



BTN-TX Gavazzi.jpr template user guide





INDEX

Introduction	3
Wizard startup page	4
Protocol settings	5
Tag import	6
Connecting a Tag to a page element	7
Users and password	8
Editing the Page templates	9
Changing/Adding language text	10
Recipes and pre-defined icons	11
Trends, alarms and events	12
Scheduler	15





1. Introduction

The BTM-Tx touch-screen can be configured to show very specific information. Status of lights, temperature, energy monitoring are just some elements that the BTM can be configured to display.

Carlo Gavazzi can supply you a template that can be used when you build a project that fits your home.

In order to give you the knowledge of how to use the template, this document will guide you through the understanding of the different functions.

This document is not a user guide for the Wizard.

This template has been developed to log data from Carlo Gavazzi energy meter EM24 and the inverter ISMGXxx.





2. Wizard startup page

When you open the Wizard with your project, the page visible is the main page, as seen below. Any element shown can be edited for your purpose by altering the references. All the pointers to the project, the Tags, must be adapted to your project – see 'Tag import' later. Once imported, you can start connecting the elements on the Wizard project to the functions in your controller project.

All the pages can be edited, and pages can be added or deleted. To bring up a page to the edit window, select the page in the 'Pages' list, and double-click on the relevant page.







3. Protocol settings

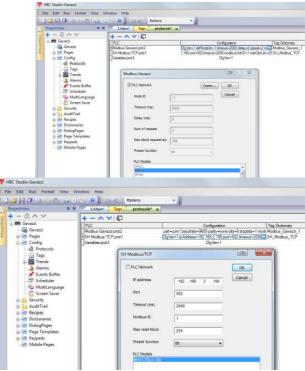
When you use the BTM as a display for your smart-house and energy monitoring, you need to adjust the settings of the communication parameters to fit your installation.

In the 'ProjectView' part of the Wizard, you can locate the 'Config' folder. Inside this folder you can find the 'Protocols', where you can select and edit the settings. See the figure to the right.

Double-click the 'Protocol', and the 'protocols' tab will appear in the work area. Depending of your network type and setup, different choises must be made. One type is indicated in the figure to the lower right. Do the settings that fits your network specifications.

Repeat with the Ethernet network of your smart-house installation. The settings are adjusted in the confiuration of the 'SH Modbus/TCP:prot1'. See the figure bottom right.





CARLO GAVAZZI Automation Components

4. Tag import

In the Tag section, you will do the import of the tags that you have available from your project. The project is the *.scc file that is created with the Configuration Tool for the BH8-CTRLX controller, and you will use the Tool's Program properties to locate the file.

Once located, you can load it by first selecting the correct protocol, the SH Modbus/TCP protocol (indicated on the figure right with the '1'), then clicking on the Tag import button ('2'), (it's the symbol ">]").

All the tags of your project will be imported automatically.

You will also have to set the parameters of your protocols before you can link the tags to the protocols.

Once the tags appear in the list they can be linked to the protocol: Select one/more tags, click the icon marked ('3') above, and the selected items appear on the uppermost list.

properties to	locate the	file.		
HBC Studio-Gavazzi				
File Edit Run Format View W	ndow Help	~		
	NO IDAI		1	
ProjectView 🗛 🗙	1:Main* Tags X			
		> SH Mod	bus/TCP:prot1	- 5
Gavazzi		Group	Driver	1
😫 🔤 Gavazzi 🦰	Board//(Fx) Board - Rollerblind control.		SH Modbus/TCP prot1	Fx Roller
🔋 👜 🍋 Pages 🛛 🦳 🛁	Board//(Fx) Board - Rollerblind control.		SH Modbus/TCP.prot1	Fx Roller
in Pa Config	Board//(Fx) Board - Rollerblind control.		SH Modbus/TCP.prot1	Fx_Roller
B A Security	Board//(Fx) Board - Temperature regul		SH Modbus/TCP.prot1	Fx Temp
AuditTrail	Board//(Fx) Board - Temperature regul		SH Modbus/TCP.prot1	1 Fx Terr
	Board//(Fx) Board - Temperature regul		SH Modbus/TCP.prot1	1 Fx Ten
	Board//(Fx) Board - Temperature regul		SH Modbus/TCP.prot1	1 Fx Ten
Dictionaries	Board//(Fx) Board - Temperature regul		SH Modbus/TCP prot1	Fx Temp
💮 🚰 DialogPages	Board//(Fx) Board - Temperature regul		SH Modbus/TCP prot1	1 Fx Ten
🔅 👘 Page Templater	Board//(Fx) Board - Temperature regul		SH Modbus/TCP.prot1	1 Fx_Ten
Mobile Pa 3				



ontype functionId RangeMin Ra





5. Connecting a Tag to a page element

Select one element that you want to edit.

The example shows the Total Kw consumption of the house.

This element is shown on the main page.

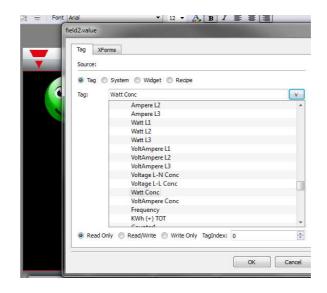
Click on the number to select it (indicated with the red arrow). Once selected, seen by the squares surrounding the element, you can edit the properties of the element.



=	Field		
-	Value	100	
	DataLink	Watt Conc:_TagMg	r
	Number Forma	#	Edit Tag
	KeypadType	Numeric	Delete Tag
	Min	-2.14748e+09	
	Max	2.14748e+09	
÷	Events		
ŧ	Text		
÷	Frame		
ŧ	Styles		
ŧ	General		
÷	Position		

The properties of the details of each single element is made in this dialog box. By selecting the 'Edit Tag', you open the dialog box where you can select whether you want to delete the tag, or if you want to edit the tag.

When you select 'Edit', the window with the available tags appears, and you can select among the new tags that you have imported.







6. Users and password

There are pages in the template that requires passwords to enter.

These passwords can be set and changed in the 'Security' folder of the project. The red arrow points at the single user setup, the green arrow points to the name of each user, and the amber arrow points to the password which is set for that user.

7	HBC Studio-Gavazzi							
8	File Edit Run Format View V	Vindow Help						
÷	🗋 🚰 🔒 🎒 🐰 🗈 🟝 👝 🖲	NI O LIM	Raliano		-			
-	ProjectView 🛛 🕈 🗙	1:Main*	Tags Users	× UserGr	oups		_	
	+-⊈∧∨	+-~~	>1 [>					
ObjectView	🖃 📟 Gavazzi	Name	Default	Group	Password	Change Intial Password	Comments	Logo
TVIE	Gavazzi	Padmin -		admin	admin	false	admin user	5
M	👜 🔭 Pages	freeuser	✓	base	free	false		0
	Config Config Scurdy	-		/				

New users can be added in this window. Add a new user by clicking the '+'. A new user line is added. Edit the wanted parameters to create the user.

Existing users can also be removed from the list. Highlight the user to be removed, and click the '-'.

	Vindow Help			
) 📴 🕞 🎒 🔥 🗗 🙈 🧠 🕐 ProjectView 🔋 🛪			* ×	
+ - ≙ ∧ ∨	+ - ~ ~	>1 [>		
🖃 🚍 Gavazzi	Name	Default User	Group	Password
	admin		admin	admin
庄 🔭 Pages 📃 🔪	freeuser		base	free
🖶 🦳 Config	▶ New		admin	user
Security				

7. Editing the Page templates

ſήΔ Automation Components

Some of the common elements of a page are made on a template master, which can be found in the 'Page Templates'.

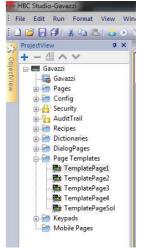
These page templates contain the common elements for many pages. For example, if you want to have all your pages look the same, with a border and a specific background colour, you make a page template with the border and colour, and use this when you make new pages.

It is also very easy to change the look of a complete project, just by changing some elements on the basic template page, instead of changing all the pages.

Enter the template you want to edit to bring it up in the edit window, and make the changes.

The main page is built up on the 'TemplatePage3' (blue arrow), and is found in the 'Page' properties of the Main page. The properties is found when you click the tab of the page (red arrow).

	\$
□ □ ↓ </th <th></th>	
□ ○ A B I </th <th></th>	
Height 480 Bkgd Color [2	
Bkgd Color [2	
	55, 255, 255]
	latePage3
▼ HOWE PAGE ((L)) ⊕ Events	
Image: Non-State in the state in the st	









8. Changing/Adding language text

When you want to add your language, or change some language test into your project, you use the 'MultiLanguage' tab, found in the Config folder.

The red arrow points to the folder tab.

To edit the text in your language, select the 'Text' tab, indicated by the amber arrow. The texts are found and can be altered directly in the fields, indicated by the green arrows in the figure below.

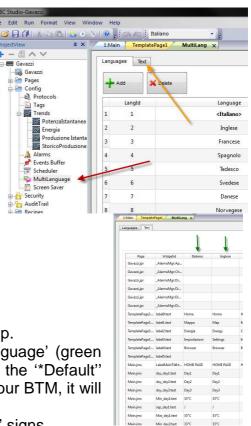
To alter a word in your language column, click in the field, and change the text.

The language of your project can be set to your at startup.

Enter the 'Config' tab (red arrow), select the 'MultiLanguage' (green arrow), highlight your language (blue arrow), and click the '*Default'' button (black arrow). When the project is uploaded to your BTM, it will start with your selected language as default.

The default language is indicated between the '<' and '>' signs.

le Edit Run Format View Windo	w Help			
🗳 🖥 🖗 1 X 🗈 🖄 🕹 O N				
	and the second se	and the second s		
ProjectView Q ×	1:Main* 2:Home*	10:Setup* TemplatePage3* M	ultiLang* ×	
+ - 4 ^ ~	Languages Text		~	
🗃 🕅 Gavazzi	Languages			
Gavazzi				
Config	🕂 Add 🛛 💥 D	elste		Default
Protocols				L.
道 Tags	Langid	Language	Writing system	Default Font
🛞 🎆 Trends	1 1	Italiano	Any	Tahoma
- 🔔 Alarms	2 2	<english></english>	Any	Tahoma
- Devents Buffer	2 2	< english >	Any	lanoma
📅 Scheduler 🥢	3 3	Français	Any	Tahoma
Screen Saver	4 4	Español	Any	Tahoma
Geteen sorter	* *	Espanol	Any	lanoma
👜 🦕 AuditTrail	5 5	Deutsch	Any	Tahoma
🛓 🛅 Recipes	6 6	Svenska	Any	Tahoma
🖻 🔭 Dictionaries				
Modbus_Gavazzi	7 7	Dansk	Any	Tahoma
Modbus_Gavazzi_1		Norsk	Any	Tahoma
	8 8			







9. Recipes and pre-defined icons

The smiley on the first page is linked with the current consumption.

Low consumption results in a glad green smiley, mid consumption gives a sad yellow smiley, while a high consumption activates the angry red smiley. The smiley itself (yellow arrow) is 3 figures, named green, yellow and red, all with the extension .png (see the green arrow), and is found in the images library of the project.

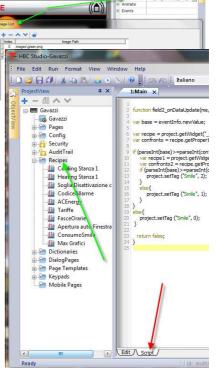
• ×

B / ■ ■ ■

It is located on the main page, and is a Multistate Image (amber arrow), with a datalink (blue arrow) and a path to the three images (green arrows).

The script that controls the change of the three images is found on the main page, select the 'Script' tab in the bottom left of the main window (red arrow). In the script editor you can edit the relations to the behavior of the three images that together form the smiley.

Also note that the values of the levels that control which of the three images that is visible lies in the recipe that is available in the 'Recipes' (green arrow). The values related to the smiley are in the recipe 'ConsumoSmile', where Element1 is set to 1500, and Element2 is set to 3000.



5 # E





10. Trends, alarms and events

In the 'Config' tab, you can select the 'Trends' to get the setup of the Trend settings (red arrow). The different trends can be selected by clicking on the relevant trend settings (green and blue arrows).

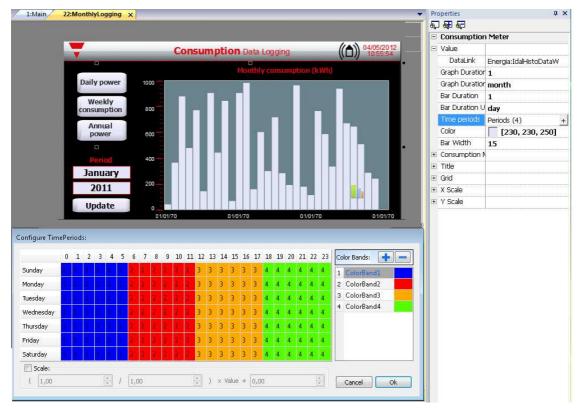
This opens the setting of the individual trend. The illustration below shows the 'IstantaneousPower' trend.

ProjectView	4 × 1:Main T	rends* ×	· .
+ - 4 A V	Add	💥 Delete	al memory Space
🗑 🚰 Pages 🥖	🚽 🖲 🎆 PotenzaIsta	ntanea	Active Source Watt Conc
Config	🗈 🎆 Energia		Active Source KWh (+) TOT
Alarge,	1:Main Trends* ×	E	
Alarme Gavazzi	1:Main Trends* x	otal memory Space	33%
Tevergia Alarme Gavazzi Gavazzi Config	1:Main Trends × Add Delete T P 20 Potenzalstantanea	otal memory Space	wate Conc
Potenza Config Confi	1:Main Trends × Add Delete T P 20 Potenzalstantanea	otal memory Space	wree Watt Conc
Config Config Config Config Config Config Config Config Config Config Config Config Config Config	13Main/Trends*X Add Delete Poleroualstantanea Source Vait Conc	otal memory Space	Watt Conc
Alvern Governi Gove	13Main/Trends*X Add Delete Poleroualstantanea Source Vait Conc	otal memory Space Carlos Sampling Time(Sec) 900	wree Watt Conc
Alarge Gavazzi Config Config Config Trajs	1:Main Trends" x + Add Delete T Polervalstantanes Source Watt Conc Trigger	Otal memory Space	Watt Conc

CARLO GAVAZZI Automation Components



Time bands



Once a trend is selected, it is possible to show the logged data divided into up to four different time bands. From the *Properties menu*, *Time periods* has to be selected: clicking on the relevant "+" a new window will appear where the wanted scaling value can be changed. The default one is "1".

CARLO GAVAZZI Automation Components



Alarms

The alarms is found under the 'Config' tab (red arrow). Each alarm has its own setup, which can be found here, each having their own Id. A number of actions can be made on an alarm event.

	Vindow	Help								
🗋 😂 🕞 🕼 I 🖇 🖻 I 📥 🔅	0.0016	Dansk		· • •						
ProjectView # >	1	Main Trends* Alarm	×							
+ - ₫ ∧ ∨	+ -	- ^ Y								
g 🕞 🛲 Gavazzi	1 18	Name	Enable	Ack	Reset	Tag	Buffer	Trigger	Action	User Ac
Gavazzi	1	Apertura automatica finestre	2		V	emperature reg	AlarmBuffer1	sard - Temperatur	WriteTag	
🗧 🗃 Pages	2	Chiusura automatica finestre	SSSSSS		< X X X X X X X X X X X X X	emperature reg	AlamBuffer1	- Temperature re	WriteTag	
Config	4	Disattivazione carico 2	2		~	Carico2	AlamBuffer1	@SogliaDisattiva	Write Tag; Write Tag;	
Protocols	Þ 5	Disattivazione carico 3	2		252	Carico3	AlamBuffer1	@SoglaDisattiva	WriteTag; ToggleBit;	
- 🔄 Tags	6	Disattivazione carico 4	2		-	Carico4	AlamBuffer1	@SogliaDisattiva	Write Tag; Write Tag;	
Trends	7	Disattivazione carico 5	2		~	Carico5	AlamBuffer1	@SogliaDisattiva	Tag: Write Tag: Write	
- Alarms	-									
Events Buffer	-									

Events

The events that are registered, are set up in the 'Events buffer' (red arrow).

ProjectView 4		1:Main Trends*		rents Buffer*	4		
+ - @ ^ ~	-	- ~ ~					
🖃 📾 Gavazzi	T	Id Name	Enable	Size	Type	MaximumLimit	Storage Type
- Gavazzi	F.	1 AlamBuffer1	True	1000	Alarma	0	FLASH
E Pages		2 Audit Trail	True	1000	Audit	0	FLASH
Config - A Protocols - Tags - Trends - A Jarms			-				





11. Scheduler

When you want to have the display to control regularly events, these are defined in the 'Scheduler' tab, found under the 'Config' tab. The events can be any, from uploading the data to memory, to have outputs controlled directly etc.

An example: The scheduler will toggle the selected Tag every second. Select the current line 16.

The name of this line is 'Blink allarme acqua', it is a recurring type, it is set to happen every time 0:00:01, that is a trigger every second.

The affected Tag is set in the menu that appears when the 'Action' is chosen.

		12.12				
		Help				
🗋 🎯 🗐 🖗 🕺 🖧 🖓 🕘	NIC	Dansk	-			
		Main Scheduler* ×		· /		_
	1.	Scheduler X				
• + - ≝ ^ ∨	+ -	- ^ V	/			
Projectview 0 × 0 ← - 4 ∧ × Gavazzi - Gavazzi - Gorig - Config - 2 Protocols	I ID	Name	lype	Schedule	Action	Priority
🐻 Gavazzi	b 1	Cooling - S1 - Fascia 1 - Fertale	Recurring	Weekly, Time, <>, 07:000	DownLoadRecipe	Medium
🖶 🦳 Pages	2	Cooling - S1 - Fascia 2 - Farale	Recurring	Weekly, Time, <>, 12:000	DownLoadRecipe	Medium
- Config	3	Cooling - S1 - Fascia - Fenale	Recurring	Weekly, Time, <>, 21:000	DownLoadRecipe	Medium
Protocols	4	Cooling - S1 - Farcia 1 - Festivo	Recurring	Weekly, Time, <>, 08:000	DownLoadRecipe	Medium
- 🔄 Tags	5	Cooling - St - Fascia 2 - Festivo	Recurring	Weekly, Time, <>, 22:000	DownLoadRecipe	Medium
Trends	6	Heating - S1 - Fascia 1 - Feriale	Recurring	Weekly, Time, <>, 07:000	DownLoadRecipe	Medium
	7	Heating - S1 - Fascia 2 - Feriale	Recurring	Weekly, Time, <>, 12:000	DownLoadRecipe	Medium
Potenzalstantanea	12	Heating - S1 - Fascia 3 - Feriale	Recurring	Weekly, Time, <>, 21:000	DownLoadRecipe	Medium
Energia	9	Heating - S1 - Fascia 1 - Festivo	Recurring	Weekly, Time, <>, 08:000	DownLoadRecipe	Medium
- 🐊 Alarms	10	Heating - S1 - Fascia 2 - Festivo	Recurring	Weekly, Time, <>, 22:000	DownLoadRecipe	Medium
- 📌 Events Buffer	11	Trasferimento Soglia carichi	Recurring	Custom, Time, 19:280	DownLoadRecipe	Medium
- Scheduler	12	DT Carico 2	Recurring	Every, Time, 00:00:10	DataTransfer	Medium
So MultiLanguage	13	DT Carico 3	Recurring	Every, Time, 00:00:10	DataTransfer	Medium
Screen Saver	14	DT Carico 4	Recurring	Every, Time, 00:00:10	DataTransfer	Medium
	15	DT Carico 5	Recurring	Every, Time, 00:00:10	DataTransfer	Medium
AuditTrail	16	Blink allarme acqua	Recurring	Every, Time, 00:00:01	ToggleBit	Medium
	17	Blink allarme fuoco	Recurring	Every, Time, 00:00:01	ToggleBit	Medium
🔅 🚰 Recipes	18	DailyEac	Recurring	Daily, Time, 00:000	UpLoadRecipe	Medium
Dictionaries	19	RefreshTrend	Recurring	Every, Time, 00:15:00	ToppleBit	Medium

	1 3	Heating - 51 - Fascia 1 - Festivo	Recumng	VVEEKIY, TIME, <>, U8:UUU	DownLoadHecipe	Meaium
🔔 Alarms	10	Heating - S1 - Fascia 2 - Festivo	Recurring	Weekly, Time, <>, 22:000	DownLoadRecipe	Medium
🖅 📌 Events Buffer	11	Trasferimento Soglia carichi	Recurring	Custom, Time, 19:280	DownLoadRecipe	Medium
Scheduler	12	DT Carico 2	Recurring	Every, Time, 00:00:10	DataTransfer	Medium
🔊 MultiLanguage	13	DT Carico 3	Recurring	Every, Time, 00:00:10	DataTransfer	Medium
Screen Saver	14	DT Carico 4	Recurring	Every, Time, 00:00:10	DataTransfer	Medium
Security	15	DT Carico 5	Recurring	Every, Time, 00:00:10	DataTransfer	Medium
· · · · · · · · · · · · · · · · · · ·	16	Blink allarme acqua	Recurring	Every, Time, 00:00:01	ToggleBit	Medium
AuditTrail	17	Blink allarme fuoco	Recurring	Every, Time, 00:00:01	ToggleBit	Medium
Recipes	18	DailyEac	Recurring	Daily, Time, 00:000	UpLoadRecipe	Medium
Dictionaries	19	Refresh Trend	Recurring	Every Time 00:15:00	ToggleBit	Medium