5.1 Class CyImageBuffer

The class CyImageBuffer is a two-dimensional derivation of the CyBuffer class of the communication component. It provides a native, image-oriented buffer.

The main difference between CyImageBuffer and CyBuffer is that, with CyBuffer, size and capacity are always the same, with capacity derived from horizontal size, vertical size, and pixel format.

The image buffer also provides methods to load and save images to and from files.

5.1.1 Initialize

Prototype

Public Sub Initialize(ByVal aSizeX As Long, ByVal aSizeY As Long, ByVal aType As Long)

Description

Constructor

Parameters

aSizeX The number of pixels in a line.

aSizeY The number of lines.

aType The type of pixels stored in the buffer

Return

Reference

CyCamComp 1.0 Type Library

Notes

The specified size and pixel can be changed with the SetCapacity methods.

See Also

SetCapacity

5.1.2 SizeX (Get)
SizeY (Get)

Prototype

Public Property Get SizeX() As Long
Public Property Get SizeY() As Long

Description

Returns the horizontal and vertical sizes of the buffer.

Parameters
5.1.6  LockForRead

Prototype
Public Function LockForRead( ByVal aFlags As Long ) As Byte()

Description
Locks a buffer for read operations. This function blocks and waits for data to be available, unless otherwise indicated by the flags.

Parameters
Possible flags that can be use in combination:

- **FLAG_NO_WAIT**
  - If an image is already available, don’t wait for the next.

- **FLAG_ERROR_IF_EMPTY**
  - If no image is available and no writing operation pending return an error. If this flag is not present, the function waits for the next write operation.

Return
A reference to an array that will contain the data in the buffer

Reference
CyCamComp 1.0 Type Library

Notes
The buffer must be release either by AbortRead or SignalReadEnd.

See Also
SignalReadEnd

5.1.7  LockForReadPtr

Prototype
Public Function LockForReadPtr( ByVal aFlags As Long ) As long

Description
Locks a buffer for read operations. This function blocks and waits for data to be available, unless otherwise indicated by the flags.

This version of the function returns a long integer that is actually a pointer to the data (a C/C++ unsigned char*).
Parameters

Possible flags that can be use in combination:

FLAG_NO_WAIT
If an image is already available, don’t wait for the next.

aFlags

FLAG_ERROR_IF_EMPTY
If no image is available and no writing operation pending return an error. If this flag is not present, the function waits for the next write operation.

Return
A reference to long integer that contains the pointer to the actual data.

Reference
CyCamComp 1.0 Type Library

Notes
The buffer must be release either by AbortRead or SignalReadEnd.

See Also
SignalReadEnd

5.1.8 SignalReadEnd

Prototype
Public Sub SignalReadEnd()

Description
Releases a locked buffer.

Parameters

Return

Reference
CyCamComp 1.0 Type Library

Notes
Must be called by the same thread that called LockForRead.

See Also
LockForRead