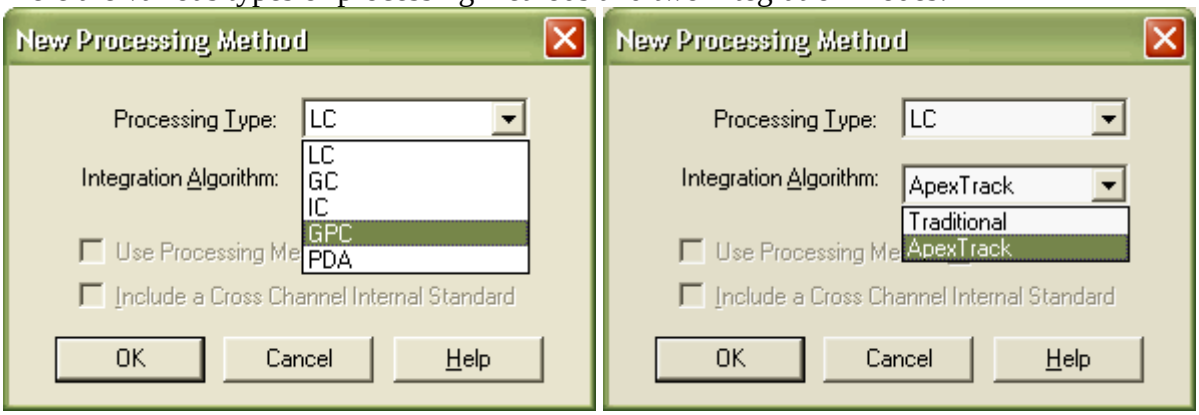
The Processing Method in Empower 2

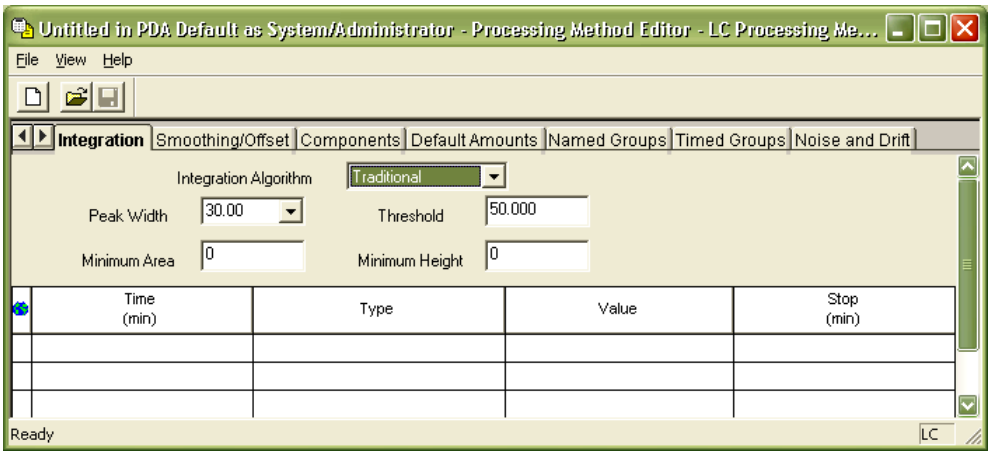
There are various types of processing methods and two integration modes:



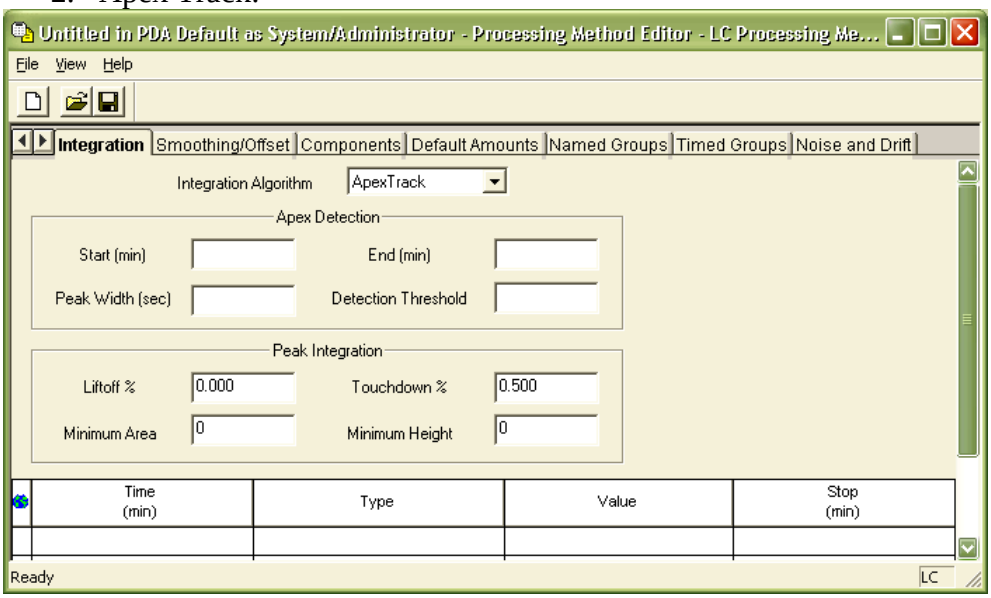
Screens in the LC Processing Method:

Integration:

1. Traditional:

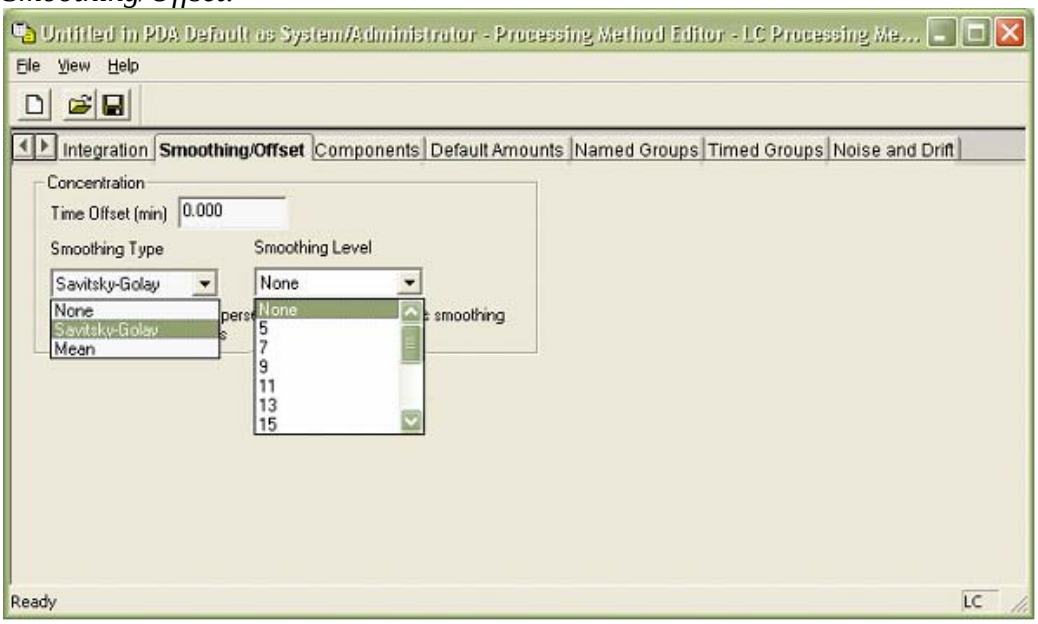


2. Apex Track:

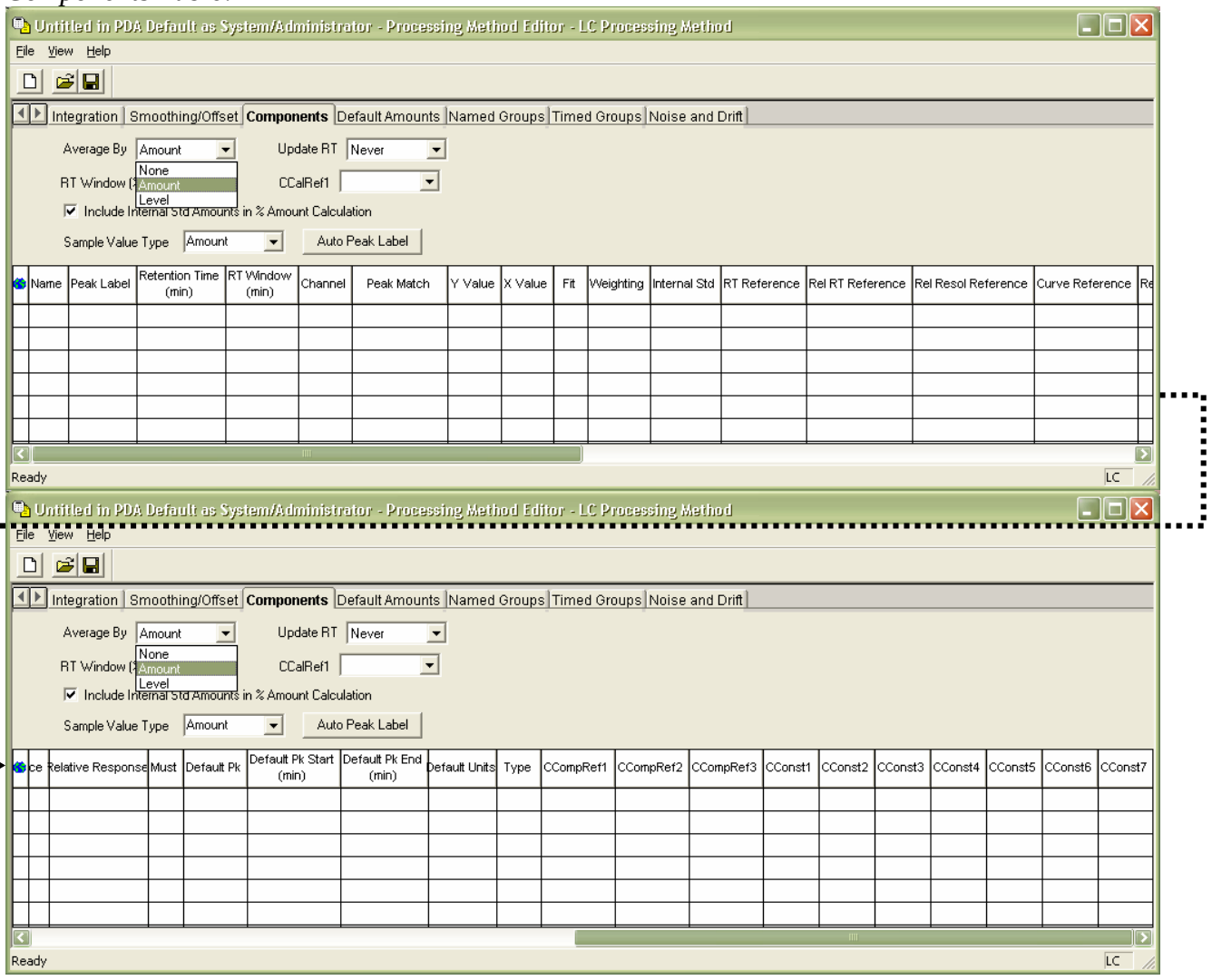


For more details on integration events: http://www.forumsci.co.il/HPLC/Integration_events.pdf

Smoothing/Offset:

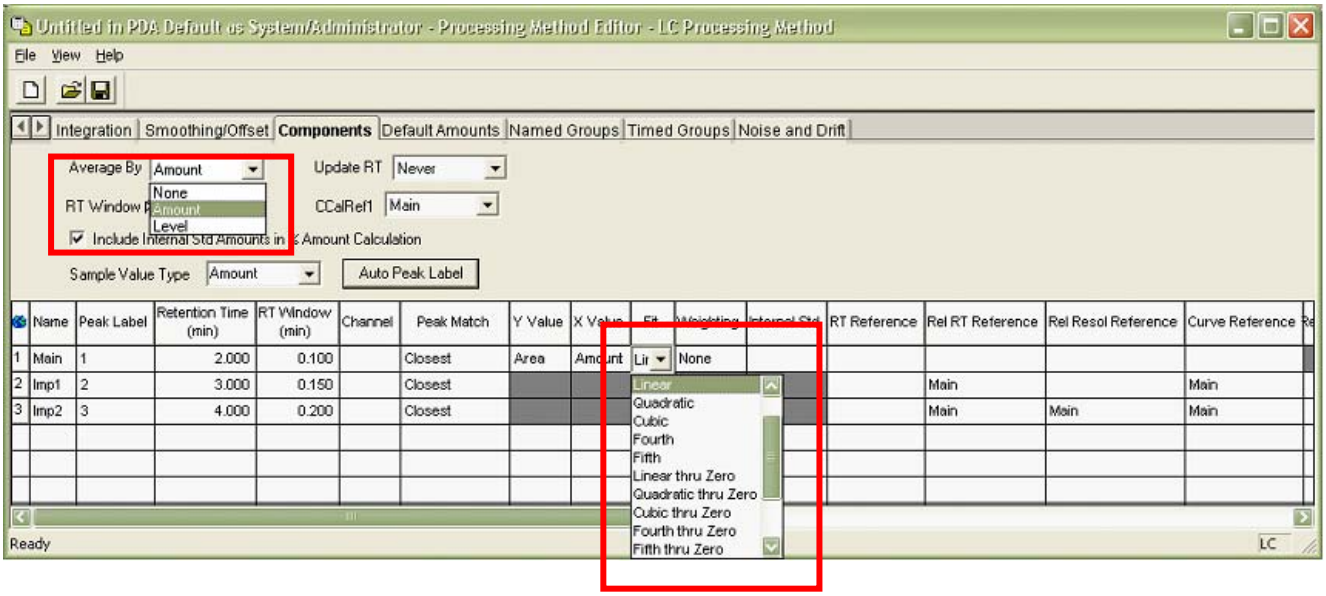


Components Table:

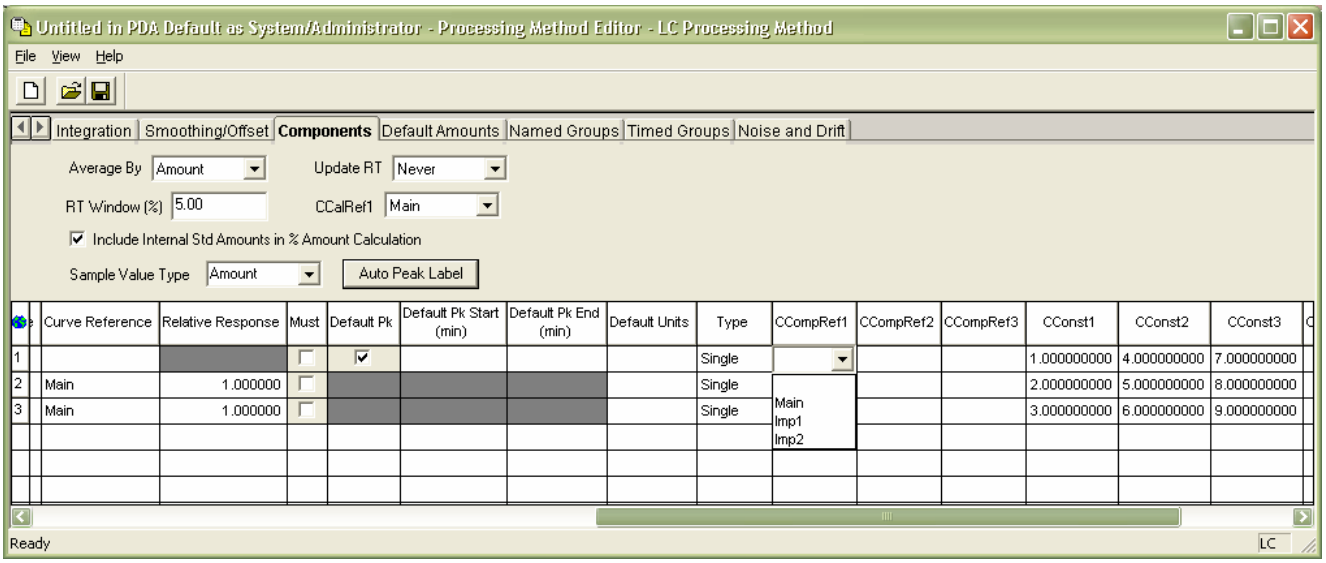


Average by

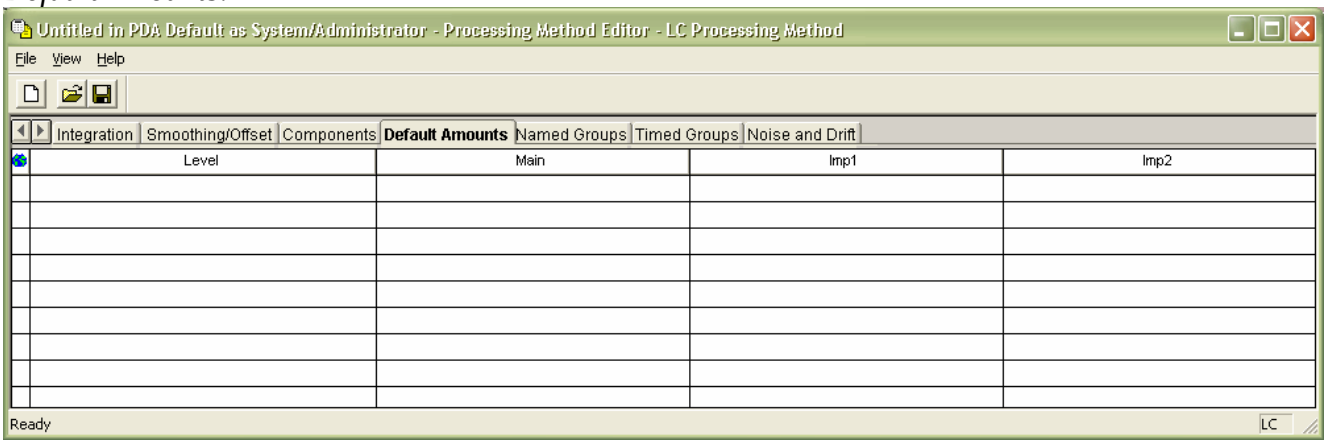
Set it to *Amount* or *Level* or *None* to average calibration standards that generate a calibration curve data in the Calibration Curve window. For example, if your protocol states that the standards should be averaged: **you must use the *Average by* option**.



The *Components Table* include parameters such as fit type (*Linear* or *Linear thru Zero*), RRT (*Rel RT Reference*), RRF (*Curve Reference*), defining one of the peaks as the Default Peak for calculations of *Amount* and RRT of unknown peaks, inter-peaks calculations pointers (*Ccompref1-3*) and values for custom calculations (*Cconst1-7*).



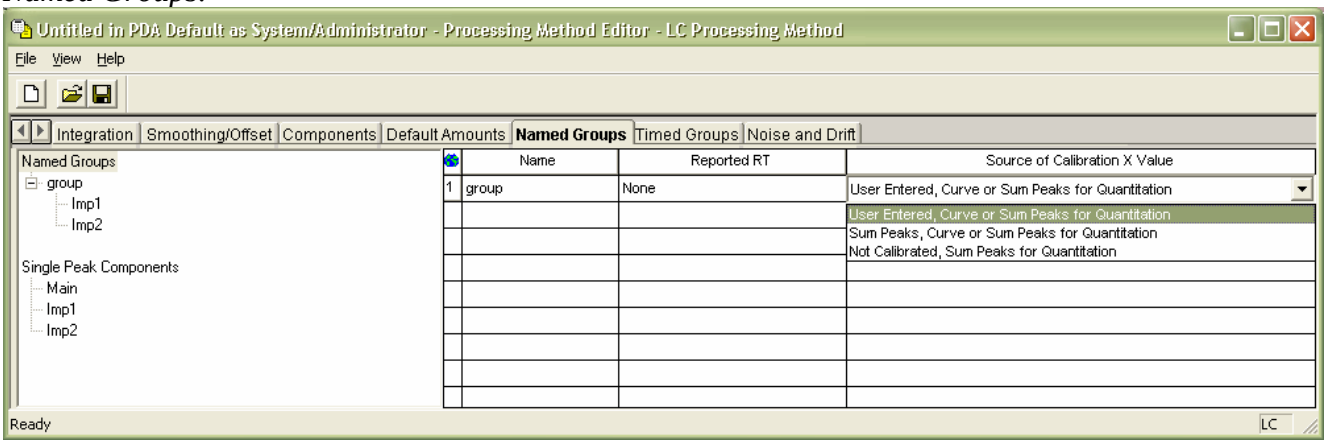
Default Amounts:



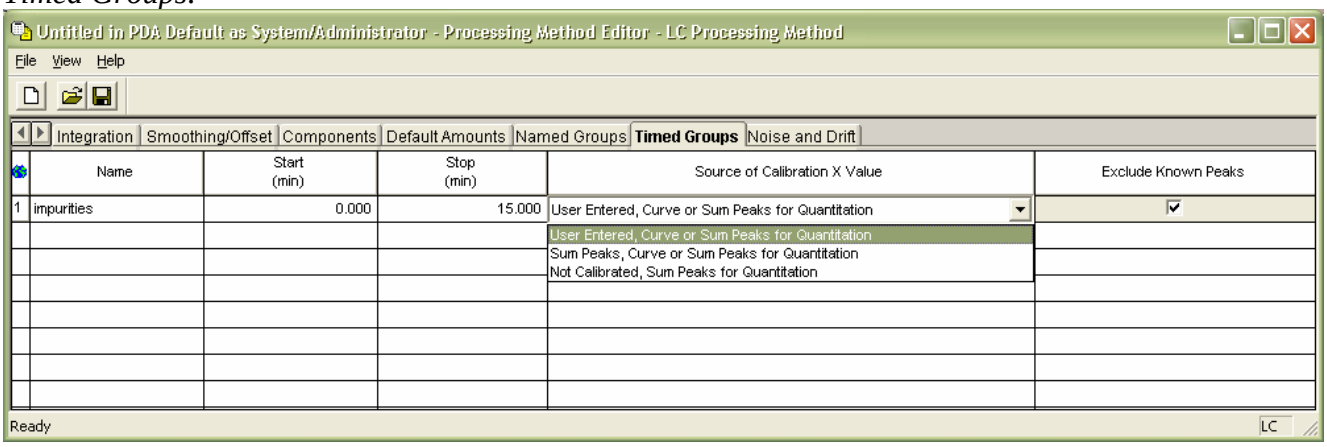
This is an optional way to enter the standards' amounts and levels.

Peaks can be grouped by time or by Peaks' names:

Named Groups:

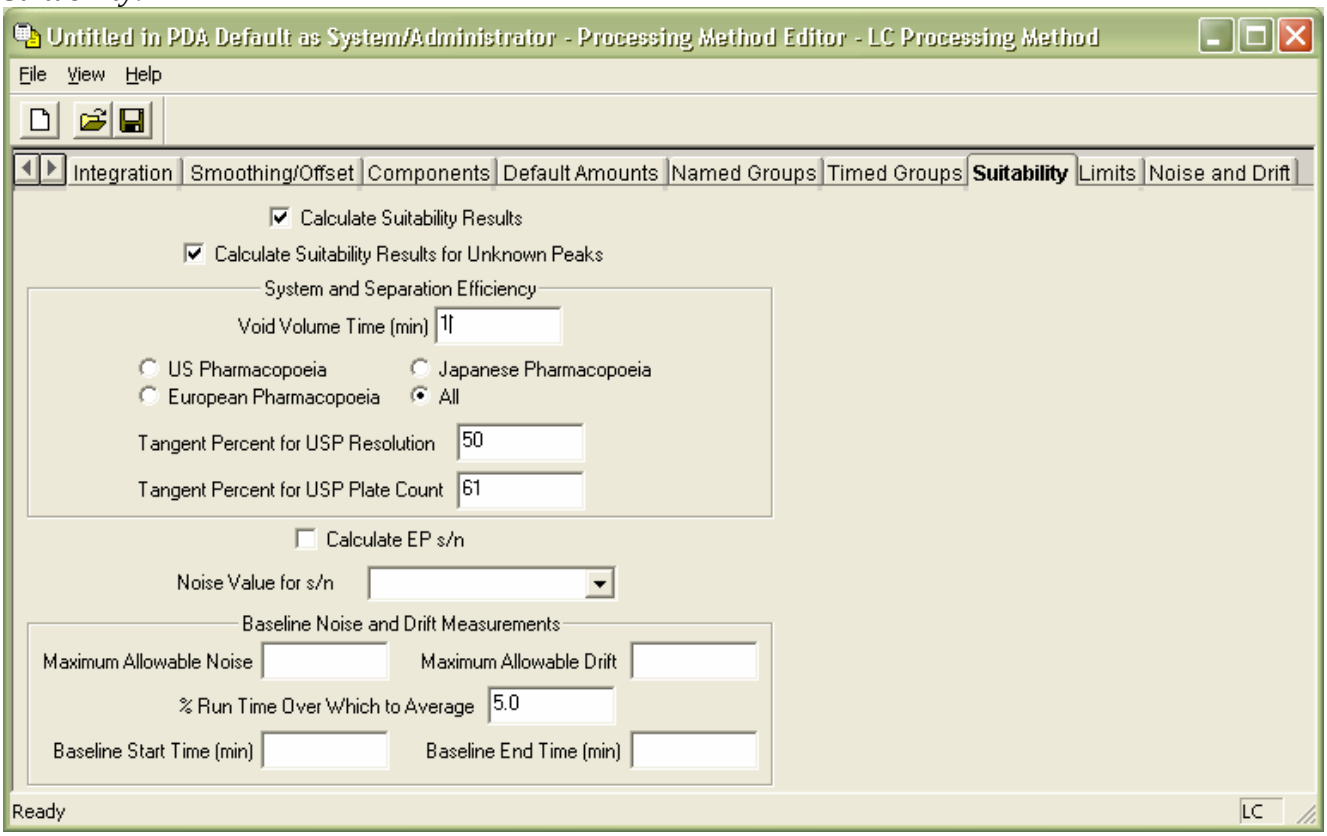


Timed Groups:



If you have **System Suitability** Option:

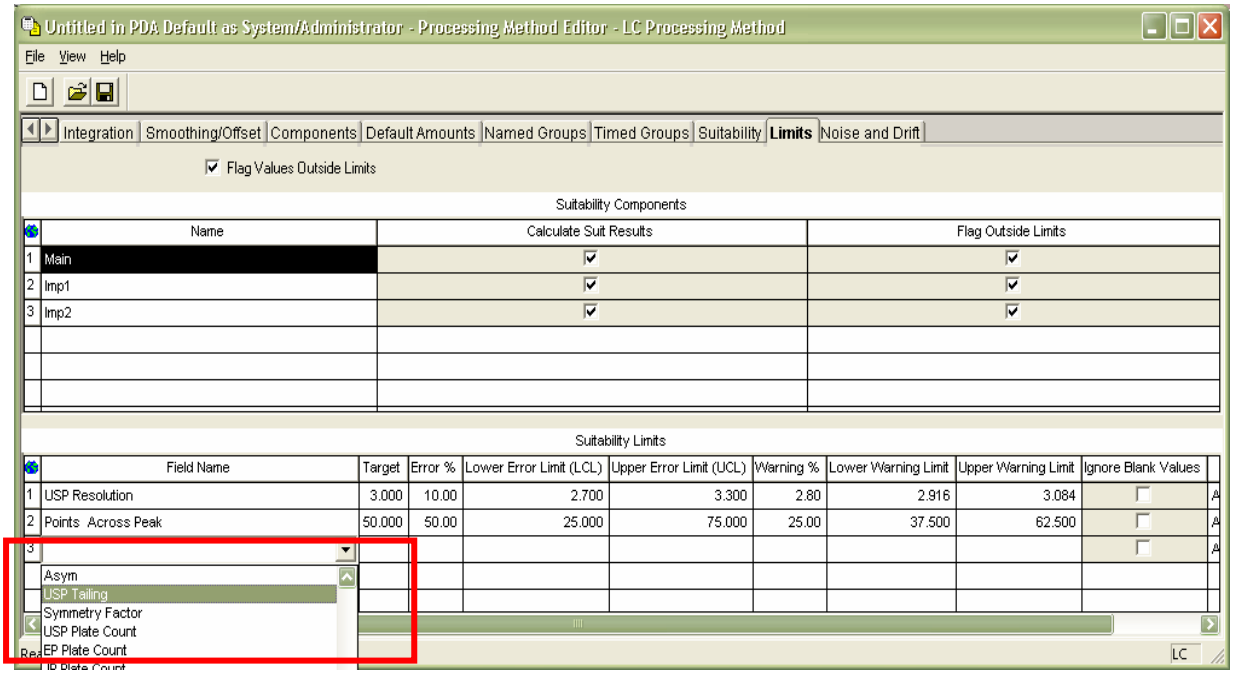
Suitability:



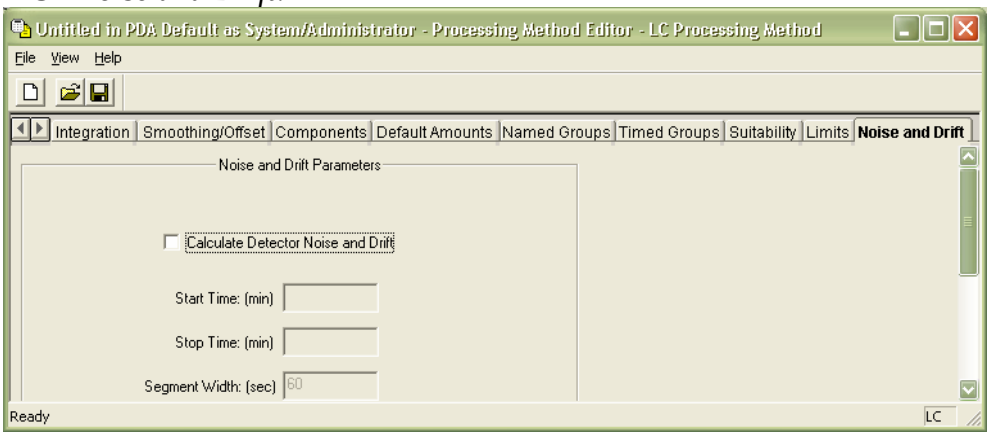
Baseline noise and drift are calculated here according to the pharmacopeia. For more details: http://www.forumsci.co.il/HPLC/SST_Emp2.pdf

Setting limits for System Suitability: Select the component and fill the limits according to the protocols:

Limits:

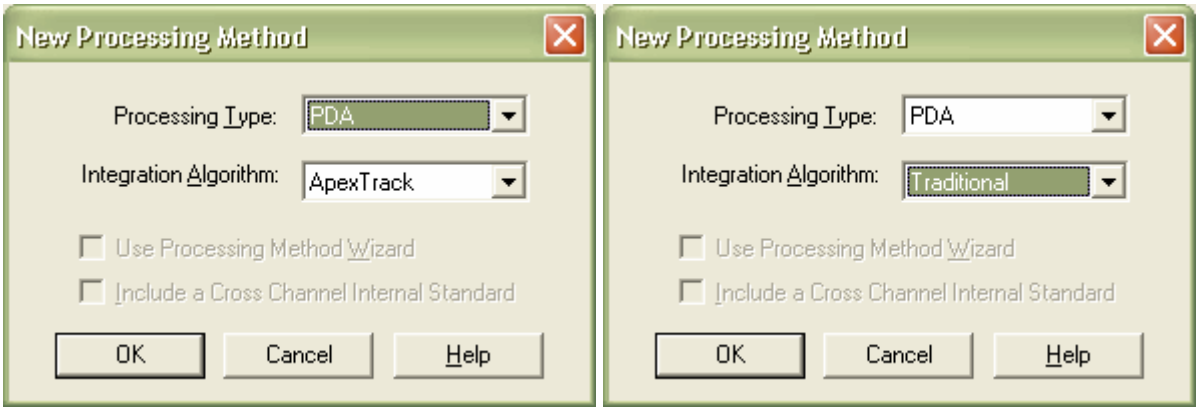


NIST Noise and Drift:

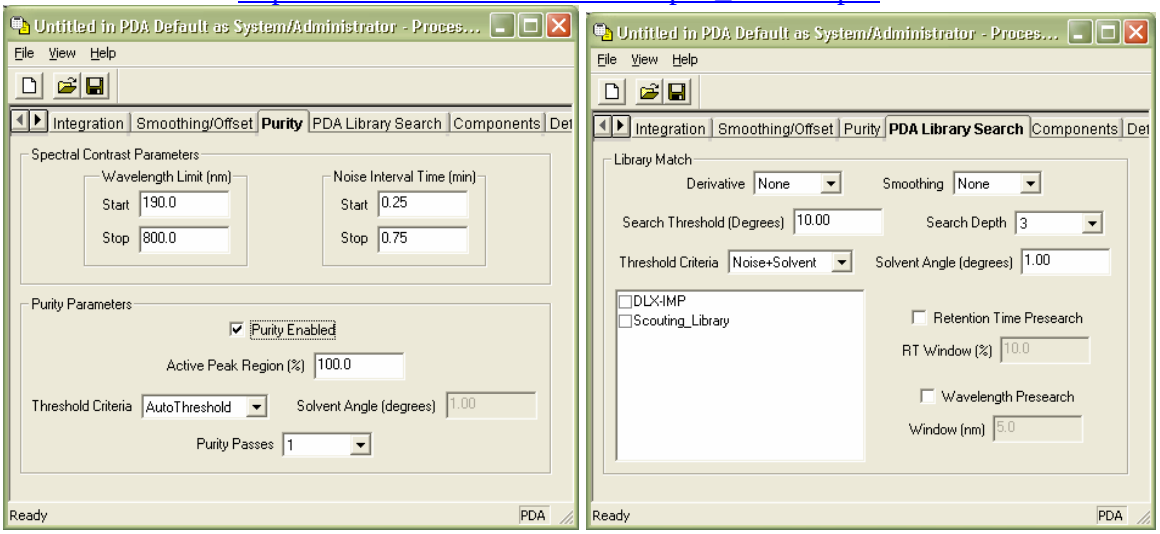


For more details on quantitative processing in Empower:
http://www.forumsci.co.il/HPLC/Quantitative_Processing.pdf
Acquitision and Processing Theory (register first):
http://www.waters.com/webassets/cms/support/docs/71500031209rb.pdf

The PDA Processing Method:

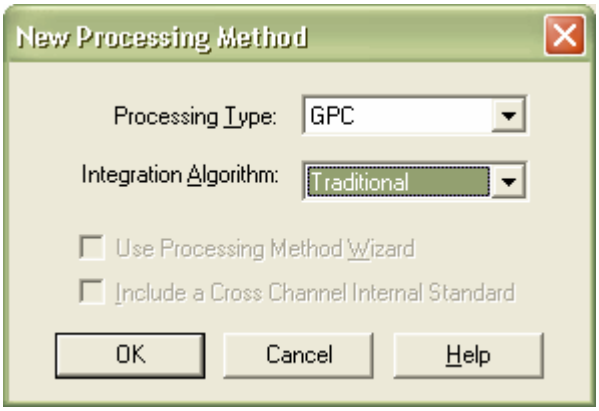


It contains 2 additional screens for measurement of Peak *Purity* and *PDA Library Search* of 3D data:
For more details: http://www.forumsci.co.il/HPLC/pda_WORK.pdf

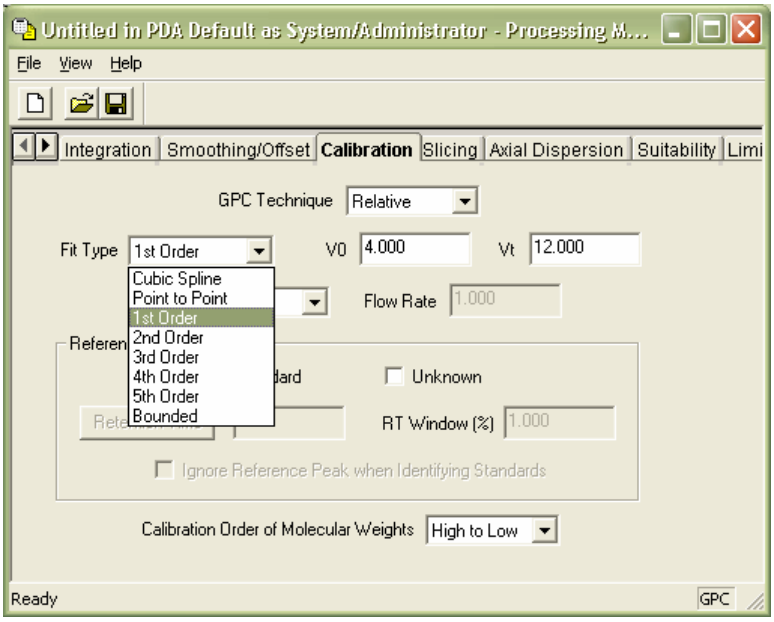


and getting started (register first):
http://www.waters.com/webassets/cms/support/docs/71500031503ra.pdf

The GPC (Gel Permeation Chromatography) Method:

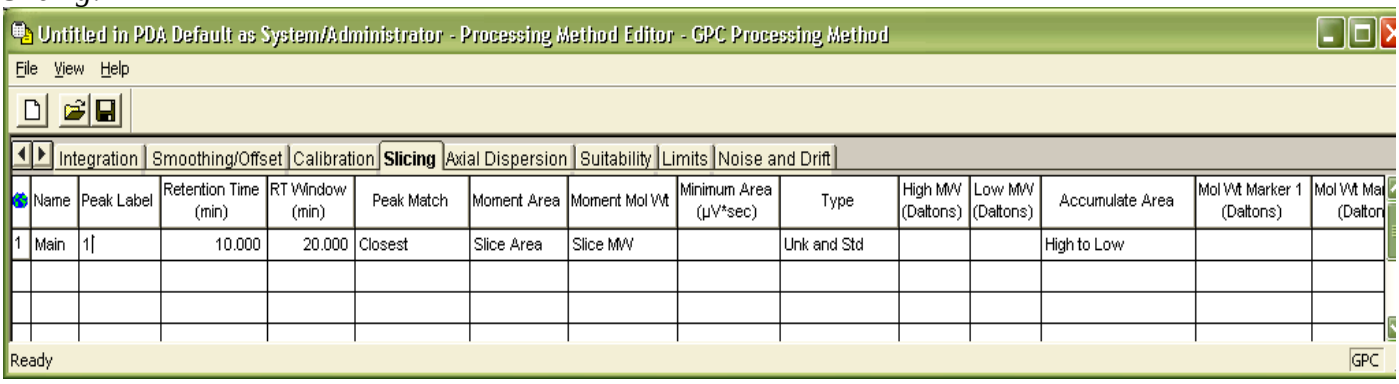


There are 3 additional screens specific to GPC work, *Calibrtion*, *Slicing* and *Axial Dispersion*:
Calibration:



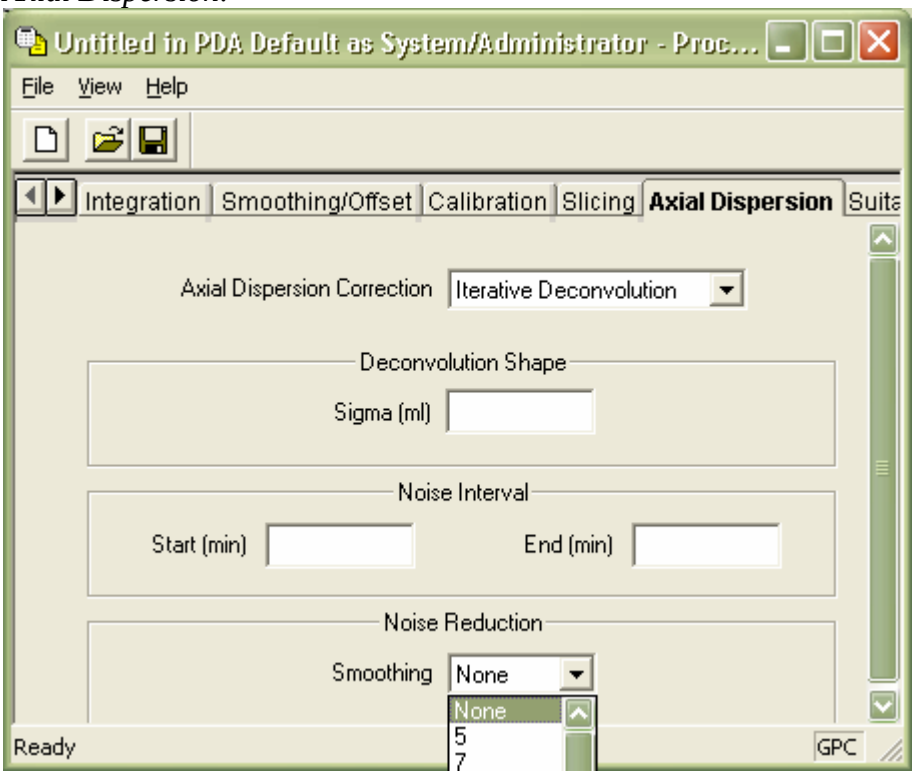
V_0 and V_t enable extrapolation outside the existing calibration curve, fit type above 1st order requires 5 points and above.

Where the Broad Unknown peaks need to be defined properly for the calculations of MW distribution:
Slicing:



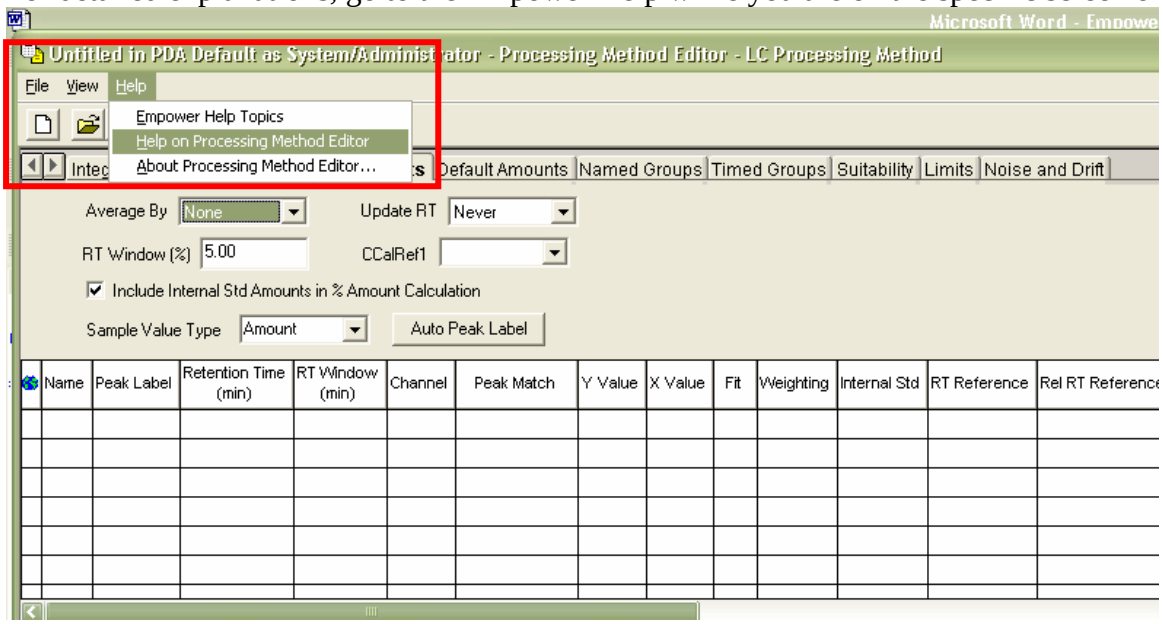
.

Deconvolution of the system's diffusional dispersion from the broad unknown peaks:
Axial Dispersion:



For GPC processing: http://www.forumsci.co.il/HPLC/gpc_steps.doc
and http://www.waters.com/webassets/cms/support/docs/71500031303ra.pdf

For detailed explanations, go to the Empower Help while you are on the specific screen of question.



For Acquisition and Processing details:
http://www.waters.com/webassets/cms/support/docs/71500031209rb.pdf