Release notes for IDS peak 2.7

Introduction

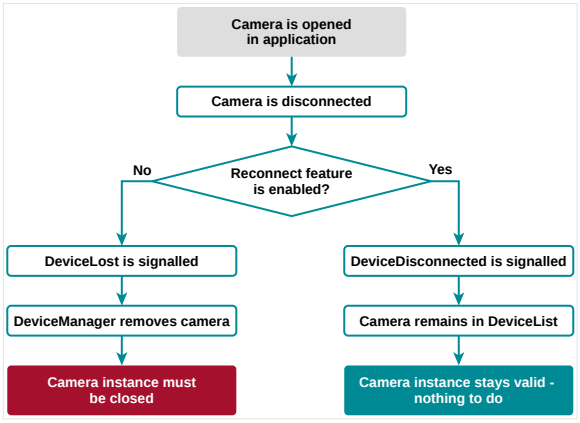
These release notes describe the changes in IDS peak 2.7 which introduces the reconnect feature for GigE uEye+ cameras (GV models) and uEye cameras (UI models), as well as I2C support in the uEye transport layer. The camera manager in the IDS peak Cockpit has been revised and new functions have been added.

IDS peak 2.7

New and changed functions

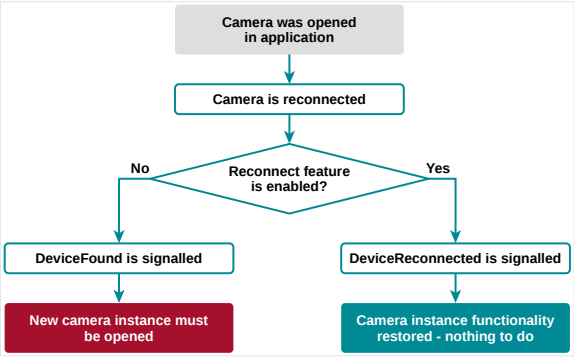
From IDS peak 2.7 on, you can use automatic reconnect for GigE Vision cameras (GV models) or via the uEye transport layer (UI models) if the physical connection has been interrupted and restored, e.g. in the event of voltage problems. If the reconnect function is enabled, the camera is automatically reopened. If you have set that a UserSet is to be loaded when the camera starts up, the previous status of the camera is also restored.

Example process when the connection to a camera is disconnected:



Disconnecting

Example process when the connection to a camera is restored:

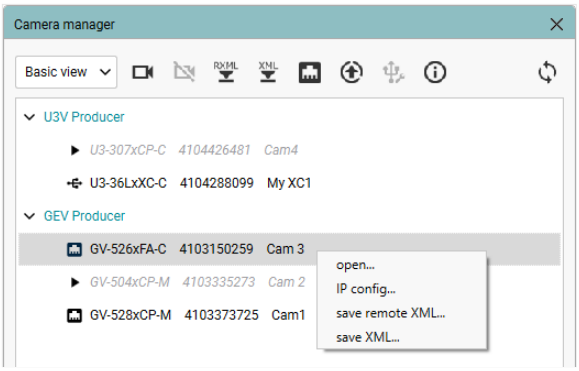


Reconnecting

IDS peak Cockpit

The camera manager has been revised and enhanced. The performance of the camera list has been improved so that you get a quick overview even in applications with multiple cameras. In addition, functions that were previously only available in the expert view have been included in the basic view.

A new feature is a context menu that you can access on each camera to open/close the camera or save XML information.



New functions in the camera manager

IDS peak comfortSDK

- To use the reconnect function, new function calls have been implemented in IDS peak comfortC as well as the corresponding notifications for the connection loss (DeviceDisconnected) and reconnection (DeviceReconnected), as well as the notifications for a new camera (DeviceFound) and a lost camera (DeviceLost).
- A maximum value can be defined for gain which should not be exceeded. (IDS peak AFL is used for this control).

New programming sample for IDS peak comfortSDK in C

reconnect	Opens the first available GigE uEye+ camera (GV model) and starts image acquisition. If you disconnect from the camera, this is detected and signaled. If you reconnect the camera, this will also be detected and image acquisition will start again. This example can also be used in combination with the uEye transport layer for uEye cameras (UI models).

IDS peak genericSDK

- To use the reconnect function, new function calls have been implemented in the IDS peak genericSDK and new callbacks for connection loss (DeviceDisconnected) and reconnection (DeviceReconnected) have been added in the DeviceManager.

New programming example for IDS peak genericSDK in C++, C# and Python

reconnect_callbacks	Opens the first available GigE uEye+ camera (GV model) and starts image acquisition. If you disconnect from the camera, this is detected and signaled. If you reconnect the camera, this will also be detected and image acquisition will start again. This example can also be used in combination with the uEye transport layer for uEye cameras (UI models). For C#, the example is provided as a Microsoft Visual Studio project file (*.csproj).

IDS peak AFL (Auto Feature Library)

- A maximum value for the gain has been added for the brightness control (PEAK_AFL_CONTROLLER_TYPE_BRIGHTNESS) in the IDS peak AFL.

GEV Transport Layer / U3V Transport Layer / uEye Transport Layer

- For the reconnect feature, the following category was newly introduced in the "System" module of the transport layer: **ReconnectControl**.
- **ReconnectControl** contains the nodes **ReconnectEnable** and **RegisteredReconnectEventsCount** which were previously under **SystemControl**. The nodes **ReconnectRemoteDeviceAcquisitionRestartEnable** and **ReconnectRemoteDeviceConfigurationRestoreEnable** are new.
- In the "LocalDevice" module, the **IsReconnectEnabled** node in the **ReconnectMonitor** category has been renamed to **ReconnectActive**. The **RemoteDeviceConnected** node has been added.
- In the "DataStream" module, the nodes **IncompleteFramesPacketError** and **IncompleteFramesBufferOverflow** have been added to the **StreamMonitor** category.
- You can now use **I2CControl** via the uEye transport layer to use the I2C features of the USB uEye LE, USB 3 uEye LE, uEye LE USB 3.1 and GigE uEye LE camera families.
- The nodes **DeviceLinkSpeed** and **DeviceReset** can be used for UI models via the uEye Transport Layer.

Further information on the respective nodes can be found in the IDS peak manual.

General improvements

- The IDS peak genericSDK as part of the Windows setup is more finely subdivided from version 2.7 on. For example, you can completely deselect components such as IDS peak AFL (development library for auto features) or selectively select or deselect bindings for programming languages such as Python or .NET.
  This change means that previous versions of IDS peak have to be completely uninstalled before the new version is installed. The setup automatically detects previous versions and displays a corresponding message to uninstall the previous version.
- A bug was fixed that caused incorrect values to be set for the ROI (region of interest) of the automatic white balance (BalanceWhiteAuto).
- A bug was fixed in the "ids_devicepassword" tool.

Component versions used in IDS peak 2.7

Component	Version Windows	Version Linux
IDS peak comfortAPI	1.6.0.0	1.6.0.0
IDS peak genericAPI	1.7.0.0	1.7.0.0
IDS peak IPL	1.9.2.0	1.9.2.0
IDS peak AFL	1.3.0.0	1.3.0.0
IDS peak Cockpit	1.9.0.1	1.9.0.1
Tool Device Command	1.4.4.0	1.4.4.0

Tool Device Update	1.4.5.0	1.4.5.0
Tool IP Config	1.4.3.0	1.4.3.0
Tool Device Password	1.0.2.0	1.0.2.0
GenTL GigE Vision user space	1.13.0.0	1.13.0.0
GenTL GigE Vision kernel	1.13.0.0	-
GigE Vision kernel driver (WHQL)	1.5.0.0	-
GenTL USB3 Vision user space	-	1.13.0.0
GenTL USB3 Vision kernel	1.13.0.0	-
USB3 Vision kernel driver (WHQL)	1.5.0.0	-
GenTL uEye (uEye Transport Layer)	1.13.0.0	1.13.0.0
GenICam	3.4.1.1	3.4.1.1

Known issues

The list of known issues can be found in the corresponding ReadMe files for Windows and Linux.

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