Advantech AE Technical Share Document

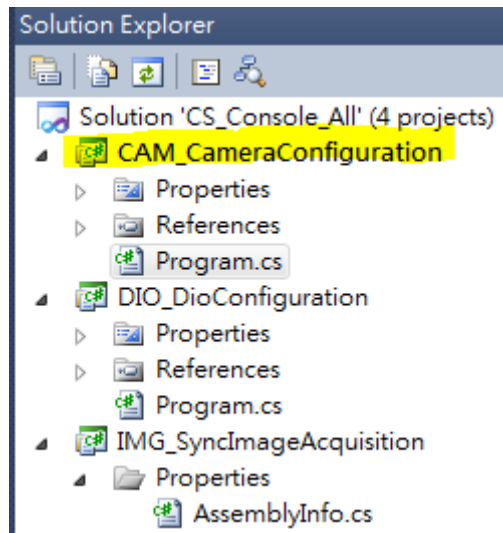| Date	2016/06/23	SR#	1-2488105251
Category	□FAQ■ SOP	Related OS	--
Abstract	Set or get parameter by using sample code		
Keyword	PCIE-1172, PCIE-1174, Frame Grabber, parameter, sample code		
Related Product	PCIE-1172, PCIE-1174		

■ **Problem Description:**

How to set or get parameter of camera by using sample code?

■ **Brief Solution - Step by Step:**

In this case, let's take C# as an example.

1. Please open "CAM_CameraCobfiguration" to set or get parameters of camera in C:\Advantech\CamNavi\Example\CS_Console\net20 or net45.

Picture1:sample code list

2. There are some parameters which already been written to specific function for user to adopt easily. For example, you can get the value of "Width" just by following function.

```
Int64 WidthValue = camConfigure.Width.Value;
```

Available function shows in following picture. However, if you are going to set the parameters like exposure time, gain, you should use function like "GetFloatNode", "GetEnumNode", "GetIntNode", etc.

Functions

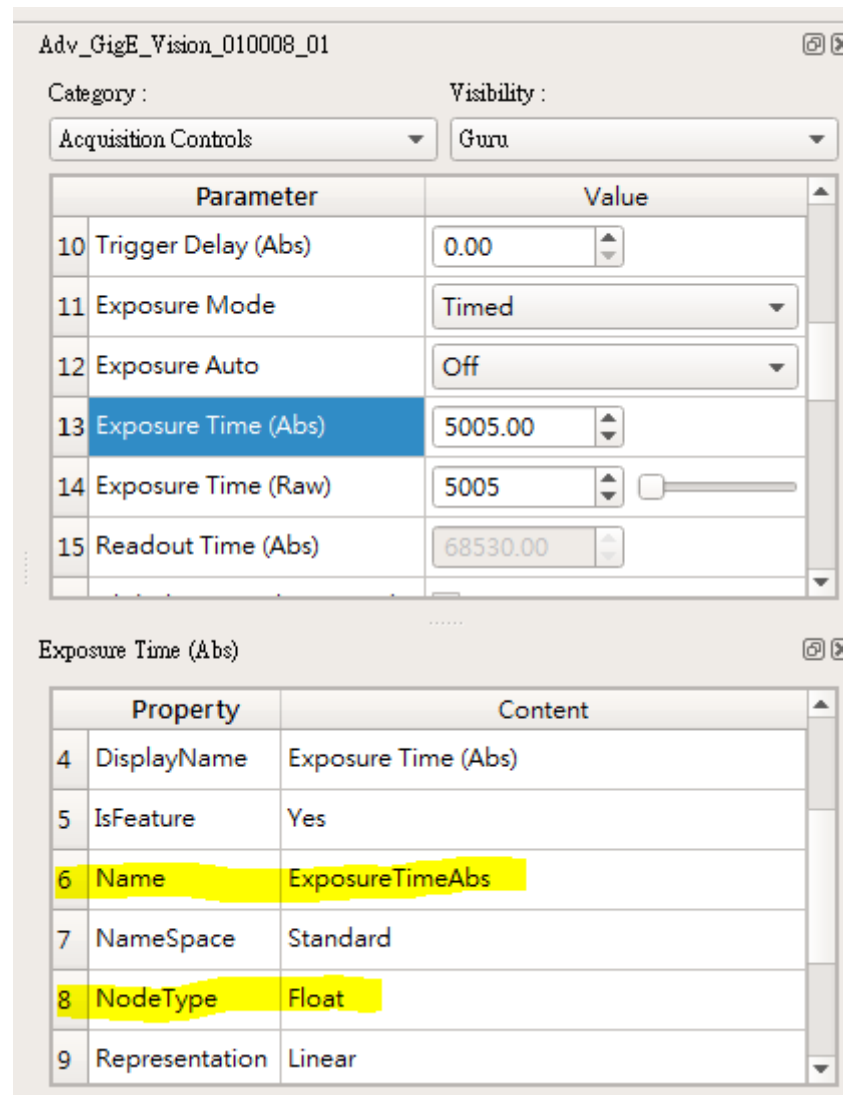|		
NodeInt	CamNaviCtrl.CameraConfigure.GetWidth ()	
NodeInt	CamNaviCtrl.CameraConfigure.GetHeight ()	
NodeInt	CamNaviCtrl.CameraConfigure.GetPayloadSize ()	
NodeInt	CamNaviCtrl.CameraConfigure.GetSCPPacketSize ()	
NodeInt	CamNaviCtrl.CameraConfigure.GetTLParamsLocked ()	
NodeEnum	CamNaviCtrl.CameraConfigure.GetPixelFormat ()	
NodeEnum	CamNaviCtrl.CameraConfigure.GetAcquisitionMode ()	
NodeComd	CamNaviCtrl.CameraConfigure.GetAcquisitionStart ()	
NodeComd	CamNaviCtrl.CameraConfigure.GetAcquisitionStop ()	
NodeBool	CamNaviCtrl.CameraConfigure.GetBoolNode (string strNodeName)	
NodeEnum	CamNaviCtrl.CameraConfigure.GetEnumNode (string strNodeName)	
NodeInt	CamNaviCtrl.CameraConfigure.GetIntNode (string strNodeName)	
NodeFloat	CamNaviCtrl.CameraConfigure.GetFloatNode (string strNodeName)	
NodeComd	CamNaviCtrl.CameraConfigure.GetComdNode (string strNodeName)	

Properties

NodeInt	CamNaviCtrl.CameraConfigure.Width	[get]
NodeInt	CamNaviCtrl.CameraConfigure.Height	[get]
NodeInt	CamNaviCtrl.CameraConfigure.PayloadSize	[get]
NodeInt	CamNaviCtrl.CameraConfigure.SCPPacketSize	[get]
NodeInt	CamNaviCtrl.CameraConfigure.TLParamsLocked	[get]
NodeEnum	CamNaviCtrl.CameraConfigure.PixelFormat	[get]
NodeEnum	CamNaviCtrl.CameraConfigure.AcquisitionMode	[get]
NodeComd	CamNaviCtrl.CameraConfigure.AcquisitionStart	[get]
NodeComd	CamNaviCtrl.CameraConfigure.AcquisitionStop	[get]

Picture2:function list

3. If you want to set or get the value of exposure time, you should use "GetFloatNode" function.

NodeFloat   CamNaviCtrl.CameraConfigure.GetFloatNode (string strNodeName)

4. How to determine the node name and node type? You could open Viewer and double click on the parameter which you would like to set. And a properties list will pop-up.
In the following picture, we need to know the node type(float) and node name(ExposureTimeAbs). If the node type is float, then use "GetFloatNode" function.

Picture3:parameter lists

5. By these information and following code, you could get the value of exposure time.

```
double Expo = camConfigure.GetFloatNode("ExposureTimeAbs").GetValue();
```

Or set the value of exposure time by following code.

```
camConfigure.GetFloatNode("ExposureTimeAbs").SetValue(10000);
```

■   **Reference:**