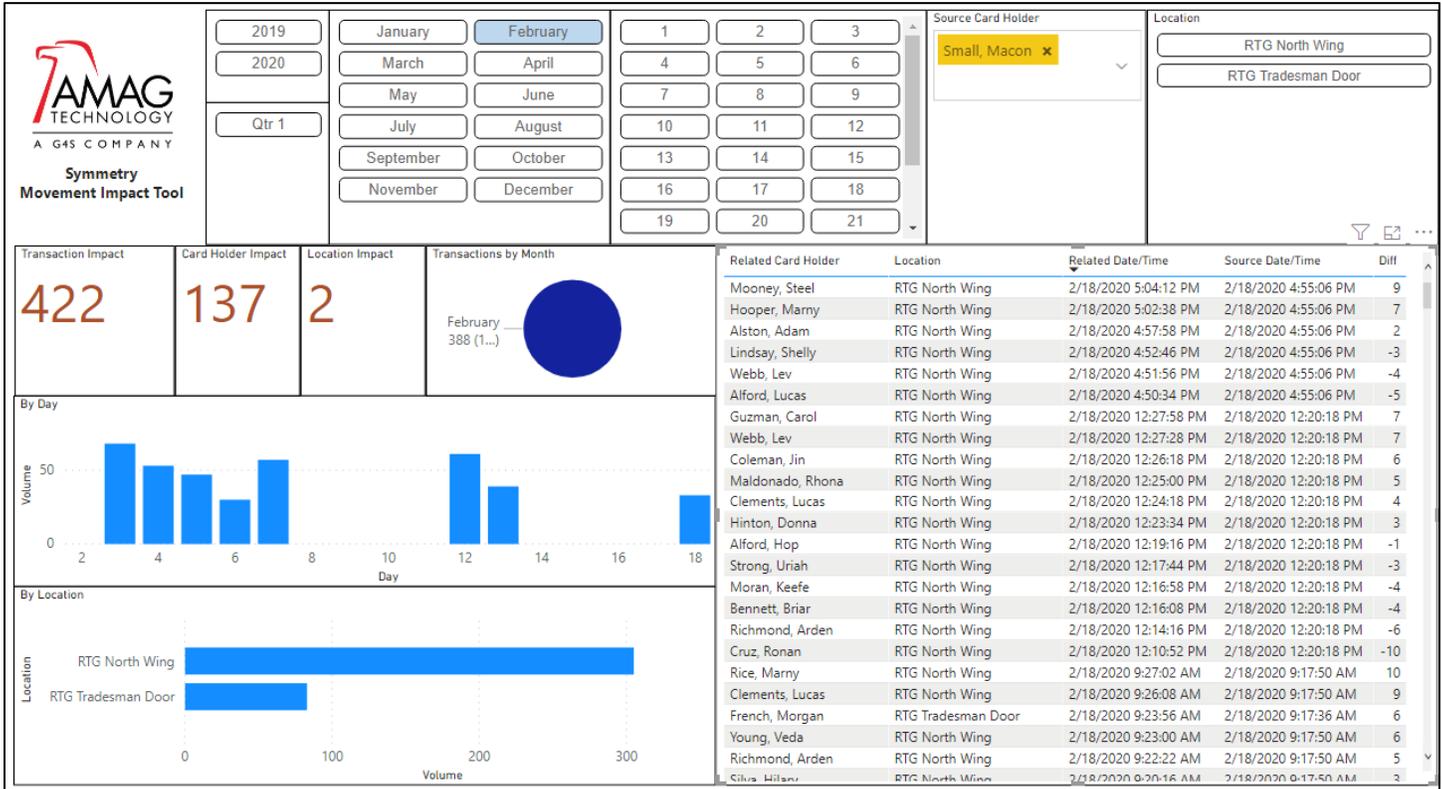


Overview

The Symmetry Movement Impact Tool has been created to help users understand the interaction between specific cardholders, using the data available in the access control system.



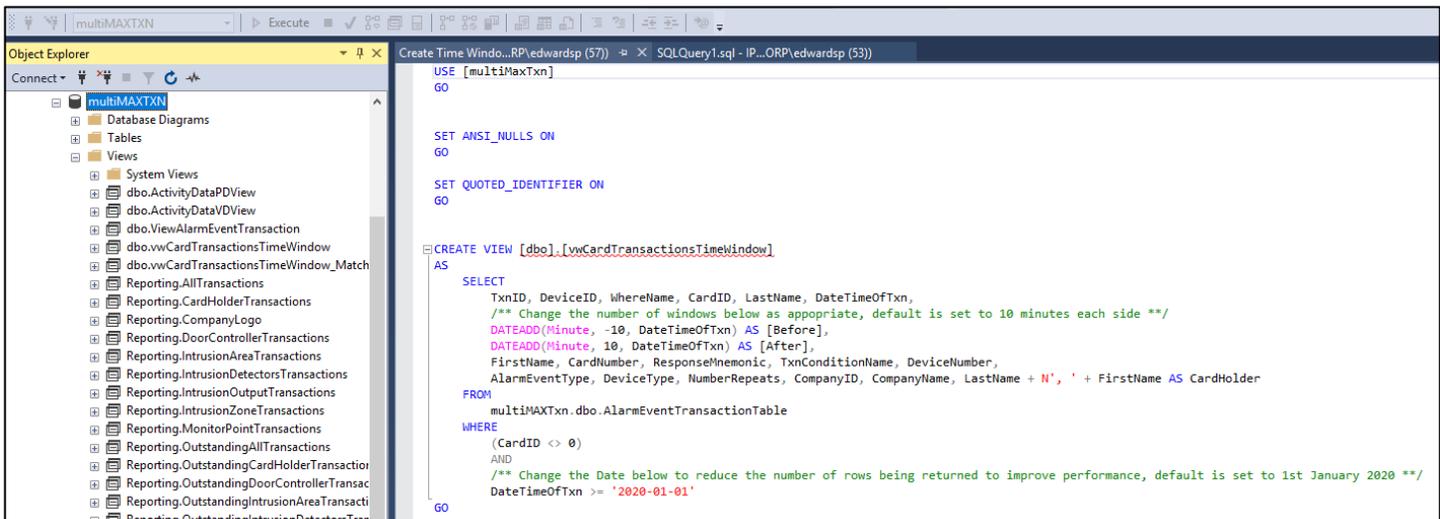
To ensure that the Symmetry system is not impacted, please perform all of the steps below on a restored backup of the multimaxtxn database. **Do not use this tool on the production database.** If you are unsure please contact your local SQL admin or AMAG Technical Support.

To enable the tool you will need:

- SQL Server (do not use your production instance) with a copy of the multimaxtxn database.
- Microsoft SQL Server Management Studio available [here](#).
- Microsoft SQL Server ODBC 17 Driver available [here](#)
- Download Microsoft PowerBI Desktop Trial Version available [here](#).

SQL Server Configuration

1. Create a SQL Backup of the multimaxtxn database and restore to a different SQL Server or Instance
2. Using Microsoft SQL Management Server Tools and ensure that you are connected to the non-production SQL Server.
 - a. Select the restored multimaxtxn database.
 - b. Click “New Query”.
 - c. From the menu click on File | Open | File.
 - d. Locate the “Create Symmetry Movement Impact Tool SQL Views.sql” file and click “Open”.
 - e. Ensure you are running the script against the multimaxtxn database (non-production) and click on the Execute button on the toolbar or press Ctrl+E (*the script will take a couple of seconds to run*).

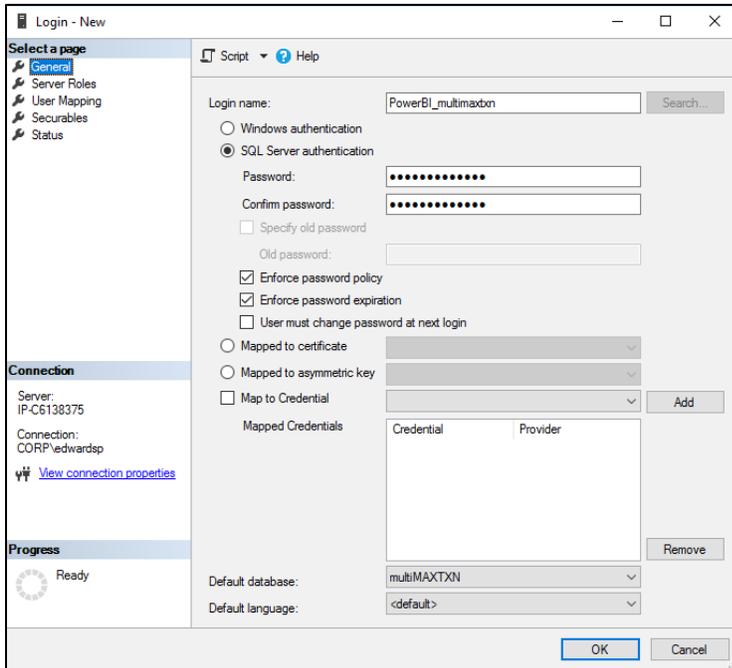


- f. To ensure it has installed correctly, right-click on “Views” (on the left sidebar) and click on “Refresh”.
- g. Expand “Views” and you will see “dbo.vwCardTransactionsTimeWindow” and “dbo.vwCardTransactionsTimeWindow_Matched” displayed.

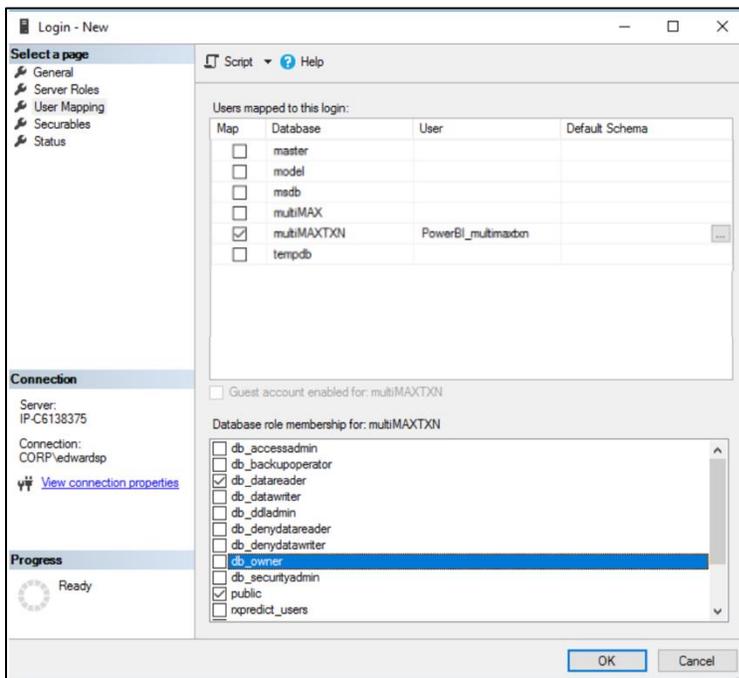
Note: If you wish to change the 10 minute window which is setup as default or change the start date the recordset is using, amend the “vwCardTransactionsTimeWindow” view.

1. Next step is to create a SQL User to allow Microsoft PowerBI to access the database via ODBC: In Microsoft SQL Server Management Studio expand “Security” (not Security within the multimaxtxn database).
2. Right-click on “Logins” and click “New Login”.
3. Enter the Login Name as “PowerBI_multimaxtxn”.
4. Enter the Password & Confirm password as Reporting4me!
5. Uncheck “User must change password at next login”.

6. Set the Default Database as multimaxtxn.



7. On the left menu click on “User Mapping” and check the “Map” next to multimaxtxn. Check “db_datareader” in the bottom section. “db_owner” can be removed.

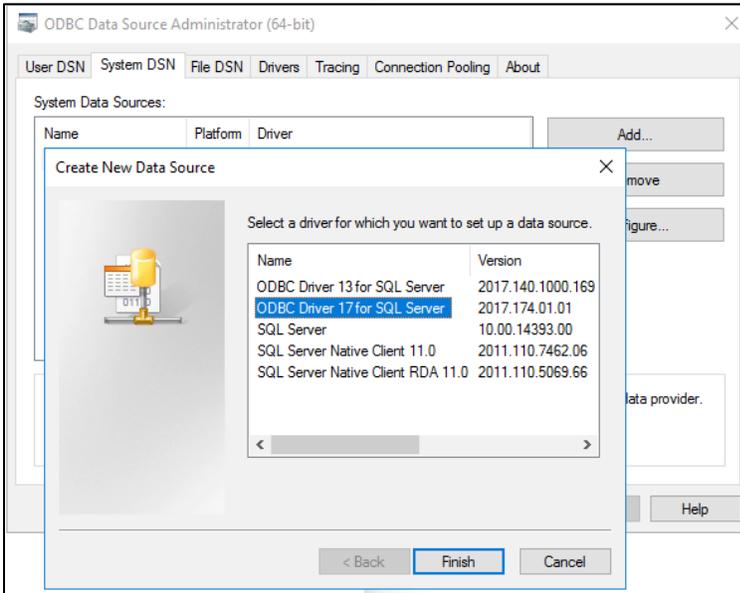


8. Click “OK”.

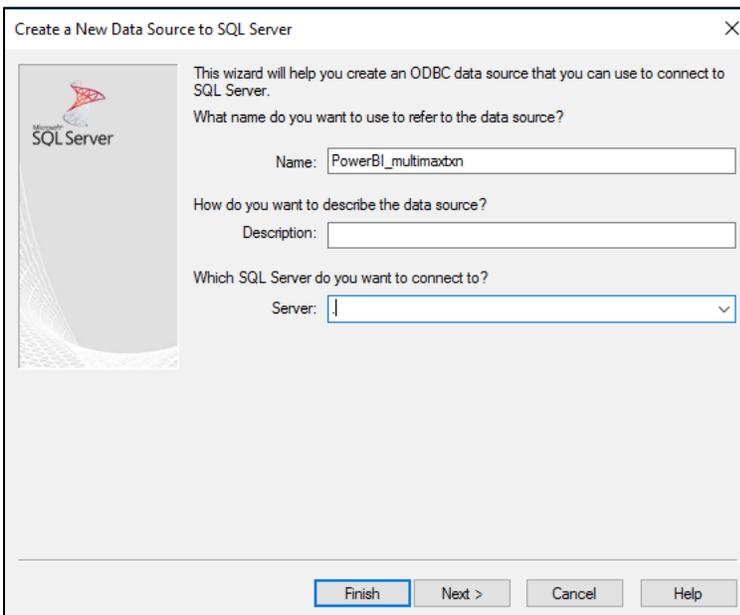
Create the ODBC Connection on the Client

Perform the following steps on the client machine where the tool will be used.

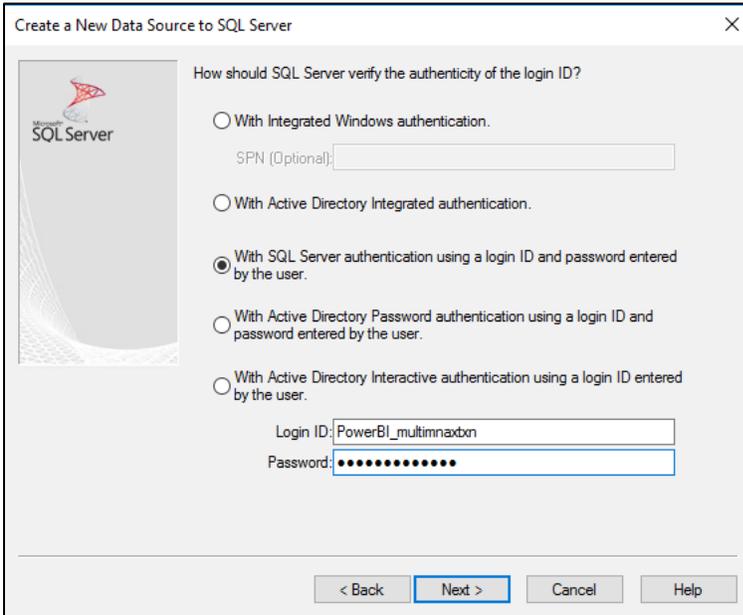
1. Click on “User DSN’ tab.
2. Click on Add.
3. Click on ODBC Driver 17 for SQL Server.



4. Click “Finish”.
5. Enter the Name as “PowerBI_multimaxtn”, and specify the SQL Server Name or IP Address.



6. Click "Next".
7. Check "With SQL Server authentication using a login ID and password entered by the user"
8. Enter the username as "PowerBI_multimaxtn" and the password as "Reporting4me!".



How should SQL Server verify the authenticity of the login ID?

With Integrated Windows authentication.
SPN (Optional):

With Active Directory Integrated authentication.

With SQL Server authentication using a login ID and password entered by the user.

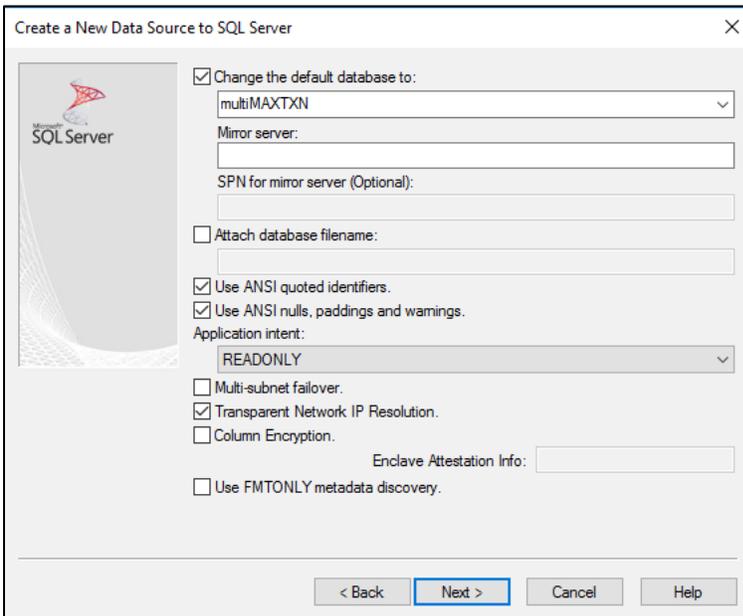
With Active Directory Password authentication using a login ID and password entered by the user.

With Active Directory Interactive authentication using a login ID entered by the user.

Login ID: PowerBI_multimaxtn
Password: Reporting4me!

< Back Next > Cancel Help

9. Click "Next".
10. Check "Change the default database to" and select multimaxtn.
11. Change the Application intent to READONLY and click "Next".



Change the default database to:
multiMAXTXN

Mirror server:

SPN for mirror server (Optional):

Attach database filename:

Use ANSI quoted identifiers.
 Use ANSI nulls, paddings and warnings.

Application intent:
READONLY

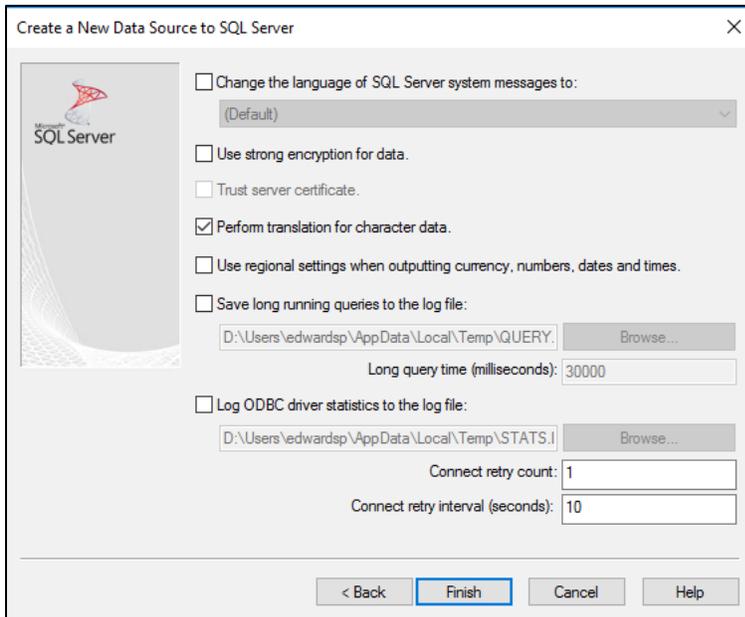
Multi-subnet failover.
 Transparent Network IP Resolution.
 Column Encryption.

Enclave Attestation Info:

Use FMTONLY metadata discovery.

< Back Next > Cancel Help

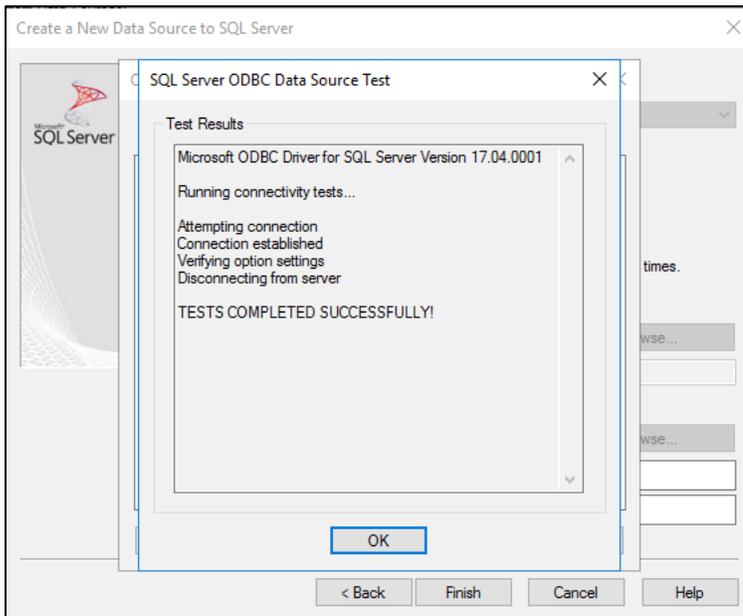
12. Click "Finish".



13. Click "Test Data Source".

14. If "Tests Completed successfully!" is visible Click "OK"

a. If the test fails, revise the configuration until it completes successfully.



Using the Reporting Tool

1. Install Microsoft PowerBI Desktop client on the same machine as the ODBC connection.
2. Open the "Symmetry Movement Impact Tool.pbix" file.
3. On the toolbar click "Refresh".
4. The data will now appear within your dashboards and you can use the filtering options at the top of the screen to restrict the visible information. For example, specify the Source Card Holder and all related card holders whom they may have come in contact with will appear. You can also filter by Reader Location and date.

