PlantVisorPRO



Plant supervision







Integrated Control Solutions & Energy Savings

+040000081 - ver. 2.0- 14/09/2010

Contents

1. Introduction	5
Purpose of this guide	5
Notes	5
2. Key	6
3. Completing installation	6
Completing installation of PlantVisorPRO	6
Enabling PlantVisorPRO for web access	8
Protecting system functions and administration	user 9
4. SETTING UP THE SYSTEM	10
Quick configuration wizard	10
Putting the devices online	16
Customising device configuration	18
Propagating the configuration to ider devices	
Displaying device details	21
Programming parametric devices	23
Defining access profiles and users	24
Creating report templates	25
5. Configuring actions based on alarms/even scheduling	ts or 26
Configuring notification channels via fax, email and relay	
Defining system actions in response alarms/events	
Defining scheduled actions	31
Site calendar	33
6. Improving security	34
Configuring guardianPRO	34
7. Customising the PlantVisorPRO interface	36







1. INTRODUCTION

Purpose of this guide

This quick guide is designed for all those who want to quickly set up PlantVisorPRO, with the following objectives:

- display real-time device values, including alarms and events
- display values recorded on one or more devices on a time graph
- send notifications via SMS, fax, e-mail in response to alarms/events or periodically
- operate relays in the field or set variables in response to alarms/events or periodically
- print immediate reports or request periodical prints
- program parametric devices
- define system and PlantVisorPRO users
- start guardianPRO for increased supervisor security
- customise the PlantVisorPRO windows

Notes

For further details on these procedures, see the PlantVisorPRO online guide and use the search engine to bring up pages with additional information on the required subject.





2. KEY

0	Note	Notes contain important information, highlighted after the text they refer to.
	Warning	Warnings indicate procedures that, if not fully observed, may damage associated devices or equipment.

3. COMPLETING INSTALLATION

Completing installation of PlantVisorPRO

Unit installation must be correctly completed before starting setup.

- 1. Follow the setup wizard and enter all the information required.
- 2. Carefully read the User License.



Warning: PlantVisorPRO is licenseprotected software. Once installed, the trial version can be used for a maximum of 30 days. The trial version will stop working at the end of the trial period unless activated. See the procedure for Activating PlantVisorPRO.

ing ing		
1	10	Antipility Antipility
1175		And Andrew Street Stree
		Martin Constanting of
		Summers Summer
		Antonio Antonio I



- 3. Enter the password to access the system
- 4. The **PlantVisorPRO Shell** panel appears after installation and PlantVisorPRO starts automatically.



- 5. On the login page, set the administrator password.
- 6. By default the PlantVisorPRO Configuration wizard opening page is displayed.









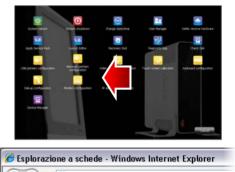
Enabling PlantVisorPRO for web access

PlantVisorPRO pages can be viewed by remote user via a simple Internet connection with Internet Explorer and the static IP assigned by the machine where PlantVisorPRO is installed.

- 1. Go to PlantVisorPRO Shell→ configuration.
- IP
- 2. Provide the information required.

Open port 443 for HTTPS access in the network Firewall.

- 4. Wait for PlantVisorPRO to restart.
- 5. Enter the machine's static IP followed by the PlantVisorPRO folder in the Internet browser address bar on any PC in the network.







Protecting system functions and user administration



Note: System accounts are only required to access the functions indicated above. To set program accounts, i.e. to set user permissions for PlantVisorPRO users, see User configuration.

Under PlantVisorPRO Shell-> User 1. management: passwords and privileges configured previously can be managed or modified.



Warning: WRITE DOWN YOUR PASSWORD! If you no longer have a password, contact CAREL customer care.







4. SETTING UP THE SYSTEM

Quick configuration wizard



A simple procedure is available under the \bigcirc Configuration \rightarrow Quick configuration wizard menu to set the basic settings of PlantVisorPRO, divided into six steps.



Benvenuto in PlantVisorPRO Questo wizard ti aulare a configurare il RantVisorPRO in pochi passi. Clicca il bottone start per iniziare la procedura di configurazione. Clicca edit per vastore dal vizard si compone di: PASSO 1: Registrazione prodotto e informazioni sul sito. PASSO 2: Configurazione linea. PASSO 3: Stetsigni perametri.





Note: To no longer display the Quick configuration wizard when starting, select the corresponding flag; to start the guided procedure click **Start**, while to exit the procedure, click **Exit**.

The following steps comprise simple system setup:

• Product registration and site information

PASSO 3: Settaggio parametri. PASSO 4: Gestione allarmi e configurazione I/O. PASSO 5: Configurazione report HACCP. PASSO 6: Configurazione GuardianPRO.

- Line configuration
- Parameter settings
- Alarm management and I/O configuration
- HACCP report configuration
- GuardianPRO configuration.



Product registration

PlantVisorPRO is a product protected from license. The trial version works for 30 days after installation. To enable the licensed version, enter the activation code; this can be requested using the special forms available on the CAREL website.

- Enter the serial number indicated on the CAREL label on the bottom of PlantVisorPRO.
- 2. On the CAREL website PlantVisorPRO page (www.carel.com), click Get PlantVisorPRO activation code.



- 3. In the **Installer** and **User** section, enter the required data and carefully read the privacy information.
- 4. Under Data required to issue the code enter:
 - a. Serial number.
 - b. MAC address indicated under System pages→ Information.
- 5. Confirm acknowledgement of privacy information.
- 6. Under **Installation** enter the data needed for company statistics.
- Click Next, check the data and click Activation code: if the data are correct, activation code will be displayed; note this down.
- Under Configuration→ System pages→ Information, select the product to be registered, enter the serial number and the activation code.
- 9. Click **Activate**: the product is licensed and can be used.



10 10 0				
Menadad B	_	The second s	1 per la retari	· · · · · · · · · · · · · · · · · · ·
Reprintente Republications	-	back Barris Man	000.00	
Percentiale (70 efficies	17%	Spacific Allower on Allower Spacific exception on Allower	Livery and	13772-
Fager sons birtus (Frita (F Heil althus Heil farthus Sectors Sectors Sectors		3143.171195.190.190.190 00.10140179.0.30 70041007910.00 70041007910100000.0.0		
martanti, Persenti Achi a matteri Accenti Accent		And Annual Control of Annual Annua Annual Annual	1000 1000	
las ai su				- 0
				<u>a</u>

Line configuration

This page is used to create, modify and remove serial lines. To configure a serial line, the connection features and connected devices need to be specified. For serial lines using the Carel protocol, connected devices can be detected automatically. For further details on configuration, see the paragraph "Putting devices on line".







Parameter setting

Quick configuration of connected devices based on specific settings for the type of application and then setting the main control parameters. All the parameters not configured in this procedure are set to the default value. To apply the chosen configuration for the device, click ...



Alarm management and I/O configuration

This page is used to configure alarm notifications and the corresponding transmission channel. For further details see the chapter on configuring actions in response to alarms/events.





	fearment a conduct much a sectors	action 4 - Gestione adarms 2 - Export Entity = 6 √ Save (←)	Statistics.
vesta pagina permatta la cord	parazione delle nutifiche ei caso di allarris a la relativa tri	postazione del carate di transmissione,	
Condizioni			
ALL ALARMS Condition			
O Priorită	Attosina CAta C Heda C Bassa		
SMS			
SMS		SHS configurati	
E-mail			
SMTP*	User .	t-mail configurate	
fander*	Password		
Auterticapiene TLS:	11000		
Frai	11		
FAX (CSM Modem)			
FAX (CSM		Fan configurati	
Modem)			
Ralay			
			-

HACCP report configuration

To save, print and/or send HACCP reports by email.

Impostazione Nome	Report gramatiers				
Drarle creazione	60 H - 60 H				
Seleziona stampante Insertezi destinatario e mail	USBfreiter m	+			
			E and meligerate		





GuardianPRO configuration

This screen can be used to increase system security by configuring possible supervisor malfunction signals and the channels used to notify such events. For further details see the paragraph "Configuring GuardianPRO".

energy (17.1	redomentese 🕇	- Duringer and	1		and a	Grothese at		NUT TOXOD	A - Guardani'
vesta pagna permetta di aur Azzati. È possibile inoltre ag	mentare il ilvello di sic pungere ulteriori cont	irezza dell'impiant rafa au veriezioni s	o config onde e g	urando le seg potione allan	nelazioni di ni attivi	naturponen	enti del supervi	sore e/o <i>de</i> i c	anali di trasmoson
State									
Rato di guardian/RO	tion functions	ate		puerdard's	0 disabilitati	per porsi			
Configurazione notifiche									
Abits rotifica									
States Strengthered Strength	Enderso				5		Links segmation	1.04	
				_					
Abiltare 8 controlle aug									
a state of the second se	a search attor.								
Configuratione variabili									
E TETEL IN ALONG MAN									
			-		_		Contra a general		
	And the second se		_						
				10.00					
				10.00					





Putting the devices online

After having completed hardware installation, is devices must be put on line to let PlantVisorPRO recognise the devices connected to the serial ports. After the devices are on line, check each device status in the details page and continue with system configuration.

Note: Default settings are already installed in PlantVisorPRO for standard CAREL devices. Once online, the main variables and log variable data can be viewed and alarms managed.

For each serial line: under Configuration → Site configuration click + Add and set the features of the serial line. To select the COM port, if the USB-RS485 converter is used, follow the automatic recognition procedure. If there are CAREL devices on the line, these will be recognised automatically using the automatic function, otherwise proceed with points 2-3.



- 2. Choose the type of device.
- 3. Add physical devices to the line either individually or by address range
- 4. Customise the description of each individual device.



Note: Under \frown **Configuration** \rightarrow **Site configuration** \rightarrow **Site** \rightarrow **Notes,** record the first line configuration.





<u>CAREL</u>

5. Repeat the entire procedure for other lines.

- Installation → Global displays the list of all field devices.
- 7. Check device status in the Status column:
 - a. (green). Device connected and operating.
 - b. (black). Device not connected.
 - c. (blue). Device connected but disabled.
 - d. 🔎 (red). Device alarm.

Inpositivi						
10.00		and the second se		Automatic States	Contraction of the local division of the loc	
	794431		Transac Agree 1	5 Parents	\$796.2	THE R. MILLING
	conversion from A la A		Respetatore variable (%)	Schule America		212127 Territori
	1000000 (See 2.2		The local rest of the local section (2011)	8.2127 Notest		ALTER SHOWER
	1000000000110	_	Termentine-rendere (Inc.	ALCON TRANSPORT		SULTIM THURST
	M952361-4		Negentia nardna (m)	ALISTY Truesto		KICT THINK
			Temperature rename (re)	plant of the location		(1) - (* leases
	MARTINE CO.		Lis Presson automotion	The seasons in the		Printing 12 Peer
	1844-1910111-11		Li, Annora support	etotegong Lo mass		di forging 12-man
	HP1043.4		Tergen set you mersion. Dog	827579 Terminis		MICT NEED
	conception in the		Name of Address Address		1	
				_	-	
Mareal					-	
Aarmi		-	Let			1/7
) Marmi		No.				1/7 8 82
(Larmi						- 10 - 10
Marmi						
Marrai						1/7
) Olaresi						17
) Claresi						1/7
) Olareal						1/7



To stop receiving alarms from a device: under \bigcirc Configuration \rightarrow Site configuration \rightarrow Site, double click the line and check the device to be disabled and then click Save.





To delete alarms and events generated when putting the devices on line: under

Configuration \rightarrow System pages \rightarrow System click Clear list of alarms and events.





Customising device configuration

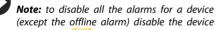
Standard online CAREL devices are preset. Default settings include alarm management, logs, and variables to be monitored on the homepage and HACCP and log graphs. A non-standard device is set during model creation using **Device Creator**.

This procedure shows how to customise device settings. Custom settings can be propagated to other devices of the same type or exported for future use.

- Configuration -> 1. Under Site configuration select the row in the table and click edit (pencil).
- 2. The line details are displayed, with the list of °₀ devices connected. Click corresponding to a device in the table.
- 3. The **Main** device configuration page is shown.



- 4. Open the Alarm safety page: set how often PlantVisorPRO Locale checks for device alarms.
- 5. Set the required settings for alarm monitoring frequencies and other related features.



under

Configuration >

configuration → Site and click

Site





- 6. Open the page then the **Log configuration** page.
- 7. Double click the variables to be recorded and define the log recording procedures.
- 8. Click **Save**: the configuration will be saved but is not yet active.



- 9. Open the Main variables page.
- 10. In the **Probes, status, inputs/outputs** table choose whether to make the variable visible and if so where on the page (probe status

section, general section). Click to compress the table.

- 11. The **Parameters and commands** table is shown: repeat the same operation for the variables listed.
- 12. Click **Save**: the configuration will be saved but is not yet active.



Note: to define the order in which the selected variables are displayed, click **Go to sort page**.

13. Open the **Description list** page.

- 14. Double click the variables to customise the code, description and unit of measure.
- 15. Click **Save**: the configuration will be saved but is not yet active.









Propagating the configuration to identical devices

The settings on the device chosen as the "sample" can be propagated to similar devices. This saves time when setting up complex sites.

1. Under

Configuration→ Site configuration → Copy configuration select the customised device, choose which parts of the configuration to propagate and choose the devices where the settings will be copied.



Note: a complete configuration can be exported and used on another site using the export function

Note: previously saved configurations can be loaded using the **import** function.

- 2. Click Save: the recipient devices will be customised with the specific configuration.
- 3. Restart the engine.

Intel Sea Propage & Selection & a Spanke, also propage and sea Second Second Company and sea Second Secon	-	and a subsect pixel for part approved also	Brann b aran Marina
Interest or game	nen is antigenissen it generatet i bige	the Balmatine (Hell, 74 (and against data	na talait, anaront a anaronte la
8 tota			
	the second s	4	
fgad anfigrations its departed	_	Name and Adv	10-21 10-21
Tapa pultanini sullipuasse pulta Palla pupa			



Displaying device details

Custom settings can be checked after restarting the PlantVisorPRO engine. Wait the required amount of time (based on the parameter recording frequency) to display log data (e.g.: graphs).

- Under Installation → Devices, click the configured device.
- 2. The Main device detail page is shown.
- 3. Click **Read-only variables** to display the probe table.



- Open the **Parameters** page to display all parameters for the device, divided into groups.
- 5. Open the **Alarms** page to display all the active or closed alarms relating to the device.





- 6. The **HACCP graph** and **Log graph** pages behave in the same way.
- The Log graph page, for standard devices, displays the graph area with traces in progress. Under the graph is the list of logged variables. The checked variables are included in the graph.



Note: to add a variable from the log to the list, open the Log configuration page under Device configuration using the Quick Link

- To modify the graph scale, select a different range of display in the table below (Lower limit and Upper limit)
- 9. To add or remove variables from the graph, select/unselect these in the table.
- 10. Click **Plot**: the graph will be updated.

Note: to edit the interval displayed, click **Search** and select the desired duration.



alante reprite	N NEW YORK C. Avenue	NAME AND ADDRESS OF		freedom.			
and the owner where		1000	-	the second s	1000		With Property lies
·	Two spinists inst						
	Supress and		A1 10407-011	411-011-010-0			
A manager	Contraction of the second seco	e	#13-0363 p.b.	21 - anni in in di	41.8	-	8.6
And	State of the second sec	-04	149.012.0.04	417,000,000,000	2.0	- 20.0	
C mm(ha)-1	The state						
		1.4	111000	4 1 (100 TO 100)			-
P. minimi i	Manager Street against	10.00	-	and control in pr	-		
Contract of	State and Aspender Ma	4.4	-	the sector shot			-
P	man hard and an and an and		somether.	100000	-		
2 maintain	Free law writers						
P. mainal -	Transformation of						





Programming parametric devices

Parametric device parameters can be edited on just one device and then propagated to devices of the same model.

- Under Installation → Global double click the device.
- 2. The device detail page is shown. Click the **Parameters** page.
- 3. A page is shown for selecting all the categories of parameters available for the device. Click **Refresh** to update the values read by the device.
- 4. To propagate *only* the modified parameters to devices of the same model, first enter the values in the fields.
- Click **Propagate**: a window is displayed for choosing the devices to propagate the values to.
- 6. Choose the devices and click **Set**: the new values are propagated.



Note: "***" indicates that the value cannot be read.



Note: if the text box is empty, the value on the device remains unvaried.



Note: To propagate all parameters to devices of the same model, first click **Copy** and then **Propagate**.



To print the configuration parameters:

under **UPReport** → **Commissioning report**, add the variables to be printed for each model. Click **Print**.



addition and the	Street Street	COLUMN TWO IS NOT	-	0	Contract of the local division of the local	-
n annual l						
COLUMN TWO	-	ACCRECITE ON	a section of the sect			-
***			rectore (hereign lings on hing (h)			
44			10,799 (1024)2 Superior Server (11) 1993, Server 20, 100 (Server Server)			
			andhild foliam Paragraph Aug Inselings			
24		Sales have	dispositivi da begustara - l'inestra	of statements and the Web		
4					C A	-
100					9	
1 -		100.00	Descrizione dispesitive			_
		1	Senapre utraliess ver. 87 - Sistema ri	TM SE (Modbus) - 20		
13 F			Sensore utraless ver. 8P - Sutema rf	TH SE (Modbue) - 21		
÷		0	Sensore wareless ver, \$7 - Sistema rf	TN SE (Modbuel - 22		
		D	Sangers withing our, SP - Sidama r	TH SE (Modbuel) - 23		
			Sensore wareless ver. 87 - Sistema rf	TH SE (Modbus) - 24		
(inc			Sensore usreless ver, 8P - Solema rf	TH SE (Modews) - 25		
			Sansore usraless ver. SP - Sistema r	TH SE (Medbus) - 27		
			Sensore utraless usr. BP - Sistema rf	TH SE (Modeue) - 28		
			Sensore withless ver, 8P - Sistema rf	TH SE (Modbus] - 28		
		0	Sansore wireless ver. 87 - Sistema rf	TH SE (Modeus) - 30		
			Sensore utraless ver. BF - Sidema r	TH SE (Modinus) + 32		
			Sensore unfaless ver. 8P - Subarna rf	TN SE (Modilue) - 32		
		0	Sensore unreless ver. 87 - Sollerna ri	TH SE (Medlect) - 33		
			(*) = set bra			





8 **7 4** 18

Defining access profiles and users

Each user accessing PlantVisorPRO requires a user account.

Users belonging to a certain profile will have access to specific functions (read-only or read/write) and a specific group of devices.

It's recommended to use the default User, Service and Installer profiles provided.

To configure a new account, proceed as follows:



- 1. Open the **Users** page.
- 2. Enter the user name.
- 3. Assign one of the existing profiles.
- 4. Enter the password.
- 5. Click Add: the user is added to the list.

*		2
-		
-		
ana l	Mada para B	
Loss of pages		
2 mente		
D. statut department	Ŧ	
and the second		
and the state of t	S.	
Contract dama	E.	
3	<i>x</i>	
E anata and	स स स स	
-		



Note: If necessary, to customise the profiles

enter **Configuration** → User configuration → Profiles and define a new profile.

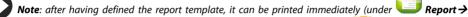


Creating report templates

For a snapshot of site conditions or operations, log or HACCP variables can be printed and/or exported. Reports can be printed on demand or automatically at regular intervals. A report template must first be set in both cases. The template indicates the time period in question (real time or at a set interval), data acquisition frequency (only for period reports) and the variables to be printed/exported.



Note: before defining a report, set the variables to be recorded in logs and recording procedures. See procedure Customising device configuration.



Report archive \rightarrow **Print**) or at regular intervals based on the scheduler (under \implies **Activities** \rightarrow **Activity** scheduler).

 Under Report→ Report management→ Configuration enter the name of the report template (e.g.: power consumption), the interval, layout, sample frequency, output format and whether it's an HACCP report.



Note: if set as an HACCP report, only the variables defined as HACCP in the log configuration are included.

- 2. Click **Devices** or **Device models** and select a model: the list of devices of that type appears in the left column and its log or HACCP variables appear in the one on the right.
- Select all the variables to add to the report and click : the selected variables appear in the Current configuration table. Select another device model and add other variables.
- 4. Click **Add**: the report template is added to the report list.
- 5. To call up a report manually, open the **Report** page and select the template.
- 6. If this report is not real-time, the frequency and period can be set.
- 7. Click Print.





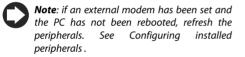


5. CONFIGURING ACTIONS BASED ON ALARMS/EVENTS OR SCHEDULING

Configuring notification channels via fax, SMS, email and relay

PlantVisorPRO can notify maintenance technicians and site managers of any alarms/events or scheduled activities. To do this, set addressees and set and test fax, SMS and email delivery channels. Field relays can also be energised or de-energised in response to an alarm.

- Under Configuration → Peripheral
 I/O configuration → Fax define:
 - a. dialup modes
 - b. one or more fax recipients
- 2. Click Save.







- 3. Under Configuration → Peripheral I/O configuration→ SMS define:
 - c. dialup modes
 - d. one or more SMS recipients
- 4. Click Save.
- 5. Under Configuration → Peripheral I/O configuration → email define:
 - e. delivery modes
 - f. one or more email recipients
- 6. Click Save.









- Under Configuration → Peripheral I/O configuration → Relay for each relay define:
 - g. energising signal value
 - h. type of reset and duration for timed reset.
- 8. Click Save.

For internal relays, active status is set in sate-mode (automatic activation in the event of power failures)



Configuration \rightarrow Peripheral

- i. Choose the type of peripheral to test.
- j. Choose a recipient.
- k. Click **Test**: the fax, SMS or email is sent to the recipient.



 Under Alarms/events → Events list check the tests results.

nunco	-	in the	and the		
				1.0	No. of Concession, Name
field story.					_
		10000	Contract of the	No. of Concession, Name of Street, or other	Contract Contract
ment if - but i		10.00	Annal M		
annual bi - had 1			terms and		
Name II - Not J		10.00			
tak monet					
1.000		And store	Contrast .	Concernance of	Sector Sector
R.Md-1-Terraria Milanese Int.		28	Server #		0
Public Step 3 - 1 Committe and and and		1.1	Annal M		12
Poly (marked the second second second		1.00	Percelo Mi		
manual day of 1 - 1 - 1 presents while continue		1 M. C	100-10 B		10.0
month long 2 1 2 Connect downers			Annual Ma		
NAME AND A DESCRIPTION OF TAXABLE PARTY.		13	read at		1 M 1
and the second s		100	ineres al		
NAME AND ADDRESS OF TAXABLE PARTY.			Annal M		10
Road and State of Contract Million and Call		1.0	Annual Ma		
works has a pre-timenth tota service		1.1			10
and the Post of th		1.8			
and the local family of the local		and a second	and a		and the state of the
63	-		Contraction of the second		
	100	100	N		and a second sec
	seconds al-	AND THE REAL PROPERTY AND	PROPERTY APPROPRIATE	-	





and i				
	1000	100	the second second	
	heatte	0		Philade has new ppercent 10000 contracts
and the period	Inpetite		1000 at 100	Orbeite artigenmentes
and the local of	Canal State		1000 M 100	 Without the last over the second second second.
1. des : 1110	institute .		trans an out	Territori urbu meti ter
instal soles."	ingening .	0	television and test	Contrada Configuration Top
anto red-to	Institut		000000	The second
antal women	- battle		1000 Arr. 100	Catalant in Spinster by Catalant Contraction Contraction Contraction Contraction
with a street	instance -		Territory and	If has not see the cost of the set of the se
	-		00000	(ap (0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
0011-00	Taxtine .		marc4.64-100	for the structure to
marrie inder	- insta		international and state	Philade Sales are bed over 12000 20000 are second in COURT INFO THE REPORT
	re-pictures.		0.000	Suprementation and
BALLY COMPANY	Destre			Contract of the Contract of th
101111-1011-0	Institut		1000-0 M-100	If a particular wave have some control providing and provide and provide a particular to a second
Dents teller	C Realize			This is the final state laget cost of 2000 2000 and as
with minn	instance .		10010-01-00	Cartoline units report the
ARTICUSE:	Product 1		Paragetters Parts & Register	Networks: Politica (sea - Witches) - 2
10410. (HR.P.	Danim			The base have a part over 12 Mill 10 Mill when
10010.140.0	. Destine		1000 B 100	Contraction in the second se
	H tradeoli		Protection from 10 Lance	India palante integranda (name neveral (name))
0010,04408	- basine			Saturday or Agreements
100711-14-040				12 Administration wave from a concept (2000) (2000) wave excitation in \$10,000) and (2000) and (2000)





Defining system actions in response to alarms/events

In PlantVisorPRO, the system's automatic response to certain site conditions can be set. To configure these procedures, **rules** need to be defined. A rule features the following elements:

- 1. Action that represents the system's response (send an SMS, fax, email, energise a relay, set a variable, open a window, print a report or alarm row, call remote supervisor).
- 2. A calendar of time bands indicating the times when these functions should be active.
- 3. **Condition** (alarm or event) that represents the site status that triggers the response.



- 2. Click **Add**: the new action is added with a red background, indicating that the action needs to be specified.
- Double click the action: the page of possible actions is shown. Open the required option (e.g.: to send an email, open the email page).
- 4. Double click a recipient in the address book.
- 5. Click to add this to the email recipients.
- 6. Click Save.



2000 2010 2011 2011	
Aphanet Reint_007	
12100419 (22100109) 8/10(2 - 40003) 9 - 4	
Areas: Million	
faith faith	



<u>CAREL</u>



- 9. Click to add the time band.
- 10. Repeat to add the number of time bands needed.
- 11. Click **Add**: the calendar is added to the list of calendars.



Note: different notifications can be set according to the time band. For example, an SMS can be sent for an alarm or event during business hours and a FAX when closed.



Note: a calendar is made up of one or more time bands (i.e. weekly, from Monday to Friday, first time band: 8.30-12.30, second time band: 15.30-19.30).



Note: the calendar can be recurrent (i.e. set holidays) or occasional (i.e. holidays without set dates).

V 10					10 III III III III III III III III III I
	, waxes		June 1		+
INC. INCOME.			6217		
and and a second second			Second Second		194
SECON MONTHS	and the second sec		Servers .		
Pro-Ko-C/10	A LOD DATES		Street.		
Transfer Street			income.		
1410 1.144			No.		
And Address of the Ad			Dark spins		
Taxa Circu					
(married and the second		1			
faer .					
	dama (in Million Mi				
Content of		H.H			
			Conception of Street	100	0
				162	and a second
	and the second se		STATISTICS.	the second s	







- Under Activities → Alarm and event management → Alarm conditions enter the name of the alarm condition (e.g.: "no showcase communication ").
- 13. Choose the device and the alarm variable to be checked.
- 14. Click to add the variable.
- 15. Repeat to add the number of variables that need to be checked.
- 16. Click **Add**: the new condition is added to the list of conditions.



Warning: the message area shows a notification requiring the engine to be restarted and the direct command to do so. This means PlantVisorPRO needs to be restarted to make the changes effective.



Note: to set a single rule for all site alarm conditions, select **All alarms**.

Note: set a rule for all alarm conditions based on priority, select the priority to be managed under **Priority**.

- Under Activities → Alarm and event management→ Rules enter the name of the rule (e.g.: "email no showcase communication").
- 18. Choose the alarm condition or event (e.g.: "No showcase communication ").
- 19. Choose the time band in which the action is enabled (e.g.: "dayshift weekdays").
- 20. Choose the action (e.g.: "email to service")
- 21. Define the delay for the action
- 22. Enable the rule
- 23. Click Add: the new rule is added to the list.
- 24. Click Save.
- 25. Restart the engine.



the lease of the lease of	1940 d #801114 mil.	4. 10/224 1			12.1.1.1.1.1.1
	ALC: NO.	A 4 57 1 10 10	and the second se	Prove di Name	
	6001_0**.0**	14.00	direct (dates and a	
	App21, (A., (A)) App21, (A), (A)	TUP:	Allowed Street	Association in the second	
	1000 (M-)-	11.0*		Test of	
	100-11.0PE.00-	0.0	dented.	free att, 314	
	feest, /1, #1		0.000 C	5 March 1 (1974	
	hamiles, h.				2
		. .			
-	8 · 100				
	-				

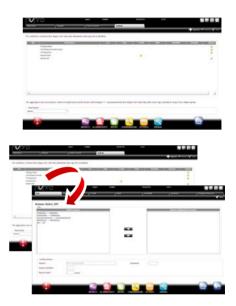


Defining scheduled actions

In PlantVisorPRO actions to be performed periodically can be configured. To configure these actions, **rules** need to be defined. A rule features the following elements:

- 1. **Action** that represents the system's response (send an SMS, fax, email, energise a relay, set a variable, open a window, print a report or alarm row, call remote supervisor).
- 2. A calendar of time bands indicating the times when these actions should be performed.
- Under Activities → Activity scheduler → Actions enter the name of the action (e.g.: "Power consumption report").
- 2. Click **Add**: the new action is added with a red background, indicating that the action needs to be specified.
- 3. Double click the action: the page of possible actions is shown. Open the required option (e.g.: to periodically print a report, open the **Report** page, choose the report template and then save).

Note: to configure a sign-of-life, simply set a periodical action to a recipient in the address book.







- (Carl
- Under → Activities → Activity scheduler
 → Time bands enter the name of the calendar (e.g.: "Every morning"), the time when action must be performed.
- 5. Click to add the time band.
- 6. Repeat to add the number of time bands needed. The action will be performed once in each time band.
- 7. Click **Add**: the calendar is added to the list.

Note: a calendar is made up of one or more time bands (i.e. weekly, from Monday to Friday, first time band: 8.30-12.30, second time band: 15.30-19.30).

 \mathbf{O}

Note: the calendar can be recurrent (i.e. set holidays) or occasional (i.e. holidays without set dates).



- Under Activities → Activity scheduler
 → Rules enter the name of the rule (e.g.: "Daily power consumption report").
- 9. Choose the time band in which the action will be performed (e.g.: "Every morning").
- 10. Choose the action (e.g.: "Power consumption report")
- 11. Enable the rule
- 12. Click **Add**: the new rule is added to the list.
- 13. Click Save.
- 14. Restart the engine.



-	Auge .			
				the second second
ie pet 1 i m et	and the statement of th			
Contraction in the	and the second se	and the second se	a la companya da companya d	1000.01.000
*	Company		configuration.	
*		Transformer and	- Charlense (
-	and the		The state of the	1.0
-	and the second	concerning of the		
	In the American States	A reported approved lightly proposed	proprietable and the second	
	Creater.	CONTRACT Second	Contraction of the	
	×			
1 h		and the second second second	17000	





Site calendar

By accessing Activities \rightarrow Site calendar groups of instruments can be defined for control and setting scheduled activities together.

- Under enter the name of the group, indicate the category of controller and select the devices making up the group.
- 2. click + Add to create a new group
- under Activities → Activity scheduler
 → Scheduler select the category being configured and Standard to set weekly scheduling.
- click for the day and the group being configured.
- 5. in the window enter the activation time band and any value to be set for the entire group.
- 6. Repeat the operation for all the time bands in each group for each day of the week.
- When configuration has been completed click Save.
- Notice set the same configuration for other days of the week, click on the "source" day

and 🛅 on the "target" days.

Not configure a special schedule for an

individual day, under $\stackrel{\text{\tiny eff}}{\longrightarrow}$ Activities \rightarrow Activity scheduler \rightarrow Scheduler Exceptions indicate the special day and then complete the configuration.







6. IMPROVING SECURITY

Configuring guardianPRO

Site supervision security is guaranteed by guardianPRO, which works in tandem with PlantVisorPRO and ensures correct operation.

Specifically, it uses privileged notification channels to warn whether all set peripherals are on and if the PC is under conditions of stress by default. When appropriately set it can also warn whether certain alarms were recognised within a certain time period or if certain variables changed in a certain period of time.



Warning: the message area shows a notification requiring the engine to be restarted and the direct command to do so. This means PlantVisorPRO needs to be restarted to make the changes effective.

	funcia dent	and the second second	1		
capita anchesia di Aspensi		ais period by store			
to all diffe tribute &	production and pro-		the starts in a solution of supervised		
		and bet of a band of	bies of an		- 4
- Contract	_	and a second	And address of the second second		
-		and the second s			
	- 10	- med			- /
100	178	(Mark)		0	
	344	1000		11	
A lotted per lot. Tender .	and on the other				
1 110					
- promotion					
					100

- Under Configuration → System pages → guardianPRO click Enable notifications and select the recipients for the notifications from the table
- 2. Click Save.
- 3. As an optional configuration, control of active alarms and **Verify probe verification** can also be enabled.

Radio Series and particularity	-	D and state and		
E since and a				
An Alteria Martin	intraductory .	1 60	in, there we being	- desired
Post - in 182 Total - contraction (contraction)				
Hard Street				
Annual instantion		_		





Note: the guardianPRO signals should be enabled on all available notification channels.

Note: to configure the active alarm control

criteria, under Configuration → Site configuration → Alarm safety choose, for each alarm priority, whether the alarms can be acknowledged by users with suitable authorisation, how long the alarms remain active (without being reset and acknowledged) before guardianPRO sends a signal.



Note: if guardianPRO is not configured (see the previous steps in this procedure), it will be activated with the default configuration.

4. Restart the engine.



7. CUSTOMISING THE PLANTVISORPRO INTERFACE

The type of opening page, the logon page background and logo can be changed, and the maximum session duration can be set.



- a. Change logon page image
- b. Change page header logo
- 2. Click Save where necessary.

Gentione Model Ellapor	indifie					
Ramucul modello di deg	position		F	9	z -	
importa modello di dag	positivo da DeviceC	reator (.xml)			22) 	
Importa mappo						
Importa mappe da Lay	pouttiditor (.Jip)				12°	
Importa immagini						ę
* Lascare iuchs per /gel	retriere Trintegine di	adaut (
Cambio il logo nella ten	stata delle pagine				1 12°	
Canthia Finesagine dell	la 'pagina di Logiv'				¥	



Notes:

+040000081 - ver. 2.0- 14/09/2010

Notes:		



Notes:	
	-





CAREL S.p.A.

Via dell'Industria, 11 - 35020 Brugine - Padova (Italy) Tel. (+39) 049.9716611 Fax (+39) 049.9716600 http://www.carel.com - e-mail: carel@carel.com Agenzia / Agency: