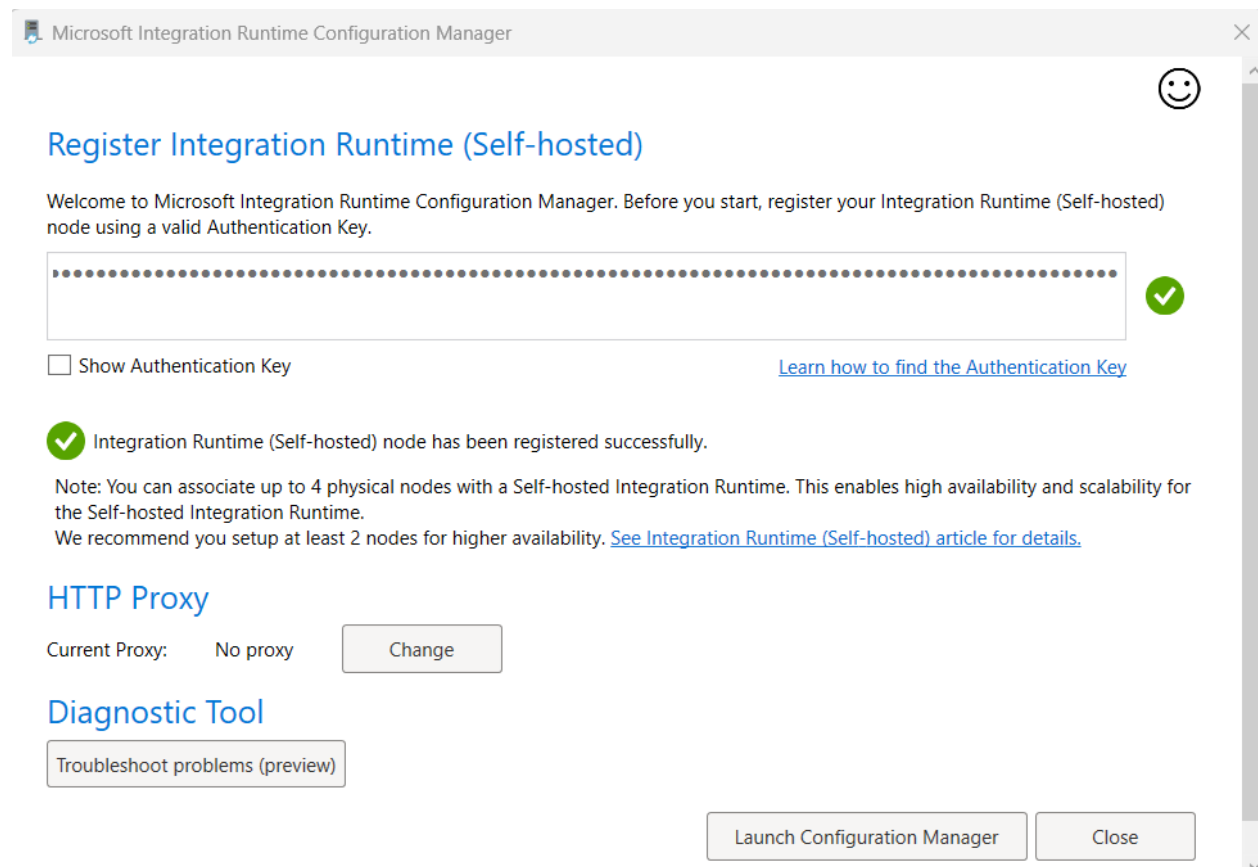


Started by creating a dummy on-premises database, utilizing a sample dataset such as the 'BikeStores' database for the project.

Configured a self-hosted integration runtime to establish a secure connection between our on-premises database and Azure SQL service.



Connected to the source SQL Server to initiate the migration process.

1 Connect to source SQL Server 2 Select databases for migration 3 Connect to target Azure SQL Database 4 Map source and target databases 5 Select database tables to migrate

Source server name * ⓘ LAPTOP-641LB7GH\SQLEXPRESS ✓

Authentication type * ⓘ SQL Authentication ✓

User name * ⓘ sa ✓

Password * ✓

Connection properties

☒ Encrypt connection

☒ Trust server certificate

Selected relevant databases from the on-premises environment for migration

1 Connect to source SQL Server 2 Select databases for migration 3 Connect to target Azure SQL Database 4 Map source and target databases 5 Select database tables to migrate

Search for database(s)

☒ Select all databases 1 of 2 databases selected.

Name ↑↓	Size ↑↓	State ↑↓
<input checked="" type="checkbox"/> BikeStores	16.00 MB	Online
<input type="checkbox"/> project_pizzasales	144.00 MB	Online

Established connections to the Azure SQL Database to ensure seamless data transfer.

1 Connect to source SQL Server 2 Select databases for migration 3 Connect to target Azure SQL Database 4 Map source and target databases 5 Select database tables to migrate

Location eastus

Subscription * ⓘ Azure for Students ✓

Resource group * ⓘ db-migration-project ✓

Target Azure SQL Database Server * ⓘ bikestore1 ✓

Target server name * ⓘ bikestore1.database.windows.net ✓

Authentication type * ⓘ SQL Authentication ✓

User name * ⓘ user ✓

Password * ✓

Ensured comprehensive selection of all tables to be migrated, ensuring a complete transition of data.

1 Connect to source SQL Server2 Select databases for migration3 Connect to target Azure SQL Database4 Map source and target databases5 Select database tables to migrate

Select the tables for each database you would like to migrate.

^ BikeStores tables selected 9/9

Missing schemas on the target. Some tables are missing and cannot be migrated unless this option is selected. Schema deployment will make a best effort to deploy database objects. Schema deployment errors will not prevent data migration.

☒ Migrate missing schema (Public Preview)

Search for table(s)

All

☒ Select all tables

Name

↑↓

Status

↑↓

☒ [production].[brands]

Migrating table schema

☒ [production].[categories]

Migrating table schema

☒ [production].[products]

Migrating table schema

☒ [production].[stocks]

Migrating table schema

☒ [sales].[customers]

Migrating table schema

Monitored the migration process closely, ensuring its successful execution.

Azure Database Migration Service

Search

+ New MigrationRefreshDelete

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Properties

Integration runtime

Locks

Automation

CLI / PS

Tasks (preview)

Export template

Help

Essentials

Resource group : db-migration-project

Subscription ID : 6d1c3567-1c3c-43bd-8213-1f1742ab1b44

Subscription : Azure for Students

Tags : Add tags

Integration Runtime State : Online

Location : East US

Target : Azure SQL

Get started

Migrations

Filter migrations

Filter in any field...

Migration status == all

Source name

↑↓

Source database

↑↓

Migration status

↑↓

Migration mode

↑↓

Target type

↑↓

Target name

↑↓

Target database

↑↓

Duration

↑↓

Start time

↑↓

LAPTOP-641LB7G...

BikeStores

Creating

Offline

Azure SQL Database

bikestore1

bikestore

Filter migrations

Filter in any field...

Migration status == all

Source name

↑↓

Source database

↑↓

Migration status

↑↓

Migration mode

↑↓

Target type

↑↓

Target name

↑↓

Target database

↑↓

Duration

↑↓

Start time

↑↓

LAPTOP-641LB7G...

BikeStores

Succeeded

Offline

Azure SQL Database

bikestore1

bikestore

7.6 mins

04/23/2024, 06:27:5

Migration succeeded

CONNECTIONS ... SQLQuery_1 - bikestore1 (user) X

Run Cancel Disconnect Change Database: bikestore Estimated Plan Enable Actual Plan Parse

```

1 SELECT TOP (1000) [STEP]
2     , [ID]
3     , [NAME]
4     , [SCHEMA]
5     , [DBNAME]
6     , [TABLENAME]
7     , [FULLNAME]
8     , [ACTION]
9     , [ROLLBACK]
10    , [ROWS]
11    , [KBS]
12    , [TIMESTAMP]
13    , [partition]
14    , [is_memory_optimized]
15 FROM [dbo].[_migration_status]

```

Results Messages

	STEP	ID	NAME	SCHEMA	DBNAME	TABLENAME	FULLNAME	ACTION	ROLLBACK	ROWS	KBS
1	1	901578250	[production].[categories]	production	BikeStores	categories	[production].[categories]	NULL	NULL	7	16
2	1	933578364	[production].[brands]	production	BikeStores	brands	[production].[brands]	NULL	NULL	9	16
3	1	965578478	[production].[products]	production	BikeStores	products	[production].[products]	NULL	NULL	321	40
4	1	1029578706	[sales].[customers]	sales	BikeStores	customers	[sales].[customers]	NULL	NULL	1445	168
5	1	1061578820	[sales].[stores]	sales	BikeStores	stores	[sales].[stores]	NULL	NULL	3	16
6	1	1093578934	[sales].[staffs]	sales	BikeStores	staffs	[sales].[staffs]	NULL	NULL	10	32
7	1	1173579219	[sales].[orders]	sales	BikeStores	orders	[sales].[orders]	NULL	NULL	1615	72
8	1	1253579504	[sales].[order_items]	sales	BikeStores	order_items	[sales].[order_items]	NULL	NULL	4722	200
9	1	1333579789	[production].[stocks]	production	BikeStores	stocks	[production].[stocks]	NULL	NULL	939	40
10	2	1525580473	[production].[categories]	production	bikestore	categories	[production].[categories]	NULL	NULL	7	16
11	2	1557580587	[production].[brands]	production	bikestore	brands	[production].[brands]	NULL	NULL	9	16

0 Ln 1, Col 1 Spaces: 4 UTF-8 CRLF 68 rows MSSQL 00:00:00 bikestore1.database.windows.net : bikestore

Leveraged Azure Data Studio to monitor the migration progress, providing real-time insights into the migration status.

We can see that our on-premise database is successfully migrated to azure SQL database.

Utilized the existing data model created earlier with on-premises schemas to perform rigorous data integrity checks.

Conducted a meticulous comparison between the newly migrated schema and the original on-premises data model.

