



- Let's convert the Cats demo from using PxPlus native keyed files to using a MariaDB external database
- Important: Make sure you back up your PxPlus native keyed files before you start

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- Install and setup a database server if you don't already have one
 - Use the software/tools provided by the database vendor to install and set up the database server
 - We used <u>MariaDB</u> (free MySQL)
- Create a new database/schema on the server where the exported tables will go
 - Use database management software or command line tools provided by database server to create the database/schema
 - We used <u>MySQL Workbench</u>



MariaDB

- May need to install database connector
 - [MYSQL], [DB2], and [OCI] interfaces all require a database connector
 - [ODB] requires a ODBC driver for the database and a data source name
- Working with MariaDB, we need [MYSQL] interface so must download <u>MySQL C Connector</u>
- Install/Extract library file (libmysql.dll/libmysqlclient.so) to PxPlus install directory
 - Use <u>System Analysis Tool</u> to test if [MYSQL] interface is working

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- Open the Data Dictionary
 - On the IDE, expand the Data Management category and click on Data Dictionary Maintenance
- Launch the Bulk Database Export Utility
 - In Data Dictionary Maintenance, click the Export button in the Database section of the top toolbar
- Input the connection information to connect to your database (in our case, MariaDB)
- Click the Load Tables button

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- To prevent plain text login credentials and make it easier to change login credentials in the future:
 - Click the **Create DB File** button to create a database Link File
 - Modify DB Link File to use a global variable for the User Name and Password
 - Add definition of User and Password and an OPEN of the DB Link File to the START_UP program
 - Password protect the START_UP program



- Scroll through the list of tables from the data dictionary, and for all the tables you want to export:
 - Click the **Validate** check box to ensure that the data in the file matches the data definition
 - If not a match, fix the definition or the data so that they do match; otherwise, the database will display an error when trying to load the data
 - Select the **Create Table** option from the **DB Action** drop-down list to create the table in the database
 - Click the **Load Table** check box to copy the data from the PxPlus native file to the database table
 - Select the **Create Link File** option from the **File Action** drop-down list to create a Link File to the table in the database, overwriting the PxPlus native file

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						View Log	Apply	Exit

- Make sure that the Strip User/Password from Link Files and Prefix Entries check box is selected
- Select the Disable Data Loss Warning check box to avoid a warning for each table exported
 - This is why we said earlier to backup your files so that you can always go back
- Click the Apply button to perform the export
 - When completed, a message box displays to list all the changes that were done

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- Click the View Log button to view/save/print the log
 - If any errors occurred, more details can be found in the log
- Exit the Bulk Database Export Utility

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Now if you look in the data dictionary, the files ٠ exported will display MySQL Link File as File Type

Now if we open our Cats demo, it will work as ٠ before but the data is in the MariaDB database

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