

# SQL Server PortaCount™ 804x



## Detailed Instructions V2

Application Note RFT-027 (US)  
September 2024

### Based on current data approach, customers seeking SQL Server with 804x/FPU fall into four categories:

FitPro™ Ultra software includes a set of support files (README.pdf and four SQL script files) that are distributed with the software.

\*The support files are located in the FitPro™ Ultra installation directory (typically “C:\Program Files (x86)\TSI\FitPro Ultra”) in a folder called, “MS SQL Support”.

#### CATEGORY 1: No current data

New, first time 804x customers (never owned any prior version of PortaCount™ fit tester).

These customers are in the process of purchasing (1 or more) 804x units and for a variety of reasons#, these customers are required to use SQL Server from the very get-go, and do not have any prior data to migrate.

#### Steps (to begin using SQL Server for 804x/FPU)

1. DBA Steps\*\*
  - a. Create DB.
  - b. Run SQL script to create FPU tables – “CreateFitPro4Tables.sql”.
2. Start FPU.
3. Give a name for the SQL Server DB, then type in the DB string (given by DBA) to connect to DB.
  - a. Select the “**Data Management**” option.

Edit Database

Active Database

NAME (REQUIRED)  
SQL Server

Database type  
 SQLITE  
 MS SQL

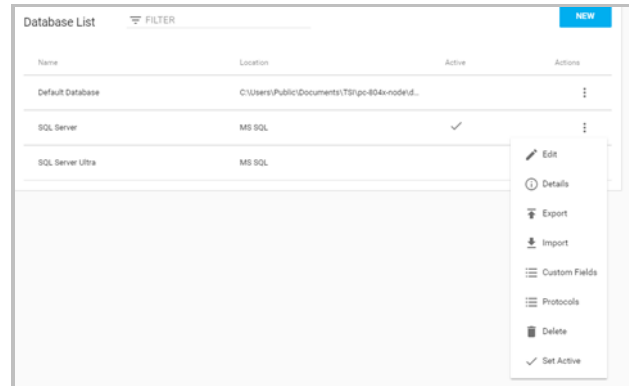
MS SQL CONNECTION STRING (REQUIRED)  
.....

NOTES  
.....  
ENTER NOTES HERE...

CANCEL SAVE

\*\*Step 1 (DBA Steps) is a common step for all four customer categories. TSI® does not provide SQL server software - this is a Microsoft® product) required to be purchased by customer. The minimum version SQL Server required to work with FPU is MS SQL Server 2016 (but you can use newer versions). The customer’s Database Admin (IT Dept.) needs to do this #Variety of reasons include information security and data storage policy, expected high volumes of fit tests, etc.

- b. Save the database information and **“Save”** it.
  - c. Open the side menu and make the SQL Server active.
4. Exit FPU.
  5. Go back into FPU.



**NOTICE**

These steps need to be performed for every computer that will connect to the instrument(s). Steps above are one-time only, so long as customer moves forward to the new data management approach of SQL Server. If at some point the customer switches to SQL Lite and creates SQL Lite data which later need to be moved over to SQL Server, then they would need to follow instructions in Category 2.

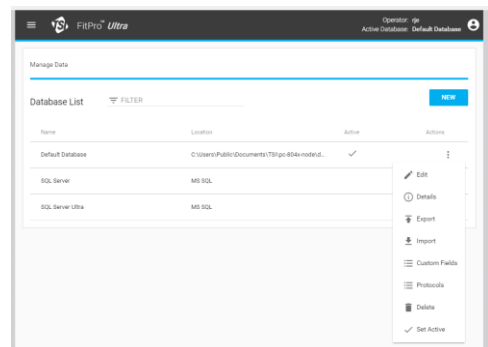
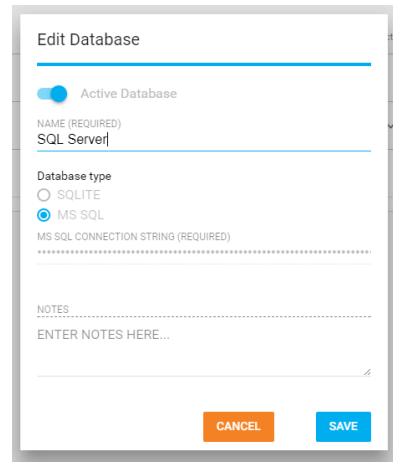
**CATEGORY 2: Currently store data in SQL Lite with FPU**

Existing customers who already own (1 or more) 804x units.

These customers have been using SQL Lite data management option in FPU, but now for a variety of reasons<sup>#</sup>, are seeking to switch over to SQL Server option being offered with FPU and they need to migrate all their stored SQL Lite data into SQL Server.

**Steps\* (to begin using SQL Server for 804x/FPU)**

1. DBA Steps.\*\*
  - a. Create DB.
  - b. Run SQL script to create FPU tables – “CreateFitPro4Tables.sql”.
2. Start FPU.
3. Give a name for the SQL Server DB, then type in the DB string (given by DBA) to connect to DB.
  - a. Select the **“Data Management”** option.
  - b. Save the database information and **“Save”** it.
4. Export (from SQL Lite DB) –
  - a. Select Data Management.
  - b. Make the SQLite database the active database and then select **“Export”**.



\*\*Step 1 (DBA Steps) is a common step for all four customer categories. TSI® does not provide SQL server software - this is a Microsoft product) required to be purchased by customer. The minimum version SQL Server required to work with FPU is MS SQL Server 2016 (but you can use newer versions). The customer’s Database Admin (IT Dept.) needs to do this #Variety of reasons include information security and data storage policy, expected high volumes of fit tests, etc.

5. Select the Database table(s), the delimiter and Location. The Location is the Location displayed in the previous screen.
6. Click the “**Export**” button.

7. Importing into SQL Server.
  - a. Select **Data Management**.
  - b. Open the side menu again and select “**Import**”. The form shown will appear.
  - c. Do this same process for each of the tables.

8. Exit FPU.
9. Start FPU.
  - a. Open the side menu and make the SQL Server active.

Name	Location	Active	Actions
Default Database	C:\Users\Public\Documents\TSL\pc-804x-node\d...		⋮
SQL Server	MS SQL	✓	⋮
SQL Server Ultra	MS SQL		⋮

## NOTICE

These steps need to be performed for every computer that will connect to the instrument(s). These steps need to be performed per SQL Lite DB that needs to be migrated to SQL Server. If the DBs have some duplicate data between them, the import step in FPU will prompt for “override” or “skip” for each duplicate. Steps above are one-time only, so long as customer moves forward to the new data management approach of SQL Server and retires current data management approach. If at some point the customer switches to SQL Lite and creates SQL Lite FPU data which later need to be moved over to SQL Server FPU data, then they would need to repeat these instructions under Category 2.

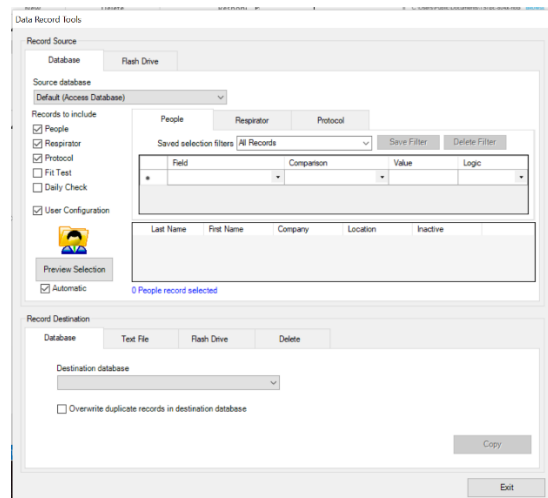
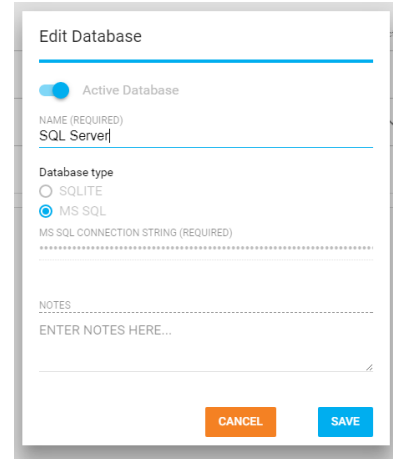
### CATEGORY 3: Currently store data in Access with FP+

Existing customers, owning (1 or more) 803x units, and in process of upgrading (some or all) 803x to 804x units.

Currently these customers use Access data management option in FP+. For a variety of reasons# they seek the SQL Server data management option when they upgrade to 804x. They need to migrate their stored FP+ data into SQL Server and this data migration needs to be performed during the 804x upgrade.

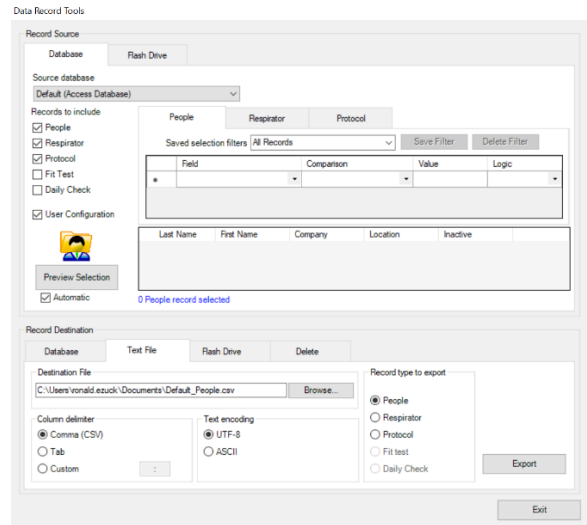
#### Steps\* (to begin using SQL Server for 804x/FPU)

1. DBA Steps.\*\*
  - a. Create DB.
  - b. Run SQL script to create FPU tables – “CreateFitPro4Tables.sql”.
2. Start FPU.
3. Give a name for the SQL Server DB, then type in the DB string (given by DBA) to connect to DB.
  - a. Select the “**Data Management**” option.
  - b. Save the database information and “**Save**” it.
4. Exit FPU.
5. Start FP+.
6. Export FP+ data – note the directory and name of the .csv file.
  - a. Go to “**Data Record Tools**” in the “Database” menu option.



\*\* Step 1 (DBA Steps) is a common step for all four customer categories. TSI® does not provide SQL server software - this is a Microsoft product) required to be purchased by customer. The minimum version SQL Server required to work with FPU is MS SQL Server 2016 (but you can use newer versions). The customer’s Database Admin (IT Dept.) needs to do this #Variety of reasons include information security and data storage policy, expected high volumes of fit tests, etc.

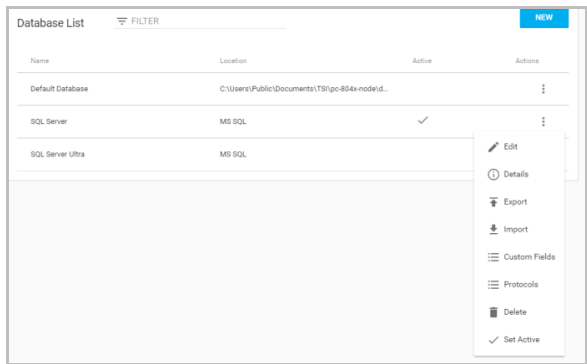
- b. Select the Source database. Click on the **“Text File”** tab.
- c. Select the **“Comma”** Column delimiter, **“UTF-8”** Text encoding, and table (Record type to export).
- d. Select a **“Destination File”**. This is the file that will be imported into FitPro™ Ultra software.
- e. Click **“Export”**. This creates a file, here named FITTEST\_People.csv.
- f. Repeat this same process for each of the tables listed (People, Respirator, Protocol, Fit test and Daily Check).



7. Exit FP+.

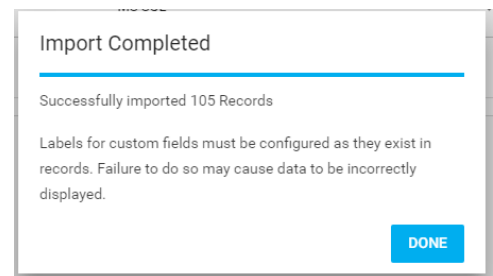
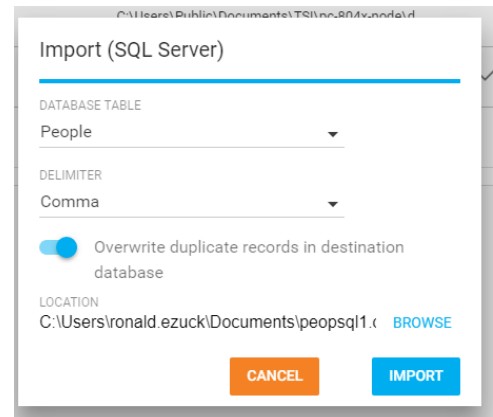
8. Start FPU.

- a. Select the **“Data Management”** option. Add the new SQL Server database to the application if it has not been previously installed.
- b. Open the side menu and make the SQL Server active.
- c. Open the side menu again and select **“Import”**. The form shown will appear.
- d. Select the **“DATABASE TABLE”** and the delimiter (Comma) as selected when exporting from the FitPro™ Plus database.
- e. At this point duplicate records can either be added or overwritten in the new database.
- f. Enter (or browse) to the location of the exported (.CSV) file and select it. Press **“IMPORT”**. The data should be transferred to the SQL Server database. A message will be displayed indicating the number of records transferred.
- g. Repeat this process for each of the other tables listed in FitPro™ Plus (People, Respirators, Fit test and Daily Check).



9. Exit FPU.

10. Go back into FPU.



## NOTICE

These steps need to be performed for every computer that will connect to the instrument(s). These steps need to be performed per Access DB that needs to be migrated to SQL Server. If the DBs have some duplicate data between them, the import step in FPU will prompt for “override” or “skip” for each duplicate. Steps above are one-time only, so long as customer moves forward to the new data management approach of SQL Server and retires current data management approach. If at some point the customer switches to SQL Lite and creates SQL Lite FPU data which later need to be moved over to SQL Server FPU data, then they would need to repeat these instructions under Category 2.

## CATEGORY 4: Currently store data in SQL Server with FP+

Existing customers, owning (1 or more) 803x units, and in process of upgrading (some or all) 803x to 804x units.

Currently these customers are already using SQL Server data management option in FP+ and seek to continue using SQL Server data management option when they upgrade to 804x. They need to migrate their stored FP+ SQL Server data into FPU SQL Server and this data migration needs to be performed during the 804x upgrade.

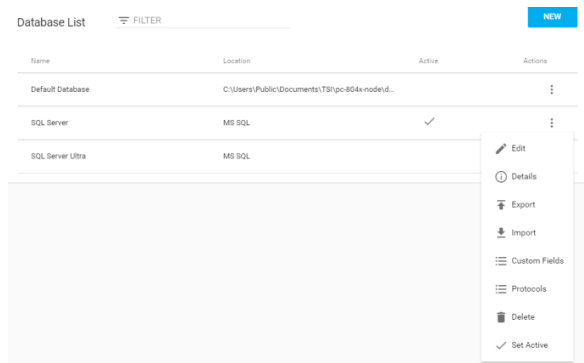
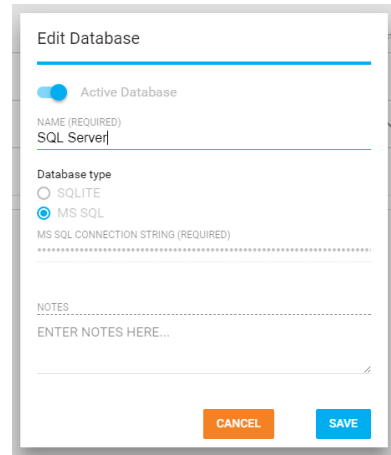
### Steps\* (to begin using SQL Server for 804x/FPU)

1. DBA Steps.\*\*
  - a. Create DB.
  - b. Run SQL script to create FPU tables – “CreateFitPro4Tables.sql”.
2. Additional DBA Step.
  - a. Run SQL script “FitProPlustoFitProUltraintial.sql” which copies all the FP+ SQL server data into FPU SQL Server data.

## NOTICE

The SQL Server script has comments in it that guide the DBA on how to point to the right locations, etc.

3. Start FPU.
4. Give a name for the SQL Server DB, then type in the DB string (given by DBA) to connect to DB.
  - a. Select the “**Data Management**” option. Save the database information and “**Save**” it.
5. Exit FPU.
6. Start FPU.
  - a. Open the side menu and make the SQL Server active.



Name	Location	Active	Actions
Default Database	C:\Users\Public\Documents\TShpc-804x\noded...		
SQL Server	MS SQL	✓	
SQL Server Ultra	MS SQL		

\*\*Step 1 (DBA Steps) is a common step for all four customer categories. TSI® does not provide SQL server software - this is a Microsoft product) required to be purchased by customer. The minimum version SQL Server required to work with FPU is MS SQL Server 2016 (but you can use newer versions). The customer’s Database Admin (IT Dept.) needs to do this #Variety of reasons include information security and data storage policy, expected high volumes of fit tests, etc.

## NOTICE

These steps need to be performed for every computer that will connect to the instrument(s). These steps need to be performed per SQL Server FP+ DB that needs to be migrated to SQL Server FPU DB. If the DBs have some duplicate data between them, the SQL script (run by DBA) will prompt for “override” or “skip” for each duplicate. Steps above are one-time only, so long as customer moves forward to new data management approach of SQL Server and retires current data management approach. If at some point the customer switches to SQL Lite and creates SQL Lite FPU data which later need to be moved over to SQL Server FPU data, then they would need to repeat these instructions under Category 2.

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