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

- o case DAQ_StateType.Progress calculation folded into PhoenixMeter
- o PercentOptions.cs moved from PhoenixControlLibrary.csproj to PhoenixLibrary.csproj
- o DataAdded delegate moved to CaptureBuffer.cs
- o DAQ_FastEnergy renamed to DAQ_HighSpeed
- o DataArrivalEventArg renamed to DAQ_StateEventArg
- o many references to meter.SnapshotMode.Active changed to meter.SnapshotMode_IsSelected
- o SUPPRESS_TRACE_PROPERTY_CHANGE added to ViewModelBase so that trace can be turned on and off without having to also mod/recompile ViewModel.cs
- o FlowDocumentExtensions created and added to SharedLibrary.csproj
- o 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.