale...	Terri...
1	1	2020-01...	2020-02...	2020-03...	1	T...	501	NULL	12345	1234	1	1

Attached: Total rows: 0, buffers: 0Rows displayed = 1

- Connection Managers
- mvhsq database.windows.net AdventureWorks

localhost test