Overview

Vimba is the all-in-one solution for working with Allied Vision cameras:

- **Vimba Viewer**: The fastest way to get an image
- Development: APIs for C, C++, and .NET, with coding examples
- Third-party applications: GenICam-compliant transport layers, Vimba Cognex Adapter

Vimba Viewer

Use the Vimba Viewer to instantly view images from your Allied Vision camera and to try out camera features without any programming.

Using Vimba Viewer

1. Connect the camera to the PC.
2. Start **Vimba Viewer**.

   The **Camera Selector** opens.
3. In the **Camera Selector**, to open a camera, click the appropriate list item:

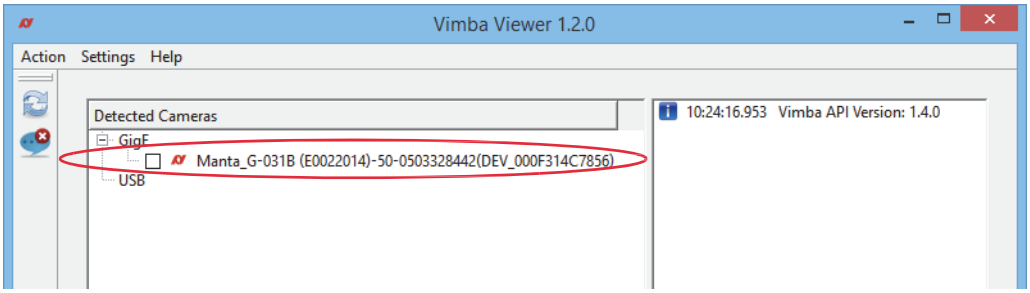

Figure 1: Camera Selector -> Opening a camera by default

The **Main window** opens automatically.

4. To start image acquisition, click the **Start button**:

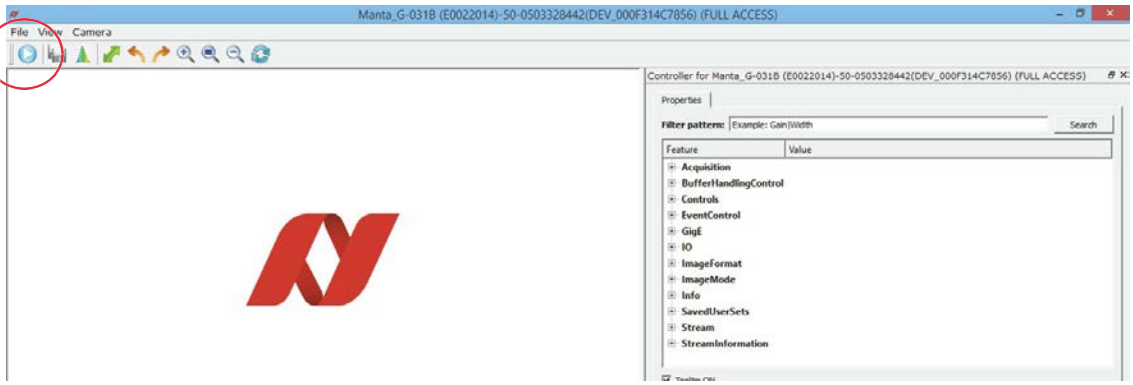

Figure 2: Main window -> Starting image acquisition

If the start button is grayed out with a GigE camera

In this case, the **Main window** is in **Config Mode** to allow the configuration of the interface settings.

5. Correct the interface settings:

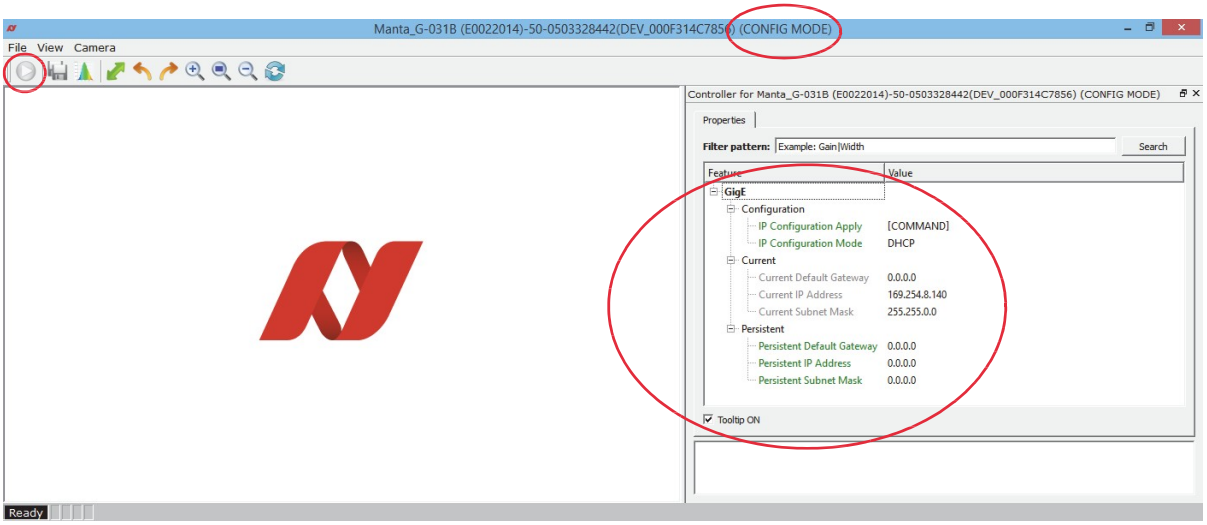

Figure 3: Main window -> Configuring the GigE interface settings

6. After correcting the interface settings, close the **Main window**.
7. In the **Camera Selector**, to open a camera, right-click the appropriate list item.
8. Click **Open FULL ACCESS:**

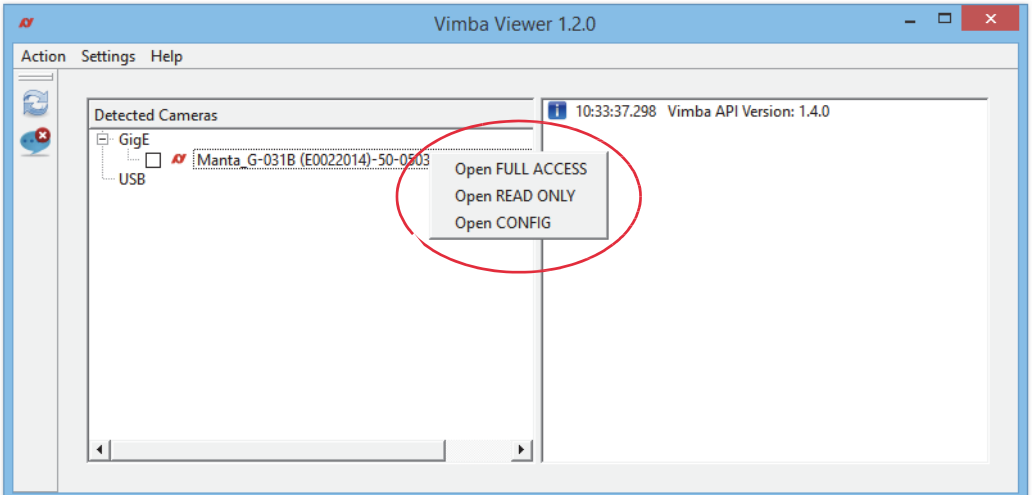

Figure 4: Camera Selector -> Opening a camera

The **Main window** opens automatically.

9. Start image acquisition, see step 4.

Opening the camera settings

1. Close the **Main window**.
2. In the **Camera Selector**, to configure a camera, right-click the appropriate list item.
3. Click **Open CONFIG**:

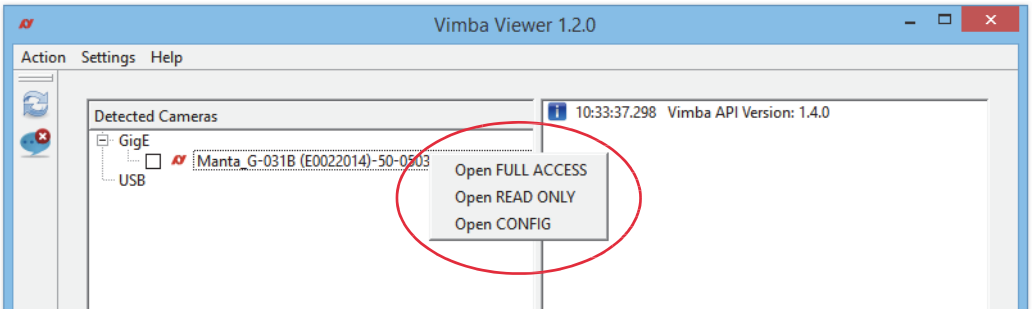

Figure 5: Camera Selector -> Configuring a camera

The **Main window** opens in **Config Mode.**

More information on camera installation

www

Select your Allied Vision camera on our website and find detailed information in its installation manual:

http://www.alliedvision.com/en/support/technical-documentation.html

Development

Depending on your programming language and the camera interface, different documents are relevant.

In any case, starting with the **Vimba Manual** is recommended. To ease programming with Vimba, read the documentation in the order suggested in the table below:

Note The documentation is available for the installed components only.

Reading order	Component	Documentation	x = necessary / o = optional					
			C	C++	.NET	IEEE 1394	GigE	USB
1	Vimba	Vimba Manual.pdf	x	x	x			
2	Vimba C API	Vimba C Manual.pdf	x					
	Vimba C++ API	Vimba CPP Manual.pdf		x				
	Vimba .NET API	Vimba NET Manual.pdf			x			
3	Camera Features	Vimba1394TLFeaturesManual.pdf				x		
		GigE_Features_Reference.pdf					x	
		USB_Features_Reference.pdf						x
4	Vimba Features	Vimba Features Manual.pdf	x	x	x			
5	Vimba Image Transform Library	Vimba ImageTransform Manual.pdf	o	o				
6	Transport Layer	Vimba1394TLFeaturesManual.pdf				o		
		VimbaGigETLFeaturesManual.pdf					o	
		VimbaUSBTLFeaturesManual.pdf						o

Table 1: Manuals for the developer

Windows only

Coding examples

For a practical introduction to Vimba coding, Vimba Examples are helpful.

Note

Linux does not provide access via start menu or ExamplesOverview.hta. Under Linux, see in the Vimba installation directory:

- o VimbaCPP/Examples
- o VimbaC/Examples

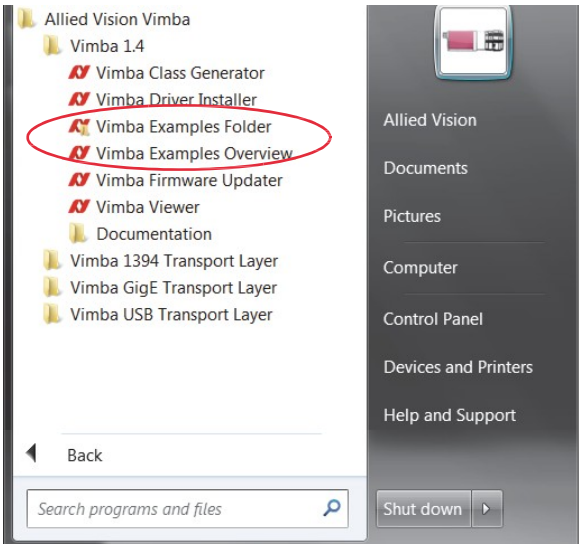

Figure 6: Windows Start Menu -> Access to Vimba Examples

In the Examples directory, ExamplesOverview.hta provides an overview of and links to the enclosed examples:

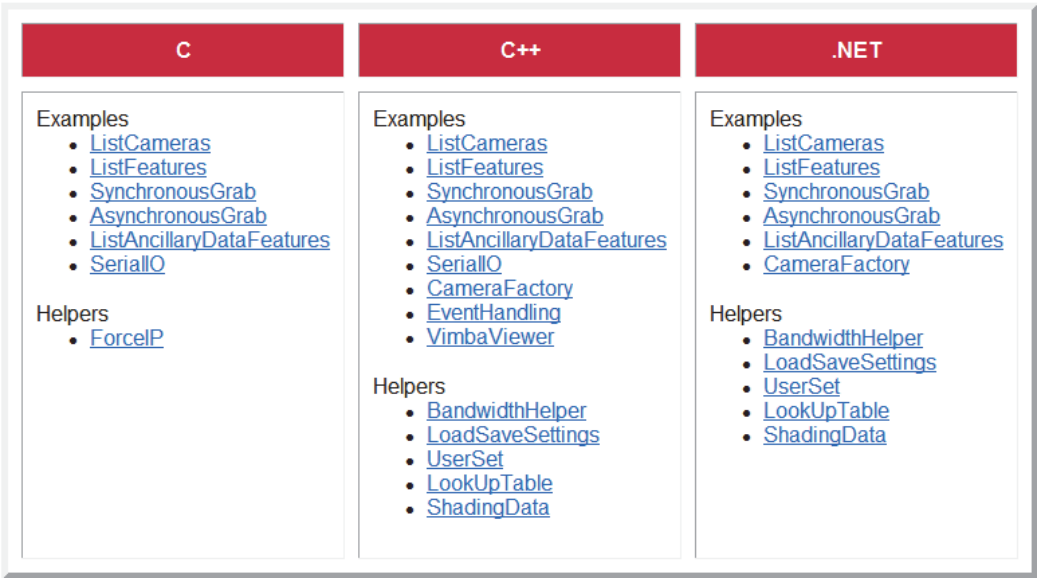

Figure 7: ExamplesOverview.hta (Windows only)

Third-party applications

Vimba provides GenICam-compliant TLs (transport layers) for GigE, USB, and 1394 cameras from Allied Vision. To use these cameras with a third-party application, read the documentation in the order suggested in Table 2:

Note

After the Vimba installation, GenICam-compliant third-party applications automatically find and use the Vimba TL.
For third-party applications not compliant with GenICam, read the corresponding manual.

Reading order	Component	Documentation	IEEE 1394	GigE	USB
1	GenICam-compliant third-party applications	Please read the documentation of the third-party application. Depending on the third-party application, also see the following:			
2	Camera Features	Vimba1394TLFeaturesManual.pdf	x		
		GigE_Features_Reference.pdf		x	
		USB_Features_Reference.pdf			x
3	Transport Layer	Vimba1394TLFeaturesManual.pdf	o		
		VimbaGigETLFeaturesManual.pdf		o	
		VimbaUSBTLFeaturesManual.pdf			o

Table 2: Manuals for the third-party application user

Windows only

Note

Cognex VisionPro 1.2 is supported by the Vimba Cognex Adapter (Windows only). For more information see Vimba Cognex Manual.pdf.

For extended functionality of the Vimba Cognex Adapter, see Vimba1394TLFeaturesManual.pdf, GigE_Features_Reference.pdf, or USB_Features_Reference.pdf.

Contacting Allied Vision

Technical information:
http://www.alliedvision.com

Support:
http://www.alliedvision.com/en/support/contact-support-and-repair.html

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