

Release Notes for IDS Vision Suite 1.0

Content

Introduction	1
New features.....	1
IDS Vision Cockpit	1
Command line tools	4
Known issues.....	6
Copyright	6

Introduction

With the IDS Vision Suite 1.0, IDS provides a complete software support to put you GigE Vision camera in operation quickly and easily. Using the IDS GenTL Producer, you can access your camera via the GenICam interface in your application or any third party software even if the application or third party software have no own support of GigE Vision. The installation of the IDS GenTL Producer is recommended for using the IDS Vision Cockpit.

In version 1.0 has the following features and tools.

New features

IDS Vision Cockpit

After installing the IDS Vision Suite, you can use the IDS Vision Cockpit to set conveniently the IP address of the camera. Use the "Device network configuration" dialog to retrieve the current IP address and set a new IP address.

The screenshot shows a window titled "Device network configuration" with a help icon and a close button in the top right corner. The window is divided into three main sections:

- Device info:** Contains input fields for Model (GV-528xCP-C), Vendor (IDS), MAC (00:1b:a2:20:09:3c), Serial (4103130808), and User-defined-name (empty).
- Current network settings:** A table comparing Interface, Current device state, and Device settings for IP address, Subnet Mask, and Gateway. The IP address is 192.168.2.1 for the interface, 192.168.2.50 for the current state, and 192.168.2.50 for the device settings. Subnet Mask is 255.255.255.0 and Gateway is 0.0.0.0. Protocol selection includes Persistent IP and DHCP.
- Setup network settings:** A section for configuring the device with input fields for IP address (192.168.2.50), Subnet Mask (255.255.255.0), and Gateway (0.0.0.0). It also has Persistent IP and DHCP. Below these are three buttons: "Force temporary", "Write settings", and "Write settings and reboot".

Figure 1: Setting an IP address

Open the camera after the IP address of the camera is set correctly. In the IDS Vision Cockpit, you will see the camera image on the right and the camera properties on the left in a tree structure.

According to the GenICam SFNC, the camera properties are divided into the categories “Beginner”, “Expert”, and “Guru”. The selection is made via the drop-down menu. In addition, you can quickly search for a desired property using the search field. The field below shows tooltips for the selected entry.

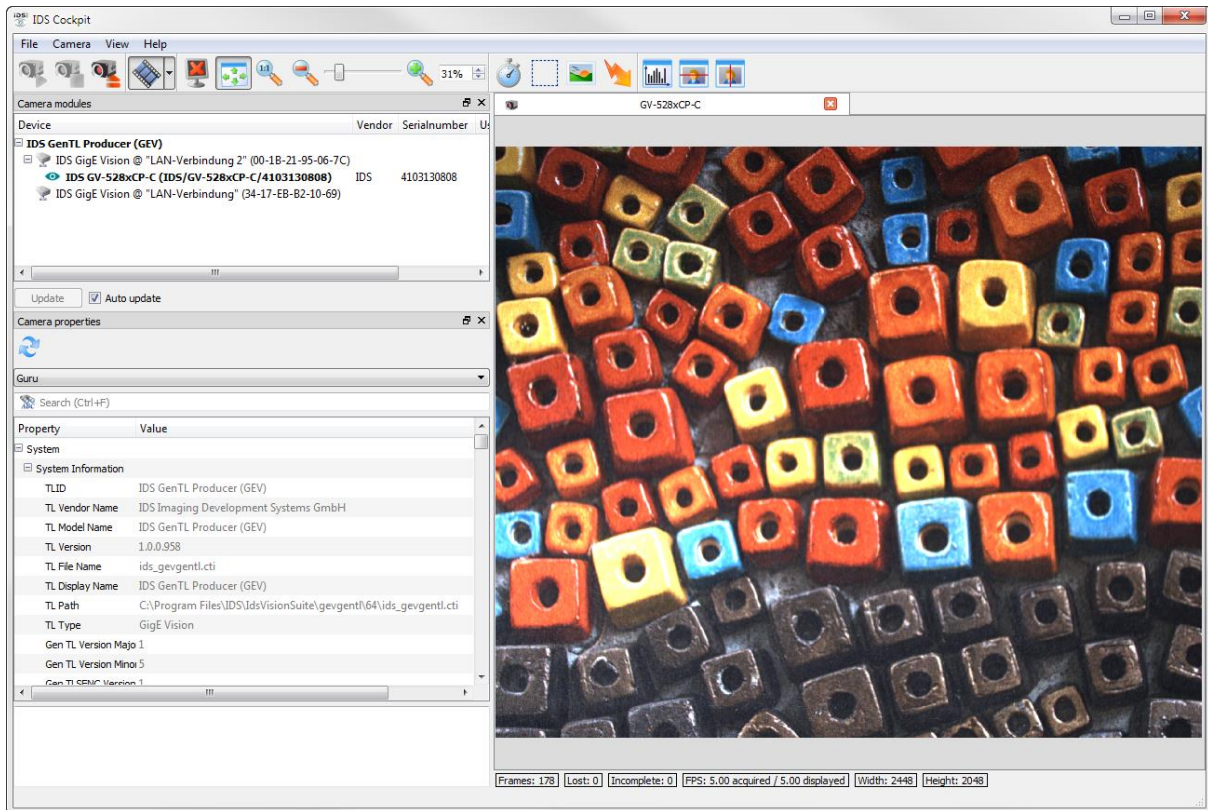


Figure 2: IDS Vision Cockpit

In addition to setting the properties in the tree, dialog-based setting options are available to set for example the frame rate, the exposure time, or a region of interest. These dialogs provide convenient, graphical access to standard GenApi functions.

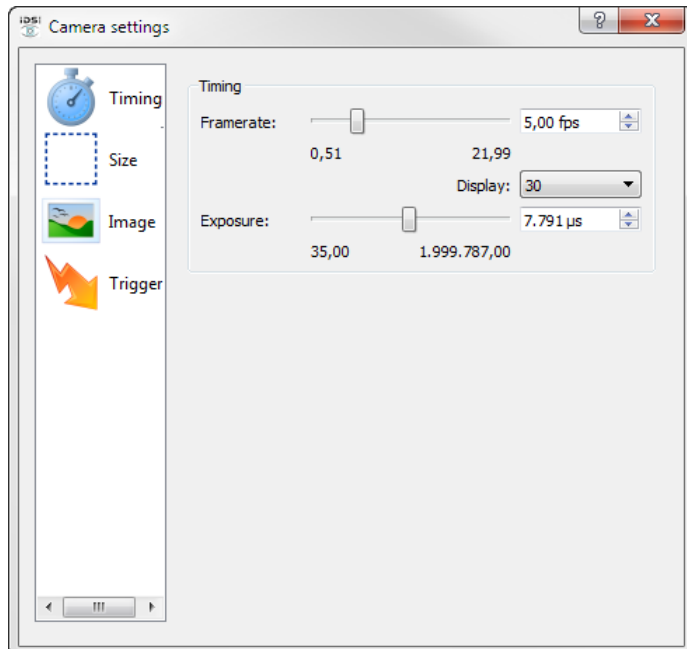


Figure 3: Dialog-based camera settings

Additional functions are also available which provide practical help. The histogram graphically displays the frequency distribution of the color values in the image captured by the camera.

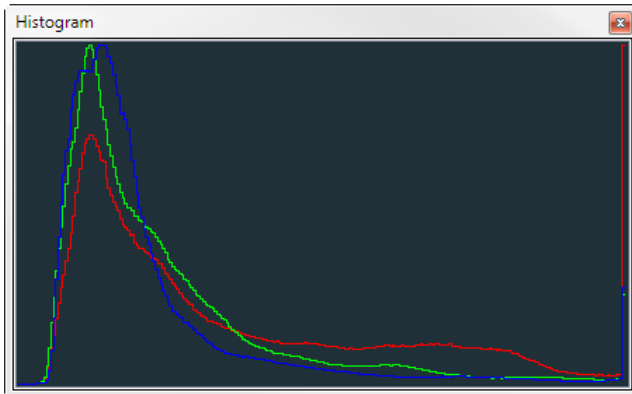


Figure 4: Histogram

The vertical and horizontal line profile graphically shows the color values of a pixel row or pixel column.

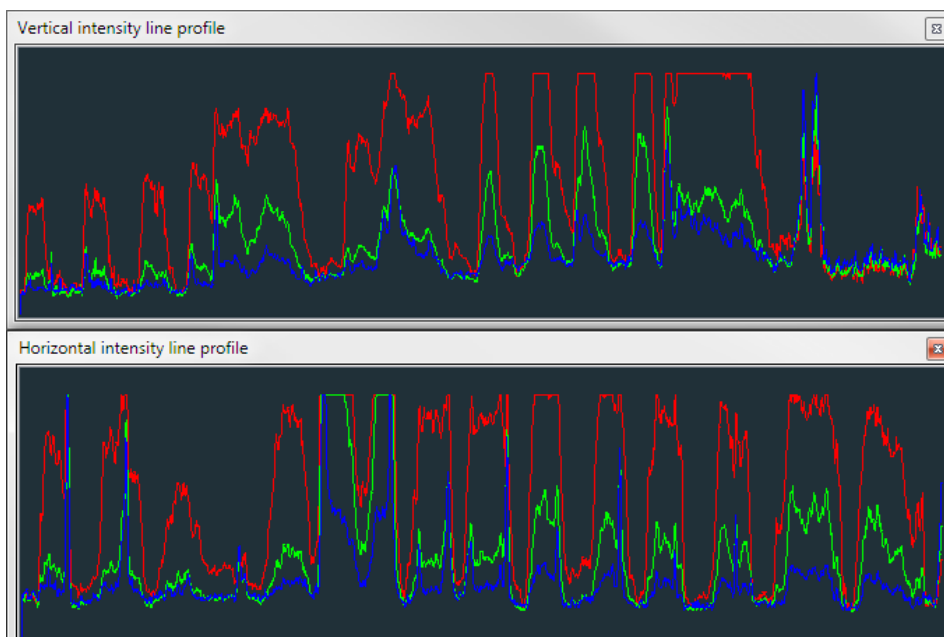


Figure 5: Vertical and horizontal intensity line profile

Command line tools

The command line tools offer the advantage that they can be automated via scripts or can be used on systems without a graphical user interface.

Tip: The start menu shortcut “IDS CMD Tools” is available under Windows. This opens a command line window and sets the PATH environment variable so that the IDS command line tools can be called directly.

Use `ids_ipconfig` to assign a valid IP address to the camera. Use `ids_devicecommand` to query and set the camera settings. For both `ids_config` and `ids_devicecommand`, use the `--help` switch to access the tool-specific help.

```

IDS CMD Tools
Vision Command Line Tools
Copyright 2017
IDS Imaging Development Systems GmbH

Tools:
  ids_cockpit
  ids_devicecommand
  ids_ipconfig

C:\Users\nag>ids_ipconfig --help
-----
                IDS IP Config
                Copyright 2017
                IDS Imaging Development Systems GmbH
                -----

Setup IP Addresses for GigE Vision Devices.

Common options:
-h [ --help ]           Produce help message
--usage [ -arg(<=0>)]  Print usage examples (detail level
                        0=Beginner, 1=Expert, 2=Guru)
-v [ --version ]       Print version string
-U [ --verbose ] arg <=1> Set verbosity level (-3=Silent, -2=Output,
                        -1=Error, 0=Warning, 1=Info, 2=Extra)

Cti selection:
-cti arg               Select cti file
-cti-dirs arg         Select cti search directories
-cti-by-type arg      Select cti by type (e.g. "MIXED" or "GEU"
                        or "U3U")
--list-ctis           List ctis
-cti-info             Print cti info

GigE Vision Control:
--list-interfaces     List GigE Vision interfaces
-l [ --list-devices ] List GigE Vision devices
-l [ --list-all ]    List GigE Vision interfaces and devices
--interactive         Interactive mode

GigE interface Selection:
-M [ --interface-by-mac ] arg  Select interface by mac
-l [ --interface-by-ip ] arg   Select interface by ip

GigE device selection:
-m [ --device-by-mac ] arg     Select device by mac
-u [ --device-by-user-name ] arg Select device by user defined name
-s [ --device-by-serial ] arg  Select device by serial number

GigE device control:
-F [ --force-addr ]           Force temporary addresses
-p [ --persistent-settings ] Set persistent settings
-i [ --ip ] arg              Device IP
-n [ --netmask ] arg         Device netmask
-g [ --gateway ] arg         Device gateway
--enable-persistent-ip      Enable persistent IP
--disable-persistent-ip     Disable persistent IP
--enable-dhcp                Enable DHCP
--disable-dhcp               Disable DHCP
-P [ --device-info ]         Print GigE Vision devices info
    
```

Figure 6: ids_ipconfig

```

IDS CMD Tools
Vision Command Line Tools
Copyright 2017
IDS Imaging Development Systems GmbH

Tools:
  ids_cockpit
  ids_devicecommand
  ids_ipconfig

C:\Users\nag>ids_devicecommand --help
-----
                IDS Device Command
                Copyright 2017
                IDS Imaging Development Systems GmbH
                -----

Control GenICam devices

Common options:
-h [ --help ]           Produce help message
--usage [ -arg(<=0>)]  Print usage examples (detail level
                        0=Beginner, 1=Expert, 2=Guru)
-v [ --version ]       Print version string
-U [ --verbose ] arg <=1> Set verbosity level (-3=Silent, -2=Output,
                        -1=Error, 0=Warning, 1=Info, 2=Extra)

Cti selection:
-cti arg               Select cti file
-cti-dirs arg         Select cti search directories
-cti-by-type arg      Select cti by type (e.g. "MIXED" or "GEU"
                        or "U3U")
--list-ctis           List ctis
-cti-info             Print cti info

Interface selection:
--list-interfaces     List interfaces
-interface-by-id arg  Select interface by id
-interface-by-type arg Select interface by type (e.g. "U3U" or
                        "GEU")
-M [ --interface-by-mac ] arg  Select GigE Vision interface by mac
-l [ --interface-by-ip ] arg   Select GigE Vision interface by ip

Device selection:
-l [ --list-devices ]           List devices
-l [ --list-all ]             List interfaces and devices
-u [ --device-by-user-name ] arg Select device by user defined name
-s [ --device-by-serial ] arg  Select device by serial number
-m [ --device-by-mac ] arg     Select GigE Vision device by mac
-d [ --device-by-ip ] arg      Select GigE Vision device by ip
-d [ --device-by-id ] arg      Select device by id
-m [ --device-by-model ] arg   Select device by model name

Device Commands:
--reset-to-runtime           Reset to runtime firmware.
--reset-to-service           Reset to service firmware.
--wait-for-device            Wait for device gets visible

Nodenap Commands:
--list-urls                  List urls.
--download-url [ -arg(<=0>)] Download url content file
-n [ --node ] arg            Select node
-g [ --get ] arg              Get node value
-s [ --set ] arg              Set node value
--set-range-factor arg       Set numeric value by the range factor (0.0
                              => set minimum, 1.0 => set maximum)
--inc [ --inc ] arg           Get node value increment
--min [ --min ] arg           Get node value maximum
--max [ --max ] arg           Get node value minimum
--execute [ --execute ] arg   Execute node

Register Commands:
--register arg                Select register address
--read [ --read ] arg         Read register
--write [ --write ] arg        Write register
    
```

Figure 7: ids_devicecommand

Known issues

- The IDS Vision Suite is available under Windows only for 64-bit systems.
- Camera images cannot be saved in JPEG format yet.

Copyright

© IDS Imaging Development Systems GmbH, Status: 2017-05-30