Sport In The Box 2 User manual

Sport In The Box™

Contents

Introduction

Start window

Start windows is the first window show when the program is started.

Existing databases are shown as a list with icons and description text.

Description is shown on top and can be edited in the MANAGE DATABASES menu. This usually includes current facility or club details, followed by the database type in red and the file name and path below.

Databases can be started with a double-click or by pressing the PLAY button next to the database.

Start window can be hidden by checking START THE LAST SELECTED DATABASE checkbox.
If checked, it will start the last used database automatically at startup.
To change this setting, in the File menu, select change database and the startup window will be shown again.

Language can be set in the drop down.

LICENSE details are showing the license holder, license ID and the expiration date.
A popup window will be shown 30 days before the expiration data.
INSTALLATION NAME is a good way to track installations internally if multiple licenses are used in the same arena.

New database

Database creation is a straightforward process. Press NEW DATABASE button.

Type database name and press BROWSE button or just click on the empty row below, confirm file name with OK.
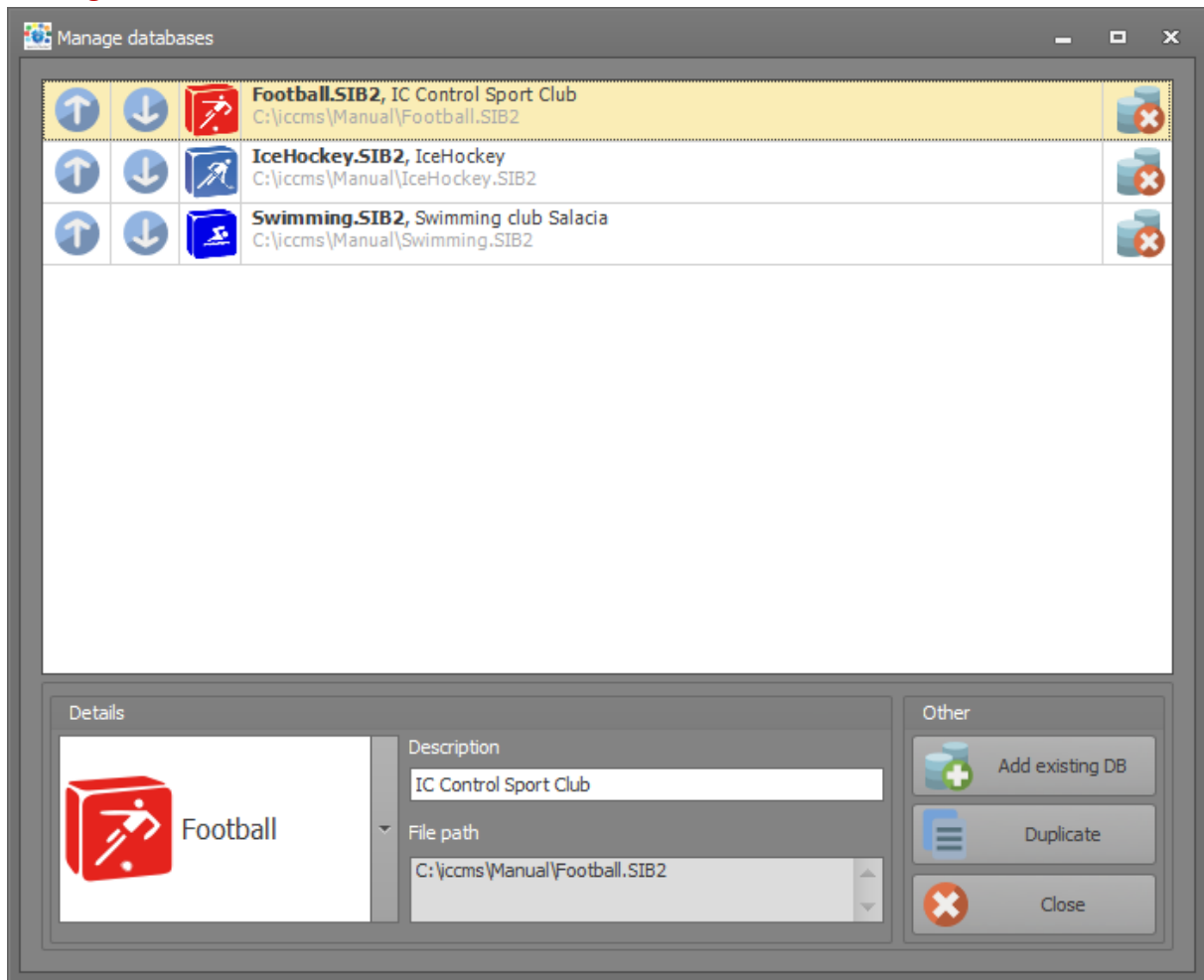
Select sport / database file.

Review details and press Finish.

New database is added last to the database list.

Manage database

Manage databases allows to change file order on the start screen by moving them with the mouse or by pressing the UP/DOWN buttons. Additionally, sport and description can be changed.

When deleting the database in the list, it is only deleted from the list, but not on the disk.

ADD EXISTING DB is used to add SIB2 files to the list.

DUPLICATE is a way to keep the current screen configuration when creating a new file. It may be a good idea to create a database without the content, but with hardware set and duplicate that database instead of creating new.

Databases are added last by default.

License details
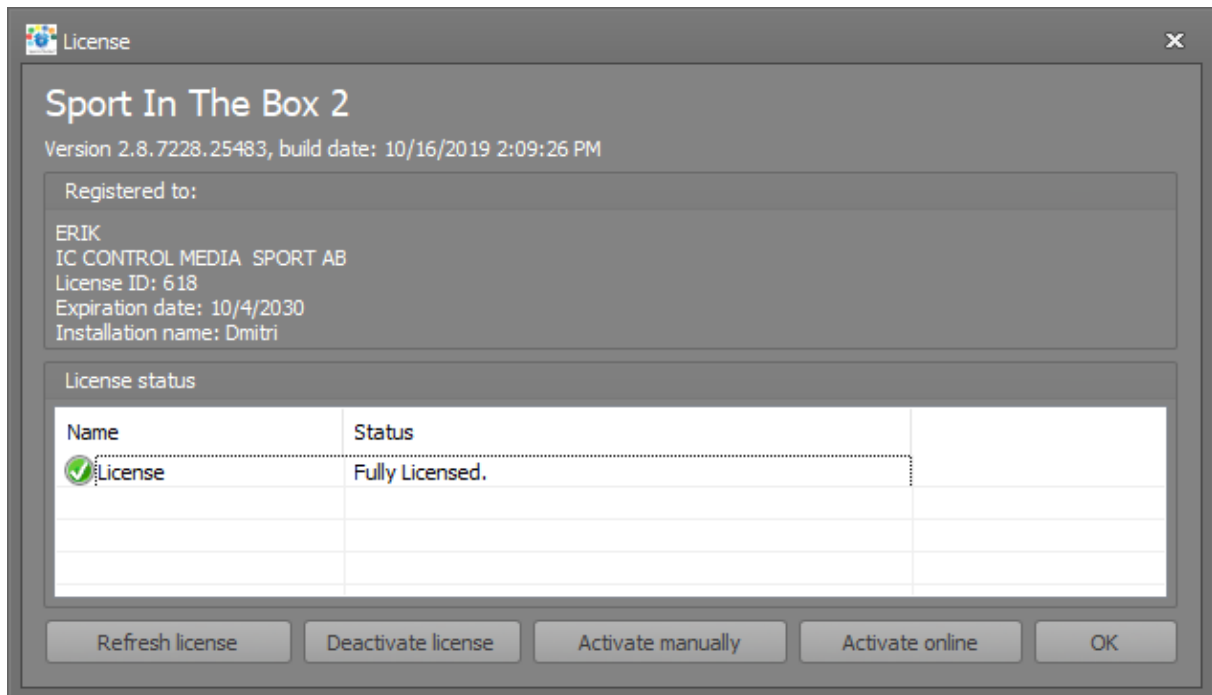
License window is the main way to manage licenses and to view the installation information.

This window is also shown at the first start. "Activate online" should be pressed then.

- REFRESH LICENSE: press refresh license after the payment to update the license.
- DEACTIVATE LICENSE: should be used if the program will be moved to a new computer.
- ACTIVATE MANUALLY: Used to activate the licence without an internet connection.
- ACTIVATE ONLINE: primary way of activation the Sport In The Box.
- CLOSE WINDOW by pressing OK.

Activate the license

Primary way to activate the license is the online activation with License ID and password.

Installation name" is a good way to track installations if multiple licenses are used in the same arena.

In doubts – contact us at info@iccmediasport.com.

License types
Sport In The Box comes in different shapes and forms. The most common forms are Light and Full.

Light
- One Screen Controller
- One video input
- Zero video outputs
- No Combined output.
- No DMX controller.

Full
- No limitations.

Main window

Main form is where the playback control takes place. Form can be schematically divided into 3 areas:

QUICKBUTTONS.
Left area with configurable buttons that can perform actions on the current or other instance of SIB2. Usual actions include playback control, performing recording of the video, making replays, starting animation in CombinedOutput and changing output windows brightness.
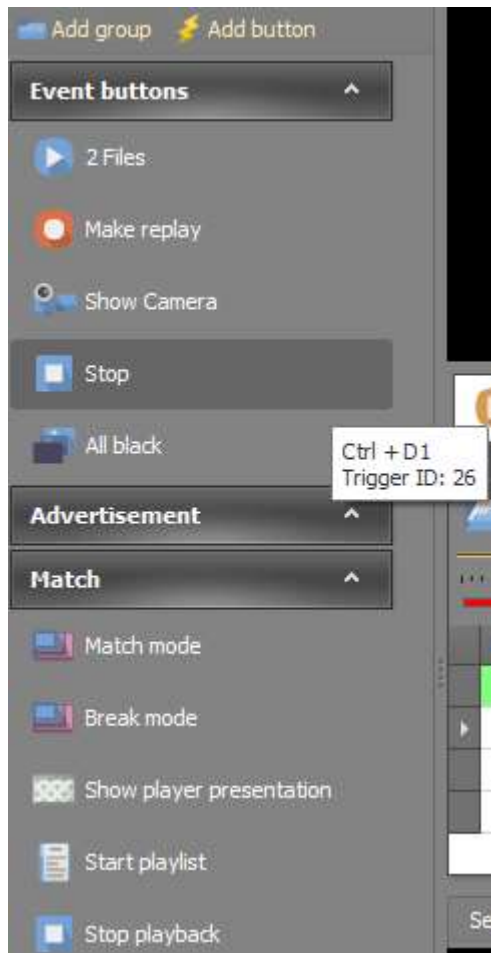
SCREENCONTROLLER.
Middle part is where the content is places. All content, except the templates, must be added to the Controller it will be played. Additional ScreenController's can be added in the settings.

SPORTCONTROLLER.
Sport controller is chosen based on the sport, selected when creating the database. The picture above shows the Football controller. Sport controller is different for the specific sport:, rules, team and clocks. Each sport has a set of pre-defined buttons. Football above has buttons to show line-up and red/yellow cards etc.

QuickButtons

QUICKBUTTON is the way of triggering multiple actions at the same time.

Typical operations include:

SCREENCONTROLLER playback: play file, start playlist, stop playback and show template (without adding it to the playlist).

VIDEOWINDOW: hide or show output window, adjust brightness.

COMBINEDOUTPUT: make scene transition animation.

VIDEO INPUT: make recording or replay of the video source and save it to the playlist.

NETWORK EVENTS: press QuickButton on another SIB instance via the network. Control ScreenController on the network computer.

Each QUICKBUTTON has a TRIGGERID associated with it. TRIGGERID is a unique identifier of the current button in the database. It can be used by the external software to press the button.

SHORTCUT can be assigned in the button editor to press buttons with a keyboard combination, like Ctrl+A, or with hardware like StreamDeck.

Playlist items can be dragged into the panel to create a QUICKBUTTON.

Buttons can be organised into the groups with the ADD GROUP button.

Reordering can be done by dragging the button with the mouse.

Button can be edited or deleted using the Right mouse button menu.

Edit QuickButton

QUICKBUTTON is edited by pressing a right mouse button and selecting EDIT on it.
BUTTON TEXT is the same as shown in the panel in the Main window and is a button name.
TRIGGERID is a unique identifier of the current button in the current database and can be used to press the button from other programs.
ICON can be selected from the list of pre-defined images, same icon will be shown everywhere in the SIB.
SHORTCUT is assigned by pressing the mouse button on the text field and pressing the required keys on the keyboard. Warning will be shown if the combination is already used.
Editor consists of two parts:

- Tree-like view with all SIB resources that can have an action with assigned action. Unassigned actions are collapsed in the tree or simply show "Do nothing" or equivalent.
- Current action editor below, that is changed based on the selected action.

Button action is changed by selecting different elements in the upper part and changing the action in the lower part.
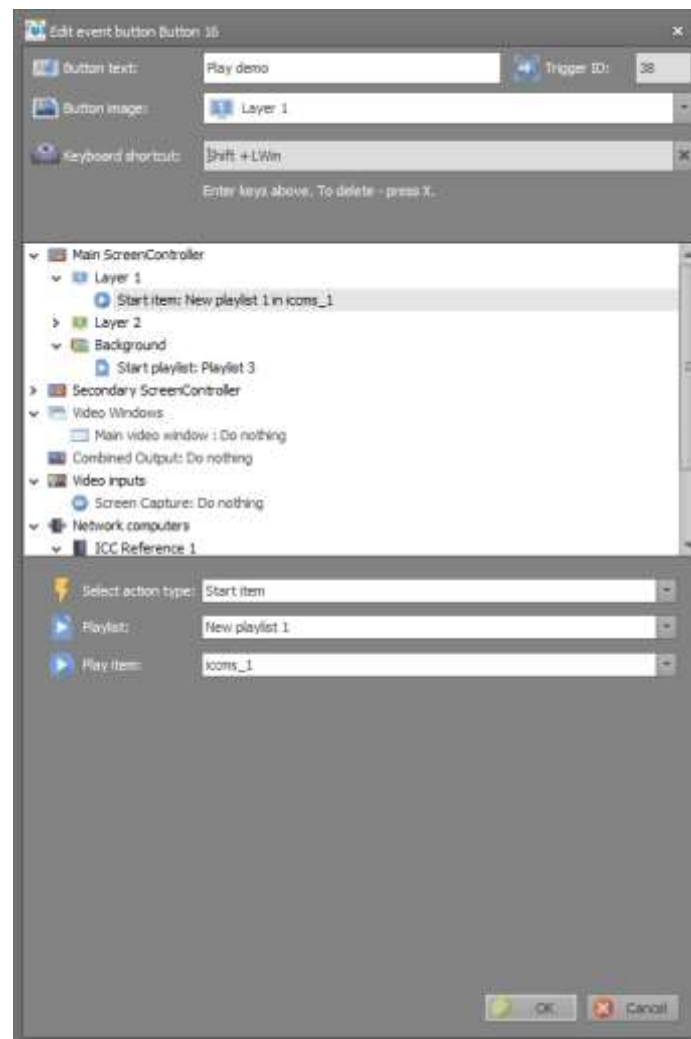
Screen Controller

For information about the SCREENCONTROLLER layers and configuration see Layers sections of documentation.

Every SCREENCONTROLLER can have different actions assigned
Since SCREENCONTROLLER has 3 three layers every layer can have its own action or no action at all.

START ITEM plays the specific file in the playlist on the selected layer. When the file ends – no other file is played after.

STOP PLAYBACK stops everything on the current layer. If the selected layer is a BACKGROUND, the default SCREENCONTROLLER background will be shown.

SHOW TEMPLATES show all templates added to the SPORT IN THE BOX in the settings. Templates is the only item that can be played without adding it to the playlist. Template duration in the playlist is unlimited and will be played until the next file starts or the playback is stopped.

START PLAYLIST will play the playlist from the beginning and loop it when that last file is reached.
USE IN PLAYLIST checkbox can be used to exclude file from playback.

Video window

Video window must be configured in Settings before assigning an action to it.

By default, VIDEOWINDOW has no action assigned. Possible actions are: DO NOTHING, SHOW, HIDE and SET BRIGHTNESS.

HIDE or SHOW. Will hide or show window without stopping the playback. This is mostly used with another software, when something is shown under the window or set as a desktop background.

SET BRIGHTNESS. Can increase, decrease or set the value. This option is saved and will replace the current value in settings. Option is used to adjust screen brightness without changing it in the hardware when the light conditions are changed.

Combined output

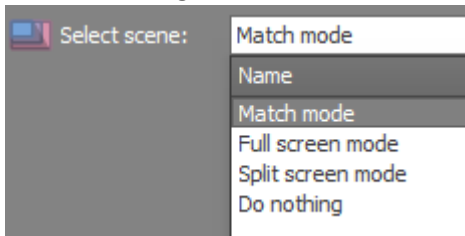Changes current view to view selected in the menu, with animation time specified in the settings. Current action is shown in the tree after COMBINED OUTPUT text.
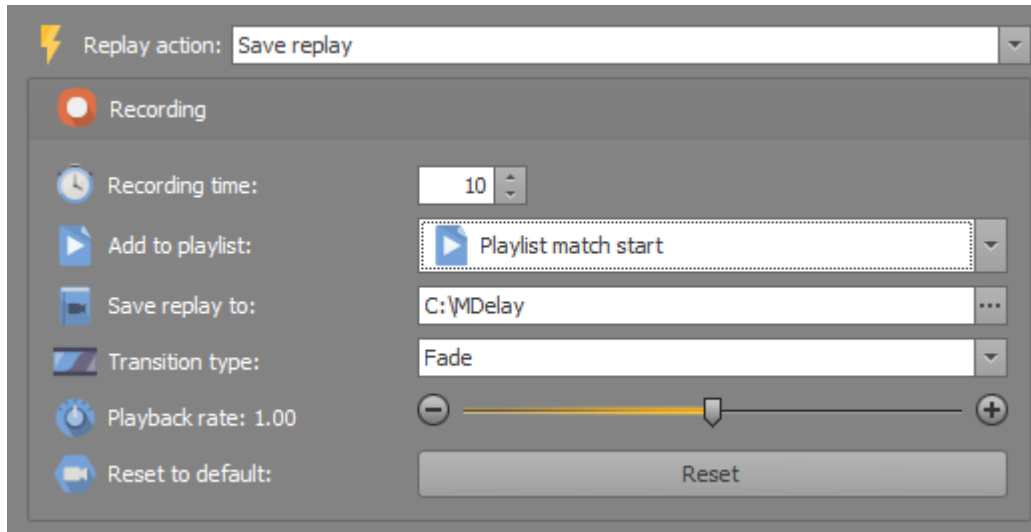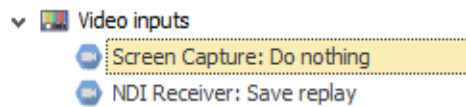
Views are listed as in Settings. To test the animation without creating the button – select different views in settings.

Video input

Video inputs must be configured in setting to be show in the button. Once configured, button can be used to save a replay.

Button action depends on the type of the video recording specified in settings.

RECORDING. Will save the video as shown on screen for number of seconds, entered above.

REPLAY is a time-shifted recording. Example: replay duration is set to 20s and recording to 10s When the button is pressed, result contains the video of what happened for 20s before and be 10s long.

Button overrides video input settings.

Different recording durations and playlist can be used on different buttons

RECORDING TIME: specifies the resulting file duration.

ADD TO PLAYLIST: file will be added to the selected playlist last. Otherwise will just be saved to the selected folder.

SAVE REPLAY TO chosen folder, user must have permissions to write to the folder.

TRANSITION TYPE and PLAYBACK RATE will change file properties in playlist when later played back.

RESET button replaces current values with default values from settings.

Network computer
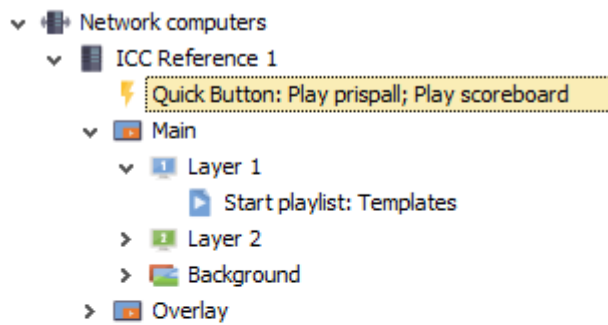
Network computers allows to control SIB instances running on the same network. Computers must be configured in settings before.
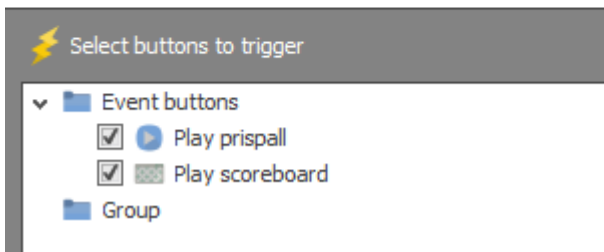
QUICKBUTTONS: allows to press multiple QUICKBUTTONS on the other computer.
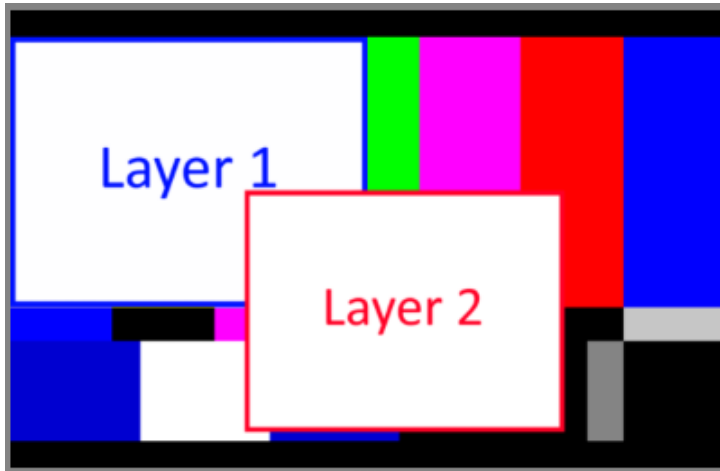SCREEN CONTROLLER playback: allows to control playback like and play files on another computer. Configuration is done the same way as on the local machine.

Every computer can have own configuration on the current button.

ScreenController

SCREENCONTROLLER includes 3 main components.

Layers

ScreenController has three layers: LAYER 1, LAYER 2 and BACKGROUND.

LAYER 1 is under the LAYER 2 and the BACKGROUND layer is under both LAYER 1 and LAYER 2.

By default, files are added to the Layer with STRETCH, KEEP ASPECT RATIO mode. File will try to fill the entire screen but will not change proportions. That is possible to change in the file settings and will be discussed later.

BACKGROUND (shown with colour-bars) is special kind of layer.

By default, BACKGROUND is stretched to fill the entire screen and positioning the file, like on other layers, is not possible.

Default background is specified in the SCREENCONTROLLER settings and nothing is played, default background will be shown. Background will also be shown when the playback is stopped.
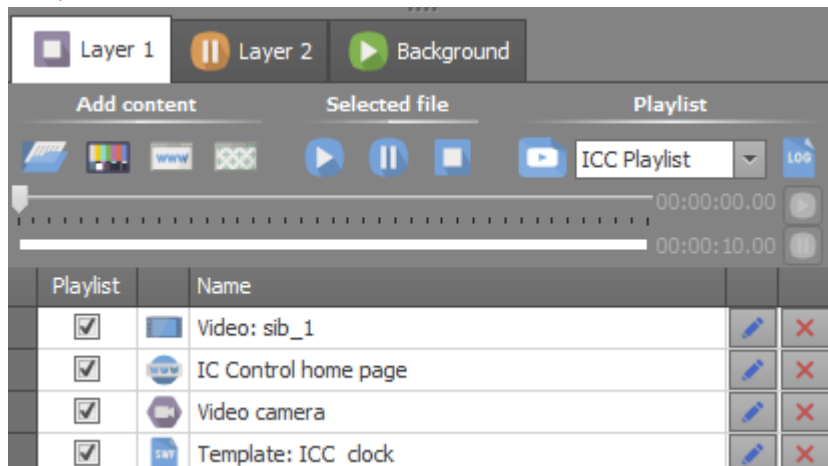
Main preview
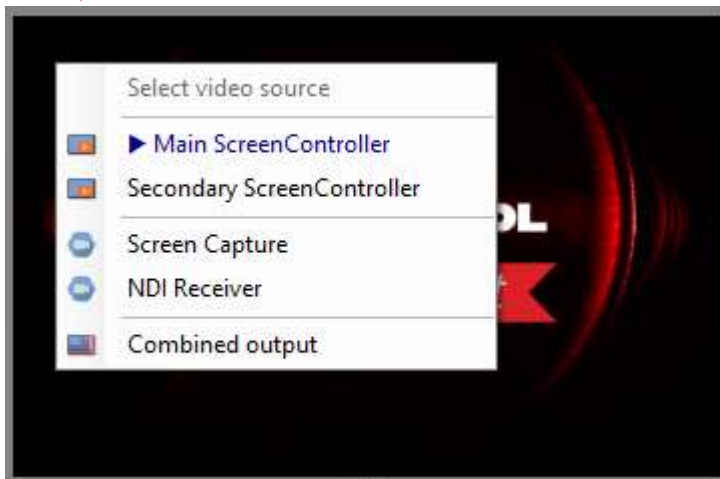
MAIN PREVIEW is the upper preview that shows what happens on all layers on the SCREENCONTROLLER.

VIDEO SOURCE of the preview can be temporary changed with the right mouse button. Original video source is marked blue.

Playlist

Playlist is where files live.

SPORT IN THE BOX has 3 layers, each one has own playlists with files on.

Each layer is represented by a tab that shows the playback state on every layer.

Each layer can have multiple PLAYLISTS to organize the files.

Playback can be started as an individual file and in playlist mode, when files are played after each other.

ICON near the file name shows the type of the playlist item.

Checkbox USE IN PLAYLIST specifies if the file should be played in the playlist mode or be skipped.

Buttons to the right are used to open the current type editor or to delete the file.

Add content
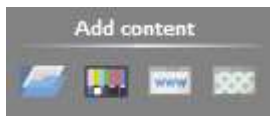
Add content group with buttons allows adding different types of content to the playlist.

Files can be rearranged by dragging them with the mouse.

Files

Regular files can be dragged into the playlist from the windows file manager.
 If pressing the open file button, a file selector window will open allowing to select multiple files by pressing shift or ctrl while clicking on the files. Once added, file properties can be changed with the EDIT button on the right of the file name.
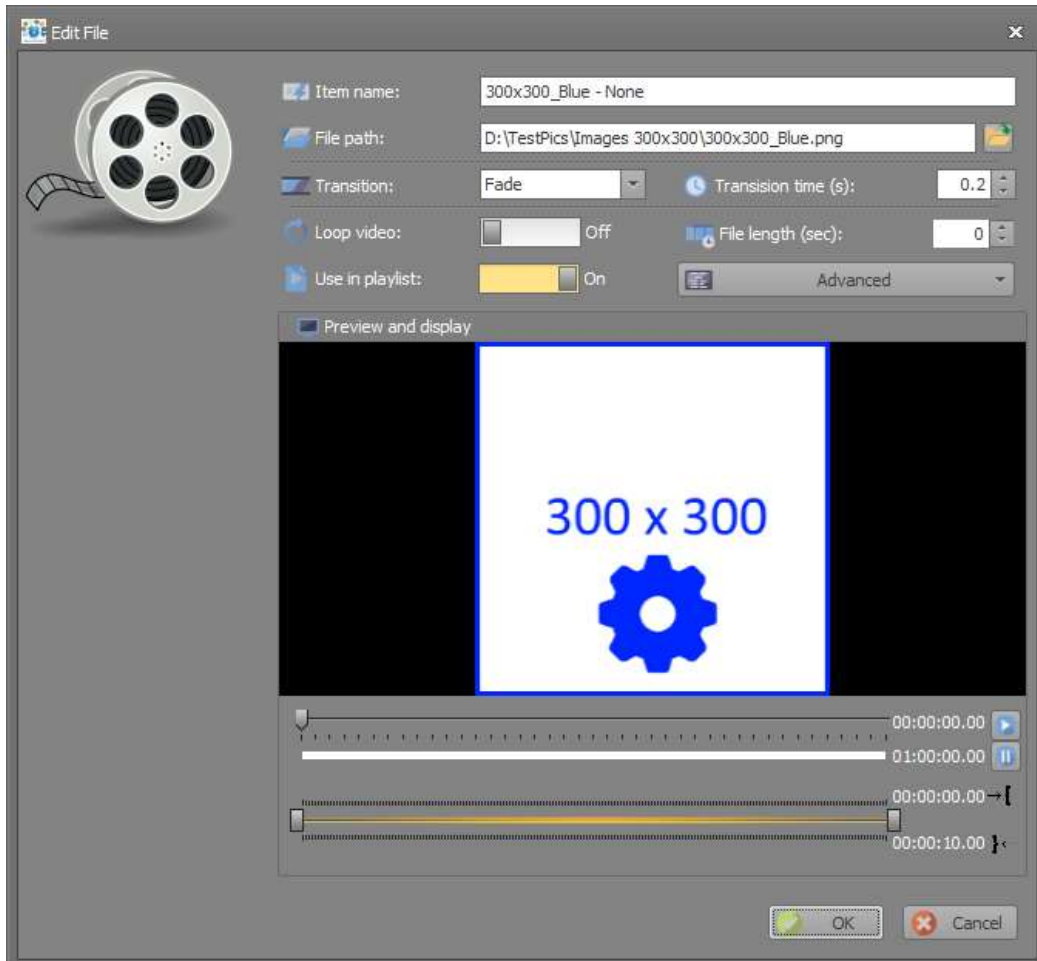
NAME is file name, but can be changed in playlist, without changing the actual file name. File can also be changed without deleting by typing the file path or pressing the BROWSE button.

Streams and YouTube links also works.

TRANSITION and DURATION specify the effect applied when file starts to play.

USE IN PLAYLIST specifies if the file will be used in playlist or skipped.

PLAYLIST DURATION set the file duration. By default, video objects play forever and doesn't have any length.

LOOP can be optionally used together with the playlist duration to start the file from the beginning.

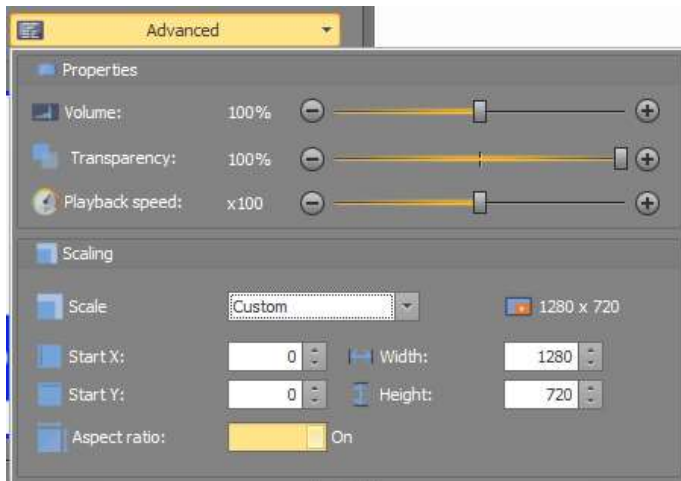FILE LENGTH is only visible for images because they have no natural file length.

ADVANCED allows to specify video position on the screen and is discussed later.
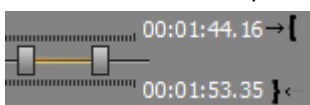
 FILE IN and FILE OUT can be adjusted by moving the sliders. This is very useful to take a part of the file without editing it.

CURLY BRACES will set in or out to the current file position.

Advanced

File has some advanced options. VOLUME adjust the current volume without changing the screen volume. TRANSPARENCY will change the alpha, making some overlay possible. PLAYBACK SPEED is usually used together with replays to make slow motions. Some settings are not available on the BACKGROUND layer.

Scaling is the most used feature. Combining different scaling options on different layers makes it possible to show PICTURE IN PICTURE or OVERLAY.

NO SCALING.
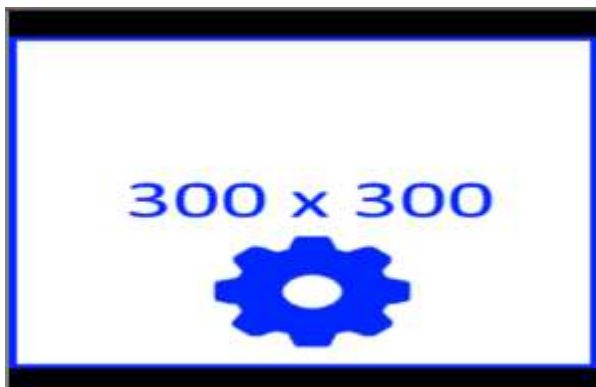Leaves file as it is. Files larger that screen will have parts that are not shown.

FULL SCREEN AND KEEP ASPECT RATIO.
Default scaling for new files. Will scale files to fill the entire screen but keep the file proportions. File is centred on the screen.
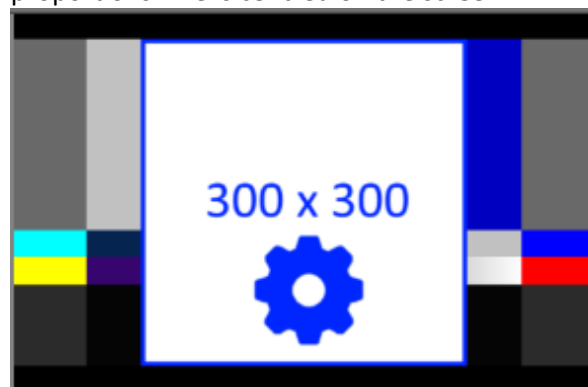
FULL SCREEN – STRETCH.
Makes file full screen, changing file proportions.

CUSTOM.
File is placed on the user specified position and uses given size.

TILE
Repeats the file on the entire screen area.
It may be a good idea to set TILE as default tiling
option in the SCREENCONTROLLER settings and only
play tiled content on that SCREENCONTROLLER.
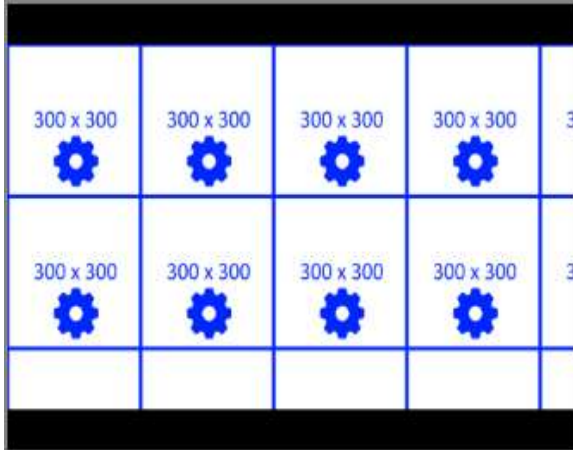
Video inputs

Video inputs must be configured in SETTINGS before using. Most common inputs are cameras,
NDI, Screen capture and SPORT IN THE BOX itself. Self-source can be other SCREENCONTROLLER,
COMBINEDOUTPUT. Once pressed, editor for video sources will be open.
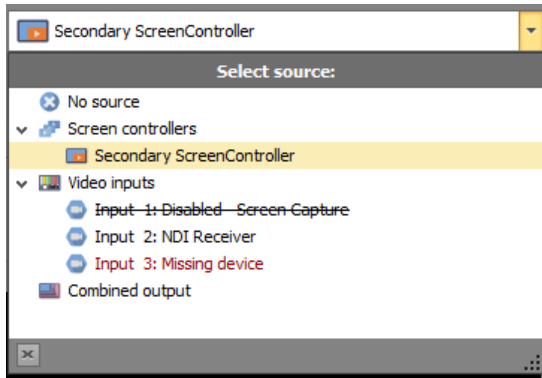
SOURCE. Shows source selector that shows possible video sources.

Disabled sources are overlined and missing sources (camera was disconnected) are have red text.

It is not possible to add SCREENCONTROLLER as a source to itself. I.e. main screen controller is not listed as a source of the main screen controller.

NAME is how the source is shown in the playlist. By default, name is set to the source name.

TRANSITION and DURATION specify the effect applied when file starts to play.

USE IN PLAYLIST specifies if the file will be used in playlist or skipped.

PLAYLIST DURATION set the file duration. By default, video objects play forever and doesn't have any length.

LOOP can be optionally used together with the playlist duration to start the file from the beginning.

ADVANCED allows to specify video position on the screen like for files.

PREVIEW show the current video input.

Web pages

 Web page can be added as a playlist item. Optionally web page can be added as a Video Input in settings and share between all consumers.

URL is the page address to navigate to.

NAME will be set to the page header if possible, specifies how the page is shown in the playlist.

USE IN PLAYLIST specifies if the file will be used in playlist or skipped.

PLAYLIST DURATION set the file duration. By default, video objects play forever and doesn't have any length.

LOOP can be optionally used together with the playlist duration to start the file from the beginning.
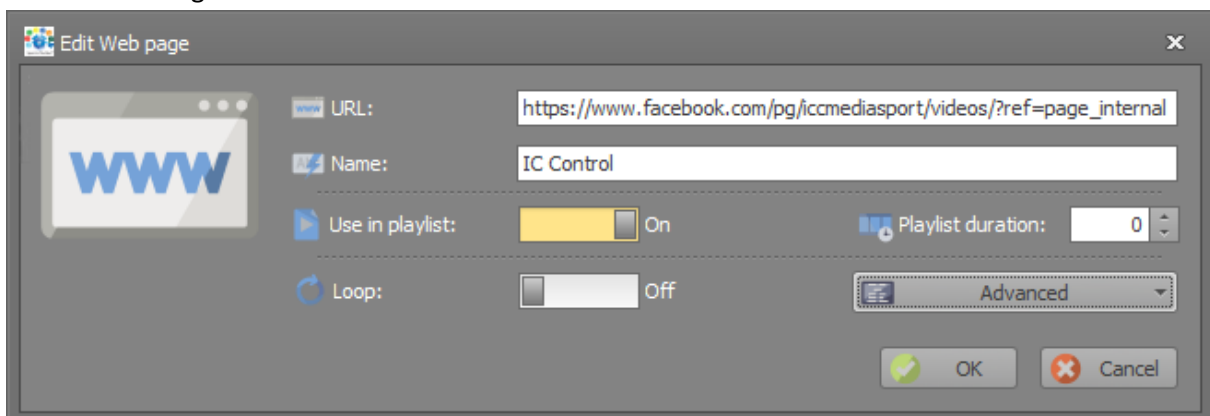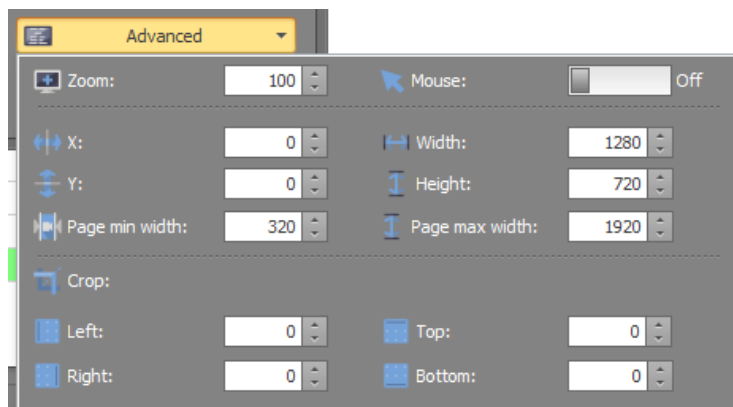
ADVANCED options are used to specify the display area of the page in pixels.

X and Y specify the start position of the capture area. WIDTH and HEIGHT sets the width and height of the capture area.

Those properties are usually used it the page have side bars or caption that should not be taken. Additionally, CROP can be used to cut the part of the show area.

Those options may not work as stated if the web page supports adaptive layout. Open the Chrome and check how the page responds to the size changes.

MOUSE can be enabled to control the page with the mouse on the SCREENCONTROLLER main preview.
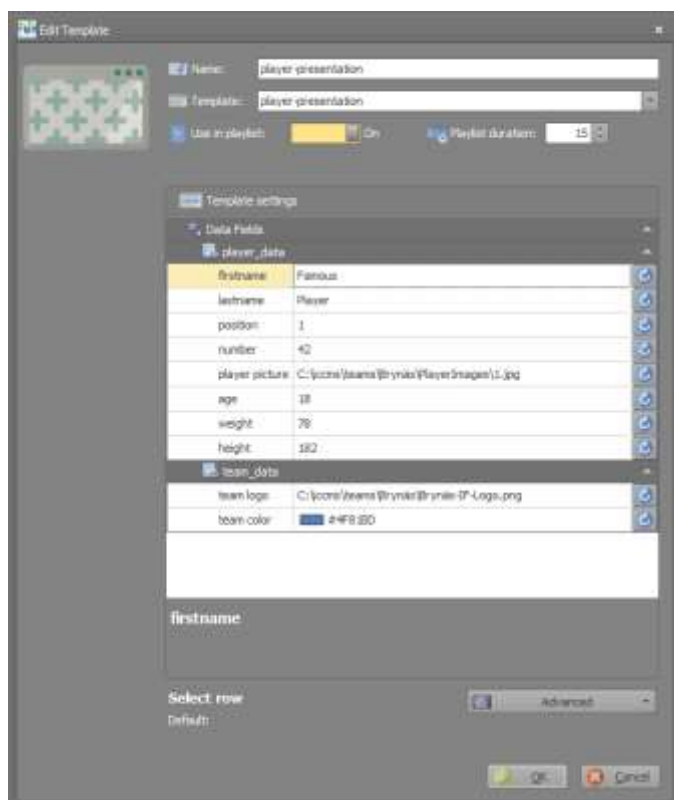
Templates

TEMPLATE must be added in settings before adding to the playlist.

Templates may have three DATA settings. Defaults in SETTINGS, PLAYLIST settings and RESULTS. This dialog is about PLAYLIST settings. By default, if nothing is changed, values from the settings menu are shown.

Playlist settings overwrite defaults with the new values without changing the original values. That is particularly useful with general-purpose templates: countdown, visitors counter, or player presentations.

NAME can in that case be used to differentiate the templates.

TEMPLATE shows all templates from settings.

USE IN PLAYLIST is just to jump over the template with playing in the playlist mode.

PLAYLIST DURATION specifies how log the template will be playing. By default (0), template is played forever.

TEMPLATE EDITOR has the same appearance as in settings. With the exception that template settings section can't be changed in playlist.

ADVANCED button allows to cut the template view are and resulting source. This option is generally not used.

For more information about configuring templates see the templates section of the manual.

Play individual files

By default, file can be started by double-clicking it.
Alternative way is to select the file in the playlist and press the PLAY button.
PAUSE and STOP works the same way in file and playlist modes.

Played file will be marked green on the white background.
When the file ends, no other file will be played,
LOOP property can be used to play the file forever
Playlist duration is used instead of file length for
VIDEOINPUT'S and TEMPLATES.

Play as playlist
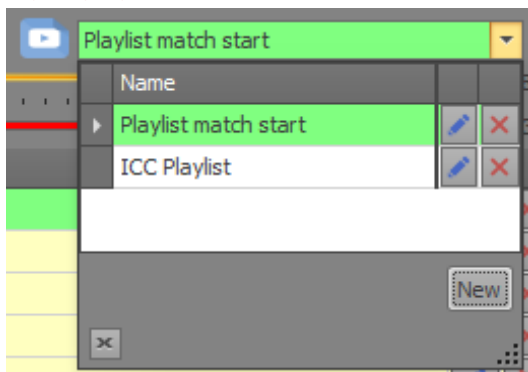
Playlist can be started with the PLAY button on the left of playlist drop-down.
Playing playlist is also marked with the green background in the playlist selector.
Additional playlists can be added with the NEW button.
To change the playlist NAME – press the PEN button.
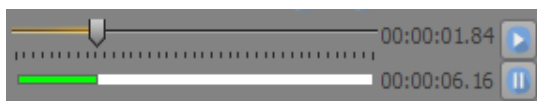To DELETE the playlist – press X.

In playing playlist – background in marked with yellow colour.
Playing file is marked with the green colour as in the regular playback.

Trackbar

Trackbar show the current file progress and allows to change the file position. Same trackbar is used across all SIB components. Hold down and drag the slider to change the file position.

PLAY and PAUSE can be used to temporary pause the playback. Pressing pause multiple times will step the file with 1 frame at time.

The UPPER TIME shows the elapsed time. The LOWER shows the remaining file time.
Progress label, GREEN, will become RED during the last 5 seconds of the file.

File preview

File preview show preview of the selected file without playing it on the SCREENCONTROLLER.

CUT TO POSITION button will start the file on the SCREENCONTROLLER from the position in the file preview window.

Preview can be completely disabled in SETTING – GENERAL – SHOW PREVIEW.

By default, preview doesn't show web pages and templates. That can be enabled in SETTINGS- GENERAL – MEDIA PREVIEW options.

IMPORTANT NOTE: template and web page preview can be disabled in settings.

File menu
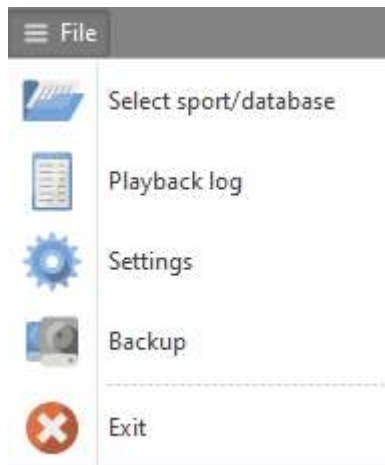
File menu hides things that are not used during the normal operations.

SELECT SPORT/DATABASE will open the start window again.

PLAYBACK LOG ALLOWS to record the played files to analyse later. Enable only if needed.

SETTINGS is where configuration is made. Add secondary screens, live sources and output devices are configured there.

BACKUP saves a copy of the current database in the Backup folder at the database current location.

EXIT BUTTON is self-explanatory.
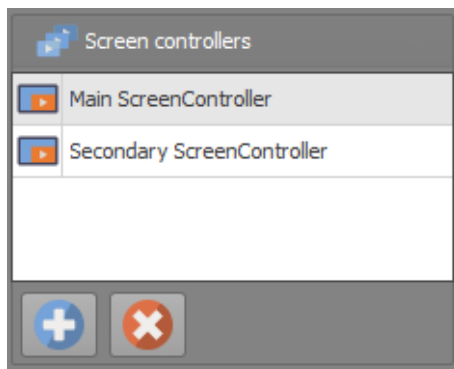
Playback log
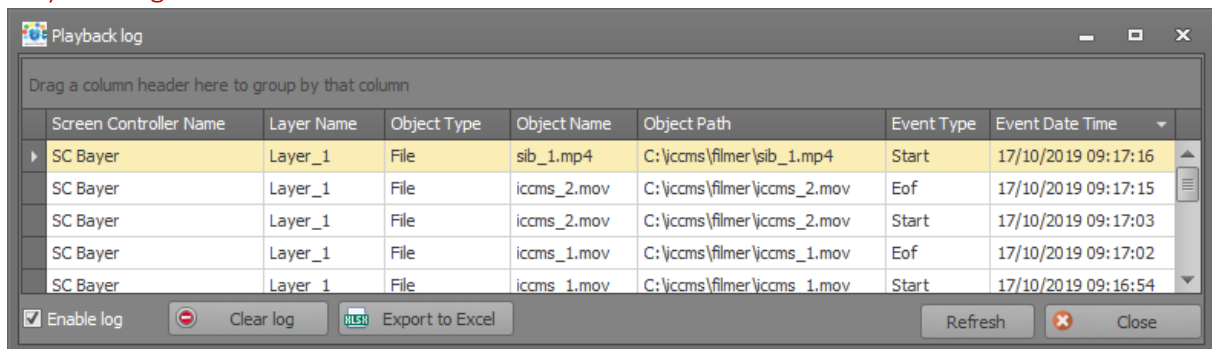
Log saves the playback events with timestamp to the database.

RULE OF THUMB: enable only if really needed. Clear log once a month.

Generally, log is exported to Excel and processed there.

Settings

Screen controller

Adding and removing SCREENCONTROLLER is done with the + and X buttons. Operation is implemented immediately.

Each SCREENCONTROLLER receives own QUICKBUTTON panel that is shared between all windows.

SPORTCONTROLLER has only one instance on the Main window and Main SCREENCONTROLLER.

Main SCREENCONTROLLER can't be deleted, but the name can be changed.

SCREENCONTROLLER is edited by selecting it in the list.
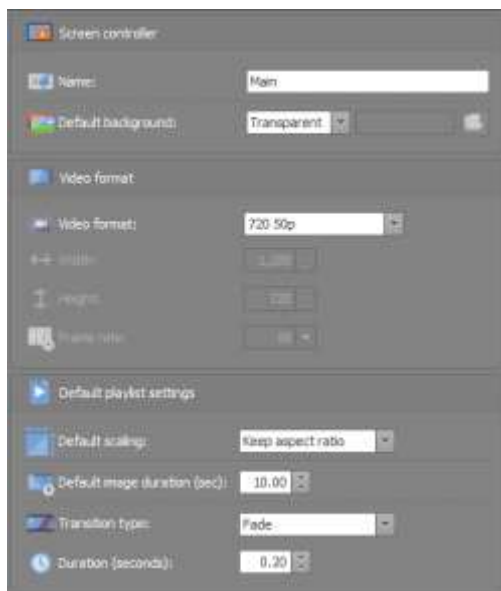
NAME specifies how the screen is shown in the program in other controls.

DEFAULT BACKGROUND is show when nothing is playing on the BACKGROUND layer and can be one of the pre-defined values or file path.

VIDEO FORMAT can either be chosen from the list, or, in case of LED screens entered manually to match the LED resolution.

DEFAULT PLAYLIST SETTINGS specify default properties for files when added to the playlist.

Video window
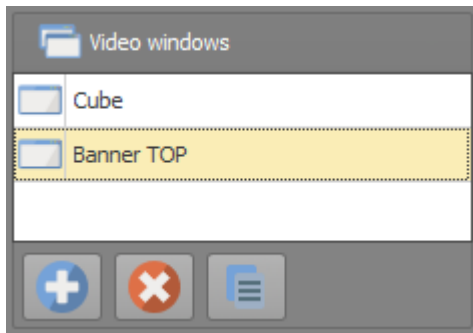
VIDEOWINDOW is primary output source of the SPORT IN THE BOX and is represented by a floating window that shows selected video source that can be places anywhere on the computer screen and scaled to any size.

VIDEOWINDOW can also be duplicated, keeping current properties.
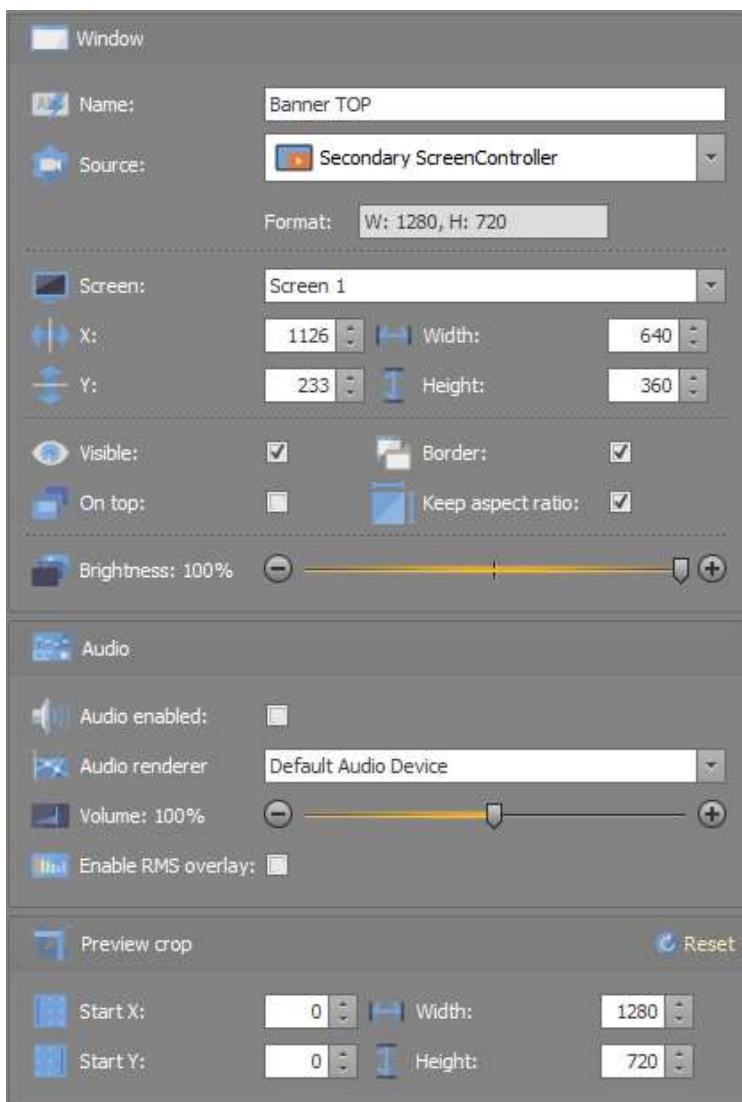
NAME is shown in the window title when the border is shown.

SOURCE list all SIB video sources that are configured and shown. Format shows source video parameters.

SCREEN properties allow setting windows monitor to place VIDEOWINDOW at and position it on that monitor.

VISIBLE will hide or show the window. That property can be changed via the QUICKBUTTON event.

BORDER is mostly used when configuring the window. Window can be dragged on the screen to set the position values. If the border is active.

ON TOP places window above other windows and hides the mouse cursor.

KEEP ASPECT RATIO will stretch the picture if unset. Used when the content is in slightly different format to adjust it a few pixels to avoid black bars.

AUDIO

Tick AUDIO ENABLED to active the audio output from this VideoWindow.
AUDIO RENDERER allows to choose the output audio card and set volume.

RMS OVERLAY shows audio bars to test timing of video/audio.

PREVIEW CROP.

By default, entire source is shown. Using the crop only one part of the source can be taken. This is particularly useful with the copy feature on the wide boards, where the board doesn't fit on one Windows monitor width and has to be divided into multiple rows.

RESET button resets current crop parameters to video source defaults.

Video inputs

VIDEOINPUT is any kind of input video or audio source. SPORT IN THE BOX supports following inputs: hardware capture cards like Blackmagic etc, DirectShow, NDI, ScreenCapture, WebCapture, WebRTC. VideoInput is added and deleted via the buttons below the input list.
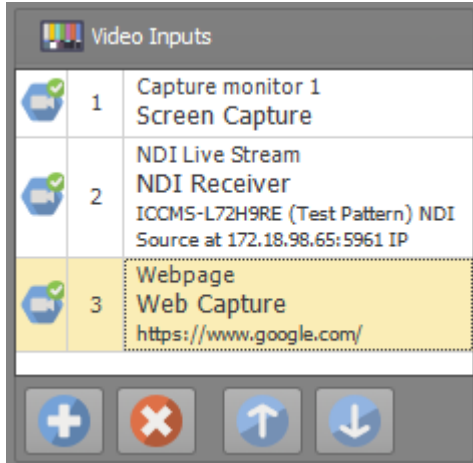
Each input is identified by its order in the list (digit).

MOVING item up and down in list will exchange those everywhere in the SIB.

Example: when moving NDI Receiver up in list, it will be played where ScreenCapture was played before and vice versa.

DELETING an input in the middle will set the source to the next input in list. Deleting the last input in list will set the source to NOT SET.

VIDEOINPUT editor, shown on the right, consist of five groups: Common properties of all inputs, specific device properties, recording settings, replay settings and preview.

Common device settings

DEVICE lists all devices that SIB finds in windows. Pressing … will open the standard windows device properties if device has those.

NAME is how the device is shown in the SPORT IN THE BOX. Changing name doesn't affect any device properties. By default, name is the same as device name.

DEVICE ENABLED can temporary disable device. It won't be started then and will be shown as disabled in device lists in SIB. Devices that couldn't be found are shown in red.
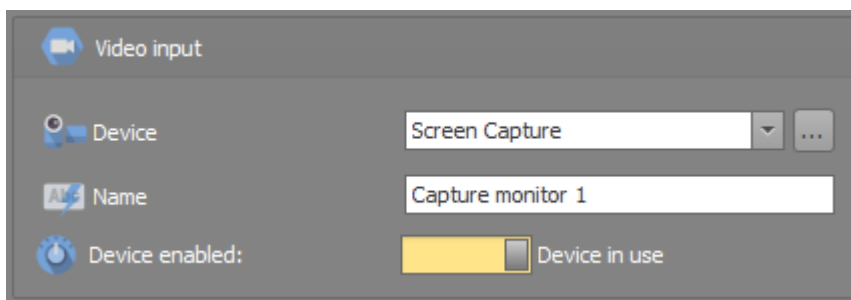
Specific device properties

Device specific properties are shown based on the device selected above.

Input cards and NDI

Video capture cards and NDI show Line-In and video format settings. Those are both taken from the hardware.

LINE-IN can be SDI or HDMI but is generally empty for input cards, for NDI it shows a list of possible sources that is found in the network.

FORMAT shows the list of device video formats. Note that some devices don't have the Auto format and the compatible format must be selected manually. Pressing the … will open Windows device format properties if device has those.

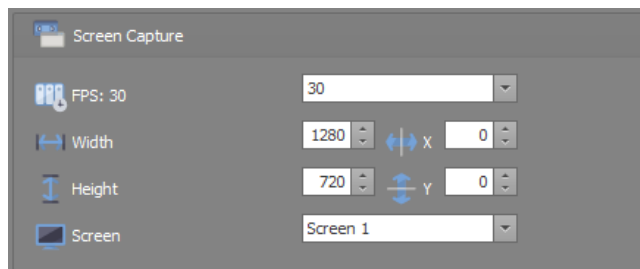Optionally, the audio from device can be completely muted with the MUTE INPUT checkbox.

ScreenCapture

Screen capture allows to take computer desktop as a video source.

FPS should be the monitor FPS or its dividers.

X, Y, WIDTH and HEIGHT are used to set the capture area on the screen.

SCREEN is the windows monitor to capture.

WebCapture

Web page can be added as a video source and shared across all consumers.

New web page URL should be confirmed with the button on the right.

Audio from device can be completely muted with the MUTE INPUT checkbox.

Another way of consuming the web page is to add it directly to the playlist using the Web pages dialog of the playlist.

Recording settings

Device recording is mostly used with the QUICKBUTTONS. Those properties can be overridden in the QuickButton properties.

RECORDING TIME specifies the resulting file length in seconds from the time QuickButton was pressed.

When the recording is completed, it will be added to the playlist specified in the ADD TO PLAYLIST menu. Otherwise it will be saved to the output folder only.

SAVE REPLAY to set the folder for the recording.
Note that the current user must have write permissions to that folder.

TRANSITION TYPE and PLAYBACK RATE set the file properties if the playlist is set above. The file itself is not changed.
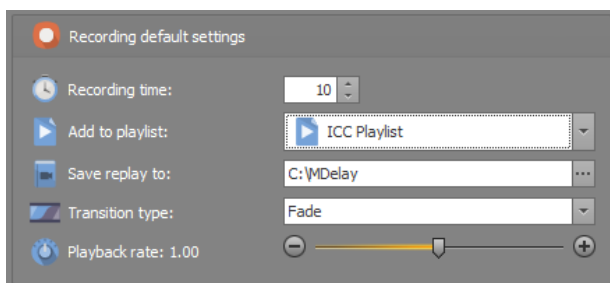
HINT: set in and out of the file in playlist to play a part of the file without editing it.

Replay settings

Reply settings allows to make a recording of the past events.

RECORDING QUALITY is the quality of the file. Setting It to 0 makes the video uncompressed.

Value in the REPLAY SECONDS field is the maximum number of seconds back in time that can be saved. Values from the illustrations will produce a file that shows 20 seconds in past and lasts for 10 seconds.

Same device can be added as recording device and as replay device at the same time. But must be added two times to the device list than.
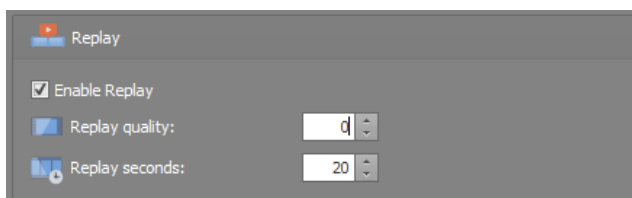
Replays are quite dependent on the hard drive speed. For saving multiple HD replays, SSD disk is recommended.
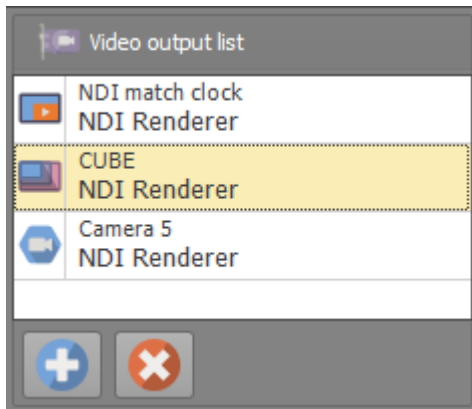
Preview

Preview shows the current video source as it is. When using the REPLAY, it will show the video back in time. When activating replay it will take replay SECONDS TIME before the correct source is shown.

Video outputs

SPORT IN THE BOX can expose own video sources to other systems via the output.
Typical output devices include output video cards with SDI/HDMI and NDI

Output are added and removed using the buttons under the list.

DEVICE LIST shown already used devices with DEVICE, custom device NAME and the ICON of the used source type.

PREVIEW of the source is shown under the current device,

Output can be temporary disabled by setting device to NONE.

When using KEYING to send out fill+key signals on two SDI outputs to an upstream mixer, be sure to se the keying type to external and when using SCREENCONTROLLER as a source, please check ENABLE KEYING in the SCREENCONTROLLER settings to get the transparency in the picture to work.
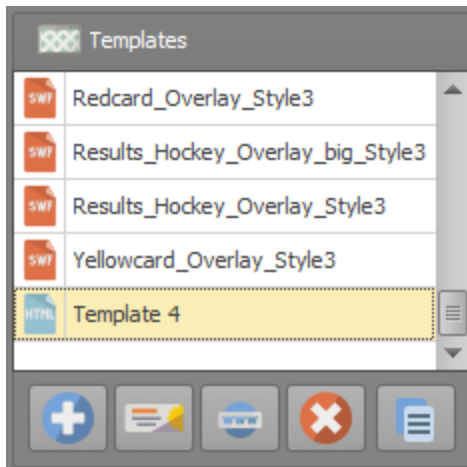
Custom device name can be set via the DESCRIPTION label.

Most of the SPORT IN THE BOX sources can be used as the INPUT.
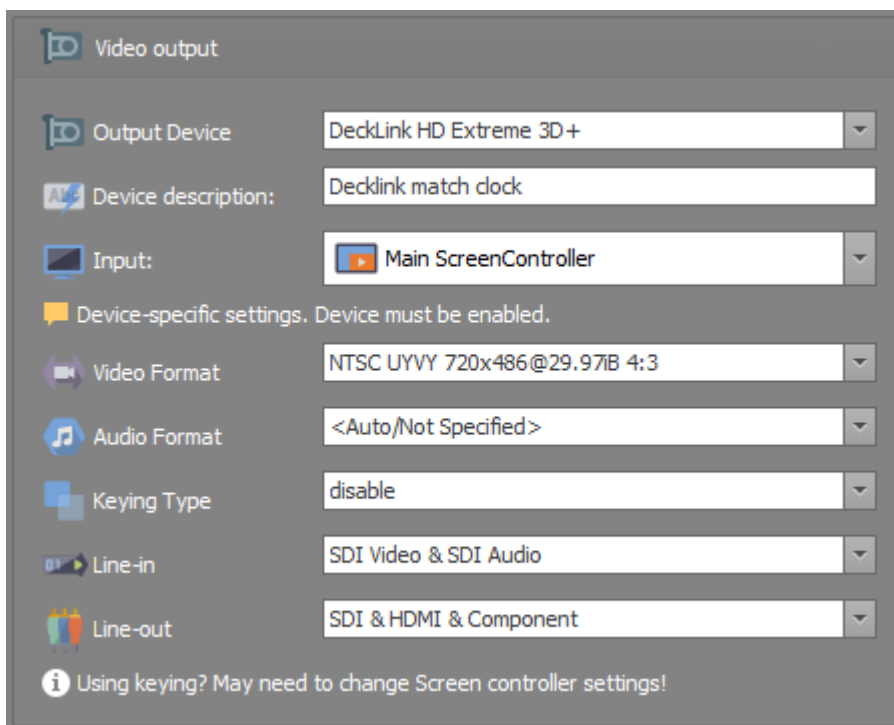
Graphic templates

Templates gives the possibility to play a HTML/FLASH content with dynamic data in the playlist or via a QUICKBUTTON.

Template can be added as

- Template from file: HTML (*.HTML), SWF (*.SWF) flash files, SPORT IN THE BOX TEMPLATE file (*.SBT) and template packs.
- CG template without file.
- URL to a web page.
- DUPLICATE of the selected template with all data.

Template can also be deleted.

Computer Graphics templates (CG)

CG templates allows to create a simple graphics with data that can be changed while SIB is running. Template can have static and dynamic fields and edited with embedded CG editor. User can create own templates and data. CG template is saved in the project file.
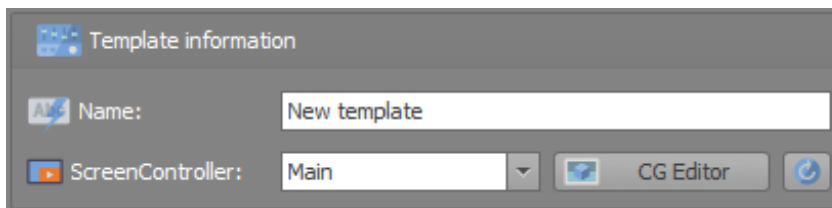
Template NAME defines how the template is shown in the Sport In The Box.

SCREENCONTROLLER sets the video format of the preview. Some templates are adapted to the specific format.

CG EDITOR button opens the internal editor. See the corresponding section of the manual.

RELOAD button load entire template again from the disk and reload it, that is equivalent of CTRL+F5 in the browser.

Template fields
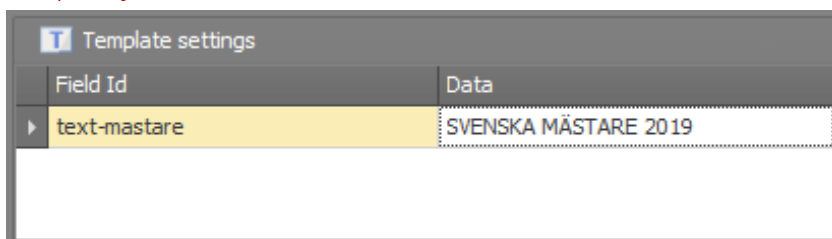
If the template has fields set as DYNAMIC, those are shown in the settings.

Only TEXT fields can be set as dynamic.

DYNAMIC data can be changed without editing the template.

Default value is set in settings, same value can be customized in the PLAYLIST.

Sport In The Box Templates

Sport In The Box templates are more advanced and have pre-defined fields by default. Generally, SIB template appearance can be customized by changing properties like colour and text, but template itself can't be changed.

Template information
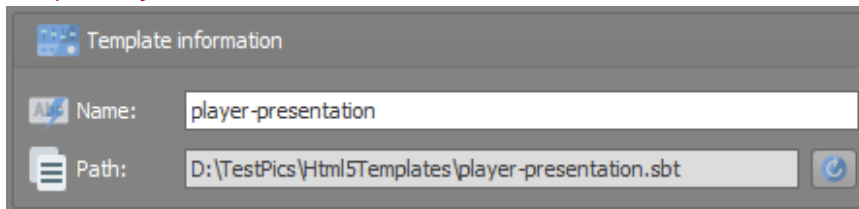
Custom template NAME can be set in editor when using multiple copies of the same template.

RELOAD button load entire template again from the disk and reload it, that is equivalent of CTRL+F5 in the browser.

Template properties

If supported by the template, it can provide a configuration interface between SIB and the template to change settings in the template like colors, texts shown, background image etc.
Each template expose the settings that is implemented in it and these are shown in the template settings grid.

Default values are reported by the template. Those can be customized in settings, using same template multiple times with different setting values is possible.
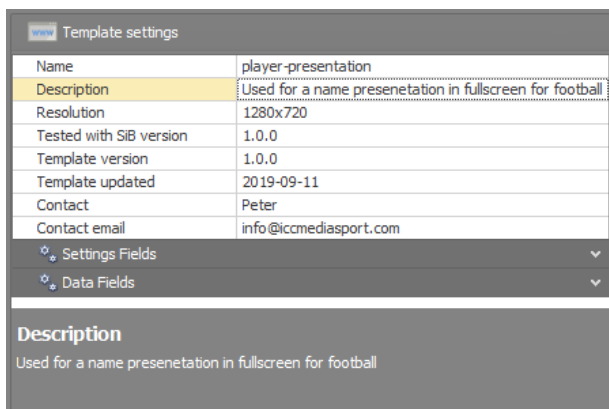
INFORMATION is Read-Only and shows the service and contact info about the creator of the template.

SETTINGS FIELDS are taken from the template and can be customized per template instance and can only be changed in the Settings window.

DATA FIELDS is also taken from the template and can be customized, but unlike template settings it can be overridden when added to the playlist.

So the values added here will be default values set when opening it from the playlist.

When EDITING the template, different editors are shown based on the data type reported by the template. RESET button replaces current value with the default value saved in the template.

When playing the template via the QUICKBUTTON - SHOW TEMPLATE menu, only Settings data is sent to the template specified in the GRAPHIC TEMPLATE SETTINGS window. When playing template from the

PLAYLIST, data is taken from the playlist and template settings are taken from the settings as shown in GRAPHIC TEMPLATES SETTINGS.

Preview

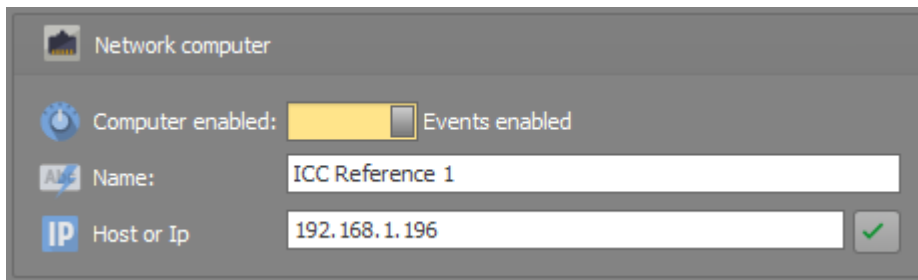Preview show template with the data, entered in the template editor.

RELOAD button refreshes the template, equivalent of F5 in the browser.

Network computers

To control other instances of SIB running in the same network, these can be added here in network computers. These will then show up as computers in the QUICKBUTTONS Network computer part.

Network events can be temporary disabled with the computer ENABLED toggle. Computer will still be visible, but only show the saved data and events won't be fired when the button is pressed.

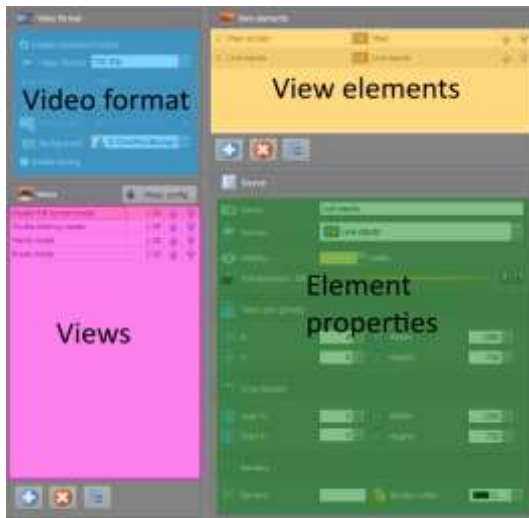Name is how computer will be show in the QUICKBUTTON.

Combined output

Combined output is way to combine multiple sources at the same time and make transitions between them. Configuration consists of four parts.

VIDEO FORMAT. Before configuring the output, it must be enabled with the ENABLE COMBINED OUTPUT checkbox.

Video format settings are not different from the SCREENCONTROLLER settings.

VIEWS. View is the main part of the screen. Only one view can be shown at the time and is usually changed via the QUICKBUTTON.

VIEW ELEMENTS. Each view can have multiple elements. Elements are SHARED between the views.

ELEMENT PROPERTIES. While elements are shared between the views – element properties are not.

Once configured, VIDEOWINDOW source can be set to COMBINEDOUTPUT. SCREENCONTROLLER main preview can be also temporary changed to display the COMBINEDOUTPUT with the source selector on the RIGHT MOUSE BUTTON.

Views
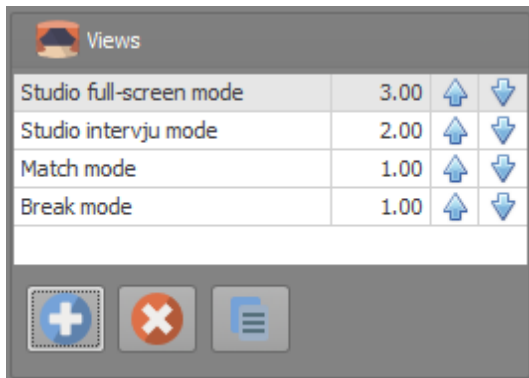
In order to use COMBINEDOUTPUT there should be at least one view and two elements on it.

Configuration with one view and one element is usually called as SCREENCONTROLLER and is much easier to configure and use.

VIEWS are about changes. Changes from the CURRENT view to the NEXT view like position, transparency, size of view elements. During the change, the TRANSITION TIME of the new view is used.

Animation will be shown when selecting the view in the list or changing view from QUICKBUTTON.

View NAME and TRANSITION can be changed by clicking the cell. Moving view up and down has no effect on how the view is shown. The first view in the list will be activated by default on startup.

The easiest way to create a second view is to COPY the current view and then change the properties in the new view.

View elements

In order to use any kind of source it should be added as view element to COMBINEDOUTPUT. Element added to one view is added to other view as well but is hidden. New element is added below the selected item in the list.

View element is identified by its ORDER in the list. Elements at the same place will have the same source and when the source is changed it will be changed on all views.

Elements higher in list will be shown over the elements below.
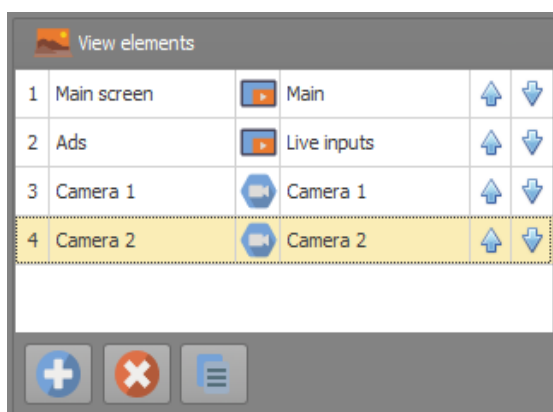
When the element is selected its borders are temporary highlighted to identify the element.

When moving element up and down it will be moved on all views.

Element properties

Properties are the values that are changed when switching the views. Configuring the name and the source is like the other parts of the SIB.

Note that when changing the SOURCE, it will also change on all view element with the same order on all views.

VIDEO SIZE is like scaling on the SCREENCONTROLLER. X, Y set the start point of the video from the upper-left corner. Width and height are the taken from the source when the source is changed but are used to scale the source on the screen. Those parameters are usually changed to make a view animation.

PREVIEW CROP is used here more than in ScreenController. One of the use cases is to split a very long video (20.000px) to the small part. Same video is then added as the view element multiple times and for each element video size and crop is adjusted to place each path on the new row so that entire video is visible. The default values of width and height are equal to the chosen source video format width and height.

BORDERS are mostly a configuration property that makes it easy to identify video elements.

DMX

DMX allow to control SPORT IN THE BOX QUICKBUTTONS from the light board.

To use this you will need a Enttec DMX USB Pro Inter-face connected between the computer and the DMX-signal.
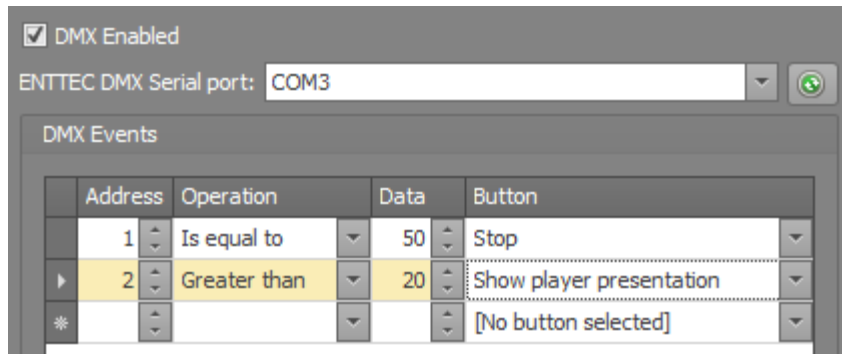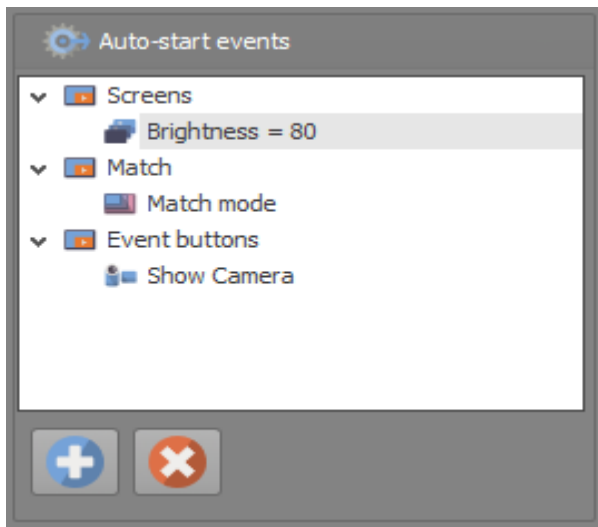

It will press the QUICKBUTTON when the values on the board are within the chosen range.

General

General settings are saved per database, it is settings of the current file.
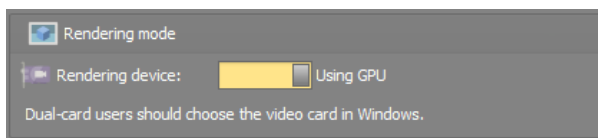
Auto-start

AUTO-START will press the buttons, listed in the box 10s after the program starts.

Avoid starting files on the same layer.

Rendering mode

By default, SPORT IN THE BOX tries to use the graphic card to render the content.

However, for some systems with older GPU or no GPU at all, it is possible to set CPU to render the content.

For system with dual graphic cards like notebooks, one must set the preferred GPU for apps in Windows 10:

1. Open the SETTINGS in Windows.
2. Go to SYSTEM - DISPLAY and scroll down to the ADVANCED GRAPHICS SETTINGS ("Graphics settings").

3. Set the app type to CLASSIC app.
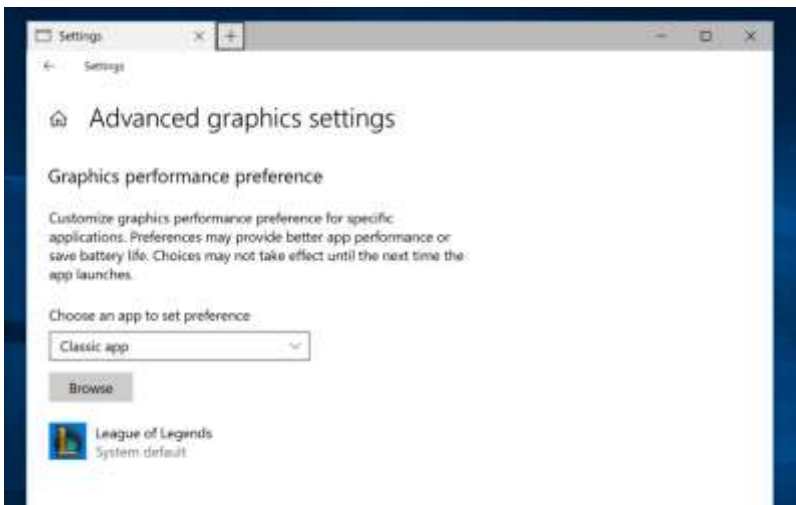
4. Browse for THE SPORT IN THE BOX to add it to the list using the BROWSE button.
5. Click on the app in the list, then click on the OPTIONS button to open the configuration dialog.
6. Select the desired graphics processor and choose HIGH PERFORMANCE.
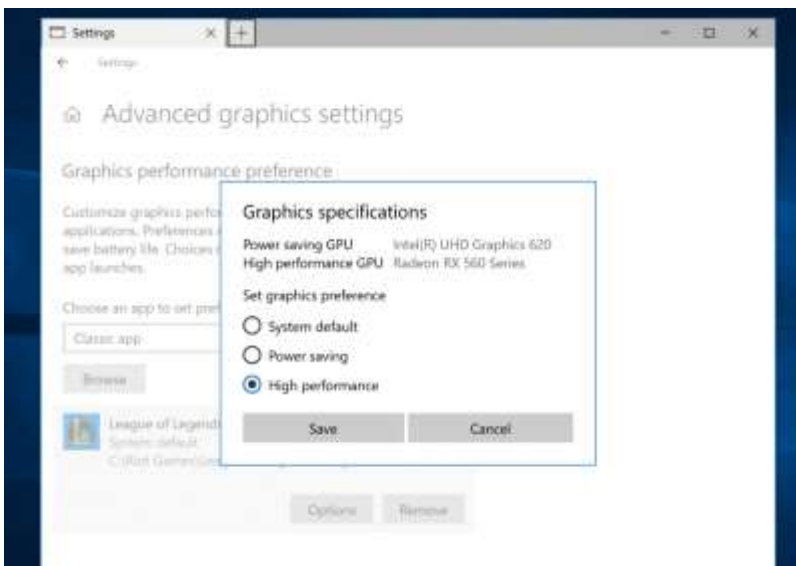
Windows 10 considers the integrated GPU as the power-saving GPU.

HIGH PERFORMANCE GPU are the discrete GPU or external GPU. If both exists, a discrete GPU and an external GPU on a system, the external GPU is considered the HIGH-PERFORMANCE GPU.

File preview
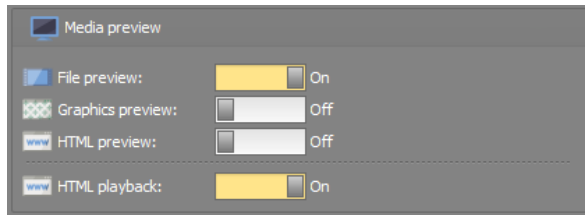
Show preview completely hides or shows SCREENCONTROLLER file preview. This property requires program restart.

ENABLE GRAPHICS PREVIEW allows to disable preview of SIB templates to save resources.

ENABLE HTML PREVIEW does the same for HTML templates. HTML PREVIEW can be quite heavy for notebooks.

ENABLE HTML can be used to disable HTML as video sources in playlist. Html can still be used as a source via WEBCAPTURE.
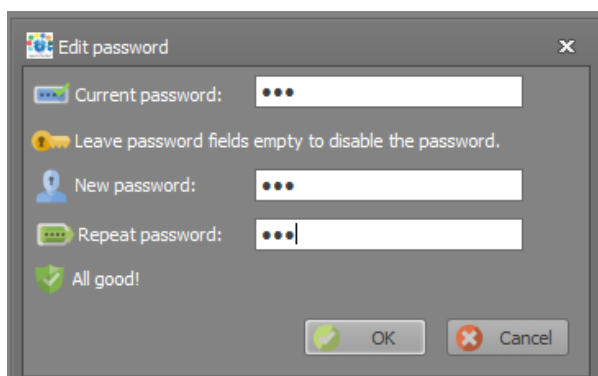
Database password
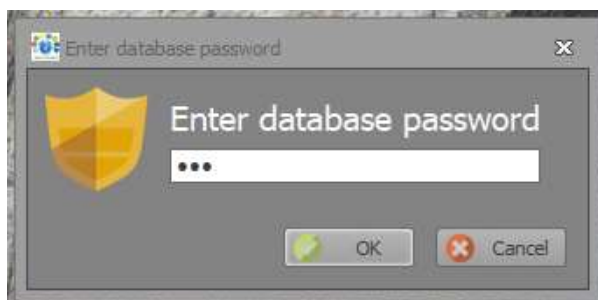
Database can be protected with a password. Once set, password will be asked when opening the database.

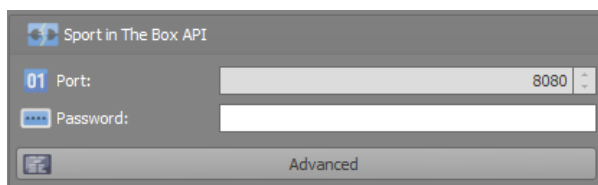To RECOVER the forgotten password – send request to info@iccmediasport.com

Current protection state is show with the icon and text.

The change the password, enter the current password, continued with new password and the repeat the new password.

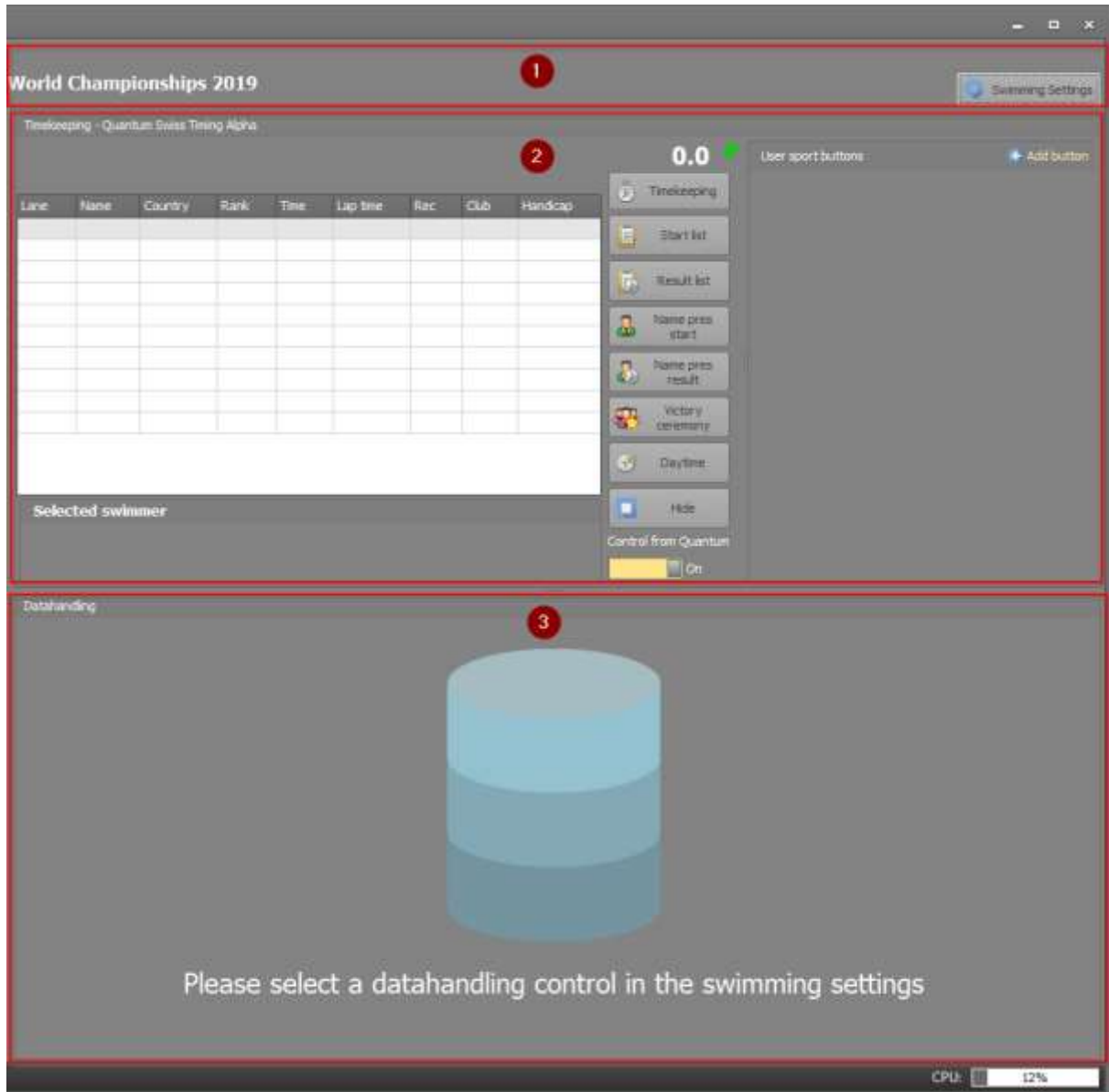To REMOVE THE PASSWORD, leave new password fields blank.

API settings shows current API port and Advanced has old NETWORK EVENTS settings,

Sports

Swimming

When a swimming database is opened in Sport In The Box 2 you will be presented with the following screen.

The swimming screen is divided into the following three parts.

1. At the top of the window you see the name of the current competition and a button to open the settings for the swimming control.
2. In the top/middle you see the timekeeping control. This control receives data from the external timekeeping system live as the heat is running.
3. At the bottom of the window you see the datahandling control. This control is used to get data from a separate datahandling system.

Swimming settings

When you click on the button called Swimming Settings you will be presented
with a settings window for swimming.

The top part of the settings window contains all the general settings that are used regardless of what timekeeping or data handling system you use. The bottom part of the settings window change depending on what timekeeping or data handling control you use.

Sport In The Box CG Editor

CG editor allows to create a simple template that can be customized at the runtime in playlist.


Cg editor consists of three areas:

- TOP: element properties editor, specific for every element type.
- PREVIEW: middle area, where elements can be dragged and changed. Preview area can be zoomed with the mouse wheel and moved when holding the RIGHT MOUSE BUTTON.
- CG ITEMS: right panel, list of all elements.

Preview background is set to colour-bars but will be transparent when playing.

Items can be deleted by either pressing the DELETE button on the keyboard, pressing DELETE button on the keyboard on the item in the CG ITEMS list or pressing delete button in the CG ITEMS header.
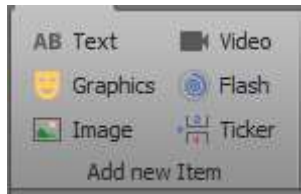
SELECTED items are marked with the red border.

Common properties of CG items
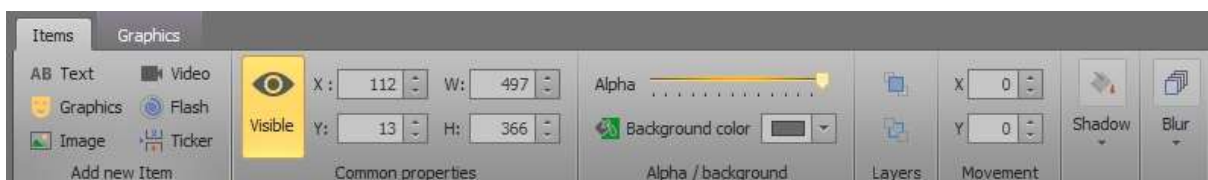
Common CG item properties are shown when any type of CG item is selected.

Add new items

CG can have following item types:

- TEXT: static and dynamic text.
- GRAPHICS: shapes like rectangle, circle, star.
- IMAGE: pictures in common formats.
- VIDEO: video files in common formats.
- FLASH: animation using Flash. When adding flash, consider creating template from file.
- TICKER: different types of scrolling text.

Common position properties
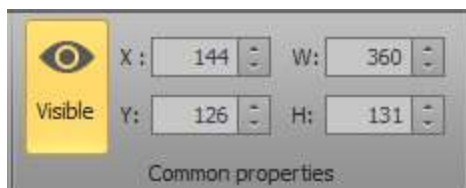
VISIBLE: sets the visibility of the element, hidden elements are sill shown in the CG item list on the right and can be selected there.

POSITION texts show the current position of the item and are updated when the element is dragged around.

Background

Cg items have a rectangle shape internally, but some parts are transparent. This is illustrated by the image with text. The background is set to blue. And text colour is white. By default, background is transparent, and item appears to be smaller than it is.
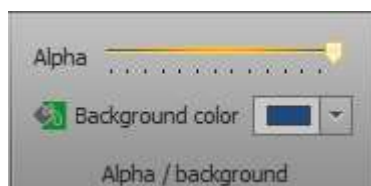
Background menu controls the appearance of entire CG item background. Some items like graphics can have own colour settings that control parameters of the specific item type.

ALPHA set the transparency of the entire item.

BACKGROUND COLOUR set the background colour. Note that transparency can also be set by pressing the more colours button in the colour picker.
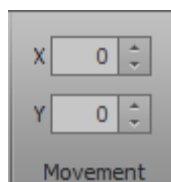
Layers

Layers menu allows to send selected elements in front of other elements or put those being.

More control is possible with up and down arrows in the CG items list on the right.
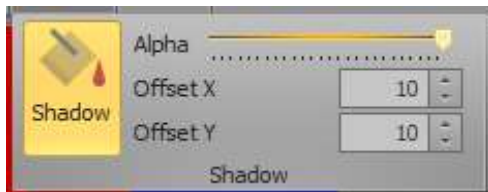
Movement

Movement will continuously move the current item horizontally, vertically or in both directions at the same time.

Start position will be taken from the position properties.

Effects

CG item can have graphic effects. Multiple effects can be applied at the same time.

SHADOW

ADDS SHADOW TO THE ITEM

ENABLED: indicates whether the effect is applied to the item

ALPHA: opacity of shadow.

OFFSET X: horizontal offset of the shadow from the item in pixels.

OFFSET Y: vertical offset of the shadow from the item in pixels

BLUR

ADDS BLUR EFFECT TO THE ITEM

ENABLED: indicates whether effect is applied to the item.

WIDTH: amount of horizontal blur in pixels.

HEIGHT: amount of vertical blur in pixels.

ALIGN: alignment of blur center.

Example: audience

Audience example shows how to create a simple overlay with audience counter for different social media. Note that the data will not update automatically, user must change it manually in the playlist.

Create a template

Go to the SETTINGS TEMPLATES and press the ADD CG TEMPLATE button. New template will be added and shown in the right panel.

Name the template as AUDIENCE.

Press the CG EDITOR button to open the editor. By default, editor background is set to colour-bars, the actual background will be transparent.

Since the current template contains four images and four text fields, press corresponding buttons four times.

NEW ITEMS will be added at the top-left corner of the preview area, move and resize each item with the mouse.

Configure text items, select TEXT panel and set following properties:
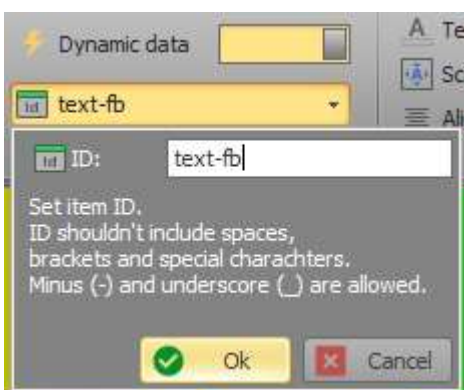
- TEXT: set default value like 0. That value will be shown when adding a new template in the playlist.
- SCALE: select *no-scale*.
- FONT: set to *Arial* and *36pt*.

Configure DYNAMIC data:

- ENABLE dynamic data by clicking on it.
- Press the ID BUTTON and in the pop-up window, change the name to the: *text-fb*, *text-twitter*, *text-vine*, and *text-youtube*.

Select first all images and in the ALIGNMENT panel, select ALIGN LEFTS.

Repeat for text labels.

Close the editor.

Create template in playlist

When the editor is closed, all dynamic data fields are lists in the template settings.
TEMPLATE DATA can now be changed without opening the editor. Changing the FIELD-ID is not possible from the here and can only be done from the CG editor.
Preview data is updated either when changing the editor row or when pressing ENTER.

Field Id	Data
text-fb	50
text-twitter	120
text-vine	32
text-youtube	25

Close the settings and go to the SCREENCONTROLLER.

Add video to the LAYER 1.

Add template to the LAYER 2.

Field Id	Data	
text-fb	50	
text-twitter	120	
text-vine	32	
text-youtube	48	

Same values should be shown as in the settings. Those values are for the current template in the playlist and will not change the values in the settings.

Select the *text-youtube* field and change it to 48.

Start the movie in the LAYER 1 and template in the LAYER 2.

Add additional templates to other screens.

Appendix

Example: CombinedOutput Sport studio

This example will create a fake "Sport studio" with four views.

Studio interview mode

Will split the screen into three parts:
- Flying ball that represents game event.
- Our developer Thomas, giving the interview
- Picture from the studio, represented by the guy with the camera.

Studio mode

Will show the studio over the background.

Match mode

Will show the current game full screen.

Break mode

Will show the clock with some Sport In The Box ads.

To create the first view, enable the component by checking the ENABLED COMBINEDOUTPUT checkbox. Next step is to create a new VIDEOWINDOW with the source set to COMBINEDOUTPUT or set the preview source of one of the ScreenController's to the CombinedOutput.

All video sources below will have 720p as a video format. Change the BACKGROUND to fireworks by pressing the … button.

Example will control five different sources:

▶	Main screen	Screen controller with the game video and the clock.
▶	Advertisement	Sport in The Box ads that are always running as a playlist.
▶	Team photos	Team presentation and The Tomas.

| | Studio camera | Video input that shows man with a camera |
| | Game camera | Camera that shows the game. |

Since all sources will be controlled individually, each source becomes a view element. In the current case, the order of elements is not important.

Change the name of the view and created additional view by either pressing a new button or copying the selected view. First view in list will be shown when the program starts.

To preview the changes, select the other view. For the purpose of tutorial - all visible elements will have a border of 2px in different colours. CROP values are not going to be used here and will be unchanged. TRANSPARENCY will be always 100% as well.

Now, let's talk about the view again and configure the view element properties. When CHANGING the view, element properties are change for every element on the CURRENT view, to the values set on the CHOSEN view with the chosen view TRANSITION TIME.

 Let's say take a CAMERA 2 as an example.

View	Visible	X	Y	Width	Height
Interview mode	Visible	750	390	500	300
Studio mode	Visible	40	40	1200	660
Break mode	Hidden	40	40	1200	660

Which will produce the following setup.

Interview	Studio	Break
Will take 4s to change from Studio and video will slowly scale down.	Will take 3s to change from Interview and view will slowly scale up.	Transition will take 1s. View will, most likely, SCALE UP while FADING OUT.

While the change from the Interview to the Studio and back is easy to understand, changing to the Break is harder.

In the Break mode view, camera is HIDDEN, but it has some values. Those values are applied when changing the view. That means that default value of 1280x720 will produce a strange result of the camera going full screen and fading out.

There are a few choices in that case. The most obvious one is to give it a value from other view, like Studio. That will make things work, but it also means between some view will look better than other.

Let's configure the rest.

Interview mode					
	Visible	X	Y	Width	Height
Main screen	Yes	20	40	700	650
Ads	No	0	0	1280	720
Tomas	Yes	750	40	500	300
Camera 1	No	0	0	1280	720
Camera 2	Yes	750	390	500	300

Studio mode					
	Visible	X	Y	Width	Height
Main screen	No	20	40	700	650
Ads	No	0	0	1280	720
Tomas	No	750	40	500	300
Camera 1	No	0	0	1280	720
Camera 2	Yes	40	40	1200	660

Match mode					
	Visible	X	Y	Width	Height
Main screen	No	20	40	700	650
Ads	No	0	0	1280	720
Tomas	No	750	40	500	300
Camera 1	Yes	0	0	1280	720
Camera 2	No	40	40	1200	660

Break mode					
	Visible	X	Y	Width	Height
Main screen	Yes	20	160	580	400
Ads	Yes	660	160	580	400
Tomas	No	750	40	500	300
Camera 1	No	0	0	1280	720
Camera 2	No	40	40	1200	660

As a curious reader may have noticed, some values are still default (1280x720). That produces some undesired effects on the left.

That is because the Main view element is on top of other views. One of the solutions could be to MOVE IT DOWN in the list.

Try playing around.

Hints

- Use wireframe tool to plan the views.
- Use fixed positions when possible so that elements don't overlap.
- Move things outside the area. Negative values of X and Y are possible, move things outside the visible are and "slide them in". Be careful with WIDTH and HEIGHT thought, it will mirror the picture.

Configure QuickButtons

With the view configured, they will show up in the QuickButton properties.

Changing a view itself is not that useful, but in combination with SCREENCONTROLLER it can produce some interesting results.
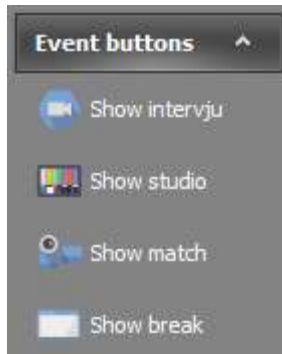
Create buttons and set icons and names as in the illustration.

SHOW INTERVIEW BUTTON

ScreenController Main, Layer 1. Set action to Start item in Playlist 1 to American football video with a ball.

ScreenController with Team photos, Layer 1. Set action to Start item in Playlist 1 to Tomas.

CombinedOutput. Select scene: Studio interview mode.

SHOW STUDIO BUTTON

CombinedOutput. Select scene: Studio mode.

SHOW STUDIO BUTTON

CombinedOutput. Select scene: Match mode.

SHOW BREAK BUTTON

ScreenController Main, Layer 1. Set action to Start item in Playlist 1 to IC control clock.

ScreenController with Advertisement, Layer 1. Set action to Start playlist to Playlist 1.

CombinedOutput. Select scene: Studio break mode.

Now, when pressing a button, view will be change and file will be started at the same time.

Example: CombinedOutput LED banner

LED screens are usually visible in Windows as regular monitors and have resolution like 800x600px.

The picture above is 3200x96px and represents a pre-manufactured content where each ICC logo can be a different vendor. COMBINEDOUTPUT can be used to view the entire picture on one screen.

Since the file is tiled manually, all content is supposed to have the same resolution.

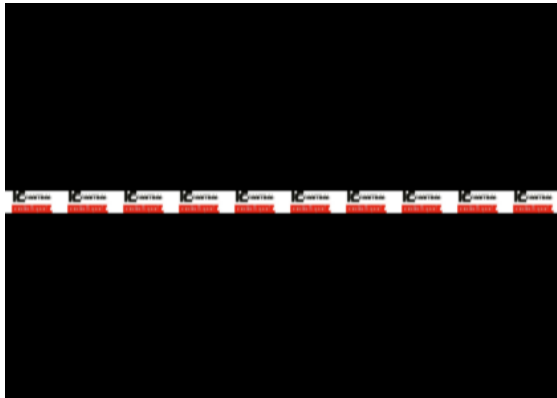For the purpose of tutorial, there will be only one SCREENCONTROLLER with a custom video format of 3200x96px and background set to COLORBARS HD or solid colour. That will help to track pixels.

Original picture in the SCREENCONTROLLER. While it is possible to create a VIDEOWINDOW, it will span across 2 monitors and leave much space unused.

Same picture in the COMBINEDOUTPUT that is going to be used as an output for the LED screen via the VIDEOWINDOW.

At that case, only one view will exist, and the COPY feature will be used to create new view elements. As usual, every element will have a border of 4px and have a different colour to make configuration easier.

COMBINEDOUTPUT will have a custom video format of 800x600px. Since the image is 3200 it means that there will be 3200/800 = 4 view elements. Each on new row.

Create the first element and set the source to the SCREENCONTROLLER. Since the crop will be make, the Width is the COMBINEDOUTPUT width, values above that will be outside the screen. Height will be 96px and unchanged.

Name	X	Y	Width	Height	Start X	Start Y	C. width	C. height	
Element 1	0	0	800	96	0	0	800	96	Red

Press the COPY button and make three copies of that element.

Width and height will remain unchanged here, but every new element will be placed on the new row, increasing it by 96PX.

Each time, new part of the video will be taken and since the video is cut horizontally, CROP START X will be increased by the WIDTH of the COMBINEDOUTPUT, 800px.

Name	X	Y	Width	Height	Start X	Start Y	C. width	C. height	
Element 2	0	96	800	96	800	0	800	96	Yellow
Element 3	0	192	800	96	1600	0	800	96	Green
Element 4	0	288	800	96	2400	0	800	96	Blue

Now, add more content to the playlist and create a QUICKBUTTON that start that playlist.

Additional playlist on the same SCREENCONTROLLER can be used to play different content during the different parts of the game.
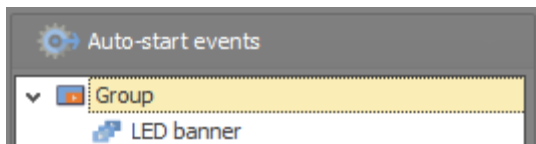
Make LED to show content when the program starts by adding QUICKBUTTON to the AUTO-START.

Press SETTINGS – GENERAL and add created button to AUTO-START list.

Example: CombinedOutput Stadium LED

This example will create a stadium LED screen with two modes. Screen size is 1008x432PX with a frame rate of 60 fps.

Match mode with a COMBINEDOUTPUT that has three parts: camera, scoreboard and banner.

Into or full screen mode, where video is playing at the full screen.

Because the intro video will be shown on the main screen, it will be stretched. So, either the video should support stretching, like abstractions. Or be produced in the same format as a Main screen.

For this tutorial following objects are created.

🔲	Main	SCREENCONTROLLER, 1280x720 @60.
		Camera and introduction videos.
🔲	Scoreboard	SCREENCONTROLLER, 240x332 @30
		Player picture and match information on the right side.
🔲	Banner	SCREENCONTROLLER, 240x100 @30.
		Ads (get event) and club logos.
🔲	Game camera	VIDEOINPUT with the camera that is on the Main ScreenController.
🔲	Led Screen	VIDEOWINDOW with CombinedOutput.
		Size: 1008x432, no borders, on top.

Frame rate of the scoreboard and the banner are reduced to save resources because the content is mostly static.

Entire LED will be driven with the COMBINEDOUTPUT, enable it and set the format to 1008x432@60.

Create first scene and add each SCREENCONTROLLER in the own scene element., like on the picture.

COPY the current scene and set names.

Configure the scene element like below. All scene elements are visible and crop values are not changed.

Match mode				
	X	Y	Width	Height
Main	0	0	768	432
Scoreboard	768	0	240	332
Banned	768	332	240	100

Full video mode				
	X	Y	Width	Height
Main	0	0	1008	432
Scoreboard	768	0	240	332
Banned	768	332	240	100

That will produce an effect of sliding video, where main video moves over the scoreboard and the banner.

One the content is added it should now be possible to produce the following result.

Example: Tile with VideoWindow

LED screens are usually visible in Windows as regular monitors and have resolution like 800x600PX.

The picture above is 3200x96PX and represents a pre-manufactured content where each ICC logo can be a different vendor. It can be scaled with the COMBINEDOUTPUT, but other way is to scale it with the VIDEOWINDOWS.

The result, with the borders enabled will look like that:

Create first VIDEOWINDOW and set the source to the Main SCREENCONTROLLER. Main ScreenController should be 3200x96PX.

Video is going to be tiled to width of 1280. Once created, copy the VIDEOWINDOW two times.

Name	X	Y	Width	Height	Start X	Start Y	C. width	C. height
Window 1	0	0	1280	96	0	0	1280	96
Window 2	0	96	1280	96	1280	0	1280	96
Window 3	0	192	640	96	2560	0	640	96

Note that last WINDOW 3 has less content that fit on the whole row. Both WIDTH and CROP WIDTH are set to the remaining content width.