# Release - 2.17.1

## IDS peak genericAPI - 1.11.1.0

### **Bug Fixes**

• Fix an issue with non-compliant 3rd party transport layers
Fix an issue with having non-compliant third party transport layers installed on
the system. Third party transport layers will now be rejected before loading them.

#### **Performance**

Add caching to EnvironmentInspector

## IDS peak IPL - 1.16.1.0

### **Bug Fixes**

Suppress unnecessary logs triggered during exception handling.

# IDS peak comfortC - 1.13.1.0

## **Bug Fixes**

Keep the saturation value when the image size changes
 When the image size is changed or when the first image is received, the processing modules are reset in the call to peak\_IPL\_ProcessFrame. Restoring this saturation value was missing after resetting the modules.

## IDS peak Cockpit - 2.6.0.0

### **Features**

Added default host color gains for the IMX900 sensor.

## Release - 2.17

## IDS peak Cockpit - 2.5.0.0

### **Features**

- Allow to open the interface nodemap by double clicking the interface while holding Ctrl
- Add a right click context action to open the interface nodemap
- Add the ability to set the device's gateway IP address to the network configuration dialog
- Add display of the device's gateway IP address to the network configuration dialog
- Add the gateway IP address of the devices and interfaces to their tooltips
- Extend network configuration dialog to show the interface's gateway IP address
- Changed IPL default color gains for IMX568 sensors

## IDS GenTL Producer - 1.19.0.0

- Add unicast device discovery
   Add unicast functionality to the device discovery mechanism. This allows devices to be found in another subnet behind a gateway or router.
- Add node GevAllowDiscoveryCMDBroadcast
   This new node controls whether discovery commands are sent via broadcast, or if the interface should only send unicast discoveries.
- Add nodes to control unicast device discovery
  - Added node GevDiscoveryUnicastIPAddressToAdd to provide an IP address to be added to the unicast IP addresses list.
  - Added node GevDiscoveryUnicastIPAddressAdd to add the provided IP address to the unicast IP addresses list.
  - Added node GevDiscoveryUnicastIPAddressListClear to clear the unicast IP address list.

- Added node GevDiscoveryUnicastIPAddressCount to read out the number of IP addresses in the unicast IP address list.
- Added nodes GevDiscoveryUnicastIPAddressSelector and GevDiscoveryUnicastIPAddress to read back the addresses in the unicast IP address list.
- Renamed node AllowDiscoveryBroadcast to
   GevAllowDiscoveryACKBroadcast and marked old node as deprecated.

### **Bug Fixes**

- Fix devices reported as openable with subnet mismatch
   Fix devices being listed as openable if the subnet mask of the host indicates that the device is in the same subnet, but the devices subnet mask doesn't allow the device to communicate with the host. If such a subnet mask mismatch is detected, the TL will now report it as DEVICE\_ACCESS\_STATUS\_NOACCESS.
- Fix interface gateway address always zero on linux systems
- Fix subnet broadcast not working when running applications with root privileges

## **IDS GigE Vision Core - 1.7.0.0**

#### **Features**

• Change resend mechanism to respect devices only reachable via gateway

## IDS peak genericAPI Samples

#### **Features**

Add samples to demonstrate the usage of the new unicast feature

### **Bug Fixes**

• Fix pre-compiled Linux .NET samples not executable on ARM platforms

## Command-line tools for IDS peak - 1.5.0.0

Add gateway IP addresses to list outputs
 Add the interfaces and devices gateway IP addresses to the output of
 --list-all and --list-interfaces

## IDS peak genericAPI (Python) - 1.11.0.0

 Add DeviceManager::Interfaces and DeviceManager::Systems functions in Python

# Release - 2.16

# IDS peak genericAPI - 1.11.0.0

### **Breaking changes**

- Specify file path encoding as UTF-8 when loading and saving .cset files.
   This changes the encoding under Windows. For Linux, UTF-8 the is default encoding.
- Fix GC\_ERR\_BUSY being incorrectly mapped to an InternalErrorException Now the GenTL error GC\_ERR\_BUSY will be mapped to a BadAccessException

- Add node traits The node traits describe the Node Type to support meta programming by e.g. std::variant (C++17).
- Add a TryLock function for the NodeMap lock. This is useful for concurrency programming when non-blocking behavior is desired.
- Add new function DataStream::FlushPendingKillWaits
   This new function can be used to clear all pending KillWaits, so that
   DataStream::WaitForFinishedBuffer will not throw an AbortedException on the
   next call.
- Add FlushPendingKillWaits function to EventController
   This function can now be used to clear all pending KillWaits, so that the
   WaitForEvent function does not throw an AbortedException on the next call.

### **Bug Fixes**

- Fix that the destructor of the EventController does not unregister the event, if a WaitForEvent call is still running.
- Remove the caching of the ValidValues for Float and Integer nodes
   According to the GenICam Standard the ValidValues are influenced by the min
   and max of the node, so the list may change and is not static. As such, the
   caching of the values is illogical and was removed.

## IDS peak IPL - 1.16.0.0

### **Breaking changes**

 Added support for handling odd binning and decimation factors when processing images with odd dimensions.

Binning factors will no longer be automatically rounded to the nearest possible value.

#### **Features**

Add chromatic adapter to adjust to changes in lighting conditions
 This is used to maintain consistent color perception despite variations in light sources.

It is possible to select different CAT algorithms: Legacy and Bradford. The color space is selectable including sRGB D65 and sRGB D50. Supply the used color temperature to calculate the correct color correction factors. These can then be applied to the ColorCorrector module or in the camera color correction matrix if the debayering is in the camera.

## IDS peak comfortC - 1.13.0.0

## **Breaking changes**

- Add new status code PEAK\_STATUS\_NOT\_SUPPORTED for functions that process a frame with unsupported pixel format
- Fix return codes for get list functions
   When given a buffer that is too small, the functions
   peak\_AutoBrightness\_Exposure\_Mode\_GetList,

peak\_AutoBrightness\_Gain\_Mode\_GetList and peak\_AutoWhiteBalance\_Mode\_GetList returned with status PEAK\_STATUS\_INVALID\_PARAMETER. Now the correct status PEAK\_STATUS\_BUFFER\_TOO\_SMALL is returned.

- peak\_IPL\_AutoBrightness\_SkipFrames\_Set and peak\_IPL\_AutoWhiteBalance\_SkipFrames\_GetRange now return PEAK STATUS OUT OF RANGE when the given values are out of range
- Fix misleading return code PEAK\_STATUS\_OUT\_OF\_RANGE for peak\_IOChannel\_Level\_SetHigh. It now returns PEAK STATUS ACCESS DENIED.

#### **Features**

- Add functions for reading and setting the shutter mode
- Add interface to control chunks and demonstrating sample
- Add chromatic adaption
   Chromatic adaption provides a solution to adjust the image's colors to changes in lighting conditions to maintain consistent color perception, even if white balancing fails.

### **Bug Fixes**

- Fix issue when a TIFF image is saved with incorrect file extension. Extend possible return status code for peak\_Frame\_Save and peak IPL ImageWriter Save
- Fix access status for binning and decimation with different engines, where the camera supports the feature only in vertical or horizontal direction
- Fix last error when calling peak\_IPL\_AutoFocus\_ROI\_Get with a buffer that is too small

## IDS peak Cockpit - 2.4.0.0

- Add control for shutter mode in flash dialog
   The following limitations apply:
  - Shutter mode can only be changed if image acquisition is stopped.

- Shutter mode GlobalStart is only available for some rolling shutter sensors with corresponding firmware.
- Shutter mode can only be set to GlobalStart if the trigger has been enabled for ExposureStart.
- Add chromatic adaption feature
  - Add controls in the color widget
  - Add the factor update to the color corrector module
- Use separate controls for BinningMode in horizontal and vertical direction.

### **Bug Fixes**

- Fix application crash while a camera is being opened
   This could occur if any dialog was opened before the camera is fully initialized or if the camera window is closed immediately after it is opened.
- Disable camera window toolbar if no camera is opened.
   An empty camera window is created when a workspace is loaded that aims to open a camera but this camera is unavailable.
- Copy histogram values for monochromatic images
- Fix an issue where the pixel viewer would occasionally jump when the magnification factor was changed.
- Fix an issue where the exposure and frame rate sliders would incorrectly change their max limits.
- Set the default image save path to the pictures folder if not specified
- Show a log message when auto image save is on and the image cannot be saved because the output file type is not supported for the selected pixel format
- Fix an issue where the button to reset the image size does not reset all Binning and Decimation factors correctly.

## IDS GenTL Producer - 1.18.2.0

## **Breaking changes**

- Fix incorrect return code when a buffer was already queued or announced.
   DSAnnounceBuffer and DSQueueBuffer will now correctly return
   GC\_ERR\_RESOURCE\_IN\_USE instead of GC\_ERR\_ACCESS\_DENIED if a buffer was already announced or queued.
- Fix output buffers not being discarded when unregistering the EVENT NEW BUFFER event.

As a side effect, it will no longer be possible to unregister the EVENT\_NEW\_BUFFER event while the data stream has a running acquisition. In this case the TL will now return GC ERR RESOURCE IN USE

### **Bug Fixes**

- Fix a crash when unregistering an event while a call to EventGentData is waiting
- Fix a potential deadlock or crash when unregistering events while an EventGetData call is still pending
- U3V: Fix DSAnnounceBuffer allowing the same buffer to be announced twice
- Fix an issue where KillWait could return an error when called in rapid succession
- U3VK: Fix a potential memory leak if DSAnnounceBuffer fails
- UEye: Fix crash when announcing buffer that is smaller than the payload size DSAnnounceBuffer and DSAllocAndAnnounceBuffer will now return GC\_ERR\_BUFFER\_TOO\_SMALL if the given buffer size is smaller than the payload size.
- GEV: Fix an issue where a large number of resends could be erroneously requested after a reconnect
- UEye: Allow setting the IP configuration for ethernet cameras using the uEye TL in all cases
  - Allows camera configuration even when current IP settings are invalid (e.g., subnet mismatch).

## IDS USB3 Vision Core - 1.7.1.0

## **Bug Fixes**

- Fixed a potential crash (null pointer dereference) when allocating a temporary buffer after user memory exhaustion.
  - In cases where user-provided memory was unavailable and the driver attempted to allocate a fallback temporary buffer, a failure in this allocation could lead to a system crash.
  - Possible causes include system out-of-memory conditions or corrupted PayloadSize values in camera registers. This issue could potentially affect all users in low-memory scenarios.

## **IDS** peak genericAPI Samples

### **Features**

Add support for CMake 4.0

## Release - 2.15

## IDS peak IPL - 1.15.0.0

### **Features**

- Add digital black functions in the gamma corrector module
- Add new LUT module (8, 10, 12, 16 bit)
- Add new integer to float and float to integer conversions
  - Implement conversion from Coord3D\_C32f to Coord3D\_C8 and Coord3D\_C16
  - Convert integer to float images using a factor and offset via
     Image::ConvertToWithFactor or an overload of ImageConverter::Convert
  - Convert float to integer images using a source interval via
     Image::ConvertToFromInterval or an overload of ImageConverter::Convert
- Add Interval class for specifying a start and an end point
- Add scale and crop for float images

## **IDS peak AFL - 1.7.0.0**

#### **Features**

- Add new data processing callbacks
- Add a new process callback for all controllers, so the user is informed when the image has been processed.

## **Bug Fixes**

Fix a bug which resulted in an incorrect ROI.

## IDS peak comfortC - 1.12.0.0

#### **Features**

- Add new functions to control digital black
- Add host-side lookup table (LUT)

### **Bug Fixes**

- Fix compatibility issues with USB 3 uEye XCP and USB 3 uEye XC models regarding trigger and auto features.
- Fix ROI offset for auto white balance and brightness when ROI is changed

## IDS peak Cockpit - 2.3.0.0

- Add profiles to the cockpit.
  - Ask the user which profile to use. This is either persistently saved or the user is asked on each start. When the auto tune image profile is selected, the cockpit overrides the default settings:
    - The trigger mode is set to freerun.
    - The frame rate is set to a flicker free value supported by the camera.
    - The auto features are all turned on continuously.
    - Gamma and DigitalBlack are enabled for color cameras.
    - The UserSet of the camera will be Default.
    - The workspace functionality is disabled.
- With the manual tune profile, the IDS peak Cockpit behaves the same as previous versions which had no profiles. Once enabled, the initial DigitalBlack value is set to 0.04045.
- Add support for list increment nodes and integer nodes which exceed the possible range of the slider.
  - The cockpit now supports fixed increment lists for Integer and Float nodes. This is used e.g. when not all values inside a range are supported. Possible nodes include the binning and decimation nodes of the camera.
  - If Integer nodes are too large to be supported by a slider, they will now be represented by a Spinbox to support large ranges. This includes the heartbeat interval timer of the local device nodemap.

- Add support for panning the image with the middle mouse button
- Add new DigitalBlack (GammaCorrector) Feature in the host functions dialog
- Move the Magic Button to a dropdown menu next to the acquisition control buttons, which allows to enable AutoAdjustments once or continuously.

### **Bug Fixes**

- Fix cset validation erroneously blocking
- Add error message if a file operation fails
- Fix unreadable context menu in log when using the dark theme
- Correct the display name for the chinese translation in the language selection
- Fix sensor name not shown in some dialogs
- Fix initial gamma value
- Fix a crash when opening a camera that's in service mode with disabled list update
- Fix initial color correction matrix for uEye USB 3 XLE, uEye USB 3 XCP and uEye USB 3 XLS models
- Fix host decimation not being applied when host binning is enabled
- Fix binning and decimation sources only being locked on camera changed

## IDS DirectShow - 1.0.0.0

## **Bug Fixes**

Fix auto white balance oscillation on some camera models

## IDS GenTL Producer - 1.18.1.0

#### **Features**

GEV(K): Add support for buffers of size greater than the payload size

### **Bug Fixes**

- Fix an issue when using the 32-bit transport layer (TL) on a 64-bit system
- U3VK: Fix a potential crash when re-starting the acquisition
- GEV: Fix stability issues regarding usage of node GevGVCPCMDLength

### **Performance**

- U3VK: Fix a performance issue when a second application updates the device list for the first time
- U3VK: Improve the performance of large transfers on the control channel which could affect the stream channel
- U3VK: Improve the performance when re-opening a device

## IDS GigE Vision Core - 1.6.4.0

### **Bug Fixes**

- Fix an issue when using FlushQueue(AllToInput)
- Fix an issue when the network adapter is disabled while a device on the adapter's network is in use.
- Fix an issue when using a 32-bit application on a 64-bit system, which is compiled with the /LARGEADDRESSAWARE flag.

### IDS USB3 Vision Core - 1.7.0.0

## **Bug Fixes**

Improved stability and performance

## **IDS** peak genericAPI Samples

#### **Features**

Add Qt6 support

## **Bug Fixes**

Fix potential compilation error when building without CMake

# IDS peak Windows Setup - 2.15.0.0

• Also install 32-bit DirectShow on 64-bit systems

### **Bug Fixes**

- Fix the 32-bit version of the VC redistributables not being installed on 64-bit systems
- Fix an issue where the registration of the directshow interface would fail on fresh windows installations

# Releases prior to 2.15

Please refer to the changelogs of the individual components:

- IDS peak genericAPI
- IDS peak IPL
- IDS peak AFL
- IDS peak comfortC

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