



Polywall Operator Guide

Version 2.250

For more information visit <http://www.polywall.ru>

February 2014

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Basic Terms and Abbreviations

Definition	Name
Preview	Preview images.
Designer	Web-interface to operate the displaying units downloaded via Mozilla Firefox browser.
Display	Video wall or standard display.
Content	Information content containing some data.
Scene	Functional content of display (displays) at a certain moment of time containing a name, comments and data sources.
Scenario or user scenario	A set of connected scenes. The scenarios are needed to prepare content beforehand.
Room	Room is a group of one or several displaying units where information control and display can be logically linked.
Repository	A site in PC where any files available for further usage can be stored and supported.

Polywall Designer Interface

To enter Polywall open Mozilla Firefox Web Browzer and write in the location bar as follows: «Server IP–adress:8080/polywall/designer» and press «Enter». After that Polywall Designer Interface is set open.



Fig. 1.

The entire interface looks as follows:

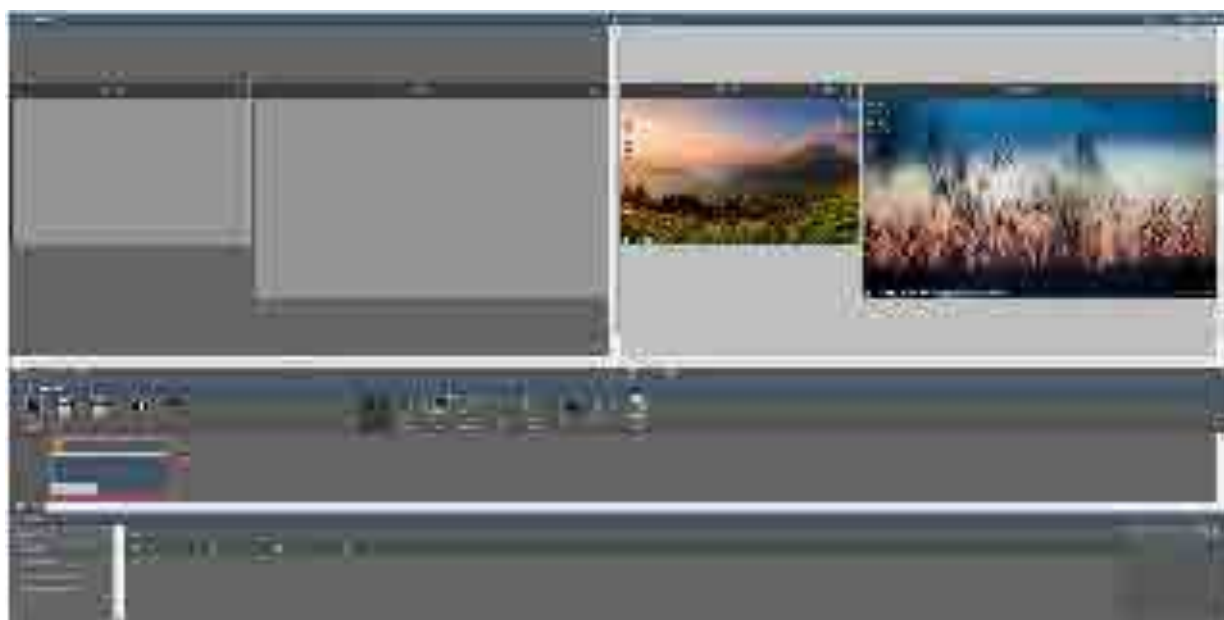


Fig. 2.

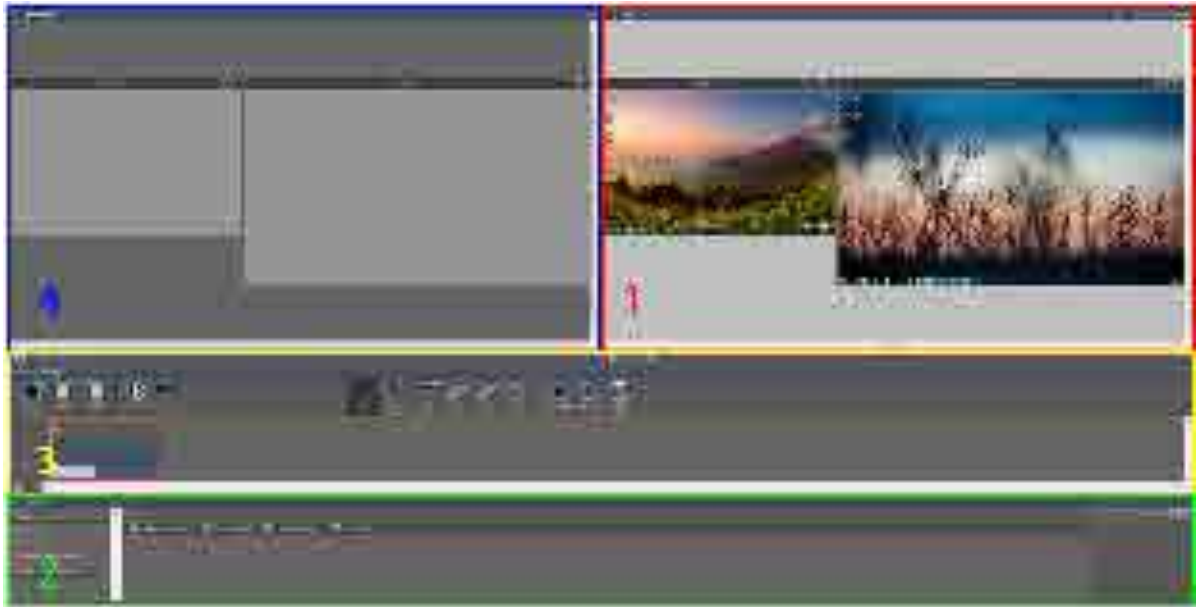


Fig. 3.

Section 1 - 'Live' shows the information displayed on displaying units of the selected room at the moment.

Section 2 - 'Files'. Accessible directories with files/sources to be shown on displays are presented in the section.

Section 3 - 'Scenario'. It is intended for planning and preservation of scenario of future information shown on displaying units.

Section 4 - 'Preview'. It is intended for preliminary preview of the chosen scene taken from the scenario of future display of information on displaying units.

Sections 3 and 4 are hidden while entering Polywall Designer.

Section 1 'Live'

Common view of 'Live' section.



Fig. 4.



Fig. 7



Fig. 8.


To choose a layout on the displaying unit press the button  in the right upper angle (fig. 9).



Fig. 9.

Types of layouts for 3x2 wall are presented in fig. 10. Available layouts change in accordance with wall configuration.

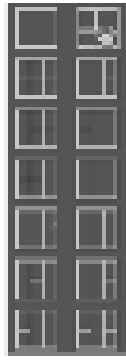



Fig. 10.



- layout when an image of the file content/source can be moved.

For preliminary preview and control of the displaying unit content press the button  in the upper corner of the display image (fig. 11).

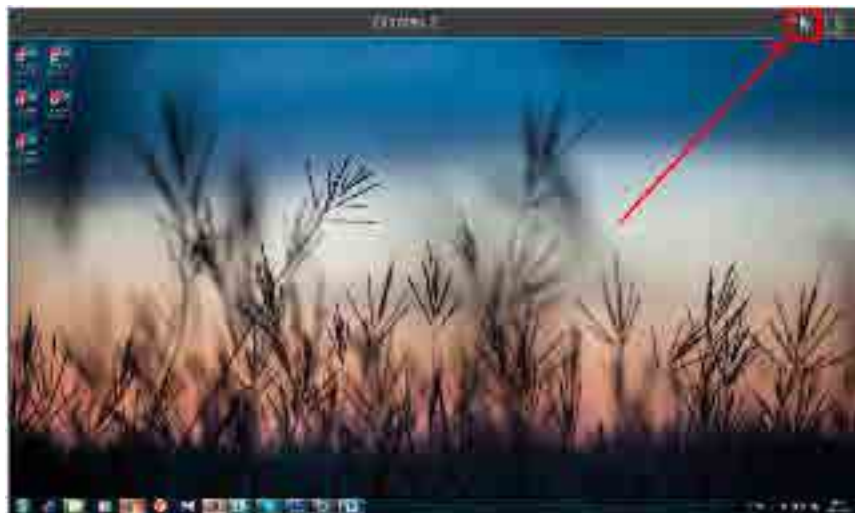


Fig. 11.




To draw sources on the images apart from video and hardware sources press the marker  in the left upper corner of Designer (fig. 12).



Fig. 12.

Painting Toolbar will be displayed in the left upper corner.



Fig. 13.

The following functions are available for painting:

- Instrument selection: marker, eraser
- Colour Selection: red, green, blue;
- Depth Selection: 1, 3, 5, 10, 20, 30;
- Complete erasion of the entire source copied from the image on the display;
- Cancellation of the entire erasion.

Management of sources in Polywall

Its own control elements are used in Polywall system for every source apart from hardware windows and images.

To control Polywall sources press the displaying image. The window will turn pink and a control panel depending on data format will arise.

Control panel for PDF – type source looks like the one in fig.

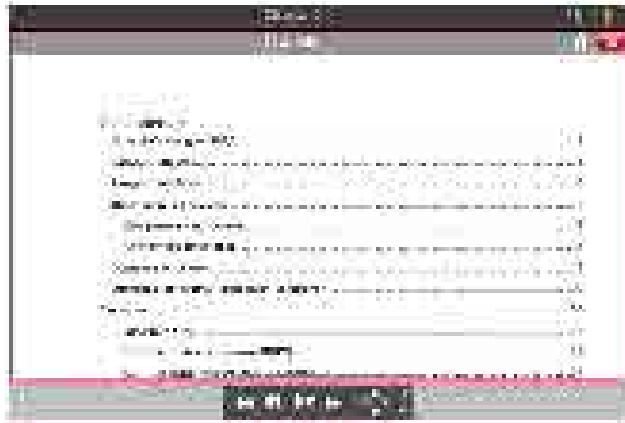


Fig. 14.

and presents the following functional:




- document navigation in 4 directions with the help of arrows;
- scaling with buttons «+» «-»;
- one page forward/backward shift with buttons «>>» «<<»;
- first/last page shift with buttons «|<<» «>>|».

Panel control for Video – type source looks like the one in fig.



Fig. 15.

and presents the following functional:

- forward/backward winding with buttons «|<<» «>>|»;
- function of 'Pause' button  ;
- function of 'Stop' button  ;
- function of 'Reverse'  .

Control panel for Microsoft PowerPoint-type source looks like the one in fig.



Fig. 16.

and presents the following functional:

- shift per one page forward/backward with buttons «>» and «<»;
- shift per one page to the first/last page with buttons «|<» и «>|».

Control panel for Microsoft Word – like source looks like the one in fig.



Fig. 17.

and presents the functional:

- document navigation in 4 directions with the help of arrows;
- scaling with buttons «+» «-»,
- one page forward/backward shift with buttons «>» «<»;
- first/last page shift with buttons «|<» «>|».

Control panel for Microsoft Excel – type source looks like the one in fig.

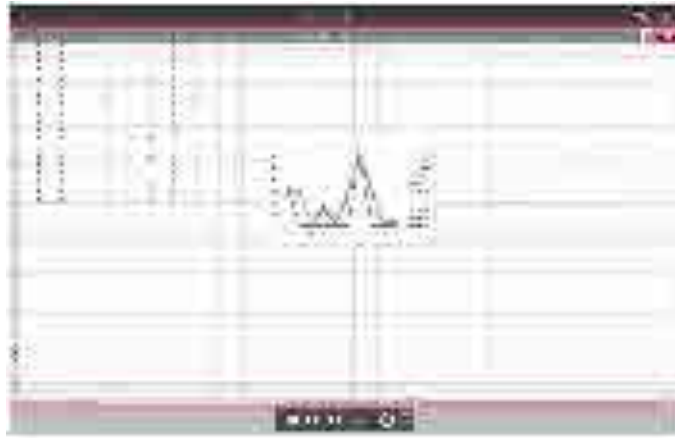


Fig. 18.

and presents the following functional:

- document navigation in 4 directions with the help of arrows;
- scaling with buttons «+» «-»;
- one page forward/backward shift with buttons «>>» «<<»;
- first/last page shift with buttons «|<<» «>>|».

Control panel for Web page – type source looks like the one in fig.



Fig. 19.

and presents the following functional:

- document navigation in 4 directions with the help of arrows;
- scaling with buttons «+» «-».

No control panels are available for VNC and Image sources.

Control panel for Streaming video source looks like the one in fig.



Fig. 20.

and contains no functional.

Polywall source data


To obtain additional data on the source press button  (fig. 21, fig. 22). Properties of information source depend on data format.



Fig. 21.

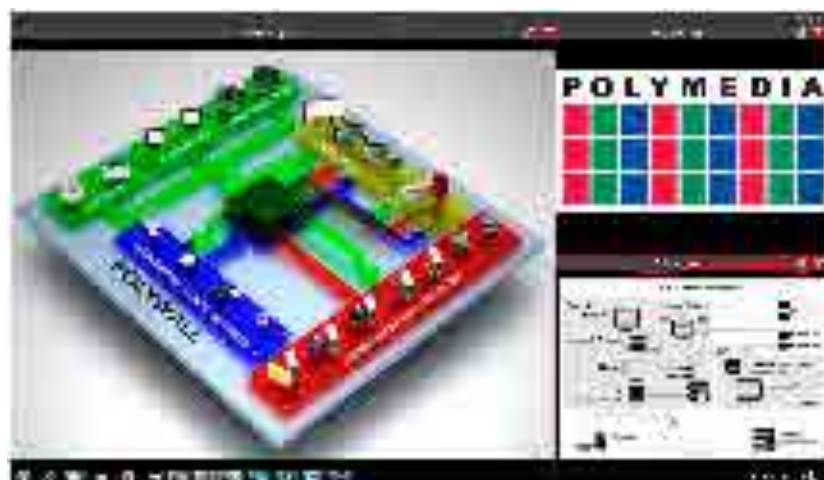


Fig. 22.



Fig. 23.

Field	Value
X	It is possible to place several information sources on a displaying device. X – X-coordinate of the left upper pixel on a displaying source
Width	Initial width of sourced image.
Y	It is possible to place several information sources on a displaying unit. Y – Y-coordinate of the left upper pixel image on a displaying unit.
Height	Initial height of sourced image.
Hardware sources	
Number of input	The parameter is responsible for controller input number the source is connected with.
Source size	Resolution of sourced image.
Aspect ratio	The parameter is responsible for the type of image display: the source is extended along the window width and has an original aspect.
Software sources	
Pdf	
Scale	The parameter is responsible for the document scale while displaying.
Pages count	Information about the number of pages in pdf-file.
Video	
Size	Initial size (image resolution) of the image.
Left_x	X-coordinate of the left upper pixel to cut a sourced image.
Top_y	Y-coordinate of the left upper pixel to cut a sourced image.
Right_x	X-coordinate of the right lower pixel to cut a sourced image. The coordinate is ranged from 0 to initial size.
Bottom_y	Y-coordinate of the right lower pixel to cut a sourced image. The coordinate is ranged from 0 to initial size.
Microsoft PowerPoint	
Slides count	The parameter is responsible for the slide number that starts display of the presentation
Group (sync.	Several presentations with the same value of the parameter 'Group of

sheet.)	synchronous sheets' can be flipped through simultaneously, by clicking on buttons «>» and «<» (see 'Management of sources in Polywall' in section 'Live'). Acceptable values of the parameter are digits.
Microsoft Word	
Scale	This parameter is responsible for the scale while displaying.
Pages count	This parameter is responsible for the number of pages in a file.
Microsoft Excel	
Scale	This parameter is responsible for the scale while displaying.
Sheets count	Displayed number of pages in pdf file.
Web page	
Scale	The parameter is responsible for the scale of a web page while displaying.
VNC	
Left_x	X-coordinate of the left upper pixel to cut a sourced image.
Top_y	Y-coordinate of the left upper pixel to cut a sourced image.
Right_x	X-coordinate of the right lower pixel of vnc image to cut a sourced image. The coordinate is ranged from 0 to initial size.
Bottom_y	Y-coordinate of the right lower pixel of vnc image to cut a sourced image. The coordinate is ranged from 0 to initial size.
Aspect ratio	The parameter is responsible for the type of the displayed source: the source is extended by width of the window and has an original aspect.
Images	
Origin size	Initial size (image resolution) of the information source.
Left_x	X-coordinate of the left upper pixel to cut a sourced image.
Top_y	Y-coordinate of the left upper pixel to cut a sourced image.
Right_x	X-coordinate of the right lower pixel to cut a sourced image. The coordinate is ranged from 0 to initial size.
Bottom_y	Y-coordinate of the right lower pixel to cut a sourced image. The coordinate is ranged from 0 to initial size.
Aspect ratio	The parameter is responsible for the type of the displayed source: the source is extended by the window width and has an original aspect.
Streaming video	
Size	The parameter is responsible for streaming video image size while displaying.
Left_x	X-coordinate of the left upper pixel of streaming video image to cut a sourced image.
Top_y	Y-coordinate of the left upper pixel of streaming video image to cut a sourced image.
Right_x	X-coordinate of the right lower pixel of streaming video image to cut a sourced image. The coordinate is ranged from 0 to initial size.
Bottom_y	Y-coordinate of the right lower pixel of streaming video image to cut a sourced image. The coordinate is ranged from 0 to initial size.

To obtain additional information about the source file press the button right to the basic properties (fig. 24, fig. 25).



Fig. 24.



Fig. 25.

The properties of the source file include as follows:

Field	Value
Type	File format.
Path	Location in the file system.
Size	Amount of space occupied by the file on hard disk unit.
Changed	Data of the last changes in the file.
Comment	The comments are introduced while creating a source in section 'Files'.

Section 2 'Files'

General Information



Fig. 26.

Available repositories (fig. 27, fig. 28) are presented in the left column. They vary depending on your system configuration. 'Local Computer' folder corresponds to the folders on operator's computer. Other folders can be located differently.



Fig. 27.

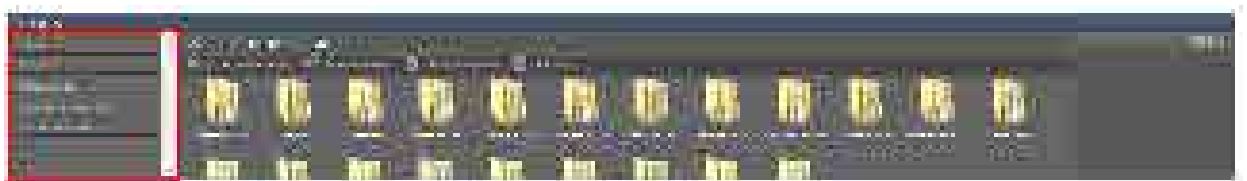


Fig. 28.

Files and folders available in the selected directory are displayed in the lower central part of the screen (fig. 29).

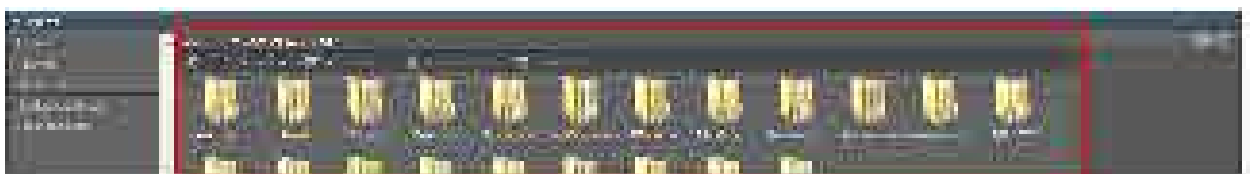


Fig. 29.

Data on your depth in the directory is also displayed here.

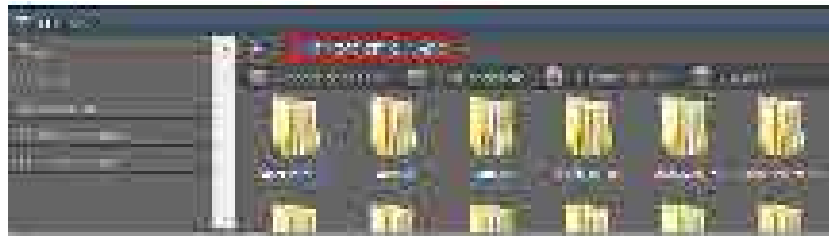



Fig. 30.

Separator between the levels is presented by . Transition between the levels is possible in pressing the folder name that must be shifted.

Panel controlling sources in 'Files' sections looks as follows:

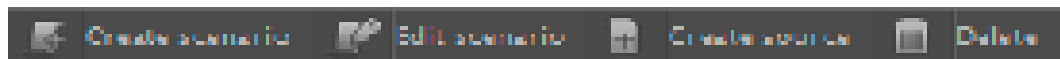


Fig.31.

- Function of creation a scenario with button 'Create scenario';
- Function of editing the available selected scenario with button 'Edit scenario ';
- Function of source creation with button 'Create source' (see 'Create source');
- Function of deleting the selected available source by pressing 'Delete' button.

General Information and Preview of the selected file is displayed in the first part of the screen (fig. 32, fig. 33).



Fig. 32.

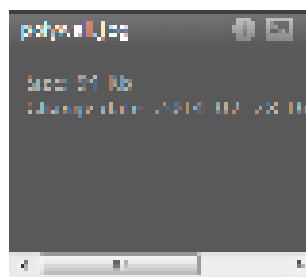




Fig. 33.

To Preview the information source press the button . General Information about the information source is displayed while pushing the button .

Display of file/ displaying source

To display the selected files/sources drag them to the corresponding displaying unit. To display a hardware source drag it to the corresponding displaying unit (fig. 34).



Fig. 34

Source information

Polywall software is capable of showing both 'software', and 'hardware' sources:

Software sources

- Office documents (DOC, XLS, PPT, PDF, DOCX, XLSX, PPTX);
- Images (JPG, JPEG, BMP, GIF, PNG);
- Video-files (AVI, MPEG, WMV, 3GP, 3G2, MOV, AVI, MPG, MPEG, MP4, FLV, MKV);
- Web pages, web applications;
- Video stream from ip-cameras (RTSP, H.264);
- Remote desktop (VNC).

Hardware sources

- Hardware RGB-source;
- PC, server station;
- Video-conference communication terminal;
- Document – camera;
- Video-camera (hardware video-source);
- DVD-player;
- TV-tuner.

Create source

Apart from displaying the available sources it is possible to create a source: video stream, web page, VNC.

1. Push the button 'Create source'



Fig. 35.

2. Choose the source type: «Video stream», «Web page» or «VNC Protocol».

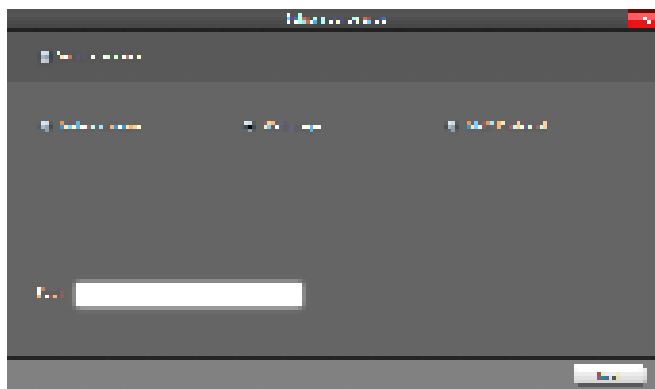


Fig. 36.

3. If the source is password protected, press 'Secure access' and enter login (if any) and password in the corresponding fields (fig. 37). Basic-authorization is supported for web pages.
4. Enter 'Path'.
 - Url-address for a web page as «http://...»;
 - IP-address for VNC;
 - Url-address for stream video as «rtsp://IP - source address: port/Name».

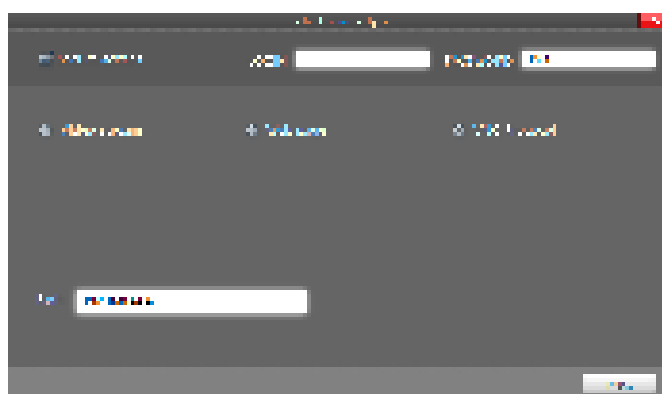


Fig. 37.

5. A window with properties of the created source. A comment statement can be added to the created source (fig. 38). To add Preview press 'Preview' button and choose a file for Preview (fig. 39). Line denotes actions, punctate lines show the obtained result.

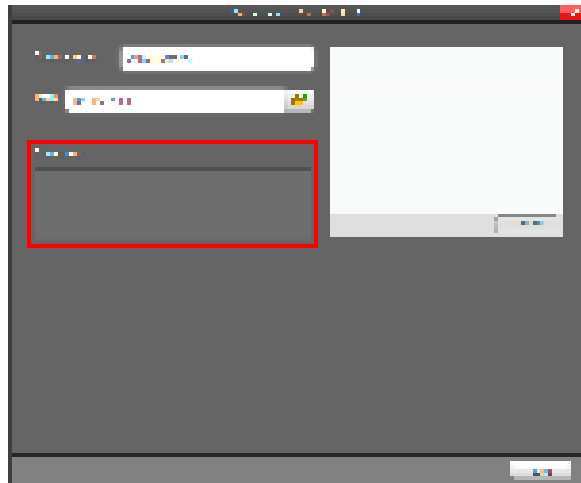


Fig. 38.



Fig. 39.

The added comments will be available in settings of information source (see 'Settings Polywall source' in section 'Preview'). The added Preview will be available in general data on the information source (see 'General information' in section 'Files').

6. Press 'Save'.

The sources created in file panels will look as the ones in picture 40.

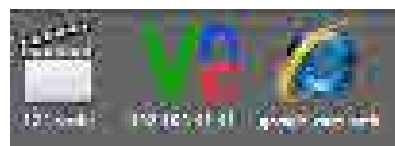


Fig. 40.

Section 3 'Scenario'

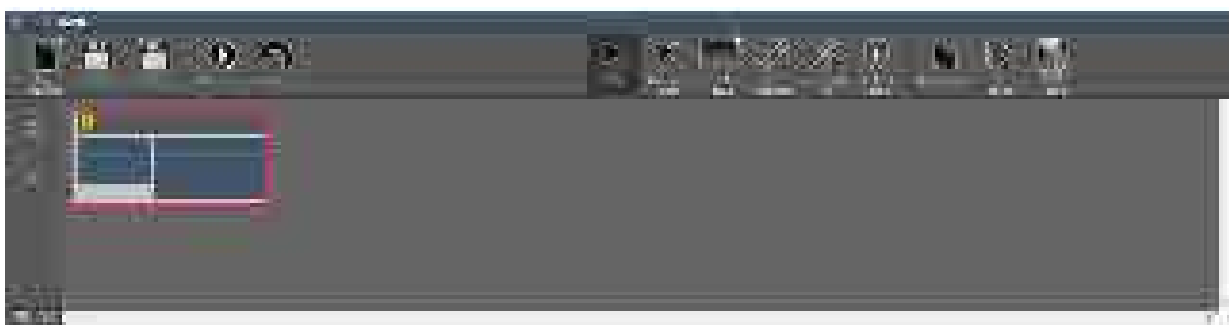


Fig. 41

The following instruments are available in creation and change a scenario:



Fig. 42.

Button	Action
New scenario	Creation a new scenario
Save	Save the current scenario. If the scenario failed to be saved before choose a directory to save it. The scenario is saved in a special rar format.
Save as	Save the current scenario in the mentioned directory in special rar format.
Play scene	Display of a scene on displays/display.
Cancel	Cancel the last change made in the scenario.
Select	Select an item in the scenario graph.
Multiple select	Select several items in the scenario graph. Selection of several elements is made by alternate left key stroke for every new scene.
Create scene	Add a new scene into scenario.
Link scenario	Create transition from one scene to another one.
Set default link	In case of several variants of scenario development the connection remained the basic one. All other connections will be alternative. Fig. 43 - yellow arrows denote connection at default, grey arrows denote alternative connections.
Set first scene	The chosen scene is assigned as the first one. It must be done in the presence of several parallel scenarios in one scenario file.
Copy scene	Copy the selected scene/scenes.
Paste scene	Addition of the scene copied before.
Delete scene	Removal of an element/elements chosen beforehand.







Fig. 43.

For convenient working with scenarios it is possible to zoom both the content of 'Scenario' section and the 'Scenario' section itself in the left part.



Fig. 44.

- Enhance the scenario with the button  ;
- Decrease the scenario with the button  ;
- Restore to normal size with a button  ;
- Transfer of 'Scenario' section into full-screen mode (and back) with a button  .

Section 4 'Preview'

Window of 'Preview' section is opened by pressing the 'expand/collapse' button next to 'Display' in the upper left corner of Designer (fig. 45).



Fig. 45.

If no scene is chosen the 'Preview' section is empty.

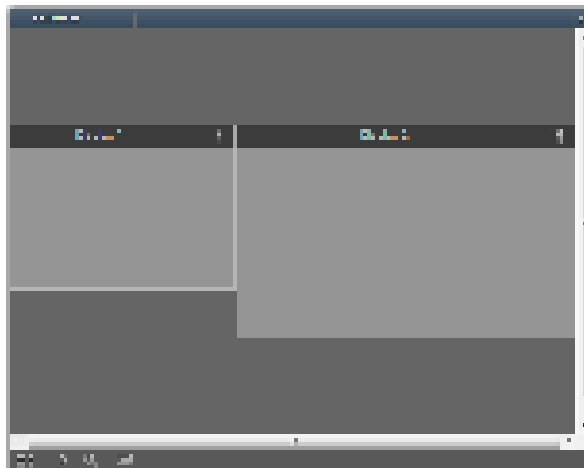


Fig. 46.

The left below corner of 'Live' section contains the panel of scaling and comments to the scenario presenting the following functional:





- zoom in displaying units on Designer screen with the button  ;
- zoom out displaying units on Designer screen with the button  ;
- return to the previous image scale by default with the button  ;
- addition of comments to scenario scene with the button  (fig. 48).



Fig. 47.



Fig. 48.

Setting Polywall sources


It is possible to set settings for the content used in the scene beforehand. For this press the button  (fig. 49).



Fig. 49.

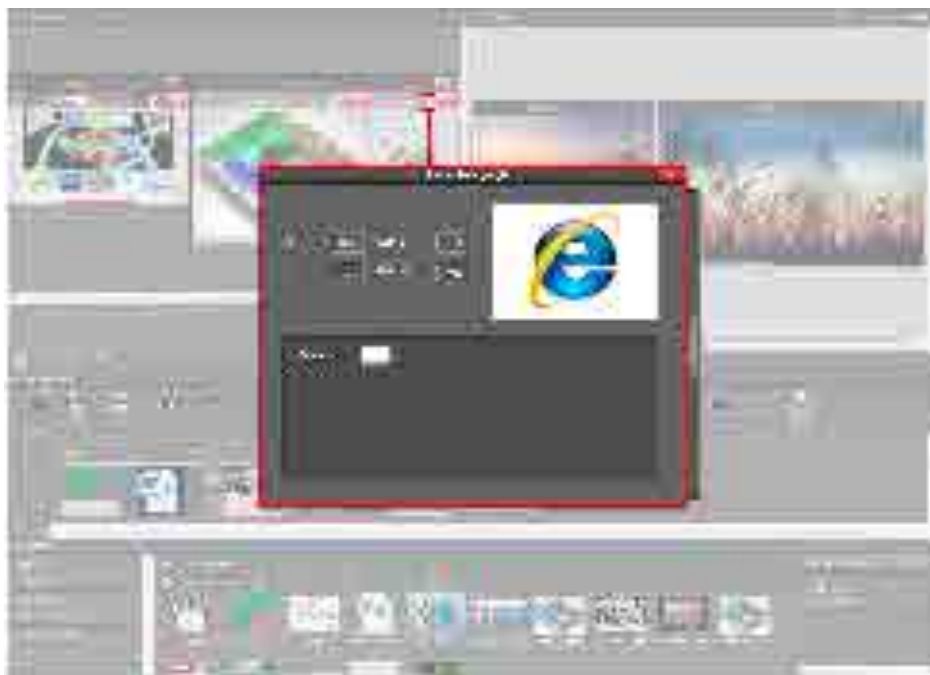


Fig. 50.

A window containing the properties of information source will open (fig. 50). Properties of information source depend on data format.

Field	Value
X	Placement of several information sources on a displaying unit is possible. X – X-coordinate of the left upper pixel image on a displaying unit.
Width	Initial width of information source image.
Y	Placement of several information sources on a displaying unit is possible. Y – Y-coordination of the left upper pixel image on a displaying unit.
Width	Initial height of information source image.
Hardware sources	
Initial size	Initial size (image resolution) of information source.
Left_x	X-coordinate of the left upper pixel to cut a sourced image.
Top_y	Y-coordinate of the left upper pixel to cut a sourced image.
Right_x	X-coordinate of the right lower pixel to cut a sourced image. The coordinate is ranged from 0 to initial size.
Bottom_y	Y-coordinate of the right upper pixel to cut a sourced image. The coordinate is ranged from 0 to initial size.
Software sources	
Pdf	
Scale	The parameter is responsible for document scale in displaying.
Start page	The parameter is responsible for the page number that starts the display of pdf file.
Video	
Autostart	The parameter is responsible for automatic start of video in the scenario.
In cycle	The parameter is responsible for recurrent start of video after it is played.
Left_x	X-coordinate of the left upper pixel to cut a sourced image.
Top_y	Y-coordinate of the left upper pixel to cut a sourced image.
Right_x	X-coordinate of the right upper pixel to cut a sourced image. The coordinate is ranged from 0 to initial size.
Bottom_y	Y-coordinate of the left upper pixel to cut a sourced image. The coordinate is ranged from 0 to initial size.
Microsoft PowerPoint	
Slide in start	The parameter is responsible for the number of the slide that starts the presentation.
Group (sync. sheet.)	Several presentations with the same value of the parameter 'Group of synchronous sheets' can be flipped through simultaneously, by clicking on buttons «>» and «<» (see 'Management of sources in Polywall' in section 'Live'). Acceptable values of the parameter are digits.
Microsoft Word	
Scale	The parameter is responsible for the document scale while displaying.
Start page	The parameter is responsible for the page number that starts the display.
Microsoft Excel	
Scale	The parameter is responsible for document scale in displaying.
Start sheet	The parameter is responsible for the number of page that starts display of the

	document.
Web page	
Scale	The parameter is responsible for the scale of a web page while displaying.
VNC	
Left_x	X-coordinate of the left upper pixel to cut a sourced image.
Top_y	Y-coordinate of the left upper pixel to cut a sourced image.
Right_x	X-coordinate of the right lower pixel to cut a sourced image. The coordinate is ranged from 0 to initial size.
Bottom_y	Y-coordinate of the right lower pixel to cut a sourced image. The coordinate is ranged from 0 to initial size.
Aspect ratio	The parameter is responsible for the character of reflected source: source is extended by the window width or has an original aspect.
Image	
Aspect ratio	The parameter is responsible for the type of reflected source: the source is extended by the window width or has an original aspect.
Left_x	X-coordinate of the left upper pixel to cut a sourced image.
Top_y	X-coordinate of the left upper pixel to cut a sourced image.
Right_x	X-coordinate of the right below pixel to cut a sourced image. The coordinate is ranged from 0 to initial size.
Bottom_y	Y-coordinate of the right lower pixel to cut a sourced image. The coordinate is ranged from 0 to initial size.
Streaming video	
Size	The parameter is responsible for the size of streaming video while displaying.
Left_x	X-coordinate of the left upper pixel of streaming video image to cut a sourced image.
Top_y	Y-coordinate of the left upper pixel to cut a sourced image.
Right_x	X-coordinate of the right lower pixel to cut a sourced image. The coordinate is ranged from 0 to initial size.
Bottom_y	Y-coordinate of the right lower pixel to cut a sourced image. The coordinate is ranged from 0 to initial size.

Scenarios

Scenario creation

To create/edit scenario it is necessary to open two sections: 'Scenario' and 'Preview'. This can be done in two ways:

- 1. by pressing the button opening the window of scenario creation/editing
- 2. by subsequent pressing the 'expand/collapse' button opening viewport scene content next to 'Live' in the upper left corner of Designer (Fig. 51).



Fig. 51.

- By pressing the 'expand/collapse' button opening viewport scene content next to 'Live' in the upper left corner of Designer (fig. 52)



Fig. 52.

To create a scenario it is necessary to prepare scenes, fill them with the essential information and make connections between the scenes.

Press 'New scenario' to create a new scenario. The first scenario scene is created at default.

Scenes Creating

To add a new scene into the scenario press 'Create scene' and click at the site of scenario field where a scene must be added (fig. 53, fig. 54).

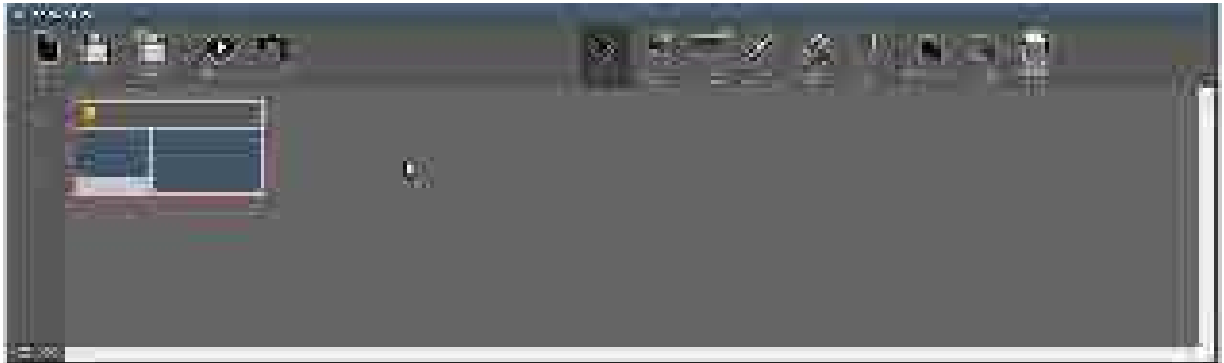


Fig. 53.

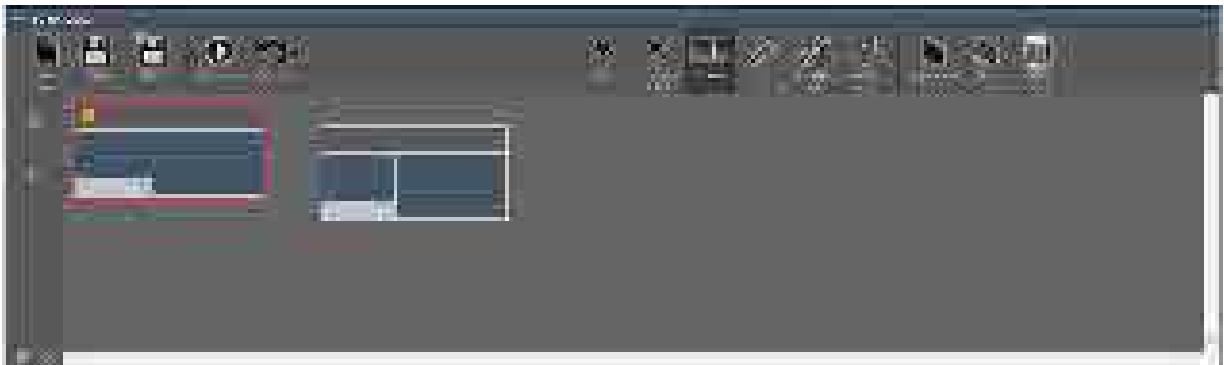


Fig. 54.

To add the scene number press the grey field of scene headline with the left mouse button (fig. 55) and enter the scene name. This will enable a comfortable scenario sort and enhance the efficiency of operator's work.



Fig. 55.

To add the data to the scene press the scene with the left mouse button. The 'Preview' window will contain displays that compose the scene. Choose the layouts for displaying means (fig. 56).

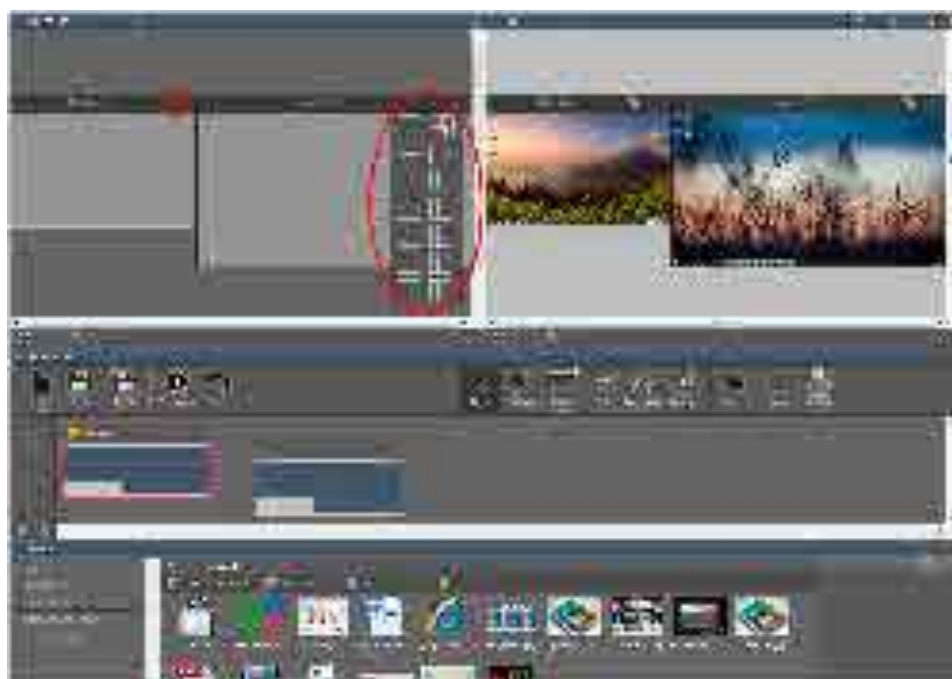


Fig. 56.

Drag the file/source to the site of displaying device layout where the information must be shown.

Making connections

A connection between the scenes is made with the help of 'Link scenario' instrument and subsequent uniting of two necessary scenes in the scenario graph. The connections can be basic and alternative. Yellow arrows (fig. 57) – basic connections. The basic connections are made:

1. with the help of 'Link scenario' button and primary connection of one scene with any other;
2. by selecting the existing connection with 'Select' button and subsequent pressing 'Set default link' button.

Grey arrows (fig. 57) represent alternative connections with 'Link scenario' instrument and subsequent union of two needed scenes in the scenario graph.

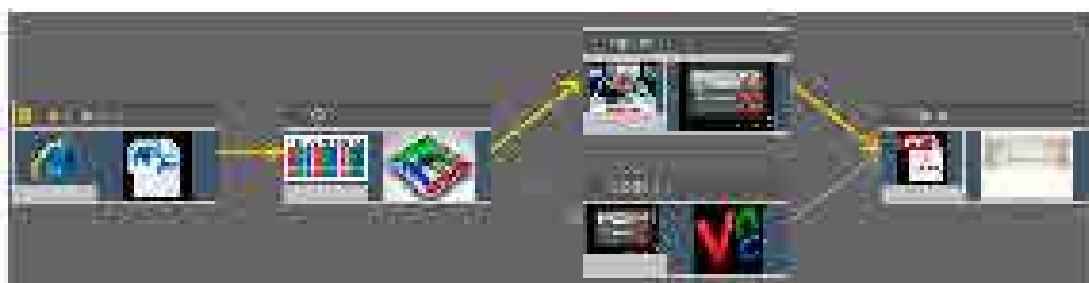


Fig. 57.

Scenario Display

By placing content in the scenario choose the scene and press 'Play scene'. Then the content will be displayed on a display device at the given site (fig. 58).



Fig. 58.

In subsequent pressing 'Play Scene' button the scene connected by default will be shown on displaying devices.

Save scenario

To save a scenario press 'Save as' and show directory save path and the name of the saved scenario in the dialogue window (fig. 59).



Fig. 59.

Open scenario

To open a saved scenario it is necessary to choose a file with a scenario in the directory where the file with the scenario is saved and press 'Edit scenario'. The selected scenario will be opened in the scenario graph (fig. 60).



Fig. 60.