

Release Notes: MATLAB Plug-in for Teledyne Lumenera camera model's support

Requirements:

- The Microsoft Visual Studio 2015 redistributable files are required and be downloaded directly from the Microsoft Website.
- The Teledyne <u>LuCam Software and Software Development Kit</u> is required for both camera API and camera device drivers. (Minimum requirement is v6.8.2)
- This plug-in has been tested with MATLAB R2016a/b, R2017a/b, R2018a/b, R2019a.

Changes from 2.1.0 to 2.1.1

Command line interface

• Adding command LucamGetSnapshot() and LucamSetSnapshot() to interface to Teledyne Lumenera API structure.

Imaqtools interface

- Add support for R2018a/b, R2019a.
- Add AE (Auto Exposure) property. This allow to enable or disable camera Auto Exposure property in video mode.

Changes from 1.X.X to 2.1.0

Command line interface

- Adds the ability to capture video or snapshot raw frame and convert it later.
- Raw frame is a structure containing information about frame format, conversion parameters and image data.
- LucamTurboxxxxxx functions added to capture raw frames into memory and converts it later when you return frames into Matlab.
- LucamGetProperty and LucamGetPropertyRange will return a data structure containing all the information.
- LucamSetProperty will use the data structure output from LucamGetProperty.
- The .m files for all commands been updated to throw MException on error.
- Overall code re-factoring.
- Started the process of altering the implementation mechanism of commands for easier support maintenance.

Imaqtools interface

- Added support of USB 3.0 cameras.
- Added more frame formats selections.
- Changed all Properties names to be similar to the API.
- Properties will be populated based on what is supported by the camera model.
- Added a property read-back function.