Touch 3

In Wiser for KNX (W4K) and spaceLYnk (sL)

How to create a widget based visualization in Touch 3

LSS100100, LSS100200

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1 Introduction

This application note describes a Touch 3. A new application which allows you to create a widget based freely customizable visualization for Wiser for KNX (W4K) and spaceLYnk logic controllers.

A glossary is available in the appendix chapter of this document. Please refer to it whenever necessary.

1.1 Competencies

This document is intended for readers who have been trained on W4K, spaceLYnk products. The integration should not be attempted by someone who is new to the installation of either products. In addition, we recommend that you be familiar with the concepts of KNX

1.2 System prerequisites

Software	Version	Download
Wiser for KNX	2.5.0 and newer	http://www.schneider-electric.com
spaceLYnk	2.5.0 and newer	http://www.schneider-electric.com

Table 1: software versions of used software

2 Touch 3

Touch 3 is an application allows you to create a widget based visualization. The Touch 3 enhancing and replacing previous Touch 2 as preinstalled since firmware 2.5.0 or distributed over marketplace.
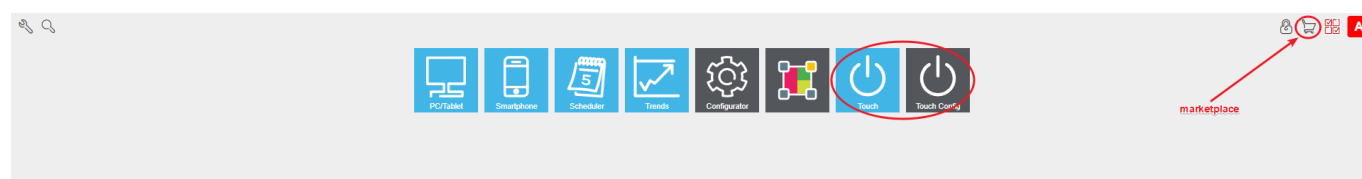
Figure 1: W4K, spaceLYnk startpage

Touch – a Touch 3 visualization for end user

Touch Config – a Touch 3 visualization for System integrator (SI), installer

NOTE: Touch 3 can be installed from marketplace available since firmware 2.0.0.

We recommend keep your controller's firmware up to date to get the latest security improvements and new features.

Make also sure you are running latest browser version in your end device (PC, Tablet, Smartphone, Touch panel). If your device has an old browser that cannot be updated and does not support Touch 3 a downgrade to Touch 2 is possible. Please, contact Customer Care Center, CCC.

3 Touch 3 – user interface, settings, styles

Touch Config is used for a design of a visualization. The visualization is empty and needs to be created according project.
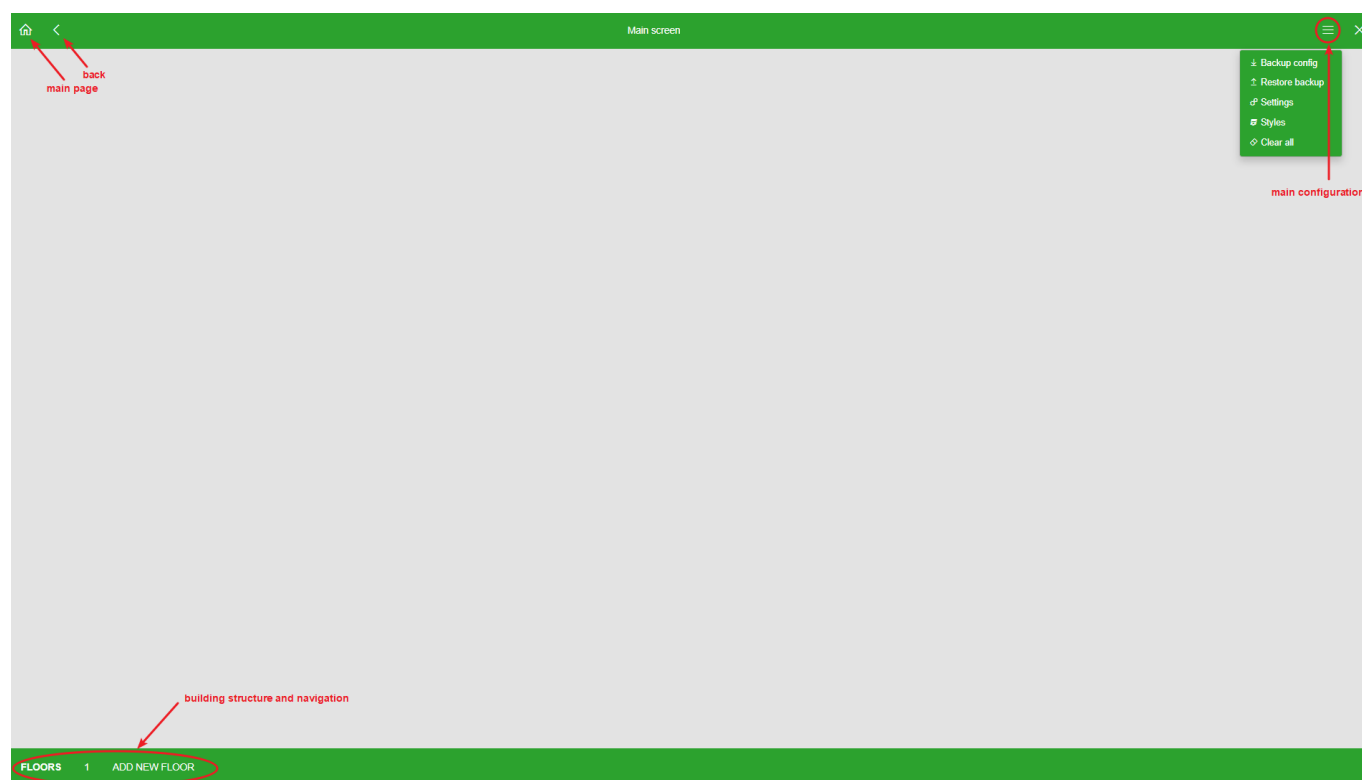
Figure 2: Main screen

Main configuration menu

- Backup config
- Restore backup
- Settings
- Styles
- Clear all
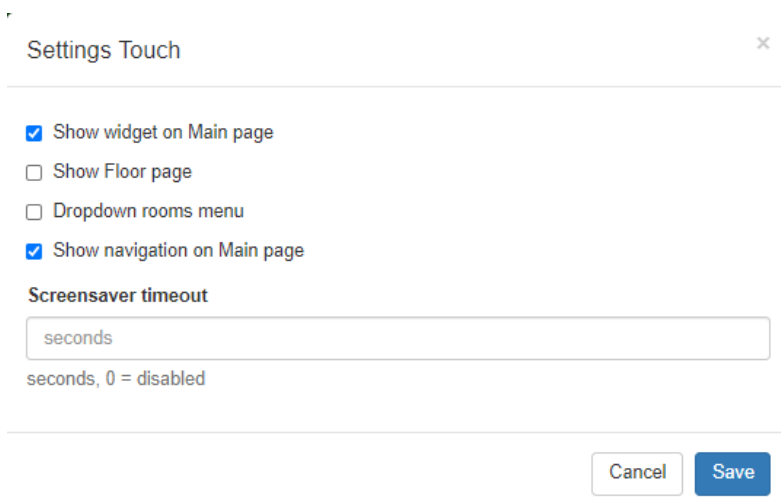
Figure 3: Touch settings

NOTE: Settings are common to the complete Touch 3 visualization.

Figure 4: Touch styles

NOTE: Touch styles are common to the complete Touch 3 User interface, widget's graphical settings.

Preset themes

- Custom
- Default
- Green
- Red
- Blue
- Dark
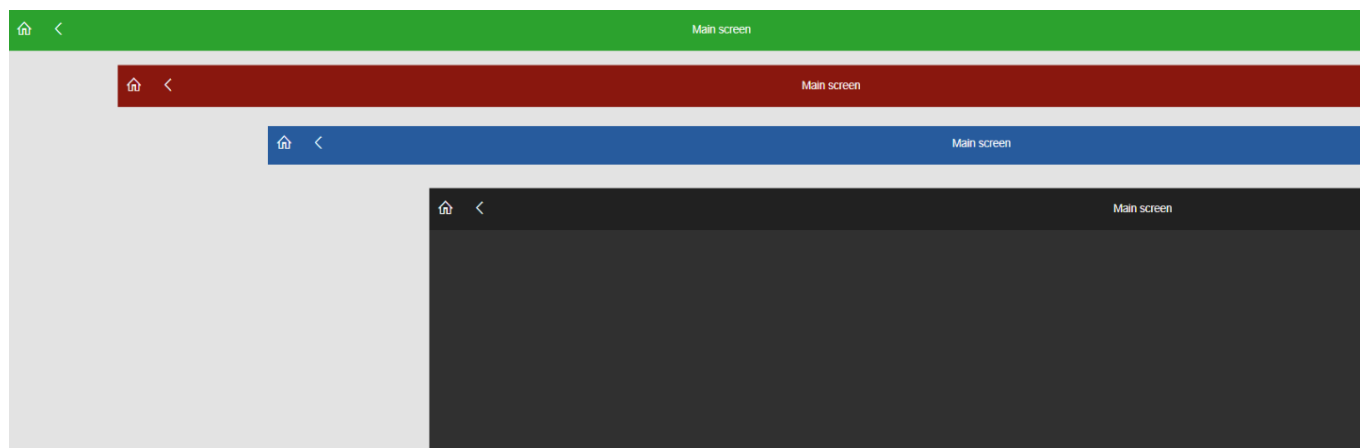
Figure 5: Preset themes

3.1   Styles Touch - Main

- Hide bottom panel
    » Hide bottom panel on small displays to save 56px of space for widgets
- Hide close button
    » Close button can be hidden (kiosk mode usecase)
- Background
    » Background color can be chosen in color picker or directly hex color code can be used
- Preset Background
    » Pre-installed or imported background image can be used for visualization
- Scale background image
- Scale background image as cover
    » Scaling of picture to fit different display resolution
- Background Filters
    » Filters like blur, grayscale etc. can be applied directly on Background image
- Custom CSS
    » Graphic design can be modified by custom css
- From JSON
    » Restore Styles settings
- Download JSON
    » Backup Style settings

3.2   Styles Touch - Top and bottom panels

- Background color
    » Background color of top and bottom panel. Transparency can be applied on any color
- Text color
    » Color of text for top and bottom panels

NOTE: Use color complementary theory and a color wheels, calculators available for free of charge on the internet in order to choose best color combination of background and foreground color.

NOTE: Size limit for uploaded custom background is 500kB.

3.3 Styles Touch - Left panel

- Background color

- Text color

- Active item background color

- Active item text color

- Do not show on small screens
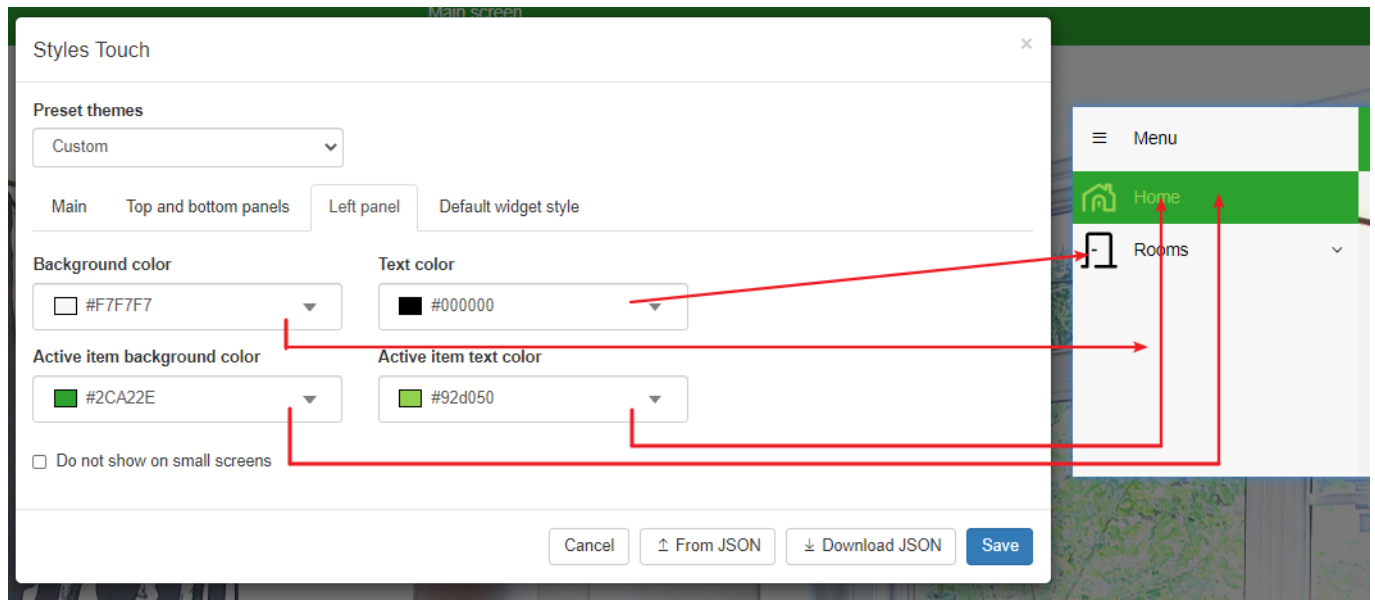
Figure 6: Left panel settings

3.4   Styles Touch - Default widget style

Figure 7: Default widget style

Option	Description
Background	Widget background color
Preset background	Widget background image (preinstalled or custom)
Title color	Widget title color
Text color	Color of text used in widgets
Width of border	Widget border thickness
Border color	Widget border color
Rounded corners	Enables rounded corners for widgets
Hide shadow	Hide widget shadow around border
Widget view close button	
Settings button color	
Setting button icon color	
Button color (A)	
Button icon color (B)	
Disabled button color (A)	
Disabled button icon color (B)	
Slider main color (A)	
Slider secondary color (B)	
Slider icon color (C)	
Gauge main color (A)	
Gauge secondary color (B)	
Warning color	Warning color of Somfy motor diagnostic widget
Error color	Error color of Somfy motor diagnostic widget
Alarm icon color	
Alarm inactive icon color	
Acknowledge waiting color	Acknowledge waiting color of text notification widget
Acknowledge done color	Acknowledge color of text notification widget when done (Acknowledged)
Setpoint color	Setpoint color of thermostat

Cooling color	Cooling status color of thermostat
Heating color	Heating status color of thermostat
Color when value 1 is over threshold 1	Threshold 1 color of CO2/humidity/temp sensor widget
Color when value 1 is over threshold 2	Threshold 2 color of CO2/humidity/temp sensor widget
Color when value 1 is over threshold 3	Threshold 3 color of CO2/humidity/temp sensor widget
DALI status 1 color (A)	
DALI status 2 color (B)	
DALI status 3 color (C)	

4   First project

The Touch 3 visualization is empty when open for the first time. A system integrator must create a structure of building, add widgets and define graphical style for the visualization.

4.1   Building structure

The structure is located in bottom panel. New floors can be added. Rooms can be added on floor's level. There is not a limit for number of floors or rooms.

1st floor is always created by Touch 3.
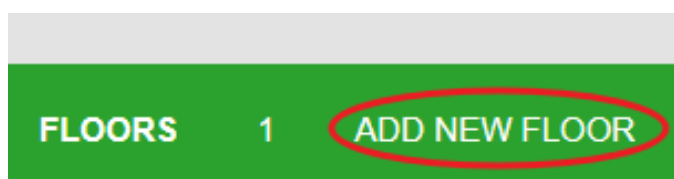
Figure 8: Adding floor

Floors can be easily renamed or deleted when mouse hover a floor.
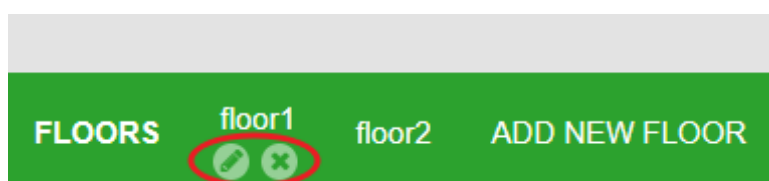

Figure 9: Rename, delete floor

When floor is created you are redirected to the floor in order to continue with adding rooms.
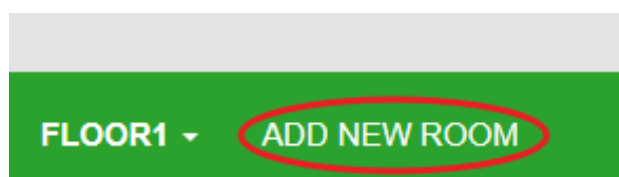

Figure 10: Adding rooms
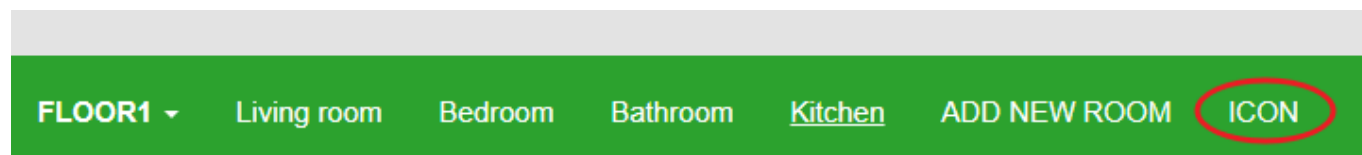
Each room can have own icons represents type of room.

Figure 11: Add icon

Click appropriate icon to assign with a room. Icons are categorized in several tabs, SVG, Title, Line Awesome where each category has different style. Using icons help with visualization's clarity.
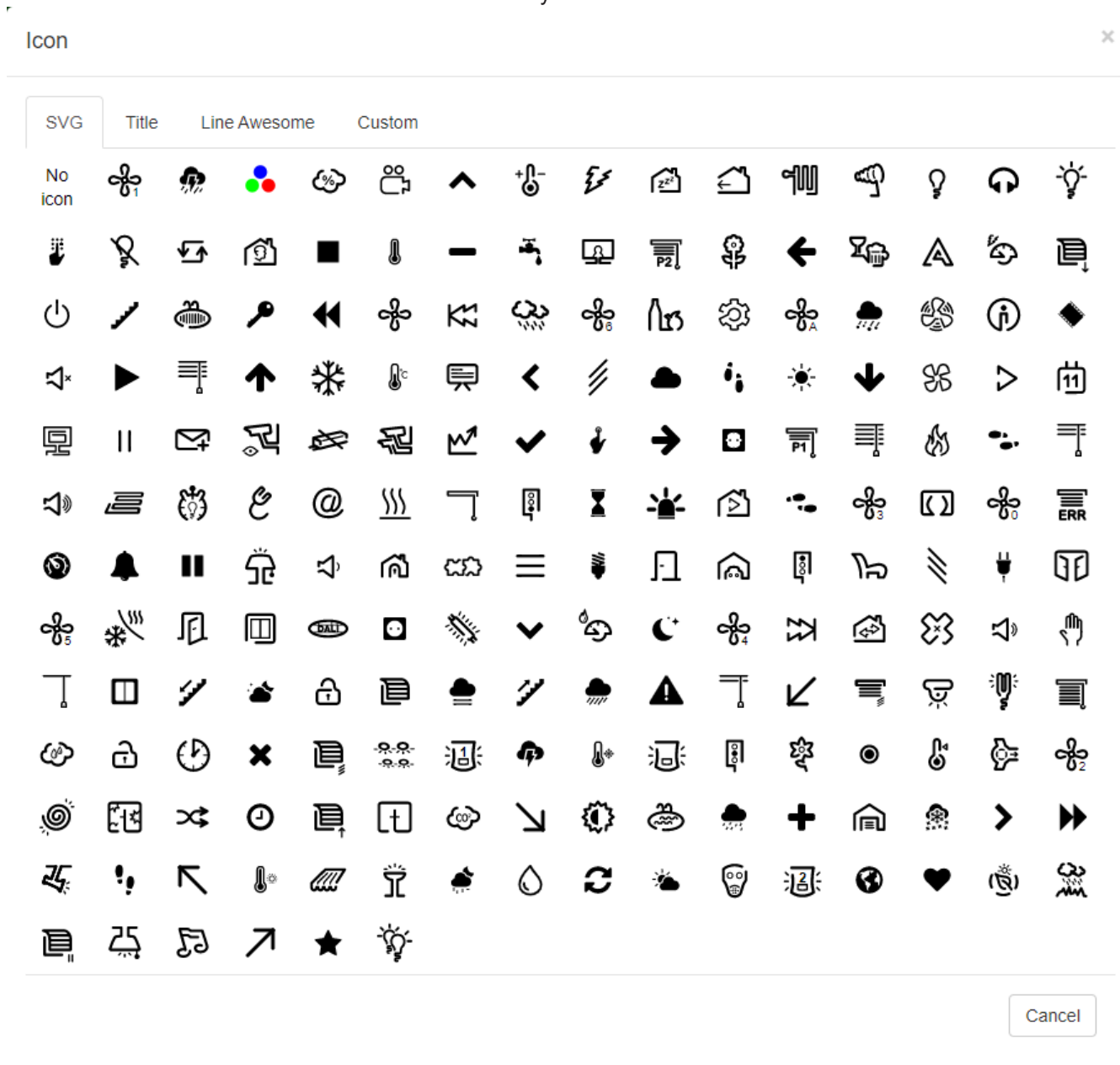

Figure 12: Icons

Custom icons can be uploaded.

NOTE: Size limit for uploaded custom icons is 40kB. Uploaded icons shape does not respect color settings defined in styles or in the widget.
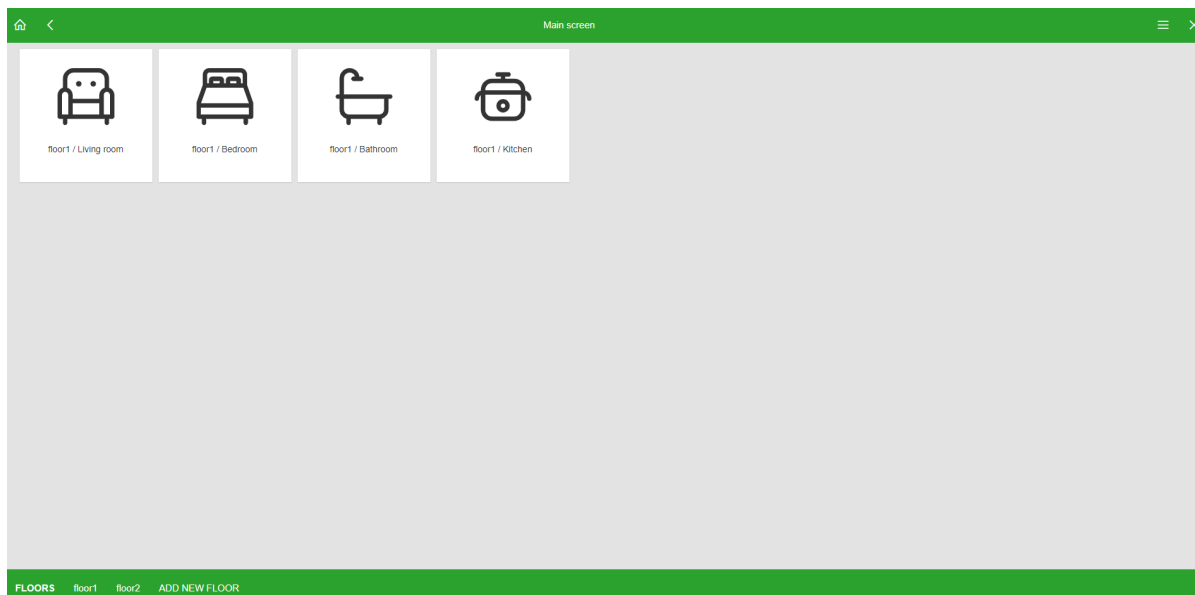
Figure 13: Room icons

4.2 Room settings

Each room can be graphically customized.
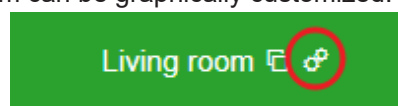
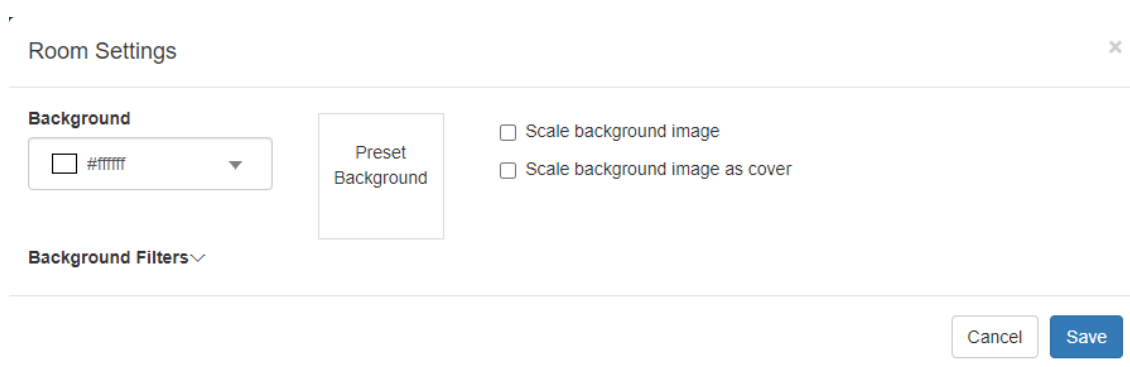

Figure 14: Room settings icon

Figure 15: Rooms settings

- Background
    - » Background color can be chosen in color picker or directly hex color code can be used
- Preset Background
    - » Pre-installed or imported background image can be used for visualization
- Scale background image
- Scale background image as cover
    - » Scaling of picture to fit different display resolution
- Background Filters
    - » Filters like blur, grayscale etc. can be applied directly on Background image

NOTE: Size limit for uploaded custom background is 500kB.

4.3 Copy room

The room can be copied in order to make visualization deployment faster. You can copy a room together with all widgets and paste into any floor of your building. The room and widget styles keep preserved. The objects mapping have to be changed according installation.
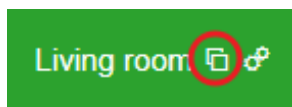
Click Copy icon in room.
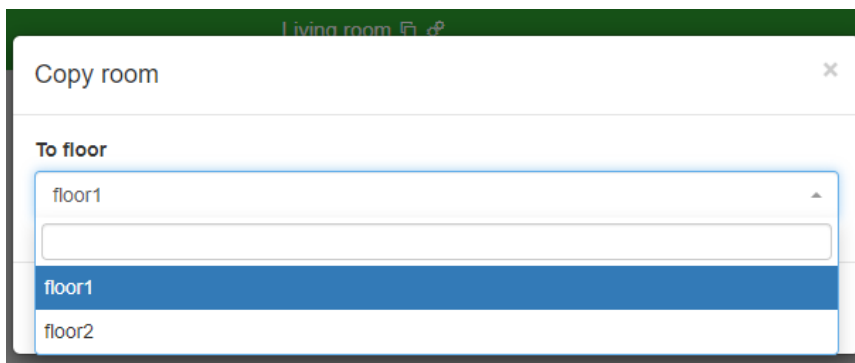

Figure 16: Copy room icon

Figure 17: Copy room

4.4 Adding Widget

A widgets can be added to any room created in the visualization. Widgets can be also visible on main screen or floor as a "shortcut" so user can operate favorite function without accessing room level.
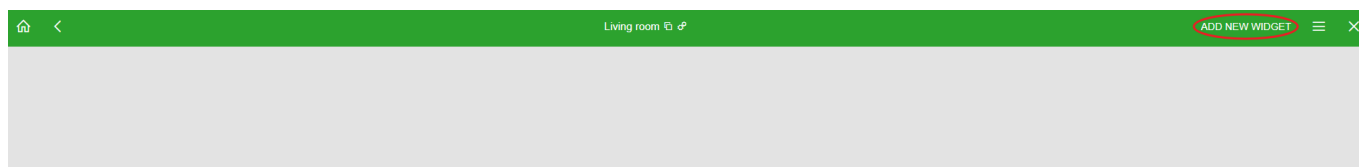

Figure 18: Add new widget

Widgets are organized into 4 categories:

- Show all

- Main

  » Default category with most used widgets

- Additional

  » Widgets not listed in Main category

- Special

  » Chart and widget creator

- Custom

  » Widgets created in widget creator can be added to Custom widgets

List of available widgets:

Light switch	Dimmer horizontal
Socket switch	Dimmer vertical
General switch	Music
Dimmer rotary	Text notification
Shutter rotary	RGB dimmer
General alarm	RGBW dimmer
CO2/humidity/temp sensor	Scene
Gauge	Shutter horizontal
Video	Shutter vertical
AC switch	Somfy garage
Fire alarm	Somfy motor diagnostic
Gas leak alarm	Somfy shades
Water leak alarm	Sonos
Constant light control	Thermostat
DALI group rotary	Content
DALI group	Weather station
Danfoss Thermostat	Widget creator
Fan switch	Chart widget
Floor heating	
Info 1	
Info 2	

Use "Search for ..." input or categories to filter widgets.

Click any widget in order to add to room. When **click** save the widget is added in "demo mode". In order to be able to operate a widget the settings needs to be completed.

Settings "Light switch"   ✕

General   Objects   Styles

Title

[   ]

⬆ From JSON   ⬇ Download JSON   Cancel   Save

Figure 19: Widget settings

- General tab
  - » A title of widget, minimum, maximum value and other user defined values
- Objects
  - » Mapping of the graphical elements to KNX objects so when user interact with widget a values are sent to KNX bus
- Styles
  - » Graphical settings for specific widget which overrides Styles definition.

NOTE: A widget settings can be backuped by click **Download JSON** or restored by **From JSON**.

4.4.1 Widget styles

Added widget is styled according theme and general default styles for Touch 3. Each widget can be re-styled more on top of this settings. To do so **click** edit icon on selected widget.
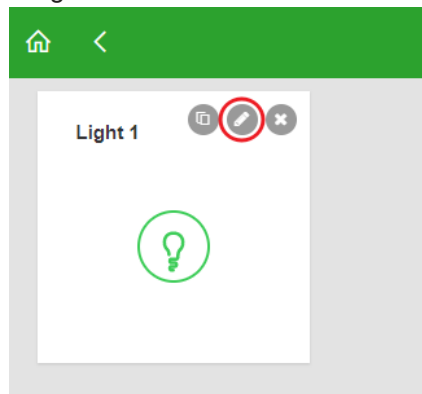

Figure 20: Edit widget

Click Styles tab which allows you to re-style the widget. Each widget has different style options.

Figure 21: Widget styles

Graphical settings can be done by selecting an input element and change of value with user friendly selectors.

Figure 22: Modified widget styles
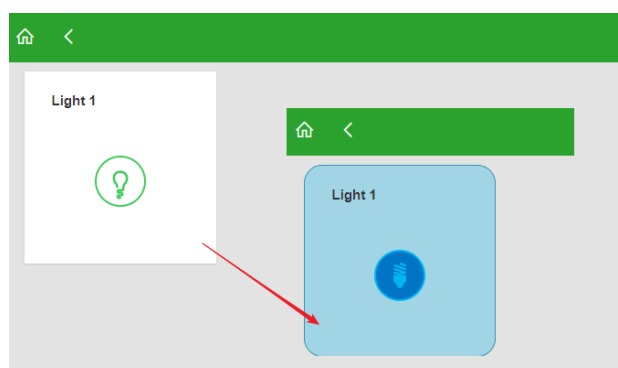
Figure 23: Graphical modification of basic widget

4.5   Copy widget

The widget can be copied in order to make visualization deployment faster. You can copy a widget and paste into any room of your building. The widget styles keep preserved. Only title and objects mapping have to be changed.

Click Copy icon in widget.

Figure 24: Copy widget

Figure 25: Copy & paste widget to a new location

The final Touch 3 visualization can consist of unlimited floors / rooms filled with widgets. Note that extent of visualization has impact on controller's CPU. Refer to controller's user guide to understand more CPU topic and best practices to not overload the controller.
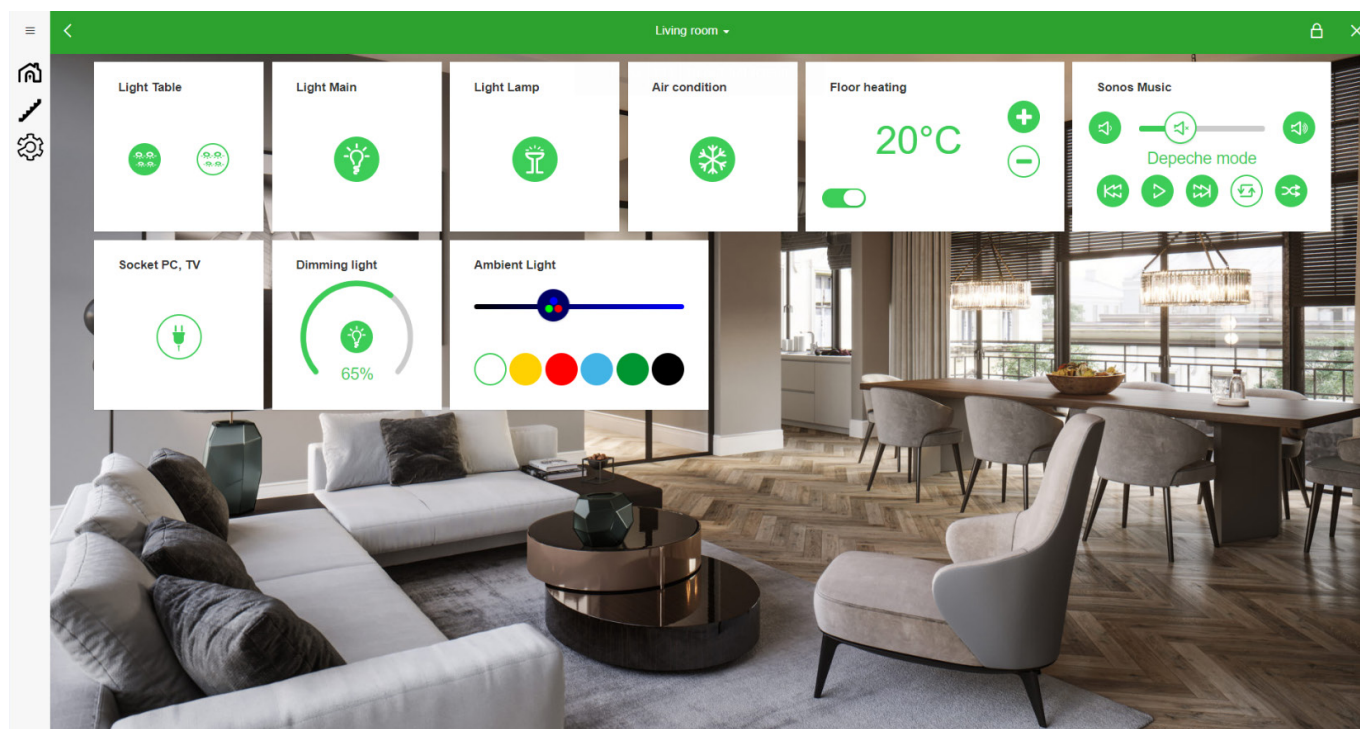
Figure 26: Example of complete visualization

5   Special Widgets

There are two more special widgets which can be used in Touch 3 visualization.

5.1   Widget creator

Even there are pre-installed number of widgets in Touch 3 it can happen that for some special project a custom widget needs to be created.

Click Add new widget -> Special -> Widget creator

When done a widget creator UI is opened.

A system integrator can define a graphic style as for any other widget. Moreover it is possible to place in this widget an elements to define a functionality of custom widget.
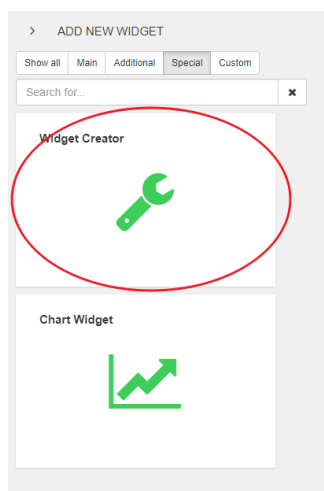
Figure 27: Widget creator
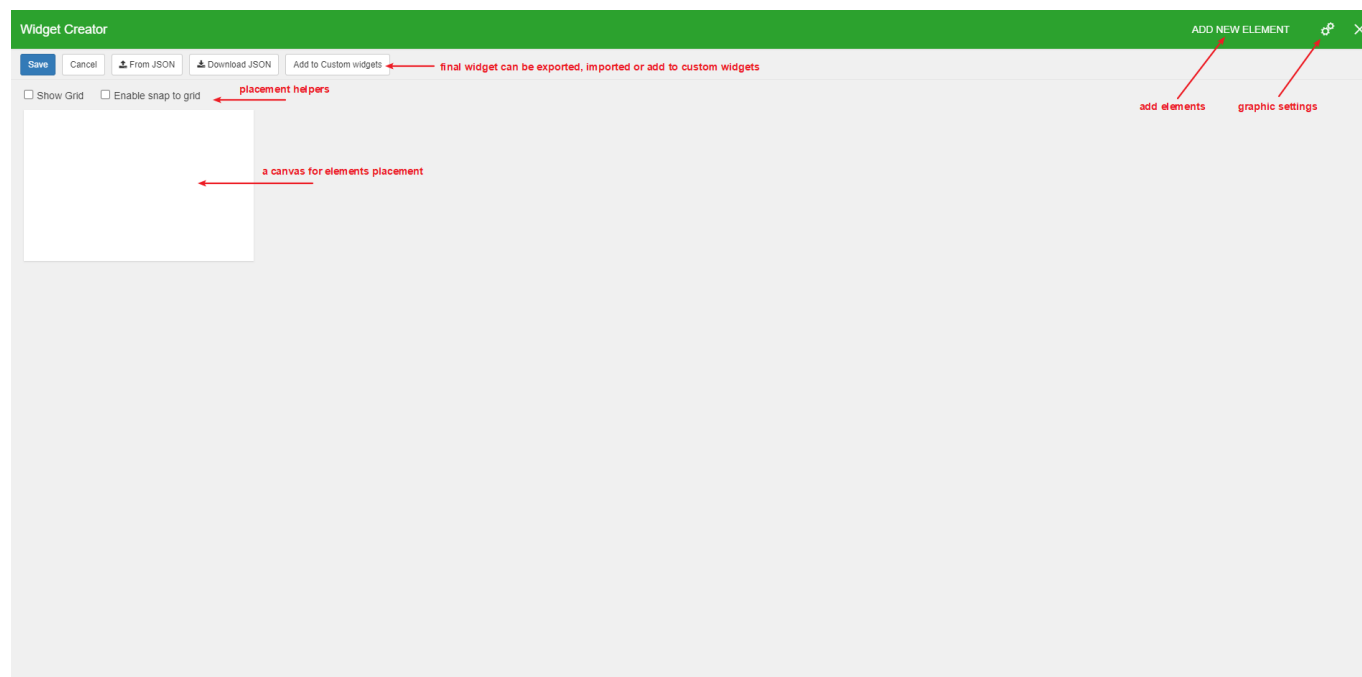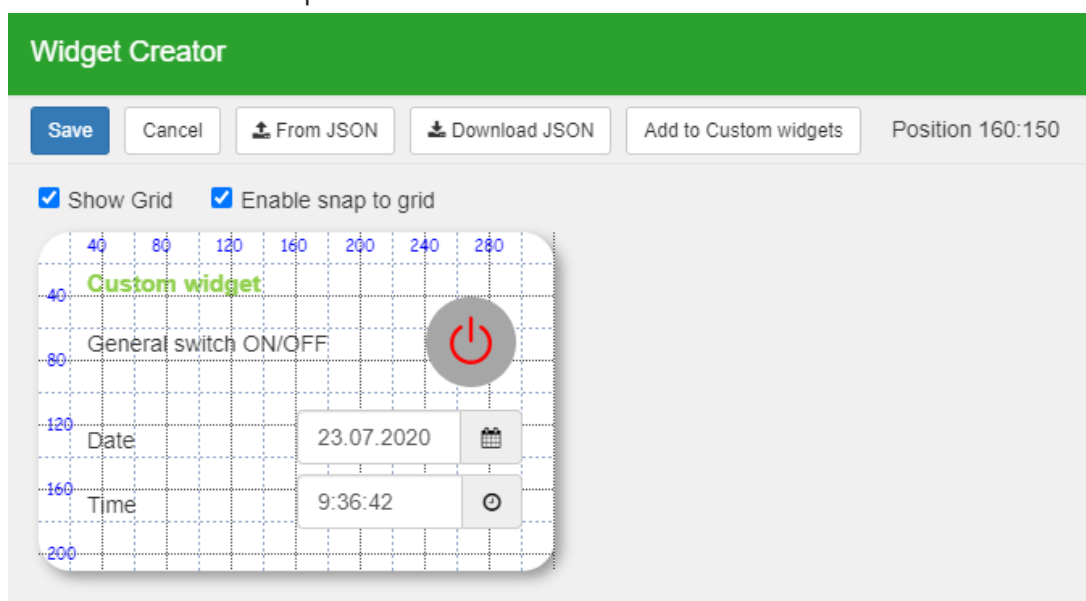
Figure 28: Widget creator

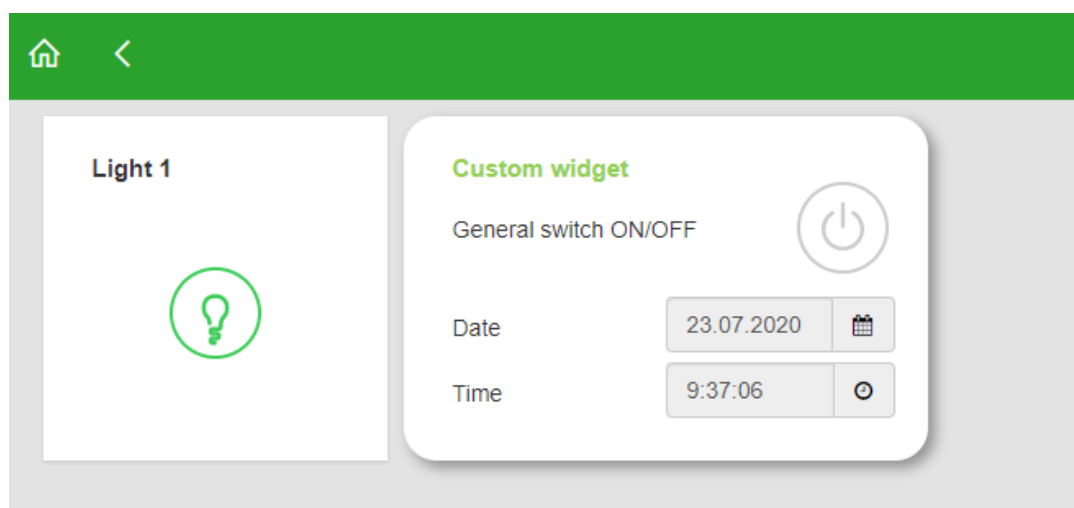Example:

Figure 29: Creating custom widget
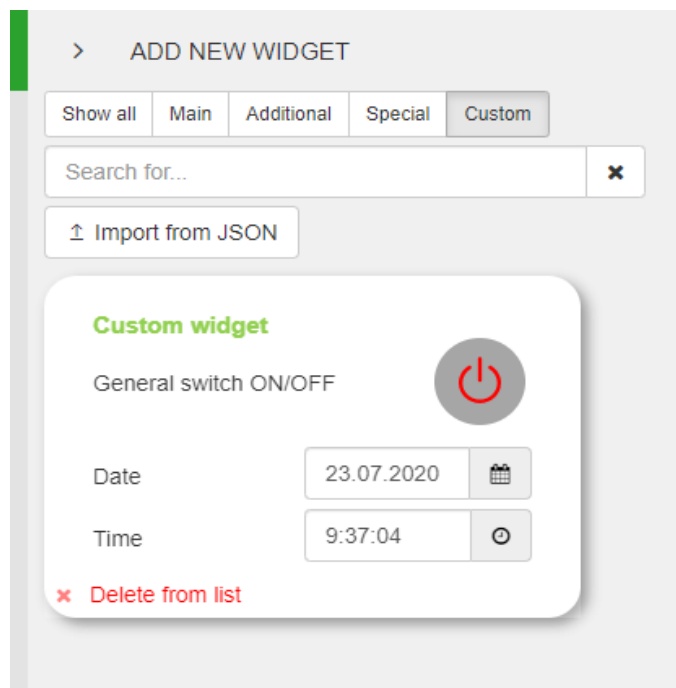

Figure 30: Custom widget in room

Figure 31: Saved custom widget

5.2   Chart Widget

Chart widget can be used in order to visualize trends stored in the controller in Touch 3 visualization.

Click Add new widget -> Special -> Chart widget

When done a Chart widget UI is opened.

A system integrator can define a graphic style as for any other widget. It is possible to use Charts in order to create a graph dashboards and combine with another widgets in room or main screen.
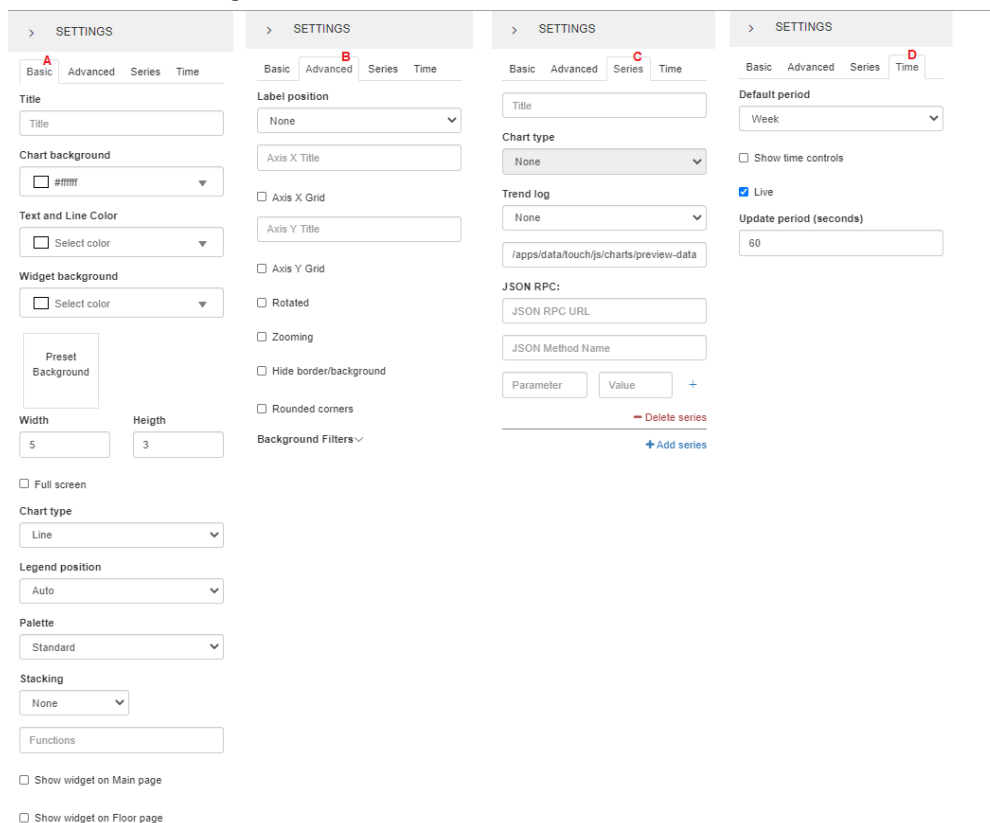
Figure 32: Chart widget settings

- Basic (A)
  - » A title of widget, chart background, type, dimensions and other user defined values
- Advanced (B)
  - » Labels, zooming, rounded corners ...
- Series (C)
  - » Add series (chart can content more series, trend selector ...)
- Time (D)
  - » Chart period definition, time control buttons ...

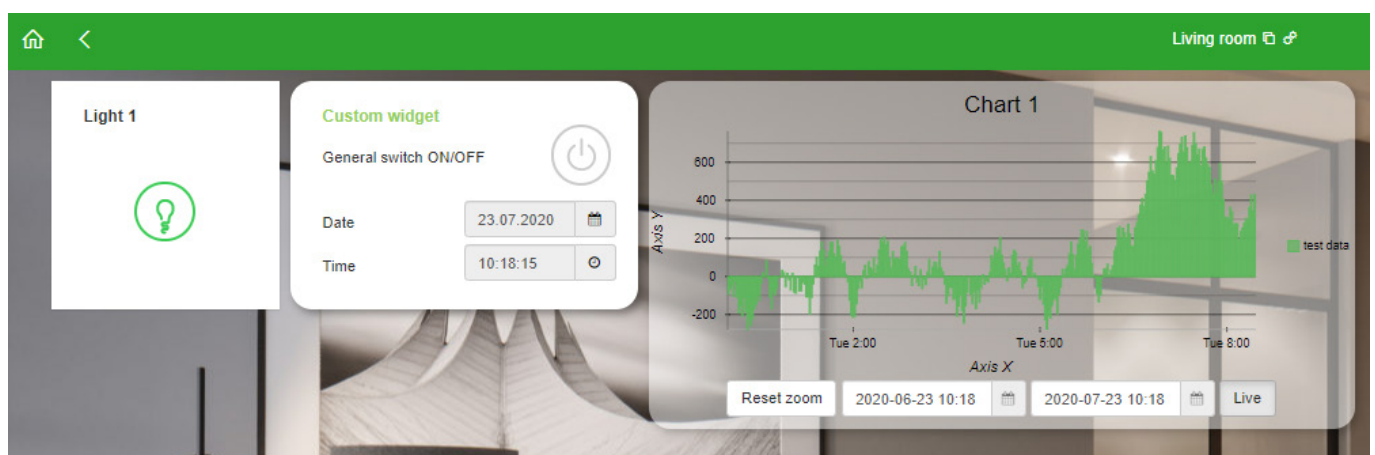Figure 33: Chart widget example settings

Figure 34: Chart widget example in room

6 Appendix

A new widget based visualization for Wiser for KNX, spaceLYnk logic controllers allows a System integrators create easily and fast an up to date visualization for KNX installation. With many pre-made widgets, fully customizable widget creator and other simplification features described in this application note gives a system integrators a strong argument to use a Touch 3 visualization as a replacement of classic PC/Tablet visualization available in the controllers.

Nevertheless all kind of visualization are continue to be supported so a system integrator can decide according project needs.

For more information about Touch 3 watch a video on following link - video and subscribe our channel here.

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