

Data Sharing Principles



Introduction

- When data shares are established between parties there are several ways to control what data is shared.
- Access to objects depend on the credentials required for the connector type – and whether the data is on premise or cloud based.
- This guide illustrates the options available – which become useful once you are sharing with more than one organization.

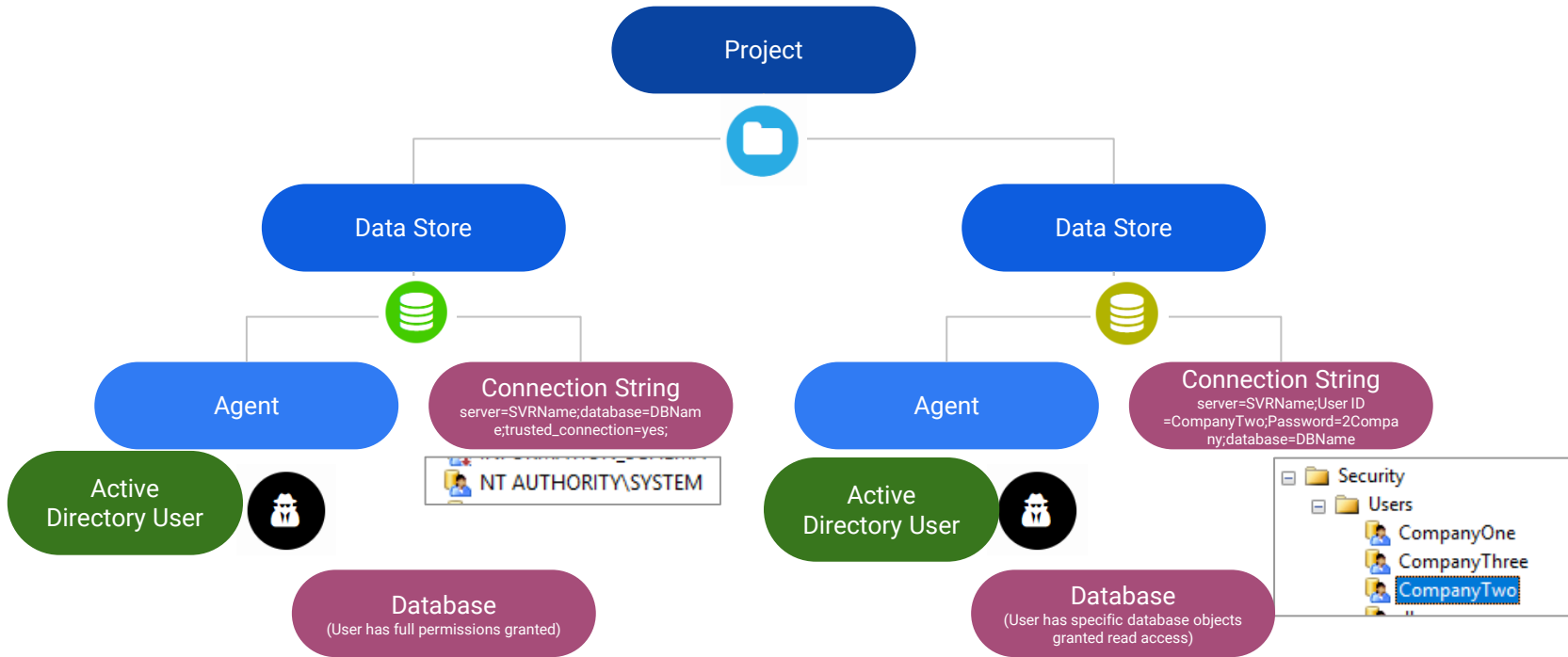
Connection Overview

Project—can contain Source and Destination **Data Stores** each with their own connection settings.

Data Stores— each one defines a **Connection String** and an **Agent**.

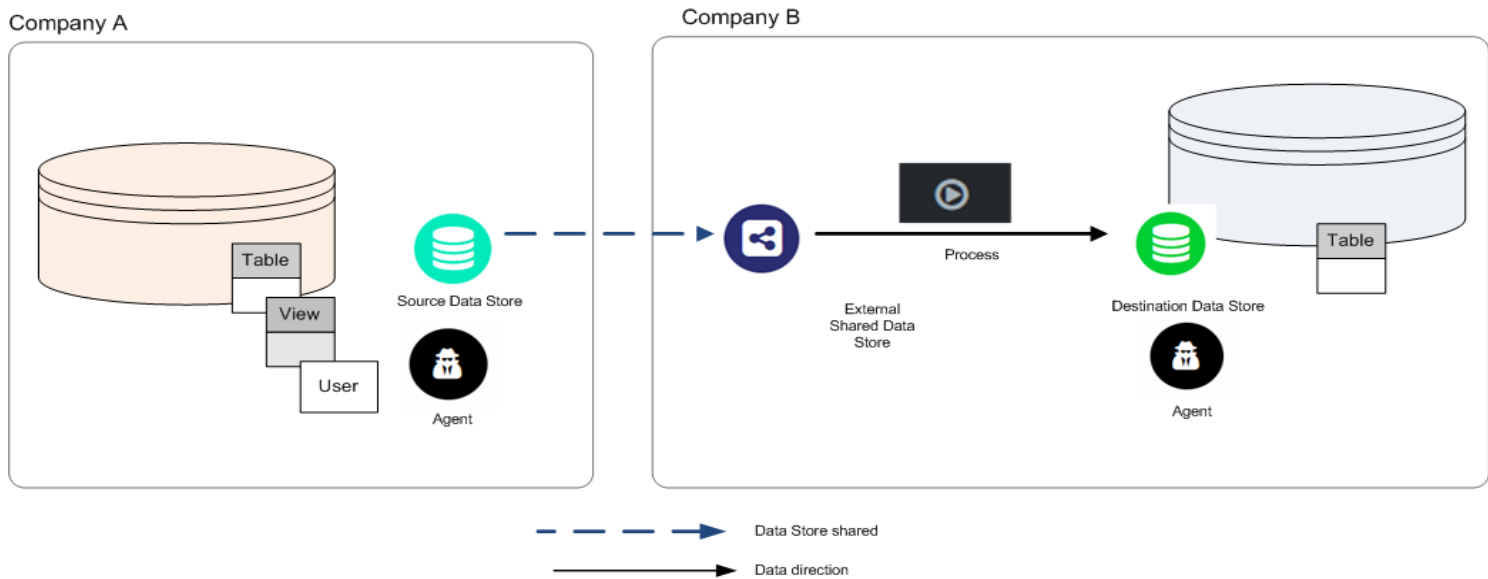
Agent — is connected via a trusted Active Directory account or a specific database User. An agent may be used for multiple connections using the same trusted account. To use multiple trusted accounts, install multiple agents.

Data Store Connections – and database security



Visibility of database objects is controlled using the Agent and Database Connection String - on the left, using the trusted default agent Windows Account (with full database permissions) - every object in AdventureWorks is visible - on the right only the objects that UserID CompanyTwo has been granted read access to can be browsed.

Share the Source

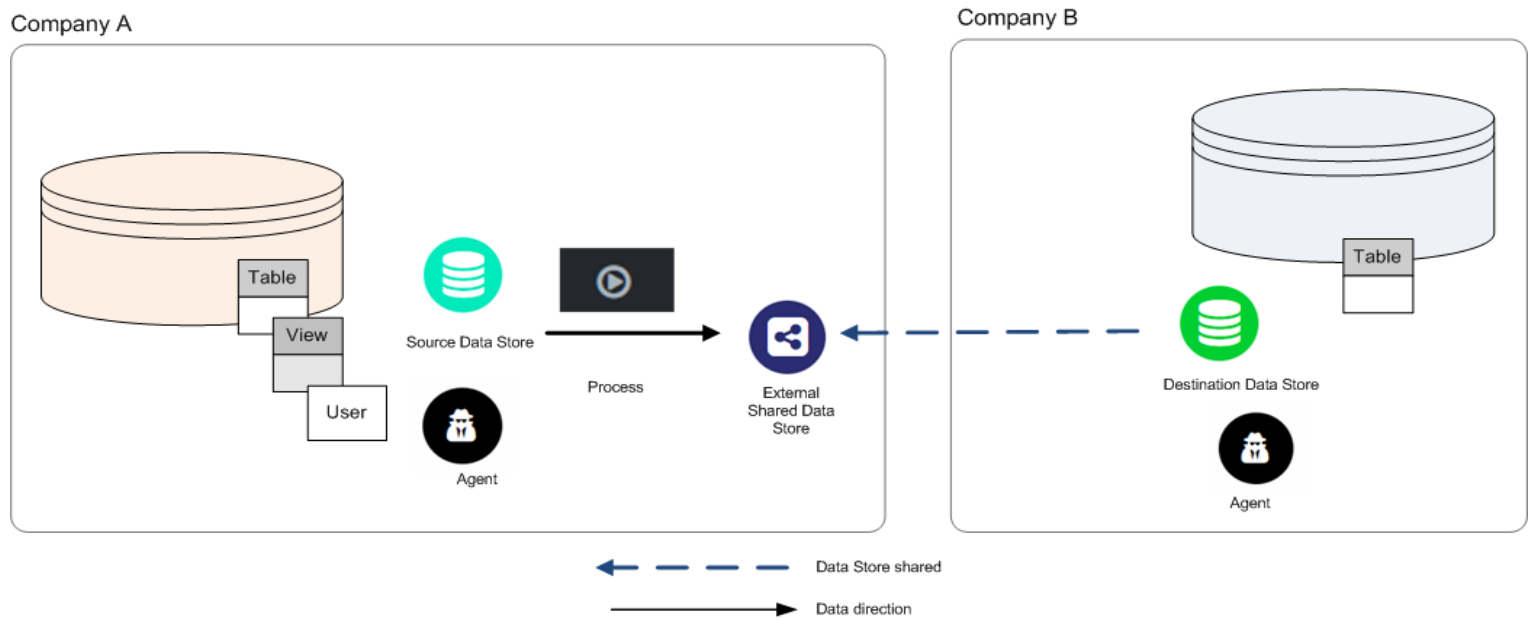


In this example the accessed objects in the Source and Destination Data Stores are determined by the Agents installed and each Data Store's Connection String. The Source Data Store is shared by Company A, to Company B.

Company A can only see the objects in the Source Data Store. Company B can see the objects in both the Source and Destination Data Stores.

Company B, as the owner of the Process, can select the objects that are to be inserted to its Destination Data Store, and define the characteristics of that Process (mapping, filters, tolerances, system or expression columns and scheduling).

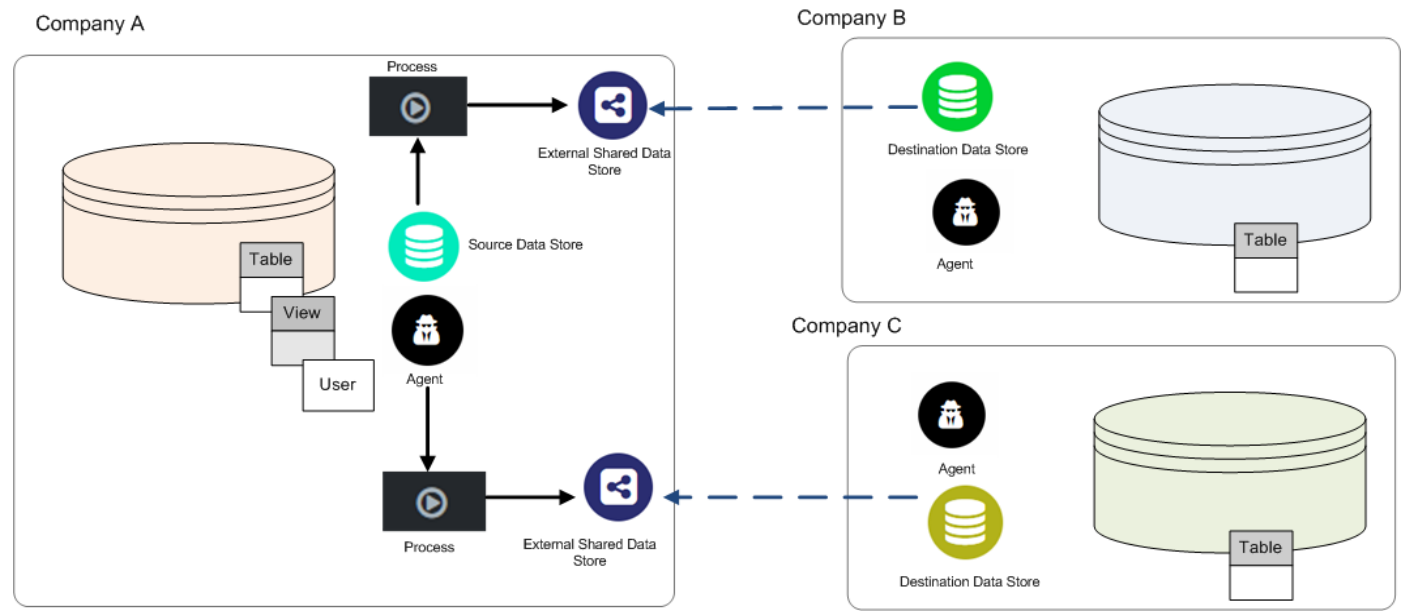
Share the Destination



The accessed objects in the Source and Destination Data Stores are determined by the Agents installed and each Data Store's Connection String. The Destination Data Store is shared by Company B, to Company A. Company A can see the objects in both Source and Destination Data Stores. Company B can only see the objects in the Destination Data Store.

Company A, as the owner of the Process, can select the objects that are to be inserted in the Destination Data Store, and define the characteristics of that Process (mapping, tolerances, system or expression columns and scheduling).

Share Multiple Destinations

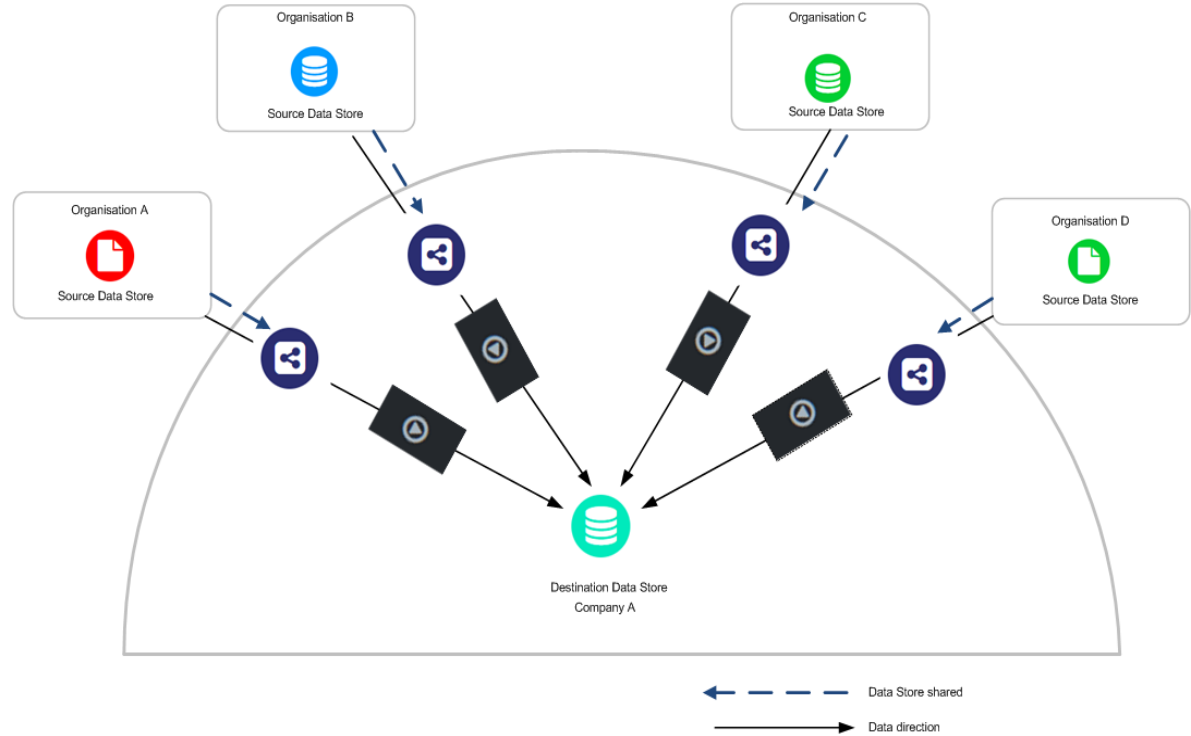


The accessed objects in the Source and Destination Data Stores are determined by the Agents installed and each Data Store's Connection String. The Destination Data Stores is shared by both Company B and Company C, to Company A. Company A can see the objects in both the Source and each Destination Data Store. Company B and Company C can only see the objects in their own respective Destination Data Store.

Company A, as the owner of the Processes, can select the objects that are to be written to each Destination Data Store, and define the characteristics of those Processes (mapping, tolerances, system or expression columns and scheduling).

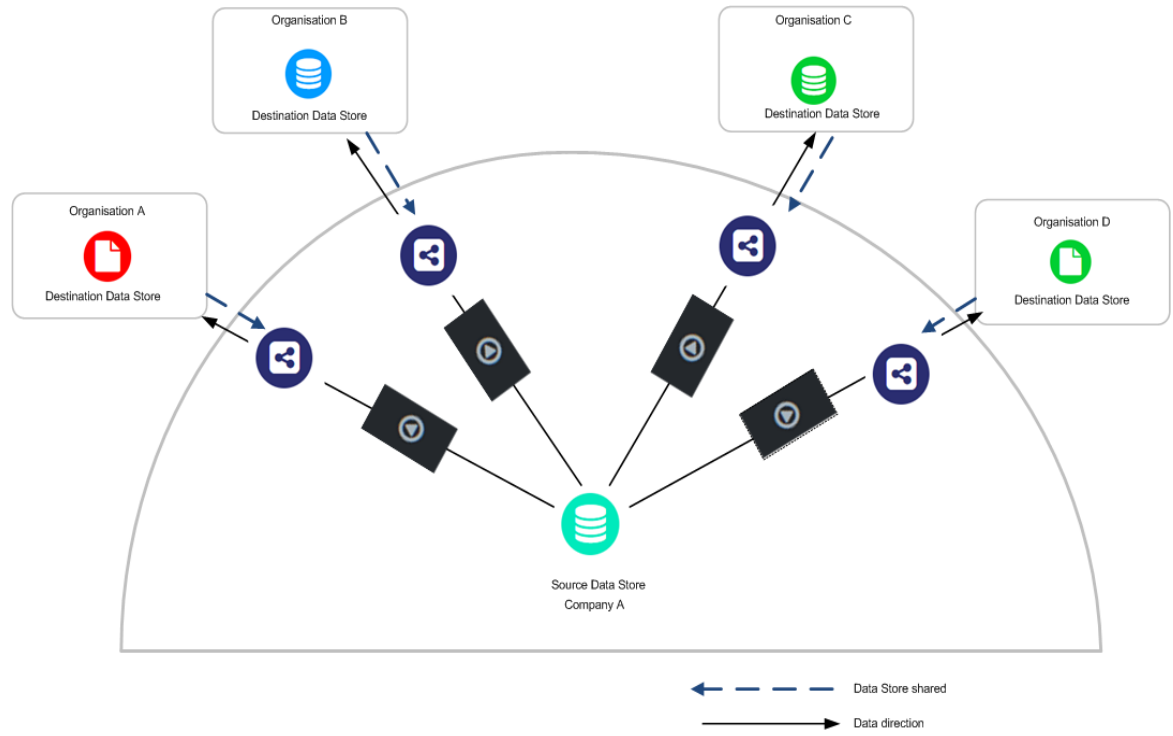
Hub - Receives data from multiple sources

Data can come from several different organisations, with Company A acting as the hub and owning the processes that insert the data from the shared Source Data Stores into its Destination.



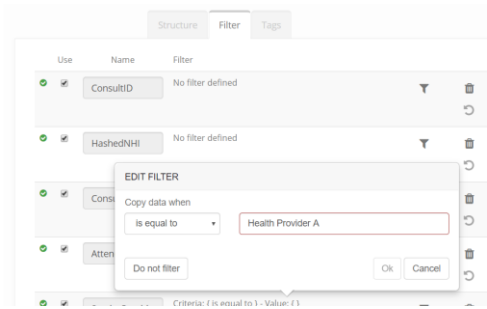
Hub - Sends data to multiple destinations

Data can go to several different organisations and Data Stores, with Company A acting as the hub and owning the Processes that insert the data to each shared Destination Data Store.

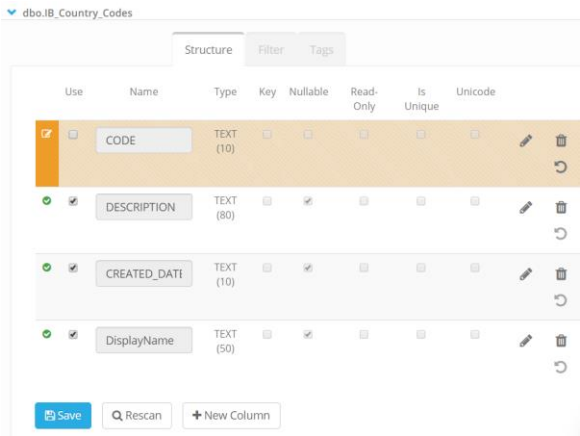


Datastore options - column and row level filters

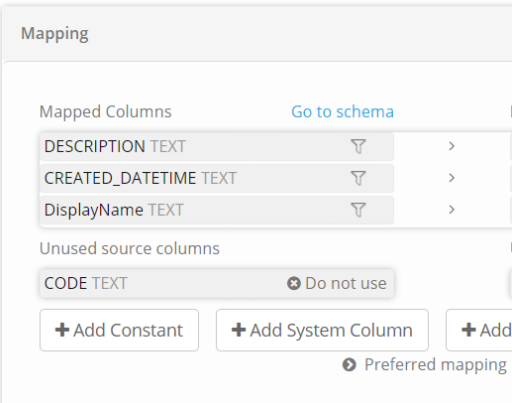
Browse a Datastore to view an object to apply row level filters.



Restrict a **column** from being used in a process – simply untick the Use checkbox and save.



Editing Process Landing.Country



The restricted column appears like this – and cannot be mapped to a destination column.

Process filters and mapped columns

Apply a **filter** within a process to control the rows written to a destination.

Unmapped columns will not be written to the destination.

Editing Process `dbo.MedicalPlanEm`

Mapping

Mapped Columns

[Go to schema](#)

Mapped

RECORD_TYPE TEXT	▼	>	RECO
Scheme TEXT	▼	>	Schen
SchemeStatus TEXT	▼	>	Schen
SchemeStartDate DATETIME	▼	>	Schen
ConversionRate TEXT	▼	>	Conve
SchemeEndDate DATETIME	▼	>	Schen
ReviewFrequency TEXT	▼	>	Review
Payment TEXT	▼	>	Paym
EmployeeNumber TEXT	▼	>	Emple
LastUpdateTime BatchExecuteDate ⚙️	▼	>	LastU

EmployeeNumber TEXT ▼ > EmployeeNumber TEXT ✓

Payment TEXT ▼ > Payment TEXT ✓

Unmapped System Columns

LastUpdateTime BatchExecuteDate ⚙️ 🗑️

Unmapped Destination Columns

LastUpdateDateTime DATETIME

+ Add Constant

+ Add System Column

+ Add Expression Column

🔗 Preferred mapping

>

🔗 Automated mapping

>

👍 Good match

>

👎 Poor match

Datastore Queries

Source Datastores connecting to relational databases - have a Query tab available which allow you to create custom views of the data to share.

Queries: 1 Data Query

Would you like to build data querie

Name	Description
Match NGO Candidates to Ministry Clients	Uses Rule for

Query

```
1
2 Select NGO_ID
3       , [NGO_Source]
4       , [Person_Hashed_ID]
5       , [LoadDate]
6 , Ministry.*
7 FROM [EmploymentMinistry].[TXN_IN].[CandidatesProcess
8
9 inner join
10
11 (select * , UPPER(left(FirstName,2)+right(Trim(LastName
12       + PostCode + cast(CONCAT((DATEPART(year,DateofBirth
13
14
15 from [dbo].[Referral]) Ministry
16 on WW.Person_Hashed_ID = Ministry.MatchRef
```

Summary

Customise your data shares by using a combination of features – permissions, filters and sharing agreements.