POLYWALL PRO

ANY SOURCE ON ANY DISPLAY

Operator Manual

Version 2.0.1033

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Basic definitions and abbreviations

Term	Definition
Designer	Web-interface to operate with displaying units downloaded through Mozilla Firefox or Google Chrome browser.
Displaying tool or Display	Video wall or standard display.
Content	Information content that includes some data.
Scene	Functional content of displaying tool in a certain period of time containing the name and data sources.
Scenario and User's scenario	A set of connected scenes. The scenarios are needed for content preparation beforehand.
Repository	File storage in computer available for the further use.
Graphic Server Redundancy	This is used as a failover mechanism to provide reliability in system configurations. The Graphic Server Redundancy is active and connected as part of a working system. When a key component fails, the Graphic Server Redundancy is switched into operation.
Polywall Agent	Polywall VNC server. Contains feature of each separate operator's monitor display.

Get started

Open **Mozilla Firefox** or **Google Chrome** browser and enter in address line

'http://IP-address_of_Server:8080/Polywall/designer'

Polywall Designer interface will be opened.

HTTPS

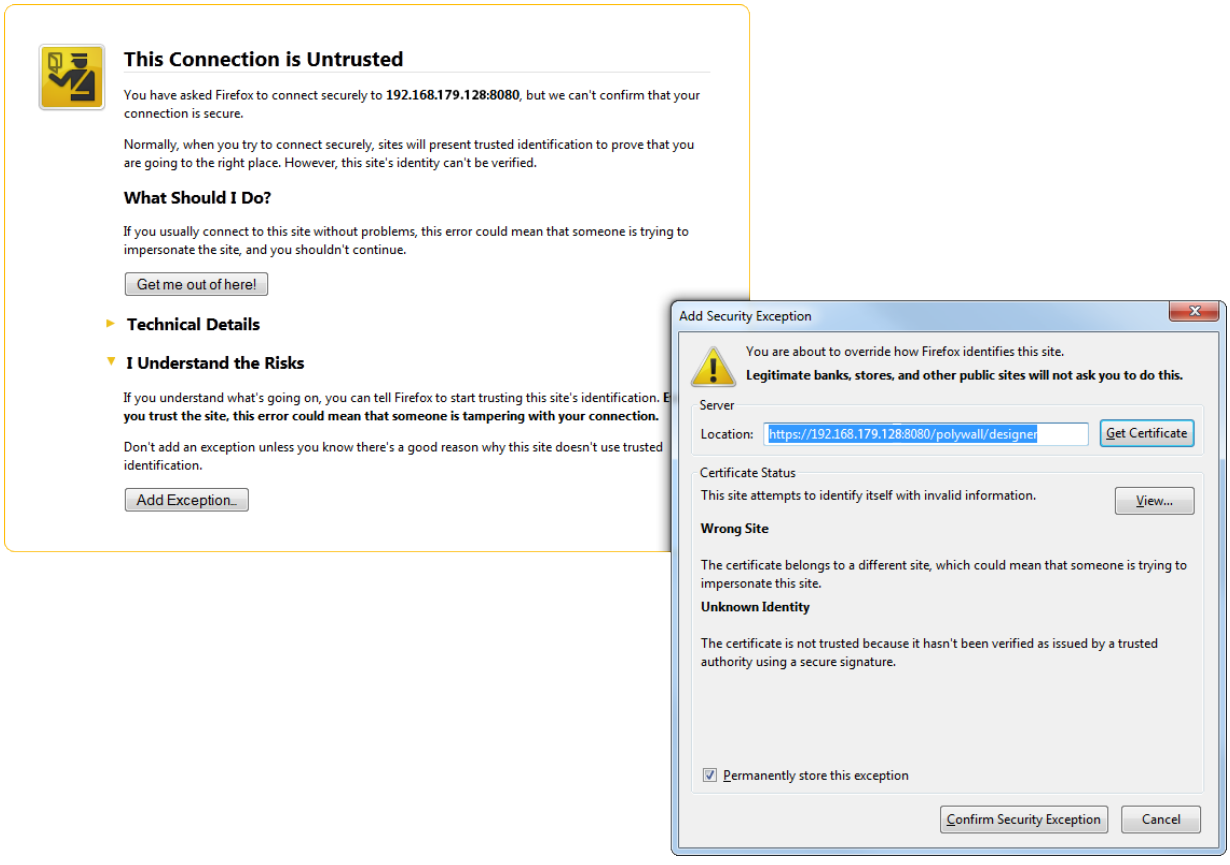
Open **Mozilla Firefox** or **Google Chrome** browser and enter in address line

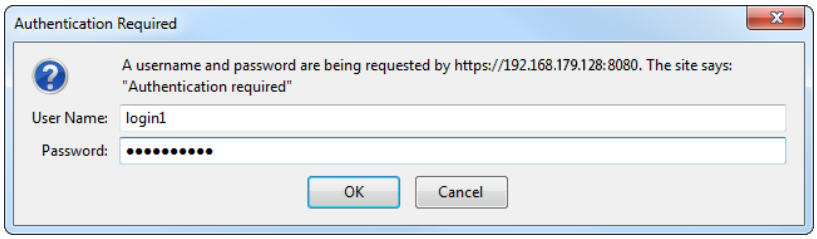
'https://IP-address_of_Server:8080/Polywall/designer'

Polywall Designer interface will be opened.

Security alert will be displayed.

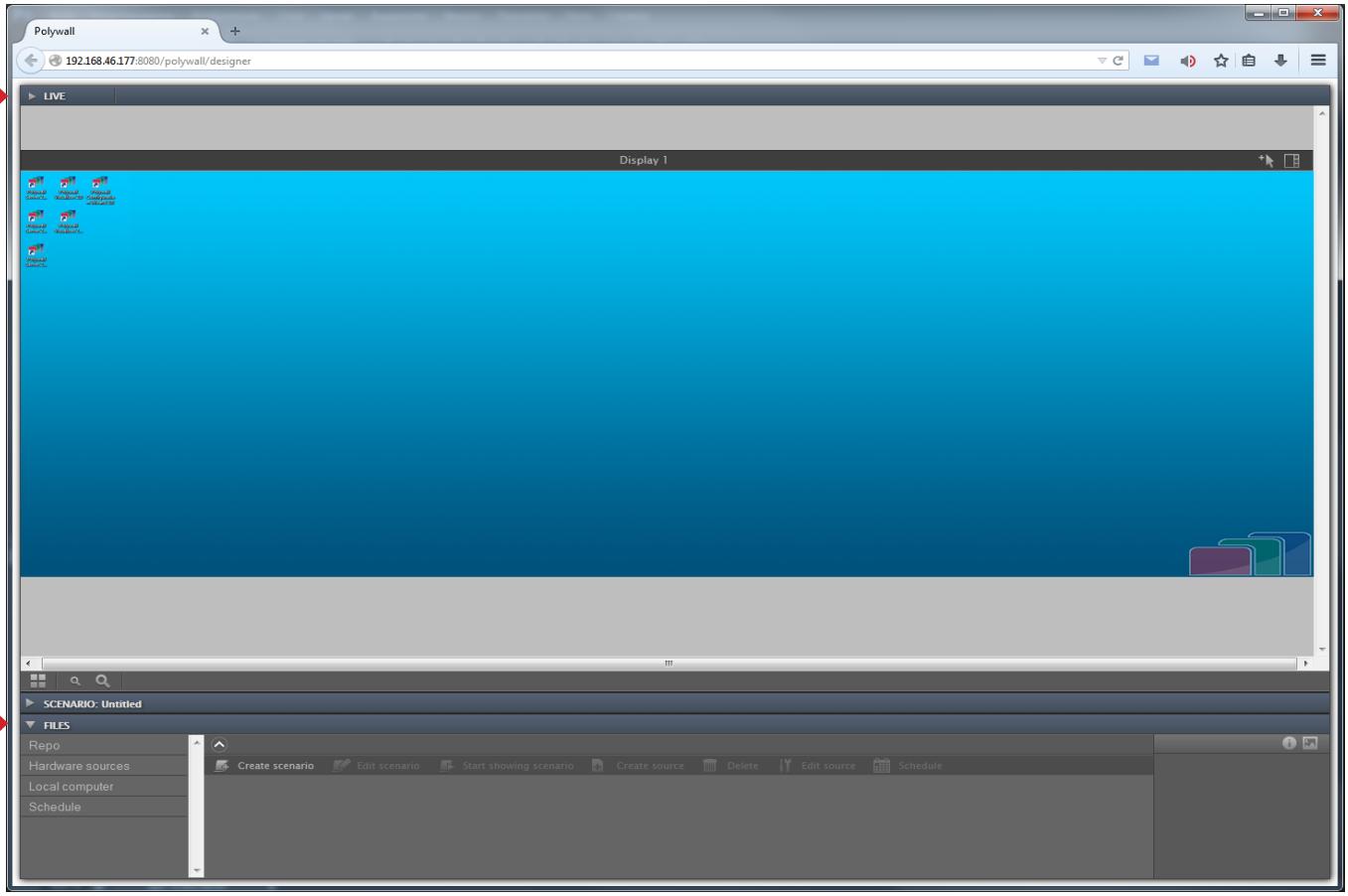
Press **'I Understand the Risks'**, then press **'Add exception…'** and **'Confirm security exception'.**





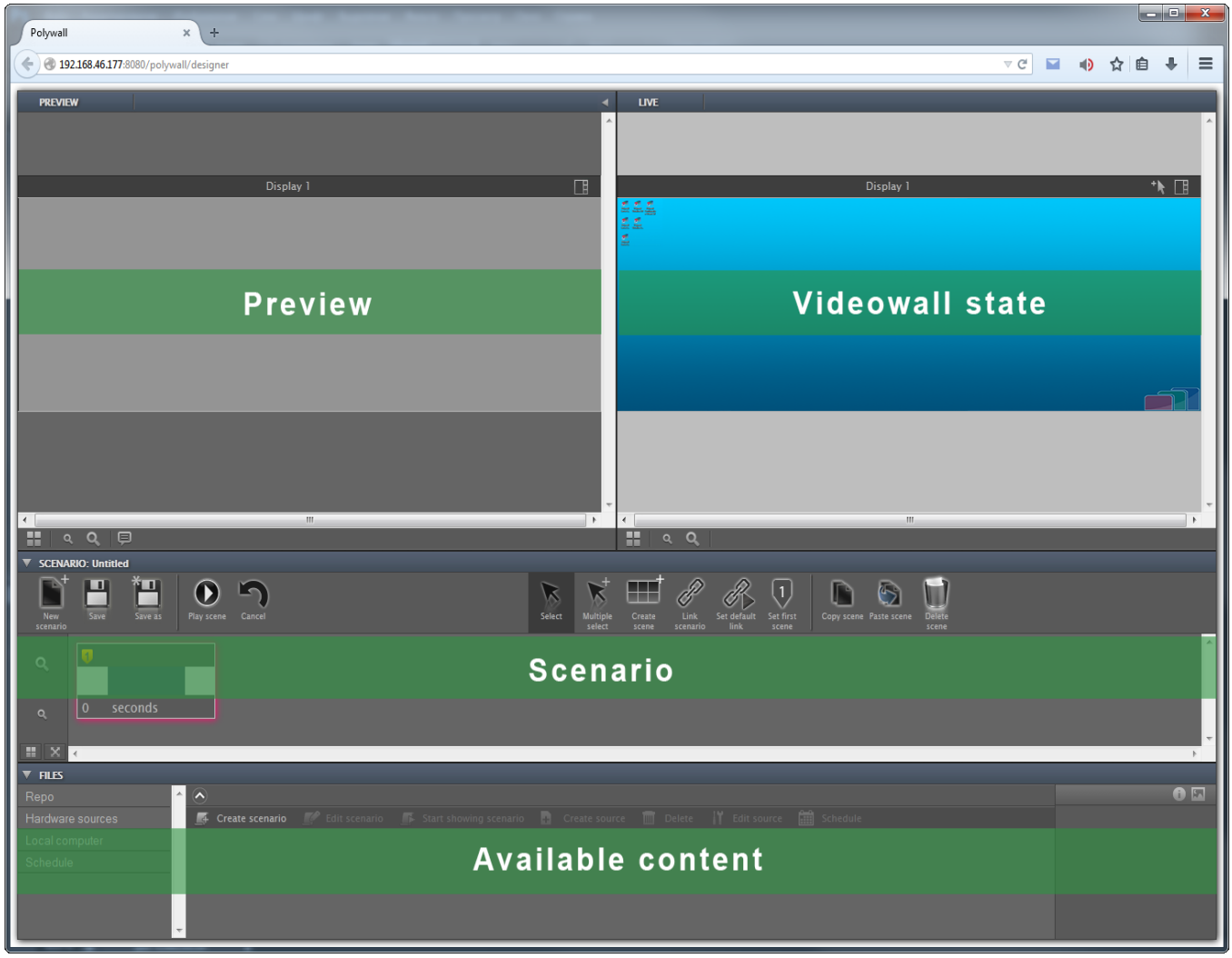
If authorization window is displayed during interface loading, enter your LDAP account details (login and password) or request the required input data from Polywall administrator.

Polywall Designer contains 4 sections.
Section '**Live**' and '**Files**' opened.
'**Live**'. Displays data loaded through displaying units at the moment.
'**Files**'. The section contains files/sources directories available for view.



Sections '**Scenario**' and '**Preview**' are hidden.
'**Scenario'**. Intended for scenario planning and saving to display the content.
'**Preview**'. Intended for preliminary scene preview.

Full Polywall Designer interface contains:

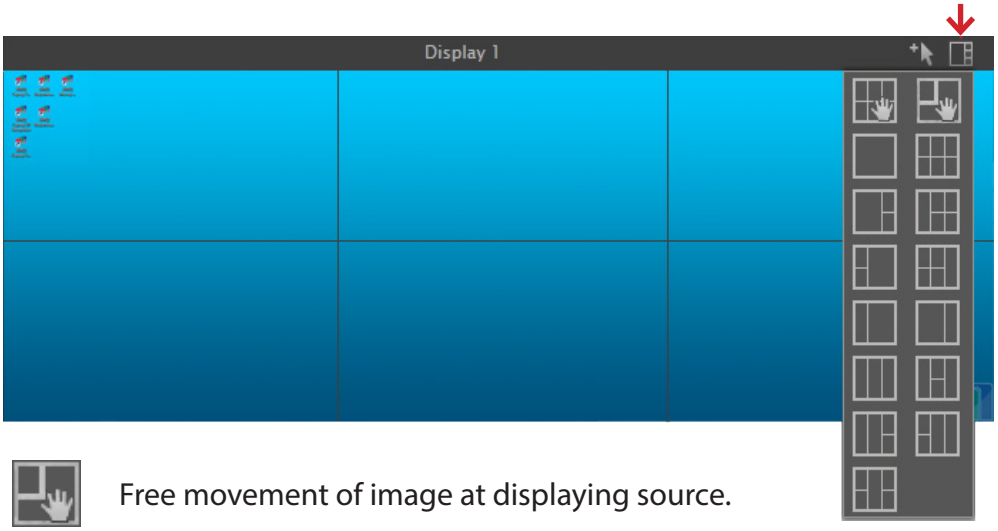


PRO

If display is partially overlapped with blue, the account is prevented from control of this part of display.

Change of displaying units layout

The section '**Live**' shows available displaying tools.
Find the layout button on the dashboard and choose the needed layout.
Layouts available will change depending in video wall configuration.



Free movement of image at displaying source.

Movement of image at displaying source to grid.

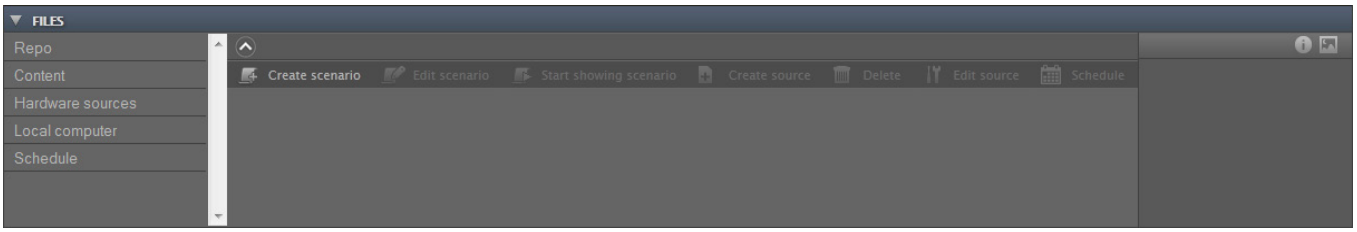
Scale change

In the left lower corner of 'Live' section is located a scale panel with the next functionality:

1. return to default scale at the Designer screen;
2. zoom out of displaying units at the Designer screen;
3. zoom in of displaying units at the Designer screen.

Content

Content available for displaying is located in section '**Files**' in the bottom of Polywall Designer. The left corner contains the available repository. They vary depending on configuration of your system.



- '**Local computer**' is a folder in operator computer.
- '**Schedule**' is intended to show scenario schedules available in this folder/server.
- '**Hardware sources**' contains hardware sources connected to server.
- '**[Display name] Inputs**' contains hardware sources connected to the display directly.

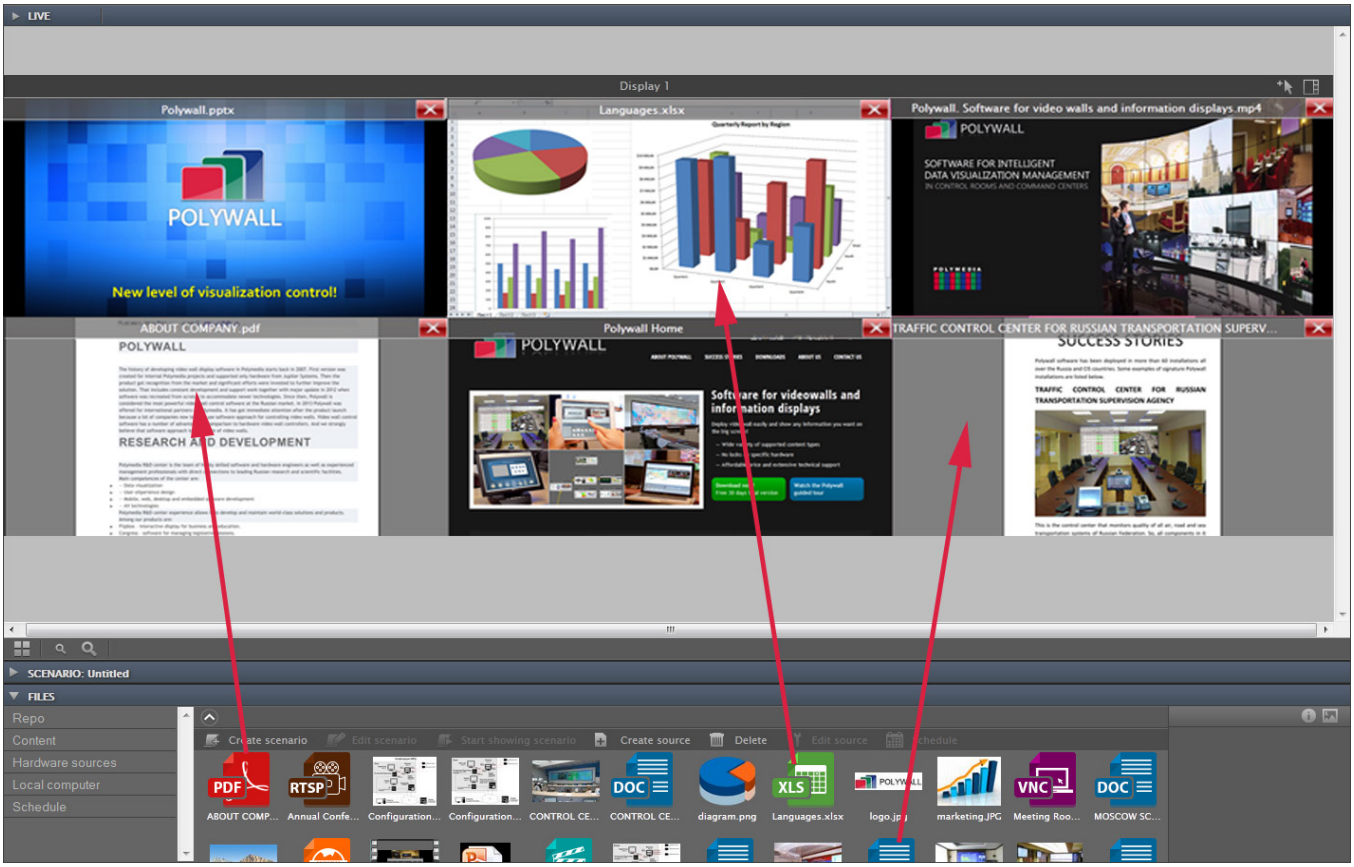
All the other folders can be located at the other computers.

Content display

Move the needed content to the displaying tool.

Move the content to the required place at the display in needed.

To display some types of Web-page content Flash Player is required.



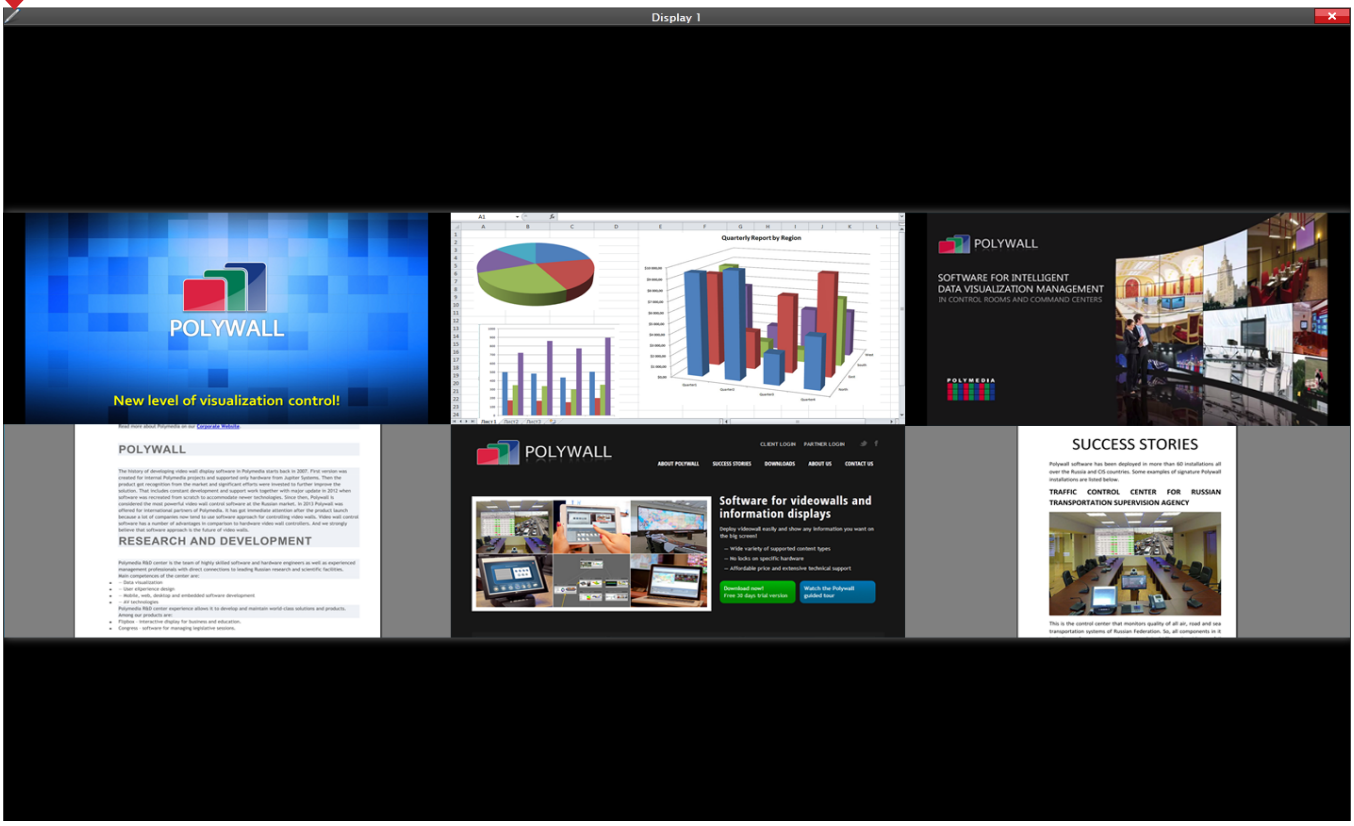
The following types of displaying sources are supported:

	Sources	POLYWALL	POLYWALL PRO
Software	MS Office (DOC, XLS, PPT, DOCX, XLSX, PPTX)	✓	✓
	Image (JPG, JPEG, BMP, GIF, PNG)	✓	✓
	Video (AVI, MPEG, WMV, 3GP, 3G2, MOV, MPG, MP4, FLV, MKV)	✓	✓
	Ip-camera	✓	✓
	Web-pages	✓	✓
	Video stream (RTSP, H.264)	✓	✓
	Remote desktop (VNC Viewer)	✓	✓
	PDF	✓	✓
	Text	✓	✓
	Application (EXE)	✓	✓
	Polywall Agent (Polywall VNC Server)	✗	✓
	Playlist (AVI, MPEG, WMV, 3GP, 3G2, MOV, MPG, MP4, FLV, MKV)	✓	✓
Hardware	Hardware RGB-source	✓	✓
	Computer, server station	✓	✓
	Video-conference communication terminal	✓	✓
	Document-camera	✓	✓
	Video camera (hardware video-source)	✓	✓
	DVD-player	✓	✓
	TV-tuner	✓	✓

Management of Polywall sources

Press the button to control content.

Drawing over the sources



During management of Polywall sources press the market icon in the left upper corner.

The next functions are available:

- Instrument selection: marker and eraser;
- Colour selection: red, green and blue;
- Thickness selection: 1, 3, 5, 10, 20, 30;
- Full erasing of all drawn at the display;
- Cancel of full erasing.

Polywall system provides its control elements for each source type. Control elements are shown during selection of displaying source at display.

PDF

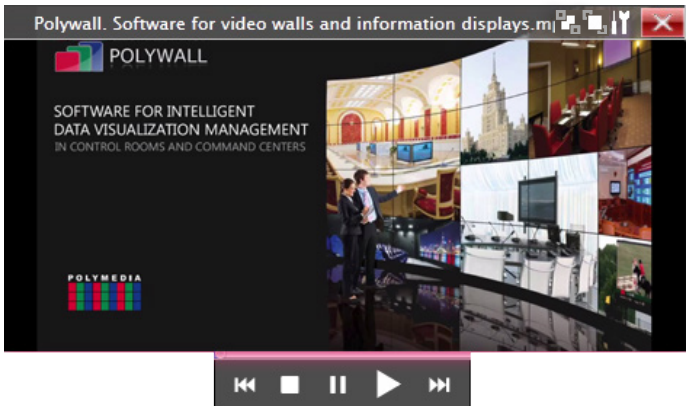
Functionality:

- document navigation in 4 directions using arrows;
- scaling using '+' and '-' buttons;
- shift to page up/down using '▷▷' and '◁◁' buttons;
- shift to first/last page using '|◁◁' and '▷▷|' buttons.

Video

Functionality:

- video Rewind forward/back using '|◁◁' and '▷▷|' buttons;
- pause button '||';
- stop button '■';
- reverse button '▷'.



Microsoft PowerPoint

Functionality:

- shift to page up/down using '▹' and '◃' buttons;
- shift to first/last page using '|◃' and '▹|' buttons.

Microsoft Word

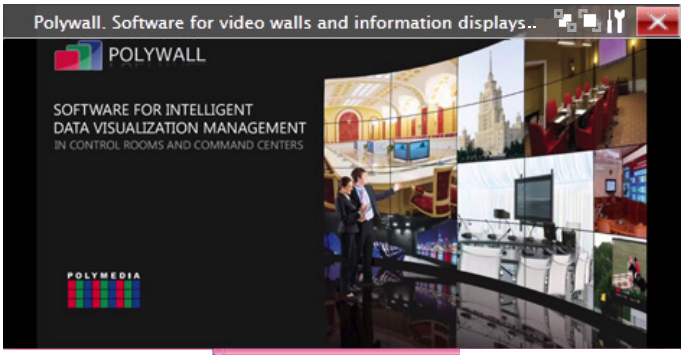
Functionality:

- document navigation in 4 directions using arrows;
- scaling using '+' and '-' buttons;
- shift to page up/down using '▹▹' and '◃◃' buttons;
- shift to first/last page using '|◃◃' and '▹▹|' buttons.

Playlist

Functionality:

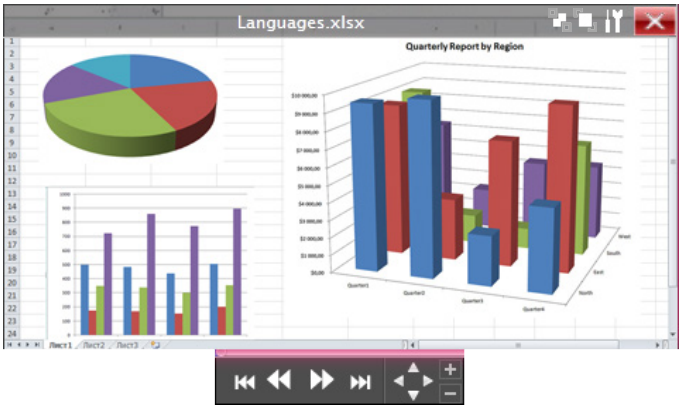
- to switch video use buttons '|◃◃' and '▹▹|' buttons;
- pause button '||';
- stop button '■';
- reverse button '▹'.



Microsoft Excel

Functionality:

- document navigation in 4 directions using arrows;
- scaling using '+' and '-' buttons;
- shift to page up/down using '▹▹' and '◃◃' buttons;
- shift to first/last page using '|◃◃' and '▹▹|' buttons.



IP camera and Stream video

Functionality:

- refresh the source.
- PRO use VLC/Datapath SQX/Matrox IPX. (Set desired option in Visualizer configurator GUI).

Web-page

Functionality:

- Web-page navigation in 4 directions using arrows;
- scaling using '+' and '-' buttons.

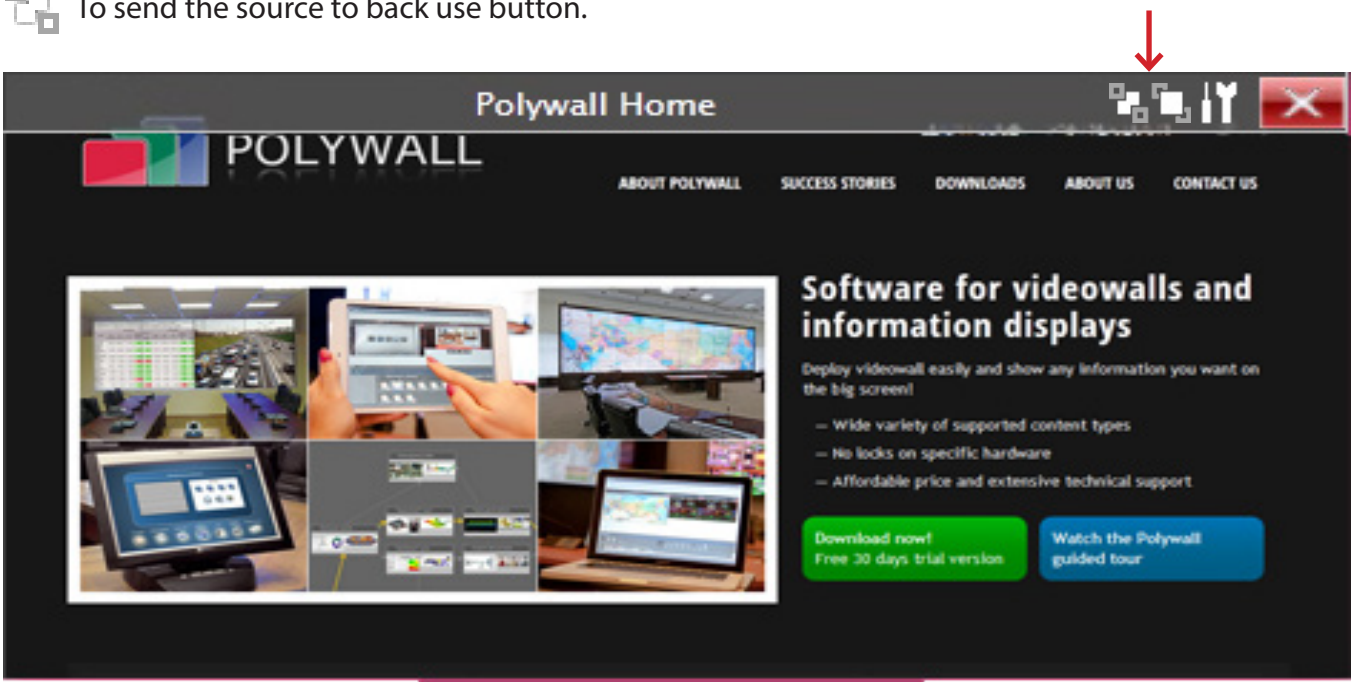
Control panels are absent for **Image**, **VNC**, **Hardware source**, **Polywall Agent**, **Application** and **Text** source types.

Polywall source characteristics

Source foreground / background at display

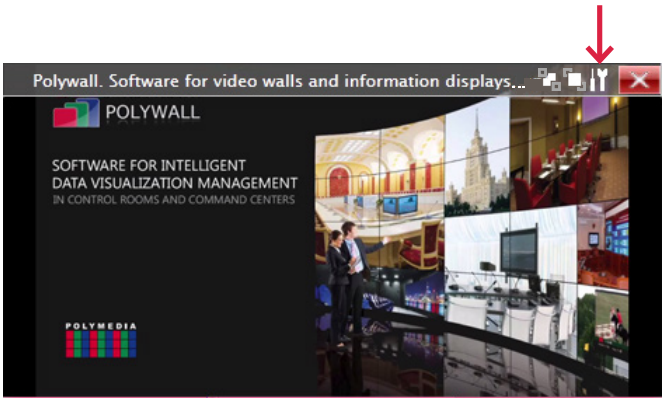
To bring the source to front use button.

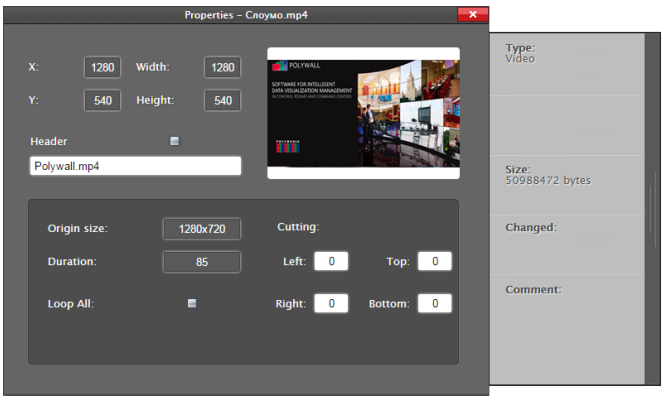
To send the source to back use button.



Additional data about the source

Press the settings button at the panel with the source name. Data source characteristics depend on the data format.





Field	Definition	Where to use
Bottom	Y-coordinate of the right lower pixel is to cut a source image. The coordinate is ranged from 0 to initial size.	Image Polywall Agent Stream video Video VNC
Duration	Duration of video-record.	Video
Group (sync. sheet.)	Several presentations with the same value 'Group of synchronous sheets' can be flipped simultaneously, using buttons '◃' and '▹'. Acceptable values are digits.	Microsoft PowerPoint
Header	Allows to assign any title to the source with text field and enable the headline with the title at the video wall by ticking the checkbox.	Any sources
Height	Original height of a source image.	Any sources
Input number	This parameter is responsible for controller input number the source is connected with.	Hardware sources
Interval	Timeslot of web-page refresh.	Web-page
Keep aspect ratio	The type of the display source: the source has an original aspect or is extended along the window width.	Hardware sources Image Polywall Agent VNC Stream video IP camera
Left	X-coordinate of the left upper pixel of streaming video image is to cut a source image.	Image Polywall Agent Stream video Video VNC
Loop All	Replay of source displaying.	Playlist Video
Mute	Muting	Hardware sources (only for capture cards Datapath)
Origin size	Original size (image resolution) of the data source.	Image Video
Pages count	Number of pages in file.	Microsoft Word PDF
Slides count	Number of pages in file.	Microsoft PowerPoint

Field	Definition	Where to use
Right	X-coordinate of the right lower pixel of streaming video image is to cut a source image. The coordinate is ranged from 0 to initial size.	Image Polywall Agent Video Stream video VNC
Scale	This parameter is responsible for document scaling during displaying.	Microsoft Excel Microsoft Word PDF Web-page
Sheets count	Number of pages in file.	Microsoft Excel
Size	Original size (image resolution) of the data source.	Stream video
Source size	Image resolution of a source data.	Hardware sources
Timer	Automatic page update.	Web-page
Top	Y-coordinate of the left upper pixel of streaming video image is to cut a source image.	Image Polywall Agent Stream video Video VNC
Volume	Audio volume. Accepts values from 0 to 100.	Hardware sources (only for capture cards Datapath)
Width	Original width of a source image.	Any sources
X	There is a possibility to place several data sources on a displaying device. X-coordinate of the left upper pixel on a displaying source.	Any sources
Y	There is a possibility to place several data sources on a displaying unit. Y – Y-coordinate of the left upper pixel image on a displaying unit.	Any sources

Create source

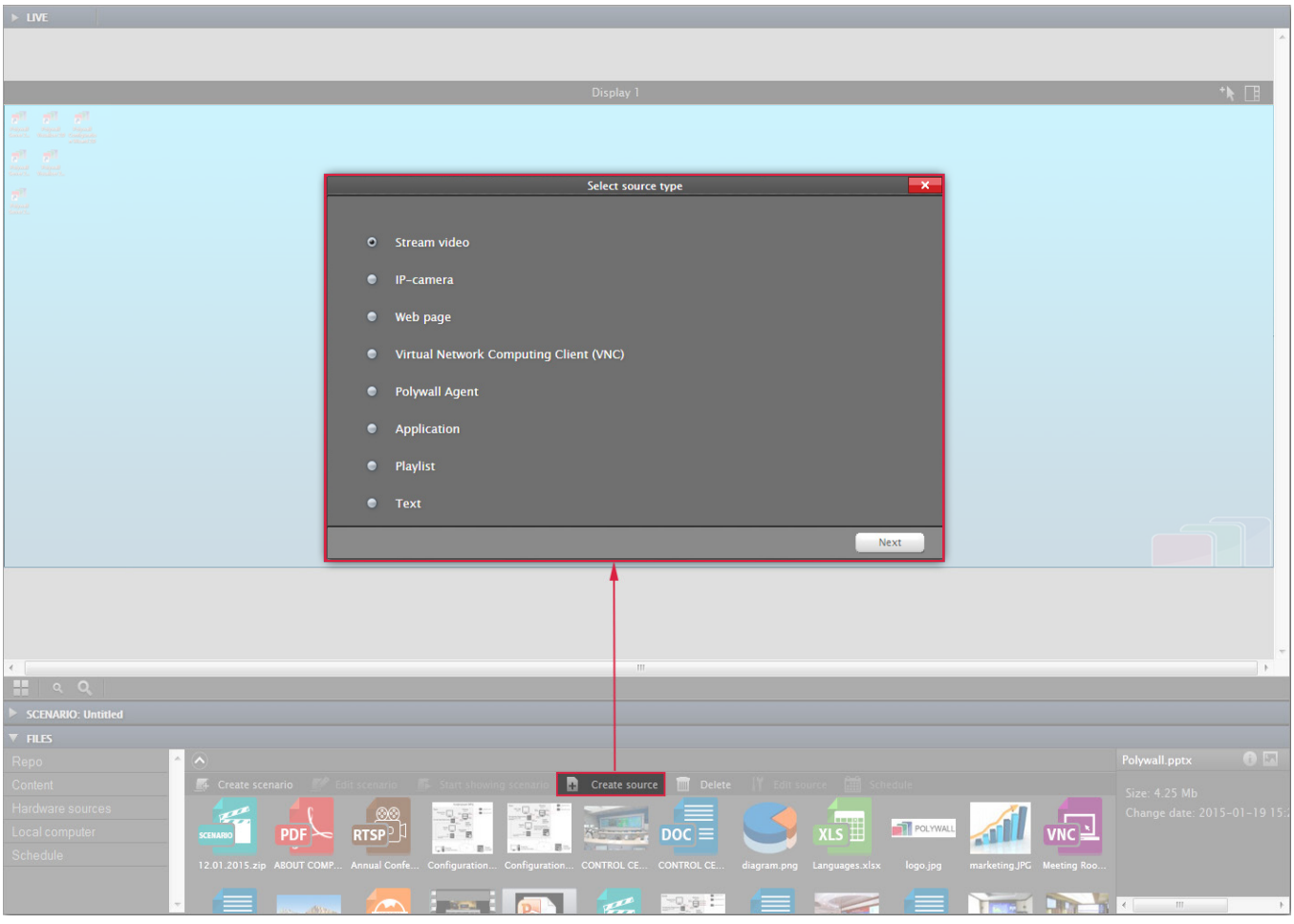
At the files-sources control panel press the '**Create source**' button.

Select source type:

Stream video,
Ip-camera;
Web-page,
Virtual Network Computing Client (VNC),
Text.

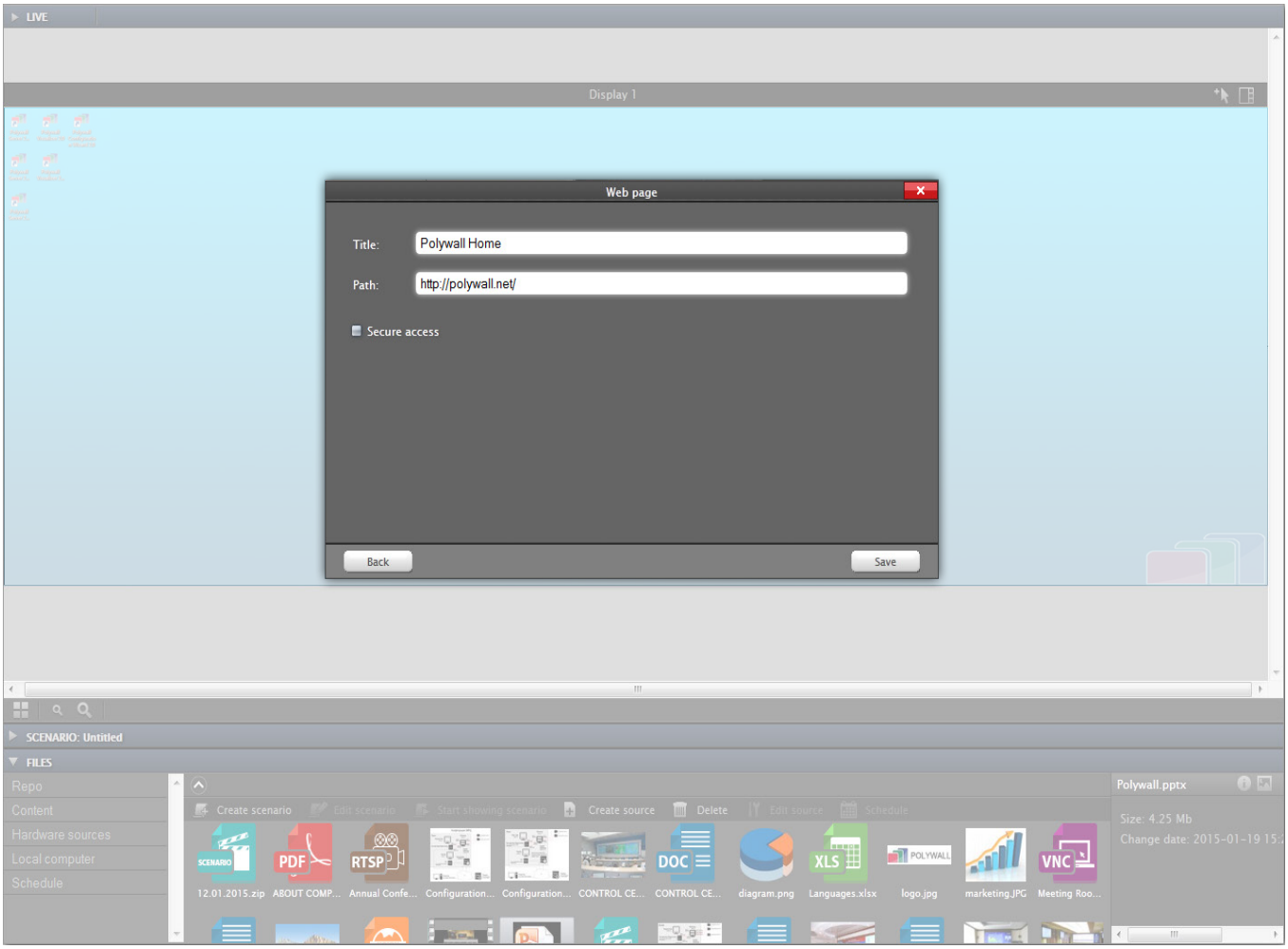
POLYWALL

PRO Polywall Agent,
Application,
Playlist.



The settings of the created source depend on the selected source type.

If the source is password protected press '**Secure access**' and enter login (if any) and password to the corresponding fields. Basic-authorization is supported for web-pages.



Rules to fill in the field 'Path' for sources:

- **Web-page**: Url-address as 'http://…';
- **VNC Protocol**: IP-address of computer;
- **Stream video**: URL address as 'rtsp://IP-source_address:port/name'.
- **Polywall Agent**: IP-address of computer;
- **Application:** similar to application launch via command line (for example, 'c:\windows\system32\notepad.exe').

For the source «IP camera» enter the ip-address, select brand and model of the camera.

For the source «Stream video» set buffer option to change delay for the stream (for Datapath SQX and VLC only).

PRO The final URL for the IP camera stream can be seen after ticking the last checkbox.

In case of using Datapath SQX or Matrox IPX cards do not forget to choose correct setting in Visualizer configurator.

Scenario

To create a scenario create scenes, fill them with the needed content and link them.

Create scenario

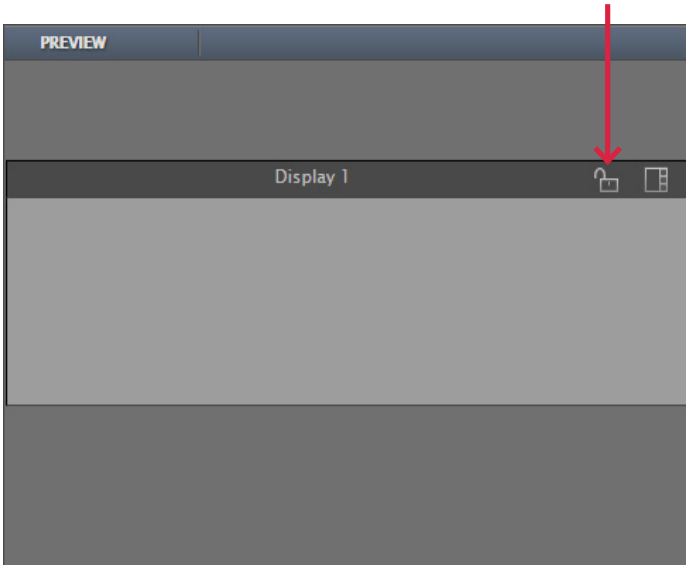
At the files control panel press the '**Create scenario**' button.

In the opened section '**Scenario**' the first scene will be created at default.

Lock screen

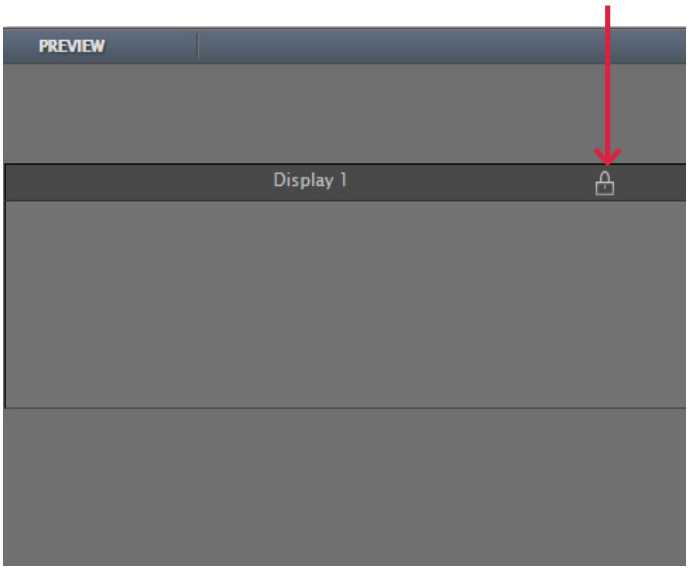
Possibility to lock an entire screen while displaying any scene.

It allows you to keep a content unchanged in the locked screen while scenario playing.



Press lock screen button to enable this function.

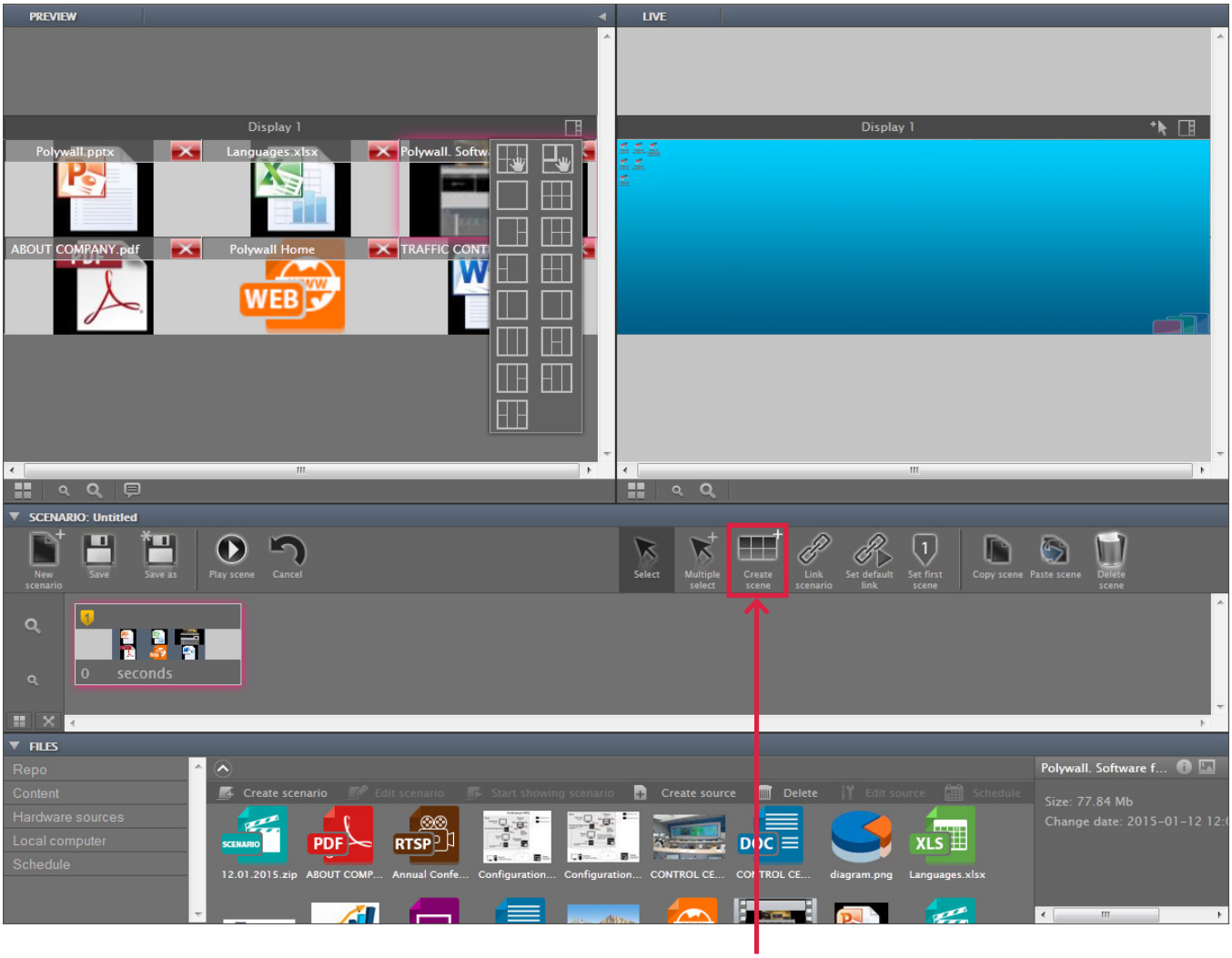
Display color will be changed.



Press unlock button to unlock the screen.

Scene creating

Select “Create scene’ instrument and press mouse in the free space of ‘Scenario’ section.

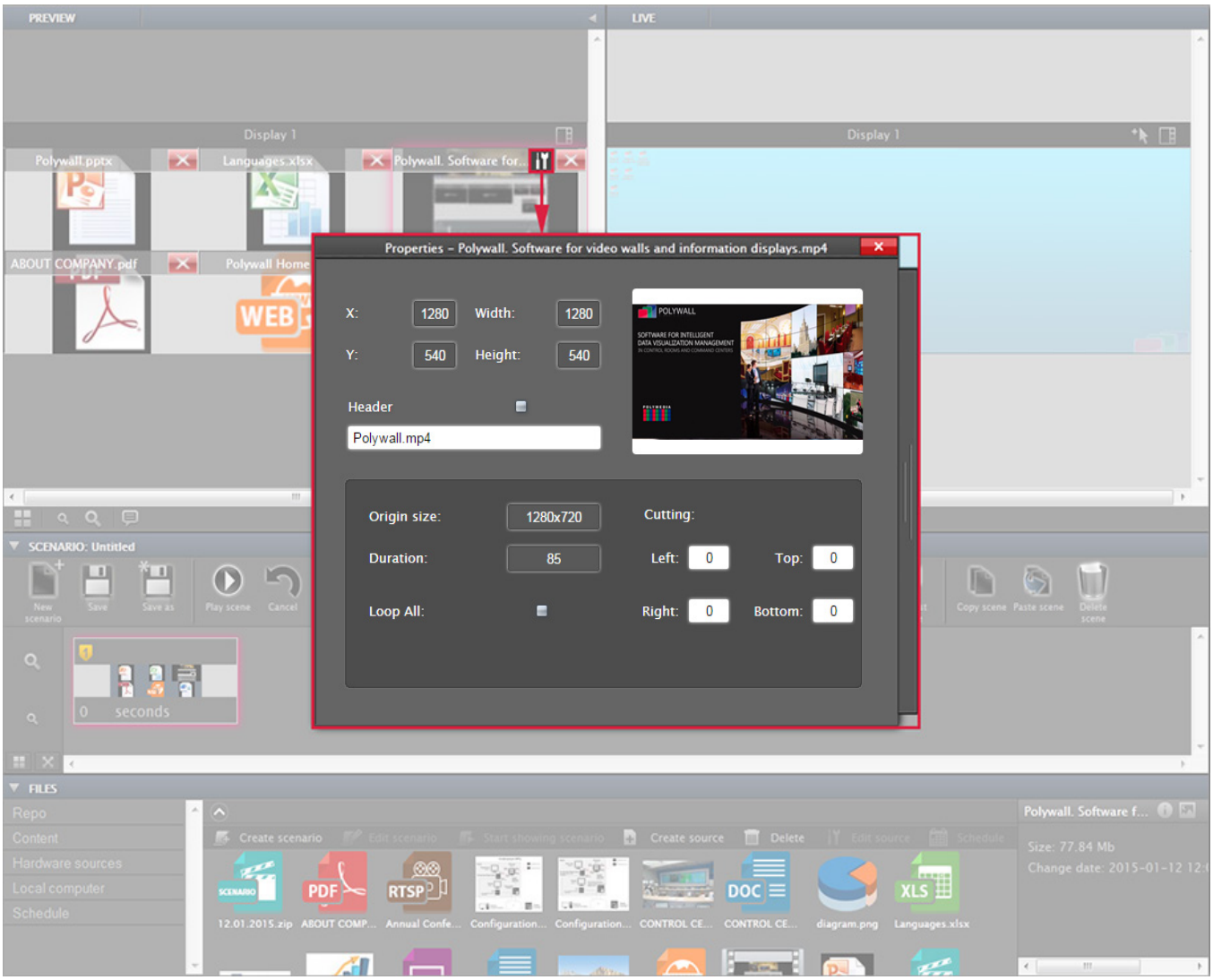


Filling in scene content

In ‘**Preview**’ section select layout for available display units and drag the needed content into the selected layout of each pixel.

Preliminary setting of scene sources

Press the source setting button.



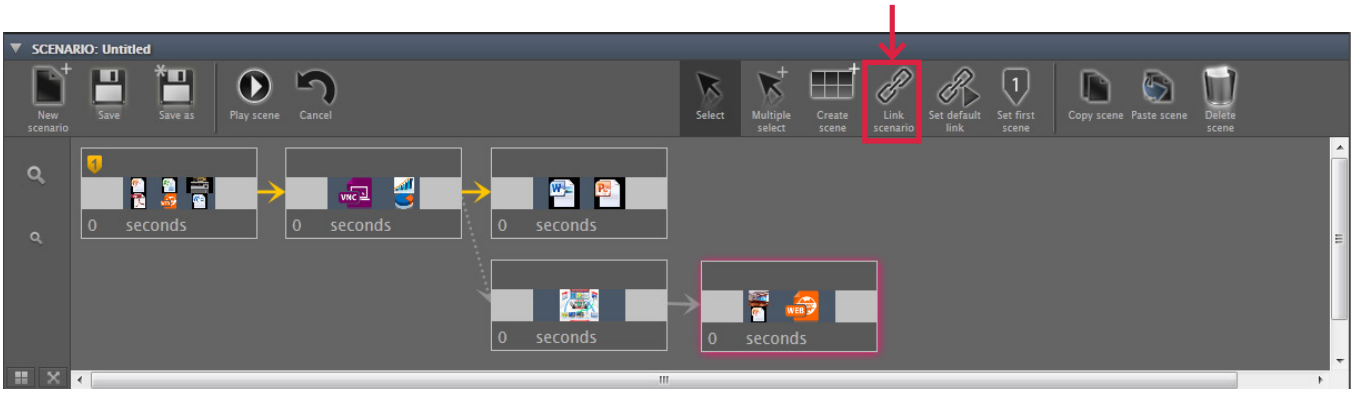
Data sources characteristics in preliminary setting are equal to source characteristics during displaying (see Polywall source characteristics) and depend on data format.

Below the additional setting are provided for preview.

Field	Definition	Where to use
Auto start	Automatic display of video file during the next scene show.	Video
Start page	Select page number to start the display of the file.	Microsoft Word PDF
Start slide	Select slide number to start the display of the presentation.	Microsoft PowerPoint

Linking the scenes

Select '**Link scenario**' instrument and connect 2 scenes in the scenario graph.



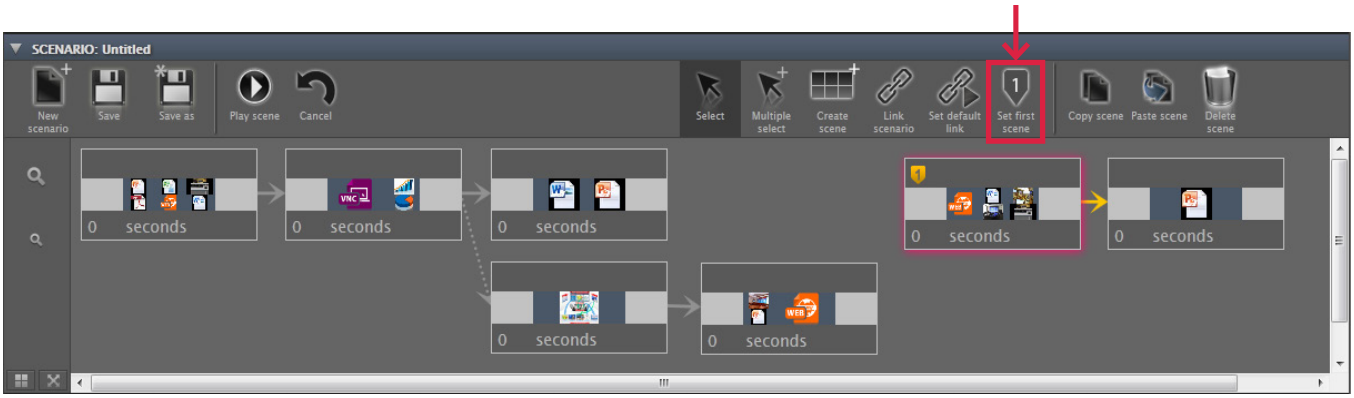
Linking types

Linking can be basic and alternative. In case of several scenario variants the scene with basic link will be displayed.

Press '**Set default link**' button to set the existing link as default.

Parallel scenarios in scenario graph

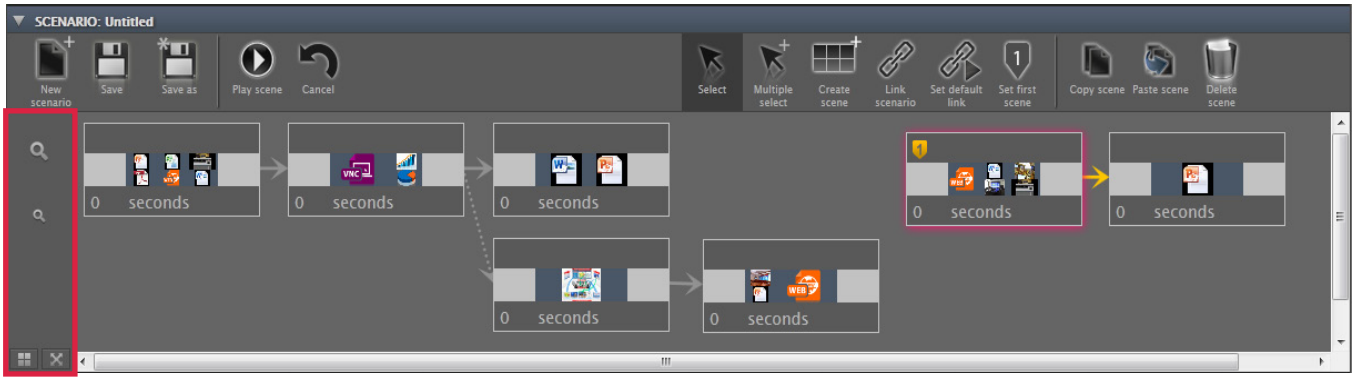
Select one of parallel scenarios and set the first scene using '**Set first scene**' button.



Scene management

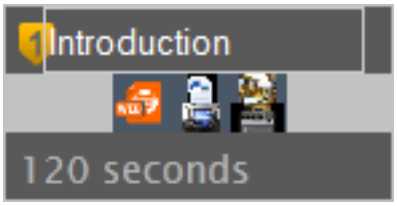
It is possible to scale both the content of 'Scenario' section and the section 'Scenario' itself.

The copy, paste, scene erase, and select one or several scenario elements functions are provided.



Scene naming

Press left mouse button to the grey field of scene heading and enter scene name.



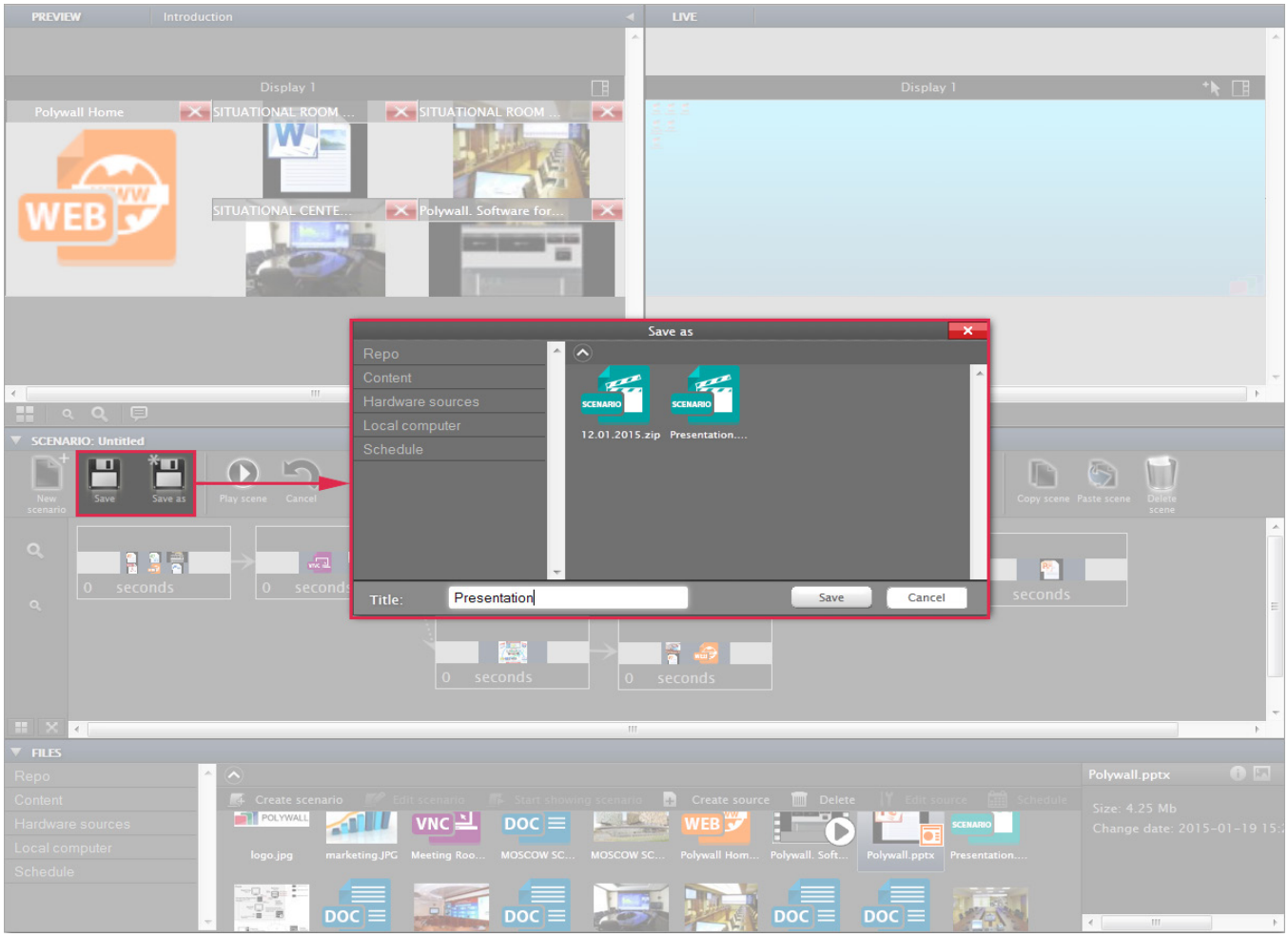
Setting of scene display duration

In the lower part of the scene set timing for scene display according to schedule.

⚠ Time setting does not affect the scenario display from the edit window.

Save scenario

After content layout is set press '**Save**' or '**Save as**' button.

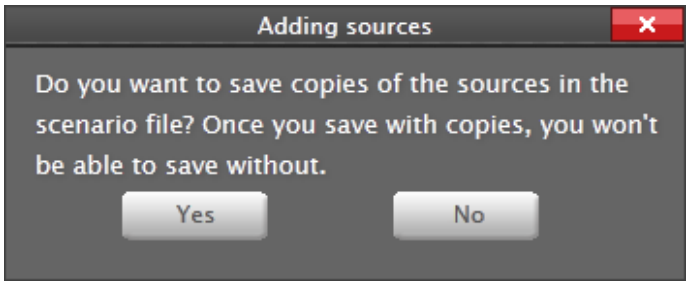


Select directory and file name.

Save source copies in the scenario file.

⚠ **Without source copies you will not be able to:**

- rename sources,
- move sources to other directory.

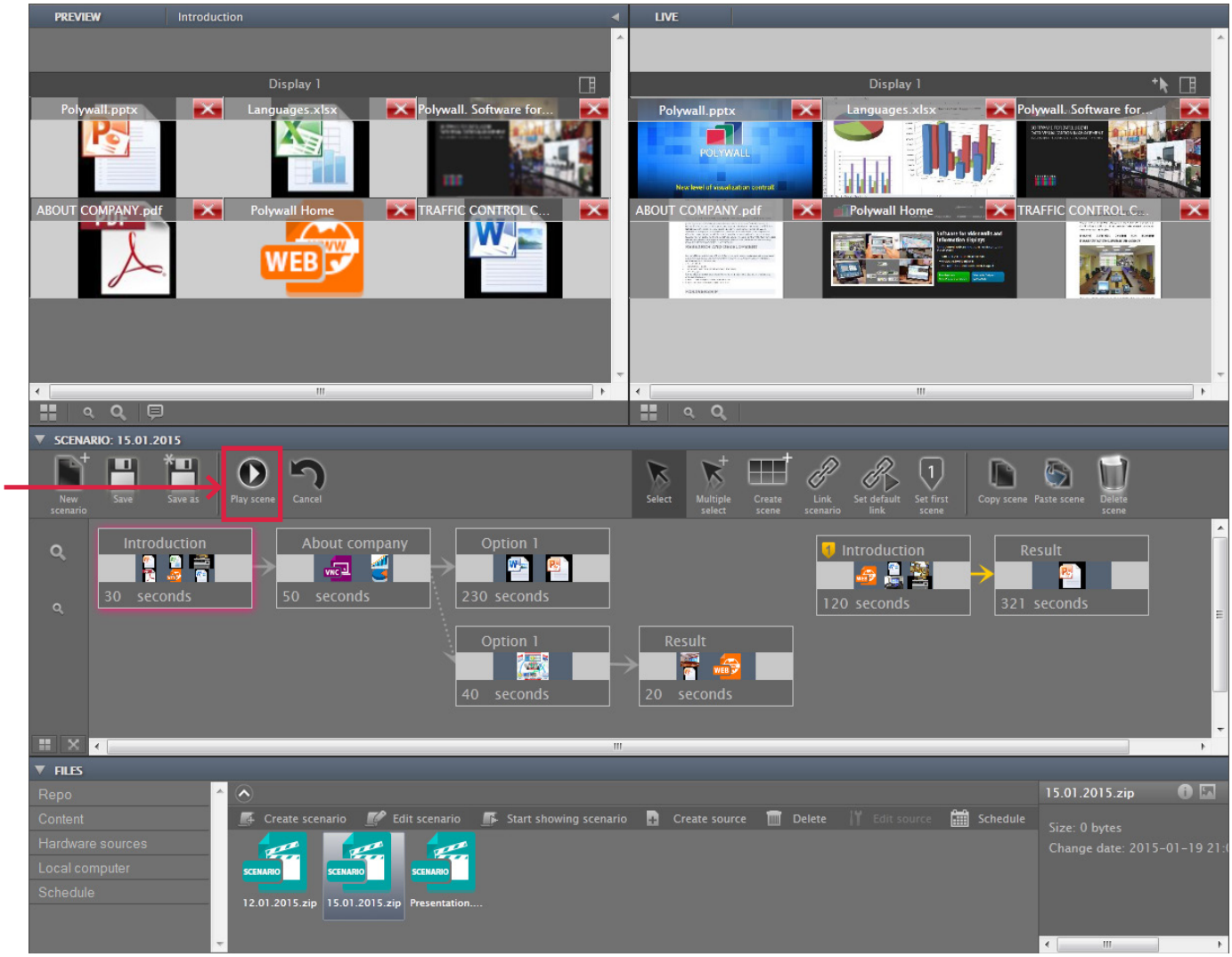


Scenario display

Scenario display with possibility to select 'Play scene'

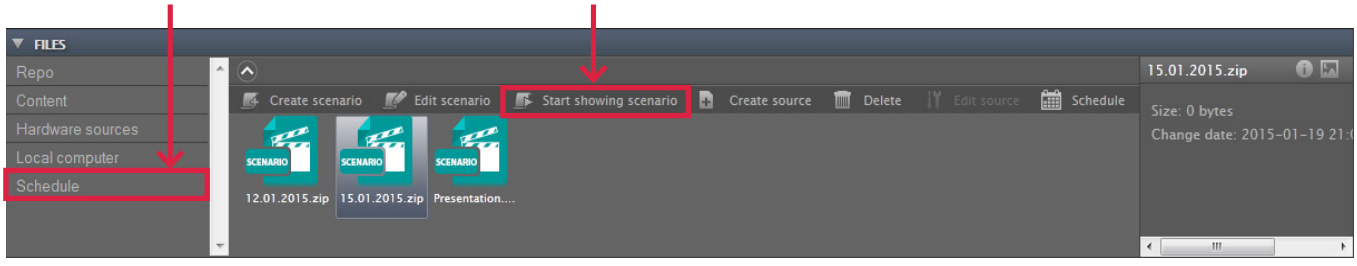
Select scene and press '**Play scene**' and the content will be displayed on the display unit in the selected place.

In subsequent press '**Play scene**' button the next scene will be displayed.



Scenario display with each scene timing

In repository '**Schedule**' select the scenario and press '**Start showing scenario**' button at the control panel.



Stop scenario display

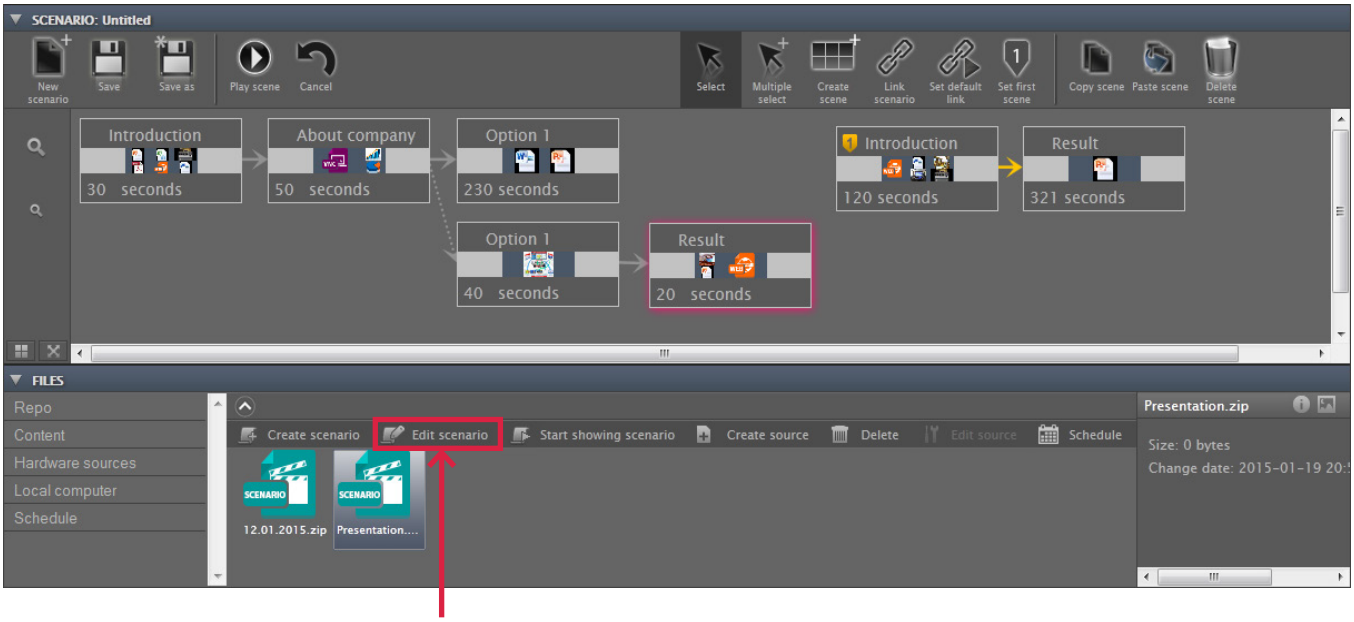
During the scenario displaying in '**Display**' section the information will be provided on which scenario and scene are shown at displays.

In order to stop displaying press the button close displaying.

Open scenario

Select a file with scenario in directory and press '**Edit scenario**' button.

Selected scenario will be opened in scenario graph.

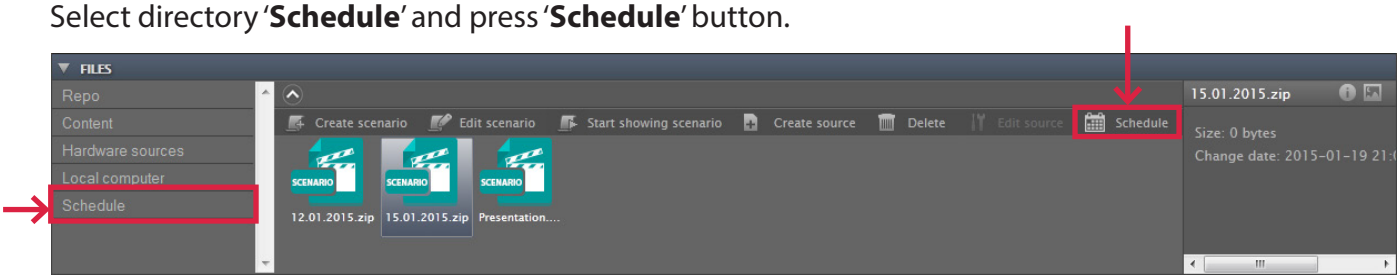


Schedule

Schedule is created at the current day. By the end of the current day the last scenario from schedule is shown until it is closed in Designer. After the Designer tab is closed the scenario display will continue as scheduled.

Each schedule record contains start time of displaying scenario and its name. All the scenarios in repository 'Schedule' are available for schedule creation.

Select directory '**Schedule**' and press '**Schedule**' button.

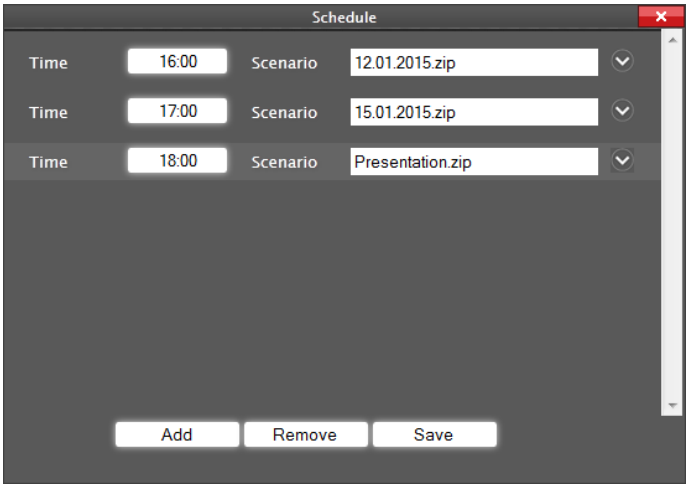


Each schedule record can be added or deleted.

Save schedule

Save schedule editing.

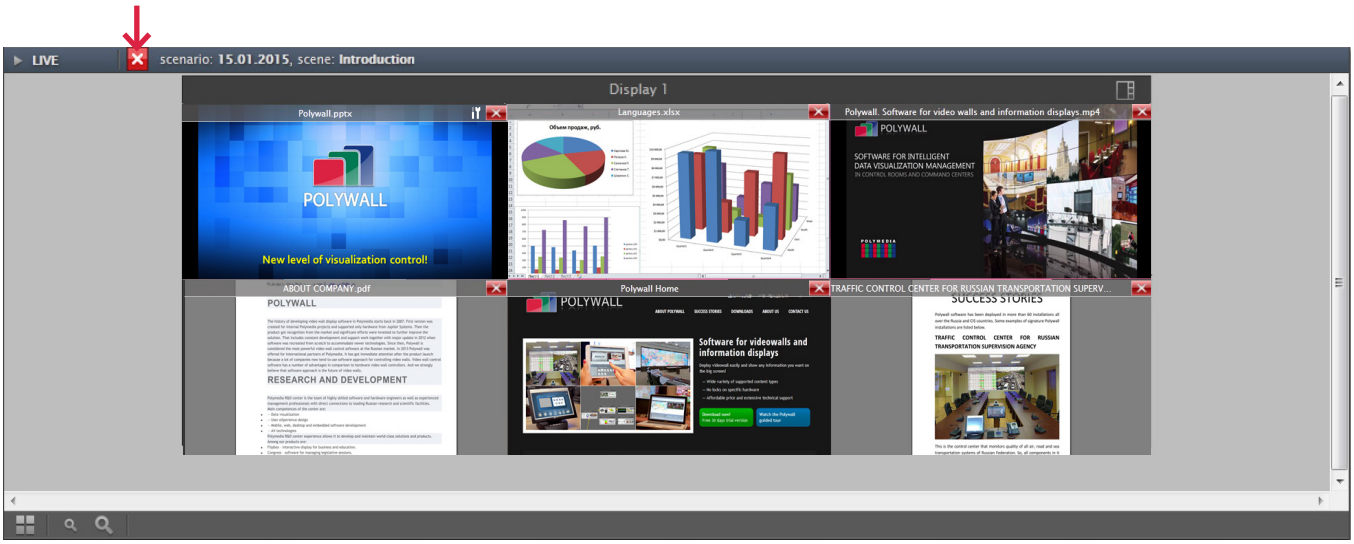
After '**Save**' button is pressed the records will be saved and sorted in order they are shown at displays.



Stop scenario display

During the scenario displaying in 'Display' section the information will be provided on which scenario and scene are shown at displays.

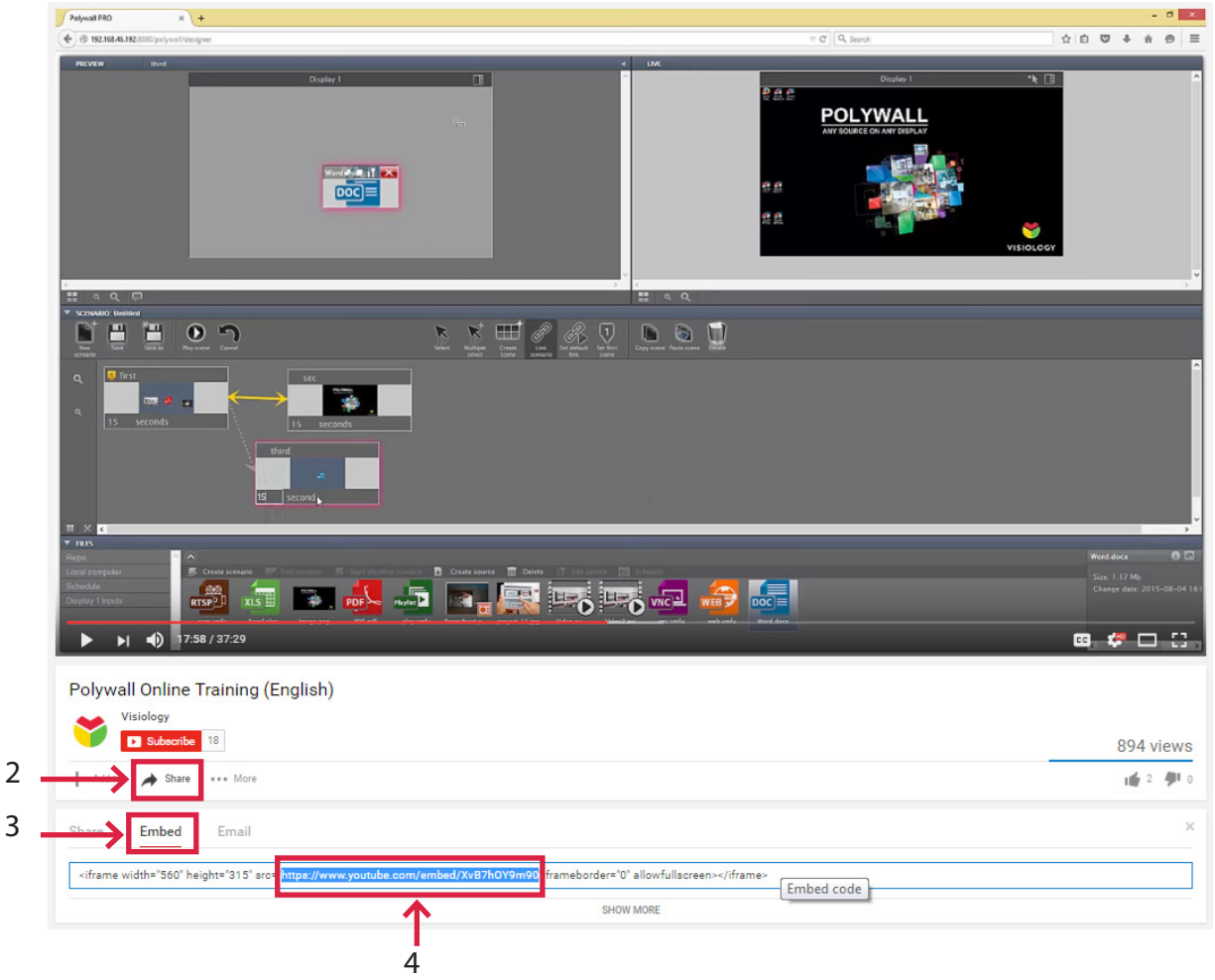
In order to stop displaying press the button close displaying.



Appendixes

1. How to play YouTube videos directly

1. Open desired video in YouTube.
2. Click «Share» under the video.
3. Choose «Embed».
4. Copy the link without quotes and other additional symbols, for example, https://www.youtube.com/embed/XvB7hOY9m90.



5. Add special parameters for hiding menu, bars and autoplaying to the link:

?controls=0&showinfo=0&autoplay=1&autohide=1 <https://www.youtube.com/embed/XvB7hOY9m90?controls=0&showinfo=0&autoplay=1&autohide=1>

For example: https://www.youtube.com/embed/XvB7hOY9m90?controls=0&showinfo=0&autoplay=1&autohide=1%20%3Chttps://www.youtube.com/embed/XvB7hOY9m90?controls=0&showinfo=0&autoplay=1&autohide=1%3E .

6. Open Polywall Designer, create Web page source, paste the final link and put the source on the video wall.

2. Polywall TCP port numbers

8080 – Polywall Server and Polywall Designer (control web interface).
8081 – Polywall Worker.
8086-8087 – Polywall Visualizer.
9998-9999 – Equipment controller (Crestron/AMX).
5900 – Polywall Agent.

3. Contacts

E-mail: polywall@visiology.com
WWW: http://polywall.net/