Release History for LabMax Pro PC

Version 1.3

# Introduction

The primary objectives of release 1.3 are:

* Support for the LabMax-Pro ProPM USB and RS “meterless” instruments.
* Re-factoring the software so that there is a PhoenixMeter object that can perform critical functions from the Unit Testing framework.
* Other bug-fixing and general maintenance of the PC software itself.

Individual changes are summarized below.

## 8 June 1.3.0.1 build

This is a special release aimed specifically at helping us pass ESD testing.

I added a /autorestart flag. This causes the app to monitor USB “surprise disconnect” events. When a disconnect event happens the app immediately closes the port, which is a work-around for a BUG in the Windows USB driver. This allows the port to be re-opened when it becomes available again. Furthermore, the disconnect event handler makes a note of whether or not the app was running when the disconnect happened; if so, then if/when the app receives an “arrival” event for that same port, it will restart data acquisition. This code is provisional, specifically to help with the ESD problems. There are a number of minor bugs and limitations with the new feature that make it unsuitable to present to end-users, though hopefully it will satisfy the minimum requirements to get through ESD.

Other changes per OnTime and SVN log.

## 26 May 1.3.0.0 build

Three of the top 5 High Priority bugs:

* 1609 Data from Snapshot mode is erased when Stop is selected
* 1640 trigger percent formatting rounds off to too few decimal places, should show more for tiny values
* 1690 pressing Start should NOT reset trend panel Scaling

## 11 May Check-in

* 1640 trigger percent formatting rounds off to too few decimal places, should show
* Also more from major DAQ refactoring in progress:
  + added SaveSettings callback to PhoenixMeter.Shutdown
  + DataArrivalEventType renamed to DAQ\_StateType; similarly all related event and other names
  + case DAQ\_StateType.Progress calculation folded into PhoenixMeter
  + PercentOptions.cs moved from PhoenixControlLibrary.csproj to PhoenixLibrary.csproj
  + DataAdded delegate moved to CaptureBuffer.cs
  + DAQ\_FastEnergy renamed to DAQ\_HighSpeed
  + DataArrivalEventArg renamed to DAQ\_StateEventArg
  + many references to meter.SnapshotMode.Active changed to meter.SnapshotMode\_IsSelected
  + SUPPRESS\_TRACE\_PROPERTY\_CHANGE added to ViewModelBase so that trace can be turned on and off without having to also mod/recompile ViewModel.cs
  + FlowDocumentExtensions created and added to SharedLibrary.csproj
  + MergeContextMenus code MergeContextMenus, but it isn't working yet; affected:
    - MainWindow.xaml
    - MainWindow.xaml.cs
    - TextBoxEditor.cs [bulk of changes]
    - ValidatingTextBox.cs

## Release 1.3.0.0 – 24 March 2015

* Merge a few minor mods from 1.2.0.15 branch
* Timestamp -> DateTime refactoring – post-10364
* UnitTestingLibrary python scripts to audit csv files
* Initial 1.3x release.
* 1683 Busy cursor shows continuously (?) while meter is running. Affects TrendPanel.xaml.cs, ShowBusy.cs, ShowBusyUntilIdle.cs, and ShowBusyNesting.cs
* moved ArcSettings.cs and PortSettings.cs to SharedLibrary.
* Refactored PollingData so constructor no longer requires Meter object; FetchData method takes Meter instead of Device object (so it can access Meter. SensorHasTemperature method); PollingThread calls Meter.UpdateSystemStatusAndFaults; the latter which actually fetches the polling data and updates the Meter’s SystemStatus and SystemFaults cache.
* Fixed bug in MeterSettingsSerializer (regex quoting for sensor properties in FindLoadFilename).
* Meter.IsOpen further relies on IsInitialized, so polling doesn’t start until well after the device is opened.
* Unused Meter. SystemStatus\_SensorDetected commented-out.
* Removed IsInitialized property from Device (moved up to Meter level).
* Device.Open errors all throw exceptions; including detection of invalid devices.
* Added SendQueryAndReceiveOneLine to support Device.
* Removed MarkStopSent() functionality from Communicator, DataRecordSingle, and…
* Changed Communicator so ReportSimpleError to NOT include irrelevant, superfluous PreviousCommand and PreviousReply text.
* CursorAnnotationHorizontal: changed indexing error to explicit NotImplementedException for illegal input.
* ReFactored TuningPanel-Dial.cs and associated so that dial has more labels, and labels are evenly spaced. Moved some titles to bottom bar.
* Jose changed TuningPanel to resize more fully in 2D when enclosing layout changes.