

# **19 Panel Editor and vsmPanel**

vsmStudio & vsmPanel

# Manual



HHO / JHA / SJU / BME 18.07.2011

# Legend

Please note: This information is of prime importance.

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# **1** vsmPanel Installation

## **1.1 System Requirements**

The installation of vsmPanel requires the following system specifications:

#### 1.1.1 vsmPanel Version 1.x

- Processor: P4, 1GHz
- Memory: 256 MB RAM
- Operating System: Windows 2000.

#### 1.1.2 vsmPanel Version 2.x and 3.x

- Processor: Core2 Duo, 2 GHz
- Memory: 1 GB RAM (2 GB for Windows Vista Business)
- DirectX9-ready video card (nVidia Quadro FX or GeForce 6600+ or ATI Radeon)
- Hardware-Accelerator (for vsmPanel 3.x)
- Operating System: Windows XP SP3 / Vista Business
- .NET Framework 3.5 SP1.

#### 1.2 Installation .NET Framework 3.5 Service Pack 1



Please note: .NET Framework 3.5 Service Pack 1 must be installed before starting the vsmPanel installation process.

.NET Framework 3.5 Service Pack 1 is included with the files provided for the installation of vsmPanel. Execute the dotNetFx35sp1.exe file to install it.

					x
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Organize 👻 🛛 Burn	New folder			III • 🗔	()
- 🔶 Favorites	Name	Date modified	Туре	Size	
💻 Desktop 鷆 Downloads	dotNetFx35sp1.exe	06.09.2010 16:06	Application	2.891 KB	

.NET Framework 3.5 Service Pack 1

In order to install .NET Framework 3.5 Service Pack 1, open the *Control Panel* and select the option *Turn Windows features on or off* located under the *Programs* tab.



After the installation, .NET Framework 3.5 Service Pack 1 will be shown in the list of Windows functions. The function now only needs to be selected in order to be activated.



Activating Microsoft .NET Framework 3.5.1

# **1.3 vsmPanel Installation Version 1.x und 2.x**

#### 1.3.1 PC Installation

When installing the software application vsmPanel on a PC, create a subfolder named vsmPanel in the VSM folder on the C drive.

🕥 = 📙 🕨 Compu	ter ► OS (C:) ► vsmPanel ►		•	Search vsmPanel	
rganize 🔻 Include	in library 🔻 Share with 👻 Bu	n New folder			ii • 🔟
Favorites	Name	Date modified	Туре	Size	
📃 Desktop	🎍 vsmWebPanel	28.04.2011 10:32	File folder		
📕 Downloads	ReadMe.rtf	22.09.2009 15:07	Rich Text Format	51 KB	
📃 Recent Places	🔯 setup.exe	29.10.2010 16:57	Application	483 KB	
	🛃 Setup.msi	29.10.2010 16:57	Windows Installer	2.578 KB	
Libraries	ysmPanel-3.0.52.zip	30.08.2010 15:28	Compressed (zipp	2.208 KB	
Documents	ysmPanel-3.0.57.zip	29.10.2010 15:59	Compressed (zipp	2.239 KB	
J Music	ysmPanel-3.0.63.zip	08.04.2011 16:15	Compressed (zipp	4.967 KB	
Pictures	WhatsNew docx	29.10.2010 16:53	Microsoft Word D	31 KB	

vsmPanel folder on the C drive

Next, copy the .zip file provided by L-S-B for the installation into the vsmPanel folder.

💭 🗢 🚹 🕨 Compu	uter 🕨 OS (C:) 🕨 vsmPanel 🕨 vsm	Panel-3.0.57.zip 👻	Search vsmPane	l-3.0.57.zip
Organize 🔻 Extract	all files			<b>≡ • ⊟ (</b>
🔆 Favorites	Name	Туре	Compressed size	Password Size
🧮 Desktop	🔄 ReadMe.rtf	Rich Text Format	12 KB	No
\rm Downloads	setup.exe	Application	208 KB	No
📃 Recent Places	🛃 Setup.msi	Windows Installer Package	1.991 KB	No
	WhatsNew.docx	Microsoft Word Document	29 KB	No

Once copied, either open the file and copy the contained files into the vsmPanel folder or extract the .zip file into the aforementioned folder.

#### 1.3.2 Server Installation

When installing vsmPanel on a server, create a folder named vsmPanel on the partition that contains the installation of vsmStudio.

Irganize 🔻 🛛 🎘 Open	Include in library	✓ Share with ▼ Burn	New folder		•	
🗧 Favorites	Date modified	Name	Туре	Size		
🧮 Desktop	2011-02-21	ImageMap	File folder			
🚺 Downloads	2010-12-17	vsmDiscover	File folder			
Recent Places	길 2011-02-01	vsmGadgetServer	File folder			
	2011-02-22	vsmPanel	File folder			
🗃 Libraries 🛛 🗏	2011-02-22	vsmStudio	File folder			
Documents	3011-01-20	vsmStudioEditor	File folder			
J Music	2010-12-17	vsmTimeSync	File folder			
E Pictures	3010-12-17	vsmTools	File folder			
Videos	3011-02-18	vsmWebPanel	File folder			
🖳 Computer						

Creating the vsmPanel folder

Copy the provided .zip file into this folder.

	outer → VSM (D:) → VSM → vsmPanel → $- \frac{4}{2}$	Search vsmPanel	- 0 ×
Organize 🔻 Inclue	e in library 🔻 Share with 💌 Burn New folder	: ::::	• 🔟 🔞
🖳 Recent Places	Date modified Name	Туре	Size
□       Libraries         □       Documents         □       Music         □       Pictures         ⊡       Videos	2010-03-24 vsmPanel-1.0.221.zip	Compressed (zipp	1.862 KB
1 item			

Copying the vsmPanel .zip file into the vsmPanel folder

Next, either open the file and copy the contained files into the vsmPanel folder or extract the .zip file into the aforementioned folder.

Co v ↓ Com	puter	r ► VSM (D:) ► VSN	1 → vsmPanel →	<b>▼ 4</b> 9 See	arch vsmPanel	- • • ×	
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Libraries     Documents     Music     Pictures     Videos		🚳 2010-03-18	vsmLib.dll		Application extens	154 KB	
		2010-03-24	vsmPanel.Debug.exe		Application	1.632 KB	
	=	2010-03-24	vsmPanel.pdb		PDB File	1.480 KB	
		2010-03-24	vsmPanel.Release.exe		Application	1.573 KB	
Videos			10-03-24	vsmPanel-1.0.221.zip		Compressed (zipp	1.862 KB
· Computer		2010-03-24	WhatsNew.txt		Text Document	9 KB	
I € Computer	-						
6 items se	lecte	d Date modified: 201 Size: 4,9	0-03-18 19:44 - 2010 Date created 3 MB	l: 2010-12-17 23	:06		

Extracted vsmPanel files

# 1.4 vsmPanel Installation Version 3.x

#### 1.4.1 PC Installation

When installing the software application vsmPanel on a PC, create a subfolder named vsmPanel in the VSM folder on the C drive.

	* *		100			_
Organize 🔻 Include	in library    Share with    Bur	n New folder			•	
🙀 Favorites	Name	Date modified	Type	Size		
📃 Desktop	🍌 vsmWebPanel	28.04.2011 10:32	File folder			
🐌 Downloads	🖳 ReadMe.rtf	02.03.2011 17:04	Rich Text Format	52 KB		
📃 Recent Places	📸 setup.exe	29.10.2010 16:57	Application	483 KB		
	🛃 Setup.msi	29.10.2010 16:57	Windows Installer	2.578 KB		
词 Libraries	🔂 setup_x64.exe	08.04.2011 16:15	Application	490 KB		
Documents	😼 Setup_x64.msi	08.04.2011 16:15	Windows Installer	2.843 KB		
🖻 🌛 Music	📸 setup_x86.exe	08.04.2011 16:15	Application	490 KB		
🖻 🔛 Pictures	😼 Setup_x86.msi	08.04.2011 16:15	Windows Installer	2.843 KB		
🖻 🔣 Videos	ysmPanel-3.0.52.zip	30.08.2010 15:28	Compressed (zipp	2.208 KB		
	ysmPanel-3.0.57.zip	29.10.2010 15:59	Compressed (zipp	2.239 KB		
💵 Computer	ysmPanel-3.0.63.zip	08.04.2011 16:15	Compressed (zipp	4.967 KB		
🕑 🏭 OS (C:)	WhatsNew.docx	08.04.2011 16:12	Microsoft Word D	34 KB		
		B 16.11				

vsmPanel folder

Next, copy the .zip file provided by L-S-B for the installation into this vsmPanel folder. Once copied, either open the file and copy the contained files into the vsmPanel folder or extract the .zip file into the aforementioned folder.

ter ► OS (C:) ► vsmPanel ► vsm	Panel-3.0.63.zip	<b>-</b> ↓	Search vsml	Panel-3.	0.63.zip	
III files					•	(
Name	Туре	Compressed size	Password	Size		Ra
ReadMe.rtf	Rich Text Format	12 KB	No		52 KB	78
setup_x64.exe	Application	213 KB	No		490 KB	57
🔀 Setup_x64.msi	Windows Installer Package	2.250 KB	No		2.843 KB	21
setup_x86.exe	Application	213 KB	No		490 KB	57
🛃 Setup_x86.msi	Windows Installer Package	2.250 KB	No		2.843 KB	21
M MACH - A-NI-	Missonaft Ward Desument	22 V P	Ne		24 V P	00
	ter → OS (C:) → vsmPanel → vsm all files Name ReadMe.rtf setup_x64.exe Setup_x64.exe Setup_x86.exe Setup_x86.exe Setup_x86.msi	ter ► OS (C:) ► vsmPanel ► vsmPanel-3.0.63.zip all files Name Type ReadMe.rtf Rich Text Format setup_x64.exe Application Setup_x64.exe Application Setup_x86.exe Application Setup_x86.exe Application Setup_x86.exe Mindows Installer Package Setup_x86.exe Mindows Installer Package	ter       VS (C:)       vsmPanel       vsmPanel-3.0.63.zip       49         all files       If iles       Image: Compressed size       12 KB         Image: ReadMe.rtf       Rich Text Format       12 KB         Image: ReadMe.rtf       Rich Text Format       12 KB         Image: Setup_x64.exe       Application       213 KB         Image: Setup_x66.exe       Application       213 KB         Image: Setup_x86.exe       Application       213 KB	Iter > OS (C:) > vsmPanel > vsmPanel-3.0.63.zip       Search vsm         If files       Search vsm         Image: Search vsm       Vindows Installer Package         Image: Search vsm       Vindows Installer Package	Iter > OS (C:) > vsmPanel > vsmPanel-3:0:63.zip <ul> <li>Search vsmPanel-3:0:63.zip</li> <li>Search vsmPanel-3:0:63.zip</li></ul>	Iter > OS (C:) > vsmPanel > vsmPanel-3.0.63.zip       Iter > OS (C:) > vsmPanel > vsmPanel-3.0.63.zip         Iter > OS (C:) > vsmPanel > vsmPanel-3.0.63.zip       Iter > OS (C:) > Search vsmPanel-3.0.63.zip         Iter > OS (C:) > vsmPanel > vsmPanel > 3.0.63.zip       Iter > OS (C:) > Search vsmPanel-3.0.63.zip         Iter > OS (C:) > vsmPanel > vsmPanel > 3.0.63.zip       Iter > OS (C:) > Search vsmPanel-3.0.63.zip         Iter > OS (C:) > vsmPanel > vsmPanel > 3.0.63.zip       Iter > OS (C:) > Search vsmPanel-3.0.63.zip         Iter > OS (C:) > vsmPanel > 3.0.63.zip       Iter > OS (C:) > Search vsmPanel-3.0.63.zip         Iter > OS (C:) > vsmPanel > vsmPanel > 3.0.63.zip       Iter > OS (C:) > Search vsmPanel > 3.0.63.zip         Iter > OS (C:) > vsmPanel > vsmPanel > 3.0.63.zip       Iter > OS (C:) > Search vsmPanel > 3.0.63.zip         Iter > OS (C:) > vsmPanel > vsmPanel > 0S (C:) >

To start the installation of vsmPanel, double click onto one of the setup...msi or setup...exe files.



Please note: Use the installation file appropriate for your operating system: select the x64 file for 64-bit operating systems or the x86 file for 32-bit operating systems.

The vsmPanel Setup Wizard will lead you through the rest of the installation. To start the process, select *Next* in the first window of the installation wizard.



vsmPanel Setup Wizard

Select Browse and choose the vsmPanel folder on the C drive as installation destination.

[큣 vsmPanel	×
Select Installation Folder	3
The installer will install vsmPanel to the following folder. To install in this folder, click "Next". To install to a different folder, enter it bek Folder:	ow or click "Browse".
C:\Program Files\VirtualStudioManager\vsmPanel\	Browse
(	Disk Cost
Install vsmPanel for yourself, or for anyone who uses this computer:	
<ul> <li>Everyone</li> </ul>	
© Just me	
Cancel < Back	Next >

Choosing the destination folder

Select Next to start the installation.

j∰ vsmPanel			_ <b>-</b> ×
Installing vsmPanel			3
vsmPanel is being installed.			
Please wait			
	Cancel	< Back	Next>

vsmPanel installation

The information window will also be closed by clicking Next.



vsmPanel information

To complete the installation process, select *Close* in the last window.



Completing the installation

#### 1.4.2 Server Installation

When installing vsmPanel on a server, create a folder named vsmPanel on the partition that contains the installation of vsmStudio.

rganize 🔻 🛛 🔭 Open	Include in library	<ul> <li>Share with </li> <li>Burn</li> </ul>	New folder		III • 🗍	
Favorites	Date modified	Name	Туре	Size		
📃 Desktop	<b>)</b> 2011-02-21	ImageMap	File folder			
퉳 Downloads	<b>]]</b> 2010-12-17	vsmDiscover	File folder			
🖳 Recent Places	<b>))</b> 2011-02-01	vsmGadgetServer	File folder			
And a second	2011-02-22	vsmPanel	File folder			
🖥 Libraries 👘 🗏	🔒 2011-02-22	vsmStudio	File folder			
Documents	3011-01-20	vsmStudioEditor	File folder			
J Music	길 2010-12-17	vsmTimeSync	File folder			
E Pictures	<b>))</b> 2010-12-17	vsmTools	File folder			
Videos	2011-02-18	vsmWebPanel	File folder			
Computer						

Creating the vsmPanel folder

Copy the provided .zip file into this folder.

~	North Contraction				x
Computer	► VSM (D:) ► VSM ► vsmPanel ►	<ul> <li>✓ </li> <li>✓ </li></ul>	ch vsmPanel	_	P
Organize 🔻 🛛 Include in	library 🔻 Share with 💌 Burn New folder				0
🛷 Favorites 🕺	Date modified Name	Туре	Size		
🧮 Desktop	2011-01-28 vsmPanel-3.0.58.zip	Compressed (zipp	4.866 KB		
Downloads					
Recent Places					
📲 Libraries					
Documents					
Pictures					
Videos					
Computer					
1 item					

Copying the vsmPanel .zip file into the vsmPanel folder

Next, either open the file and copy the contained files into the vsmPanel folder, or extract the .zip file into the aforementioned folder.

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Comput	er 🕨 VSM (D:) 🕨 VSM	▶ vsmPanel ►	▼ <sup>4</sup> <sub>2</sub>	Search vsmPanel	_	_	P
Organize 🔻 🛛 😭 Open	n 🔻 Burn Nev	v folder					(?)
☆ Favorites	Date modified	Name	Туре	Size			
🧮 Desktop	2009-09-22	ReadMe.rtf	Rich-Text-Format	51 KB			
🚺 Downloads	🔯 2011-01-28	setup_x64.exe	Application	483 KB			
📃 Recent Places	🔂 2011-01-28	Setup_x64.msi	Windows Installer	2.794 KB			
	🔂 2011-01-28	setup_x86.exe	Application	483 KB			
词 Libraries 👘	🔂 2011-01-28	Setup_x86.msi	Windows Installer	2.794 KB			
Documents	2011-01-28	vsmPanel-3.0.58.zip	Compressed (zipp	4.866 KB			
J Music	🖳 2010-12-20	WhatsNew.docx	Microsoft Word-D	32 KB			
Pictures							
Videos							
P Computer							
vsmPanel-3.0. Compressed (zi	58.zıp Date moo ipped) Folder	lified: 2011-01-28 15:03 Size: 4,75 MB	Date created: 2011-02-22 14:39				

Extracted vsmPanel files

To start the installation of vsmPanel, double click onto one of the setup...msi or setup...exe files.



Please note: Use the installation file appropriate for your operating system: select the x64 file for 64-bit operating systems or the x86 file for 32-bit operating systems.

The vsmPanel Setup Wizard will lead you through the rest of the installation. To start the process, select *Next* in the first window of the installation wizard.



vsmPanel Setup Wizard

Use the browse function to select the folder D:\VSM\vsmPanel as installation destination.

Select Installation Folder	
he installer will install vsmPanel to the following folder.	
o install in this folder, click "Next". To install to a different fold	der, enter it below or click "Browse".
<u>F</u> older:	
C:\Program Files\VirtualStudioManager\vsmPanel\	Browse
	Disk Cost

Selecting the destination folder

Select Next to start the installation.

j∰ vsmPanel		
Installing YsmPanel		3
vsmPanel is being installed.		
Please wait		
E		
	Cancel < Back	Next>

vsmPanel installation

The information window will also be closed by clicking Next.

vsmPa	anel Information	
vsmPa	anel Information	-
	vsmPanel 3 requires the .net framework 3.5 with service pack 1 or higher < <u>http://www.microsoft.com/downloads/details.aspx?</u> FamilyID=ab99342f-5d1a-413d-8319-81da479ab0d7 &displaylang=en> In case vsmPanel encounters a fatal error, it will create a file called "vsmPanel crashed. Please send this file to VSM customer Service. (Date).log" on your desktop. This file only contains information like vsmPanel version, date and time of the error and a technical error description. It does not contain any information about the user, the computer or any other preastance use here installed. Sending the file view of the error.	

vsmPanel information

To complete the installation process, select *Close* in the last window.

vsmPanel has been successfully installed Click "Close" to exit.	<u>.</u>			
Please use Windows Update to check fo	or any critical upda	ates to the .NET F	ramework.	

Completing the installation

# 2 Starting vsmPanel

### 2.1 vsmPanel Configuration Mode

After vsmPanel has been installed, the application can be started through the windows start function (Virtual Studio Manager > vsmPanel).



The currently connected host can be entered under Connection in the window *vsmPanel* (*Configuration Mode*).

Date and Tim	ie i	Peripherals
Connection	View	Scheduling
Host:	localhost	
Host 2:	Host name or I	P address
Host 3:	Host name or I	P address
Host 4:	Host name or I	P address

vsmPanel Connection

Under the *View* tab, different views can be chosen:



vsmPanel view settings

The settings of the scheduler bar can be changed under Scheduling.

	me	Peripherals
Connection	View	Scheduling
cheduling Bar		
Mute Mark:		
ave unchangec		
Future Range:	24 Hours	
Past Range:	8 Hours	

Scheduler settings

Additional ports can be selected under the Peripherals tab.

Connection	View	Scheduling
Date and Time	e	Peripherals
Perinherals Port		
conposed as role.		
C	OM3	
0.02		

Additional port settings

Confirming the settings by pressing OK will open the currently set-up panel ID.

#### 2.2 Opening vsmPanel



Selecting vsmPanel will automatically open the control panel of the currently set panel ID. Alternatively, a desktop shortcut can be created, or the vsmPanel icon can be placed in the Windows taskbar from where the program can be started.

# 3 Panel List



To access the panel list, select the panel symbol located in the main menu. Existing control panels can be opened using the drop down menu in the vsmPanel taskbar.



Control panel drop down menu

In the panel list that opens after selecting the panel symbol mentioned above, existing control panels can be edited, and new control panels can be created or imported.

List	Linked	
Icon	Number	Name
	001/01	Tie-Line
	002/02	Pseudo Devices
	003 / 03	Timer
	004 / 04	Tally
$\odot$	005 / 05	Test
	006 / 06	Monitoring
	007 / 07	Test 2

Existing control panels are displayed under the *List* tab according to icon, name, and ID (number).

#### 3.1 New Panel Linkage

Linked control panels are listed under the *Linked* tab. A new linkage can be created here by right-clicking into the list.

List L	nked	
- Indepe	ndent	
000	1 - Tie-Line	
	2 - vsmWebPanel	
000	13 - Timer	
00	04 - Tally	
000	05 - Test	
000	6 - Monitoring	
	Create new Panel Linkage	

A single right-click on this linkage allows editing of its name. Required panels are assigned using drag and drop and subsequently function like a single, large control panel.



Editing control panel shortcuts

A panel can be removed from a linkage using drag and drop. However, an entry in the *Linked* list can only be deleted if all assigned panels have been removed from it.



Therefore, the option *Delete Panel Linkage* only appears in the window that opens following a right-click onto a panel linkage if the panel linkage does not contain any control panels.

## 3.2 Columns of the Panel List



Different, pre-defined symbols can be displayed in the *lcon* column. The column *Number* shows the different panel IDs. The column *Name* shows the name given to the respective panel during its set-up (see chapter 19.4.1 Panel Properties).

# 4 New Panel



Importing or creating a new panel

A right-click allows adding or importing of a new panel. Using the function *Import Panel*, a control panel that has previously been created in a different configuration can be imported. If the function *New Panel* is selected to create a new control panel, the panel properties window opens.

## 4.1 Panel Properties

Number:	Name:		
5	Test		Test 🗨
Quick Launch Grou	p:	▼ Icon:	ŀ
☐ Auto	omatically open p	anel when loading	Configuratio
Automatically return	to ''Idle'' Page a	fter:	
	Never	•	
Automatically switch	to dark after:		
	Never	-	
Selection Style:	orm connects wł ere possible let v	nen buttons are pre smPanel render lab	ssed. els.

Setting up properties

Enter the panel-ID with which the control panel can later be opened in the field titled Number.

Number:	Name:				
5	Test		Test	-	
Quick Launch Gro	up:	lcon:			
Automatically retur	itomatically open panel wh n to ''Idle'' Page after:	en loadin <u>c</u>		Π	
Automatically retur	tomatically open panel wh n to ''Idle'' Page after: Never	en loading			
Automatically retur	itomatically open panel wh n to ''Idle'' Page after: Never ch to dark after:	en loadin <u>c</u>			

Defining the font colour for the panel name

Enter the panel name in the *Name* field. Beside it, the font colour for the control panel's name can be defined. Using the option *Quick Launch Group*, different panels can be assigned to one group. This creates a grouping in a drop down menu located under the control panel icon in the main taskbar, through which the control panels can be opened as virtual panels (see chapter 19.3 Panel List).

inel Properties				^	4		
Number:	Name:						
5	Test	Τe	est	•			
Quick Launch Group	x Icon:	(	9	•			
T Auto	matically open panel when loading	X	$\odot$	彩		22	G
A. Armatically calors (	- III-II Daga silar	<b>(</b> )	ø	2	1	-	-
Automatically return (	.o "Idle" Page arter:			*			1
Automatically switch	to dark after:					(D)	*
	Never			-	1	22	-
			5	-		Re	6
☐ Perfo □ Whe	orm connects when buttons are pre re possible let vsmPanel render lat	<b>1</b>				_	-
Selection Style:	-						

Defining an icon

The drop down menu *lcon* allows the choice of different symbols that can be assigned to a control panel. Subsequently, the symbol will be shown in the panel list.

anel Properties		? <mark>-</mark> ×
Number:	Name:	
5	Test	Test 🔻
Quick Launch Group	lc	con: 🙁 💌
Automatically return to	o "Idle" Page after:	
Automatically switch	Never 5 Seconds 10 Seconds 20 Seconds 30 Seconds	
🗖 Perfo	1 Minute	essed.

Defining the duration to jump to the first page

The drop down menu under *Automatically return to "Idle" Page after* allows the user to choose if and, if so, after what time the selected panel will jump back to page one.



Defining the duration for button-protector

The drop down menu below allows the user to choose if and, if so, after what time the selected panel will activate the button-protector. In order to protect the control panel buttons, they will turn black after the time period selected in this menu.

I. WI	here possible let vsmPanel render labels.
Selection Style:	
	Rotating Black/White Pulsating Blue

Additional control panel settings

Generally, the function assigned to a button is only executed once the button is released. If the box in front of *Perform connects when buttons are pressed* is ticked, all connects are executed automatically as soon as the button is pressed.

Using the attribute *Where possible let vsmPanel render labels*, line breaks can be set by vsmPanel, and the font is automatically adjusted to 8X. The drop down menu beside *Selection Style* allows the selection of the colour framing a pressed button on a virtual panel. This frame can either be rotating, white/black or blue and pulsing. By default, a rotating, white/black frame is set.

# 4.2 Panel Layout

In the window shown in the screenshot below, the panel layout can be chosen in accordance to the hardware panels.

anel Layout		? <mark>- </mark> X
Hardware Panel Lay	outs:	
½19''	19"	Vertical
C LBP8 C LBP16 C LBP24 C LBP32	С LBP17 С LBP34 С LBP51	C LBP34V C LBP51V

Choosing the hardware panel layout

If, for example, a *LBP32* is selected here, the initial control panel layout will be displayed with 32 buttons – in four rows with eight buttons each - in the panel edit.

w Page	Move < Name		Layout					Buttons
268								
200								
00	01	02	03	04	05	06	07	
								С Ф Ф. Ф. 4 Ф.
08	09	10	11	12	13	14	15	தி தொ
								03 → / ೨ -8 ~
16	17	18	19	20	21	22	23	* Ee :00
								. C. N.
24	25	26	27	28	29	30	31	- 2 V
_								

The panel resolution is shown in the top left of the layout view in a red font (here 702 x 268).

Please note: panels as the

Please note: This information is important for the correct scaling of virtual panels as they may otherwise be displayed too small.

#### 4.2.1 Button Layout and Size

#### 4.2.1.1 Moving Buttons

Position and size of single buttons can be changed while in layout view. It is possible to select multiple buttons while pressing the shift button. The selected buttons can then be moved across using the keyboard navigation buttons.

ew Page	Move < Name Move > Delete	Copy	Layout				
( 536							
00	01	02	03	04	05	06	07
08	09	10	11	12	13	14	15
16	17	18	19	20	21	22	23
						30	31
24	25	26	27	28	29		
l[							

Moving multiple buttons down

#### 4.2.1.2 Button Alignment

If multiple buttons are selected, a right-click on them will open the following menu:



The option Align allows the adjustment of the button layout using the following menu:



Buttons are aligned either to the left, right, top, or bottom.

#### 4.2.1.3 Button Size

Selecting the option *Make Same Size* will adjust multiple buttons to the same size.



Adjusting the size of multiple button

Buttons can be matched in terms of height, width, or both height and width.

#### 4.2.2 Button Arrangement

The option Arrange Buttons can be accessed by right-clicking onto the panel background.



Here, a button layout for all available hardware control panels can be loaded, including everything from *LBP 8* to *LBP 51V*. In addition, PBP panels are available as layouts. The option PDA Vertical was added specifically for PDAs.



Conversion

The option *Convert* enables changing the button layout of a *BD1551* to a *LBP 51* and adjusting the button resolution from 32x24 to 64x32.



BD layouts

The option *BD15xx* allows arranging the buttons to resemble the control panels of the company Protec.

New Page	Move < Name Move > Delete I	Copy	1		
2 x 536					
00	01	02	03	04	05
06	07	08	09	10	11

Big buttons

The option Layout: Big Buttons enlarges all buttons.

ID: 7 Connect to		-		vsmPanel 3.0
In1	In2	In3	In4	In5
Out1	Out2	Out3	Out4	Out5

vsmPanel with big buttons

## 4.3 Button Properties

The selection of a button will automatically open the button's properties window.

-🟳 Style	Secondary	Layers Attach	iment   Dyn	amic   Visibility   Extra	
	Normal Color	Blink Activ	e Color B	llink Style:	
On-Screen Color:	Text	Te Te	« 📮	T Style: Button Flat	-
LBPxx Color:	Text		kt ▼_	J □ Use Inline Editing □ □ Value Only Display	
BDxx Color:	Text	Te:	at 🔻 l	Label Source**:	
				00 - Default (Picture)	-
Opacity**:	100 + %	100 -	7%		
	,	1	-	NU.	

Properties window

The title bar shows the following information:

- The panel ID, in this case 5
- The panel name, here Test
- Page 1 means that the button is located on the first page of the control panel.
- The button ID, in this case 0, and
- The button type, here a Generic button.

With the pin symbol in the top left, the window can be locked into one position on the monitor.

#### 4.3.1 Style

The *Style* tab allows the choice of colour, opacity, as well as style of the button and the label that should be used. The setting under *Normal Color* represents the colour that is shown when the button is not active. To select colours, use the two arrows on the right side (top for the background, bottom for the font) of the field.



Colour selection for button background

The field shows the currently selected button background colour and the text colour both on a monitor (*On-Screen Color*) and on a hardware control panel (*LBPxx Color* is initially changed with the on-screen color, but can be edited later). The colour settings for *BDxx Color* refer to an older control panel generation and do not apply to current devices.

In normal mode, colour saturation can be changed in the fields following *Opacity*. Ticking the box in front of *Blink* will cause the button to blink.

Under Active Colour, the same colour settings are available for the active state.

Style: Button Flat	-
Normal	
Style: Button Big	
Style: Button Flat	
Style: Button Glass	
Style: Button Medium	
Style: LED (Round)	
Style: LED (Square)	
Style: PPM	
Style: Slider H	
Style: Slider H (Slim)	
Style: Slider V	
Style: Slider V (Slim)	
Style: Tab (Bottom)	
Style: Tab (Top)	
Style: Value "Clicker"	

The drop down menu located below the Style header allows the choice of display styles for buttons. These different display possibilities are not shown in the panel edit and are only visible through the vsmPanel software.



Additional display options

In order to make the value on button changeable, the option Use Inline Editing can be selected if a gadget parameter was placed on a button and the normal style was selected. If, on the other hand, Value Only Display is selected, the gadget parameter placed on the panel is only displayed.

The drop down menu under Label Source allows the choice of the displayed label for inputs and outputs.

#### 4.3.2 Secondary

View for secondary functions

The tab Secondary is empty by default. Different functions, for example GP-I/Os (see chapter 15), signals (see chapter 5 Signal Paths), crosspoints, gadgets (see chapter 10), or storage groups (see chapter 9) can be placed here and attached to different methods of execution. These functions will then be executed as secondary function of the button in accordance to the options defined in this window (see chapter 19.7 Secondary Functions).

### 4.3.3 Layers

Under the *Layers* tab, certain layers can be activated or deactivated (see chapter 12 Pseudo Devices).

	1	×11
Fictive	🗹 Audio 6 🛛 🗹 Deferral	
🖉 Video	🗹 Audio 7	
🖉 Key	🗹 Audio 8	
🖉 Audio 1	TC TC	
🖉 Audio 2	Monitoring 1	
🖉 Audio 3	Monitoring 2	
🖉 Audio 4	🜌 Special 1	
🖉 Audio 5	🗹 Special 2	

Layers

#### 4.3.4 Attachment

The Attachment tab shows the original name of the signal or the GP-I/O.

Properties	of "5:"Test", Page 1, #0; Generic"	×
-(22)	Style   Secondary   Layers Attachment   Dynamic   Visibility   Extra	
Attachm	nent: <empty></empty>	

Original name of the signal path

### 4.3.5 Dynamic

The Dynamic tab is empty by default.



View for dynamic attachment scripts

It provides space to enter Dynamic Attachment Scripts (see chapter 19.8).

#### 4.3.6 Visibility

The Visibility tab offers different settings concerning the button display.

-⊯ Style Second	dary Layers Attachment Dynamic Visibility Extra
	<ul> <li>✓ Visible during "Normal" Operation</li> <li>✓ Visible during "Record" Operation</li> </ul>
Visibility is also controlled by:	<empty> -&gt;</empty>
	☐ Hide when not active
	✓ Enabled during "Normal" Operation
	🔽 Enabled during "Record" Operation
Enable is also controlled b	<empty> -C&gt;</empty>
	└── Don't "dim" the Button when disabled
	* Drop the controlling item e.g. GPI into a field

Visibility view

*Visible during "Normal" Operation* is ticked by default and causes the button to be displayed. The option *Visible during "Record" Operation* affects storage groups (see chapter 9).

A crosspoint or a GP-I/O (see chapter 15) can be placed in the drop down menu beside *Visibility is also controlled by.* These will also influence the visibility of the button. The triangle symbol after the field indicates the logical connection. The standard view indicates that the button is displayed as soon as the assignment defined here is true. If the triangle has a black dot in its right tip, the button will be displayed of the assignment is false.

If the box in front of *Hide when not active* is ticked, the button will only be displayed when it is active.

*Enabled during "Normal" Operation* is ticked by default and is required so that the button can be operated. *Enabled during "Record" Operation* is also ticked by default. If it is deactivated, the button cannot be selected while a storage group (see chapter 9) is recorded.

The drop down menu beside *Enable is also controlled by* allows the placing of a GP-I/O (see chapter 15) or a crosspoint which can also influences the availability of the button. The triangle symbol behind the field indicates the logical connection. The standard view indicates that the button will be displayed as soon as the predefined assignment is true. If a black dot is shown in the right bottom tip of the triangle, the button will be displayed if the assignment is false.

The option *Don't "dim" the Button when disabled* can be used to display the actual colour instead of the light gray used as default.

#### 4.3.7 Extra



Extra view

Additional functions can be assigned under the Extra tab:

- If the field in front of *Deselect active Target or Component* is ticked, all currently selected sources, targets, gadgets, etc. will be deselected.
- Selecting the option Suppress TAKE for this target will make the confirmation of a Take button (see chapter 19.6.17) on the panel redundant for this target. Suppress TAKE for this source can be used to the same effect for sources.
- Using *Toggle with Previous Source*, it is possible to switch back to the previous source by selecting the current source again.
- If *Execute when Pressed* is selected, the function will be triggered as soon as the button is pressed.
# 4.4 Editing Button Labels

A right-click onto a button will open the following menu:



#### 4.4.1.1 Editing an Image

If the first option, *Edit Bitmap 64x32* is selected, a window opens in which the button label can be edited. 64x32 hereby indicates the number of pixels.



Editing a 64x32 pixel bitmap

*Image* is selected by default. The existing button label can be deleted by left-clicking onto *Clear*. The content for the first line on the button can be entered in the first empty box below. As long as this line is selected, the text in this field can be moved freely to the left or right while holding the left mouse button until *OK* is selected. The second text field represents the second line of the button. This field can be named like the one mentioned above. If the checkmark in front of *Use default image* is removed, a different label can be assigned to the currently selected button. Selecting *OK* will confirm the changes. If *Cancel* is selected, the changes will be discarded.

Selecting *Edit Bitmap 36x24* after right-clicking on a button will open the following window:



Editing a 36x24 pixel image

In general, this window offers the same settings as those described above. However, the number of pixels is only 36x24 in this scenario.

### 4.4.1.2 Assigning an Image

With the option Assign Picture (BMP), an image can be assigned to a button. With the option *Recopy Image*, the image can be reassigned to this button. The option *Remove Image* deletes an image that was assigned to the button earlier.

### 4.4.1.3 Show on All Pages

If the option *Show on all Pages* is selected, this button will be visible on all panel pages. Selecting *New Group* will start a new group beginning from the page on which this option is chosen. A button placed on that specific page will therefore be visible on all following control panel pages. If the option *Only this Page Different* is selected, only the pages on which this option was selected will be displayed differently. On the following page, the previously assigned button will be visible again.

# 5 Editing a Control Panel

Right-clicking onto an existing control panel will open the following menu:



The option *Edit Panel* opens the panel edit. *Open as Virtual Panel* will display the control panel as vsmPanel if the vsmPanel software is installed (see chapter 19.1 vsmPanel Installation). *Copy selected* copies the selected control panel, allowing its repeated use with a new ID and under a new name.

This menu can also be used to create a new control panel, delete an old panel (also possible by pressing Ctrl+X), and export or import it into another configuration file. Through *Properties*, the settings initially defined during the set-up of the control panel can be opened and edited (see chapter 19.4.1 Panel Properties).

### 5.1 New Panel Page



Adding a new control panel page

To add an arbitrary number of new pages to the control panel, press the New Page button.

Draw	Move > Delet	Copy	Layout 🕮 Page 1
00	01	02	Change Text

By clicking onto Name, the name of the page can be changed.

## 5.2 Page Options



The *Draw* function enables drawing coloured frames with text around certain buttons. The window that opens after selecting *Draw* offers a variety of frames, both with and without a text box that can be positioned differently according to the frame style chosen.

Panel Edit - (6)	Monitori	10			
New Page	Move <	Name		Lavout للسد	🕮 Page 1
Draw	Move >	Delete	Сору		1
	A -1-170				

Additional page options

Using the *Copy* button, pages can be reproduced any number of times. With *Delete*, panel pages can be deleted if there is more than one page. *Move* < and *Move* > can be used to move the selected page backward or forward, respectively.

# 6 Panel Toolbox

The panel toolbox opens automatically with the panel edit view and offers various "Page Items", that is functions that can be displayed and used on control panels.

ew Page	Move <	Name		Layout 📰	Buttons 📷
Draw	Move >	Delete	Сору		<b>▶</b> - 1,2,

Layout functions in the panel toolbox

While the control panel is viewed in layout view, only four functions in the top two rows can be used. The cursor, *Select Object*, is selected by default. It can be used to select and edit buttons and button areas.

# 6.1 Adding and Removing Buttons

Using the function *Insert Buttons*, an arbitrary number of buttons can be added. Alternatively, it is possible to delete the same number of buttons that was added last.

New Buttons		? ×
Number of buttons to	o create:	
ОК	Cancel	Delete Last

Inserting and removing buttons

Please note: Buttons are removed in order of their buttons IDs.

# 6.2 Define Virtual Pages

The symbol with the red frame indicates the function *Define Virtual Pages*. With this frame, multiple individually controllable areas or groups can be created on one panel. To this end, the number of different pages can be chosen as well. With the pressed left mouse button, the red frame can be dragged over the area of the control panel that is to be included in a group.

Please note: Only buttons that are entirely within the red frame will be included in the virtual page. The selected area must therefore be bigger than the actual size of the buttons.

New Page	e Mov raw Mov	e < Nar e > Dela	ne ete i	Copy	Lay الس	out 🔛	Page 1	📰 Pa	ge 2							Bu	tton
2 x 268		des												-			- <sub>k</sub>
	a [	018		028	13	038		04	<u>1</u>	05	<u>[]</u>	06	<u>E1</u>	07	a		6 5 6
08	o 🖸	098	<u>11</u>	10		118		12	-	138		148		15 <sup>8</sup>	a	4 6	. = ₽ 65 • →
16		17		18		19		20		21		22		23	Group 1	2	= E

It is, for example, possible, to summarize the top-most buttons with the IDs 00 to 15 into one control area, which can then be navigated independently from the rest of the panel. To create each subsequent frame, the *Define Virtual Pages* icon must be selected. The maximum number of frames that can be created is 17.

# 6.3 Define Sub Panel

With the blue frame icon *Define Sub Panel*, a control panel in layout view can be divided into several small panels. It is hereby irrelevant whether the panel in question is a virtual or a physical panel. This enables multiple selection of sources and targets on a panel as well as the selection of different pages.

Please note: Only buttons that are entirely within the blue frame will be included in the sub panel. It is therefore recommended, to make the selected area bigger than the actual size of the buttons.



Sub panels

In the screenshot above, the button IDs 16 to 23 belong to sub panel 2, the button IDs 24 to 31 to sub panel 3. For each subsequent sub panel, the *Define Sub Panel* icon must be selected.

# 6.4 Copying and Moving Buttons

After the first control panel pages has been created, multiple page items become available in the panel toolbox that were previously greyed out.



Copying and moving a button

With the second arrow symbol, *Move/Copy*, previously created buttons can be moved on the panel or copied while holding the shift button.

# **6.5 Grouping Elements**

The green frame allows the grouping of elements. Through this function, it is possible to achieve an alternating behaviour of GP-I/Os (see chapter 15.7 GP-I/Os on Control Panels). If the function is not used, only one GP-I/O will be active per page at a time.



To do so, select the green frame in the panel toolbox and drag it around the relevant area on the control panel page while pressing the left mouse button.

Please note: Only buttons that are entirely within the green frame will be included in the group. The selected area must therefore be bigger than the actual size of the buttons.

Subsequently, the button IDs 00 to 02 belong to the group element. To create any other frames, the *Group Elements* icon must be reselected.

## 6.6 Blank



Deleting a button

The *Blank* function is used to delete functions (signals, GP-I/Os, storage groups etc.) that were placed on the panel at an earlier time.

## **6.7 Generic Button**

The *Generic* button, indicated by the G (for "Generic") in the toolbox, can be used universally, meaning that various labels and functions can be assigned to it. To do so, simply select the icon in the panel toolbox and place the function onto the relevant button using drag and drop. The cursor will show a small, green G at its tip while doing so.

Draw         Move >         Delete         Copy           01         02         03         04         05         06         07	1 272			2	age   📖 Page	🖬 Layout 📖 Pa	فليبة المسمسا	iove ( Name	ew Page
01 02 03 04 05 06 07	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			74.	1		Сору	love > Delete	Draw M
01 02 03 04 05 06 07									
01 02 03 04 05 06 07									
02 03 04 05 06 07	-	07	Loc.	LO.F.	04	02		04	
	<b>.</b>	07	00	05	04	03	02	-	
	a <sup>r</sup>								<u> </u>
	- 💦	15	4.8	12	12	4.4	10	00	0.0

Generic button

Contrary to the frame functions described above, this icon remains selected after having been placed on the panel, so that multiple generic buttons can be placed in quick succession. They are displayed in red in the panel edit as long as no function is assigned to them or if they were labelled.

It is, for example, possible to assign the function to the generic button that makes it jump to other panel pages. To assign this page, select the two, blue lines located in the bottom centre of the button.



Page and group assignment

No assignment is the default state. This option can also be used to reset pages and groups that were previously assigned. If no groups were created on the panel, the options *All* and *Outside* become visible and are automatically checked. As soon as a group is created on the panel, it will be shown in the same drop down menu. Moreover, all available panel pages are listed here. By selecting one of them, the generic button will jump to that page, indicated by a small number on the button.



Generic button with page reference

# 6.8 Display Source and Target

### 6.8.1 Display Source

Using the icon *Display Source*, the current source can be displayed. If this function is selected in the panel toolbox, a small version of the icon will be visible above the cursor. The number of *Display Source* buttons per panel page is not limited. If no other function was assigned to a button, it will be shown in red in the panel edit.

	Move < Name		Layout 🕮 P	age 1 📰 Page	2 📟 Page 3	🕮 Page 4 🔠	Page 5 📖 Pa	ge 6
Draw	Move > Delete	Сору		1				
								Г
(						-		
		02	09	04	05	06	07	-
GI 03								லி
G 03				_				- 6

Display Source button

The following menu opens if the Display Source button is selected:



Options for the Display Source button

The option *Display UMD Text*, which causes input and output signals to be displayed on the button, is ticked by default. By clicking on *Display Signal Path Picture*, the primary label (see chapter 5.2.5 Labels) or a created signal path image (see chapter 5.2.7 Bitmaps) of the relevant signal path will be shown, depending on its configuration. With *Display Current (and Virtual) Connections,* all signals are displayed. It is also ticked by default. If *Display Physical Connections* is selected, only physical signals will be displayed.

## 6.8.2 Display Target

The *Display Target* button has the same function for targets as the *Display Source* button for sources. Therefore, the button shows which target is currently connected to a source. As with the *Display Source* button, the number of *Display Target* buttons per panel page is not limited, and the buttons will be shown in red in the panel edit if no other function is assigned to them.

Draw Move> Delete Copy	
02 04 08	07
00 00 00	07
G 03 ++ ++	
	15
00 09 10 11 12 13 14	د ا

A click on the bottom left of the *Display Target* button will open a menu offering the same functions as the *Display Source* button described above (see chapter 19.6.8.1 Display Source).

# 6.9 Navigation Buttons: Escape, Next, Main and Back

### 6.9.1 Escape

By default, the *Escape* button executes two functions: deselecting a selected button and jumping back to the first page. To add an *Escape* button to a panel page, select the symbol in the panel toolbox. A small *Escape* icon will be shown to the left above the cursor. The number of *Escape* buttons per panel is, again, not limited.



The standard colouring for the Escape button is a dark red and an Escape label in white font.

### 6.9.2 Next, Main and Back

If a *Next* button has been set up on the panel, it can be used to navigate to the next panel page. The *Main* button will navigate to the first page, while the *Back* button jumps back to the previously opened page.



Navigation buttons

By default, these buttons are displayed on the panel in light orange with white writing.

## 6.10 Layer

The *Layer* button can be used to deactivate certain layers. For instance, if switches connected to Pseudo Devices (see chapter 12) are made, it can be used to deactivate the audio component, thereby ensuring that switches are only made on the video layer.

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This button is normally displayed in olive-green with the caption Layer in white lettering.

## 6.11 Shift

The *Shift* button, while pressed, will jump to a page that needs to be defined prior to using the function. There, it is possible to execute switches or view the status of a switch. Upon releasing the *Shift* button, it will jump back to the previous page.

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The default colouring for the *Shift* button is a light orange with the caption *Shift* in white lettering.

# 6.12 Source and Target

### 6.12.1 Source

The *Source* button is created as soon as a source signal is placed on the panel or a state is to be displayed through DAS (see chapter 19.8 Dynamic Attachment Scripts). Moreover, if, for example, the target of a loop-through device was placed on a panel instead of the source, this error can subsequently be corrected using this button.



Please note: This only applies to loop-through devices, not to standard signal paths (see chapter 5).

Buttons with only the Source function are displayed in red in the panel edit.



Source and source signal buttons

If a source signal is placed on a panel from the signal path list (see chapter 5.1), the signal path name will appear on a purple background. This colour is predefined for source signal paths and cannot be changed.



Display source options

A left-click onto the small source icon on the button will open a menu with the option *Display Source*. Used together with DAS (see chapter 19.8 Dynamic Attachment Scripts), it is possible to view the input signal that corresponds to the selected output signal.

### 6.12.2 Target

The *Target* button is created as soon as a target signal is placed on the panel or a state is to be displayed through DAS (see chapter 19.8 Dynamic Attachment Scripts). Moreover, if, for

example, the source of a loop-through device was placed on a panel instead of the target, this error can subsequently be corrected using this button.



This button is the equivalent of the Source button (see chapter 19.6.12.1 Source) for targets.



Target button options

Selecting the *Target* icon in the bottom left of the button, a menu with the following three options will open: *Automatic*, *Display Source*, and *Display Source Only*. If *Automatic* is chosen, this target will always be selected. *Display Source* will display the currently selected target and the source connected to it on the button. With *Display Source Only*, the currently connected source of the selected target will be shown on the button.

# 6.13 Reference Source and Target

### 6.13.1 Reference Source

The button *Reference Source* allows the use of one signal as a reference to refer to multiple sub groups.

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Reference Source button

The *Reference Source* button can be placed on multiple panels with one assignment. It is therefore sufficient to place the reference signal on only one panel.



By selecting *Reference #1* after left-clicking on the small icon in the bottom left of the button, a first reference group can be created. The signal *In1* is, for example, assigned to it. After the first reference group has been created, the option *Reference #2 <New>* automatically appears. By selecting *Reference #2 <New>*, a second group will be created, to which the signal *In 2* could, for example, be assigned. *Clear Signal Path* will reset the signal assignment of a reference group, so that a new signal can be added.

## 6.13.2 Reference Target

The button *Reference Target* is the equivalent of the *Reference Source* button (see chapter 19.6.13.1) for targets. With this button, it is therefore possible to refer to multiple sub groups from one reference output signal. The *Reference Target* button can be distributed to multiple panels with one single assignment. It is therefore sufficient to place the reference signal on one panel.

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24	25	26	27	28	29	Back	31		

Reference Target button

For the assignment of reference groups, the same options are available as those described for the *Reference Source* button (see chapter 19.6.13.1).

## 6.14 Preview

Pressing the *Preview* button allows the user to view a previously defined input. Once the *Preview* button is released, the output will be switched back to the previously switched signal.



# 6.15 Multi Target

Using the *Multi Target* button, multiple targets can be selected and the sources connected to them can be viewed. Furthermore, it is possible to select multiple targets and connect one specific source to them.

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This button is generally displayed in light orange with the label *Multi Target* in white lettering.

If a *Multi Target* button has been placed on a panel, a new tab, *Multi Target*, appears in the button's properties window.



Multi Target properties

This tab offers the following options:

- With *View Only*, the button functions only as a display button
- With the checkmark before *This button is the Multi-Target status indicator*, this button can activate or deactivate the multi target function. The active colour indicates, whether the function is active or not.
- With Allow deselecting Targets, selected output signals can be deselected at a later point in time.
- With the checkmark before *Display deselected Targets*, deselected output signals will still be displayed. If the box is not ticked, these buttons are greyed out in the vsmPanel software.

# 6.16 Multi Target from Source

The *Multi Target from Source* button can be used together with the *Multi Target* button (see chapter 19.6.15 Multi Target) to view sources and targets that are connected to each other.



By default, this button is displayed with the caption *Target* in white lettering on a dark red background.

# 6.17 Take

If a *Take* button is used on a control panel, all switches must be executed via this button. Therefore, switches are only executed after the source, the target, and the *Take* button have been selected.



The default colouring for this button is the caption *Take* in white lettering on a light orange background.

## 6.18 Enable

If an *Enable* button is placed on a panel, it must be selected so that used GP-I/Os (see chapter 15) are activated.

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Generally, this button is displayed with white lettering on a light orange background.

# 6.19 Source of Target and Target of Source

### 6.19.1 Source of Target

The button *Source of Target* can be used to display the source of the currently selected target. To do so, first create a *Target* button (see chapter 19.6.12.1 Target) on the panel. Afterwards, place the *Source of Target* function on the same button. The button will then show both the target – for example *Out* 9 – and the corresponding source, for instance *In1*. It is also possible to execute direct switches with this button.

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Source of Target button

After clicking the *Source of Target* icon in the bottom left of the button, the following menu opens:



Source of Target button options

*Display Current (and Virtual) Connections* is checked by default and causes all signals to be displayed. *Display Physical Connections* will only display physical signals, while *Display Previous* will show the signal that was last switched onto the target.

### 6.19.2 Target of Source

The *Target of Source* button is the equivalent of the *Source of Target* button (see chapter 19.6.19.1) for targets. It can be used to display the target of the currently selected source. To do so, place a *Source* button (see chapter 19.6.12.2 Source) on a panel followed by the *Target of Source* function on the same button. The button no longer shows the source but the target, for example *Out2*. Direct switches are also possible with this button.

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## 6.20 Lock Target

The *Lock* button can be used to lock targets.

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Lock button

By default, this button is displayed with the caption *Lock* in white lettering on a dark red background.

If a *Lock Target* button has been placed on a panel, a new tab, *Lock*, will appear in the properties window:



Lock target properties

The new tab offers the following options:

- If *Unlock* is selected, the button can only be used as unlock button.
- If *Toggle Target Lock* is ticked, the button can be used as lock or unlock button for the currently selected output.
- Using *Toggle Signal Path Lock*, the button can be used as either lock or unlock button for the currently selected output. However, it will lock the entire signal chain.
- If *Toggle Pseudo Device Lock* is selected, the button can be used as lock or unlock button for the currently selected output. In addition, the corresponding signal in the pseudo device list (see chapter 12 Pseudo Devices) will also be locked.
- Master Lock / Unlock will make the button usable as either lock or unlock button for the currently selected output. It can reset all previously set lock commands.

# 6.21 Blind Source

The *Blind Source* button can be used to switch selected targets onto the blind source that was defined for them.



The default colour theme for this button is the caption *Blind* in white lettering on a dark red background.

# 6.22 Connect Targets

Using the Connect Targets or Monitoring button, a target can be changed into a source.

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By default, it is displayed with the caption *Monitoring* in white lettering on a dark red background.

# 6.23 Control Button

The button *Control, e.g. GPIs, Gadgets...* is used for functions, such as GP-I/Os (see chapter 15) and gadgets (see chapter 10).



## 6.23.1 Gadget Control

If the value placed on the control button is a gadget (see chapter 10), the following window will open by left-clicking on the icon in the bottom left of the button:



The first option changes the placed button into a display button. A gadget parameter can therefore be displayed but not edited. Selecting *Automatic* will automatically select the placed gadget, allowing the value to be changed directly on the control panel using an encoder.

## 6.23.2 GP-I/O Control

If the value placed on the control button is a GP-I/O (see chapter 15), a left-click onto the icon in the bottom left of the button will open the following window:



The first option changes the placed button into a display button. A GP-I/O can therefore be displayed but not edited. If *Activate this page when GPI becomes true* is selected, the panel page on which the GP-I/O is located will be called up as soon as the GP-I/O is set.

## 6.23.3 Button Properties

If a control button is placed on a panel, a new tab, Control, appears in the properties window:



This tab offers the following options:

- Display Only: When this box is ticked, the button only serves as display button.

- Automatically perform action when page is entered: This option allows the execution of a function placed on the panel as soon as the page on which the button is located is opened.
- Toggle with "Blind" signal source: This option allows a crosspoint button to jump between the crosspoint placed on the panel and the blind source.
- Automatically perform "goto" if attached is "True" allows a page change as soon as the function on the panel is active.
- Automatically perform "goto" if attached is "False" allows the same automatic page change if the function is inactive.
- With Automatically perform "goto" if attached becomes "True", an automatic page change will occur as soon as the function on the panel becomes active.
- Automatically perform "goto" if attached becomes "False" prompts the same automatic page change as soon as the function on the panel becomes inactive.
- Automatically jump to "this" page when attached becomes "True": This option also enables an automatic page change. If, for instance, a GPO lies on a panel page and becomes active, the program will open the page on which the GPO was placed.
- Automatically jump to "this" page when attached becomes "False" is exactly the same function for an inactive GPO.

# 6.24 GP-I/O Assignments

## 6.24.1 GP-I/O Crosspoint Assignments

Using the button Assign GPI to Switchable Node, a crosspoint switch can be assigned to a GP-I/O (see chapter 15). To do so, the relevant GP-I/O is placed on a control panel button followed by the function Assign GPI to Switchable Node, which is placed on the same button.



GPI crosspoint assignment

The default colouring before a GP-I/O is placed on it is the caption GP-I/O? in white lettering on a light orange background. As soon as a GP-I/O is placed on it, the caption changes to the GP-I/O's name.

### 6.24.2 GPI-GPO Assignment

With the button Assign Multiple GPIs to GPO, multiple GPIs can be linked to one GPO. To do so, a GPO is placed on a control panel button followed by the function Assign Multiple GPIs to GPO, which is placed on the same button.



Before a GPI is placed on this button, its default colouring is the caption GP-O? in white lettering on a light orange background. As soon as it is linked with a GPO, the button will display its name.

## 6.24.3 Tally-GPO Assignment

Using the Assign Tally to GPO button, a source can be assigned to a GPO. The GPO will become active as soon as this source receives tally.

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Tally-GPO assignment

The default colouring for this button is the caption GP-O? in white lettering on a light-orange background. When it is linked to a GPO, the GPO's name will be shown in the button caption instead. By selecting the icon in the bottom left of the button, the following icon opens:



By selecting *Red* in this menu, a colour can be assigned to the tally within the GPO. This means that a red tally link is created. If multiple colours are selected (for example Red + Green or Red + Green + Yellow), a red-green or red-green-yellow OR-link is created in the GPO with the selected signal.

## 6.25 Mimic Button

By first selecting the Mimic button followed by the selection of another button, the second button's function can be replicated.



Mimic button

By default, this button is displayed with the caption *Mimic* in white lettering on a light-orange background, as long as no other function is copied.

# 6.26 Display Label

Using the button Induce Label Text, the primary label (see chapter 5.2.5) on a virtual panel can be changed.

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Induce Label Text button

By default, this button is displayed with the caption *<nosignal>* in white lettering on a lightorange background as long as no signal is assigned to it. If the function was placed on a signal button, it will take on the signal path's name, for example *Camera3*. The label can subsequently be changed on the virtual panel by simply overwriting it.

ID: 5 Connect to	vsmPanel 3.	0.63.0@127.0.0.1 (Single Server Mode) 🔀
GPO2 9-TALLY PETRIC CARTER 2	Blind	Escape
Ini	Monitoring	Enable Take
	GPI1	Next Main
In1 Out2	Targets GPO1	Back Lock

Label change on vsmPanel

If an *Induce Label Text* button is placed on a panel, the following new tab appears in the properties window:

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Induce Label Text properties

Using the options in the drop down menu located below *Induce Label into*, the changed label can be saved in the protocol label or the external label. The drop down menu under *Display* can be used to change the display on the button between primary, secondary, video mixer, protocol and external label (see chapter 5.2.5 Labels).

If the option *Do not display "Label Overlays"* is ticked, duplicate labels are not displayed.

# 6.27 Insert

With the *Insert* function, loop-through devices, such as frame synchronizers, can be added into the signal chain. If this button is selected, the corresponding device is switched onto the selected target.

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<b>-</b>	G+	₽ <b>*</b> 01	B		GPI 1	IP	- 10	÷	Go	
16			Multi-Targe	20	GPT1	Nevt	Main		٩.	
			-		1-002	INC/C			C <sup>2</sup>	
Out 9	**	GPI 2	d"	GPO 1	•	→ 02	<u>× 01</u>		đ	
14.7	10 ( <u>10</u> )	GPI2		ASSIGN GPIS	00	and the second	and the second se		P	

## 6.28 Timer

The *Timer* button is used to display a timer (see chapter 13) on the control panel. First, a timer must be placed on the button from the timer list (see chapter 13.4 Timer on Control Panels), so that the button will display a timer. Placing the button on the panel directly from the panel toolbox enables the use of DAS (see chapter 19.8 Dynamic Attachment Scripts).



The default colouring for this button consists of three white question marks on a light-orange background as long as no timer is assigned. As soon as a timer is placed on the button, its name will be shown. Placing a time on a panel will add the following tab in the button's properties window:

Timer Style	Secondary Layers Attachr	ment   Dynamic   Visibility   Extra
Mode Display Only Run	Format • HH:MM:SS C MM:SS *	Special
⊂ Run / Stop	<ul> <li>SSS **</li> <li>* Ignored if hour not zero</li> <li>** Ignored if seconds &gt; 600</li> </ul>	

Timer properties

Below the option *Mode*, different button options can be defined:

- If Display Only is selected, the timer placed on the panel will only be displayed.
- With *Run*, the timer can be started on the panel, while it can be started and stopped using the option *Run/Stop*. With the option *Run/Stop/Reset*, the timer can be started, stopped, and reset.
- *Stop* will make a stop function available, *Reset* a reset function, and *Restart* a restart function.

Format allows the choice of three different views:

- HH:MM:SS displays hours, minutes, and seconds in double-digits.
- MM:SS displays minutes and seconds in double-digits.
- SSS displays seconds in triple-digits.

If the option under *Special* is ticked, the timer will start to blink at 10 seconds.

## 6.29 Change Panel

The *Change Panel* button allows jumping from the currently opened panel to a panel with a different panel ID.

Panel Edit - (5) Test		Buttor
lew Page Move < Name	📕 🏧 Layout 🕮 Page 1 📟 Page 2 📟 Page 3 🕮	🖩 Page 4 🕮 Page 5 🕮 Page 6 🛛 🚺 🏷 🕇
Draw Move > Delete Copy		
		Гд
GPO 2	SET I AREI	
GPOZ	amera3 Blind	Layer Escape 🛛 🔩 🖷
		الله - N O1
In1	Link 🚽 Monitoring	Enable Take 🛛 🖕 🕫
G+ G+ G+		10 - 10 - AB
	No Assignment	
16	Multi-Target 0001 Tis Line	- Next Main
Out 0	0001 - He-Line	→ 02 01 mm
	GPI2 0002 - Vinwebraner	
In1 Out2	largets 0004 - Tally	Back Lock
•= - · ·	- 0005 - Test	۵ - ۰۰ - ۴
	0006 - Monitoring	
	0007 - Test 2	

The default colour for this button is a black caption on a light-yellow background. After a leftclick onto the small symbol in the bottom left corner of the button, it is possible to select the panel ID to which the button should refer. *No Assignment* is checked by default. This option also allows the reversing of previously made assignments. After placing a *Change Panel* or *Link* button on a panel, the following tab appears in the button's property window:

Propertie	s of "5:"Test", <unknown>, #12: Link"</unknown>	×
-ja	Panel Link Style Secondary Attachment Dynamic Visibility Extra	
Г Ре Г Tra	rform "ESC" when entering other panel ansfer selected Target to other panel	

Panel link properties

With *Perform "ESC" when entering other panel*, the function of an *Escape* button can be replicated for page changes, so that all currently selected buttons are reset.

*Transfer selected Target to other panel* allows selecting an output on a panel and then using the *Link* button to jump to a different panel to choose the relevant input. Once the input is selected, the *Link* button must be used to jump back to the initial page.

# 6.30 Storage Groups

Use the *Storage Group* button to place a storage group (see chapter 9) onto a control panel. As before, directly placing the button on the panel from the panel toolbox allows the use of DAS (see chapter 19.8 Dynamic Attachment Scripts).



Storage Groups button

When no storage groups are assigned, the button is displayed with three white question marks on a light-orange background. Once a storage group is assigned, its name is shown on the button.

Placing a *Storage Group* button on a panel will add a *Storage* tab to the button's properties window:

Properties o	f "5:"Test", <unknown>, #20; Storage"</unknown>	×
-1 <b>2</b> 1	Storage Style Secondary Layers Attachment Dynamic Visibility Extra	
Name:	StorageGroup1 Store as defined by Storage Group Load Save Record user actions Record Record	

Storage group properties

The name of the storage group or of the storage disc (see chapter 9 Storage Groups) is shown after *Name* – in this case *StorageGroup1*.

Under *Store as defined by Storage Group* it is possible to select which functions should be available for this storage group or storage disc on the panel: crosspoint setups can either be loaded or saved.

Through Record user actions, crosspoint setups can be set to be loaded or recorded.

# 6.31 Visual Link

To be able to use the *Visual Link* function, a frame must be drawn on a panel. This function, as those described in the following, are not button-related functions, but are only displayed on virtual control panels.

If the available space on the panel does not have a sufficient size, the entire panel can be enlarged in the *Layout* tab (see chapter 19.4.2 Panel Layout).

肆 Pa N	nel Edit - (5) Tes ew Page Mi	t ove < Name		Layout 🕮 P.	age 1 📖 Page	2 💷 Page 3	EEE Page 4	B Page 5 💷 Page I	
702	Draw Mi <b>x 600</b>	ove > Delete	Сору				- 1		
	00	01	02	03	04	05	06	07	Г g ** ** К Щ Ф Ф Ф
	08	09	10	11	12	13	14	15	0% ↔ % 0% ↔ %
	16	17	18	19	20	21	22	23	→ +5 % ∴ D• +6 ▼ へ, 00
	24	25	26	27	28	29	30	31	N, %, %, ← & ♡ E ■ €
	1			4					₩# <b>⊄</b> 
	ł	_	_	_	_	_	_		

Increasing panel size

To create the *Visual Link* frame, select the function in the panel toolbox and draw the frame by moving the curser from top left to bottom right while pressing the left mouse button until the desired size is reached. The same procedure applies to the following functions, including Scheduler, Views, Map, Audio Level Meter, Alarm Management, Media Player, Browser, and Storage List (see chapter 19.6.32 to 39).

In1 Out2 GP2 Targets GPO1 29 Back Lock	
VsualLink	
	_

Visual Link frame

In the panel edit, the visual link has a red frame has a red caption in the top left corner. On a virtual panel, signals linked within this frame are shown as a signal chain.



Visual Link on vsmPanel

To delete the Visual Link frame, right-click into it in the panel edit and select Delete.



Deleting the Visual Link frame

If a *Visual Link* frame is placed on a panel, the tabs *VisualLink, Colors,* and *Visibility* appear in the properties window.

The first tab allows changes to colour and opaqueness of the *Visual Link*. As with the buttons, the colour can be changed in the field next to *Color*. Similarly, opaqueness can be changed directly in the field beside *Opaque* or by using the slide control.

Properties of "5:"Test", Page 1" - Mark Colors VisualLink Colors Visibility	
Color:	

Colour settings

The following options are available under the VisualLink tab:

Properties	of "5:"Test", Page 1			×
- <b>1</b> 20	VisualLink Colo Display:	rs   Visibility   ▼ View Only ▼ Show Signal Family 01 - Primary 00 - Identifier 01 - Primary 02 - Secondary	) Colours	
C		Minunel Lind		

Visual Link properties

If *View Only* is ticked, the *Visual Link* will only be displayed. *Show Signal Family Colours* allows the display of colours assigned to signal path families (see chapter 5.2.2) in the signal path list.

The drop down menu next to *Display* offers the choice of which label should be displayed in the *Visual Link*. The options hereby include *Identifier*, *Primary*, and *Secondary* label (see chapter 5.2.5 Labels).

Properties	of "5:"Test", Page 1"	×
يتر <u>ا</u>	VisualLink Colors Visibility ✓ Visible as part of containing group.	

Visibility properties

Using the option under the Visibility tab, the Visual Link will remain visible within a group.

### 6.32 Scheduler

#### 6.32.1 Creating Channels

In order to be able to use the Scheduler, corresponding channels (see chapter 6.7.2 Channels) must be created first. This can be done in the *Matrix Properties* view under the *Channels* tab.

Layers	Channels S	Settings	System Ta	ally Flags	System E	ebug Flag	s		
Chanr	Name							Short	
01	TX 2 Reporting							TX 2 Benor	
									Up
									Dn
	-								
Nev	v Channel	Edi	t I			Delete			
				ОК	1	Cancel	ADD	lu l	Help

Upon selecting New Channel, a window opens in which a new channel can be set up.
Name:	Short:	
TX 2	TX 2	TX 2 🔾
Comment:		
Berlin		

New channel

Enter a relevant name for the new channel and confirm the input by pressing *OK*. Close the *Matrix Properties* view after all necessary channels have been created.

## 6.32.2 Create Control Panel with Scheduler

Select the *Scheduler* function in the panel toolbox and draw a frame as describe above (see chapter 19.6.31 Visual Link) across the side of the panel edit on which the scheduler is to be added. In the panel edit, the scheduler has a black frame and a white caption on black background in the top left corner. The scheduler frame can be deleted by right-clicking into it.



Create scheduler

When the window for the scheduler has been created, the properties view will open automatically. In this view, additional settings can be adjusted. The first tab allows the choice of which channels will be displayed in the scheduler.

-)ai	Channels	Options Visibility		
Type:	chedule Bar chedule List utomation Bar utomation List alendar		Options       Color:       Event       ▼         ✓       View Only       ✓       Show Header         Start Row:       0       ✓         Visible Rows:       22       22         Row Height:       87       ●	

Scheduler options

The second tab currently provides four view options for the scheduler:

### 6.32.2.1 Schedule Bar

With the <u>Schedule Bar</u>, events can be created and displayed on a time line.

	New Event	Now: 08:41:47	9-00 AM	2011-06-06 08:39:15	2011-06-06 09:24:00 뉟 Goto
	<u></u>		News		
ž			UD56 Connect"PGM A L"« "	Studio A L"	
TX2		Transmission Be JK19 Connect"TX 1"« "Ext 1"	erlin		
	•				< > II>
			Schedule ba	r	

#### 6.32.2.2 Schedule List

The *Schedule List* shows all current switches per channel. Events cannot be displayed in this view.



The Automatic Bar function is currently not supported.

#### 6.32.2.3 Automation List

Through *Automation List*, events can be created while they are displayed as an automation list. Each event is clearly distinguishable through automatically generated colours. Moreover, events are automatically organized into active events with a five minute preroll and planned events per channel. This list comes with an integrated search function to quickly find created events.

TX 1 TX 2							
					08:47:07 2011	-06-06	
Event	Date	Begin 📥	Duration	Remaining	Comment	Actions	
<ul> <li>Transmissic</li> </ul>	n   2011-06-06	08:50:00	00:30:00	T-00:02:53		Connect "TX 1" « "Ext 1"	
ents							
Ve E							
Act							
2011-06-06	Calendar						Search 🗸
<ul> <li>Transmissic</li> </ul>	n 2011-06-06	08:50:00	00:30:00	T-00:02:53		Connect "TX 1" « "Ext 1"	
57							
Even							
AII							

Automation list

#### 6.32.2.4 Calendar

With the *Calendar* function, events can be created and displayed in a calendar view. In addition, this view offers a collision test for each channel. As soon as a time conflict is detected within a channel, the interface will show the corresponding collision.

Collisions TX 1 TX 2	● Day ○ Week	k 🔘 Month
◀ June, 2011 ►	1 collision(s) detected!	
Mo Tu We Th Fr Sa Su	TX 1 on 2011-06-06	
30 31 1 2 3 4 5	"TX to FFM" collides with "News" from 09:07:00 to 09:15:00	
6         7         8         9         10         11         12           13         14         15         16         17         18         19           20         21         22         23         24         25         26           27         28         29         30         30	07 <sup>00</sup>	
July, 2011	0800	
Mo Tu We Th Fr Sa Su		
1 2 3 4 5 6 7 8 9 10	09 <sup>00</sup> Name (1056)	
11 12 13 14 15 16 17 18 19 20 21 22 23 24		
25 26 27 28 29 30 31 1 2 3 4 5 6 7	1000	
Today: 2011-06-06	1100	
	12**	
	1300	
	Calendar	

#### 6.32.2.5 View Properties



Visibility tab in the scheduler properties

The option *Visible as part of containing group* can be activated or deactivated in the *Visibility* tab. If active, the scheduler area will be changed in accordance to a page change. Consequently, if no scheduler was created on the relevant page, the control panel will not show one. With this function, multiple scheduler windows can be configurated for multiple pages, for example to allow the use of multiple views. If this option is not activated, the scheduler window will not change in the event of a page change. All other scheduler settings are taken from the vsmPanel.

#### 6.32.3 New Event

The procedure for the creation of events always remains the same, regardless of the view option chosen for the scheduler. To create a new event, select the control panel on which the scheduler is located and open it as virtual panel by right-clicking onto it in the control panel list.



#### Next, select *New Event* in the scheduler view to create a new event.



This will prompt the following window:

	inici.						163	<u></u>							CON	morie.					
N	ame:									Sł	ort Na	ame:									
												On E	nd: Lea	ve Uncha	anged	•	Releas	e: Leav	ve Un	change	d •
ccurren	ce A	Actio	n																		
								$\bigtriangledown$	Set to	0								T	otal L	ength: I	00:30:00
Ð		F	<sup>o</sup> rero		i i		1	3							C	2		Po:	stroll		B
						1		1.0		1			61	1							STREET
17:0 Occurr	7:00 rences unlim	Tota s (0 = nited)	00 al 0 : : ) Int	): 00 Eerval	:00 F : 0	1 2 inal E 1:00:	7:07:( 011-0 legin: 00	00	2011	-06-23 Paily / V	00 + /eekl	: <b>30:0</b> 17:06	05 🔄		17:37:00 2011-06-	23 👻	) 00	):00:00	)	17:3	7:00
17:0 Occurr Occurr Days ol	7:00 rences unlim ce f the V	Tota s (0 = nited) @	00 al 0 : : : : :	): 00 Eerval	:00 F : 0	1 2 inal E 1:00:	7:07:( 011-0 Regin:	00 )6-23	2011 © C	-06-23 Paily / V	00 – /eekl	:30:0 17:06	0 🔄	Months	17:37:00 2011-06- s:	23 -	00	); 00; 00	1	17:3	7:00
17:0 Occurr ● Onc Days ol ★ ▼	7:00 rences unlim ce f the V	Tota s (0 = nited) @	OC al c b l nt c t t nu	): OO	:00 F : 0	1 2 inal E 1:00:	7:07:1 011-0 Begin: 00	00 )6-23 ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )	2011 © C ays of	-06-23 Jaily / V the Mo	veekl	:30:0	05	Months * Jan	17:37:00 2011-06- s: Feb Ma	23 V	1 OC	): 00: 00	) J	17:3	7:00
17:0 Occurr ● Onc Days ol * ♥ ▶ Mon ▶ Mon	7:00 rences unlim ce f the V Tue V	Tota s (0 = wited) week	00	):00 erval	:00 F F Sat	1 2 7 7 7 7 7 8 7 8 7 8 9 8 9	7:07:1 011-0 9egin: 1st 2nd	00 )6-23 )6-23 ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )	2011 © C ays of	-06-23 Paily / V the Mo	00 	:30:0 17:06 5	05 🔄	Months * Jan	17:37:00 2011-06- s: Feb Ma	r Apr h	1ay Jur	): 00: 00	) ug Se	17:3	7:00
17:0 Occurr ● Onc Days of × ▼ ▶ Mon ▶ Mon ▶ Mon	7:00 rences unlim ce f the V Tue N Tue N	Tota s (0 = c week	OC left c Thu Thu Thu	):00 erval	:00 F : 0 Sat Sat	1 2 inal E 1:00: Son Son	7:07:1 011-0 8egin: 1st 2nd 3rd	00 06-23	20111 © C 1 8	-06-23 Daily / V the Mo 2 3 9 10	000 ▼ //eekli 111	:30:0 17:06 5 12	0 🔄 05 🔄 8 7 3 14	Months * Jan	17:37:00 2011-06- S: Feb Ma	23 V	4ay Jur	): 00: 00	) Jg Se	17:3	7:00
17:0 Occurr ● Onc Days of × ▼ Non Non Non	7:00 rences unlim ce Tue V Tue V Tue V	Tota s (0 = week week week week week week	OC al c b nt c Thu Thu Thu Thu	erval Fri Fri Fri	:00 F :00 Sat Sat Sat	1 2 inal E 1:00: Son Son Son Son	7:07:1 011-0 8 egin: 1st 2nd 3rd 4th	00 06-23 0 0 0 0 0	2011 © [ ays of 1 8 115 1	-06-23 Daily / V the Mo 2 3 9 10 6 17	00 	5 12 19 12 19 20 10 10 10 10 10 10 10 10 10 10 10 10 10	05 🔄 6 7 3 14 20 21	Months * Jan	17:37:00 2011-06- :: Feb Ma	r Apr №	1ay Jur	): 00: 00	) ug Se	17:3	7:00
17:0 Occurr Occurr Onc Days of Mon Mon Mon Mon	7:00 unlim ce Tue N Tue N Tue N Tue N	Tota s (0 = wited) week week week week week week week wee	OC al c b lnt Thu Thu Thu Thu Thu	):00 erval Fri Fri Fri Fri	:00 F :00 Sat Sat Sat Sat Sat	1 2 inal E 1:00: ∑ Son Son Son Son	7:07: 011-0 Begin: 1st 2nd 3rd 4th 5th	00 06-23	2011 © C ays of 1 8 15 1 222 22	-06-23 Daily / V the Mo 2 3 9 10 6 17 23 24	00 	5 17:06 12 19 26 2 6	05 (⇒) 05 (⇒	Months * Jan	17:37:00 2011-06- 5: Feb Ma	rr Apr h	l OC	): 00: 0C	) ug Se	17:3	7:00

Window to create an event

In a drop down menu on the top, the previously selected and activated channel can be chosen (see chapter 19.6.32.2 Creating Control Panel with Scheduler). Next, the event can be created for the selected channel.

Channel:	2	-	Comment:	
Name:	Reporting TX 2	Short Name:		

Selecting a channel

In the next step, enter a name for the event. As soon as a channel has been chosen and a name entered, the previously greyed out confirmation button *OK* in the bottom right become available.

					Total L	.ength: 00:30:0
Ø	Preroll	3		0	Postroll	B
17:07:00	00:00:00	17:07:00	00:30:00	17:37:00	00:00:00	17:37:00
		2011-06-23 👻		2011-06-23 👻		

Starting time, duration, and end time for the event

The time for the start of an event can be set in hours, minutes, and seconds along with a date in the field *Occurrence*. The end time will automatically be added once the duration of the event has been entered.

					Total Leng	th: 00:06:0
P	Preroll 🔽	3		8	V Postroll	8
	1000				100 V 100	
17:59:00	00:01:00	18:00:00	00:04:00	18:04:00	00:01:00 🚖 18:0	5:00
	100	2011-06-23 -		2011-06-23	+	



If *Preroll* and *Postroll* are ticked, durations for postroll time after and preroll time before the event can be entered there. These times can be defined either as start or end time points, where *p* stands for *Preroll*, *R* for *postroll* (Release), *s* for the start, and *e* for the end of the event

### 6.32.3.1 One-Time Event

There are two possible ways to set up a one-time event: The starting time of the event can be chosen through the drop down menu under *Set to*. The scheduler will automatically add the duration (between one and 15 minutes) entered here to the current time, which then becomes the starting time for the event.

		$\bigtriangledown$	Set to:				Total Ler	igth: 00:05:0
Ð	Preroll		Now		6		V Postroll	ß
			Now + 1 min				×	
18:00:00	00:00:00	18:00:C	Now + 2 min	-	18:04:00	00:0	1:00 🚖 18:	05:00 🔶
		2011-0	Now + 5 min		2011-06-23	-		
			Now + 10 min			1		8
Te	otal		Now + 15 min	ISANT -				

Choosing the duration in the drop down menu

Alternatively, it is possible to enter a start and end time or the duration of the event as described above. Select the option *Once* after these entries have been made to indicate that this event is a one-time event.

0	Preroll	۹		0
18:00:00	00:00:00	18:00:00	00:04:00	18:04:00
T	otal		0.00 HT 00.05 [4]	

Select Once for a one-time event

After confirming the entries by pressing *OK*, event actions can be defined. The scheduler will notify the user if the start time of the event was set before the current real time.



### 6.32.3.2 Repeated Event

A repeating event can be set up in multiple ways. The duration, after which the event repeats itself, is entered under *Interval*.

7:59:00 🚖 00:01:00 🚖 18:00:00 🔄 00:04:00 🚖 18:04:00 🚖 00:01:00 🚖 18:	05:00 🚖
2011-06-23 👻 2011-06-23 👻	

It is, for example, possible to create an event that repeats itself hourly.

18	:00	New Event. 18:15	Now: 18:30	17:15:( 18:45	2011-06 19:00	5-23 17:54:49 19:15	- <i>2011-06-2</i> 19:30	2 <i>3 20:02:37</i> 19:45	+ Goto) 20:00
Reporting	linnur				miilinn	uuudauu		mmilium	
TX2	T Al				T A1				T Al
								<	

#### Hourly repeating event

An event can also be set to repeat on certain weekdays, dates, and certain months. To do so, select the option *Daily / Weekly*.



Scheduling by weekdays, dates, and months

In the field below, certain weekdays (multiple selections are possible, for example all Mondays), dates, and months can be chosen for the repetition of the event. These fields can be individually selected and deselected by repeatedly clicking onto them. Blue colouring indicates that this day, month, or date is selected; white indicates that it is not selected.

#### 6.32.3.3 Event Actions

Once time, duration, and repetition of the event have been set, the event action must be defined. To do so, select *Save and Record*.

▶ Mon	Tue We	d Thu	Fri	Sat	Son	4th	15	61/	18	19	20 21							
▶ Mon	Tue We	ed Thu	Fri	Sat	Son	5th	22 2	3 24	25	26	27 28	8						
▶ Mon	Tue We	d Thu	Fri	Sat	Son	6th	29 3	0 31						Legend		Selected	E	Unselected
						•			-					Logona		50100100	1	
												/	-		~			64 64
												0	Save an	d Record		OK		Cancel
														the second s				

Defining event actions

In a new window, the following recording modes are available:

- s > e: from beginning to end of the event
- p > R: from postroll to preroll
- *p*: preroll
- s: beginning
- *e*: end
- R: release (postroll).



Recording and saving actions

To record and event action, the event phase (that is from preroll to postroll) for which an action is to be defined must be chosen first. Next, the targets and sources whose links will be part of the event must be selected, for instance *Out4* and *In5*. The recording mode is indicated by a red record symbol on the panel.

out1							
	Out2	Out3	Out4	Out5	Out6	Out7	
Actions Record I	Mode: <b>S→B</b>	©→ <mark>®   © ©</mark>	6 B				
#	Action	Target	Source				
0	1 Connect 2 Connect	Out 2 Out 4	In 3 In 5		<i>211-06</i>	- <i>23 21:29:31</i> 20:30 21:	+ G

Record and save crosspoint

Press Finish to confirm the entries.

## 6.32.4 Clone Events

To duplicate an event, right-click onto the event that is to be copied and select the option *Clone Event*.



A new window opens, in which the event settings described above can be adjusted.

Name:         Clone Events         Short Name:           On End:         Leave Unchanged         Release:         Leave Unchanged           currence         Action	ed • 00:06:00
On End:         Leave Unchanged         Release:         Leave Unchanged           currence         Action	ed •
currence Action  7 Set to: Total Length:  9 Preroll ♥  7:59:00   18:00:00   18:00:00   18:04:00   18:04:00   18:05:00	00:06:00 B
✓ Set to:         Total Length:           Preroll         ✓         ✓         Postroll           7:59:00         ♦         00:01:00         ♦         18:05:00	00:06:00
Preroll    Presoll	B
7:59:00 🔄 00:01:00 🔄 18:00:00 🔄 00:04:00 🔄 18:04:00 🔄 00:01:00 🔄 18:05:0	
	n lai
2011 00 00	U 📼
2011-06-23 👻	
Doccurrences (0 = 0	
Mon Tue Wed Thu Fri Sat Son 1st * 1 2 3 4 5 6 7 * Jan Feb Mar Apr May Jun Jul Aug Sep Oct	Nov Dec
Mon         Tue         Wed         Thu         Fri         Sat         Son         1st         1         2         3         4         5         6         7         Tue         War         Apr         May         Jun         Jul         Aug         Sep         Oct           Mon         Tue         Wed         Thu         Fri         Sat         Son         2nd         8         9         10         11         12         13         14	Nov Dec
Mon         Tue         Wed         Thu         Fri         Sat         Son         1         2         3         4         5         6         7           Mon         Tue         Wed         Thu         Fri         Sat         Son         2nd         8         9         10         11         12         13         14           Mon         Tue         Wed         Thu         Fri         Sat         Son         3rd         15         16         17         18         19         20         21	Nov Dec
Mon         Tue         Wed         True         Fri         Sat         Son         1         2         3         4         5         6         7           Mon         Tue         Wed         True         Fri         Sat         Son         1         2         3         4         5         6         7           Mon         Tue         Wed         True         Fri         Sat         Son         2nd           Mon         Tue         Wed         True         Fri         Sat         Son         2nd           Mon         Tue         Wed         True         Fri         Sat         Son         3nd           Mon         Tue         Wed         True         Fri         Sat         Son         3nd           Mon         Tue         Wed         True         Fri         Sat         Son         and           Mon         Tue         Wed         True         Fri         Sat         Son         and           Mon         Tue         Wed         True         Fri         Sat         Son         strue         Sat         Son         strue         Sat         Sat         Sat	Nov Dec

Settings for cloned events

Similarly to the procedure described above, this window requires the input of a name, channel, etc. for the cloned events (see chapter 19.6.32.3 New Event).



Beside *Total Occurrences*, the number of repetitions can be defined. The field besides Final Begin allows the definition of the time of the event's last repetition.

#### 6.32.5 Scheduler Navigation

The scheduler features a so-called *Date Picker* that allows an optimized search for an event by selecting an exact date, to which the scheduler view will jump.

4		Ju	ni 20	11		+	2
Mo	Di	Mi	Do	Fr	Sa	So	
30	31	1	2	3	4	5	
6	7	8	9	10	11	12	
13	14	15	16	17	18	19	
20	21	22	23	24	25	26	
27	28	29	30	1	2	3	
4	5	6	7	8	9	10	
		To	day:	23.0	5.201	1	
17:2	9:18					÷	
_	OK			Car	cel		

Navigation of the scheduler is made easy by the three arrows located in the bottom right corner of the window. Using them, it is possible to jump directly to the next or previous event or to the next gap.



## 6.33 Views

The *Views* function allows the display of views (see chapter 7) on a virtual panel. They can be used either as display option only or to switch crosspoints. As the previous functions, the *Views* function requires a frame. To create it, select the function in the panel toolbox and drag the cursor from the top left to the bottom right while pressing the left mouse button to draw a frame in the required size.



Views have a black frame with the white caption *Active View* and the name of the currently selected view on a black background in the panel edit. If no view has been assigned, the read-only view of the master matrix (see chapter 6) is shown.



Assigning a view

A view must be dragged and dropped from the views list into the views frame's properties window in order to be displayed on a virtual control panel. This window also allows the choice whether the view will be read-only or if it can be edited.



The *Visibility* tab allows the option to set the view to remain visible as part of its containing group.

-)ai	View	Visibility	
		✓ Visible as part of containing group.	

View properties

To delete the frame, right-click into it and select the *Delete* function.

## 6.34 Map

The *Map* function allows the creation of button ranges on previously edited images. These can then be switched on a panel. In order to be able to create and edit image maps prior to their use, the Software Image Map (see chapter 18) is required. This function also requires a frame. To create a frame, select the function in the panel toolbox and drag the cursor from the top left to the bottom right while pressing the left mouse button to draw a frame in the required size.



Image Map frame

In the panel edit, image maps have a black frame with the white caption *Map* and the name of the currently selected image map on a black background. Using the browser function next to *Name of map file*, the image map can be added to the frame. If no image map is assigned, the caption will read *Map: ">unknown>*". The *Visibility* tab offers the option to keep the image map visible in its containing group. The frame can be deleted by right-clicking into it.



Image Map on vsmPanel

## 6.35 Audio Level Meter

Using the *Audio Level Meter* function, peak meter data that is available as gadget (see chapter 10) can be displayed on a virtual panel. Again, this function requires a frame. To create a frame, select the function in the panel toolbox and drag the cursor from the top left to the bottom right while pressing the left mouse button to draw a frame in the required size.



Audio Level Meter frame

Once an *Audio Level Meter* frame has been placed on a panel, the following new tab appears in the properties window.

-ja	Style Peakmeter Colors C	Dynamic   Visibility
	Metering:	Alarms:
Correlation:	<empty></empty>	<empty></empty>
Left:	<empty></empty>	<empty></empty>
Right:	<empty></empty>	<empty></empty>

Peakmeter properties

The tab *Colors* allows the selection of colours, similar to the same function for buttons. The *Dynamic* tab offers space to enter Dynamic Attachment Scripts (see chapter 19.8).

The tab *Peakmeter* offers the following options:

- The appropriate correlation gadget parameter can be dragged and dropped from the gadget list (see chapter 10 Gadgets) into the field next to *Correlation* for the metering.
- Left represents the respective PPM gadget parameter of the left channel, *Right* the PPM gadget parameter for the right channel. For the metering, both can be inserted into the appropriate field from the gadget list using drag and drop.
- In the spaces below *Alarms*, gadget parameters for alarms are placed (the first field represents correlation, the second the left channel, and the third the right channel).

( <b>m</b> )	Style	Peakmeter Colors Dynamic Visibility		
Caption:		Style:	DIN	•
db Offset:	0	Segments:	53	-
	, 	Effect	Smooth	•
		Channels:	Both	•

View options

The *Style* tab offers the following options:

- Caption is merely used as label in the panel edit mode.
- The drop down menu beside *Style* allows the choice between different display options.





- The drop down menu beside *Segments* offers the choice between 26 and 53.
- The menu next to Effects offers the choice between Smooth and Fast.
- The options in the drop down menu next to Channels include Both, Left, and Right.

Using the option under the *Visibility* tab, the *Audio Level Meter* can be set to be visible within its containing group. The frame can be deleted by right-clicking into it and selecting *Delete*.



## 6.36 Alarm Management

## 6.36.1 Configuration of the Alarm Management Console

Prior to configuring an alarm management console on a virtual control panel, a free layout area needs to be defined in the panel area.

145	anel Edit New Page Dra 8 x 600	- (8) Alarms Move < Name wr Move > Delete	Copy	a Layout	_												(_   <b>-</b>   ×
		01	02	03	04	05	06	07	08	09	10	11	12	13	1.4	15 Suttons Q は □ + と ち ち + + + + + + + + + + + + + + + +	6
									Ļ								

Drawing a layout area

Within this area, the page item for the alarm management can have any size.



Placing an alarm management page item on the panel

Next, alarms (see chapter 16.1 Alarm) or *AlarmStacks* (see chapter 16.2) are dragged and dropped into any position in the alarm management console. In the panel edit, this function is displayed with a black frame and, as long as no alarms or alarm stacks are assigned to it, the white caption *Alarms: "<unknown>"* on a black background. The frame can be deleted by right-clicking into it and selecting *Delete*.



Assigning alarms and AlarmStacks

When an alarm becomes active, it will be displayed in the appropriate colour. At the same time, the individual, active alarm is indicated in an *AlarmStack*. If this panel ID is opened with the vsmPanel, the following alarm management console will appear.

D:1 Connect to_										vsmPanel 3.0.62.0	@192.168.17.40 (Single	e Server Mode)
Alexen Goostelev Cert & Rover 1 Access Fill Rover 1 Access Fill Rover	Alarm FAN Gertinkert	Alarm PSU Router 1										
	Begin	End	Source	Target	Log Signaled	Alarm	Priority	Processed	Processed by	Acknowledged	Acknowledged by	
	€ 2011-04-19 15:39:11	Alarm PSU Router 1			PSU Router 1 Failure	Alarm PSU Router 1	0					E i
	2011-04-19 15:39:11	Alarm PSU Router 1			PSU Router 1 Failure	Alarm PSU Router 1	0					🗉 i
	2011-04-19 14:33:10	2011-04-19 15:29:54	)		PSU Router 1 Failure	Alarm PSU Router 1	0		(System Restart)			Ei
Grouped Bus Single Bus Release Selection Find Selection												
	Unacknowledged High P	riority Low Priority	Nuisance Log All									History

#### Alarm management console

## 6.36.2 Operating the Alarm Management Console



Individual	alarms
------------	--------

Active alarm notifications are highlighted and displayed in the appropriate colour in accordance with the colour specifications (see chapter 16.1.3 Alarm Module). The process status of the alarm can be accessed by left-clicking onto an active alarm. A right-click on the active alarm, however, will open a sub-menu offering the following options: *Process, Acknowledge,* and *View in X/Y Panel.* 



The *AlarmStack* (see chapter 16.2) groups all individual alarms and shows the active alarm in accordance to the created priority list. The colours used hereby depend on the colours defined for each individual alarm (see chapter 16.1.3 Alarm Module). By left-clicking onto an active alarm, the process status of the alarm is activated. A right-click on the active alarm will open a sub-menu offering the following options: *Process, Acknowledge, and View in X/Y Panel*:

- Process: This option registers the user editing the alarm and puts the alarm into the process state. Depending on the control panel configuration, certain process panels can be created and equipped with the relevant switch information. The alarms are then saved in the history where they can be viewed at any time.
- Acknowledge: This option registers the user who confirmed the alarm and moves the alarm into a different sub category. The alarms are then saved in the history where they can be viewed at any time.
- *View in X/Y Panel*: This option transfers the information belonging to the alarm to a control panel previously configured to this end.

Please note: All control panel interaction for processing or viewing requires an appropriately configured dynamic attachment script (see chapter 19.8).



A click onto *Grouped Bus* summarizes all alarms in groups. They are, however, only summarized if they are independent from each other. Dependence can occur, for example, if the alarm for FSY 1 (picture lost) triggers an alarm on the TX path which is switched onto the

FSY (and an appropriate alarm exists for it). In this scenario, all affected signals are shown at once. If the grouped bus is confirmed by pressing *Acknowledge* or edited further through *Process*, all alarms dependent on it are put into this state at the same time.

Silence on PGM A Pic. lost o TX 1	Alarm FSY 1 Pic. lost on TX 2	n Pic. lost on TX 4			
	Begin	End	Source	Target	Log Signale
	2011-06-06 06:59:59	Pic. lost on TX 1	Ext 1	TX 1	
Grouped Bus	2011-06-06 06:59:57	Alarm FSY 1	Ext 1	FSY 1	
Single	2011-06-06 06:54:43	2011-06-06 06:59:56	Studio A L	PGM A L	TX Problem
Bus	2011-06-06 06:48:34	2011-06-06 06:54:45	Ext 1	TX 3	
Release Selection					
Find					
Selection	•				•
	Unacknowledged High P	riority Low Priority N	luisance Log All		History

Single Bus view

By clicking *Single Bus*, all alarms are listed individually. They are, therefore, not grouped, and alarms have to be changed to either the *Acknowledge* or the *Process* state individually.

Silence on PGM A Pic. lost o TX 1	Alarm FSY 1 On Pic. lost on TX 2 Fic. lost on TX 3	Pic. lost on TX 4				
	Begin	End	Source	Target	Log Sign	
	2011-06-06 06:59:59	Pic. lost on TX 1	Ext 1	TX 1		=
Grouped Bus	2011-06-06 06:59:57	Alarm FSY 1	Ext 1	FSY 1		
Single	2011-06-06 06:54:43	2011-06-06 06:59:56	Studio A L	PGM A L	TX Problem	
	2011-06-06 06:48:40	2011-06-06 06:59:57	Ext 1	FSY 1		
Release Selection	2011-06-06 06:48:34	2011-06-06 06:54:45	Ext 1	TX 3		
Find Selection		2011 OF OF OF F4.42	Caller A 1	DOM A L	TV 0	٣
	Unacknowledged High P	riority Low Priority N	luisance Log All		History	

Release Selection/Find Selection

Using the button *Release Selection*, selected alarms (with a blue background) can be deselected. The function *Find Selection* allows the recovery of selected (with a blue background) alarms. For extensive alarm lists, this button helps to specifically focus in on the selected individual alarms.

## 6.36.3 Columns of the Alarm Management Console

Silence on PGM A	Alarm FSY 1 hho@LSB							Pic. lost on TX 1	Lost on TX 2	Pic, lost on X 3 TX 4		
	Begin	End	Source	Target	Log Signaled	Alarm	Priority	Processed	Processed by	Acknowledged	Acknowledged by	1
	2011-06-06 06:59:59	Pic. lost on TX 1	Ext 1	TX 1		Pic. lost on TX 1	0	2011-06-06 07:23:17	hho@LSB			Ë =
Grouped Bus	2011-06-06 06:59:57	Alarm FSY 1	Ext 1	FSY 1		Alarm FSY 1	0			2011-06-06 07:23:25	hho@LSB	E
Single	2011-06-06 06:54:43	2011-06-06 06:59:56	Studio A L	PGM A L	TX Problem	Silence on PGM A	0					
	2011-06-06 06:48:40	2011-06-06 06:59:57	Ext 1	FSY 1		Alarm FSY 1	0			2011-06-06 06:59:57		E
Release Selection	2011-06-06 06:48:34	2011-06-06 06:54:45	Ext 1	TX 3		Pic. lost on TX 3	0					
Find Selection	1011 06 06 06.45.13	2011 06 06 06.64.42	Caller A. I	DCMAI	TV D 61	BONA A	^			2011 06 06 06.54.42		
	Unacknowledged Hi	igh Priority Low Priori	ty Nuisance Lo	g All								History

Alarm View details

- Begins shows the time and day on which the alarm became active.
- *End*: For active alarms, the name of the alarm will be displayed. For inactive alarms, the end of the alarm will be displayed.
- Source: If possible, this column shows the connected source that is affected by the alarm.
- *Target* displays the target corresponding to the alarm.
- Log Signaled displays the name used for the reporting. This entry can be found in the vsmStudio.log file (see chapter 2.3.3.1 Folder Log Files). The name is defined during the set-up of the GP-I/O (see chapter 16.1.2 Alarm GPO).
- Alarm displays the name of the alarm.
- *Priority* indicates the priority of the alarm
- Processed shows at what time and date the alarm was changed to the Processed state.
- Processed by shows the vsmPanel PC user who put the alarm into the Processed state
- *Acknowledged* indicates the time and date at which the alarm was changed to the status *Acknowledged*.
- Acknowledged by indicates the vsmPanel PC user who changed the alarm's state to Acknowledged.

## 6.36.4 Alarm Report

A report for the problem can be saved by selecting the text icon in the backmost part of the alarm list.

🚟 Edit Report			3
Comments			
Comment History:	2011-06-06 07:13:05: hho@LSB wrote: Checkl 2011-06-06 07:27:51: hho@LSB wrote: Hardware failure. Send to manufacturer		*
			Ŧ
Add Comment:	Hardware returned		
	ОК	Cancel	

Report window

- Unacknowledged shows all alarms that have not yet been acknowledged.
- High Priority shows all alarms (acknowledged or not) with high priority.
- Low Priority show all alarms (acknowledged or not) with low priority.
- Nuisance shows all alarms that have been assigned the status Nuisance.
- Log all shows all alarms.
- History shows past alarms and allows the export of "all" alarms or alarms from the "current day" into a file.

## 6.37 Media Player

Using the *Media Player* function, different audio and video files can be played back on a virtual panel. This function also requires a frame. To create a frame, select the function in the panel toolbox and drag the cursor from the top left to the bottom right while pressing the left mouse button to draw a frame in the required size.



Media Player frame

The default colour style for the *Media Player* in the panel edit is a black frame with a white caption on a black background in the top left corner.



#### Media Player on vsmPanel

## 6.38 Browser

The *Browser* function allows the display of websites or switch configurations online on a virtual panel. It also provides complete internet browser navigation. This function also requires a frame. To create a frame, select the function in the panel toolbox and drag the cursor from the top left to the bottom right while pressing the left mouse button to draw a frame in the required size.



In the panel edit, the browser is displayed with a black frame and a white caption on a black background in the top left corner of the frame.

The homepages that will be displayed in the browser window when the panel is opened with vsmPanel can be entered under *Initial* in the *Browser* tab of the function's properties window. The standard URL can be entered in the field beside *URL*. If the box in front of *Show URL* is ticked, the web address will be shown. If *Edit URL* is checked, the address can be changed. The option *Show Navigation Button* allows the user to navigate to the previous or the next site just as with a normal browser.



Web browser on vsmPanel

The frame can be deleted by right-clicking into it.

## 6.39 Storage List

The function *Storage List* allows the creation, loading, and saving of storage groups (see chapter 9) on a control panel. This function also requires a frame. To create a frame, select the function in the panel toolbox and drag the cursor from the top left to the bottom right while pressing the left mouse button to draw a frame in the required size.



Storage List frame

- The Storage tab of the properties window offers the following options:
- The storage group or the storage disc that is to be used on the panel can be added in the field beside *Storage* using drag and drop.
- Under *The user may*, the functions to load and save storage groups or storage discs are offered.
- If the option Ask before Load or Store remains active, a click onto save or load will prompt a window asking for confirmation of the action.
- Create Folders enables the creation of new storage groups in the storage frame on the panel.
- Using *Rename Folders*, it is possible to rename new storage groups in the storage frame on the panel.
- Storage groups can be deleted using *Delete Folders*.
- Create Discs enables the creation of new storage discs in the storage frame on the panel.
- Rename Discs enables the renaming of new storage discs in the storage frame on the panel.
- Storage discs can be deleted in the storage frame on the panel using *Delete Discs*.

The frame can be deleted by right-clicking into it.

# **7** Secondary Commands

A Secondary Command is a button function. It allows buttons to be assigned functions in addition to their primary functions. Secondary commands can be accessed as tab in the panel edit's properties window. Alternatively, the relevant secondary function can simply be placed on the respective button while pressing the *Ctrl*-button.

17       18       19       20       21       22         24       25       26       27       28       29       30         Properties of "5:"Test", Page 2, #16; Control"         Image: Control Style       Secondary       Jayers       Attachment       Dynamic       Visibility       Extra         Image: Control Style       Secondary       Jayers       Attachment       Dynamic       Visibility       Extra         Image: Application       Condition       Action       T       Value       Name         Image: Control Style       Secondary       Jayers       Attachment       Dynamic       Visibility       Extra	GPI	×0	- 9	×0	×0			-
24     25     26     27     28     29     30       Properties of "5:"Test", Page 2, #16; Control"     Image: Control Style Secondary Dayers Attachment Dynamic Visibility Extra     Image: Control Style Secondary Dayers Attachment Dynamic Visibility Extra       Image: Application Condition Action To Value Name       Image: Control Style Secondary Dayers Attachment Dynamic Visibility Extra	GPI GPI I-000	17	18	19	20	21	22	23
Properties of "5:"Test", Page 2, #16; Control"	24	25	26	27	28	29	30	3
								1 1 1

Secondary commands

Once a secondary command has been added, a white *S* will be shown on green background in the bottom of the button.



# 7.1 Configuration of Secondary Commands

There are generally two ways to add an additional function to the secondary field: The function can either be placed into the secondary field using drag and drop, or directly onto the relevant button while pressing the *Ctrl*-button.

д	Cor	ntrol Style S	Secondary Lay	vers Attachn	nent Dynamic	Visibility Extra	1
Appl	lication	Condition	Action	∀ Value	Name	>	
	- Merry						161

If an element has been placed in the secondary field, the predefined columns *Application*, *Condition*, *Action*, *Value*, and *Name* offer different ways to specify further how the secondary commands are to be executed. The options available in the field under *Action* hereby depend on the selected function.



Options under Application

The options under Application and Condition are the same for all secondary commands.



The following options are available under Condition:

- Released (default setting): The secondary function will be executed as soon as the button is released.
- Pressed: The secondary function will be executed when the button is pressed.
- Sync: If the button itself as well as the secondary command is a gadget parameter (see chapter 10) with the same function and the same value range (that is gain from 0 to -128dB), the value used in the secondary command will follow the value of the button.
- Held 1sec: The secondary function is executed when the button is pressed for one second.

## 7.2 Secondary Commands and Actions



Action options for targets

The following functions can be placed in the secondary window:

Target: *Disconnect* (default setting) connects the target with the blind source.
 Previous connects the target with the previously connected source.



Action options for crosspoints

Crosspoints: Connect (default setting): The crosspoint is placed. Queue: Disconnect
 & Flush refers to the queue connect function. Toggle switches between the crosspoint or the crosspoint blind > target at the push of a button.



Action options for storage groups

 Storage groups: Load (default setting) loads a pre-defined storage group, Save saves it.



Action options for GPOs

 GPOs (see chapter 10): *Toggle* (default setting) changes the state of the GPO to the currently unused one (that is if the GPO is *ON*, toggle will turn it *OFF* and vice versa). Set activates the GPO, *Clear* deactivates it. *Pulse* will activate the GPO for one second.



Action options for gadget parameters

Gadget parameters (see chapter 10): Set Absolute (default setting) changes a
parameter to the value that was entered in the Value field. Set Relative will change
the parameter by the interval defined in the Value field (with +/- as prefix).



Action options for panels

Panel: *Escape* (default setting) deselects the active components of the selected control panel. *Goto* jumps to a different panel. *End Alarm Processing* ends the alarm processing on the selected panel. With the function *Assign DAS Alias* that can be found below the panel name, the secondary function can be used in connection with *Dynamic Attachment Scripts* (DAS) by entering a unique name (see chapter 19.9 Secondary Commands and Dynamic Attachment Scripts). This allows all secondary functions to be used dynamically.



Providing an alias for dynamic attachment scripts

## 8 Dynamic Attachment Scripts (DAS)

Dynamic Attachment Scripts – short DAS – are scripts that the VSM control system uses to make assignments dynamically.

## 8.1 Configuration of Dynamic Attachment Scripts

Properties of "5:"Test", Page 2, #16; Control"

These scripts are assigned to a button in the *Dynamic* tab of its properties window.

DAS field

As soon as a script has been assigned to a button, a white D on a green background will appear on the button.



DAS marking on buttons

The *Dynamic* window allows the simultaneous configuration of multiple scripts. Scripts are entered line by line and are executed from top to bottom, until a script with a true result ends the execution of the scripts. Dynamic attachments scripts are not case sensitive.

Generally, the same button function (signal, control button, etc.) is selected that the script is meant to generate in the end. A gain, for example, would usually be placed on a control button, while a target would be placed on a target button.

## 8.2 Scripts and Applications

The following scripts can be used for the described applications:

 trace: This script is added in the first line of a DAS and can be used optionally to display the result of a script in the *CommTrace*. Achtung: This script impedes system performance and should therefore be deleted after testing and verification of a script.

- *selectedtarget*: With this script, the target selected on the panel will appear on the button on which the script is executed.
- *selectedtarget.source*: This script allows accessing the source corresponding to the selected target. This function only becomes visible if a source button is used.
- connected source: This script allows accessing the source corresponding to the selected target.
- selectedsource: This script allows access to the selected source.
- selectedgadget: If a selected parameter can be activated, it can be accessed with this script.
- selectedcomponent: With this script, a selected element, a parameter, or a GPI (except for signals) can be accessed.
- attached: This script gives access to a function that is concealed "under" a button. If, for example, a source or a target is placed on a button, and a GPI or gadget button is placed on the same button, the script attached will provide the "attached" function. This means that if a target is placed on the button first followed by a source button, the script attached.source will provide the source of the target previously placed on the button.
- *current*: With this script, the last evaluated script will be shown until it is re-evaluated. The script *selectedtarget current* results in the display of the last active target until a new target is selected.
- target= or source=: These scripts are generally used in combination with a control button. They become crosspoint buttons.
   target=selectedtarget
   or
   source=selectedsource
   for example, dynamically generate a crosspoint from the selected target and source.

If a source should be generated dynamically (for example the currently selected source) and the corresponding target should be locked, a crosspoint with the locked target is used. The source of the crosspoint is hereby irrelevant. In this scenario, the script would look as follows:

### target=attached

#### source=selectedsource

The same procedure works the other way as well (dynamic target, locked source).

*pSource*: The p in the beginning of the scripts stands for physical. When this prefix is used, the next available physical source in the signal flow is displayed. Virtual signals in the signal flow are ignored.

#### selectedtarget.psource

for example, displays the next outgoing physical source of the selected target.

- fSource: The f in the beginning of the script stands for far. Using this prefix, the first source in the signal flow will be displayed.
- cardinal: The attribute main source or cardinal source was added in order to be able to reach signals in the signal flow that are neither located at the beginning nor before the selected target. A signal can only be found using this script if the attribute signal path Is "Cardinal" Source is selected in the signal path properties (see chapter 5.2.4 Signal Path Attributes).

Pool	64x32 Images	36x241	mages	Sync
Information	Connections	Attributes	Labels	Tally
ionnection Relevant No loopba Is "Billind" Is "Cardin Talk Bac pecial Settings: I 4-Wire - Target ca I anget ca I connectin	nt Settings: ack Signal Source al" Source * Source source is currently un source is currently un source is currently un source is currently un	source when co	nnected to a Blind	d Source
☐ Invert "Sv ☐ Invert "Sv	vitch behavior" on So witch behavior" on Ta	xed source again urce rget	retums to Blind S	Source

Main source indicator

selectedtarget.cardinalsource

would be an example of a valid script.

- target: This additional script allows access the target located at the end of the signal flow from another target in the signal flow, for example by using the script
- selectedtarget.target
- meta: This script is used to gain access to previously created gadgets (see chapter 10) from pre-defined meta gadget containers (see chapter 11). The relevant syntax becomes clear in the following example: If the corresponding volume has been assigned to a target in the meta gadgets, the script selectedtarget.meta:"Volume"

will provide the corresponding volume value. Similarly, this script can be used for all values stored in meta gadget containers.

activate=: This script allows the dynamic activation of a parameter, for example to be able to modify it through an incremental encoder. As an example: In order to modify the volume belonging to a selected target, this value must be generated and activated on the position of the incremental encoder.
 activate=selectedtarget.meta:"Volume"
 selectedtarget.meta:"Volume"
 or
 activate=selectedtarget.meta:"Volume"
 activate=selectedtarget.meta:"Volume"

 - <signal>:"layer": This syntax allows the generation of values (that is signals, parameters, etc.) due to definitions of pseudo devices (see chapter 12). Based on the selected target,

selectedtarget:"Audio 2"

for example, searches the target that is located in the column *Audio 2* under pseudo devices (see chapter 12.2 New Pseudo Device Rule).

- /follow=: With this script, parameters can be set to follow each other. This becomes relevant for application with stereo gains. Using the script Selectedtarget: "Audio 2".meta: "Gain"/follow=selectedtarget.meta: "Gain" the gain parameter based on the selected source and belonging to the signal defined in the column Audio 2 in the pseudo device rules is set to follow the gain of the selected target.
- xconnect: With this script, a crosspoint generated by DAS is executed at once. For example, to dynamically connect a locked target to a selected source, a crosspoint with the required target is chosen. The script on the crosspoint button would read as follows:

target=attached

## source=selectedsource xconnect

*if*: This script allows the generation of events depending on the occurrence of certain other events. If, for example, a crosspoint is only to be generated if a gain parameter was added to the selected target in the meta gadget container, the following script would be used:

*if(selectedtarget.meta:"Gain") target=selectedtarget source=selectedsource* 

 visibility=: In combination with the if-script, buttons can be made visible or invisible with this script. If a navigation button is to be made invisible if the selected target has a meta gadget gain:

*if(selectedtarget.meta:"Gain") visibility=false* 

## **9** Secondary Commands and DAS

*Dynamic Attachment Scripts* can be used in combination with secondary commands. By combining the two, dynamic secondary commands can be generated on buttons. To do so, a signal or parameter has to be added in the secondary tab und button properties. Select the function *Assign DAS Alias* in the column *Name* and enter a unique name. This name must be used in the *Dynamic* window in the future.

	occondary	Layers	Attachi	nent pynamic	VISIDIIIQ	Exua
on	Action	Ť.	Value	Name		
ed	Set Abs	olute 💌	0	+ Gain		

Assigning gain as DAS Alias

If, for example, the gain of the selected target is to be locked at -20dB on a generic button, place an arbitrary gain in the secondary window and define it according to the requirements (*Set Absolute* with value -20). Then, select *Assign DAS Alias* in the column *Name*, and enter a name, for example *Gain*. Next, the following script must be used in the *Dynamic* window: *"Gain"=selectedtarget.meta:"Gain"*.



## 10vsmPanel Update

## 10.1 vsmPanel Versions 1.x and 2.x

Please note: Before updating vsmPanel, it is recommended to backup the currently running version of vsmPanel. To do so, copy all files located in the folder \VSM\vsmPanel onto your backup partition.

Corr	puter	VSM (D:) VSM	VsmPanel Vsm	Searc	h vsmPanel	
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📃 Recent Places	*	Date modified	Name	-	Туре	Size
		🚳 2010-03-18	vsmLib.Controls.dll		Application extens	207 K
🕽 Libraries 📄 Documents 🎝 Music		3 2010-03-18	vsmLib.dll		Application extens	154 K
		<b>2010-03-24</b>	vsmPanel.Debug.exe		Application	1.632 K
		2010-03-24	vsmPanel.pdb		PDB File	1.480 K
Pictures	=	2010-03-24 vsmPanel.Release.exe			Application	1.573 K
Pictures Videos		2011-02-01	vsmPanel.Release.exe - Shortcut		Shortcut	2 K
		2010-03-24	vsmPanel-1.0.221.zip		Compressed (zipp	1.862 K
🖳 Computer		2010-03-24	WhatsNew.txt		Text Document	9 K
-	-	•				•
9 items se	electe	d Date modified: 201	0-03-18 19:44 - 2011-02-11 15:29			

Copying vsmPanel files

Place the .zip file provided for the update in the folder \VSM\vsmPanel.


Update .zip file

All files from the .zip-folder will be copied into the vsmPanel folder. Older versions of files located in the vsmPanel folder must be replaced. To do so, delete the old .zip file from the folder and proceed with the installation of the new vsmPanel version.

## **10.2 vsmPanel Version 3.x**

Please note: Before updating vsmPanel, it is recommended to backup the currently running version of vsmPanel. To do so, copy all files located in the folder \VSM\vsmPanel onto your backup partition.

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📃 Recent Places	🚳 2011-01-28	DirectShowLib-2005.dll		Application extens	276	KB	
	🚳 2011-01-28	Ionic.Zip.Reduced.dll		Application extens	144	KB	
🥽 Libraries	2009-09-22	ReadMe.rtf		Rich-Text-Format	51	KB	
Documents	3 2011-01-28	register.cmd		Windows Comma	1	KB	
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🛃 Videos	🔂 2011-01-28	setup_x86.exe		Application	483	KB	
	101-28	Setup_x86.msi		Windows Installer	2.794	KB	
👰 Computer	🚳 2011-01-28	vsmLib.Advanced.dll		Application extens	35	KB	
	🔊 2011-01-28	vsmLib.Controls.dll		Application extens	230	KB	
📬 Network	🚳 2011-01-28	vsmLib.dll		Application extens	180	KB	
	🚳 2011-01-28	vsmLib.Wpf.dll		Application extens	103	КВ	
	🚳 2011-01-28	vsmPanel.Base.dll		Application extens	14	КВ	
	🔕 2011-01-28	vsmPanel.Data.dll		Application extens	112	КВ	
	🚳 2011-01-28	vsmPanel.Discovery.dll		Application extens	28	КΒ	
	🚳 2011-01-28	vsmPanel.Dom.dll		Application extens	58	KB	
	2011-01-28	vsmPanel.exe		Application	1.608	KB	
	2011-01-28	vsmPanel.exe.config		XML Configuratio	2	KB	
	2011-02-11	vsmPanel.InstallState		INSTALLSTATE File	3	KB	
	2011-01-28	vsmPanel.pdb		PDB File	1.762	KB	
	🚳 2011-01-28	vsmPanel.Remote.dll		Application extens	53	КВ	
	🚳 2011-01-28	vsmPanel.Services.dll		Application extens	28	КВ	
	3 2011-01-28	vsmPanel.Transport.dll		Application extens	25	KB	
	10-20	vsmPanel-3.0.57.zip		Compressed (zipp	2.239	KB	
	2010-12-20	WhatsNew.docx		Microsoft Word-D	32	KB	
	3 2011-01-28	WPFToolkit.dll		Application extens	457	KB	
28 items selecte Show more detai	ed Is						

Copying vsmPanel files

Place the .zip file provided for the update in the folder \VSM\vsmPanel.

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🕍 Recent Places	2011-01-28	Ionic Zin Reduced dll		Application extens	144 K	R
<b>E</b>	2009-09-22	ReadMe.rtf		Rich-Text-Format	51 K	B
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Documents	2011-01-28	setup x64.exe		Application	483 K	B
IVIUSIC	i∰ 2011-01-28	Setup x64.msi		Windows Installer	2.794 K	в
Videos	2011-01-28	setup_x86.exe		Application	483 K	в
<b>VIDEOS</b>	2011-01-28	Setup_x86.msi		Windows Installer	2.794 K	в
Computer	3 2011-01-28	vsmLib.Advanced.dll		Application extens	35 K	в
1ª computer	3 2011-01-28	vsmLib.Controls.dll		Application extens	230 K	в
🕤 Network	🚳 2011-01-28	vsmLib.dll		Application extens	180 K	в
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	3 2011-01-28	WPFToolkit.dll		Application extens	457 K	B
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vsmPanel update folder

All files from the .zip-folder will be copied into the vsmPanel folder. Older versions of files located in the vsmPanel folder must be replaced. To do so, delete the old .zip file from the folder and proceed with the installation of the new vsmPanel version (see chapter 19.1 vsmPanel Installation).