SOFTWARE LIBRARIES AND DRIVERS

Image Acquisition Software

The primary programming interface for Leutron Vision cameras is the Simplon API. Simplon encapsulates access to individual camera types and technologies in a single, consistent interface. It also unifies various aspects of GenICam (GenApi & GenTL) aspects of the camera control.

Simplon comes also with a preprocessing library that unifies access to preprocessing capabilities of some cameras and similar functionality in the software. Last but not least, it also offers GUI components and dialogs for inclusion in user applications – such as the GenICam feature tree control.

Supported platforms

Simplon is available for Windows (32/64-bit), Linux (32/64-bit) and for OEMs also for VxWorks. All supported platforms are treated with the same priority, share the equivalent feature range and provide the same toolset. Releases for all platforms are synchronized and all tests are executed on every platform. Migrating to a different operating system or upgrading to a 64-bit architecture is thus very straightforward and painless.

The Simplon API provides a pure C interface, an object-oriented C++ interface and a .Net class library.

Interfacing 3rd Party Software Packages

Besides the Simplon API, the camera can also be accessed through standard interfaces such as GenICam GenTL or GigE Vision. The cameras pass all corresponding standard certifications and strictly follow the standard requirements, including GenICam SFNC, to a degree unrivaled among competitors. The strict SFNC compliance assures best compatibility with generic software packages, and especially its predictability and intuitive use.

The cameras are compatible with

- Halcon & ActivVisionTools (MVTec Software)
- VisionPro (Cognex)
- LabView (National Instruments)
- MIL (Matrox)
- Common Vision Blox (Stemmer Imaging)
- and more

Sample Code Generator, Demos

To simplify and streamline the development process, Leutron Vision provides a source code generator tool. This flexible tool allows the generation of Simplon API code snippets or full application skeletons for many different use cases, including camera configuration, buffering & acquisiton or image preprocessing. Demo programs are available and allow experimentation with cameras' and Simplon functionality without programming as well.