SCHILLE

VMClientOCX Documentation

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Revision History

Version	Date	Comment
001	**FEB/*1*/2009**	**First issue** **Complies with VMClientOCX version 1.2.1.142**

ActiveX Control VideoClientOCX

The document provides an overview of how 3rd party-applications or Schille PVis™ management system can integrate SiVM components via the VideoClientOCX. The reader should be familiar with IP video and Windows™ COM/DCOM technologies.

The VideoClientOCX acts as a SiVM client workstation. This control may be embedded into browser based applications or programs developed with MS C++, MS Visual Basic or Borland Delphi. The control may show up to 9 video channels in a 3x3 matrix. It contains an optional user interface for selecting the video channels, controlling ptz- and i/o-functions and for playback navigation. In addition all these functions are exported inside the ActiveX.

VideoClientOCX Interfaces

The ClassID of the VideoClientOCX is *9EC0768B-A6D1-4771-9E0F-56A58E42347E.* It exports following methods:

1. ConnectToServer

Description
Connects to a VM Video Server

Syntax
VMVideoClientOX.ConnectToServer HOST PORT

Parameters

HOST	STRING Name of host or ip-address of the VM server
PORT	STRING Port number as configured at the VM server

Remarks
Authentification will be implemented in the future. The authentification has to be disabled on the VM server's side.

Example
VMVideoClientOX.ConnectToServer LOCALHOST 5401

2. SetFrameLess

Description
Switches to frame less mode.

Syntax
VMVideoClientOX.SetFrameLess MODE

Parameters

MODE	INTEGER	Frameless mode

Remarks
The mode parameter will be ignored. Any value will enable the frame less mode.

Example
VMVideoClientOX.SetFrameLess 0

3. ConnectVideoSource

Description
Connects a video source to monitor 1.

Syntax
VMVideoClientOX.ConnectVideoSource MONITOR SOURCE

Parameters

MONITOR	INTEGER	Current Monitor
SOURCE	STRING	Video source identifier

Remarks
The video source identifier contains the path and the name of the videosource separated by a slash "/".

Example
VMVideoClientOX.ConnectVideoSource ENTRANCE.NORTH/CAMERA1

3. VideoSourceCommand

Description
Sends commands to current connected video source.

Syntax
VMVideoClientOX.VideoSourceCommand MONITOR COMMAND PARAM

Parameters

MONITOR	INTEGER	Current monitor
COMMAND	INTEGER	Command as described below
PARAM	STRING	Additional command parameter

Remarks
In frame less mode the MONITOR parameter has to be set to 1.

Following commands are supported:

COMMAND	Command	Remarks
0	PTZ HOME	PTZ Home position
1	PTZ TILT UP	Optional speed value in PARAM
2	PTZ TILT UP STOP	
3	PTZ TILT DOWN	Optional speed value in PARAM
4	PTZ TILT DOWN STOP	
5	PTZ PAN LEFT	Optional speed value in PARAM
6	PTZ PAN LEFT STOP	
7	PTZ PAN RIGHT	Optional speed value in PARAM
8	PTZ PAN RIGHT STOP	
9	PTZ ZOOM NEAR	
10	PTZ ZOOM NEAR STOP	
11	PTZ ZOOM FAR	
12	PTZ ZOOM FAR STOP	
13	-	
14	PTZ FOCUS NEAR	If supported by video source
15	PTZ FOCUS NEAR STOP	If supported by video source
16	PTZ FOCUS FAR	If supported by video source
17	PTZ FOCUS FAR STOP	If supported by video source
18	PTZ FOCUS AUTO	If supported by video source
19	PTZ IRIS CLOSE	If supported by video source
20	PTZ IRIS CLOSE STOP	If supported by video source
21	PTZ IRIS OPEN	If supported by video source
22	PTZ IRIS OPEN STOP	If supported by video source
23	PTZ IRIS AUTO	If supported by video source
24	GET PRESET POSITION	PARAM contains preset position 1 to 64
25	SET PRESET POSITION	PARAM contains preset position 1 to 64
26	FUNCTION 1	Optional video source function 1
27	FUNCTION 2	Optional video source function 2
28	FUNCTION 3	Optional video source function 3
29	FUNCTION 4	Optional video source function 4
30	FUNCTION 5	Optional video source function 5
31	FUNCTION 6	Optional video source function 6
32	PTZ LEFT UP	If supported - optional speed value in PARAM
33	PTZ LEFT UP STOP	If supported - optional speed value in PARAM
34	PTZ LEFT DOWN	If supported - optional speed value in PARAM
35	PTZ LEFT DOWN STOP	If supported - optional speed value in PARAM
36	PTZ RIGHT UP	If supported - optional speed value in PARAM
37	PTZ RIGHT UP STOP	If supported - optional speed value in PARAM
38	PTZ RIGHT DOWN	If supported - optional speed value in PARAM
39	PTZ RIGHT DOWN STOP	If supported - optional speed value in PARAM

Example
VMVideoClientOX.VideoSourceCommand 1 5 "" – Starts PTZ pan left

4. ExportImage

Description
Creates a Bitmap from current image.

Syntax
VMVideoClientOX.ExportImage MONITOR FILENAME

Parameters

MONITOR	INTEGER	Current monitor
FILENAME	INTEGER	Filename to save Bitmap-File

Remarks
None

5. GetMode

Description
Returns actual mode from monitor.

Syntax
VMVideoClientOX.GetMode MONITOR

Parameters

MONITOR	INTEGER	Current monitor

Remarks
Return Values (int):

0 = Disconnected
1 = Error
2 = Live mode
3 = Play mode

6. PlayModeCurrenttime

Description
Returns current time from selected monitor.

Syntax
VMVideoClientOX.PlayModeCurrenttime MONITOR

Parameters

MONITOR	INTEGER	Current monitor

Remarks
Return Value (BSTR)
Return Format: YYYYMMDDHHMMSSXXX

Example
20090203150703245 → 03.02.2009 15:07:03.245

7. PlayModeEndtime

Description
Returns end time of records from selected monitor.

Syntax
VMVideoClientOX.PlayModeEndtime MONITOR

Parameters

MONITOR	INTEGER	Current monitor

Remarks
Return Value (BSTR)
Return Format: YYYYMMDDHHMMSSXXX

Example
20090203150703245 → 03.02.2009 15:07:03.245

8. PlayModeStarttime

Description
Returns start time of records from selected monitor.

Syntax
VMVideoClientOX.PlayModeStarttime MONITOR

Parameters

MONITOR	INTEGER	Current monitor

Remarks
Return Value (BSTR)
Return Format: YYYYMMDDHHMMSSXXX

Example
20090203150703245 → 03.02.2009 15:07:03.245

9. SetMode

Description
Sets Mode to selected monitor.

Syntax
VMVideoClientOX.SetMode MONITOR MODE

Parameters

MONITOR	INTEGER	Current monitor
MODE	INTEGER	Mode

Remarks
Parameter: Mode
0 : Live mode (Command only necessary while being in play mode)
1 : Play mode

Return Value (INT)
0 : Not Successful
1 : Successfu

10. PlayModeCommand

Description
Sets play mode command to selected monitor.

Syntax
VMVideoClientOX.PlayModeCommand MONITOR COMMAND

Parameters

MONITOR	INTEGER	Current monitor
COMMAND	INTEGER	Play mode command

Remarks
Parameter: COMMAND

0 : Pause
1 : StepNextImage (Results pause state)
2 : StepPreviousImage (Results pause state)
3 : PlayBackwards
4 : PlayForwards
5 : TrackStart (Results pause state)
6 : TrackEnd (Results pause state)
7 : PlayFastBackwards
8 : PlayFastForwards
9 : SelectPreviousTrack (Results pause state)
10: SelectNextTrack (Results pause state)

11. PlayModeSearchTime

Description
Searches for timestamp in recorded data.

Syntax
VMVideoClientOX.PlayModeSearchTime MONITOR TIMECODE

Parameters

MONITOR	INTEGER	Current monitor
TIMECODE	STRING	Timestamp

Remarks
Whether there is no recorded data for the declared timestamp, it will return the next timestamp close to it.

Example

Date	Time	→ Timecode format
03.02.2009	15:07:03.245	→ 20090203150703245

12. PlayModeState

Description
Returns actual play mode state.

Syntax
VMVideoClientOX.PlayModeState MONITOR

Parameters

MONITOR	INTEGER	Current monitor

Remarks
Return Value (INT)

0 : Not in play mode
1 : Pause
2 : PlayBackwards
3 : PlayForwards
4 : PlayFastBackwards
5 : PlayFastForwards

13. VideoSourceCameraCommands

Description
Returns available camera commands.

Syntax
VMVideoClientOX.VideoSourceCameraCommands ENTRY

Parameters
ENTRY INTEGER Number of entry in camera list

Remarks
Parameter ENTRY: Available entries: 1...VideoSourceListCount

Return Value (INT64)

PTZDefinedHome	= 0x0000000000000100;
PTZDefinedLeft	= 0x0000000000000200;
PTZDefinedRight	= 0x0000000000000400;
PTZDefinedUp	= 0x0000000000000800;
PTZDefinedDown	= 0x0000000000001000;
PTZDefinedZoomNear	= 0x0000000000002000;
PTZDefinedZoomFar	= 0x0000000000004000;
PTZDefinedFocusNear	= 0x0000000000008000;
PTZDefinedFocusFar	= 0x0000000000010000;
PTZDefinedFocusAuto	= 0x0000000000020000;
PTZDefinedIrisClose	= 0x0000000000040000;
PTZDefinedIrisOpen	= 0x0000000000080000;
PTZDefinedIrisAuto	= 0x0000000000100000;
PTZDefinedGetPosition	= 0x0000000000200000;
PTZDefinedSetPosition	= 0x0000000000400000;
PTZDefinedFunc1	= 0x0000000000800000;
PTZDefinedFunc2	= 0x0000000001000000;
PTZDefinedFunc3	= 0x0000000002000000;
PTZDefinedFunc4	= 0x0000000004000000;
PTZDefinedFunc5	= 0x0000000008000000;
PTZDefinedFunc6	= 0x0000000010000000;
PTZDefinedLeftUp	= 0x0000000100000000;
PTZDefinedRightUp	= 0x0000000200000000;
PTZDefinedLeftDown	= 0x0000000400000000;
PTZDefinedRightDown	= 0x0000000800000000;

14. VideoSourceHasPTZ

Description
Verifies whether PTZ Commands are available.

Syntax
VMVideoClientOX.VideoSourceHasPTZ ENTRY

Parameters
ENTRY INTEGER Number of entry in cameralist

Remarks
Parameter ENTRY:
Available entries: 1...VideoSourceListCount

Return Value (INT)
0 : No PTZ commands available
1 : PTZ commands available

15. VideoSourceHasRecording

Description
Verifies whether recoded data is available.

Syntax
VMVideoClientOX.VideoSourceHasRecording ENTRY

Parameters
ENTRY INTEGER Number of entry in cameralist

Remarks
Parameter ENTRY:
Available entries: 1...VideoSourceListCount

Return Value (INT)
0 : No recorded data available
1 : recorded data available

16. VideoSourceListCount

Description
Returns number entries of cameralist.

Syntax
VMVideoClientOX.VideoSourceListCount

17. VideoSourceListEntry

Description
Returns name of entry in cameralist.

Syntax
VMVideoClientOX.VideoSourceListEntry ENTRY

Parameters

ENTRY	INTEGER	Number of entry in cameralist

Remarks
Parameter ENTRY:
Available entries: 1...VideoSourceListCount

Return Value (BSTR)
Name of entry in camaralist

HTML file sample

Describe the following "object" element in a HTML file in order to call the VMVideoClientOCX:

```
<HTML>
<center><P>
<OBJECT id=VMVideoClient
classid="clsid:9EC0768B-A6D1-4771-9E0F-56A58E42347E"
codebase="./VMVideoClientOCX.OCX#version=1,2,1,0"
width=800 height=600 align=center hspace=0 vspace=0>
</OBJECT>

<SCRIPT language=VBScript>
Sub window_onLoad()
        VMVideoClient.ConnectToServer location.hostname,location.port
end sub
</SCRIPT>

</HTML>
```

If not used within the video management server's WEB-directory replace the parameters ***location.hostname*** and ***location.port*** with the server's ip-address and port-number. There may be a case that some client application cannot view the OCX correctly if the ***#version=*** indication is different from the version of the ActiveX viewer which is located in the path.

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