ISAM TO SQL MIGRATION IN SYSPRO

This document is aimed at assisting you in the migration from an ISAM data structure to an SQL database. This is not a detailed technical document and assumes the reader has a good knowledge of SYSPRO, SYSPRO services, Microsoft SQL and Windows administrative functions.

There are some preparatory setups that need to be examined and configured BEFORE starting the migration.

Pre-requisites

- Know if you are using a 3 tier or 2 tier environment?
- Make sure you know the SQL Administrator password (sa user) and the Network Administrator password.
- Make note of the default Collation on the SQL server.
- Determine the method of Authentication for SQL. It will be either SQL or Windows Authentication.
  - Add a SQL/Windows user to the SQL Security.
  - The user must have the ability to read, write and delete information in the database.
  - The user must also be added to the SQL server authentication section of the Operator Maintenance in SYSPRO.
    (Multiple users can be created in SQL and SYSPRO if you want each user to have their own login to SQL if so desired)
  
  Note: If you are using Windows Authentication, the SQL server authentication information in the SYSPRO Operator Maintenance is ignored.

- Attach a ‘Log on as’ user to the SYSPRO Services. (a must for 3 tier)
  - This user must be a user account in the Domain.
  - This user must have rights to both the SQL and SYSPRO application servers.

- A folder must be created and shared on the SQL server. The SYSPRO services and the SQL services must be able to access this share.

- Order a new SQL registration number for your company(ies) and have it in your possession.

- Make sure the Datasource for SQL is installed on the SYSPRO application server (installed from the SYSPRO installation cd).

- Define the SYSPRO System Setup > Database tab.
  - ‘SQL Server’ must be selected in the ‘Database information’ section.
  - The method of Authentication must be defined in the ‘Database connection information’ section.
  - Check that the information in the ‘Database configuration’ section is correct.

- Stop all SYSPRO Services before starting the migration wizard.

ISAM to SQL Migration Wizard

SYSPRO is installed with an SQL Migration Wizard which will guide you through the conversion from ISAM to SQL. If you have completed and have the information from the ‘Pre-requisites’ section you are now ready to start the migration.
1. It is best to run the wizard directly on the SYSPRO application server. So, create an icon on the servers desktop (if it does not already exist) that points to the IMPACT.exe file located in the ‘base’ folder of SYSPRO.

2. Launch SYSPRO and login as the ‘ADMIN’ user (or a user that has ADMIN group rights).

3. Go to Setup > Company Setup and highlight the company you wish to migrate and select the Change button.

4. Click on the Database and Data Paths tab. Click on the Migrate to SQL Server button to start the process.

5. A Windows will appear stating that it will save any changes before proceeding. Click OK

6. A migration warning window will appear. After reading click Next.
7. The wizard will now try to use the Datasource to connect to the SQL server. Click **Next**.

![ISAM to SQL Migration](image)

8. Select the method of Authentication you chose in the pre-requisites. Click **Next** to connect.

![ISAM to SQL Migration](image)

9. If a connection is made the following screen will display. Click **OK**

![ISAM to SQL Migration](image)
10. The wizard will ask if it should create the database or let you create it.

- If your SQL servers' default collation is Binary or Case Sensitive (Binary is preferred), select the option to let the wizard create the database.

- If your SQL servers' default collation is Case Insensitive, you must select the option to create the database in SQL manually and choose a Binary or Case Sensitive collation (sort order). After creating the database come back to this program and type in the database name you created. (the database name is case-sensitive). Click Next.

11. The wizard will now ask to create the tables for SQL. There are 3 choices.

- **I require the wizard to create the SYSPRO tables for me** – Use this option if you want the wizard to create all the tables for you.

- **I will issue the statements myself from the Query analyzer** – Use this option to create an SQL script that you will run in Query Analyzer to create the tables.

- **I have already created the tables and wish to continue** – Use this option after creating all the tables.

Click on Next after making selection.
12. Select the *I have already created the tables and wish to continue* option and click **Next**.
13. The Bulk Copy screen will appear.

- **Temporary directory** - Ensure that the folder exist and that both the SYSPRO services and the SQL services have rights.
  - If SYSPRO is installed in a 3-tier environment, this must be pointing to a shared folder that was created on the SQL servers’ local drive. It should be entered using a UNC path (Example: `\SQL-SERVER\SHARENAME`, where SQL-SERVER is the name of the SQL server and sharename is the name of the shared folder on the SQL server. Both the SYSPRO services and the SQL services must be granted read, write and delete access to this share.

- **Change Code Page** – Used for advanced SQL database users who want to change the Code Page number from the standard

- **Restart bulk copy** – used if the bulk process fails and want to start back at the same place where it left off after correcting the error.

- **Skip Bulk Copy** – use this option if you do not need to go through the Bulk Copy process again.

After making selections click on **Start Bulk Copy**.

The wizard will reconfirm that you wish to start the bulk copy process. Click **OK**.

First stage is checking the integrity of the ISAM files
Second stage is exporting the ISAM file to a BCP format and importing it to SQL.

After the bulk copy process is finished. Click **OK**.

14. A Screen will display the new database name. The option for removing the ISAM has been disabled purposely. Click on **Next**.
15. The last screen in the wizard allows let operators back into SYSPRO and test the current login for SQL access. (during the migration the wizard disallowed users from logging in).

- Put a check mark in the **Allow Operators to login to this company**.
- Click on the **Test Current Login** button. This will test the login credentials against the currently logged in user.

![Image of Testing Current Login](image)

- Click on **Finish** to complete the migration.

![Image of ISAM to SQL Migration](image)

16. Finally you need to enter the new SYSPRO SQL registration number for your company using the Company Maintenance program.

You are now finished migrating to a SQL database. You must repeat these steps for each of your SYSPRO companies.