

## Copy All Tables from One Database to Another

- Firstly, lets create two azure sql databases for source and destination:

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Home > SQL databases >

### Create SQL Database

Microsoft

Database details

Enter required settings for this database, including picking a logical server and configuring the compute and storage resources

Database name \* companydb-src ✓

Server \* (new) mahiwal-sql-src (Central India) ✓  
[Create new](#)

Want to use SQL elastic pool? ☐ Yes ☒ No

Workload environment ☐ Development ☒ Production

Default settings provided for Production workloads. Configurations can be modified as needed.

Compute + storage \* **General Purpose**  
Standard-series (Gen5), 2 vCores, 32 GB storage, zone redundant disabled  
[Configure database](#)

Backup storage redundancy

Choose how your PITR and LTR backups are replicated. Geo restore or ability to recover from regional outage is only available when geo-redundant storage is selected.

Backup storage redundancy ☐ ☒ Locally-redundant backup storage

[Review + create](#) [Next: Networking >](#)

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### Create SQL Database

Microsoft

Subscription \* Azure subscription 1 ✓

Resource group \* RG-ADF ✓  
[Create new](#)

Database details

Enter required settings for this database, including picking a logical server and configuring the compute and storage resources

Database name \* companydb-dst ✓

Server \* (new) mahiwal-sql-dst (Central India) ✓  
[Create new](#)

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Workload environment ☐ Development ☒ Production

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- Write a query to create 3 tables that will be used, inside our souce database

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Home > companydb-src (mahiwal-sql-src/companydb-src)

### companydb-src (mahiwal-sql-src/companydb-src) | Query editor (preview)

SQL database

Search Login + New Query Open query Feedback Getting started

Overview Activity log Tags Diagnose and solve problems **Query editor (preview)** Mirror database in Fabric (preview) Resource visualizer Settings Data management Integrations Power Platform Security Intelligent performance Monitoring Automation Help

companydb-src (mahiwalvaishnav619@...)

Showing limited object explorer here. For full capability please click here to open Azure Data Studio.

Tables

- dbo.Departments
- dbo.Employees
- dbo.Projects

Views

- sys.database\_firewall\_rules

Stored Procedures

Query 1

```
-- EMPLOYEES table
CREATE TABLE Employees (
    EmployeeID INT PRIMARY KEY,
    Name NVARCHAR(50),
    DepartmentID INT
);

INSERT INTO Employees (EmployeeID, Name, DepartmentID) VALUES
(1, 'Anihant', 101),
(2, 'Bharat', 102),
(3, 'Cheshta', 103),
(4, 'Dinesh', 102),
(5, 'Ekansh', 101),
(6, 'Farukh', 104),
(7, 'Gukesh', 103);

-- DEPARTMENTS table
CREATE TABLE Departments (
    DepartmentID INT PRIMARY KEY,
    DepartmentName NVARCHAR(50)
);

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES
(101, 'Human Resources'),
(102, 'Engineering'),
(103, 'Marketing'),
(104, 'Finance');

-- PROJECTS table
```

Query succeeded | 0s

- And we can see that our destination database is empty right now.

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the Microsoft Azure logo, an 'Upgrade' button, a search bar, and a Copilot icon. The main header indicates the current location: 'Home > companydb-dst (mahiwal-sql-dst/companydb-dst)'. Below this, the 'companydb-dst (mahiwal-sql-dst/companydb-dst) | Query editor (preview)' page is displayed. The left sidebar contains a navigation menu with options like Overview, Activity log, Tags, Diagnose and solve problems, Query editor (preview), Mirror database in Fabric (preview), Resource visualizer, Settings, Data management, Integrations, Power Platform, Security, and Intelligent performance. The 'Query editor (preview)' section is active, showing a 'Query 1' editor with a 'Run' button and options to cancel, save, or export data. The 'Results' tab is selected, showing a search bar for filtering items. The 'Object Explorer' on the left shows a tree view with 'Tables', 'Views', 'sys.database\_firewall\_rules', and 'Stored Procedures'.

- Inside our data factory we create 2 linkedservice for source and destination

The screenshot shows the Microsoft Azure portal interface for the 'Data Factory' section. The left sidebar contains a navigation menu with options like General, Factory settings, Connector upgrade advis..., Connections, Linked services, Integration runtimes, Microsoft Purview, ADF in Microsoft Fabric, Source control, Git configuration, ARM template, Author, Triggers, Global parameters, Data flow libraries, Security, Credentials, Customer managed key, Outbound rules, Managed private endpoi..., and Workflow orchestration manager. The 'Linked services' section is active, showing a table with 2 items: 'AzureSql\_LS' (Azure SQL Database) and 'BlobStoragecelebal' (Azure Blob Storage). The 'New linked service' configuration page is open, showing the 'LS\_SQL\_Source' service. The configuration includes fields for Name, Description, Connect via integration runtime (AutoResolveIntegrationRuntime), Version (2.0), Account selection method (From Azure subscription), Azure subscription (Azure subscription 1), Server name (mahiwal-sql-src), Database name (companydb-src), Authentication type (SQL authentication), and User name. The 'Create' button is visible, and a 'Connection successful' message is displayed.

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- We drag a lookup activity in order to get the tables from source

The screenshot shows the Microsoft Azure Data Factory interface. On the left, the 'Factory Resources' pane lists 'Pipelines' and 'Datasets'. The 'Full\_DB\_Replication' pipeline is selected. In the center, the 'Activities' pane shows a 'Lookup' activity. On the right, the 'Settings' tab for the 'Lookup' activity is displayed. The 'Source dataset' is set to 'DS\_LookupQuerySource'. The 'First row only' checkbox is checked. The 'Use query' radio button is selected. The 'Query' text box contains the SQL: `SELECT TABLE_NAME FROM INFORMATION_SCHEMA.TABLES WHERE TABLE_TYPE = 'BASE TABLE'`. The 'Query timeout (minutes)' is set to 120. The 'Isolation level' is set to 'Select...'. The 'Partition option' is set to 'None'.

- Next we take a ForEach activity to read all the attribute of tables

The screenshot shows the Microsoft Azure Data Factory interface. On the left, the 'Factory Resources' pane lists 'Pipelines' and 'Datasets'. The 'Full\_DB\_Replication' pipeline is selected. In the center, the 'Activities' pane shows a 'ForEach' activity. On the right, the 'Settings' tab for the 'ForEach' activity is displayed. The 'Name' is set to 'ForEach1'. The 'Description' field is empty. The 'Activity state' is set to 'Activated'. The 'Activities' pane shows a 'Copy data1' activity connected to the 'ForEach' activity.

- Inside the for each activity we have a copy data activity to copy our tables to the destination database

The screenshot shows the Microsoft Azure Data Factory interface. On the left, the 'Factory Resources' pane lists 'Pipelines' and 'Datasets'. The 'Full\_DB\_Replication' pipeline is selected. In the center, the 'Activities' pane shows a 'Copy data' activity. On the right, the 'Source' tab for the 'Copy data' activity is displayed. The 'Source dataset' is set to 'DS\_SQL\_Source'. The 'Dataset properties' table is shown with the following data:

Name	Value	Type
TableName	@item().TABLE_NAME	string

The 'Use query' radio button is selected. The 'Query' text box contains the SQL: `SELECT * FROM @item().TABLE_NAME...`.

- We did create datasets for our three activities prior: (DS\_SQL\_Source, etc)

- After successfully run/Debug we have copied all tables to the destination database

- As we can see the dbo.Departments has been transferred with all its data