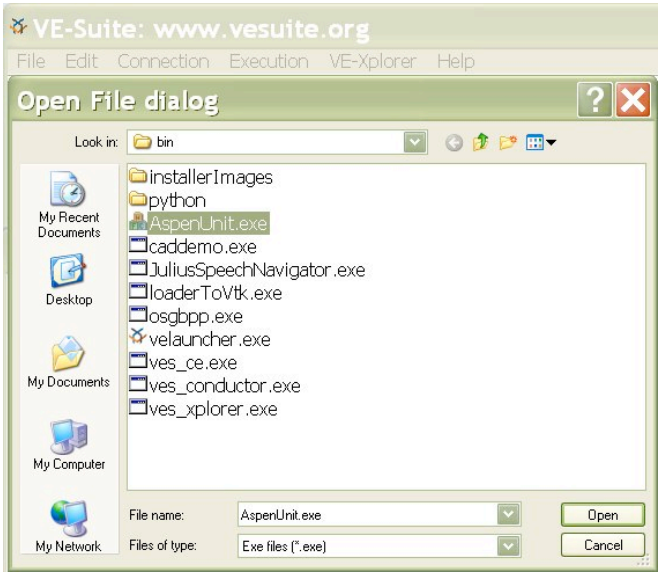
The VE-AspenUnit, which adds process simulation capabilities to VE-Suite will be described in this document. The assumptions are that users have access to Aspen Plus and that they are familiar with general VE-Suite operations.

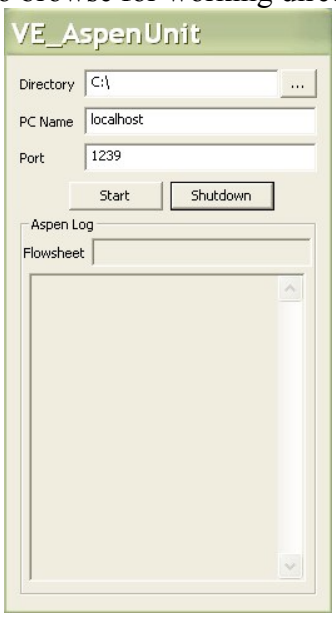
To begin, the user launches VE-Suite through the normal modes that can be found in the VE-Suite documentation. The user then launches the VE-AspenUnit executable via VE-Conductor.

Choose "Open" from the File menu and select the AspenUnit executable from you VE-Suite installation directory.



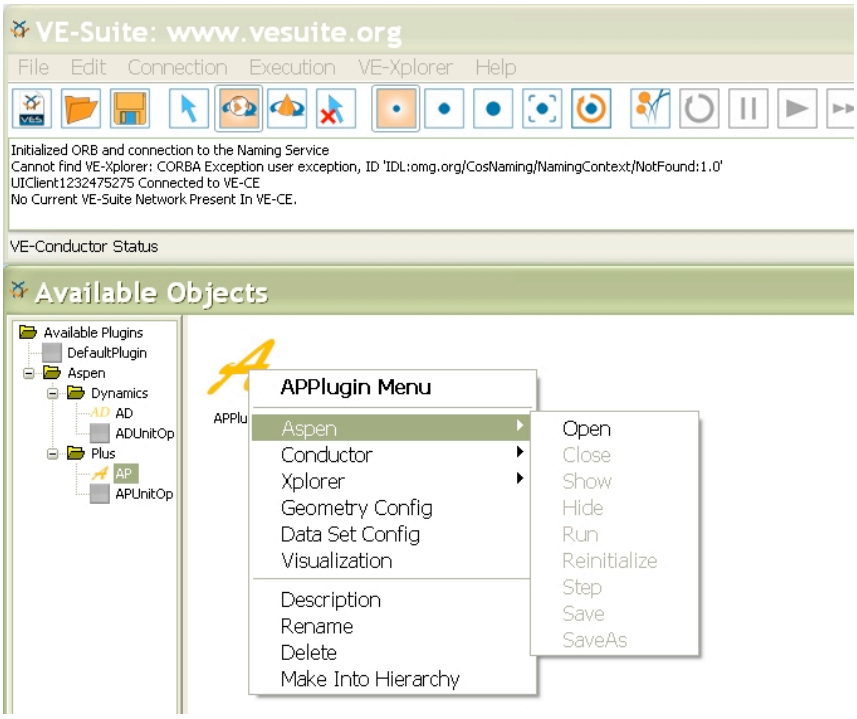
Once the VE-AspenUnit is launched:

Choose "…" to browse for working directory.

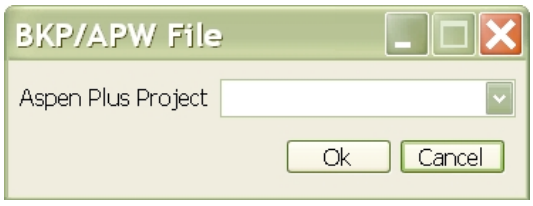


Once working directory choose “Start” - VE-Conductor will show “Successfully registered ASPENUNIT”.

VE-Conductor now requires a plugin be added to the canvas to allow connection to Aspen Plus. Double-click the Aspen Plus or Dynamics plugin to create it on the canvas. Right click the plugin and choose Aspen->Open.

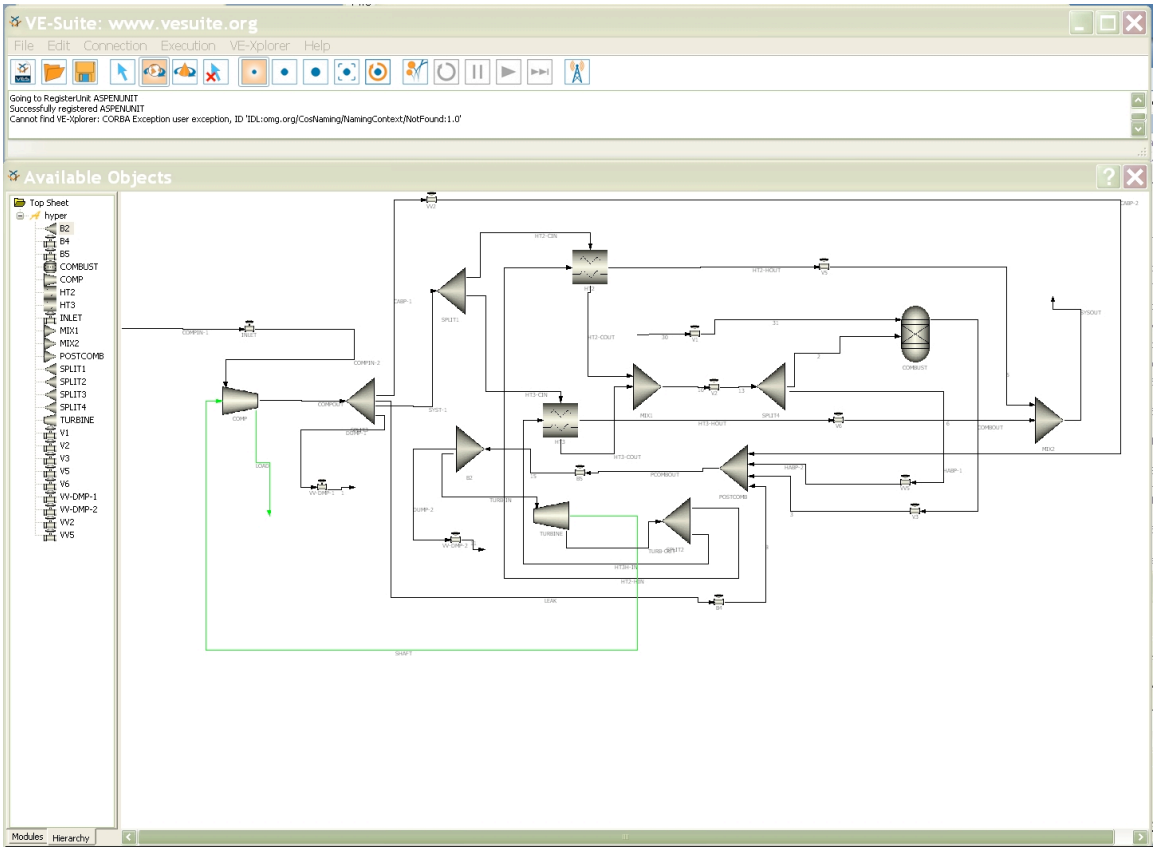


A popup dialog will appear with a pull down menu containing all the .apw/.bkp files that appear in the working directory.

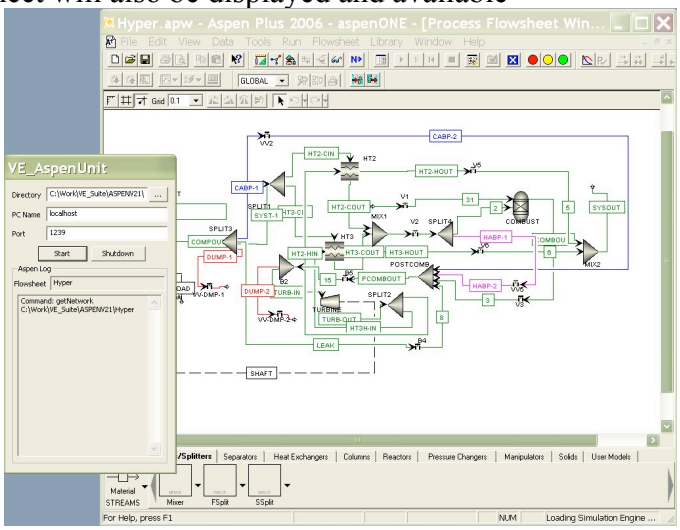


Note: Before doing this step be sure both the APW & bkp files have been created.

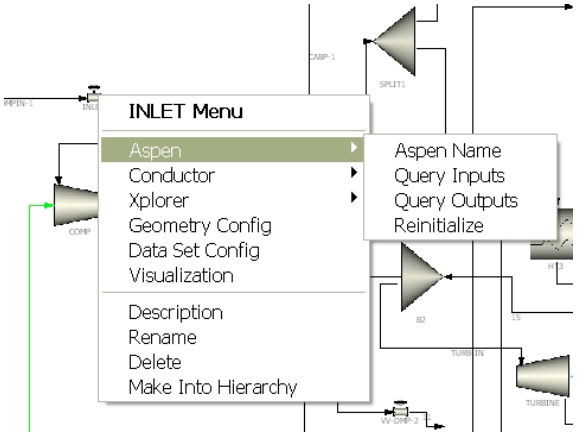
Once the .bkp/.apw file is chosen, navigate to the Hierarchy tab, expand the plugin and select an component on the sheet. The user will then see a network diagram of the Aspen flowsheet similar to what is seen in Aspen:



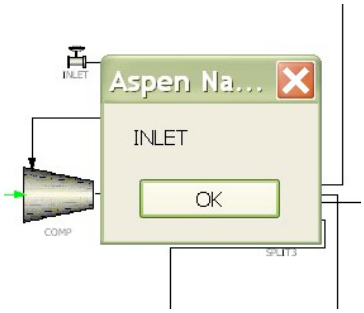
The Aspen flow sheet will also be displayed and available



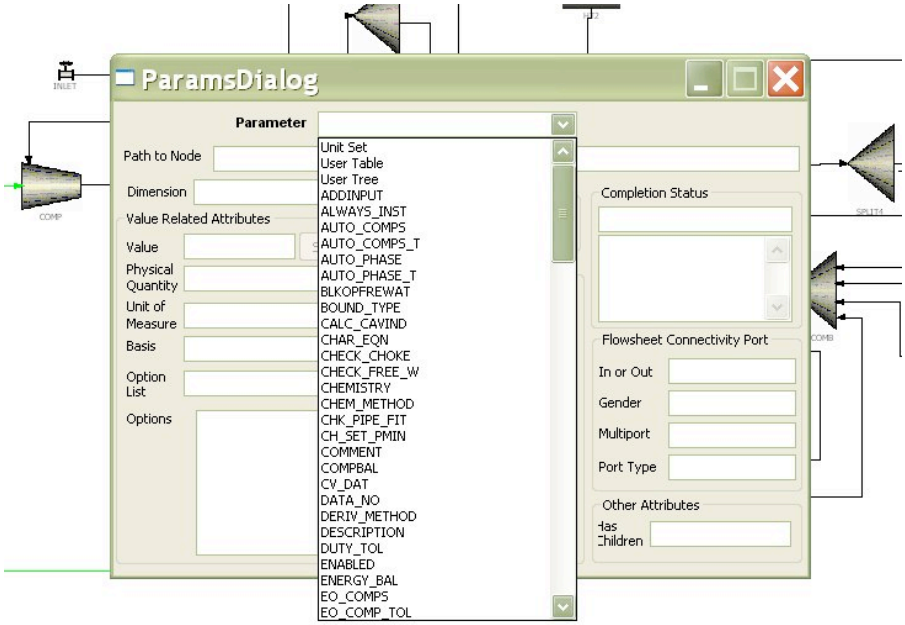
Once the Aspen flowsheet is loaded, it is possible to work with Aspen through the VE-Suite right-click menus:



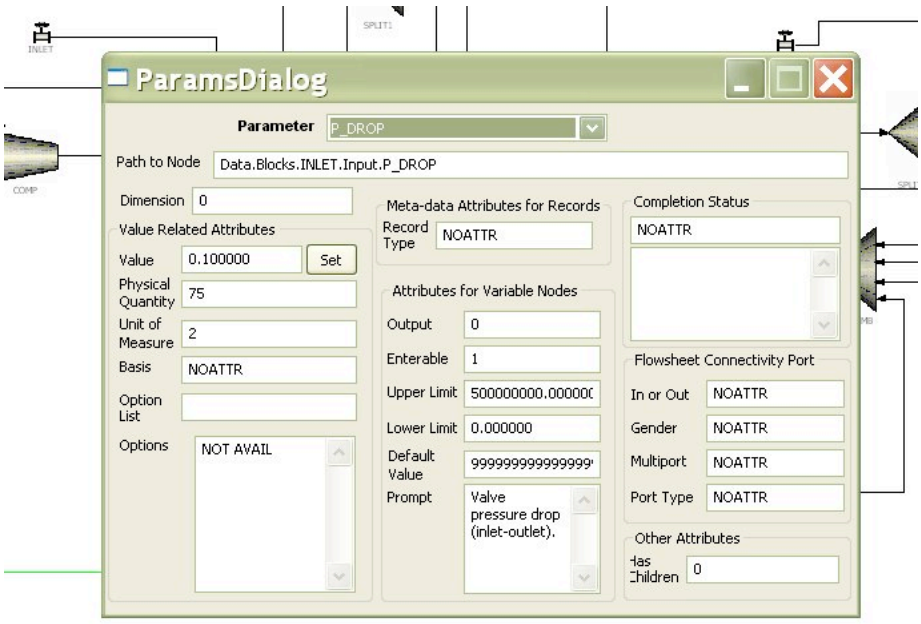
The Aspen unit operation name is shown below:



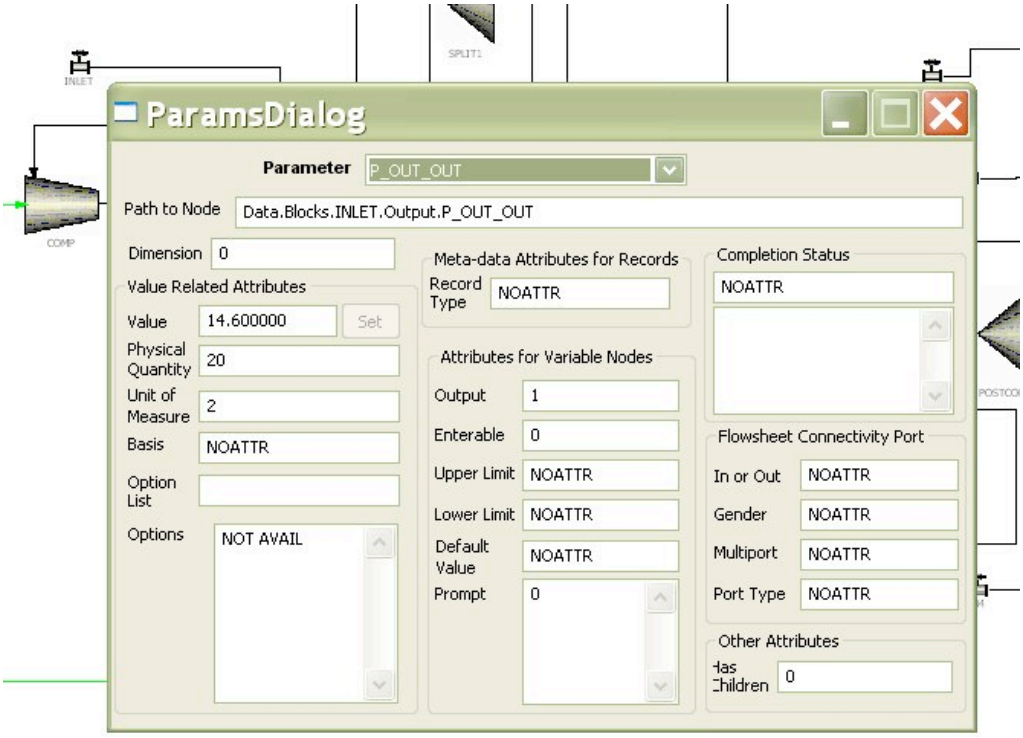
When the user chooses to investigate input variables, the parameters dialog allows any variable to be viewed for a specific unit operation and modified. This is also true for the results, except that the user is unable to change results.



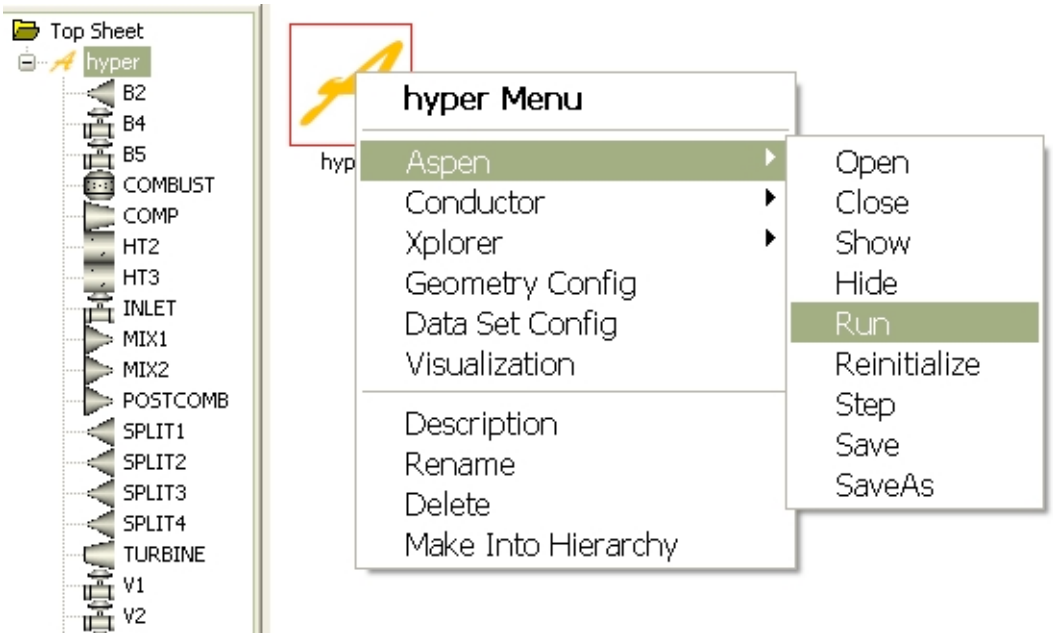
Inputs:



Results:



Once the user changes an input, the flowsheet can be run in Aspen by right clicking the plugin and choosing Aspen→Run:



Note: In addition to being able to run the Aspen flowsheet in traditional modes, there is also a 3D mode that can be viewed by selecting VE-Xplorer → Graphical View → Network: