

## Guide to Using the New Feature Set of Simplicity PC

This document illustrates the abilities of features added to Simplicity PC in v2.0rc1 once the application is installed

### Added Features

- A logging feature that records relevant control board data map points to the PC
- A graphing utility that shows selected data points on a time scaled plot
- Import or export 1A/VAV board settings
- Auto-detect 1A board expansions
- Changes to XML files and XML location
- New button theme

### Logging Feature

The logging feature in Simplicity PC can be set to periodically record relevant points in the data map for diagnostic or other use. Simplicity PC must be connected to the control board via the FREEnet Adapter (RS-485). The data logged are preset to certain points of operation.

This feature is compatible with:

- Elite (Device ID 20 Hex)
- Intellicomfort (Device ID 26 Hex)
- 4-stage 1A/IntelliComfort II combo (Device ID 27 Hex)

To enable logging:

1. With Simplicity PC running and connected to the desired board, Click Setup->Options.

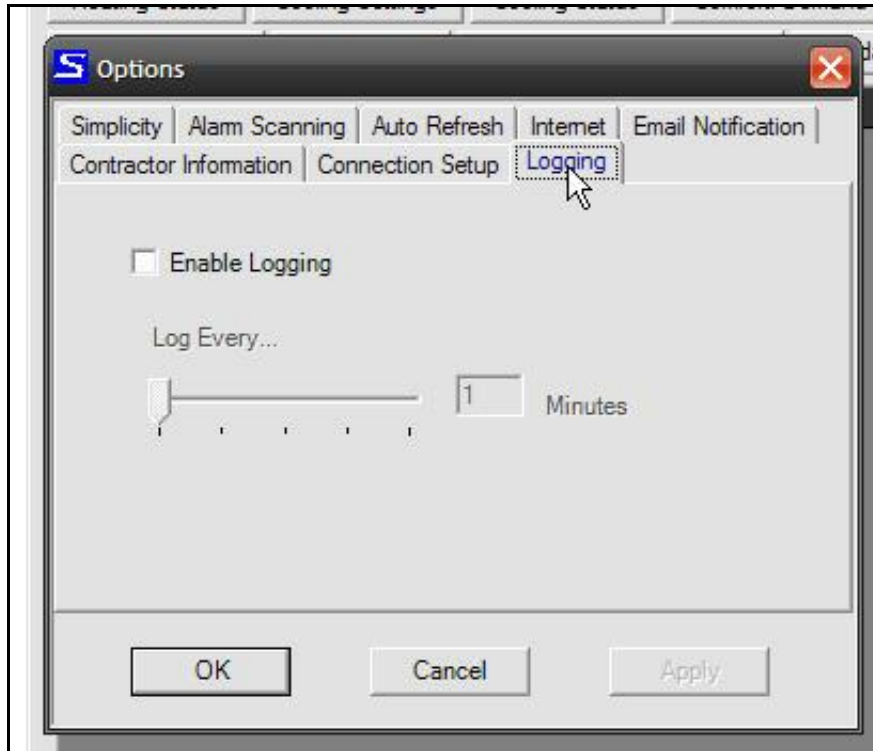
Click Options to bring up the Options Dialog.

Make sure the desired board to log is selected. The Logging function supports only one board at a time.

Description	Value	Unit(s)
Supply Air Temp	66.0	*F
Outside Air Temp	78.8	*F
Return Air Temp	78.1	*F
Space Temp	72.1	*F
Return Air Humidity	19	
Return Air Enthalpy	23	BTUs Per Pound
Outside Air Humidity	76	
Outside Air Enthalpy	38	BTUs Per Pound
Indoor Air Quality (CO2)	0	PPM
Outdoor Air Quality (CO2)	0	PPM
Input: Dirty Filter Switch	OFF	
Input: Air Proving Switch	OFF	

Notice the new Logging Status box.

2. Select the Logging tab in the Options Dialog box.



3. Check the "Enable Logging" check box. The timing bar will become active and then select how often logging will occur. Click OK.
4. Simplicity PC will immediately try to log the first set of data. This can be verified by checking the "My Documents\My Simplicity Data\" folder for the log file.
5. When Simplicity PC is in Logging Mode, The toolbar buttons "Add", "Scan", and "Tree", as well as the connection tree window will be **disabled**.
6. To stop logging, repeat step 3, except uncheck "Enable Logging". Simplicity PC will wait to finish the final log point then return to normal operation.

## Log File Details

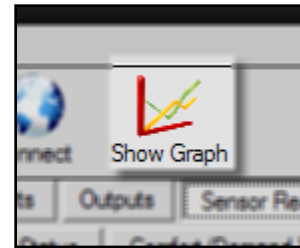
The Simplicity PC log file is a comma-separated value (.CSV) file that contains the values of every logged data point. It is placed under the folder "My Simplicity Data" within the "My Documents" folder. A new log file is generated for every calendar day, starting at 00:00 (12:00am), even if Simplicity PC is continuously logging between days.

**NOTE: Manual modification of the Simplicity PC log file can result in erroneous behavior of the graphing utility.**

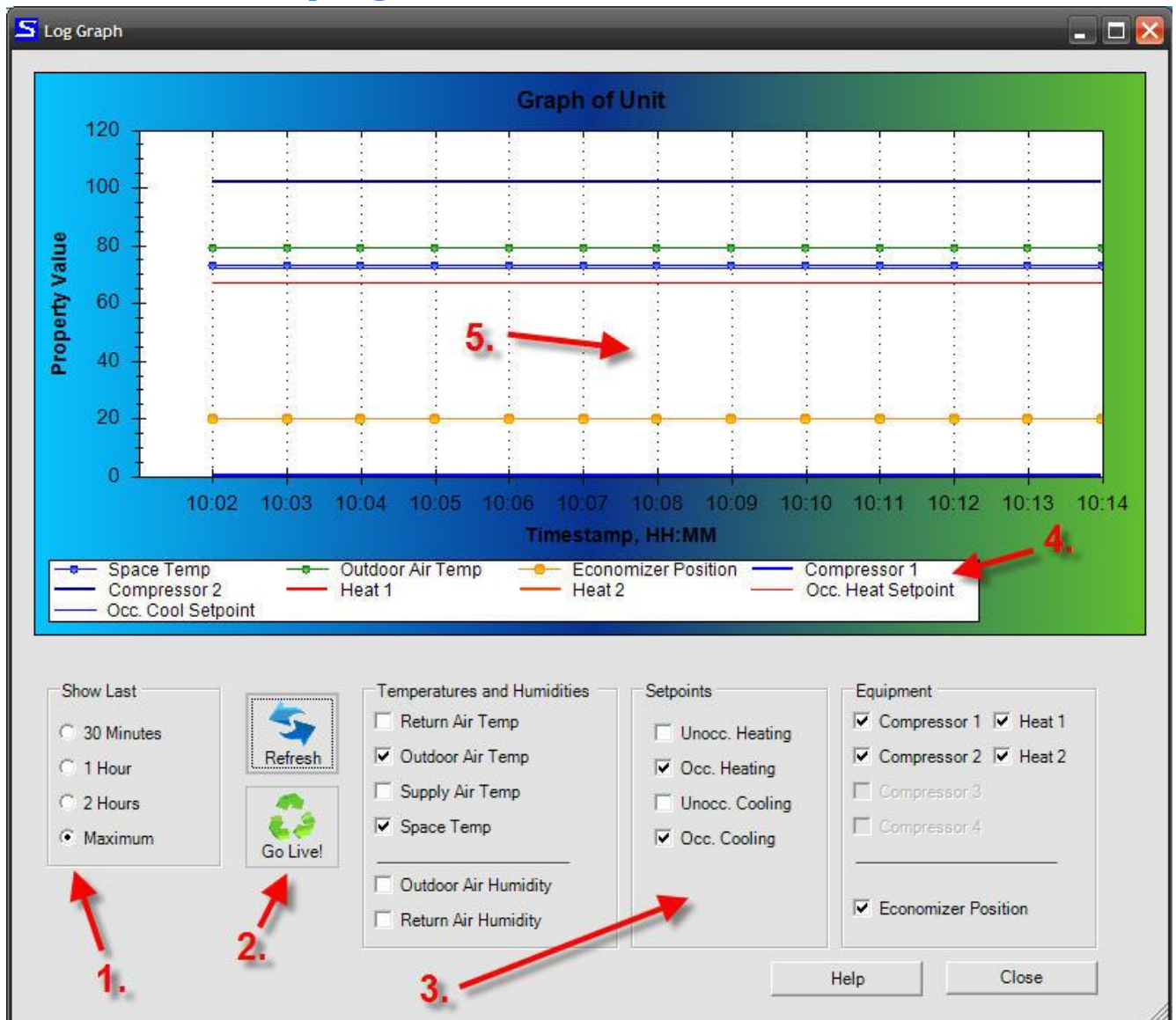
## Graphing Feature

The graphing feature in Simplicity PC uses the log file generated in Logging Mode to plot a graph over time. There are several feature subsets in the graphing utility. To view the graphing utility:

1. With Logging Enabled, click on the activated “Show Graph” button on the toolbar.

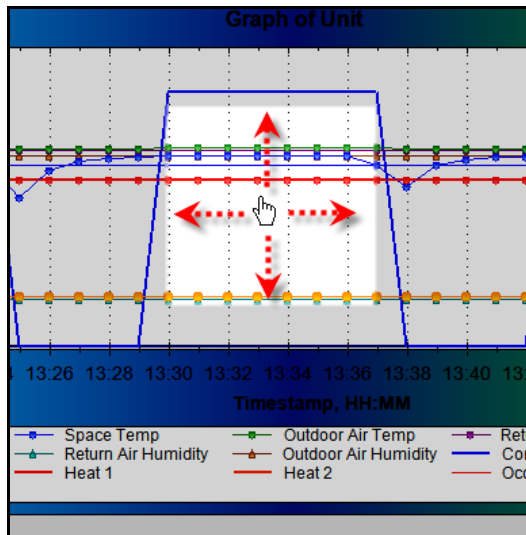


## Feature Set of the Graphing Window

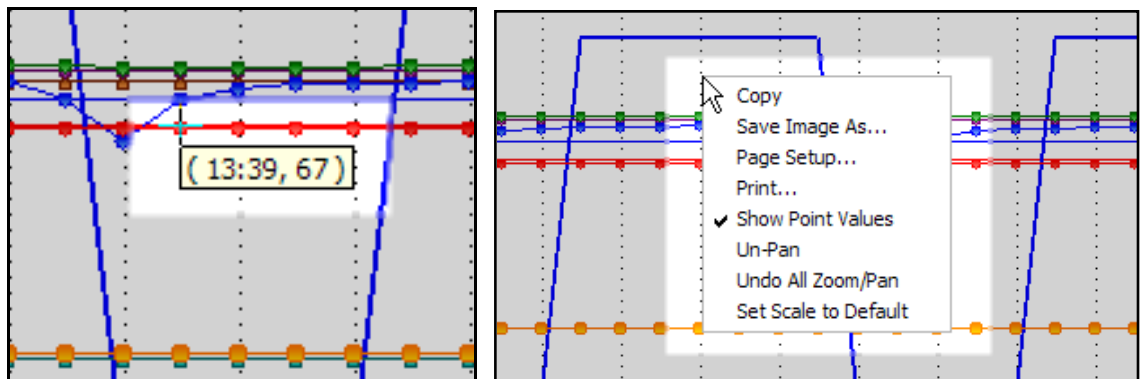


1. The set of “Show Last” radio buttons scales the graph’s time axis to 30 minutes, 1 hour, 2 hours or the maximum amount of time the log has been running for the day.
2. The Refresh button polls the log file to see if there are any updates, and if there are, the graph will be re-drawn and re-scaled to reflect changes. The Go Live! button will cause the graph to automatically poll the log every minute and update the graph. To stop automatic updates, click the Stop button.

3. The Temperature and Humidities, Setpoints and Equipment groups contain check boxes that select which points to draw on the graph. These checkboxes **do not** determine which points are logged, only which are displayed on the graph. The graph itself will refresh every time a box is checked or unchecked.
4. This box is the legend for the graph, displaying the color and point shape for each data point. At this time, color and type of point are not customizable.
5. The main chart of the logging graph. This element has several features:
  - a. Pan by left-clicking the mouse anywhere on the graph and dragging.



- b. Zoom in or out by scrolling the mouse wheel up or down while the mouse pointer is over the plot. An alternative to this is holding CTRL on the keyboard while left clicking the mouse and dragging a box to the desired zoomed area.
- c. Hovering over any data point marker will cause a pop-up box containing the timestamp and value of that data point.



- d. Right clicking on the plot area will invoke the context menu. Printing, saving the graph as an image, undoing recent zooms and pans, etc. can all be done from this menu.

## Import and Export of 1A/IntelliComfort II Board Settings

The import and export feature for 1A/VAV combination setups works exactly as it has for Elite and Intelli-Comfort boards. The 1A board ID must be 27 Hex (39 Dec). The file containing the saved settings will be a \*.1a4 file type.

## 1A System Auto-detect

Simplicity PC and the YorkDevice.xml now support the auto-detection of connected expansion boards to the Simplicity 1A controller. Once the board(s) have been detected, the appropriate section of XML (and thus, available features) will be loaded (e.g. 1A standalone, 1A with 4-Stage Board, 1A with Intelli-Comfort II, etc). The device ID will still read "27" for any combination.