TeslaMultiSCADA

User Manual

Version 1.10

Contents

Requirements

The TeslaMultiSCADA requires Android operating system and access to SD card memory.

- Android 2.3 or above
- Read/Write access to SD card.

Setup

To install the TeslaMultiSCADA on a mobile device the following steps must be followed.

- Copy the APK package on the device.
- Execute the APK file.

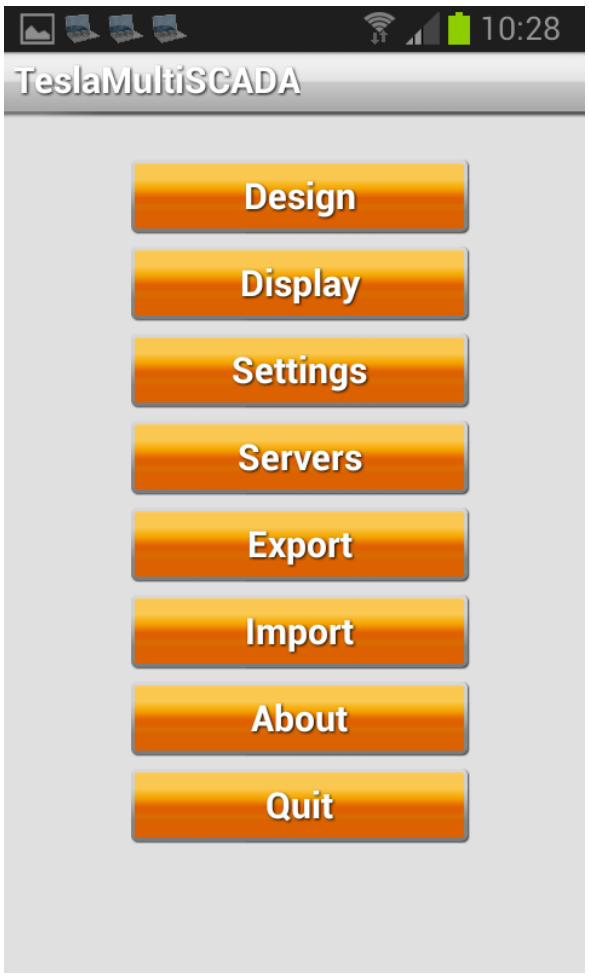
Installation Procedure

The following step-by-step instruction must be followed when copying and installing the

TeslaMultiSCADA manually from a PC.
NOTE: When installing from an android store these steps are not required.
1. Connect PC and phone with USB-cable.
2. Change USB-mode to mass storage (drag down upper menu bar).
3. Copy the installer .apk file from PC onto the phone.
4. Change USB-mode back to 'only charging' / 'none' or just disconnect USB-cable.
5. Use file manager (e.g. ES File-Explorer) navigate to the .apk (SD-card mounted under ‘/sdcard’) and select the .apk
6. Allow access to resources and start TeslaMultiSCADA.

Start TeslaMultiSCADA

On the first startup TeslaMultiSCADA you see the license agreement. You should approve it before using the software. Then you see the main menu of the program.

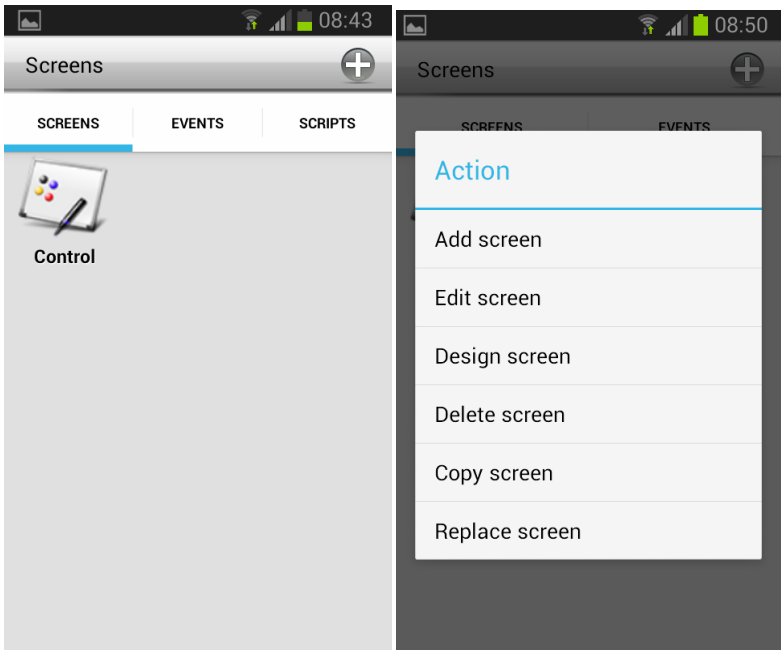


Where:

- **Design**
  Development of your project.
- **Display**
  Run your project.
- **Settings**
  Configure your project settings.
- **Servers**
  Configure servers of your project.
- **Export**
  Export your project on the SD card.
- **Import**
  Import project from the SD card.
- **About**
  About project and Id of your device.
- **Quit**
  Quit the program.

Design

When you select “Design” menu you get to the page “Screens”. In this page you can add, delete, edit, copy, replace, remove screens of your project.



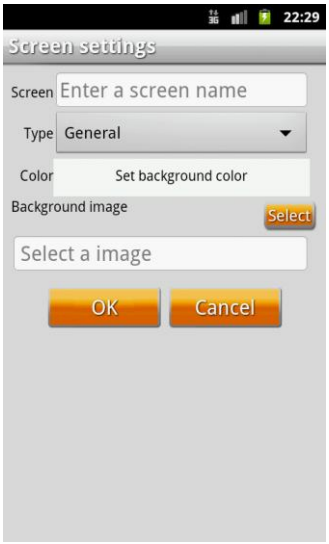
In these figures you can see screens of the project and pop-up menu of the page “Screens”.
Where:

- **Add screen**
  Add a new screen in the project.
- **Edit screen**
  Edit the screen settings.
- **Design screen**
  Design the screen. You can select this item by simply clicking on the desired screen.
- **Delete screen**
  Remove the screen from the project.
- **Copy screen**
  Copy the desired screen.
- **Replace screen**
  Change the scroll position of the screen. You select the screen you want to change, click “Replace screen”, and then select the screen with which you want to change.

  By sliding or clicking tab “Events” you get to the page “Events” where you can add events to your project. By sliding or clicking tab “Scripts” you get to the page “Scripts” where you can add scripts to your project. See below.

Screen settings

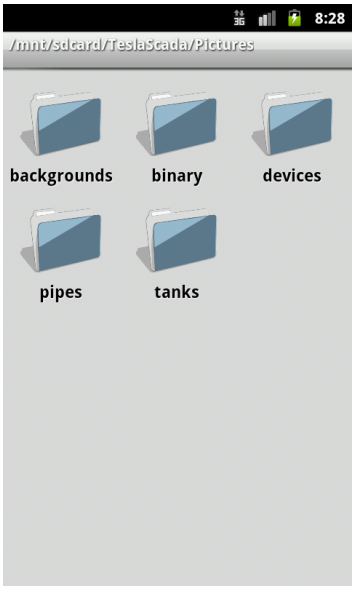
When you select the “Add screen” or “Edit Screen” you get in the “Screen settings” page. You see the next figure.



Where:

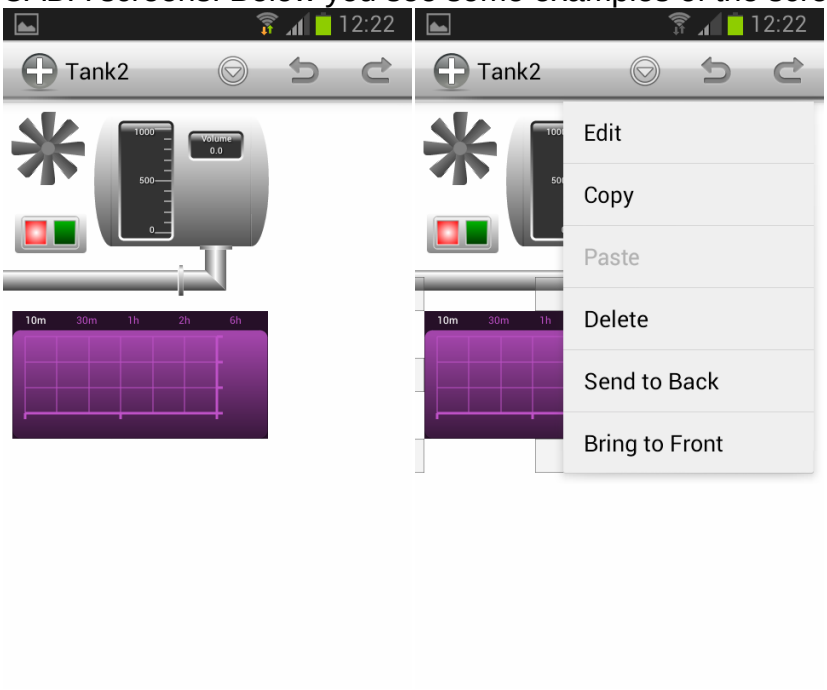
- **Screen**
  Name of the screen
- **Type**
  Choose type of the screen – general or popup.
- **Color**
  Background color of the screen.
- **Background image**
  Background image of the screen.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.

After clicking “Select” button you get to the image selection page where you can choose the desired picture.



Design screen

When you select “Design screen” in the page “Screens” you get to the page where you develop your SCADA screens. Below you see some examples of the screens.



Some actions you can do on this page:

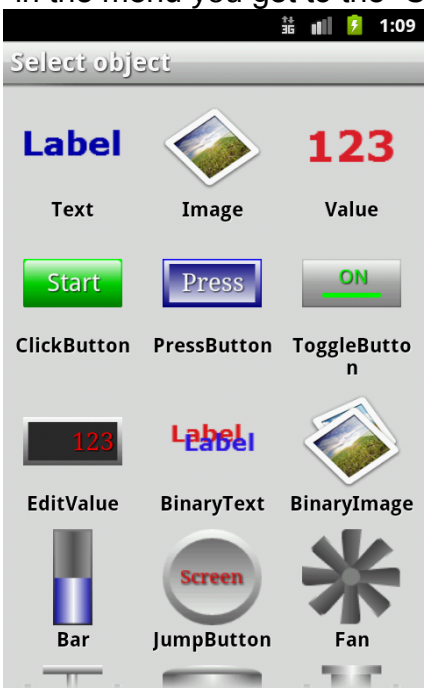
- **Add object**
  Press menu button and select “Add object” or click plus icon on the top left of the screen then you get in the page “Select object” where you can select an object you needed.
- **Move object(s)**
  To move an object you have to long click on the object you want to move, drag it and drop in the place where you want to. To move objects you have to long click on empty place. The rectangle will be shown. Select items you want to move. Then long click on the rectangle and move it on the place you want to.
- **Resize object**
  Select an object by clicking on it. The resize squares will be shown. Resize the object by dragging one of it.
- **Delete object(s)**
  To delete object you have to long click on an object you want to delete, drag it to the basket and drop it or you have to select object by clicking on it or by using selecting rectangle to select multi objects. Then you have to press select button on the action bar, and select “Delete” menu item.
- **Edit object**
  To edit object you have to double click on an object or you have to select object by clicking on it, press select button and select “Edit” menu item.
- **Copy object(s)**
  To copy an object you have to enter to the object settings by clicking on the object and select “Copy” in the menu or you have to select object by clicking on it or by using selecting rectangle to select multi objects. Then you have to press select button on the action bar and select “Copy” menu item.

- **Paste object(s)**
  To paste object(s) you have to press select button on the action bar and select “Paste” menu item.
- **Horizontal alignment objects**
  To horizontal alignment objects you have to select objects, press select button on the action bar and select “Horizontal alignment”
- **Vertical alignment objects**
  To vertical alignment objects you have to select objects, press select button on the action bar and select “Vertical alignment”
- **Bring to back object**
  To bring to back object you have to select object, press select button on the action bar and select “Bring to back”
- **Bring to front object**
  To bring to front object you have to select object, press select button on the action bar and select “Bring to front”
- **Undo**
  To undo actions you have to select “Undo” button on the action bar.
- **Redo**
  To redo actions you have to select “Redo” button on the action bar.

  To hide action bar you have to click menu button and select “Hide action bar” menu item. When action bar is hided you can do all actions by clicking menu button and select appropriate menu items. To show again action bar you have to click menu button and select “Show action bar” menu item.

Select object

When you select “Add object” in the menu you get to the “Select object” page.



Where:

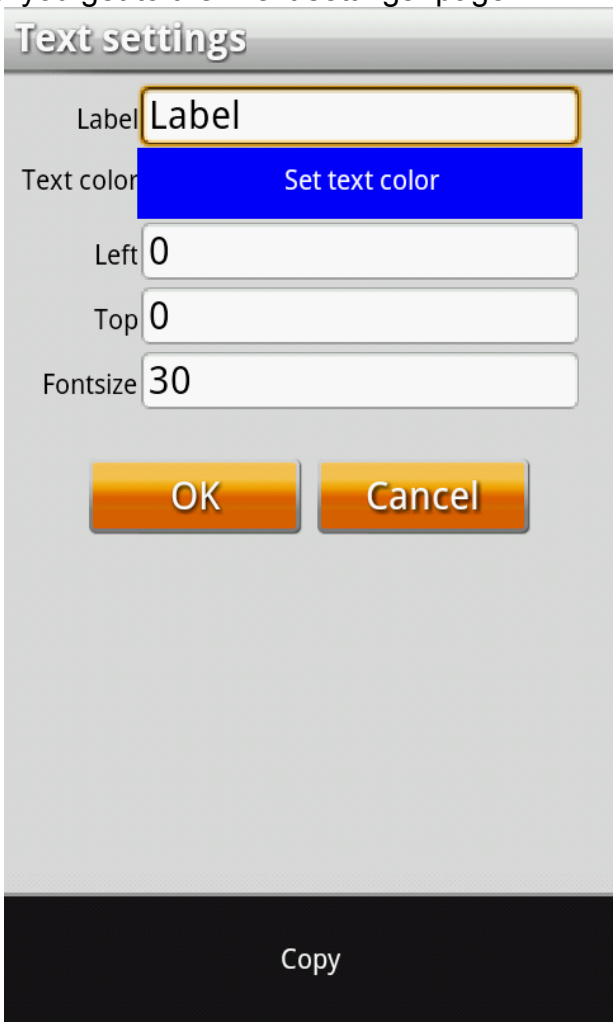
- **Text**
  Simple text object.
- **Image**
  Simple image object.
- **Value**
  Display the value of the variable.
- **ValueString**
  Display the ASCII string.
- **ClickButton**
  The value of the Boolean variable is set *true* or *false*.
- **PressButton**
  The value of the Boolean variable is set as *true* when button pressed and when button release it is set as *false*.
- **ToggleButton**
  The value of the Boolean variable is changed every time you click, switching from the current setting to the other setting *true* or *false*.
- **ImageButton**
  The value of the Boolean variable is changed every time you click, switching from the current setting to the other setting *true* or *false*. Image displayed on the button depends on the state of tag.
- **LightButton**
  The value of the Boolean variable is changed every time you click. When value is true the button is lighten.
- **EditValue**
  Set value of the variable.
- **EditString**
  Set string.
- **BinaryText**
  Display text depending on the Boolean variable.

- **ValueText**
  Display text depending on the Value variable.
- **BinaryImage**
  Display image depending on the Boolean variable.
- **Bar**
  Fill the bar depending on the variable.
- **JumpButton**
  Button to quickly move between screens.
- **Call Popup**
  Button to call popup window.
- **Fan**
  Fan object. Depending on the Boolean variable is rotating or not.
- **Ventilation louvers**
  Ventilation louvers object. Depending on the Boolean variable is close or open.
- **Valve**
  Valve object. Depending on the Boolean variable is open or not.
- **Tank**
  Tank object. Depending on the variable is filling.
- **Vert. cylinder tank**
  Vertical cylinder tank object. Depending on the variable is filling.
- **Hor. cylinder tank**
  Horizontal cylinder tank object. Depending on the variable is filling.
- **Pipes**
  Four type of pipes - straight, end, bow and tee.
- **Pump**
  Pump or motor object. Depending on the Boolean variable is on or off.
- **Centrifugal pump**
  Centrifugal pump object. Depending on the Boolean variable is on or off.
- **Air blower**
  Air blower object. Depending on the Boolean variable is on or off.
- **Light**
  Light object. Depending on the Boolean variable is on or off.
- **LightStack**
  Stack light object. Depending on the Boolean variable is on or off.
- **Analog meter**
  Analog meter object. Display the value of the variable.
- **Digital meter**
  Digital meter object. Display the value of the variable.
- **Slider**
  Slider object. Set value of the variable.
- **Counter**
  Counter object. Set value of the variable.
- **Selector**
  Selector object. Set discrete value of the variable.
- **Warning label**
  Warning label object. Depending on the Boolean variable is on or off.
- **Indicator**
  Indicator object. Depending on the Boolean variable one light is on or other.
- **Voice input**
  Voice input object. When you click the object you are suggested to speak the value you want to write to the variable.

- **Switch**
  Switch object. Depending on the Boolean variable is on or off.
- **Line**
  Line object. Depending on the Boolean variable is on or off.
- **Contour**
  Contour object. Depending on the Boolean variable is on or off.
- **Trend**
  Trend object. Display your value in graphic view.
- **MultiTrend**
  MultiTrend object. Display your values in graphic view.
- **WebView**
  Web view object. Show web page or complex image (like animated gif).
- **Binary WebView**
  Binary Web view object. Show web page or complex image (like animated gif) depending on the Boolean variable.

Text settings

When you select “Text” you get to the “Text settings” page.

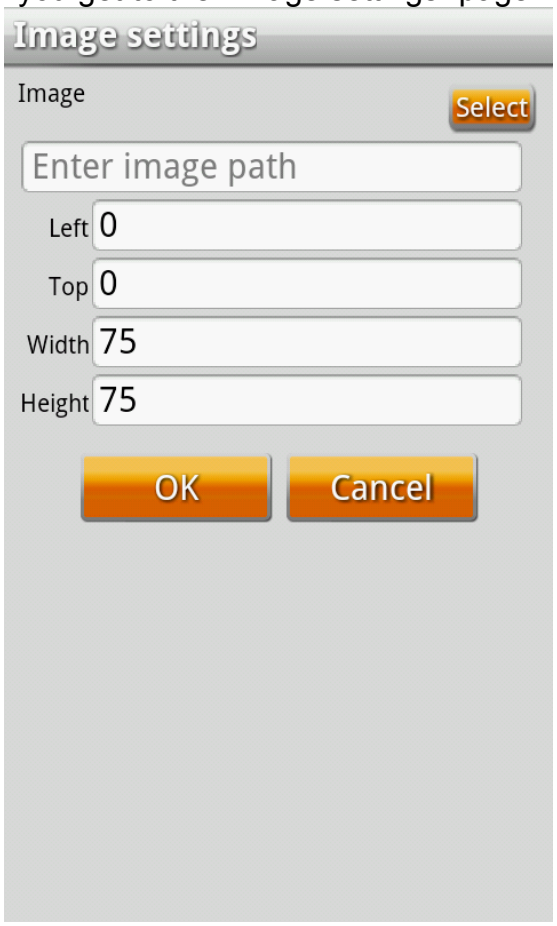


Where:

- **Label**
  Text you will see on the screen.
- **Text color**
  Text color.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Fontsize**
  Font size.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Image settings

When you select “Image” you get to the “Image settings” page.

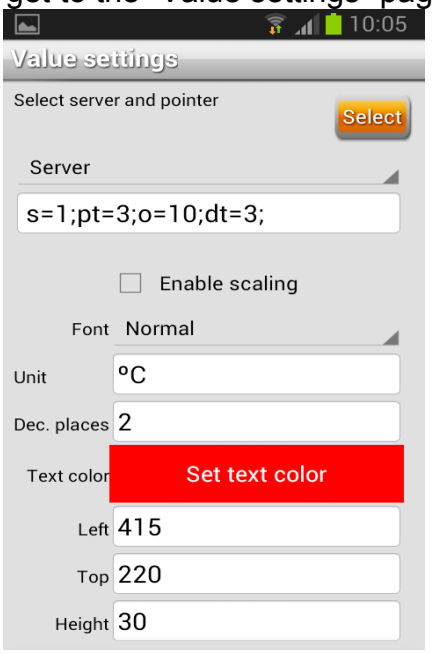


Where:

- **Image**
  Path to the image you will see on the screen.
- **Select**
  Select image.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the image.
- **Height**
  Height of the image.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Value settings

When you select “Value” you get to the “Value settings” page.

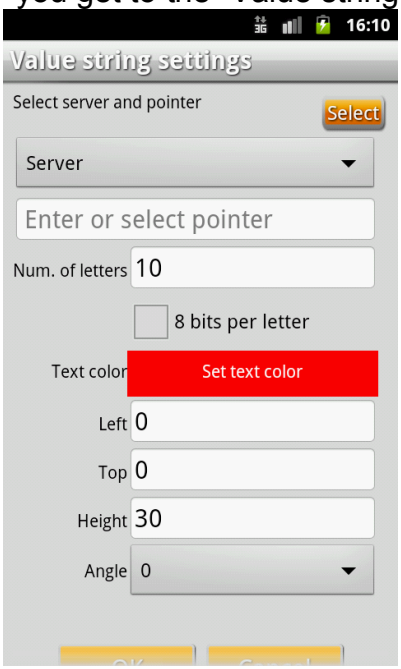


Where:

- **Select server and tag**
  Select the tag to be displayed. *See below*.
- **Raw max**
  Maximum raw value.
- **Raw min**
  Minimum raw value.
- **EU max**
  Maximum value in engineering units.
- **EU min**
  Minimum value in engineering units.
- **Font**
  Choose font.
- **Unit**
  Engineering unit.
- **Dec. places**
  Number of decimal places.
- **Text color**
  Text color.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Fontsize**
  Font size.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Value string settings

When you select “ValueString” you get to the “Value string settings” page.

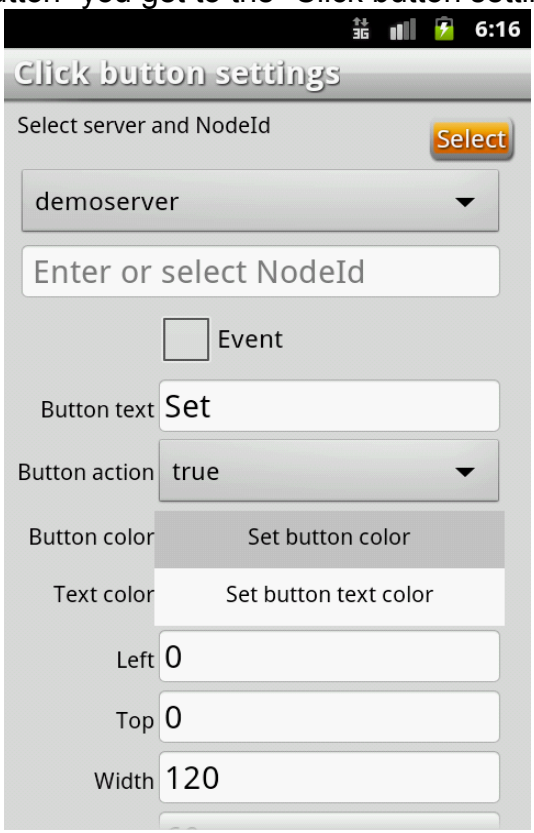


Where:

- **Select server and tag**
  Select the tag that has to be tied to the value. *See below*.
- **Num. of letter**
  Enter number of letters.
- **8 bits per letter**
  Check if you want to us 8 bit per letter. Works only with Unsigned Integer(16bit) point data type.
- **Text color**
  Text color.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Height**
  Height of the text.
- **Angle**
  Rotation angle of the string.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Click button settings

When you select “ClickButton” you get to the “Click button settings” page.



Where:

- **Select server and tag**
  Select the tag that has to be tied to the button. *See below*.
- **Button text**
  Text to be displayed on the button.
- **Button action**
  The action of clicking the button – *true* of *false*.
- **Button color**
  Color of the button.
- **Text color**
  Text color.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the button.
- **Height**
  Height of the button.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Pressed button settings

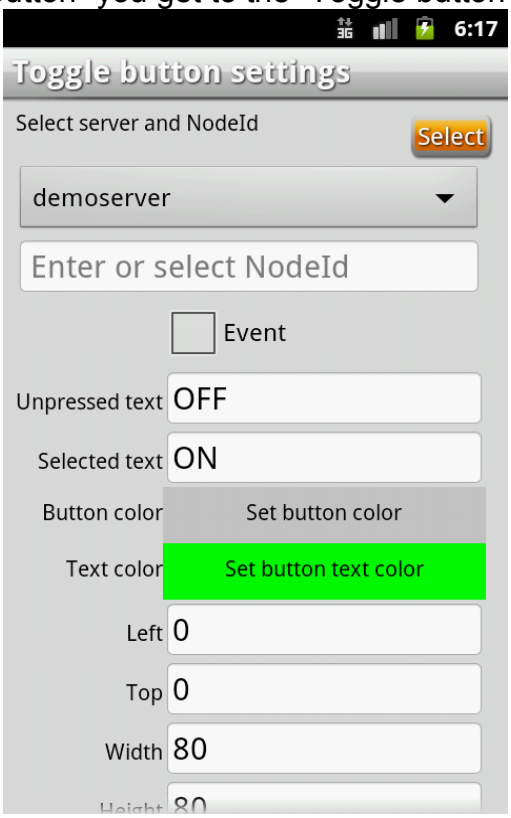
When you select “PressButton” you get to the “Pressed button settings” page.

Where:

- **Select server and tag**
  Select the tag that has to be tied to the button. *See below*.
- **Button text**
  Text to be displayed on the button.
- **Button action**
  The action when pressing the button – *true* of *false*.
- **Button color**
  Color of the button.
- **Text color**
  Text color.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the button.
- **Height**
  Height of the button.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Toggle button settings

When you select “ToggleButton” you get to the “Toggle button settings” page.



Where:

- **Select server and tag**
  Select the tag that has to be tied to the button. *See below*.
- **Unpressed text**
  Text to be displayed when the button is not pressed.
- **Selected text**
  Text to be displayed when the button is pressed
- **Button color**
  Color of the button.
- **Text color**
  Text color.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the button.
- **Height**
  Height of the button.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Image button settings

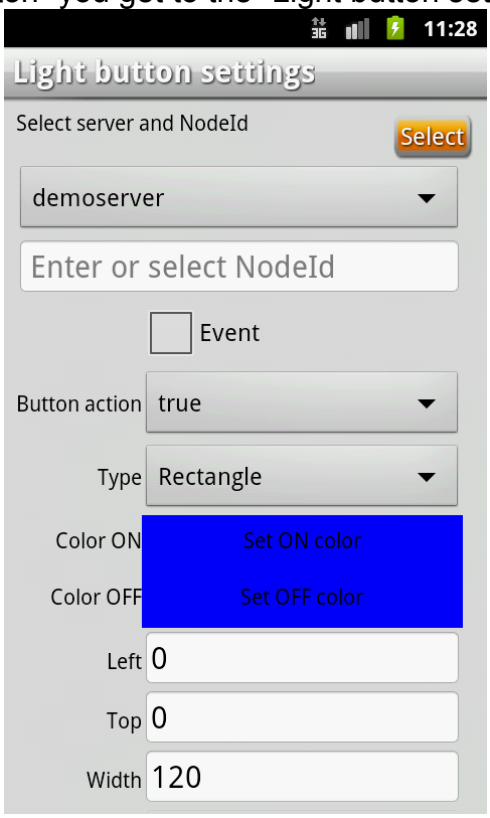
When you select “ImageButton” you get to the “Image button settings” page.

Where:

- **Select server and tag**
  Select the tag that has to be tied to the button. *See below*.
- **Image ON**
  Image to be displayed on the button when the tag is *true*.
- **Image OFF**
  Image to be displayed on the button when the tag is *false*.
- **Button color**
  Color of the button.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the button.
- **Height**
  Height of the button.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Light button settings

When you select “LightButton” you get to the “Light button settings” page.

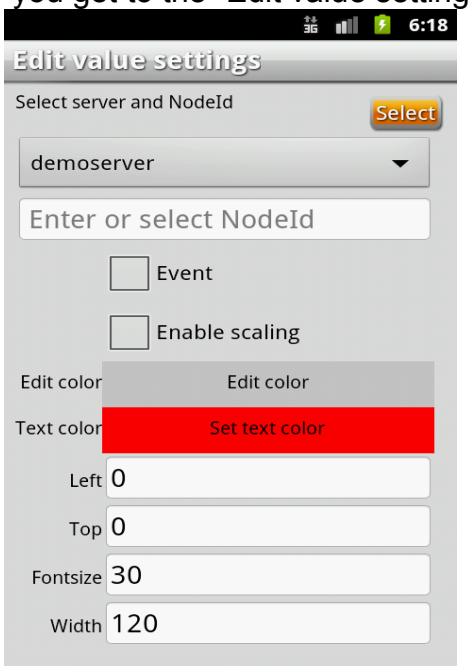


Where:

- **Select server and tag**
  Select the tag that has to be tied to the button. *See below*.
- **Button action**
  The action when pressing the button – *true* of *false*.
- **Type**
  The shape type of the button – rectangle or oval
- **Color ON**
  Color of the button when ON.
- **Color OFF**
  Color of the button when OFF
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the button.
- **Height**
  Height of the button.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Edit value settings

When you select “Editvalue” you get to the “Edit value settings” page.

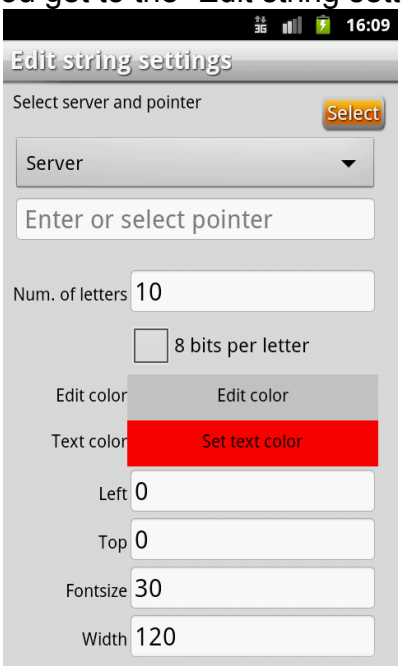


Where:

- **Select server and tag**
  Select the tag that has to be tied to the edit bar. *See below*.
- **Raw max**
  Maximum raw value.
- **Raw min**
  Minimum raw value.
- **EU max**
  Maximum value in engineering units.
- **EU min**
  Minimum value in engineering units.
- **Dec. places**
  Number of decimal places.
- **Edit color**
  Color of the edit bar.
- **Text color**
  Text color.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Fontsize**
  Font size.
- **Width**
  Width of the edit bar.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Edit string settings

When you select “Editstring” you get to the “Edit string settings” page.

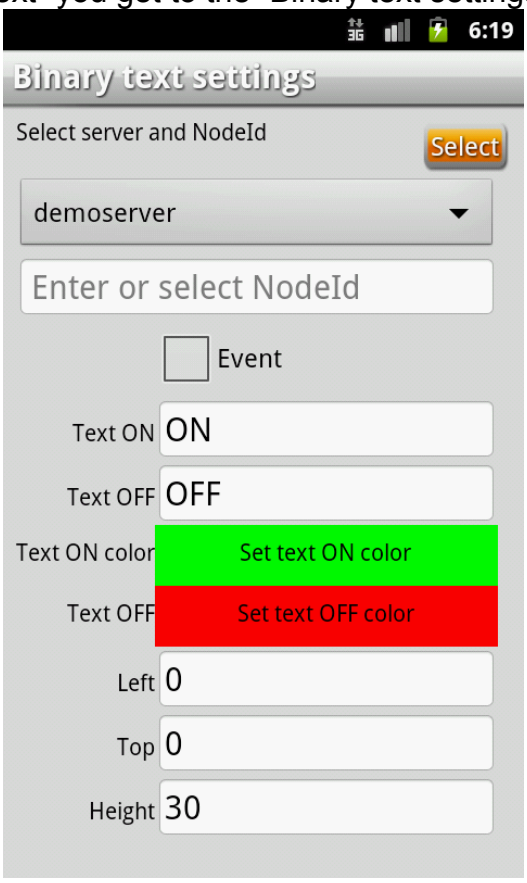


Where:

- **Select server and tag**
  Select the tag that has to be tied to the edit bar. *See below*.
- **Num. of letter**
  Enter number of letters.
- **8 bits per letter**
  Check if you want to us 8 bit per letter. Works only with Unsigned Integer(16bit) point data type).
- **Edit color**
  Color of the edit bar.
- **Text color**
  Text color.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Fontsize**
  Font size.
- **Width**
  Width of the edit bar.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Binary text settings

When you select “Binarytext” you get to the “Binary text settings” page.

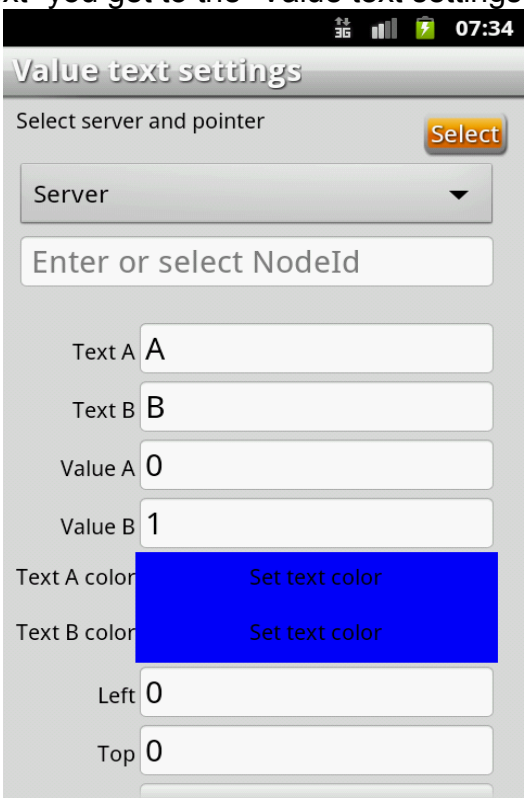


Where:

- **Select server and tag**
  Select the tag that has to be tied to the text label. *See below*.
- **Text ON**
  Text to be displayed when the tag is *true*.
- **Text OFF**
  Text to be displayed when the tag is *false*.
- **Text ON color**
  Color of the text when the tag is *true*.
- **Text OFF color**
  Color of the text when the tag is *false*.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Fontsize**
  Font size.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Value text settings

When you select “Valuetext” you get to the “Value text settings” page.



Where:

- **Select server and tag**
  Select the tag that has to be tied to the text label. *See below*.
- **Text A**
  Text to be displayed when the value of tag = Value A.
- **Text B**
  Text to be displayed when the value of tag = Value B.
- **Value A**
  Set value A.
- **Value B**
  Set value B.
- **Text A color**
  Color of the text when the value of tag = Value A.
- **Text B color**
  Color of the text when the value of tag = Value B.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Fontsize**
  Font size.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Binary image settings

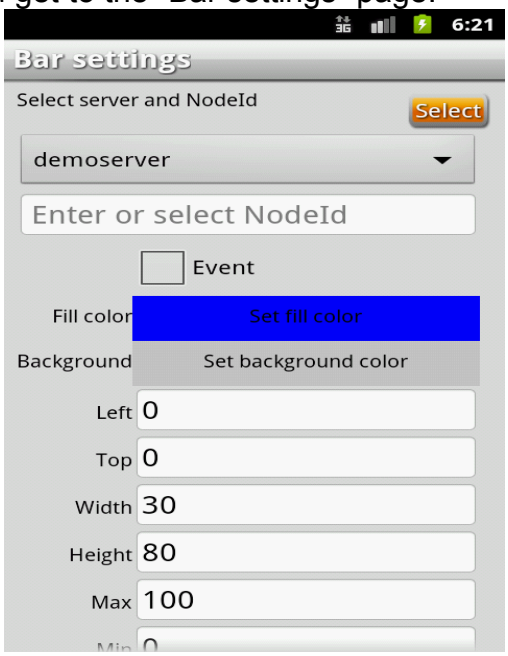
When you select “BinaryImage” you get to the “Binary image settings” page.

Where:

- **Select server and tag**
  Select the tag that has to be tied to the image. *See below*.
- **Image ON**
  Image to be displayed when the tag is *true*.
- **Image OFF**
  Image to be displayed when the tag is *false*.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the image.
- **Height**
  Height of the image.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Bar settings

When you select “Bar” you get to the “Bar settings” page.

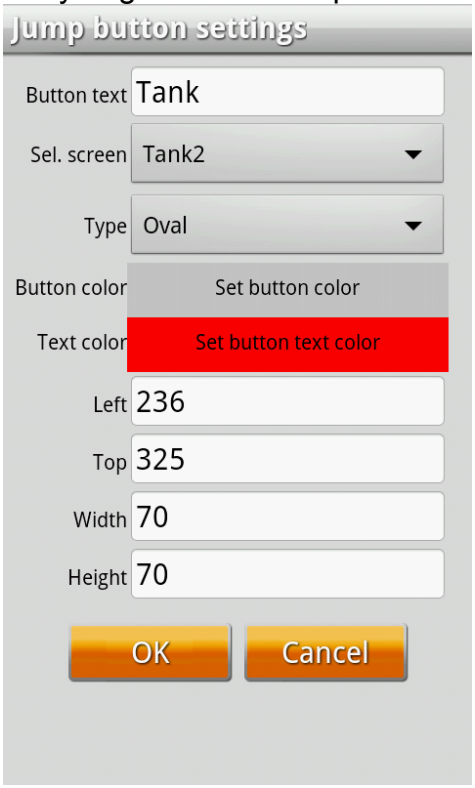


Where:

- **Select server and tag**
  Select the tag that has to be tied to the bar. *See below*.
- **Color fill**
  Color that fill the bar.
- **Background**
  Background color of the bar.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the bar.
- **Height**
  Height of the bar.
- **Max**
  Value when the bar is filled completely.
- **Min**
  Value when the bar is not filled at all.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Jump button settings

When you select “JumpButton” you get to the “Jump button settings” page.

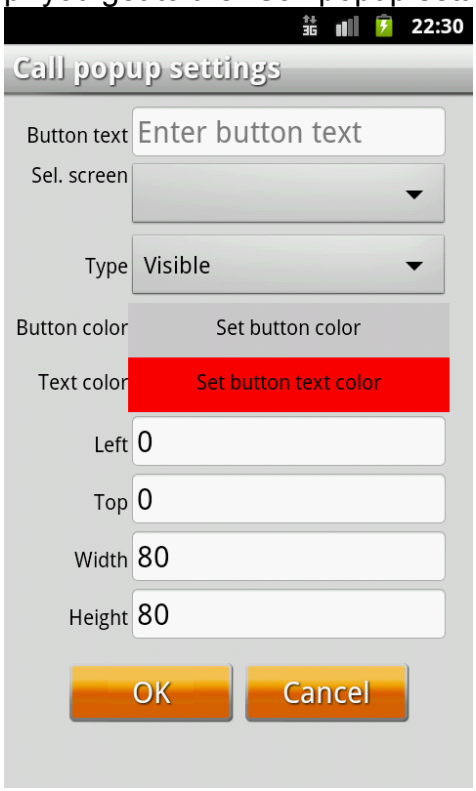


Where:

- **Button text**
  Text to be displayed on the button.
- **Sel. screen**
  The screen is where you go when you click on.
- **Type**
  Shape type of the button.
- **Button color**
  Color of the button.
- **Text color**
  Text color.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the button.
- **Height**
  Height of the button.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Call popup settings

When you select “Call popup” you get to the “Call popup settings” page.

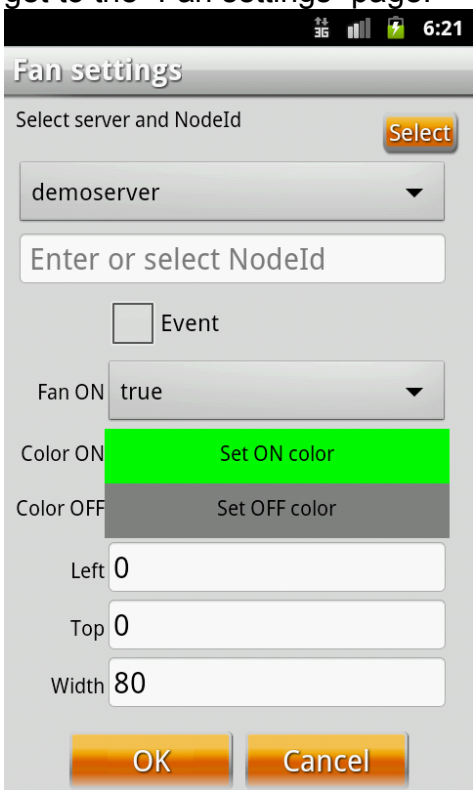


Where:

- **Button text**
  Text to be displayed on the button.
- **Sel. screen**
  The popup screen is shown when you click on.
- **Type**
  Type of the button – visible or invisible.
- **Button color**
  Color of the button.
- **Text color**
  Text color.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the button.
- **Height**
  Height of the button.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Fan settings

When you select “Fan” you get to the “Fan settings” page.

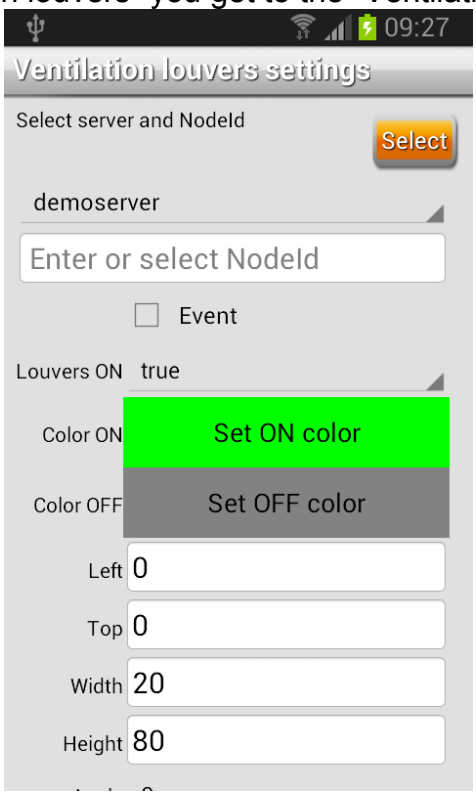


Where:

- **Select server and tag**
  Select the tag that has to be tied to the fan. *See below.*
- **Fan ON**
  Select when the fan is ON.
- **Color ON**
  Color of the fan when the tag is *ON*.
- **Color OFF**
  Color of the fan when the tag is *OFF*.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Ventilation louvers settings

When you select “Ventilation louvers” you get to the “Ventilation louvers settings” page.

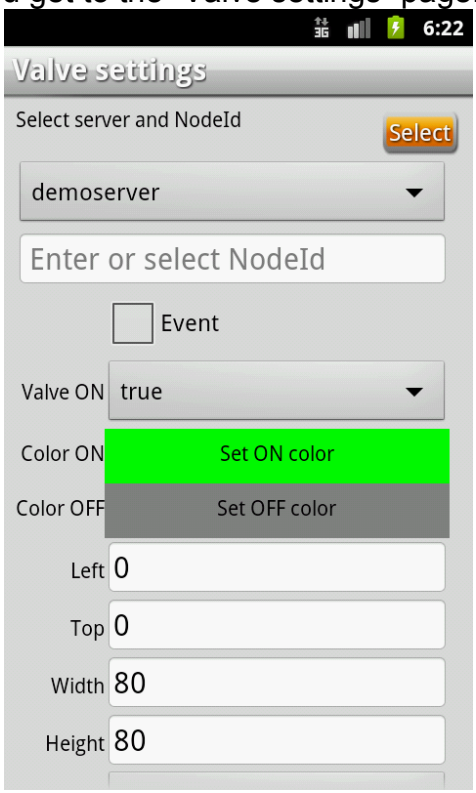


Where:

- **Select server and NodeId**
  Select the tag that has to be tied to the ventilation louvers. *See below.*
- **Louvers ON**
  Select when the ventilation louvers is ON.
- **Color ON**
  Color of the ventilation louvers when the tag is *ON*.
- **Color OFF**
  Color of the ventilation louvers when the tag is *OFF*.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **Angle**
  Rotation angle of the ventilation louvers.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Valve settings

When you select “Valve” you get to the “Valve settings” page.

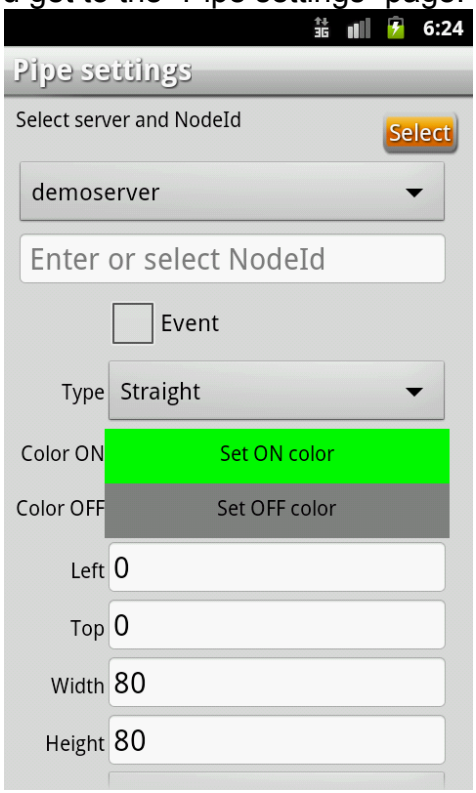


Where:

- **Select server and tag**
  Select the tag that has to be tied to the valve. *See below.*
- **Valve ON**
  Select when the valve is ON.
- **Color ON**
  Color of the valve when the tag is *ON*.
- **Color OFF**
  Color of the valve when the tag is *OFF*.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **Angle**
  Rotation angle of the valve.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Pipe settings

When you select “Pipes” you get to the “Pipe settings” page.

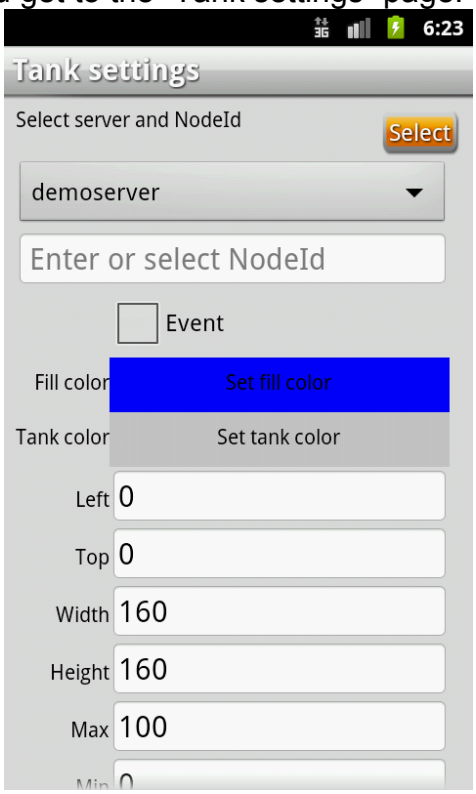


Where:

- **Select server and tag**
  Select the tag that has to be tied to the pipe. *See below.*
- **Type**
  Type of the pipe: *straight, end, bow , tee, intersect or elbow.*
- **Color ON**
  Color of the pipe when the tag is *true*.
- **Color OFF**
  Color of the pipe when the tag is *false*.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **Angle**
  Rotation angle of the pipe.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Tank settings

When you select “Tank” you get to the “Tank settings” page.

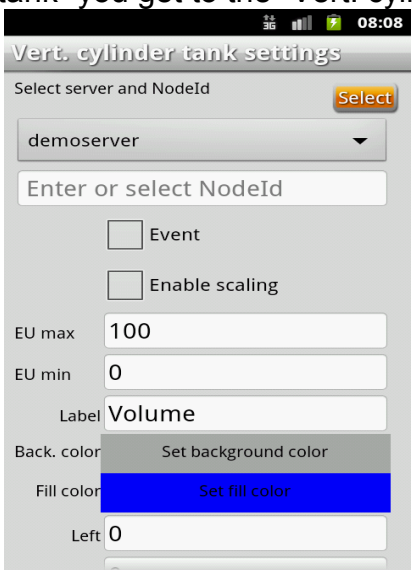


Where:

- **Select server and tag**
  Select the tag that has to be tied to the tank. *See below.*
- **Fill color**
  Color of the tank’s bar.
- **Tank color**
  Color of the tank.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **Max**
  Value when the bar is filled completely.
- **Min**
  Value when the bar is not filled at all.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Vertical cylinder tank settings

When you select “Vert. cylin. tank” you get to the “Vert. cylinder tank settings” page.

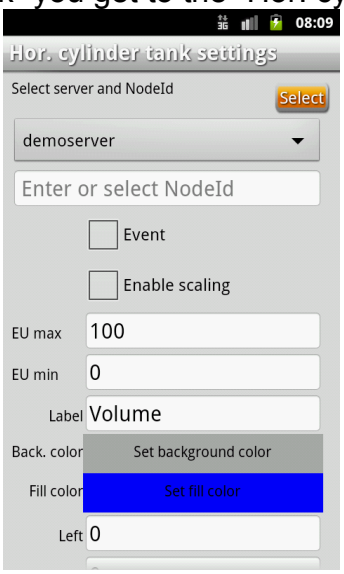


Where:

- **Select server and tag**
  Select the tag that has to be tied to the tank. *See below.*
- **Enable scaling**
  Check to enable scaling.
- **Raw max**
  Maximum raw value.
- **Raw min**
  Minimum raw value.
- **EU max**
  Maximum value in engineering units.
- **EU min**
  Minimum value in engineering units
- **Dec. places**
  Number of decimal places.
- **Label**
  Label of the measured value.
- **Back. color**
  Background color of the tank.
- **Fill color**
  Color of the tank’s bar.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.

Horizontal cylinder tank settings

When you select “Hor. cylin. tank” you get to the “Hor. cylinder tank settings” page.

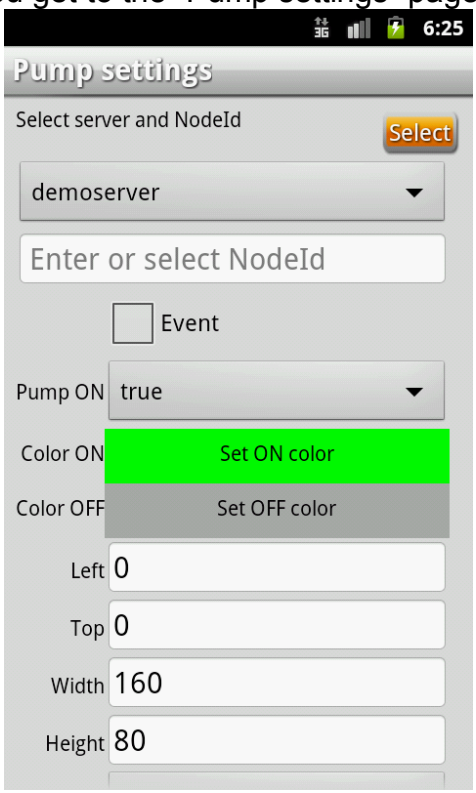


Where:

- **Select server and tag**
  Select the tag that has to be tied to the tank. *See below.*
- **Enable scaling**
  Check to enable scalin.
- **Raw max**
  Maximum raw value.
- **Raw min**
  Minimum raw value.
- **EU max**
  Maximum value in engineering units.
- **EU min**
  Minimum value in engineering units
- **Dec. places**
  Number of decimal places.
- **Label**
  Label of the measured value.
- **Back. color**
  Background color of the tank.
- **Fill color**
  Color of the tank’s bar.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.

Pump settings

When you select “Pump” you get to the “Pump settings” page.

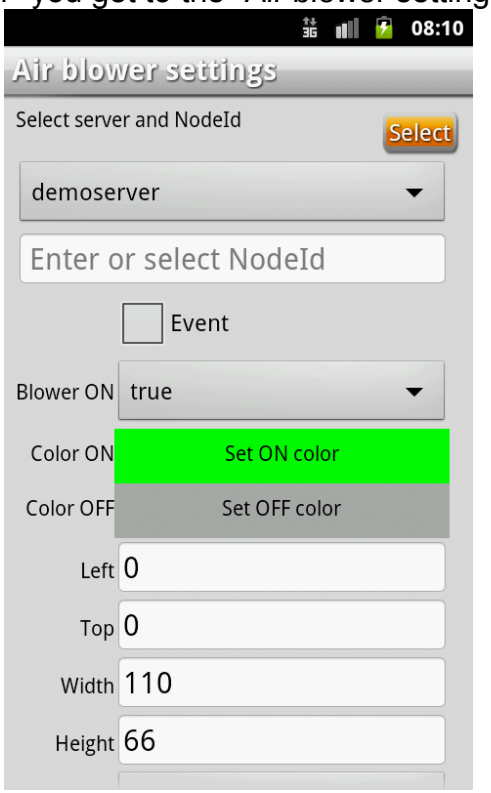


Where:

- **Select server and tag**
  Select the tag that has to be tied to the pump. *See below.*
- **Pump ON**
  Select when the pump is ON.
- **Color ON**
  Color of the pump when the tag is *ON*.
- **Color OFF**
  Color of the pump when the tag is *OFF*.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **Angle**
  Rotation angle of the pump.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Air blower settings

When you select “Air blower” you get to the “Air blower settings” page.

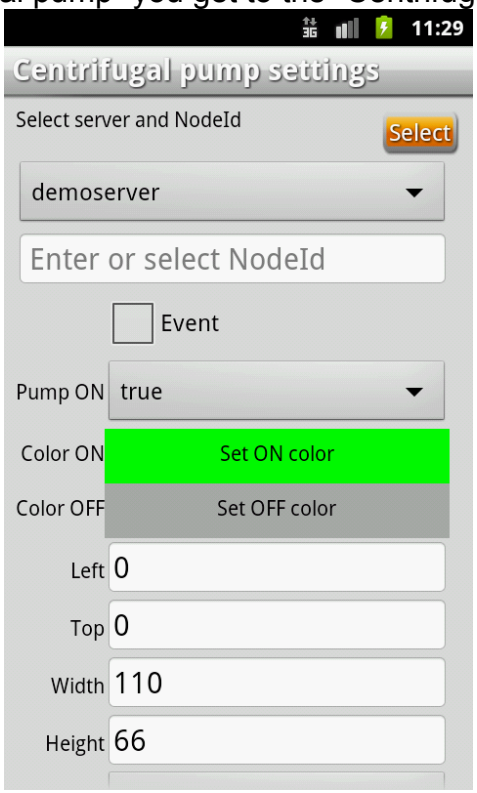


Where:

- **Select server and tag**
  Select the tag that has to be tied to the pump. *See below.*
- **Blower ON**
  Select when the blower is ON.
- **Color ON**
  Color of the pump when the tag is *ON*.
- **Color OFF**
  Color of the pump when the tag is *OFF*.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **Angle**
  Rotation angle of the pump.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Centrifugal pump settings

When you select “Centrifugal pump” you get to the “Centrifugal pump settings” page.

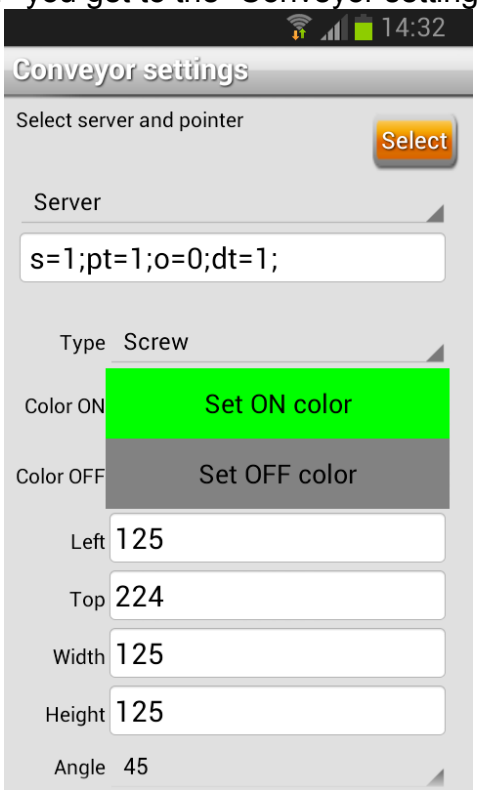


Where:

- **Select server and tag**
  Select the tag that has to be tied to the pump. *See below.*
- **Pump ON**
  Select when the pump is ON.
- **Color ON**
  Color of the pump when the tag is *ON*.
- **Color OFF**
  Color of the pump when the tag is *OFF*.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **Angle**
  Rotation angle of the pump.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Conveyor settings

When you select “Conveyor” you get to the “Conveyor settings” page.

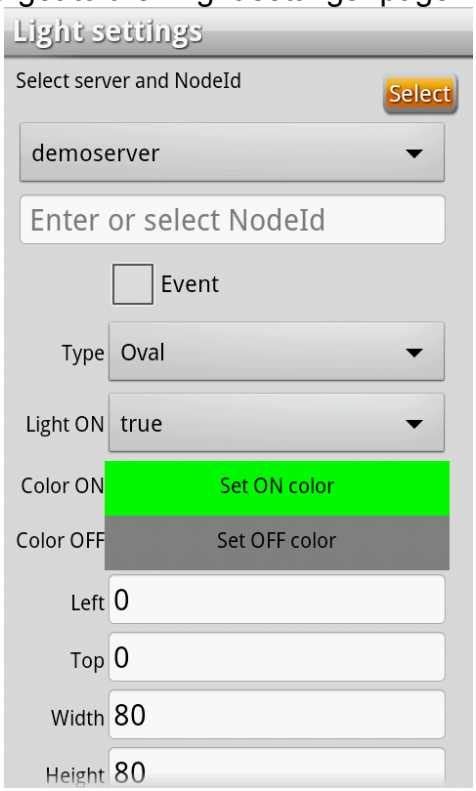


Where:

- **Select server and tag**
  Select the tag that has to be tied to the conveyor. *See below.*
- **Type**
  Type of the conveyor: *belt or screw.*
- **Color ON**
  Color of the conveyor when the tag is *true*.
- **Color OFF**
  Color of the conveyor when the tag is *false*.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **Angle**
  Rotation angle of the conveyor.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Light settings

When you select “Light” you get to the “Light settings” page.

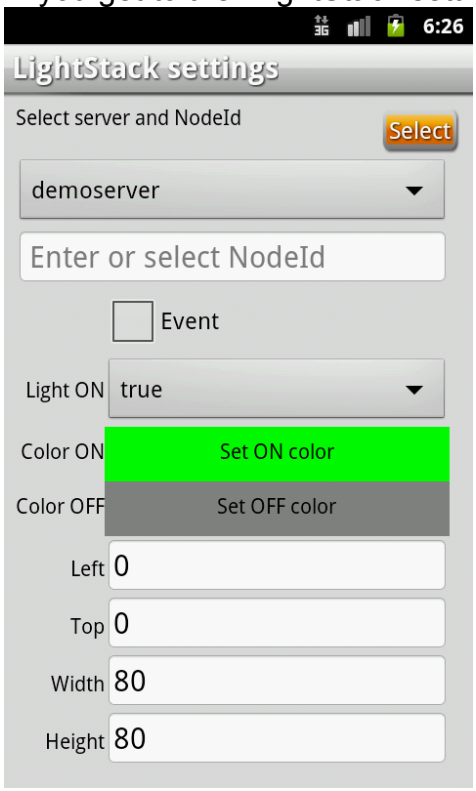


Where:

- **Select server and tag**
  Select the tag that has to be tied to the light. *See below.*
- **Type**
  Shape type of the light.
- **Light ON**
  Select when the light is ON.
- **Color ON**
  Color of the light when the tag is *ON*.
- **Color OFF**
  Color of the light when the tag is *OFF*.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

LightStack settings

When you select “LightStack” you get to the “LightStack settings” page.

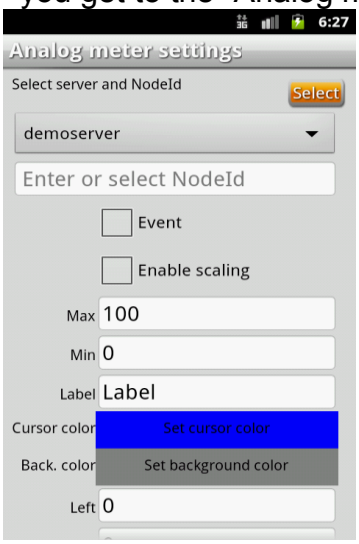


Where:

- **Select server and tag**
  Select the tag that has to be tied to the lightstack. *See below.*
- **Light ON**
  Select when the lightstack is ON.
- **Color ON**
  Color of the lightstack when the tag is *ON*.
- **Color OFF**
  Color of the lightstack when the tag is *OFF*.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Analog meter settings

When you select “Analog meter” you get to the “Analog meter settings” page.

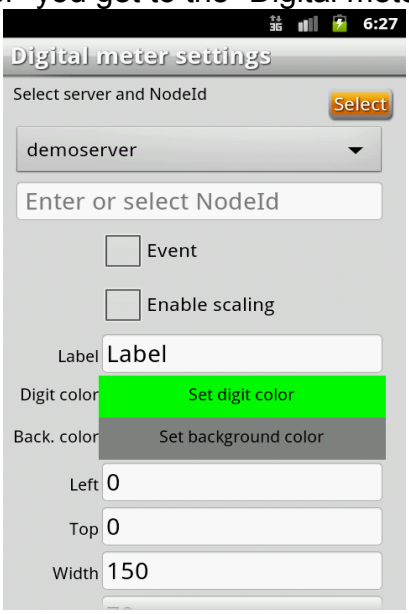


Where:

- **Select server and tag**
  Select the tag that has to be tied to the analog meter. *See below.*
- **Raw max**
  Maximum raw value.
- **Raw min**
  Minimum raw value.
- **Max**
  Maximum value in engineering units.
- **Min**
  Minimum value in engineering units.
- **Label**
  Label of the object.
- **Cursor color**
  Color of the cursor.
- **Back. color**
  Color of the analog meter.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Max**
  Value when the arrow point to the right.
- **Min**
  Value when the arrow point to the left.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Digital meter settings

When you select “Digital meter” you get to the “Digital meter settings” page.

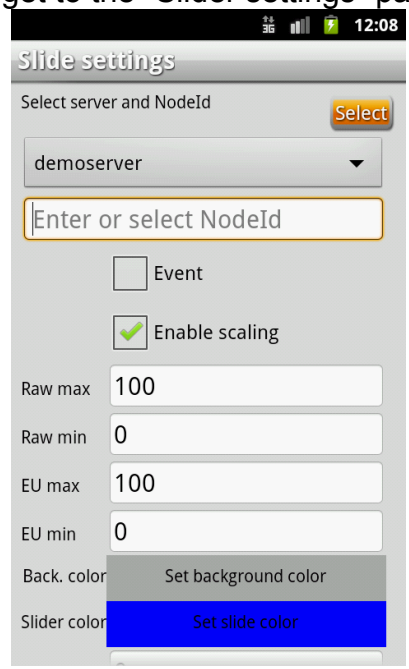


Where:

- **Select server and tag**
  Select the tag that has to be tied to the digital meter. *See below.*
- **Raw max**
  Maximum raw value.
- **Raw min**
  Minimum raw value.
- **EU max**
  Maximum value in engineering units.
- **EU min**
  Minimum value in engineering units.
- **Dec. places**
  Number of decimal places.
- **Label**
  Label of the object.
- **Digit color**
  Color of the digits.
- **Back. color**
  Color of the meter.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Slider settings

When you select “Slider” you get to the “Slider settings” page.

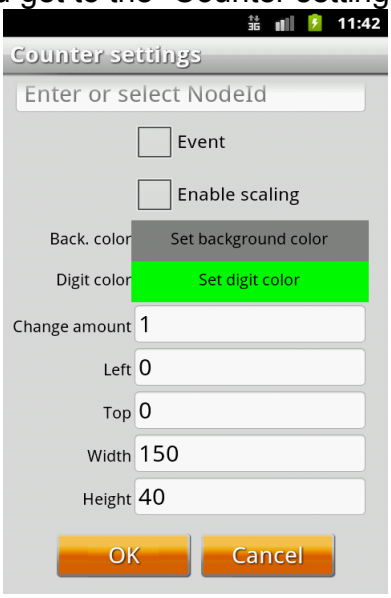


Where:

- **Select server and tag**
  Select the tag that has to be tied to the slider. *See below*.
- **Raw max**
  Maximum raw value.
- **Raw min**
  Minimum raw value.
- **EU max**
  Maximum value in engineering units.
- **EU min**
  Minimum value in engineering units.
- **Dec. places**
  Number of decimal places.
- **Back color**
  Background color
- **Slider color**
  Color of the slider bar.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Height**
  Height of the slider.
- **Width**
  Width of the slider.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Counter settings

When you select “Counter” you get to the “Counter settings” page.

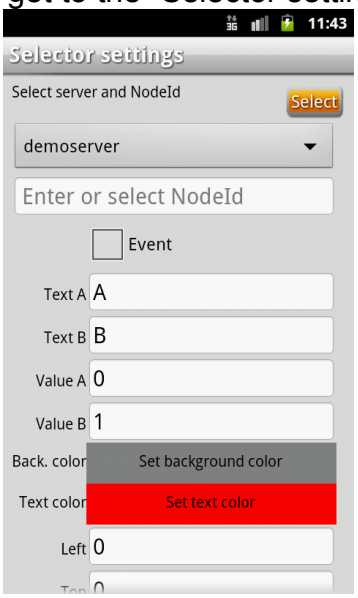


Where:

- **Select server and tag**
  Select the tag that has to be tied to the counter. *See below*.
- **Raw max**
  Maximum raw value.
- **Raw min**
  Minimum raw value.
- **EU max**
  Maximum value in engineering units.
- **EU min**
  Minimum value in engineering units.
- **Dec. places**
  Number of decimal places.
- **Back color**
  Background color
- **Digit color**
  Color of the counter’s digits.
- **Change amount**
  Amount to decrement/increment by during clicking “-” and “+“.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Height**
  Height of the counter.
- **Width**
  Width of the counter.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Selector settings

When you select “Selector” you get to the “Selector settings” page.

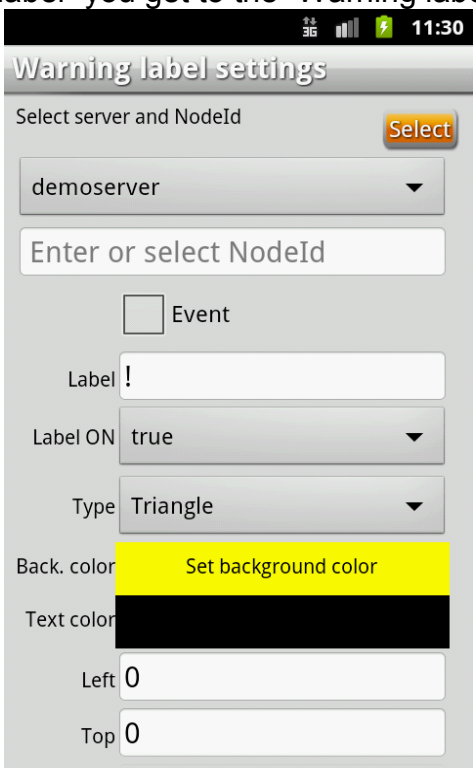


Where:

- **Select server and tag**
  Select the tag that has to be tied to the counter. *See below*.
- **Text A**
  The text on the selector A.
- **Text B**
  The text on the selector B.
- **Value A**
  The value be written by clicking the selector A.
- **Value B**
  The value be written by clicking the selector B.
- **Back color**
  Background color
- **Text color**
  Color of the selector’s text.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Height**
  Height of the selector.
- **Width**
  Width of the selector.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Warning label settings

When you select “Warning label” you get to the “Warning label settings” page.

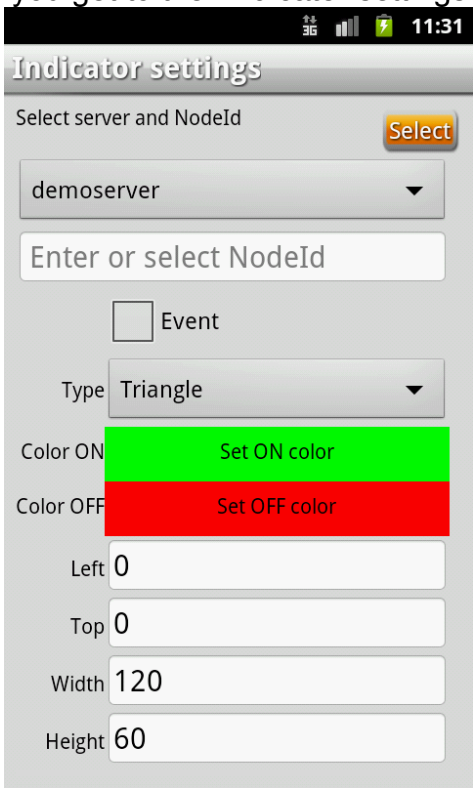


Where:

- **Select server and tag**
  Select the tag that has to be tied to the light. *See below.*
- **Label**
  The text is shown.
- **Label ON**
  Select when the light is ON.
- **Type**
  The shape and vision type of the label – triangle, rectangle or oval. Blink or not.
- **Back.color**
  Set the background color of the label.
- **Text color**
  Set the text color of the label
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Indicator settings

When you select “Indicator” you get to the “Indicator settings” page.

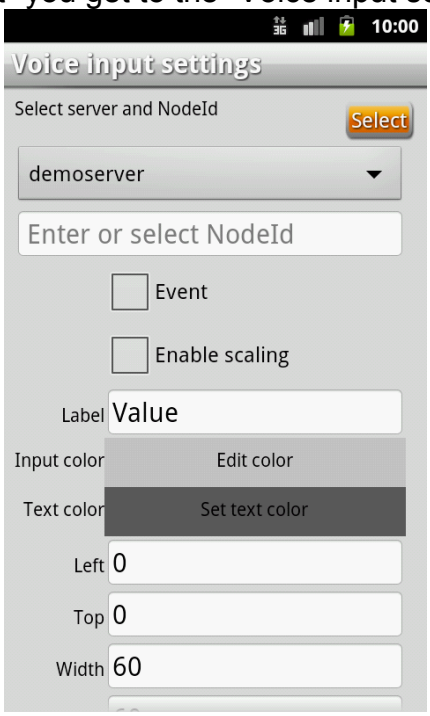


Where:

- **Select server and tag**
  Select the tag that has to be tied to the light. *See below.*
- **Type**
  The shape type of the indicators lights – triangle, rectangle or oval
- **Color ON**
  The color of the “ON” indicator.
- **Color OFF**
  The color of the “OFF” indicator.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Voice input settings

When you select “Voice input” you get to the “Voice input settings” page.

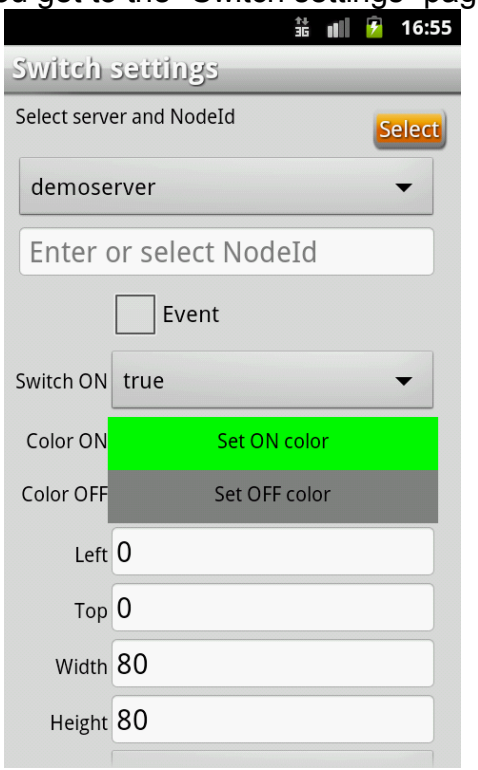


Where:

- **Select server and tag**
  Select the tag to be displayed. *See below*.
- **Raw max**
  Maximum raw value.
- **Raw min**
  Minimum raw value.
- **EU max**
  Maximum value in engineering units.
- **EU min**
  Minimum value in engineering units.
- **Dec. places**
  Number of decimal places.
- **Input color**
  Input color.
- **Text color**
  Text color.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.

Switch settings

When you select “Switch” you get to the “Switch settings” page.

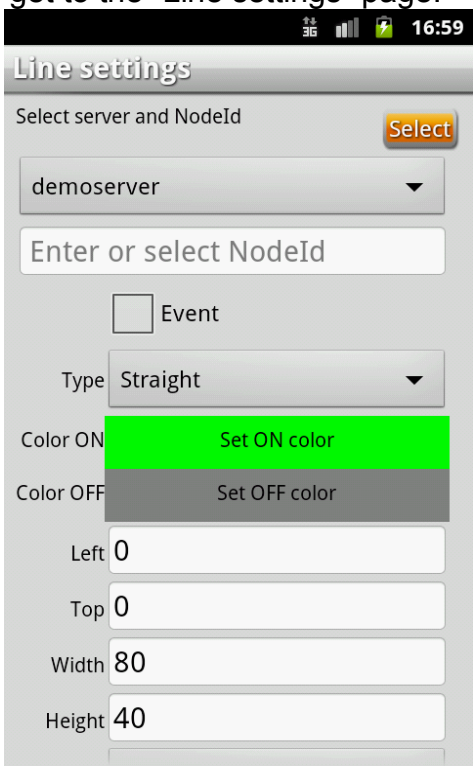


Where:

- **Select server and tag**
  Select the tag that has to be tied to the light. *See below.*
- **Switch ON**
  Select when the switch is ON.
- **Color ON**
  Select color when switch is ON.
- **Color OFF**
  Select color when switch is OFF.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **Angle**
  Rotation angle of the switch.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Line settings

When you select “Line” you get to the “Line settings” page.

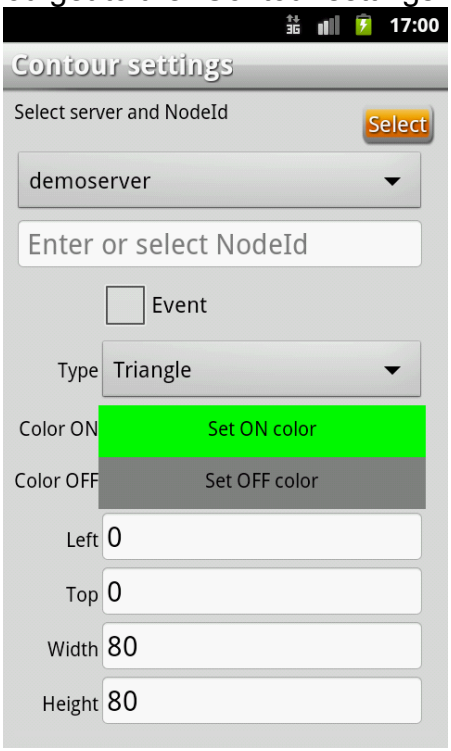


Where:

- **Select server and tag**
  Select the tag that has to be tied to the valve. *See below.*
- **Type**
  Type of the line.
- **Color ON**
  Color of the line when the tag is *ON*.
- **Color OFF**
  Color of the line when the tag is *OFF*.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **Angle**
  Rotation angle of the line.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy object.

Contour settings

When you select “Contour” you get to the “Contour settings” page.

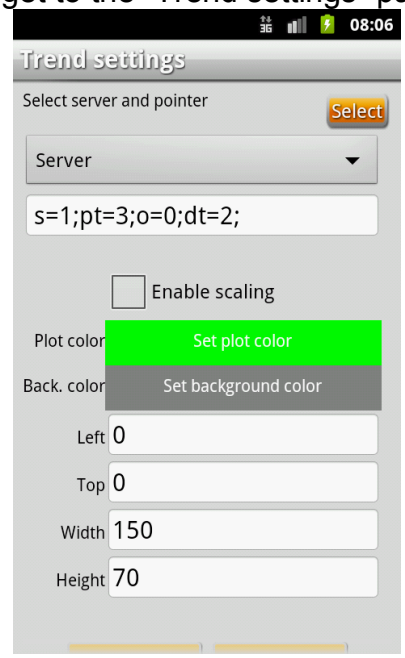


Where:

- **Select server and tag**
  Select the tag that has to be tied to the valve. *See below.*
- **Type**
  Type of the contour.
- **Color ON**
  Color of the valve when the tag is *ON*.
- **Color OFF**
  Color of the valve when the tag is *OFF*.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy object

Trend settings

When you select “Trend” you get to the “Trend settings” page.

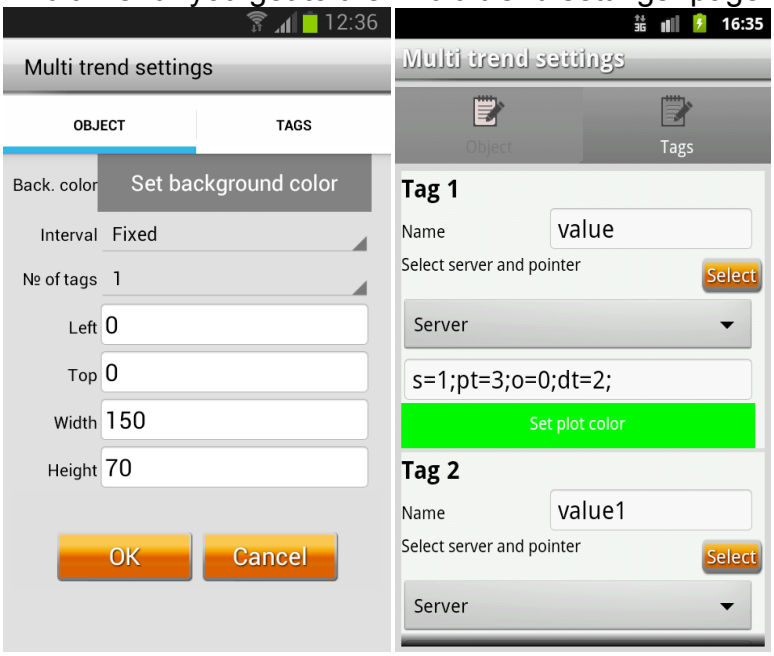


Where:

- **Select server and NodeId**
  Select the tag that has to be tied to trend object. *See below.*
- **Raw max**
  Maximum raw value.
- **Raw min**
  Minimum raw value.
- **EU max**
  Maximum value in engineering units.
- **EU min**
  Minimum value in engineering units.
- **Dec. places**
  Number of decimal places.
- **Plot color**
  Color of the curve.
- **Back. color**
  Color of the background.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Multi trend settings

When you select “MultiTrend” you get to the “Multi trend settings” page.

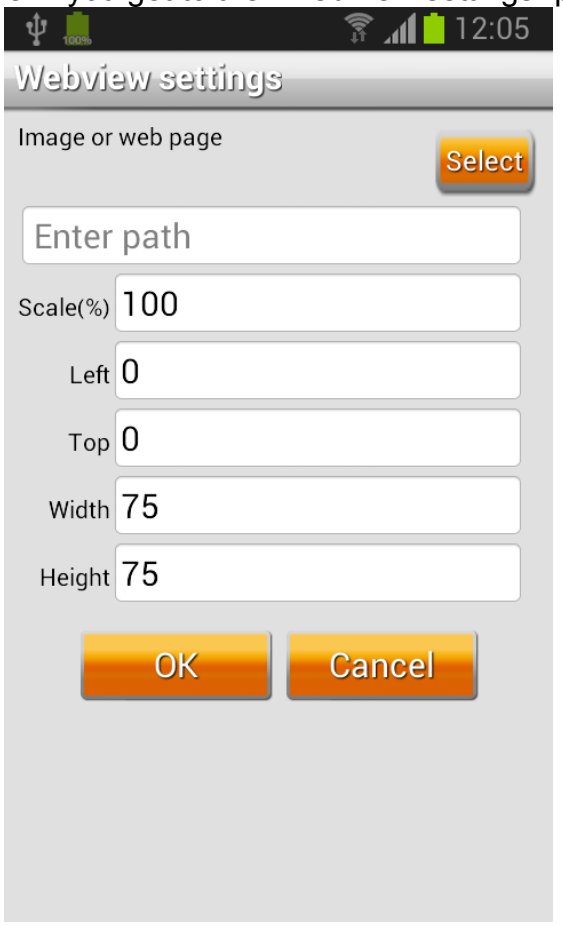


Where:

- **Select server and NodeId**
  Select the tag that has to be tied to trend object. *See below.*
- **Name**
  Name of the curve.
- **Set plot color**
  Color of the curve.
- **№ of tags**
  Number of curves.
- **Interval**
  Interval type.
- **Back. color**
  Color of the background.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the object.
- **Height**
  Height of the object.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

WebView settings

When you select “Web view” you get to the “WebView settings” page.



Where:

- **Image or web page**
  Path to the image or web page you will see on the screen. Path to the file saved on the sdcard begins with “file:///”(use button to select saved image or web page)
- **Select**
  Select image or saved web page.
- **Scale(%)**
  Scale of the image or web page.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the image.
- **Height**
  Height of the image.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Binary WebView settings

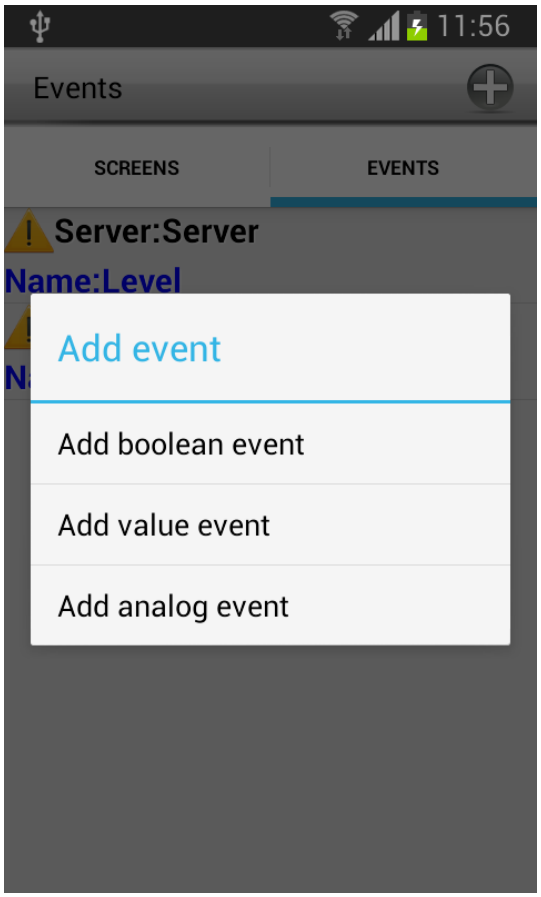
When you select “Binary WebView” you get to the “Binary Webview settings” page.

Where:

- **Select server and NodeId**
  Select the tag that has to be tied to the image. *See below*.
- **Image or web page ON**
  Image or web page to be displayed when the tag is *true*.
- **Image or web page OFF**
  Image or web page to be displayed when the tag is *false*.
- **Scale(%)**
  Scale of the image or web page.
- **Left**
  Location. The number of pixels from the left side.
- **Top**
  Location. The number of pixels from the top side.
- **Width**
  Width of the image.
- **Height**
  Height of the image.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.
- **Copy**
  Copy the object.

Events

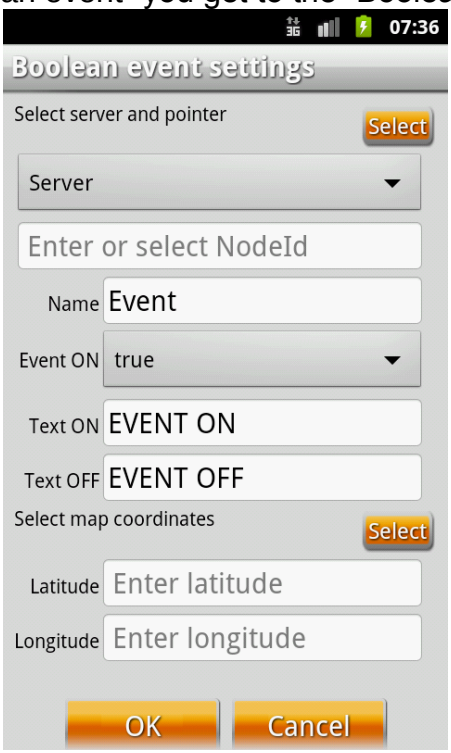
When you select “Events” bar in the “Design” you get to the “Events” page.



You can add new events by clicking on the button “Add” and choosing what event you want to add or by selecting menu items “Add boolean event” ,“Add value event” or “Add analog event”.

Boolean event settings

When you select “Add boolean event” you get to the “Boolean event settings” page.



Where:

- **Select server and pointer**
  Select the tag that has to be tied to the event. *See below.*
- **Name**
  Name of the event
- **Event ON**
  Select when event is *ON*.
- **Text ON**
  What text will appear when event is ON
- **Text OFF**
  What text will appear when event is OFF.
- **Select map coordinates**
  Select map coordinates of the event.
- **Latitude**
  Select or enter latitude.
- **Longitude**
  Select or enter longitude.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.

Value event settings

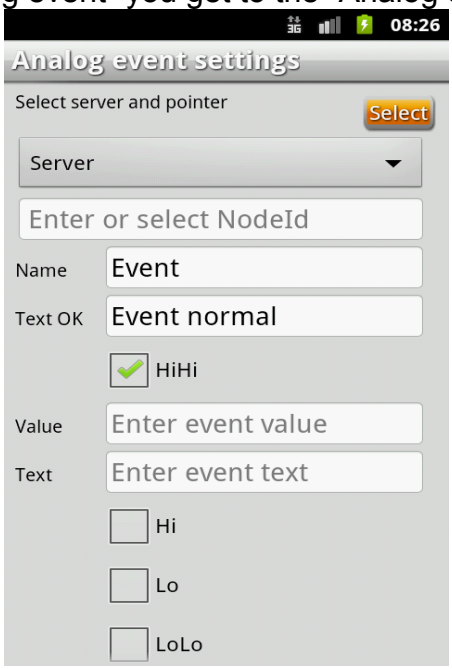
When you select “Add value event” you get to the “Value event settings” page.

Where:

- **Select server and pointer**
  Select the tag that has to be tied to the event. *See below.*
- **Name**
  Name of the event
- **Event ON**
  Select when event is *ON*.
- **Argument**
  Enter a value of argument is compared with a real time value.
- **Text ON**
  What text will appear when event is ON
- **Text OFF**
  What text will appear when event is OFF.
- **Select map coordinates**
  Select map coordinates of the event.
- **Latitude**
  Select or enter latitude.
- **Longitude**
  Select or enter longitude.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.

Analog event settings

When you select “Add analog event” you get to the “Analog event settings” page.

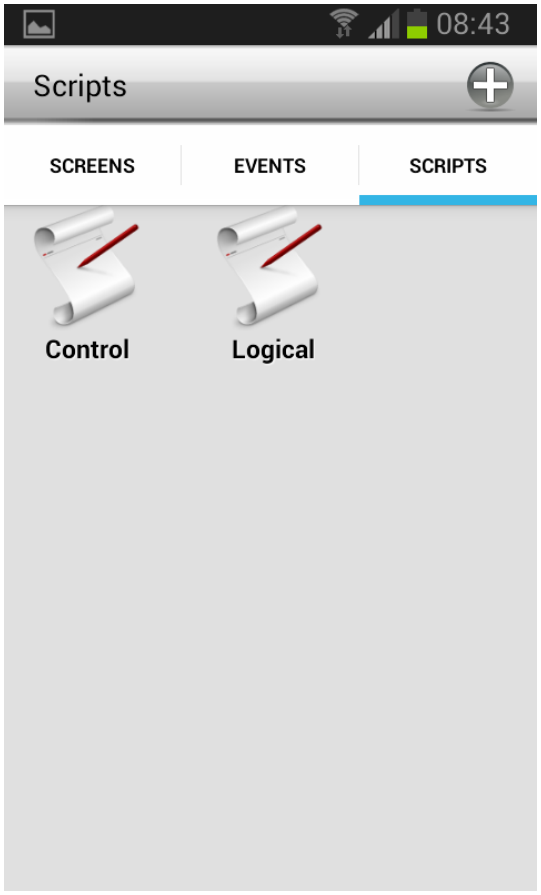


Where:

- **Select server and pointer**
  Select the tag that has to be tied to the event. *See below.*
- **Name**
  Name of the event
- **Text OK**
  What text will appear when no event.
- **HiHi**
  Use HighHigh level event.
- **Hi**
  Use High level event.
- **Lo**
  Use Low level event.
- **LoLo**
  Use LowLow level event.
- **Value**
  What value should be for according event is ON
- **Text**
  What text will appear when according event is ON.
- **Hysteresis**
  Value of hysteresis.
- **Select map coordinates**
  Select map coordinates of the event.
- **Latitude**
  Select or enter latitude.
- **Longitude**
  Select or enter longitude.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.

Scripts

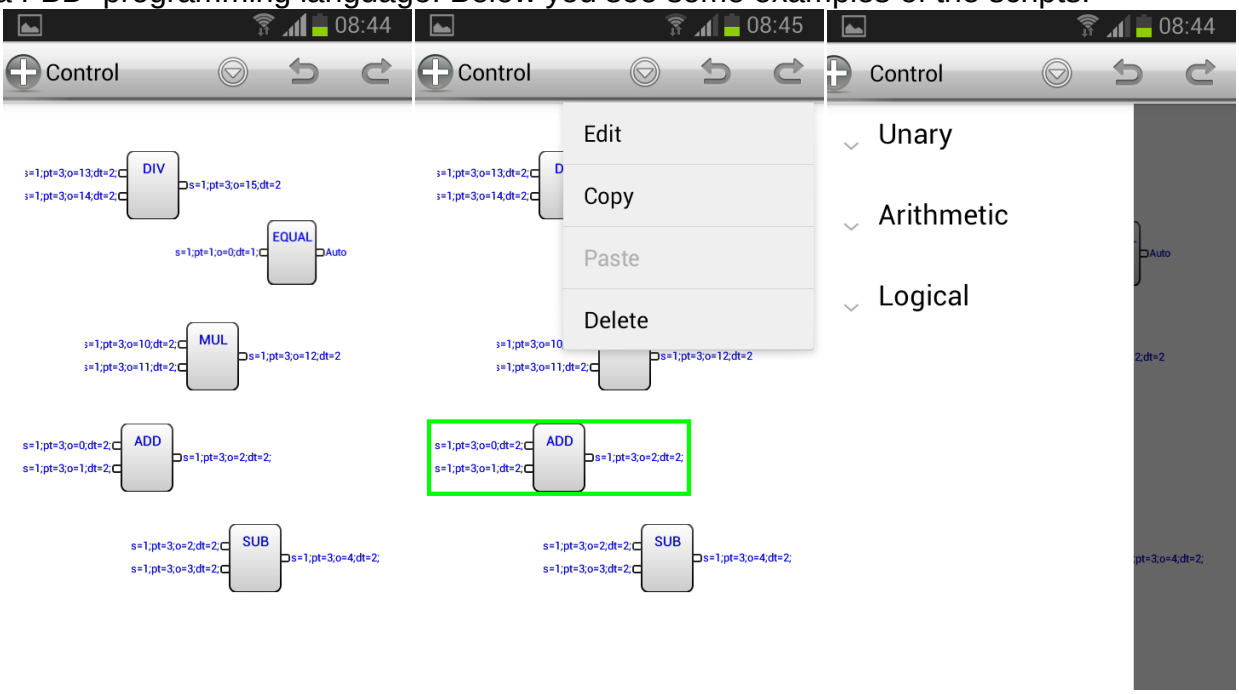
You can use scripts in your project. Scripts are executing during running of your project. To design scripts select “Scripts” bar in the “Design” you get to the “Scripts” page.



You can add new scripts by clicking on the button “Add” and entering a name in the dialog box.

Design script

When you select “Create script” in the page “Scripts” you get to the page where you can develop your SCADA scripts. For the development of scripts in our SCADA system uses a FBD programming language. Below you see some examples of the scripts.

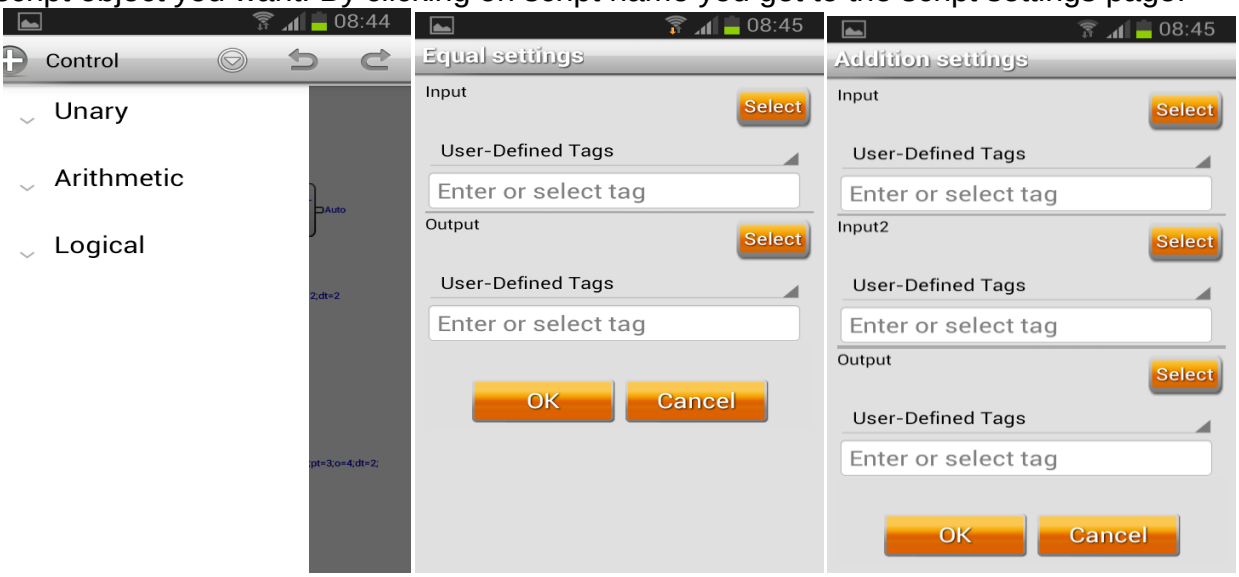


Some actions you can do on this page:

- **Add script object**
  When you click a plus icon on the top left of the screen you get navigation drawer where you can select an object you needed.
- **Move object(s)**
  To move an object you have to long click on the object you want to move, drag it and drop in the place where you want to. To move objects you have to long click on empty place. The rectangle will be shown. Select items you want to move. Then long click on the rectangle and move it on the place you want to.
- **Delete object(s)**
  To delete object you have to long click on an object you want to delete, drag it to the basket and drop it or you have to select object by clicking on it or by using selecting rectangle to select multi objects. Then you have to press select button on the action bar, and select “Delete” menu item.
- **Edit object**
  To edit object you have to double click on an object or you have to select object by clicking on it, press select button and select “Edit” menu item.
- **Copy object(s)**
  To copy an object you have to enter to the object settings by clicking on the object and select “Copy” in the menu or you have to select object by clicking on it or by using selecting rectangle to select multi objects. Then you have to press select button on the action bar and select “Copy” menu item.
- **Paste object(s)**
  To paste object(s) you have to press select button on the action bar and select “Paste” menu item.
- **Undo**
  To undo actions you have to select “Undo” button on the action bar.
- **Redo**
  To redo actions you have to select “Redo” button on the action bar.

Select scripts and script settings

When you select “Add script object” you get a navigation drawer where you can select a script object you want. By clicking on script name you get to the script settings page.



Where:

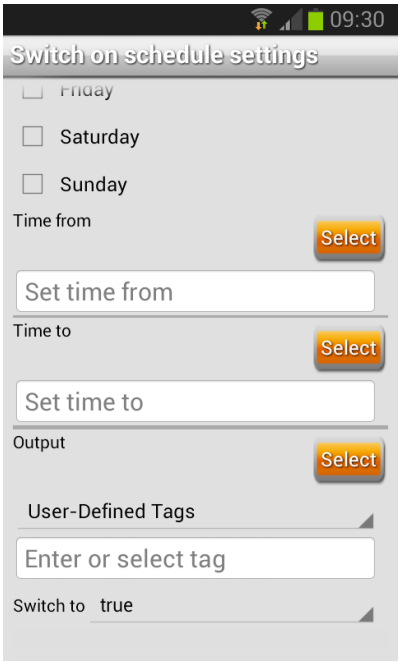
- **Equal**
  Simple script where Output = Input.
- **Addition**
  Output = Input + Input2.
- **Subtraction**
  Output = Input – Input2.
- **Multiplication**
  Output = Input * Input2.
- **Division**
  Output = Input /Input2
- **Modulo**
  Output = Input %Input2
- **Not**
  The Boolean Not script. Output = ! Input.
- **And**
  The Logical AND. Output = Input & Input2.
- **Or**
  The Logical OR. Output = Input || Input2.
- **XOR**
  The Exclusive OR. Output = Input XOR Input2.
- **MVM**
  The Masked move. Output = Input &Input2 (Mask).
- **Compare Equal**
  Output = Input == Input2.
- **Not Equal**
  Output = Input != Input2.
- **Less**
  Output = Input < Input2.
- **Greater**
  Output = Input > Input2

- **Selectable Enable**
  IF Input==true THEN Output=Input2
- **Selectable Negate**
  IF Input==false THEN Output=Input2
- **Schedule**
  If the time is within a certain range output turn to TRUE(FALSE)
- **Index Read**
  Output = Input1[Input2]
- **Index Write**
  Output[Input2] = Input1

To choose tags for inputs and outputs use select buttons. See below.

Switch on schedule script settings

When you select “Switch on schedule” you get to the “Switch on schedule settings” page.

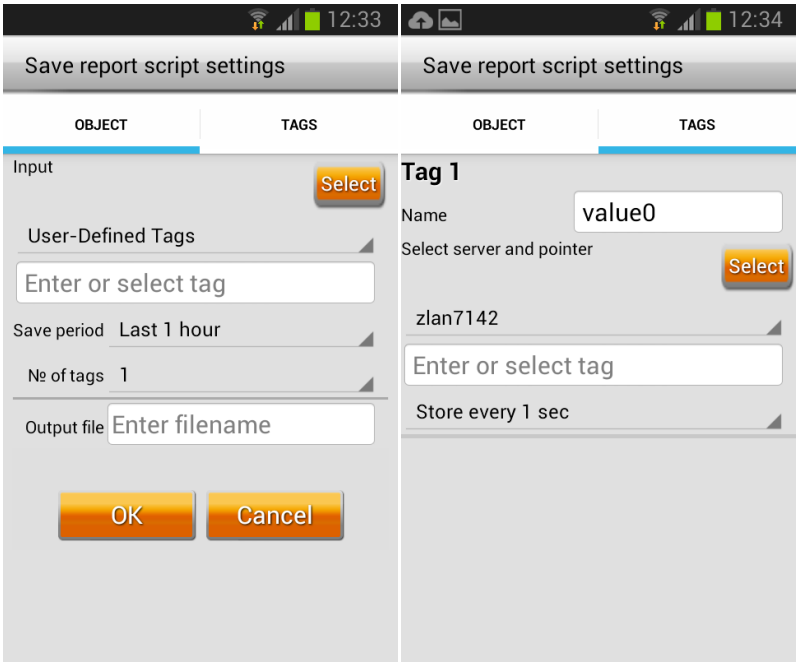


Where:

- **Days of week**
  Days of week from Monday to Sunday when schedule will work.
- **Time from**
  Time starting from which the switch is turn to TRUE or FALSE.
- **Time to**
  Time to which the switch forced TRUE or FALSE.
- **Output**
  Output tag where desired value is forced written during schedule interval.
- **Switch to**
  Write to the output TRUE of FALSE during schedule interval.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.

Save report script settings

When you select “Save report” you get to the “Save report script settings” page.

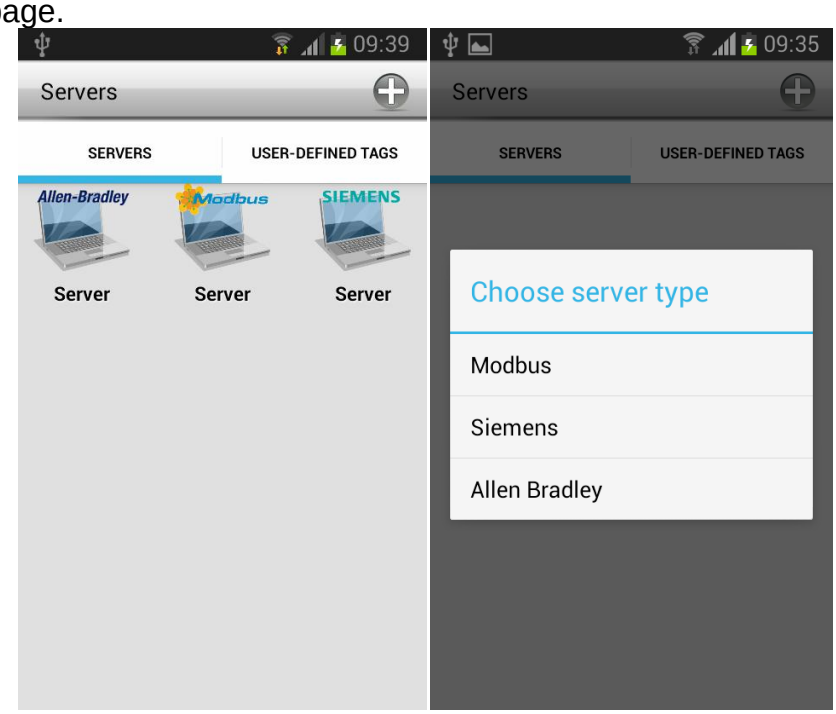


Where:

- **Save period**
  Save *to file a report last n hours of data tags*
- **№ of tags**
  Number of saved tags.
- **Output file**
  The output filename
- **Name**
  Name of the tag.
- **Store every 1 sec**
  Store data of tag every 1-60 seconds. The array size – 1500 values.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.

Select server and tag

When you click “Select” button you go to the “Servers” page. Choose by clicking or create a new server you want to connect. When you connect to the server by clicking on the icon you get to the “Modbus tag Settings” ,“Siemens tag settings” or “Allen Bradley tag settings” page.

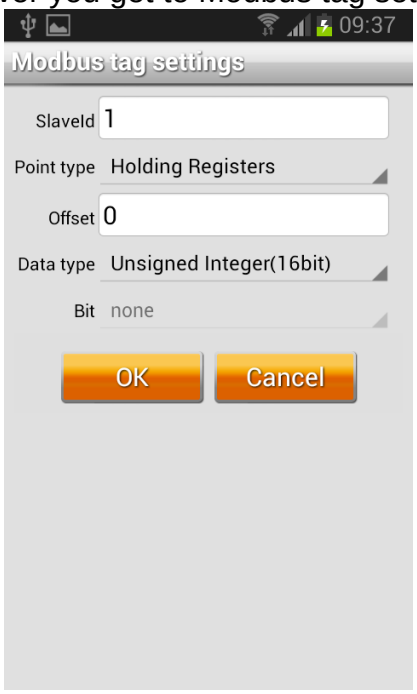


Where:

- **Connect**
  Enter to the tag settings.
- **Add**
  Add new server.
- **Edit**
  Edit server.
- **Delete**
  Delete server.

Modbus tag settings

When you select Modbus server you get to Modbus tag settings

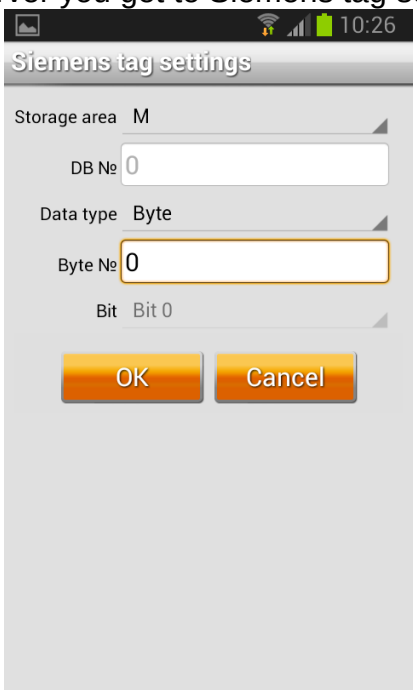


Where:

- **SlaveId**
  Id of Modbus slave.
- **Point type**
  Type of the point
- **Offset**
  Register offset
- **Data type**
  Type of the data.
- **Bit**
  Bit

Siemens tag settings

When you select Siemens server you get to Siemens tag settings

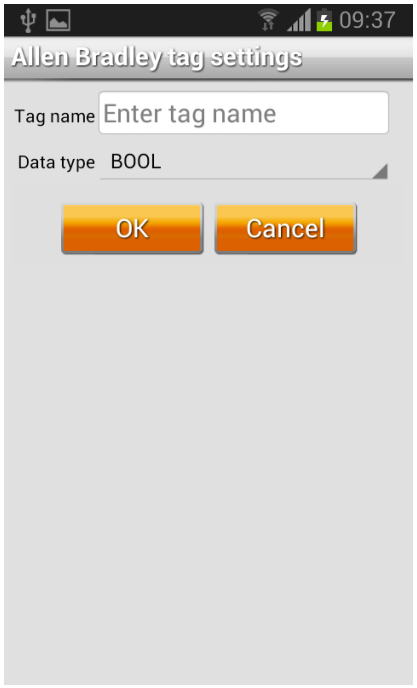


Where:

- **Storage area**
  Storage are I,Q,M or DB
- **DB №**
  If storage area is DB then number of DB
- **Data type**
  Data type
- **Byte №**
  Byte number
- **Bit**
  If data type is Bit then number of bit

Allen Bradley tag settings

When you select Allen Bradley (Compact logix or Control logix) server you get to Allen Bradley tag settings



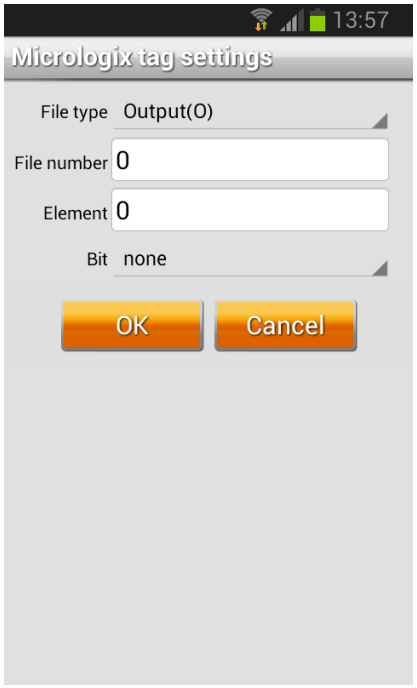
Where:

- **Tag name**
  Tag name
- **Data type**
  Type of the data

.

Micrologix tag settings

When you select AllenBradley (Micrologix type) server you get to Micrologix tag settings

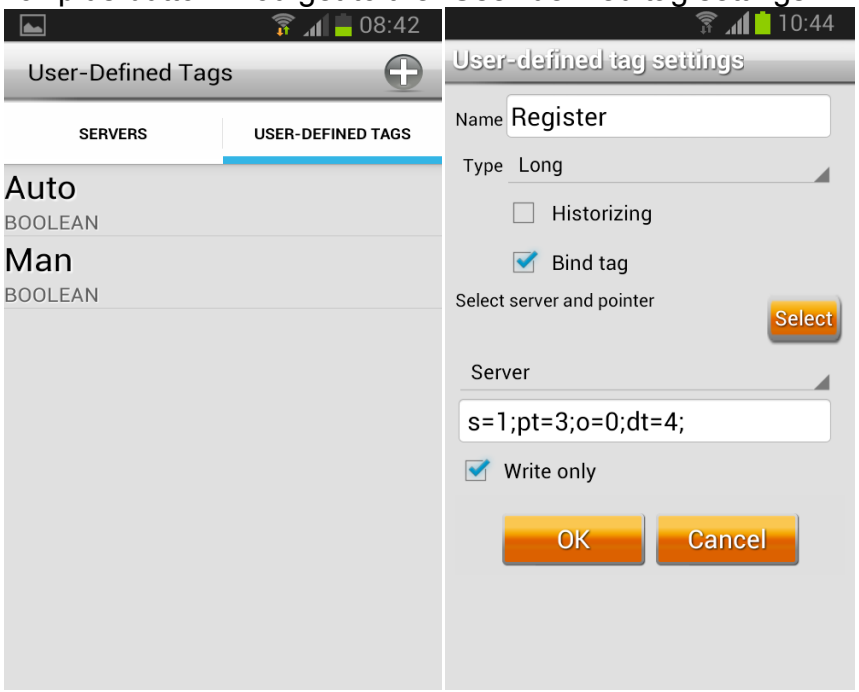


Where:

- **File type**
  File type of Micrologix tag.
- **File number**
  File number
- **Element**
  Number of element
- **Bit**
  Bit

User-Defined tags.

When you click “Select” button you can also choose user-defined tags. To select user-defined tag long touch on tag you want and click “Select” item on the context menu. To add new tag click plus button. You get to the “User-defined tag settings”.

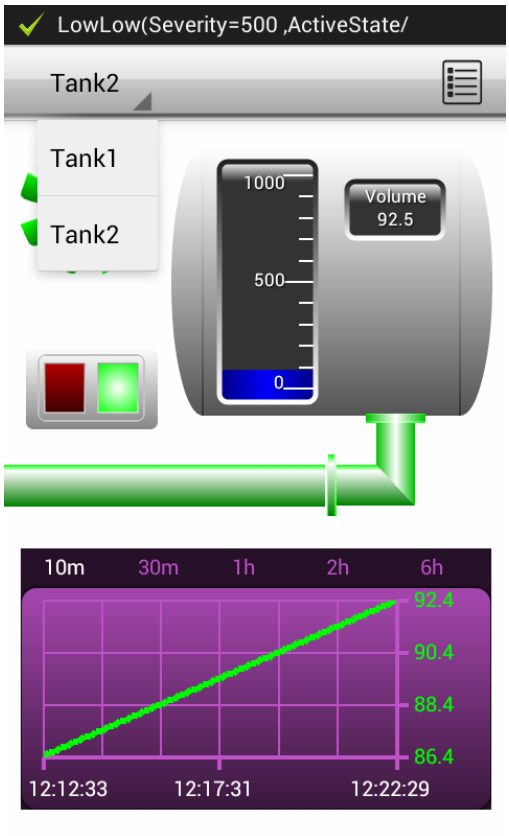


Where:

- **Name**
  Name of the tag
- **Type**
  Type of the tag. Boolean, Long, Double, String or Array.
- **Historizing**
  Check if you want to use this tag for Trend or Multi-trend objects.
- **Bind tag**
  Check to bind modbus tag.
- **Select server and pointer**
  Select the tag that has to be tied to the user-defined tag.
- **Write only**
  Check to use user-defined tag only for writes.
- **Num. of elements(letters)**
  Number of elements of the Array(String).
- **1 element (letter)**
  Type of the element (letter).

Display

When you select “Display” button of the main menu you connect to the Modbus TCP(UDP) servers and go to the screens of the project. You can slide between screens, you can spinner on the action bar or you can use your jump buttons to move to another screen.

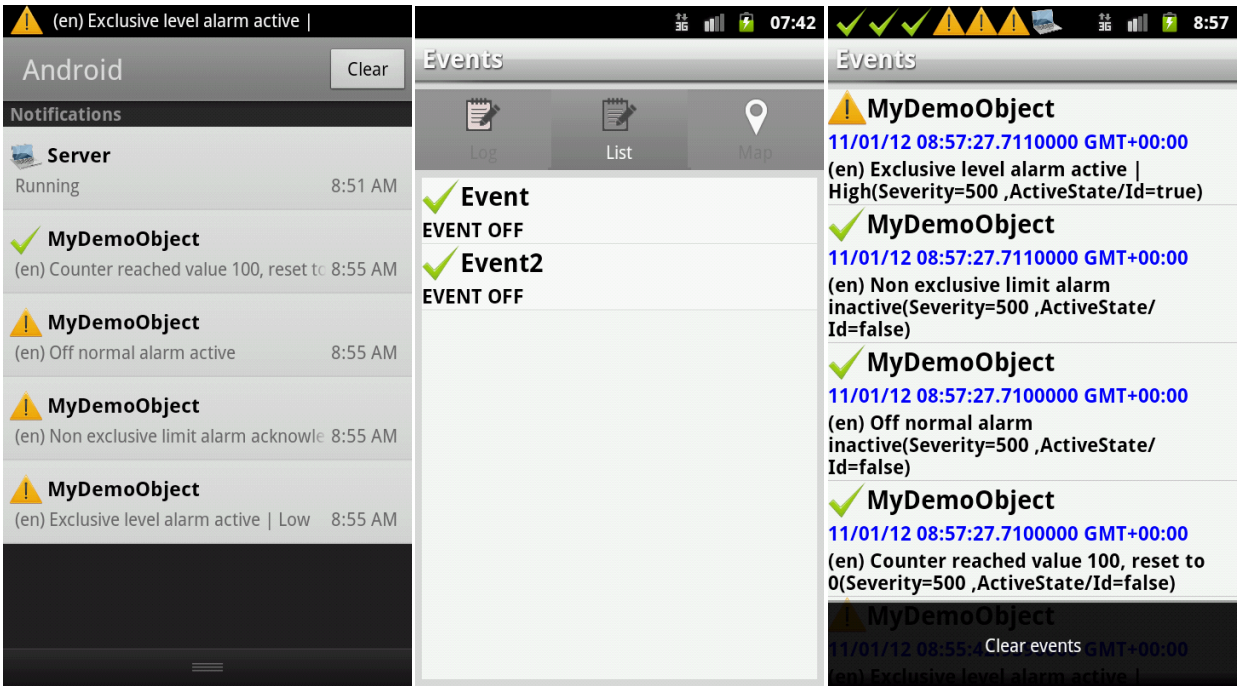


Where:

- **Events (on the action bar icon or menu item)**
  Call events window.

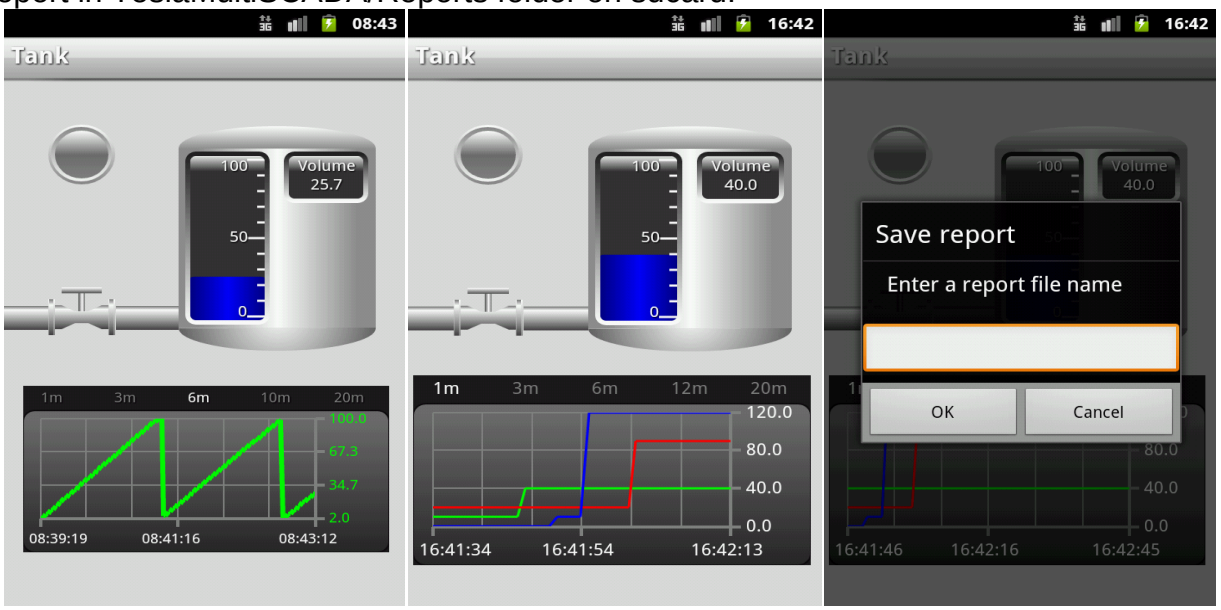
Events

When an event occurs in the notification bar icon and message appear. When you click on the notification you go to the “Events” page where you can see three tabs. First is “Log” where you can find out the log of events. To clear all events you have to choose “Clear events” menu item. Second “List” where you can find out the list of all events. Third “Map” where you can find out the events binding to the map.



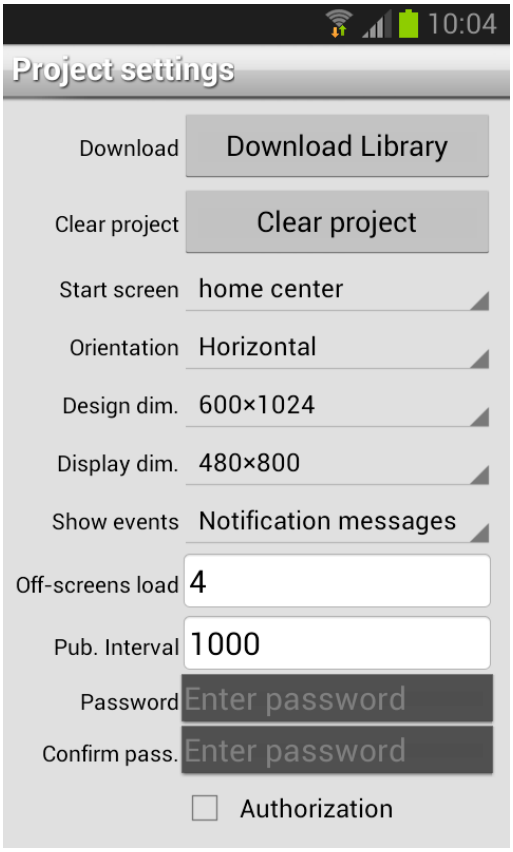
Trend

When you want to get a real time data from the tag in a graphic view you choose “Trend” or “Multi trend” objects. “Trend” view showing the value in a graphical trend view related to the requested time frame. “Multi trend” view is showing in a graphical trends view related to the requested time frame. You can save report of multi trend values by long clicking on multi trend object and enter a name of report. You can find out your report in TeslaMultiSCADA/Reports folder on sdcard.



Settings

When you select “Settings” button of the main menu you go to the “Project settings” page.



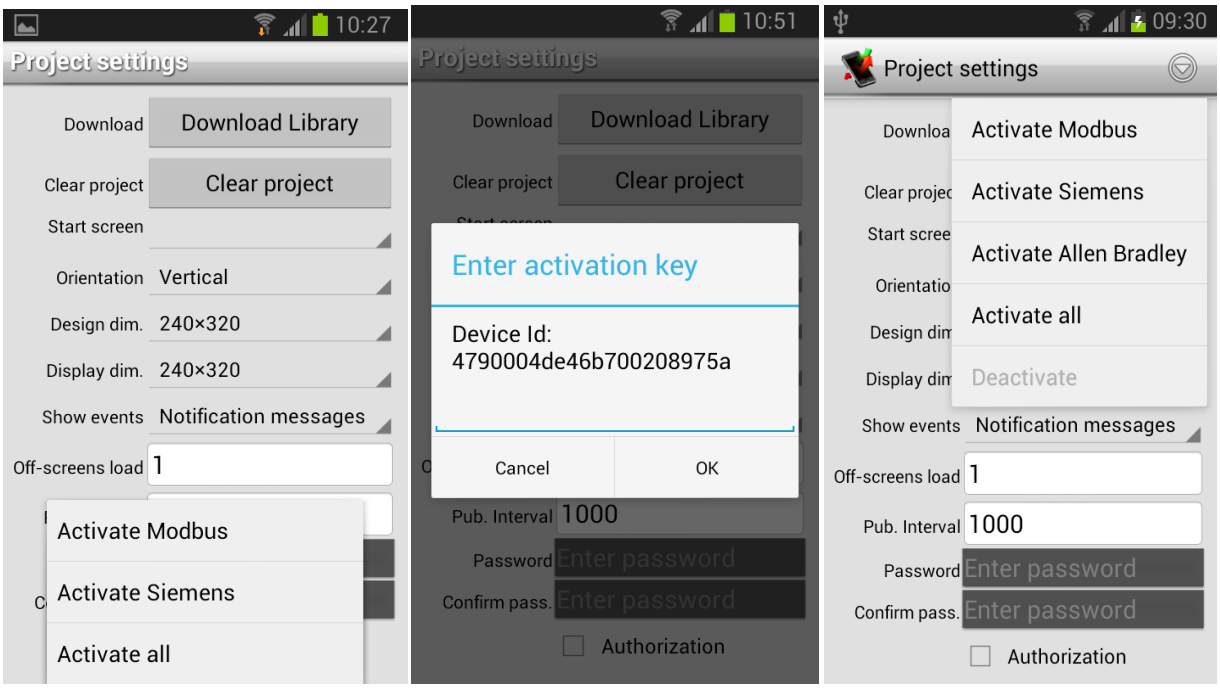
Where:

- **Download**
  Download some graphical images.
- **Clear project**
  Clear current project.
- **Start screen**
  The screen from which you start by clicking on the “Display”.
- **Orientation**
  Screen orientation of your project – vertical or horizontal.
- **Design dim.**
  Screen dimensions under which the project was designed .
- **Display dim.**
  Screen dimensions under which the project has to be displayed.
- **Show events**
  How to show events. Using notification messages, toast messages or none.
- **Off-screen load**
  Number projects off- screens loaded to the RAM during display execution.
- **Pub. Interval**
  Server’s tags update interval and the interval of the graphical objects updates.
- **Password**
  Enter password for authorization access to “Design” and “Settings” menu.
- **Confirm pass.**
  Confirm password
- **Authorization**
  Check for authorization access to “Design” and “Settings” menu.

- **Sound off**
  Check to turn all sounds in project off.
- **Runtime mode**
  Check to use runtime mode.
- **Debug**
  Create or not create debug log. Log is located in the directory “TeslaMultiScada/debug”.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.

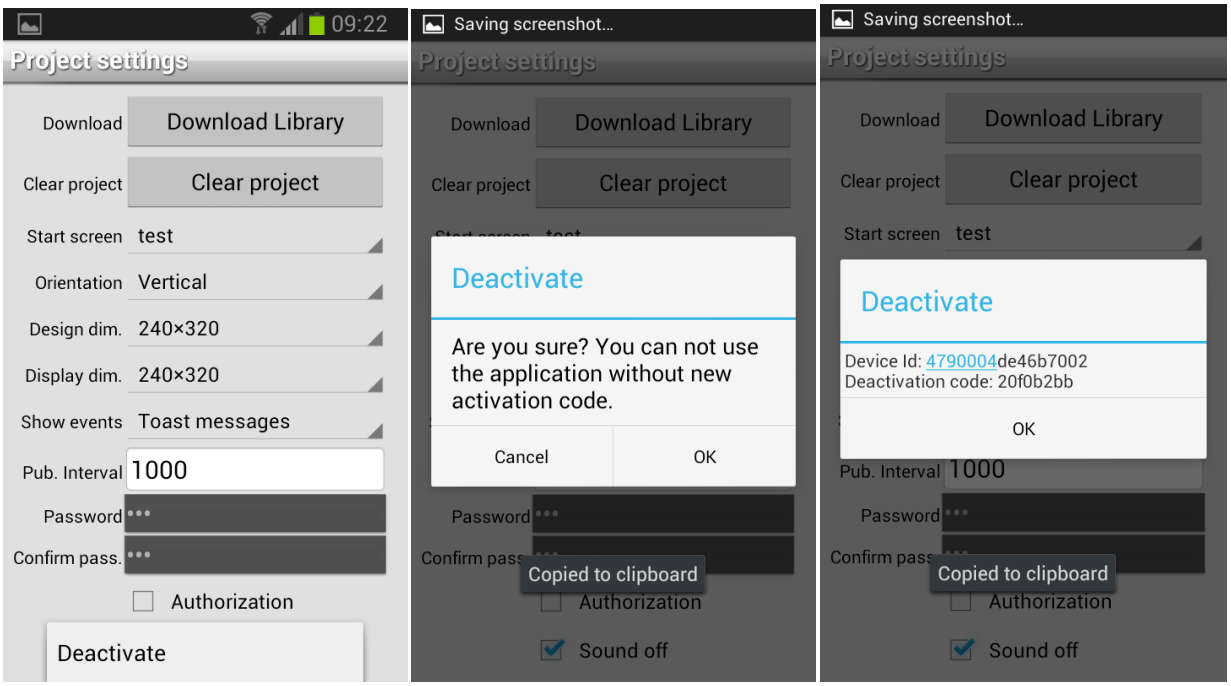
Activate

When you want to activate your application you should enter “Settings” menu. Click menu button and choose activation. Activation dialog will appear. Enter your activation code. Press OK.



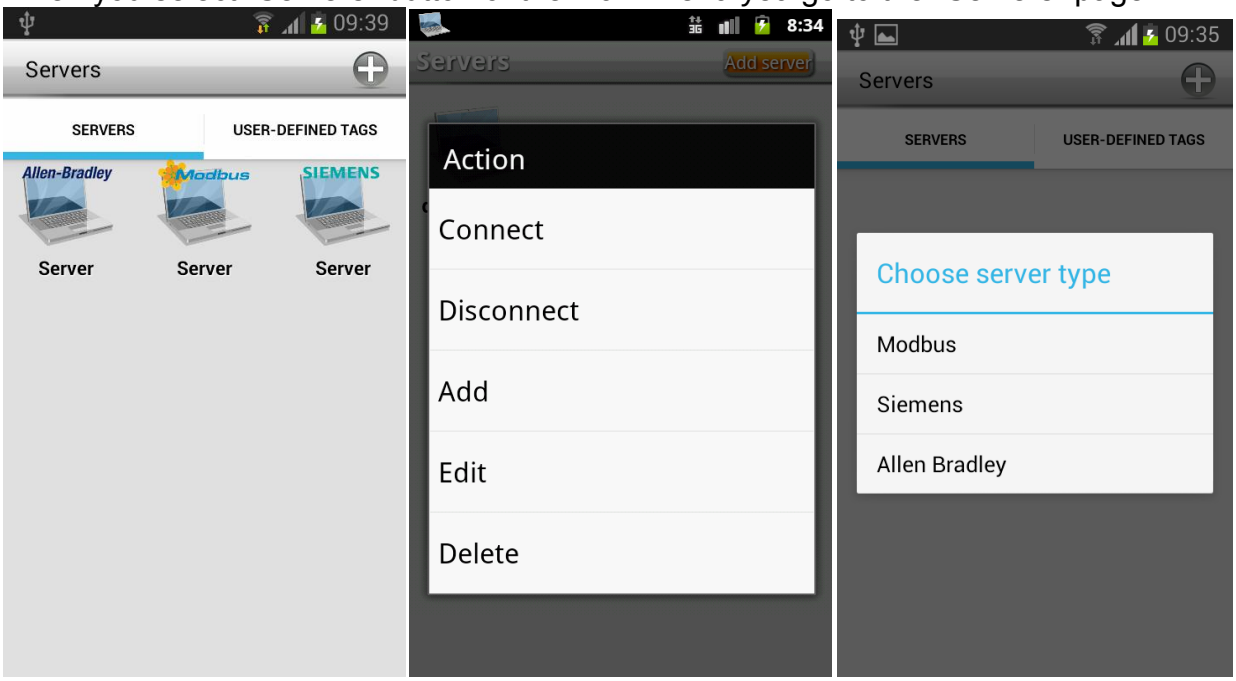
Deactivate

When you want to deactivate your application (to transfer license for example) you should enter “Settings” menu. Click menu button and choose Deactivate menu item. Deactivate dialog will appear. If you are sure you want to deactivate your application click OK. Deactivation code dialog will appear. Remember deactivation code and DeviceId. **BE CAREFUL WITHOUT DEACTIVATION CODE AND DEVICEID YOU COULDN’T TRANSFER LICENSE.**



Servers

When you select “Servers” button of the main menu you go to the “Servers” page.

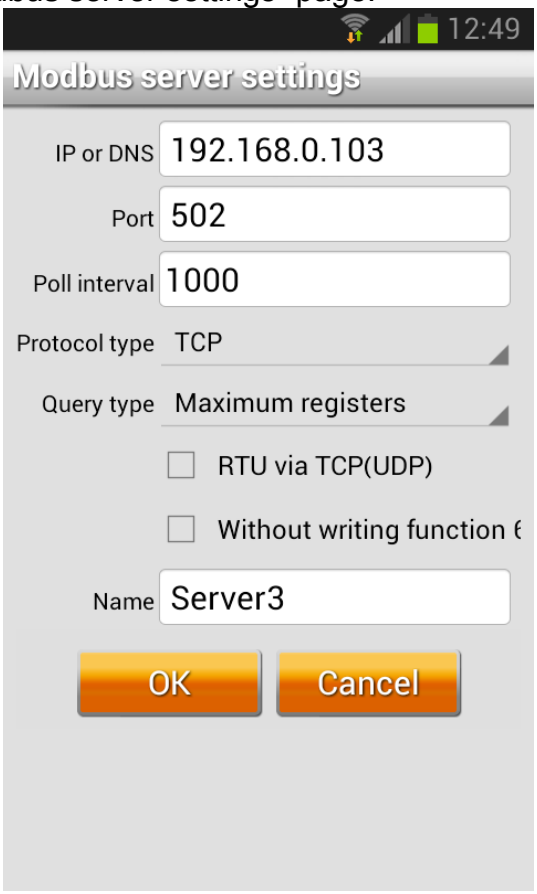


Where:

- **Add server**
  Add a new server.
- **Connect**
  Connect to the server. You can connect to the server by simply clicking on the icon.
- **Edit**
  Edit a server.
- **Delete**
  Delete a server.

Modbus server settings

When you select “Add server” and choose Modbus server or “Edit” menu on modbus server you go to the “Modbus server settings” page.

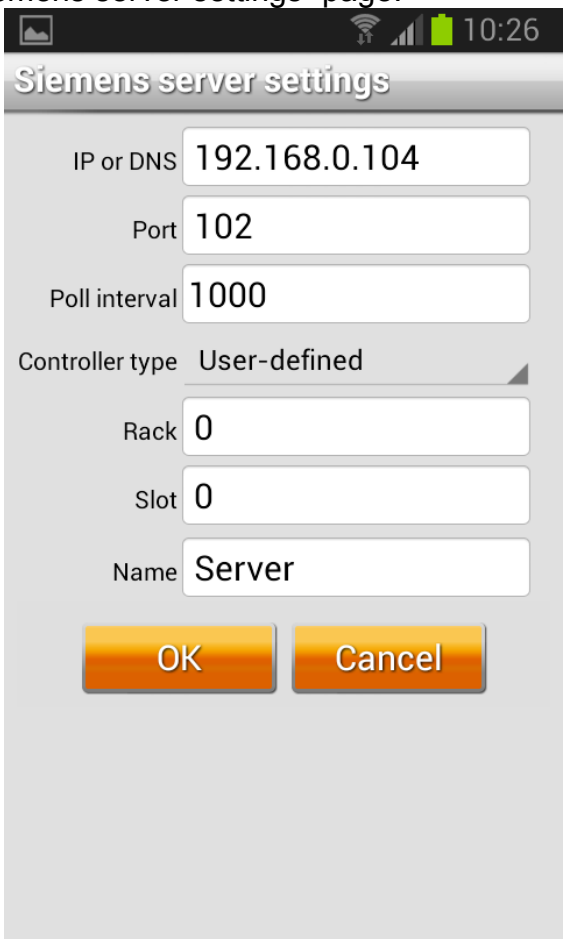


Where:

- **IP Address**
  Ip address of the connection.
- **Port**
  Port of the connection.
- **Poll interval**
  Polling interval in milliseconds.
- **Protocol type**
  Protocol type – UDP or TCP.
- **Query type**
  Query type - Maximum registers (request maximum registers), Consecutive registers (request query of consecutive registers), 1 pointer registers (request registers for 1 pointer).
- **RTU via TCP(UDP)**
  Set RTU via TCP(UDP) mode.
- **Without writing function 6**
  Don’t use function 6 for writing commands. Use only function 12.
- **Name**
  Name of the server.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes

Siemens server settings

When you select “Add server” and choose Siemens server or “Edit” menu on siemens server you go to the “Siemens server settings” page.

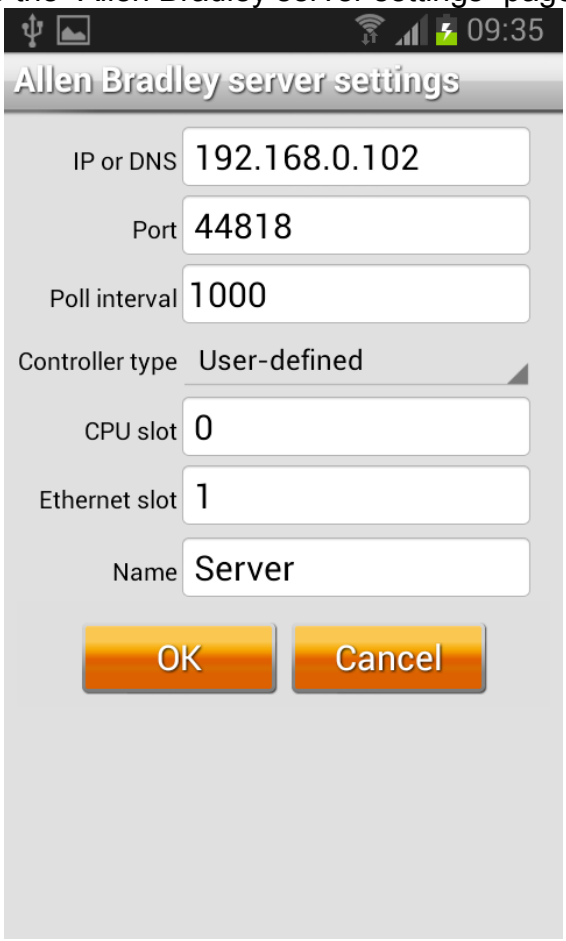


Where:

- **IP Address**
  Ip address of the connection.
- **Port**
  Port of the connection.
- **Poll interval**
  Polling interval in milliseconds.
- **Controller type**
  Type of the controller.
- **Rack**
  Rack of the controller.
- **Slot**
  Slot of the controller.
- **Name**
  Name of the server.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.

Allen Bradley server settings

When you select “Add server” and choose Allen Bradley server or “Edit” menu on Allen Bradley server you go to the “Allen Bradley server settings” page.



Where:

- **IP or DNS**
  Ip address or DNS of the connection.
- **Port**
  Port of the connection.
- **Poll interval**
  Polling interval in milliseconds.
- **Controller type**
  Type of the controller.
- **CPU slot**
  CPU’s slot
- **Ethernet slot**
  Ethernet module’s slot.
- **Name**
  Name of the server.
- **OK**
  Approve your changes.
- **Cancel**
  Cancel your changes.

Network settings for remote access

TeslaMultiSCADA is designed to communicate with PLCs without using dedicated servers or any specific software installed on a PC. TeslaMultiSCADA communicates with PLCs by using Modbus TCP(UDP) or other controllers protocol commands.

To establish a remote connection, a GPRS or DSL router is needed at the PLC site, which will act as a bridge between the LAN (Local Network) where the PLC is installed and the WWAN or WAN (Internet) to which a remote Android device will have access to. This figure shows a standard setup.

1. Determine the LOCAL IP address of the GPRS or ADSL router. PLCs need to know the router address as it is the gateway to the internet. Enter this IP in Modbus/TCP based device settings.

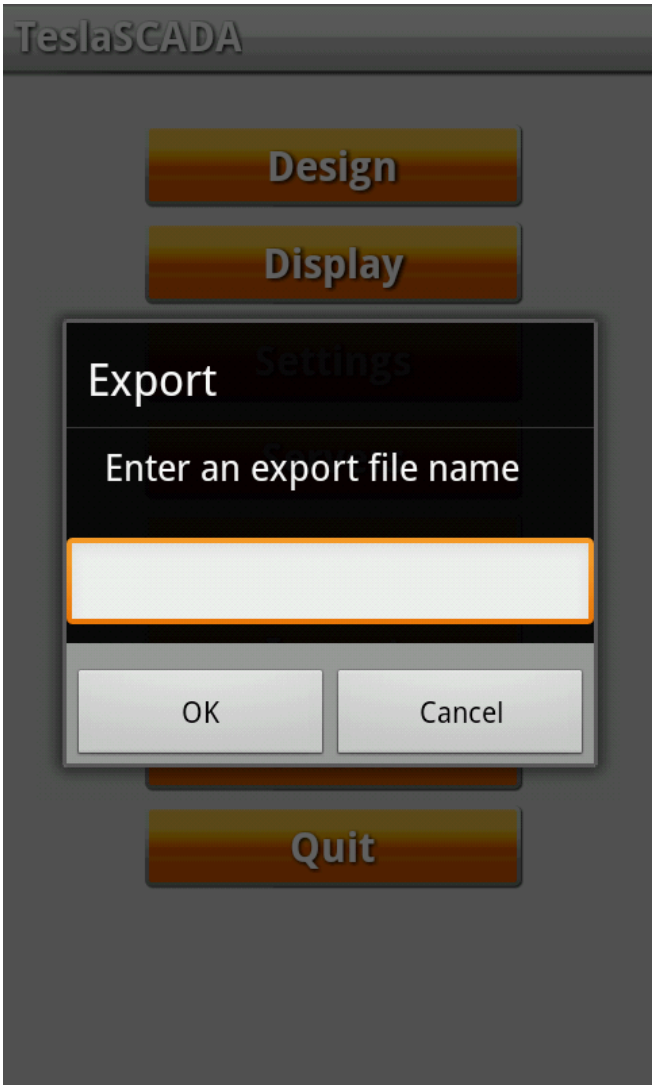
2. Now log into the GPRS or DSL Router and configure NAT options to set up a bridge between the WAN and your PLC local address and port. 502 is default port for Modbus/TCP device. Protocol on the router must be set to TCP/IP. Look at your router documentation for details.

3. If you have a fixed IP address enter it as such in TeslaMultiSCADA in Connection settings page.

4. If your router access the WAN through a dynamic IP then you must create an account with a dynamic DNS services provider such as www.dnsdynamic.org or www.dlinkddns.com for example, and configure your router to notify of IP changes (see example below). In this case, enter in TeslaMultiSCADA the name you chose for your dynamic DNS. The port number must still be the one configured in the NAT section of your router.

Export

When you select “Export” button of the main menu you see “Export” dialog.



You have to enter your project name and click “OK”. Your project will be saved in the directory “TeslaMulticScada/Projects”.

Import

When you select “Import” button of the main menu you go to the “Import” page.

The projects of TeslaMulticSCADA have .tsp extension. Chose the project you want to be loaded.

About

When you select “About” button of the main menu you see “About” dialog. This dialog contains information about TeslaMultiSCADA, ID of your device and contact information.

Quit

When you select “Quit” button of the main menu you see “Quit” dialog. Press “OK” button if you want to quit the program or “Cancel” if you want to stay in.