



OLI Tips #26

Loading a private database into Hysys OLI

Revised October 24, 2012

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Introduction

Many times new or updated data is available from OLI Systems, Inc. When this occurs, a private (or user) database is distributed.

Additional Links:

Install ESP Databases:

<http://support.olisystems.com/TIPS/OLI-Tips11-Installing-ESP%20DB.pdf>

Using ESP Databases:

<http://support.olisystems.com/TIPS/OLI-Tips12-using-ESP-Private-Databases.PDF>

Once installed, the database must be made accessible to Hysys.

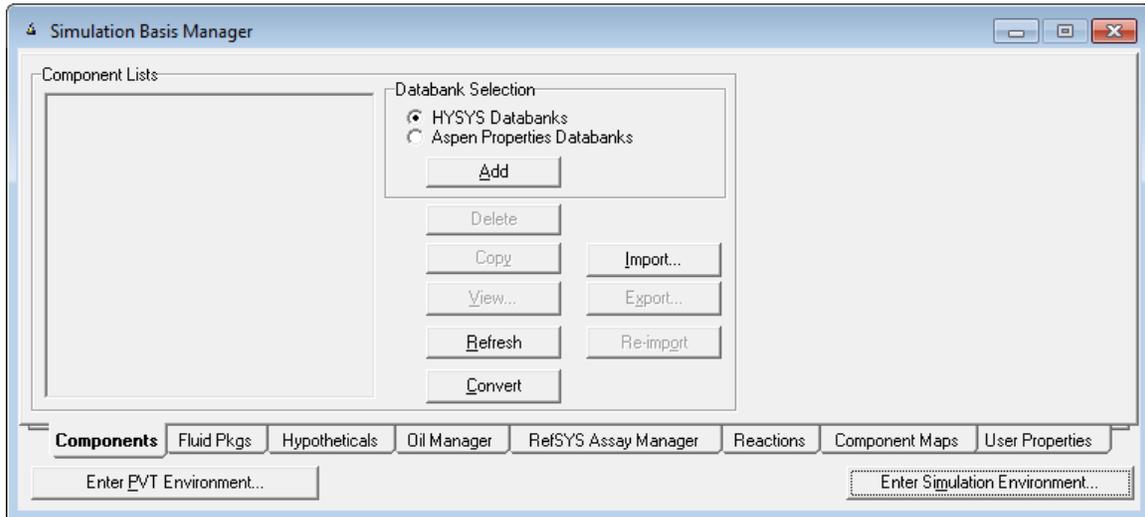
Assumptions:

1. It is assumed that you have Hysys 7.3 or later and that you have the OLI Engine for Aspen HYSYS V7.3(9.0.2) installed.
2. This tip assumes you are already familiar with Hysys and can access the component views.

Accessing the OLI User Supplied Databank (AQ Framework)

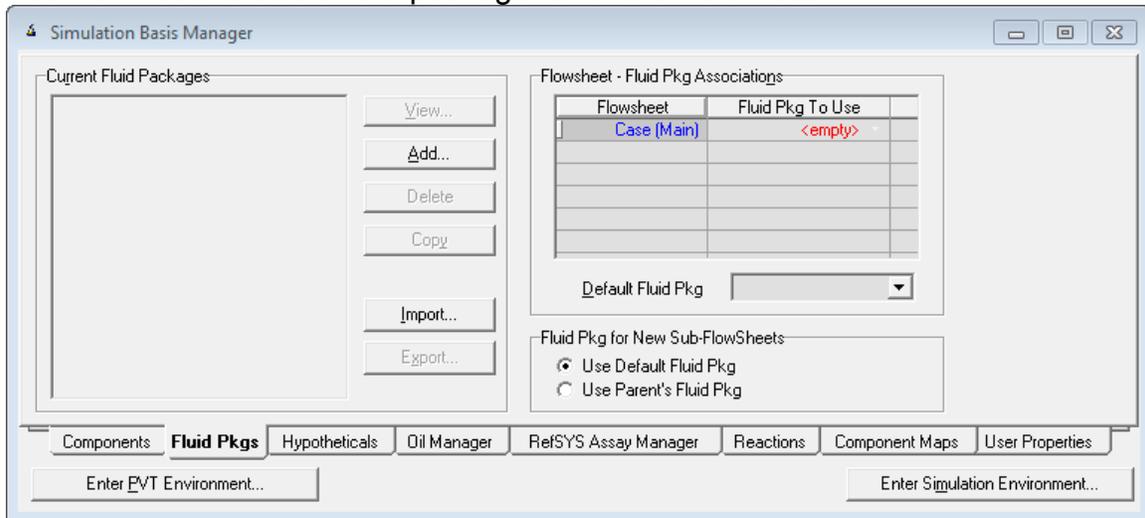
Step 1:

Select the Simulation Basis Manager. This will display the **Components** tab. Click on the **Fluid Pkgs** tab.



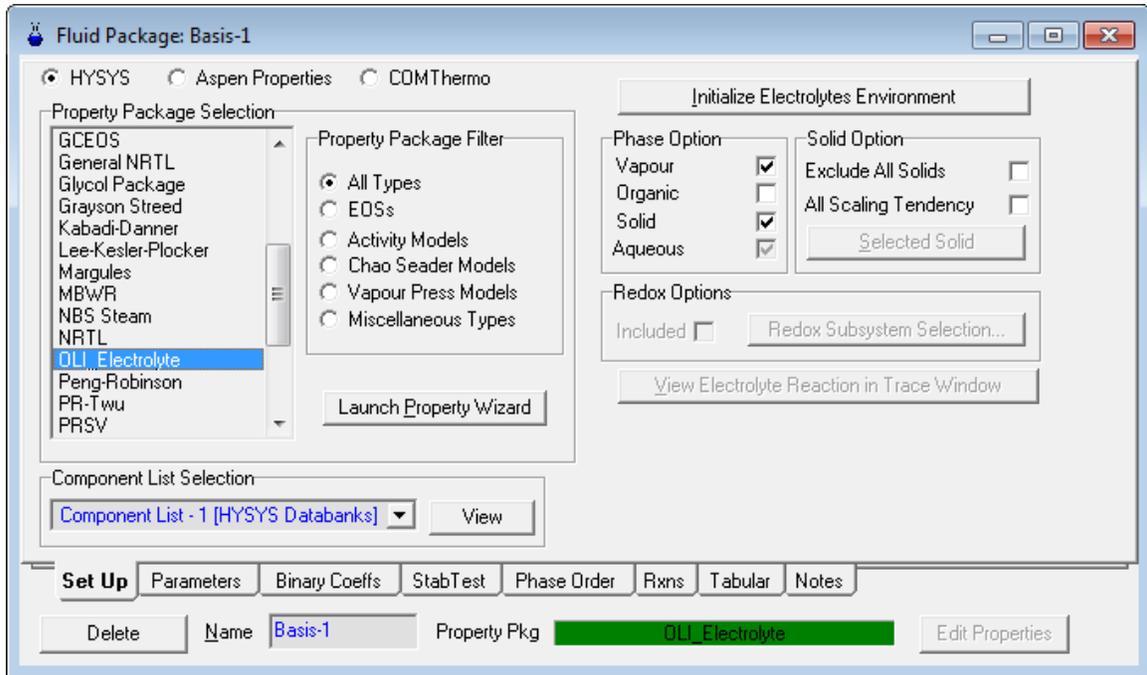
Step 2:

You now need to add a fluid package. Click the **Add** Button.



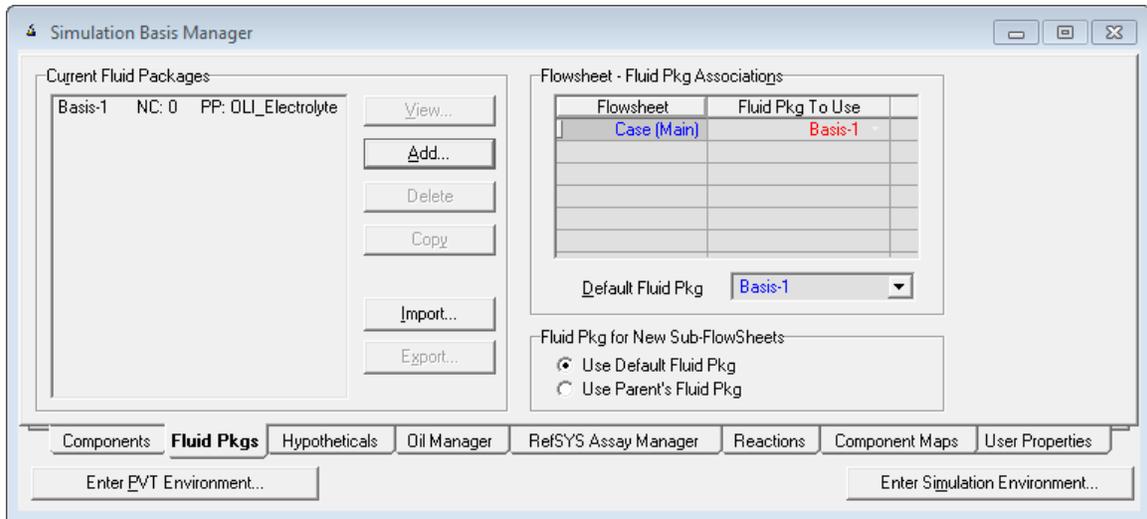
Step 3:

Scroll down the list of Property Packages till you find **OLI Electrolyte**. The dialog will expand to show additional fields.



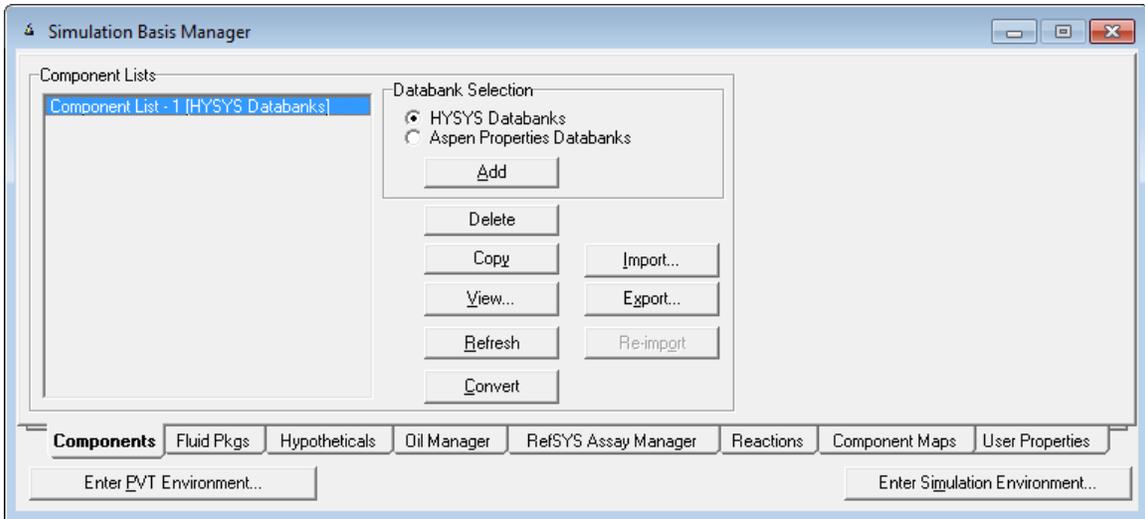
Step 4:

Click on the “x” to close this window. You will be returned to the current fluid packages window. Highlight the OLI Electrolyte line and then click the **Components** tab.



Step 5:

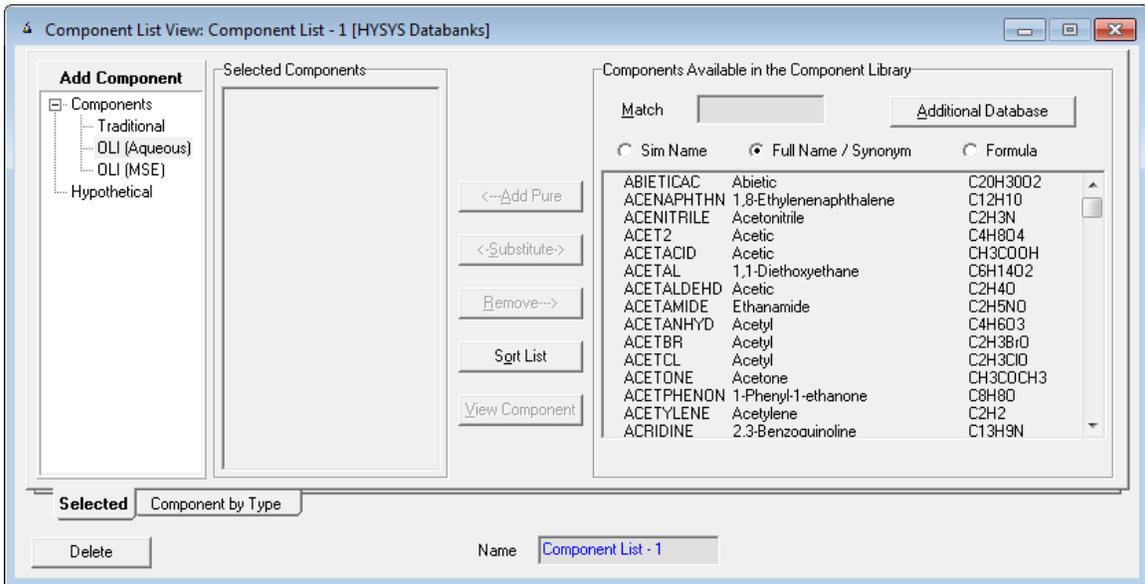
A new component list will appear. High light the new component list and then click the **View** button.



Step 6:

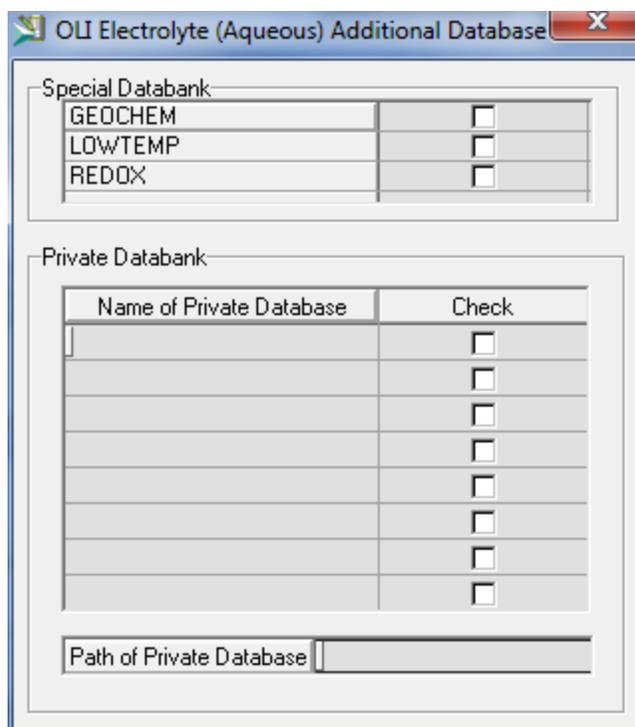
Several types of components will be displayed in the **Components** tree. Select **OLI (Aqueous)**. The window will expand to display more components.

Click the **Full** radio button. The **Additional Database** button should be visible. Click the button.

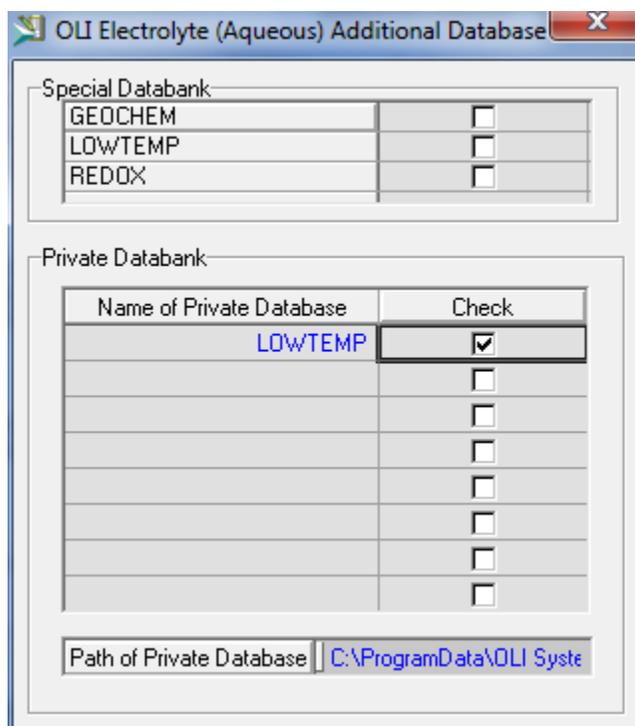


Step 7:

The procedure that works well is to first specify the path (or location) of the private database. In this example the database we want to use is



Stored in the C:\ProgramData\OLI Systems\Databanks\9.0.2 folder.



Once you have entered the path, and it is accepted. Enter the name of the private database in the field. Here we have entered the name LOWTEMP. This

must be a valid ESP format database. Finally we have checked the box to use this database.

The Hysys program will indicate that it is reading a pure component database.

Reading OLI Pure component database

The program is now ready to use the new OLI database.

Accessing the OLI User Supplied Databank (MSE Framework)

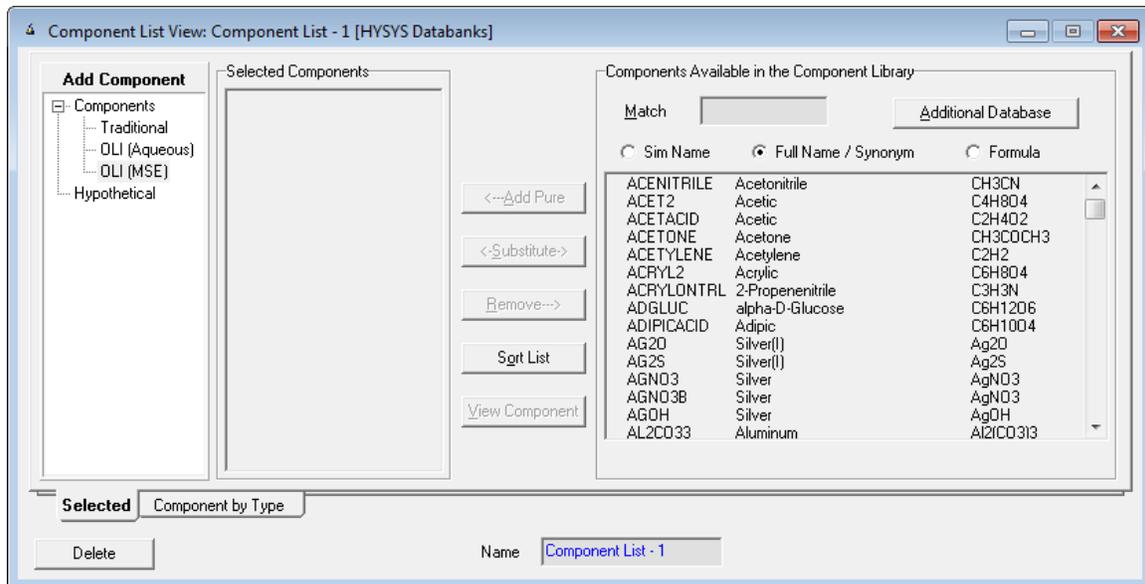
The steps for accessing a private databank in the MSE framework are similar to the AQ framework but with a few exceptions.

Repeat Steps 1 to 5 above:

Step 6:

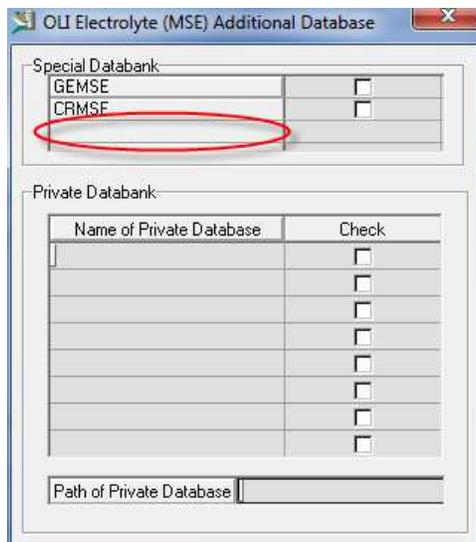
Several types of components will be displayed in the **Components** tree. Select **OLI (MSE)**. The window will expand to display more components.

Click the **Full** radio button. The **Additional Database** button should be visible. Click the button.

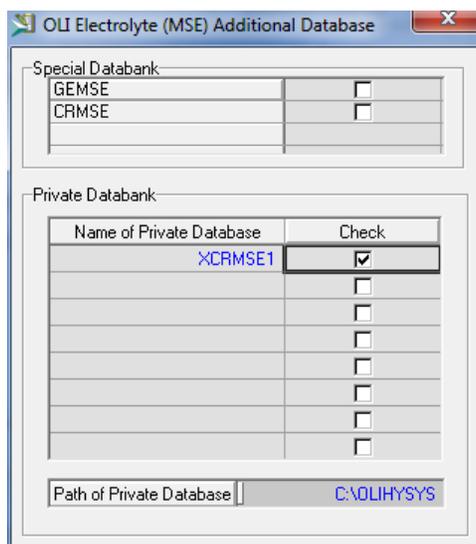


Step 7:

For MSE, Aspen Technologies did not include the **REDOX** databank which means that oxidation and reduction chemistry is precluded from this version.



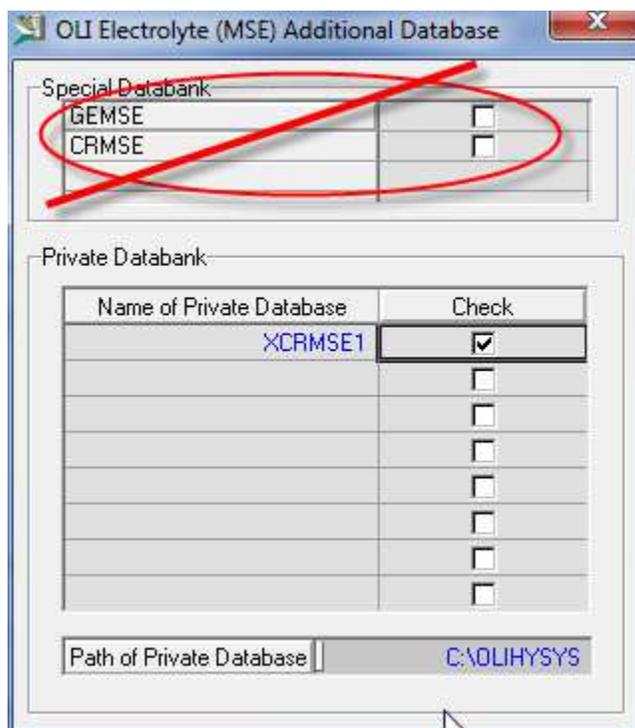
The procedure that works well is to first specify the path (or location) of the private database. In this example the database we want to use is **C:\OLIHYSYS**



Caveat!

There is a design flaw on the Aspen HYSYS side of the interface. The original version of the OLI interface for Aspen HYSYS used the PUBLIC databank as the default databank. When using one of the preloaded databanks for MSE – GEMSE¹ or CRMSE² - an error occurs. Aspen HYSYS erroneously appends the letter “B” to the name of the databank, e.g., GEMSEB, which does not exist.

Thus these databanks cannot be used in this version for MSE as they are installed.



Fortunately there is a work-around. The user can request OLI to convert their databank to a new name which contains at least 6 characters. Here we have converted the installed CRMSE databank into the databank XCRMSE1. This works around the known bug.

This converted databank is then used as with any other private databank.

¹ This is the MSE version of the GEOCHEM databank

² This is the MSE version of the CORROSION databank