Dummy Camera provider

Version 1.1.0

User's guide

September 13, 2018

Remarks:

[Revision History]

Version	Date	Content
1.0.0	2015-09-01	First edition.
1.1.0	2018-09-13	Added system variable of CaoController class. {@ERROR_CODE, @BUSY_STATUS, @NORMAL_STATUS, @CURRENT_DATETIME, @RANDOM}
	2020-04-17	Deleted the installer-related description from Overview.

Contents

1. Introduction

This is a user's guide of Dummy Camera provider.

Dummy Camera provider allows to simulate the camera's value acquisition and setup by using a virtual camera without connecting to a real camera.

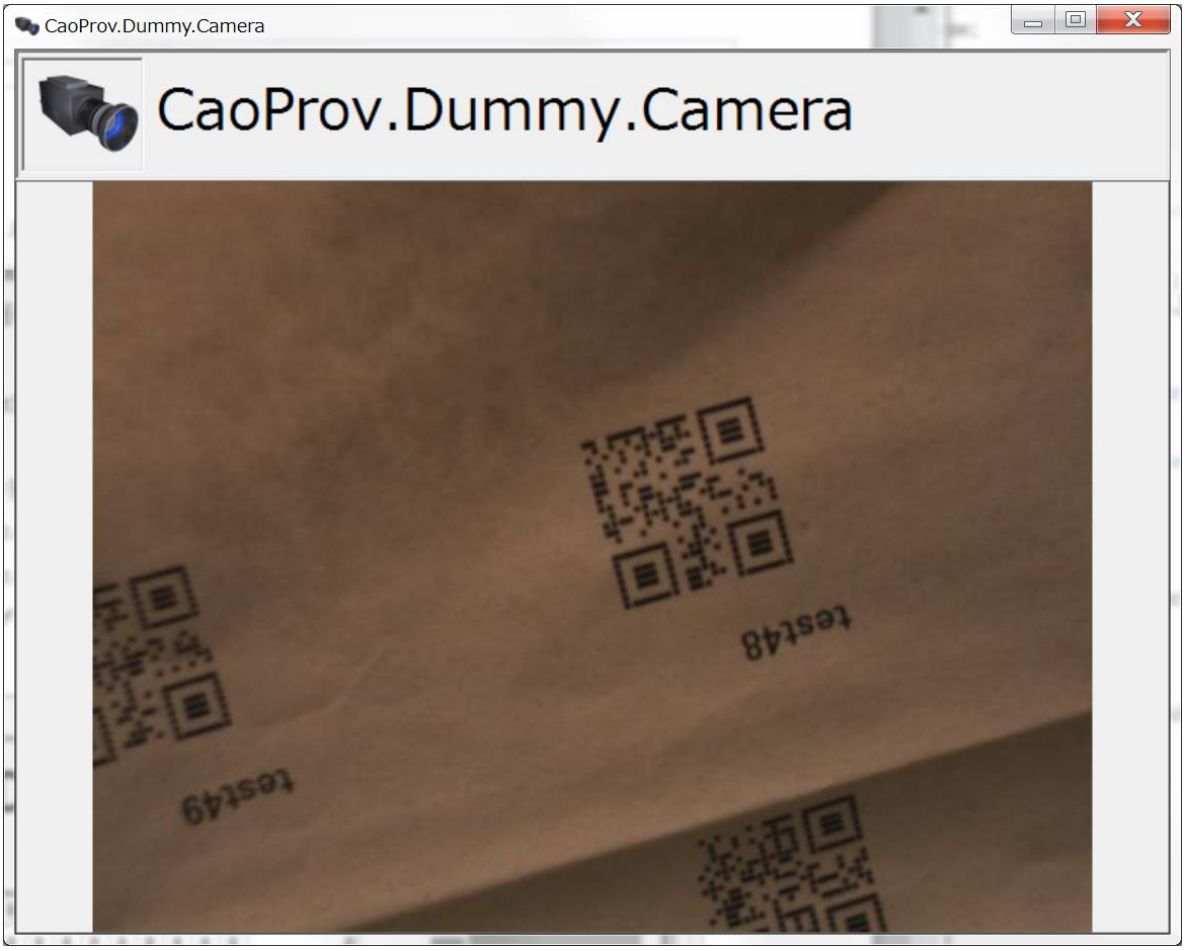

Figure 1 The dummy provider screen for Camera

2. Overview of provider

2.1. Overview

Dummy Camera provider is a CAO provider that allows to obtain and check image data by using a virtual camera.

The file type is DLL (Dynamic Link Library) and is dynamically loaded by CAO engine when it is used.

Table 2-1 Dummy Camera provider

File name	CaoProvDummyCamera.dll
ProgID	CaoProv.Dummy.Camera

2.2. Method and Properties

2.2.1. CaoWorkspace::AddController method

Dummy Camera provider establishes a connection to the dummy camera by referring to the parameters that have been passed at the AddController method execution.

Format AddController(<bstrCtrlName:BSTR>,<bstrProvName:BSTR>,
<bstrPCName:BSTR> [,<bstrOption:BSTR>])

<bstrCtrlName>	:	[in] Controller name Specify a unique arbitrary string for each connection. * An error (0x80000205) occurs if the same name is specified by a different application or computer. If an empty string ("") is entered, CAO engine automatically assigns a unique controller name.
<bstrProvName>	:	[in] Option character string Fixed value = "CaoProv. Dummy.Camera
<bstrPcName>		[in] Computer name to execute provider For a local connection, enter an empty string (""). To establish a remote connection, specify a target computer name.
<bstrOption>		[in] Option character string (not used)

2.2.2. CaoController::AddFile method

Obtain a file object that stores captured images at the CaoController::AddFile execution.
An argument of AddFile method on CaoController class specifies a file name (BSTR type). For the File name, specify an arbitral file name.

Format AddFile (<bstrName:BSTR > [,<bstrOption:BSTR>])

< bstrName >	:	[in] File name
<bstrOption>	:	[in] Option character string (not used)

2.2.3. CaoController::AddVariable method

AddVariable method on CaoController class is a method to access variables. In this provider, you can specify a variable that can be obtained by CaoController::get_VariableNames property as a variable name. refer to “2.3Variable list”.

Format AddVariable(<bstrName:BSTR > [,<bstrOption:BSTR>])

< bstrName > : [in] Variable name

<bstrOption> : [in] Option character string (not used)

2.2.4. CaoController::get_VariableNames property

Get the variable name list implemented by this provider as an array.

Format VariableNames([<bstrOption:BSTR>])

<bstrOption> : [in] Option character string (not used)

2.2.5. CaoVariable::get_Value property

Get a variable value corresponding to an object. For details about variable implementation state and data type,

2.2.6. CaoVariable::put_Value property

Set a variable value corresponding to an object. For details about variable implementation state and data type,

2.2.7. CaoFile::get_Value property

Get a byte data array of an image that has been captured at CaoController::AddFile method execution.

2.3. Variable list

2.3.1. Controller class

Table 2-1 Controller class variable list

Variable identifier	Data type	Explanation	Attribute	
			get	put
@CURRENT_DATETIME	VT_DATE	Current time	√	-
@BUSY_STATUS	VT_BOOL	true = During program operation, false = Program halted	√	-
@NORMAL_STATUS	VT_BOOL	true = normal, false = abnormal (error occurring) (Due to dummy operation, always true)	√	-
@ERROR_CODE	VT_I4	Acquires the number of the error occurring as a decimal value. If no error occurred, 0 is returned. (Due to dummy operation, always 0)	√	-
@RANDOM	VT_R8	Returns a random value between 0.0 and 1.0.	√	-
@Image	VT_ARRAY | VT_UI1	Get a capture image.	√	-
@Pause	VT_BOOL	True = Web camera pause False = Web camera playback	√	√

2.4. Setting the Ini file

As output images of a virtual camera, you can set/change serial image data on the data section of the ini file. All image files of the serial image data must have the same extension and each file name has a sequence number.

The ini file that lists the setup is stored in the following path.

" <ORiN2 SDK installation folder>¥CAO¥ProviderLib¥Dummy¥Bin¥Camera.ini"

[data]

datapath=< A path to a folder that stores serial image data >

interval=< Interval before displaying the next image of the serial image data (ms)>

filenameformat=< Format of the next serial image file name>

2.4.1. Sample file

Camera.ini

```
[data]
  datapath=.¥Camera.Data
  interval=100
  filenameformat=img{0:00000}.jpg
```