# **Graphics Editor**

Graphics editor in AirManager MediaConnect and NewsCUT allows creating and editing captions and graphic compositions.

This client module permanently interacts with SL NEO Media Database. All initial materials and results of work are usually stored on the server array, providing common network operating process for several users and instantaneous playback of created compositions. SL NEO server implements rendering in the on-fly mode directly within the playback process.

Graphics editor allows working with static graphic files, 32-bit animation and video fragments, using access either directly to Windows files and folders, or to the database and proxy copies stored at the server. A composition may contain sound with a set audio level ratio for every layer.

In other respects, graphics editor contains an exhaustive selection of instruments for quick creation of graphics with 2D effects and captions, including roll up captions, "crawlers", "teletypes", TV clocks and displaying RSS feed data. Marking initial texts with tags can be applied to all types of captions, which allows automatic change of text and background color and insert of images. 2D animation management by key points for every object is also available.

# **Graphics Editor Launch**

The editor is launched automatically when:

- Creating a new graphic composition. Right click menu in the Media Browser window: Media Browser→New→Graphics....
- A request for editing an existing graphic composition. Right click menu in the Media Browser window: Media Browser→New→Edit....

Before creating a new graphic composition, specify its format:

airmgr		? X
Video Format:	PAL - 720x576, 25.00, TFF	•
Resolution:	Default 📩 x Default	*
Color Mode:	Unspecified	•
Finable A	udio	
Audio Chan	nels: 2	÷
	Ok Car	cel

Parameter	Description
Video Format	Select the graphic composition format from the list
Resolution	The option allows setting the graphic composition size in pixels. Added in 2.4.50. version.

Parameter	Description
	Set the color space for the created composition:
	BT.601
	BT.709
Color Mode	
	BT.2020
	SMPTE ST 2084
	ARIB STD-B67
Enable Audio	Allows turning off audio in the composition. Added in 2.4.44. version.
Audia Channala	The number of audio channels in the composition. Possible values are from 1 to 16
Audio Channel	Added in 2.4.44, version.

### **Editor Interface Elements**



Graphics* (1920x1080@25.00, 48000,16,2)	_O×
File Edit	
	General Elements
	Vame Clement
	Rect 0 Rect
	BackgroundImage PIP Frame
000000000000000000000000000000000000000	
	-Position X: 0 ★ Y: 0 ★ W: 1920 ★ H: 1080 ★
	Show/Hide
	Actions
	Uri: Container - Top Stories
	In: 00:00:00:00 Out: 00:00:01:00 Dur:
Text Area 0 (	Uri:
Rect0 ( )	In: 00:00:00:00 Out: 00:00:00 Dur:
Begin 🔽 00:00:00 🖡	

Area	Description
	The graphics editor menu line.
	File Menu
	New creating a new graphic composition
	Load opening an existing graphic composition for editing
	•
	•
	<b>Save as</b> - saving the composition with an option of renaming
	•
1	Close - closing the graphics editor
	Edit Menu
	•
	Copy - copying a graphic object to clipboard
	Paste - inserting a graphic object from clipboard
	•
	•
	Bedo - applying changes
	•
	Delete - deleting the graphic object

Δrea	Description
/ I Cu	Buttons to control displaying and key frames
	• <b>Deinterlace preview</b> - turning on/off the interlacing mode when viewing in the editing window.
	<ul> <li>Preview fade ins/outs - turning on/off displaying mixer transitions, wipe transitions and clipping in the editor.</li> </ul>
	• Display safe area quidelines - turning on/off displaying a "safe zone" frame for captions.
2	Go to previous key point - moving the cursor in the area 5 to the previous key frame.
	<ul> <li>Go to next key point - moving the cursor in the area 5 to the next key frame.</li> </ul>
	<ul> <li>Insert key point - adding a key frame to the current graphic object, displaying it as a red point on the object timeline in the area 4 and in its properties.</li> </ul>
	<ul> <li>• Масштаб - setting the scale of the composition visual editing window. Added</li> <li>in 2.4.29 version.</li> </ul>
	• Zoom In/Out with Mouse - scale control with a mouse. When the button is active, the cursor defines the scaling point, left click zooms in, and left click + Shift zooms out. Added in 2.4.29 version.
3	
4	The list of active graphic objects with timelines.
	More details on object animations. The graphic composition scrolling area, which allows displaying the composition status at a set
5	moment of time.

Area	Description
-	The General tab contains general settings of a graphic composition:
1	• BG Type - backing type. •
	<b>Opaque</b> - a non-transparent backing used with a full screen graphic composition: for example, when creating a multiscreen composition for displaying SL NEO server input and output signals.
-	<b>Transparent</b> - a transparent backing (no backing) used when creating captions and compositions with transparency.
	Auto (default value) - Transparent.
	<b>Duration</b> - general duration of a graphic composition. The default value is -:-:-:- , meaning the composition has infinite duration. To return the default value, scroll down the mouse wheel or press the down arrow key.
6       	• Lead Out - the parameter defines the time needed for a composition with infinite duration to implement disappearing effects to its objects. For example, a composition has mixing disappearing effects, with 20 frames duration for all objects. Pressing Stop Seq or GoTo in the playlist of graphic events would make an "infinite" composition end correctly, with final effects, if you set the Lead Out value to 20 frames.
	Wipes - adding static images (BW transition templates) into the composition.
           	<b>Data Feeds</b> - adding RSS-data sources for further parametrization of the composition, in the format <a href="http://server_ip:port/RSS_name">http://server_ip:port/RSS_name</a> . Starting from version 2.0.148, the Data Feeds field can contain variables. For now there is one variable \$(storage), containing the address of the server with a media base, from which the composition was loaded. For instance, if the composition must always request an RSS-feed with the Feed_1.rss name at the same server that plays the composition, write \$(storage)/rss/Feed_1.rss in the feed URL. This function provides backup when using the built-in RSS generator. Starting from version 2.4.56 work by the HTTPS protocol is supported.
7	The tab with graphic objects settings

Area	Description		
		Send Composition To:	
		Local Monitor:	
		Remote Server:	
	Elements for composition preview control.	Layer_1:	
	Load graphics composition to Fil composition to the File Monitor window or	e Monitor/Graphics layer - loads the current adds it to a remote server playlist.	
	Play graphics composition in File composition in the File Monitor window or	e Monitor/Graphics layer - launches the current a remote server playlist.	
8	- Reset File Monitor/Stop Graphics	<b>Layer</b> - stops playback.	
o	Add/Remove Remote Server - opens a dialog for adding/deleting servers that may receive graphic compositions.		
	<ul> <li>Name - a random playlist name.</li> </ul>		
	• Address - the server IP address.		
	Program - number of the program channe	el with 1.	
	Layer - number of the playlist with 0 (0 - t	he main layer, 1 - the first graphic one etc).	
	Visual editing window. Scaling objects is in rectangle corner. By holding Shift and mov following hot keys are supported:	nplemented by dragging the black marker in the ving the marker will save the picture aspect ratio. The	
	Ctrl+C - copying a graphic object to clipbo	bard.	
9	Ctrl+V - inserts a graphic object from clipl	board.	
	Ctrl+Z - cancel changes.		
	Ctrl+Y - apply changes.		
	<b>Del</b> - deleting the graphic object.		

Area	Description	
	The area displays a sorted list of active graphic objects. In the Name field allows setting a name for every object, the Element field displays the object type. When selecting the object in this window, it becomes selected in the editor window, with all object attributes available for editing displayed in the lower part of the Elements tab.	
	Name Element	
	Text object Text Area	
	Black rect Rect	
	Red rect Rect	
10	The object position in the list defines its position in the editor concerning other objects. The higher the object is in the list, the closer it is to the audience, visually overlaying all other objects lower in the list. • Raise - move the object higher.	
	Lower - move the object lower.	
	•	
	<ul> <li>Chains - grouping several objects.</li> <li>•</li> </ul>	
	New - add a new object to the composition. The new object will be added before the selected object. •	
	Paste - paste an object.	
	•	
	Delete - delete an object.	
11	The area for configuring the graphic composition parameters. Available settings depend on the graphic object type. See the detailed description of settings in the Graphic Objects section.	

# **Graphic Objects**

### **PIP Frame**

PIP frame is a «picture-in-picture» object. PIP objects may contain full screen clips, audiovisual clips-links created in the News CUT app, static and dynamic graphic clips created while importing graphic files (24/32 bit), Live-clips (including TV clock clips).



An example of displaying a new object in the editing area.

#### **Object Settings**

Position

X: 0 * Y: 0 * W: 1920 * H: 1080 *		
Show/Hide		
Sh 00:00:00:00 / In V Hd 00:00:00:00 / Ou V		
Actions		
On Empty On Not Empty Clippers Anchors		
E		
Uri:		
In: 00:00:00:00 Out: 00:00:00 Dur: 00:00:00		
Г		Key points
Uń:		Clip to original
In: 00:00:00:00 Dut: 00:00:00 Dut: 00:00:00:00		Keypoint Smoothing: None
		Time Orig: Shov r: Frm: 00:00:00:00
	VANC/VBI Auto Unicop 🔽 RSS Loopped 🔽 BG for Inv	Scale: 1.00 Rot: 0
	Audio	Too: 1.00 - Btra: 1.00 -
In: 00:00:00:00 Out: 00:00:00 Dur: 00:00:00 0	Volume: 0 Db Channel Mixer	DX: 0.00 - DY: 0.00 -
Parametrization	Video	Opst: 100 and
Type: Disabled	- Mix In	
Feed:	Type: Cut 💌 Dur: 0 fm 🚋	
Channel:	Wpe: v	Video Effects
Selector:	- Mix Out	Effect Name Add
Index: 0	Type: Cut 💌 Dur: 0 frm 💼	
	Wpe: 🗸	E00
108	Crop Video	Move Up
Oroup:		New Deve
item:		Move Down
Selector:	Castan Ea w	Remove
Index: 0	HAllow W	
Title:	The second secon	Position Mapping
Field: Item Description	wage. Tob	Counter name:
AutoRewind Value Map	-Render Mode	Counter value IN: 00:00:00
Restort On Show	Render Mode: Paint	Counter value OUT: 00:00:00
- common and action	Blur Radius: 10	Clamp at borders

Parameter	Description
	The object position and size on screen. Countdown of coordinates is implemented from the picture left top corner.
	• M. M. affrat in nivela
	<b>X</b> - X oπset in pixels,
Position	• <b>Y</b> - Y offset in pixels,
	• W _ object width in pixels
	•
	H - object height in pixels.

Parameter	Description
	The Show/Hide field allows setting time values, according to which the server delays the PIP object input/output relative to the beginning and end of a graphic composition. For example: when setting the Sh 00:00:02:00/In value, the object will appear in two seconds after the composition starts. When setting Sh 00:00:10:00/In, the object will disappear in ten seconds after the composition starts. When setting Hd 00:00:01:00/Out, the object will disappear one second before the composition ends.
Show/Hide	• In - the IN point. If the composition wasn't trimmed in a playlist or in the File Monitor window, the In point would coincide with the Bgn point by default.
	<b>Out</b> - the OUT point. If the composition wasn't trimmed in a playlist or in the File Monitor window, the Out point would coincide with the End point by default.
	<b>Bgn</b> - the point of the graphic composition start.
	• <b>End</b> - the point of the graphic composition end.
Actions	<ul> <li>On Empty - the option sets execution of Skylark Graphic API commands upon the "Empty" condition. A PIP object becomes Empty, when clip playback stops. See Example of Using Graphics Actions.</li> <li>On Not Empty - the option sets execution of Skylark Graphic API commands upon the "Not Empty" condition. See Example of Using Graphics</li> </ul>
	Actions.   Clippers - setting "clipping" rectangles.  Anchors - setting object anchoring vertically and horizontally to other graphic composition object. Added in 2.2.12 version
Uri	<ul> <li>Uri - a link to the clip loaded to PIP.</li> <li>[] - the button opens the window for object selection.</li> <li>In - time code of the clip initial point. The value is initialized automatically, if a clip is dragged to the editing area from the media base.</li> <li>Out - time code of the clip final point. The value is initialized automatically, if a clip is dragged to the editing area from the media base.</li> <li>Out - time code of the clip final point. The value is initialized automatically, if a clip is dragged to the editing area from the media base.</li> <li>Dur - clip duration. The value is not set automatically; the default value -:-:-:-means the clip will be played in an endless loop.</li> <li>There are three Uri fields provided for one PIP object, which allows displaying captions with dynamic backings, where Uri1 is the backing appearing clip. Uri2 is the backing cycle, and Uri3 is the backing disappearing clip. This function is often used with the Still Frame video effect.</li> </ul>
Parametrization	The area of configuring object parametrization in a graphic composition.
VANC/VBI	Service Andrew Servic
Auto Unloop	

Parameter	Description
RSS Loopped	🕆 Fix Me!
BG for Inv	The function allows using the initial frame covered by a composition as PIP content in case, if PIP video is empty. Amongst other, this allows squeeze-back by launching the corresponding composition in a graphic layer, and displaying content of two previous layers in the PIP window "as is". Example of using the function - Squeezeback Effect. Added in 2.0.127 version.
Audio	The Volume field allows setting an audio level for the layer and specifying the mixing (decreasing) value of sound in dB.
Chanel Mixer	The virtual switcher-mixer of audio-channels with 16x16 dimension
Video→Mix In	sets the the object layer mixing parameters, when appearing
Video→Mix Out	sets the the object layer mixing parameters, when disappearing
Video→Crop Video	Select the vertical and horizontal "cropping" values for images. • CX - crop the initial video by the X axis from the left (video is scaled depending on the Video→Placement→Scaling option parameters). • • • CY - from the top • CW - from the right • CH - from the bottom Consider the proxy-copy size
Video→Placement	Clip positioning within the PIP object area • Scaling: • Fill - inserts the clip to the PIP area sizes (without saving the aspect ratio). • Box - inserts the clip to the PIP area, saving the aspect ratio. • Box - inserts the clip to the PIP area, saving the aspect ratio. • None - saves the clip original size without scaling. • HAlign - horizontal alignment (for Scaling: box and none). • VAlign - vertical alignment (for Scaling: box and none).

Parameter	Description
	Sets the clip displaying mode in the PIP element.
	• Dender Mede
	s
	Paint - regular clip in PIP displaying. ₀
Video→Render Mode	Blur - In this mode, alpha channel of the clip placed in PIP is used to blur the picture following it. Usage example.
	<b>Alpha</b> - the mode allows rendering the PIP object alpha channel to the composition alpha channel (the effect is applied to the lower layers). Thus, random videos/sequences/compositions can be used as masks for graphic compositions. Added in 2.4.51 version.
	<b>Blur Radius</b> - the parameter sets the blurring degree and can possess the value from 1 to 40 Added in 2.0.107 version.
Video→Key points	Object Animation by key frames.
	The field contains the list of effects that can be applied to the video layer Rendering is implemented by the SL NEO server "on the fly" during clip playback.
	• Add - adds an effect.
Video→Video Effects	Edit - opens the setting window for the selected effect.
	<b>Move Up</b> - moves the selected effect up in the list. Effects in the list are applied consequently.
	Move Down - moves the selected effect down in the list.
	<b>Remove</b> - removes the selected effect. See the description of available video effects.
	Parametrizing the number of the displayed video frame by the Counter element value from the same composition. The function sets two counter values conforming the initial and final points of the video displayed in PIP. Values can be set manually in the composition editor, or parameterized from the playlist. The value is set in seconds and can be, for instance, a result of calculating time to the event start in the playlist.
Video	<b>Counter name</b> - name of the counter containing the values.
Mapping	<b>Counter value IN</b> - counter value in seconds, corresponding the clip IN point.
	<b>Counter value OUT</b> - counter value in seconds, corresponding the clip OUT point. •
	Clamp at borders - 🥆 Fix Me!
	Added in 2.0.183 version. Usage examples: Accelerating Final Captions and Creating Circle Progress Bar.

#### **Rectangle object**

Rectangle object is a rectangle (tinted box, static backing for a caption).



An example of displaying a new object in the editing area.

- Position	Parametrization	
X: 384 * Y: 216 * W: 1152 * H: 648 *	Тура:	External
Show/Hide	Feed:	
Sh 00:00:00:00 / In 🕶 Hd 00:00:00:00 / Ou 🕶	Channel	·
Actions	Columna.	linim and
On Empty On Not Empty Clippers Anchors	selector:	index 👻
	Index:	0 🛨
Frame type: Rectangle	Title:	
	Group	
Color: Opacity: 100	Group.	·
Grad: Non CCol: GOpac: 100 -	IDEMI:	
V Outine	Selector:	Index. 👻
Width: 0 Color: Opecity: 100 -	Index:	0 *
Grad: Non 🔽 GCol: 🔲 GOpac: 100 🚎	Title:	
Key points	Field:	Item Description
Keypoint Smoothing: None	AutoRewind	Value Map
Time Orig: Shov - Frm: 00.00.00.00	Revind On Show	
SX: 1,00 - SY: 1,00 -	Mix In	
DX: 0.00 PY: 0.00 P	Type: Cut	Dur: 0 frm 🔆
0000	Wipe:	¥.
	Mix Out	
	Type: Cut	Dur: 0 frm
	Wipe:	

Parameter	Description
Position	The object position and size on screen. Countdown of coordinates is implemented from the picture left top corner.
	X - X offset in pixels,
	• Y - Y offset in pixels, •
	<b>W</b> - object width in pixels,
	•
	<b>H</b> - object height in pixels.

Parameter	Description
Show/Hide	The Show/Hide field allows setting time values, according to which the server delays the PIP object input/output relative to the beginning and end of a graphic composition. For example: when setting the Sh 00:00:02:00/In value, the object will appear in two seconds after the composition starts. When setting Sh 00:00:10:00/In, the object will disappear in ten seconds after the composition starts. When setting Hd 00:00:01:00/Out, the object will disappear one second before the composition ends.
	<b>In</b> - the IN point. If the composition wasn't trimmed in a playlist or in the File Monitor window, the In point would coincide with the Bgn point by default.
	<b>Out</b> - the OUT point. If the composition wasn't trimmed in a playlist or in the File Monitor window, the Out point would coincide with the End point by default.
	<b>Bgn</b> - the point of the graphic composition start.
	<b>End</b> - the point of the graphic composition end.
Actions	<ul> <li>On Empty - the option sets execution of Skylark Graphic API commands upon the "Empty" condition. The Rect object becomes Empty, when it disappears from the screen.</li> </ul>
	<b>On Not Empty</b> - the option sets execution of Skylark Graphic API commands upon the "Not Empty" condition.
	Clippers - setting "clipping" rectangles.
	• <b>Anchors</b> - setting object anchoring vertically and horizontally to other graphic composition objects. Added in 2.3.12 version.
	Sets the Rect object look.
	• Rectangle - a rectangle •
	H Line - a horizontal line
Frame type	V Line - a vertical line
	<b>Rounded</b> - a rectangle with rounded corners (including circle and ellipse). Rounding is set by the Radius parameter.
	<b>Diamond</b> - a parallelogram. Sloping is set by the Slope parameter.

Parameter	Description
	Turning on/off the rectangle filling. When the option is active, the following parameters are edited:
	Color - rectangle filling color
	<b>Opacity</b> - the degree of displaying the rectangle filling (Opacity - value reverse to transparency, 100% - completely opaque)
	Grad - activates gradient and sets the gradient filling type:
Fill	None - gradient is not active; 。
	vert - vertical;
	Hor - horizontal;
	LT-RB - from the top left corner to the lower right one;
	<ul> <li>LB-RT - from the lower left corner to the top right one;</li> <li>•</li> </ul>
	GCol - gradient color; •
	GOpac – the degree of displaying the gradient color of rectangle filling.
	If needed, there is an option to set an Outline with attributes:
	• Width - outline width; •
	<b>Color</b> - outline color;
	• Opacity - the degree of displaying the outline (100 - completely opaque) •
	<b>Grad</b> - activates gradient and sets the gradient filling type:
Outline	None - gradient is not active;
	<b>Vert</b> - vertical;
	Hor - horizontal;
	<b>LT-RB</b> - from the top left corner to the lower right one;
	<b>LB-RT</b> - from the lower left corner to the top right one;
	<b>GCol</b> - gradient color;
	<b>GOpac</b> – the degree of displaying the outline gradient color.
Key points	Object Animation by key frames.
Parametrization	The area of configuring object parametrization in a graphic composition.
Mix In	sets the object layer mixing parameters, when appearing.
Mix Out	sets the object layer mixing parameters, when disappearing

### Text object

Text - the	text ob	ject (ca	ption).





An example of displaying a new object in the editing area.

Position	- Inked Rect
X: 384 - Y: 216 - W: 1152 - H: 648 -	Linked Rect
Show'Hide	Left margin: 0 👘 Top margin: 0 👘
Sh 00:00:00:00 / In 💌 Hd 00:00:00:00 / Ou 💌	Right margin: 0 2 Sottom margin: 0 2
Actions	-Key points
On Empty On Not Empty Clippers Anchors	Clip to original
	Keypoint Smoothing: None
	Time Orig: Shor v Frm: 00:00:00:00
	SX: 1,00 + SY: 1,00 +
	DX: 0.00 ++ DY: 0.00 ++
	0x+ 100 -
-Style	
H: Left V: Top Lap: 100 - Cap: 100 -	Parametrzation
Scroling	Type: Disabled
Type: Still V Speed: 2.00 - Loop	Feed
Ent	Channel
Family: Arial V Size: 15.02	Selector:
Bold Italic Hinting Sight V	Index: 0
Text raise	Trie
Color: Downity: 100 - Security: 1	
	line.
Victor A - Color	Salaria
	Tele:
	Field: Item Description
Background	AutoRewind Volue Map
Coor. 100 =	Revind On Show
	There are a second and a second
	type out tote offen
	mpe.
	type: Out Voue 0 fm 🚔
	Wpe:

Parameter	Description
Position	<ul> <li>The object position and size on screen. Countdown of coordinates is implemented from the picture left top corner.</li> <li>X - X offset in pixels,</li> <li>Y - Y offset in pixels,</li> <li>W - object width in pixels,</li> <li>H - object height in pixels.</li> </ul>

Parameter	Description
Show/Hide	The Show/Hide field allows setting time values, according to which the server delays the PIP object input/output relative to the beginning and end of a graphic composition. For example: when setting the Sh 00:00:02:00/In value, the object will appear in two seconds after the composition starts. When setting Sh 00:00:10:00/In, the object will disappear in ten seconds after the composition starts. When setting Hd 00:00:01:00/Out, the object will disappear one second before the composition ends.
	<b>In</b> - the IN point. If the composition wasn't trimmed in a playlist or in the File Monitor window, the In point would coincide with the Bgn point by default.
	<b>Out</b> - the OUT point. If the composition wasn't trimmed in a playlist or in the File Monitor window, the Out point would coincide with the End point by default.
	<b>Bgn</b> - the point of the graphic composition start.
	• End - the point of the graphic composition end.
Actions	<ul> <li>On Empty - the option sets execution of Skylark Graphic API commands upon the "Empty" condition. The Text object becomes Empty, when it disappears from the screen.</li> </ul>
	<b>On Not Empty</b> - the option sets execution of Skylark Graphic API commands upon the "Not Empty" condition.
	Clippers - setting "clipping" rectangles.
	• <b>Anchors</b> - setting object anchoring vertically and horizontally to other graphic composition objects. Added in 2.3.12 version.
Text	
Style	• <b>H</b> - horizontal alignment (Left, Right, Center) •
	<b>V</b> - vertical alignment (Top, Bottom, Center)
	Lsp - line spacing
	<b>Csp</b> - char spacing

Parameter	Description
	Activating the line scrolling option.
	• <b>Type</b> - the caption scrolling type,
	Still - static,
	Scroll - the bottom-up scrolling, 。
Scrolling	<b>Crawl</b> - right to left ticker,
	<b>Tele</b> - teletype (character by character input),
	<b>Speed</b> - scrolling speed measured in units equal 1/15 from the screen size per second. The speed value must include tenths, e.g. 2,0 or 0,5. Negative values launch the line scrolling from left to right.
	Loop - repeat the content scrolling cycle (only for Text objects).
	Font Settings
	<b>Family</b> - select a font from the list of fonts installed in the system. Since 2.0.148 version, the feature is a free-form data entry, which allows specifying fonts absent in the system that implements editing.
	Size - font size in pt.
	Bold - bold fonts.
Font	Italic - italic fonts. •
	<b>Hinting</b> - screen optimization: changing the font outline while its rasterization, to achieve the maximal legibility at the computer screen. The feature is used to provide a more distinct shape of letters for devices with low screen resolution, or displaying text in a small body-size.
	None - no hinting,
	Slight - low level,
	Full - complete hinting.
	Text Color Settings
Text color	Color - sets the text filling color.
	<b>Opacity</b> - the degree of displaying (the value in percent, opposite to transparency).
	Smooth - blurring.

Parameter	Description
	If needed, there is an option to set an Outline with attributes:
	• Width - outline width;
	• Color - outline color;
	• Opacity - the degree of displaying the outline (100 - completely opaque) •
	<pre>Grad - activates gradient and sets the gradient filling type:</pre>
Outline	None - gradient is not active; 。
	<b>Vert</b> - vertical;
	<b>Hor</b> - horizontal;
	<b>LT-RB</b> - from the top left corner to the lower right one;
	<b>LB-RT</b> - from the lower left corner to the top right one;
	GCol - gradient color;
	<b>GOpac</b> – the degree of displaying the outline gradient color.
	If needed, there is an option to set displaying a Shadow with attributes:
	• Color - shadow color:
	•
	<b>Opacity</b> - the degree of shadow displaying (100 - completely opaque);
Shadow	Blur - shadow blurring;
	<b>dX</b> - shadow positioning along the X axis (positive value shifts the shadow to the right); •
	<b>dY</b> - shadow positioning along the Y axis (positive value shifts the shadow lower);
Background	The text background color and degree of transparency.
	backing automatically changes its sizes according to text content.
	Linked Rect - specify the anchored Rect object name.
Linked Rect	<b>Left margin</b> - the rectangle left margin in pixels. •
	<b>Right margin</b> - the rectangle right margin in pixels.
	<b>Top margin</b> - the rectangle top margin in pixels.
	Bottom margin - the rectangle bottom margin in pixels.
Key points	Object Animation by key frames.
Parametrization	The area of configuring object parametrization in a graphic composition.
Mix In	sets the object layer mixing parameters, when appearing.
Mix Out	sets the object layer mixing parameters, when disappearing



For correct displaying of text by the SL NEO server, font sets at the server and network workstation responsible for text editing must be identical.

#### **Text feed**

Text Feed is the object containing text automatically read off from external sources and displayed as tickers, scrolling lists etc. Typical examples are SMS-chats, tickers, exchange rates information etc.



An example of displaying a new object in the editing area.

#### **Object Settings**

- Position X: 384 - Y: 216 - W: 1152 - H: 048 -	Color: Opacity: 100
ShowHide	. Key points
Sh 00:00:00:00 / In ¥ Hd 00:00:00:00 / Ou ¥	Clip to original
Actions	Keypoint Smoothing:
On Empty., On Not Empty., Clippers., Anchors.,	Time Odr. Show W. Ever. 00:00:00:00
Preview text:	DA: 1,00 - DT: 1,00 -
	Di: 0.00 + DY: 0.00 + Open. 100 +
	Parametrization
- Feeds	Type: Disabled
Wait next Pause: 1.0 📩 🔽 TimeSict end at Hide	Feet
Spacing: 0 in Delay: 1,0 in	Channel
. Style	Galacter Index v
H: Left V: Top V. Lsp: 100 🚎 Csp: 100	
Scroling	
Type: Still 💌 Speed: 2.00 🗮	Trite:
Font	Group:
Family: Arial V Size: 15.0 *	Item:
Bold Italio Hinting: Slight 💌	Selector: Index y
Text color	Index: 0 🚊
Color: Opacity: 100 and Smooth: 1 and	Title:
Outine	Field: Item Description
Width: 0 🛖 Color:	AutoRevind Value Map
Color: Opacity: 100 - Blar: 0 -	E Rewind Dn Show E Delete displayed
a 0 4 m 0 4	Mix in
	Type: Cut 💌 Dur: 0 fm 🚊
	Wpe:
	Mix Out
	Type: Out  Dur: 0 fm
	Wpe: v

Some settings are described in the Text object description, the table contains the differences.

Parameter	Description
Actions	• <b>On Empty</b> - the option sets execution of Skylark Graphic API commands upon the "Empty" condition. The object Text Feed becomes Empty, when there is no more text for displaying.
	<b>On Not Empty</b> - the option sets execution of Skylark Graphic API commands upon the "Not Empty" condition.
	Clippers - setting "clipping" rectangles.
	• <b>Anchors</b> - setting object anchoring vertically and horizontally to other graphic composition objects. Added in 2.3.12 version.
Preview text	
	<ul> <li>Wait next - if there are no other messages, the last one will be displayed.</li> <li>Pause - pause in seconds</li> <li>Spacing</li> </ul>
Feeds	• Delay •
	<b>TimeSlot end at Hide</b> - ends a line timeslot after object disappearing from the screen. Messages that have not been displayed, will be saved in the queue for the next output. If the object with the inactive «TimeSlot end at Hide» parameter is hidden, playback of messages in the line will be continued, but the element will not be displayed on the screen.
Scroling	Loop settings are not available for this object.



For correct displaying of text by the SL NEO server, font sets at the server and network workstation responsible for text editing must be identical.

#### **Text counter**

Text counter is a text object that contains a digital counter or a clock displaying current time or date.



An example of displaying a new object in the editing area.

	Shadow		
	Color:	Opeoty: 100 + Blut: 0	-
	dX: 0	dY: 0 🛖	
	Background		
	Color	Openity: 100	-
	Key points		
Reading.	Clip to original		
	Keypoint Smoothing:	None	-
	Time	Orig: Show - Frm: 00:00:00:	10
Sh 00.00.00 / In T Hd 00.00.00 / Ou T		SX: 1.00 🚖 SY: 1.00 🚖	
Actors		DX: 0,00 🚊 DY: 0,00 🚊	
On Empty On Not Empty Clippers Anchors		Oper: 100	
Turne Weit electric W Court form Show W Auto	Parametrization		
		-	
Offset Fred V 00:00:00 Proportional font	Туре:	Deabled	91
Date format: YYYY_MM_DD	Feed:		
Counter	Channel:		
Toays IV Hours IV Minutes	Selector:	Index	1
🔽 Seconds 🔽 Tenth 🖓 Hundredth	Index	0	В
Show Overflow T 12HRS Show AM/PM	Title:		-
Leading zero	Group:		-
-Style	Item:		
H: Left V: Top Lsp: 100 * Csp: 100 *	Selector:	Index	3
Soroling	Index	0	Э
Type: Sol Freed: Z.00 -	Title:		-
-Font	Field:	Item Description	1
Family: Arial Size: 15.0 *	E AntoRevied	Value Man	1
Field Talic Hinting: Slight 💌			- 1
Text color	I manage on prove		
Color: Opacity: 100 🚔 Smooth: 1 🚔	-Mix In		-
Outine	Type: Cut	Dut: 0 fim :	2
Whiteh:	Wipk:	<u> </u>	
Shadow	Mix Out		-
Color: Openity: 100 🕁 Rue: 0 🕁	Type: Cut	U Dur: 0 fim	
	Wpe	<u>*</u>	

Parameter	Description
	The object position and size on screen. Countdown of coordinates is implemented from the picture left top corner.
	•
	<b>X</b> - X offset in pixels,
Desition	•
Position	<b>Y</b> - Y offset in pixels,
	•
	<b>W</b> - object width in pixels,
	•
	<b>H</b> - object height in pixels.

Parameter	Description
	The Show/Hide field allows setting time values, according to which the server delays the PIP object input/output relative to the beginning and end of a graphic composition. For example: when setting the Sh 00:00:02:00/In value, the object will appear in two seconds after the composition starts. When setting Sh 00:00:10:00/In, the object will disappear in ten seconds after the composition starts. When setting Hd 00:00:01:00/Out, the object will disappear one second before the composition ends.
Show/Hide	<ul> <li>In - the IN point. If the composition wasn't trimmed in a playlist or in the File</li> <li>Monitor window, the In point would coincide with the Bgn point by default.</li> </ul>
	Out - the OUT point. If the composition wasn't trimmed in a playlist or in the File Monitor window, the Out point would coincide with the End point by default.
	<b>Bgn</b> - the point of the graphic composition start.
	• <b>End</b> - the point of the graphic composition end.
Actions	<ul> <li>On Empty - the option sets execution of Skylark Graphic API commands upon the "Empty" condition. The Text object becomes Empty, when it disappears from the screen.</li> <li>On Not Empty - the option sets execution of Skylark Graphic API commands upon the "Not Empty" condition.</li> <li>Clippers - setting "clipping" rectangles.</li> <li>Anchors - setting object anchoring vertically and horizontally to other graphic composition objects. Added in 2.3.12 version.</li> </ul>
	Counter type: • Wall clock - a digital clock. • Counter - a simple counter. •
Туре	<b>External</b> - the counter value can be set using API (counter_set_value)
	<b>Date</b> - displaying the current system date.
	<b>Clock Counter</b> - allows creating counters displaying time from/to a certain time of the day. Time of the day is set in the Offset field, direction is set by the switch: Backward - time at the counter decreases, Forward - it increases.

Parameter	Description	
	The countdown point for the counter:	
	• <b>Begin</b> - from the composition start	
	•	
	<b>End</b> - from the composition end.	
Count from	• In - from the composition In point.	
	<b>Out</b> - from the composition Out point.	
	• <b>Show</b> - from the point of the object appearing on the screen. •	
	Hide - from the point of the object disappearing from the screen.	
	<b>Auto</b> - the default value for this type of counters.	
Countdown direction	<b>Forward</b> - countdown forward (values increasing).	
	Backward - countdown backward (values decreasing).	
Sp1	Sets an indent to the left of the separator (00*:00*:00.00)	
Sp2	Sets an indent to the right of the separator (00:*00:*00.00)	
Sp3	Sets an indent between the time value and AM/PM symbols (00:00:00.00*AM)	
Sep	The separator of values for days, hours, minutes and seconds.	
	The value of offset relative to the timecode, in the 00:00:00:00 format.	
Offset	Bkwd - backward	
	•	
	Frwd - forward	
Proportional font	Sets proportional displaying (emulation of a monospace font).	
	The format of date displaying in the Date mode:	
	• YYYY MM DD	
	•	
	DD_MM_YYYY	
	• DD_MM_YY	
Date format	• DD_MM	
	• MM_DD_YYYY	
	MM_DD_YY	
	MM_DD	

Parameter	Description
	Activates and controls displaying the corresponding counter values: "DD HH:MM:SS:DH TI" •
	Days - days (DD);
	• Hours - hours (HH); •
	Minutes - minutes (MM); •
	Seconds - seconds (SS); •
Counter	<b>Tenth</b> - tenths (D); •
	Hundredth - tenths and hundredths (DH); •
	<b>Show overflow</b> - allows displaying values greater than 60 for minutes and seconds; •
	<b>12HRS</b> - activating the 12 hour format (" $18:53:12" \rightarrow "06:53.12"$ );
	<ul> <li>Show AM/PM - displaying the AM or PM time interval (TI);</li> <li>•</li> </ul>
	<b>Leading Zero</b> - activating the leading zero for the first left segment $(6:53.12 \rightarrow 06:53.12)$ . Added in 2.3.95 version.
	Font Settings
	<b>Family</b> - select a font from the list of fonts installed in the system. Since 2.0.148 version, the feature is a free-form data entry, which allows specifying fonts absent in the system that implements editing.
	Size - font size in pt.
	Bold - bold fonts.
Font	Italic - italic fonts.
	<b>Hinting</b> - screen optimization: changing the font outline while its rasterization, to achieve the maximal legibility at the computer screen. The feature is used to provide a more distinct shape of letters for devices with low screen resolution, or displaying text in a small body-size.
	None - no hinting,
	Slight - low level,
	Full - complete hinting.
	Text Color Settings
	Color - sets the text filling color.
Text color	• <b>Opacity</b> - the degree of displaying (the value in percent, opposite to transparency). •
	Smooth - blurring.

Parameter	Description
	If needed, there is an option to set an Outline with attributes:
	• Width - outline width; • Color - outline color;
	<b>Opacity</b> - the degree of displaying the outline (100 - completely opaque)
	<b>Grad</b> - activates gradient and sets the gradient filling type:
Outline	None - gradient is not active;
	<b>Vert</b> - vertical;
	<b>Hor</b> - horizontal;
	<b>LT-RB</b> - from the top left corner to the lower right one;
	<b>LB-RT</b> - from the lower left corner to the top right one; •
	GCol - gradient color; •
	<b>GOpac</b> – the degree of displaying the outline gradient color.
	If needed, there is an option to set displaying a Shadow with attributes:
	<b>Color</b> - shadow color;
	<b>Opacity</b> - the degree of shadow displaying (100 - completely opaque);
Shadow	Blur - shadow blurring;
	<b>dX</b> - shadow positioning along the X axis (positive value shifts the shadow to the right); •
	<b>dY</b> - shadow positioning along the Y axis (positive value shifts the shadow lower);
Background	The text background color and degree of transparency.
Key points	Object Animation by key frames.
Parametrization	The area of configuring object parametrization in a graphic composition.
Mix In	sets the object layer mixing parameters, when appearing.
Mix Out	sets the object layer mixing parameters, when disappearing



For correct displaying of text by the SL NEO server, font sets at the server and network workstation responsible for text editing must be identical.

### Sound level meter

Sound Level meter is a specialized element for displaying sound levels, used when building

compositions for multiscreen displaying input and output signals of SL NEO servers.



An example of displaying a new object in the editing area.

Position	Channel map
X: 384 - Y: 210 - W: 1152 - H: 648 -	
-Show/Hide	
Sh 00:00:00:00 / In V Hd 00:00:00:00 / Ou V	
Actions	
On Empty On Not Empty Clippers Anchors	13 14 15 18
Clip	Key points
Hereas array Koursey artess an users i KV	
Unippocioneer_xpanepara_onoopa_chywarenear_x7	Keypoint Smoothing: None
In: 00:00:00:00 Out: 00:01:40:11 Dur:	
Parameters	Time Orig: Shov v Frm: 00:00:00:00
T dialitetels	SX: 1.00 - SY: 1.00 -
Base level: 0	
Bar width: 8	DX: 0.00 + DY: 0.00 +
Font size: 8.0	Opet: 100 +
Show numbers	Mix In
Channels: 2	Type: Cut 💌 Dur: 0 frm 🚞
	Wipe:
	-Mix Out
	Type: Cut Dur: 0 frm
	Wipe:

Parameter	Description
Position	<ul> <li>The object position and size on screen. Countdown of coordinates is implemented from the picture left top corner.</li> <li>X - X offset in pixels,</li> <li>Y - Y offset in pixels,</li> <li>.</li> </ul>
	<ul> <li>W - object width in pixels,</li> <li>•</li> </ul>
	H - object height in pixels.

Parameter	Description
	The Show/Hide field allows setting time values, according to which the server delays the PIP object input/output relative to the beginning and end of a graphic composition. For example: when setting the Sh 00:00:02:00/In value, the object will appear in two seconds after the composition starts. When setting Sh 00:00:10:00/In, the object will disappear in ten seconds after the composition starts. When setting Hd 00:00:01:00/Out, the object will disappear one second before the composition ends.
Show/Hide	<b>In</b> - the IN point. If the composition wasn't trimmed in a playlist or in the File Monitor window, the In point would coincide with the Bgn point by default.
	<b>Out</b> - the OUT point. If the composition wasn't trimmed in a playlist or in the File Monitor window, the Out point would coincide with the End point by default.
	<ul> <li>Bgn - the point of the graphic composition start.</li> <li>•</li> </ul>
	<b>End</b> - the point of the graphic composition end.
	<ul> <li>On Empty - the option sets execution of Skylark Graphic API commands upon the "Empty" condition. The Text object becomes Empty, when it disappears from the screen.</li> </ul>
Actions	<b>On Not Empty</b> - the option sets execution of Skylark Graphic API commands upon the "Not Empty" condition.
	Clippers - setting "clipping" rectangles.
	Anchors - setting object anchoring vertically and horizontally to other graphic composition objects. Added in 2.3.12 version.
	• Uri - a link to the clip loaded to the sound level indicator. •
	[] - the button opens the window for object selection.
Uri	In - time code of the clip initial point. The value is initialized automatically, if a clip is dragged to the editing area from the media base.
	Out - time code of the clip final point. The value is initialized automatically, if a clip is dragged to the editing area from the media base.
	Dur - clip duration. The value is not set automatically; the default value -:-:-:- means the clip will be played in an endless loop.
	• Base level - the basic level.
Parameters	Bar width - the scale width (from 1 to 20).
	• Font size - the font size.
	• Show numbers - displaying the numeric scale.
	<b>Channels</b> - the number of analyzed channels (the number of displayed scales).
Channel map	
Key points	Object Animation by key frames.

Parameter	Description
Parametrization	The area of configuring object parametrization in a graphic composition.
Mix In	sets the object layer mixing parameters, when appearing.
Mix Out	sets the object layer mixing parameters, when disappearing

# **Transitions (Wipes)**

Mixing the object layer when appearing/disappearing.

# **Object Animation**

Graphic objects animation by key frames.

# Clipping

Work with a clipping rectangle.

### Parametrization

**Object parametrization** 

### **Graphics Actions**

- Example of Using Graphics Actions
- Skylark Graphic API Commands

### **Examples**

- Configuring "Now Playing" Captions
- Configuring "Coming up Next" Captions



- Squeezeback Effect
- Blur Effect
- Accelerating Final Captions (Video Position Mapping)
- Creating Circle Progress Bar (Video Position Mapping)

From: http://www.wiki.skylark.tv/ - **wiki.skylark.tv** 

Permanent link: http://www.wiki.skylark.tv/manual/graphics\_editor



