

Getting started

Creating a simple OPC Client support application

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1. Introduzione

In this guide we propose, as an example, the design of a simple supervision application with OPC Client support; this example is a little step towards the design of more complex SCADA applications, but it can be useful for anybody who approaches for the first time to a SCADA, and in particular to **Winlog Pro** software, to quickly understand how to communicate with external devices

OPC (OLE for Process Control) is an industry standard created in collaboration with a number of worldwide leading automation hardware and software manufacturers. OPC allows software components such as software connectors to be combined and enables these components to intercommunicate with no need of special adaptions.

Winlog Pro OPC Client driver support data access (DA) to OPC servers DA 1.0 and 2.0; It can connect to local OPC servers through COM object or to remote OPC servers (in the local network) trough DCOM object. In case of remote server, you must ensure that DCOM is properly configured.

DCOMCNFG is a Windows tool that allows users to configure the DCOM settings.Before you can access a COM component via DCOM, you must provide the authentication credentials of a user who has been granted permission to access/launch the component.



Remote OPC Server

DA OPC Server is organized in a structure of groups and items that are directly connected to device or PLC internal variables, so the problem of communication protocol with them is solved by the specific OPC server.

OPC Client communicates with OPC servers always in the same mode without need to know the specific device or PLC communication protocol.

The first thing to do is to install the OPC server on the computer, and configure it defining communication parameters and items (devices read or write variables); Item full name (usually compound by DeviceName+GroupName+ItemId) does not be more than 80 chars.

After that open ProjectManager and create a new project, then select ProjectManager->Configuration->Channel and choose OPC Client protocol and configure it by selecting the computer and OPC server name to connect to

In our example we will use an OPC Server simulator installed in the same Winlog Pro computer; in particular we used DSXP OPC Simulator Ver1.2 by DET Informatica sas, that can be freely downloaded from the website http://www.dsxp.com and can be freely redistributed. This software can simulate variables trends in an easy way.

D5xP0pcSimulator					
Image: Setup Image: Setup	<mark>₩</mark> ide	€) About Exit			
Namespace Clients Log					
Device1	Description:	Internal Alarm Status - Device 1			
	ItemID	Device1.1012			
3015 	Line:	0 Pos.: 0			
3005	Change:	Ascending			
	Min:	0 • • • • • • • • • • • • • • • • • • •			
	Time:	↓ 1000 Err. freq.			
	Value:	True			

OPC Server simulator

Every time you design a new application, it is necessary to know, for each external device, the communication protocol, the address and the list of variables that you want read or write.

We suppose to have to communicate, using an OPC Modbus server, with two devices (Test Device#1 e Test Device#2) whose address are 1 and 2; for each device we will simulate 3 numeric variables (Temp, Sp e Out) and 1 digital variable (Alarm).

We set OPC server simulator to provide these variables as it obtain them, using a Modbus protocol, from two field devices; you can operate in a similar way for each different protocol.

FileName C:\Programmi\DSxP\DSxP0pcSimulator\test_opcdata.xml					B
A < ► H + - ▲					
ItemName	ItemID	Canonical Type	Туре	Description	-
SP 2	Device2.3010	5	Double	Temperature Setpoint - Device 2	
OUT 2	Device2.3015	3	Integer	Control Output Value - Device 2	
ALARM 2	Device2.1012	11	Boolean	Internal Alarm Status - Device 2	
TEMP 2	Device2.3005	5	Double	Tempereature - Device 2	
TEMP 1	Device1.3005	5	Double	Tempereature - Device 1	
SP 1	Device1.3010	5	Double	Temperature Setpoint - Device 1	
OUT 1	Device1.3015	3	Integer	Control Output Value - Device 1	
ALARM 1	Device1.1012	11	Boolean	Internal Alarm Status - Device 1	
Data Other data					
Description Te	emperature Setpoint - De	evice 2			
Line 0 Canonical Data Type Double					
Min 0 Max 0					
V OK X Cancel					

OPC Server simulator configuration

2. Creating the project

To create a new supervision project, it is necessary to use **Project Manager**, the **Winlog Pro** integrated development environment that provides different tools (**Gate Builder**, **Template Builder**, **Code Builder**).

Run Project Manager selecting own icon from Start menu.

Select New from Project menu and insert the project name (for example Test).

77 Project Manager	
File Edit View Project Tools Help	
田田 (Demo) 田田 (Demo) 田田 (Demo) 田田 (Demo)	
New Project	
Name Test	
OK Cancel	

Project creation

In this way you create a tree structure with all supervision project elements.

3. Communication channel configuration

From elements in Configuration folder select Channels.

Define the logic channel 1 to communicate OPC Client support.



Protocol selection

Press button Options.

OPC Client Ver	. 1.01	
Server node	[
OPC Server	DSxPOpcSimulator.TSxOpcSimulator.1	
	Vendor Info: DET DSxP Opc Simulator Version : 3.0.219 DA Version : DA 2 OPC Server	
	Server state : running Start time : 26/05/2006 10.47.39	
	Read from DEVICE C Read from CACHE Cano	

Protocol configuration

Choose the Server node that is the network node on which the OPC server is installed (for example the local computer) and choose the OPC Server between the available ones on the node.



OPC Server network node choice

Select OPC Server	×
E 🧕 This computer — 🔁 DSxP0pcSimulator.TSx0pcSimulator.1	_
	ОК
	Cancel
	-

OPC Server choice

It is also necessary to choose whether to read data directly from devices (Read from DEVICE) or OPC Server cache memory (Read from CACHE)

4. Devices declaration

From elements in Configuration folder select Devices.

Insert Test Device#1 and Test Device#2, respectively at address 1 and 2 on logic channel 1 previously set.

Project Manager		
File Edit View Project Tools	Help	
📽 • 📽 🥵 📽 🖷 •	σγχαμ	
E Gramics Kiln - Forno per cer	amiche (Demo) 📋 Options 📑 Channels 📑 Devices di Filatura (Demo) 📑 Access Groups 📑 Template	
E-up Test		
Configuration		
- Gates	77 Test - Devices	X
	Channel Device Description	
Recipes	1 1 Test Device#1 1 2 Test Device#2	
	1 2 Test Device#2	
Images		Add
	Modify Device	
	1 Channel 2 Device	Modify
	Description	Remove
	Test Device#2	
	Cancel	
1		
	OK Cancel Help	

Devices declaration

5. Creating variables database

Now we can insert the devices variables in gates database

In this example we only consider numeric and digital variables (gates).

Numeric gates include all those variables that refer to an analog quantity (for example measured variables, setpoints, alarm threshold ..) and can be expressed by a byte, a word, a double word, an integer or by a floating-point variable.

Digital gates include all those variables that refer to digital status (for example an alarm conditions, a configuration option, ...) and can be expressed by a single bit.

Sometimes more digital conditions can be gathered in a single numeric variable, but this case will not be explained in this example.

To edit the variables database, you need to run Gate Builder

From Project Manager, select Gates folder and double-click on each of icons (Numeric, Digital, ...).



Variables database creation

Suppose you need to read the following variables (to adapt this example to a real case it is enough to modify the gates details below).

Name	Channel	Device	OPC address*	Variabile type	Gate Type	Unit	Description
TEMP	1	1	Device1.3005	Signed Word	Numeric	°C	Temperature - Measure
SP	1	1	Device1.3010	Signed Word	Numeric	°C	Temperature - Setpoint
OUT	1	1	Device1.3015	Unsigned Word	Numeric	%	Control Output - Value
ALARM	1	1	Device1.1012	Bit	Digital		Internal alarm status
TEMP	1	2	Device2.3005	Signed Word	Numeric	°C	Temperature - Measure
SP	1	2	Device2.3010	Signed Word	Numeric	°C	Temperature - Setpoint
OUT	1	2	Device2.3015	Unsigned Word	Numeric	%	Control Output - Value
ALARM	1	2	Device2.1012	Bit	Digital		Internal alarm status

* OPC address can be already defined in the OPC Server or user defined; it must be no longer than 80 characters (please read the protocol guide in Project Manager Help).

5.1 Numeric variables configuration

Repeat numeric gates configuration for both devices, having care to change device number (Device) and N ID.

Numeric variable TEMP configuration	
Numerical gates	
General Sampling Value Tolerance	
Temp 🗾 Gate ID	Record on DB
1 NID	Writing enabled
Description Temperature - PV - Measured value - Test Device#1	
Access groups	ISE
	Ok Cancel Help

TEMP numeric variable configuration – General folder

Numerical gates				
General Sampling Va	lue Tolerance			
1	Channel -> Protocol :	OPC Client		
Device1.3005			• 🔌	Address
Always	Sample		T	Read block
1	Sample freq. [Sec.]			
	, , <u>(</u>			
			Ok Canc	el Help

TEMP numeric variable configuration – Sampling folder

Click on button ... and choose the variable among the ones available on the OPC Server

OPC Client Ver. 1.01> Select 3	Item		
OPC node : OPC Server : DSxP0pcSimulator.TS: Vendor Info : DET DSxP 0pc Simula			
Path (Branches) Device1 Device2 Device2	Items (Leafs) 1012 3005 3010 3015		
Selected item : Device1.3005	<u> </u>	Cancel	

TEMP numeric variable configuration – variable choice from OPC Server

Numerical gates	
General Sampling Value Tolerance	
0 Min. value	Conversion factor
0 Start value	1 Engineering val. 1
1 Decimal digits	1 Measured val. 2
°C 💽 Measure	1 Engineering val. 2
S_WORD Variable type	
	Ok Cancel Help

TEMP numeric variable configuration – Value folder

Numeric variable SP configuration

Numerical gates	
General Sampling Value Tolerance	
Sp Gate ID Record on DB	
✓ Writing enabled	
Description	
Temperature - SP- Setpoint value - Test Device#1	-
Access groups	
Choose	
Ok Cancel	Help

SP numeric variable configuration – General folder

Numerical gates
General Sampling Value Tolerance
Channel -> Protocol: OPC Client
Device1.3010 💌 🔐 Address
Always Sample Read block
1 Sample freq. [Sec.]
Ok Cancel Help

SP numeric variable configuration – Sampling folder

Numerical gates	
General Sampling Value Tolerance	
0 Min. value 0 Max. value 0 Start value 1 Decimal digits °C Measure	Conversion factor 1 Measured val. 1 1 Engineering val. 1 1 Measured val. 2 1 Engineering val. 2
S_WORD Variable type	
	Ok Cancel Help

SP numeric variable configuration – Value folder

Numeric variable OUT configuration

Numerical gates
General Sampling Value Tolerance
Out Gate ID Record on DB
Writing enabled
1 NID
Description
Control Output - OP - Value - Test Device#1
Access groups
Choose
Ok Cancel Help
Ok Cancel Help

OUT numeric variable configuration – General folder

Numerical gates	
General Sampling Value Tolerance	
1 Channel -> Protocol : OPC Client	
Device1.3015 💌 🛄 🏈 Ad	ddress
Always Sample Re	ead block
1 Sample freq. [Sec.]	
Ok Cancel	Help

 $OUT\ numeric\ variable\ configuration\ -Sampling\ folder$

Numerical gates	
General Sampling Value Tolerance	
Image: Standpring Foreital Company Image: Min. value Image: Max. value Image: Start value </td <td>Conversion factor 1 Measured val. 1 1 Engineering val. 1 1 Measured val. 2 1 Engineering val. 2</td>	Conversion factor 1 Measured val. 1 1 Engineering val. 1 1 Measured val. 2 1 Engineering val. 2
U_WORD Variable type	
	Ok Cancel Help

OUT numeric variable configuration – Value folder

End result

After you have defined all numeric variables, you should see the **Gate Builder** main page similar to the one shown below.

% G	iate B	uilder - te	est											_ 🗆 🗙
File	Edit	View He	lp											
2	-	■ √	*	₿ <mark>n</mark>	Ē.	•	7	È	<u>t</u> .					
	Chan	nel Devic	e Gate ID	NID	Address		Descrip	tion					Measure	Variable type
1	1	1	Temp	1	Device1	.3005	Temper	ature -	PV - M	easured v	alue - Test	Device#1	°C	s word
2	1	1	Sp	1	Device1	.3010	Temper	ature -	SP-Se	tpoint val	ue - Test De	evice#1	°C	S_WORD
3	1	1	Out	1	Device1	.3015	Control	Outpu	t - OP -'	Value - Te	est Device#	1	%	U_WORD
4	1	1	Temp	2	Device2	.3005	Temper	ature -	PV - M	easured v	alue - Test	Device#2	2°C	S_WORD
5	1	1	Sp	2	Device2	.3010	Temper	ature -	SP-Se	tpoint val	ue - Test De	evice#2	°C	S_WORD
6	_1	1	Out	2	Device2	.3015	Control	Outpu	t - OP - '	Value - Te	est Device#	2	%	U_WORD
┫														Þ
Num	erical g	ates												

Numeric variable database

5.2 Digital variables configuration

Repeat numeric gates configuration for both devices, having care to change device number (Device) and N ID.

Digital gates				
General Sampling Value				
Alarm	Gate ID	Record on DB		
	Galeid			
		Writing enabled		
1 NID				
Description				
Internal Alarm Status - Test Device #1				
Access groups				
	Cho	ose		
		[
			Cancel	Help

ALARM digital variable configuration – General folder

Digital gates	
General Sampling Value	
Channel -> Protocol: OPC Client	
Device1.1012	Address
Always Sample	Read block
1 Sample freq. [Sec.]	
	el Help

ALARM digital variable configuration – Sampling folder

Final result

After you have defined all numeric variables, you should see the **Gate Builder** main page similar to the one shown below.

🎢 G	ate Bi	uildeı	r - tes	st								
File	Edit	View	Help)								
2	-		✓	*	Ē	E	•	7	Ř	* *		
	Chan	nel D	evice	Gate ID	N ID	Address		Descrip	ition			
1	1	1		Alarm	1	Device1	.1012	Internal	Alarm	Status -	Test	Device #1
2	1	1		Alarm	2	Device2	2.1012	Internal	Alarm	Status -	Test	Device #2
												•
Digita	il gates	;										

Digital variables database

5.3 Alarms gates configuration

So we have created numeric and digital gates database; now we will create as example an event/alarm gate for each device.

These gates are not read from devices but are software generated and their status wil be displayed in runtime as "event and alarm status" and "event and alarm history".

Name	Condition	Filter time	Message	Registration
Internal_Alarm,1	Alarm, $1 = 1$	10 s	Attention! Internal Alarm Test Device#1	yes
Internal_Alarm,2	Alarm, $2 = 1$	10 s	Attention! Internal Alarm Test Device#2	yes

Let's create alarm gates with the following conditions.

Configuration of alarm gate Internal_Alarm

Event gates	
General Condition Message Class	
Internal_Alarm Gate ID	 ✓ Is Alarm ✓ Need Acknoledge ✓ Record on DB Access group Choose
	Ok Cancel Help

Internal_Alarm ALARM gate configuration – General folder

Event gates	
General Condition Message Class	
Condition gate DIG Type Alarm Gate ID 1 N ID Choose	Condition 1 Value 10 Filter time [Sec.]
	Ok Cancel Help

Internal_Alarm ALARM gate configuration – Condition folder

Event gates				
General Cond	tion Message	Class		,
Message				
Attention! - Ir	iternal Alarm Tes	t Device#1		
	Туре	Gate ID	NID	
ltem 1				Choose
Item 2				Choose
Item 3				Choose
ltem 4				Choose
ltem 5				Choose
ltem 6				Choose
ltem 7				Choose
ltem 8				Choose
			Ok Can	cel 📔 Help 📗

Internal_Alarm ALARM gate configuration –Message folder

Final result

After you have defined all numeric variables, you should see the **Gate Builder** main page similar to the one shown below.

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File	Edit H	elp																			
2	- 🔛	 ✓ 		<mark>∦</mark> [ð	6	•		7	ò	_ ±										
	Gate ID	N	ID	Messac	ie						Туре	Gate ID	N ID	Condition	Value	Filter tim	e [Sec.]	Class 1	Class 2	Is Alarm	Need A
1	Internal	Alarm 1		Attentio	n! - I	nternal	Alarm	Tesl	Devi	ce#1	DIG	Alarm	1	1	1	10				Т	F
2	Internal	Alarm 2		Attentio	n! - I	nternal	Alarm	Tesl	Devi	ce#2	DIG	Alarm	2	1	1	10				T	F
																					F
Even	t gates																				//

Alarm gates database

6. Creating a template

Now supervision network has been set; we have defined the logical channel connected to the OPC Client support; we have linked to this channel two devices using the OPC Server (Test Device#1 e Test Device#2); for both we have declared sampling variables and alarm/event internal variables.

si è caratterizzato il canale logico al quale è stato associato il supporto OPC Client; su questo canale tramite OPC Server si sono collegati due dispositivi

Now it is the moment to build a template for the application.

Select Template folder and create a new template, selecting the item New>File from Edit menu. Rename the just created template using the name Main, do this selecting it and then using Rename item from Edit menu.

🔏 Project Manager		- D ×
File Edit View Project Tools Help		
28 - 器器器器器 電 - じ ズ ×	χαμ	
Ceramics Kiln - Forno per ceramiche (Demo) Spinning machine - Impianto di Filatura (Demo) Test Configuration Gates Code Recipes Recipes Images	No Name Rename File Name Main OK Cancel	

Template creating

Double-clicking on created template, Template Builder start in order to build the graphic page.

6.1 Declaring template variables

First it is necessary to declare which variables we will use in the template; in this example we will use all of them.

Click on button _____ alongside of the Gates item in the *Property Editor* (Property Editor is the window on the left side of the screen that allows to modify template elements properties).

A new windows will appear; press Add gate button, select the first numeric gate and press Ok. Repeat this operation for each numeric, digital and alarm gate that belongs to the application.

🎸 Template Bu File Edit Help	uilder - Test									_1	
	tandard Advanced										
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7 Property Ed Template			Main ' Temp	olate gat	es						
Property	Value		iate	Туре	Name				ld]	
Name	Main	0		NUM	Temp				1	4	
Access group	0	1		NUM NUM	Sp Out				1		5 II
Left	0	3		NUM	Temp					Add gate	J
Тор	0	45		NUM NUM	Sp Out				2 2 2	Delete gate	
Width	480	6		EVN	Internal_	Alarm			1		- 11
Height	308	7		EVN	Internal_	Alarm			2	EditGate	
BkColor	192,192,192									Ottimizza	
Gates	VN,Internal_Alarm,2										-
Open function											
Close function										Ok	
Hidden	False			ates Sel							
Style	Standard				eccion						쓰이
			Тур			Char	nnel	Device			
		ll'L	E	/ent/Alarm	-	All	7	All	- F	Property	
			Nam	ne .	10		Description	2			
				nal_Alarm	1				Alarm Test De	vice#1	
				nal_Alarm	2		Attention! -	Internal /	Alarm Test De	vice#2	
							ОК	Cance	el		

Template variables declaration

6.2 Inserting a Label object

Firstly build a Frame that will contain all the elements that will be inserted later.

To do this, select *Frame* object among the ones on the upper bar (, it is the first on the left) and click on the template, a void rectangle will be displayed.

The next step is to insert into the created frame a static label that is a static text; select Label object among the ones

on the upper bar (**A**), then click into the frame. To modify the text displayed into the object, use Property Editor, click alongside of the property Label and digit TEMPERATURE.

Alongside of just inserted label, position another one to visualise temperature read form the device.

To link the Label to the numeric variable *TEMP*, click on the button ... alongside of the item Gate in Property Editor and select NUM, Temp, 1 among the available gates. Modify in addition the property Label inserting \$5.01f °C.

Every described object can be formatted and placed as you like using Property Editor.

🎸 Template Builde	er - Test		
File Edit Help			
🗋 🚔 🔚 Stand	lard Advanced		
¥ 🖻 🛍 🕞	🗌 🗖 A 💷 🛔	au 🌇 🄜 📓 🖉 💿 🗃 📑 🎯 🖾 🚞 🔛	
🎸 Property Editor		🎸 Main	
Label			
Property	Value		
ID	0		
Left	105	TEMPERATURE %5.01f°C	
Тор	10		
Width	56		
Height	23		
Description			
BkColor	252,209,199		
Cursor	(default)		
TxtColor	0,0,0		
Font	"MS Sans Serif",9,0000		
Gate	NUM,Temp,1		
Label	%5.0lf °C		
Horizontal align	Center		
Vertical align	Center		
Frame	Embossed		
On Click			
On Double Click			-
)			

Label object inserting

6.3 Inserting an Edit object

Insert another Label, positioning it below TEMPERATURE and modify the text in SETPOINT

A control will be inserted that will allow to modify the value of the SP gate and to send it to the device.

Select *Edit* **(abl**) object from tool bar; and, as done before, link it to NUM, Sp, 1 gate using the Property Editor.

🗲 Template Builder - Tes File Edit Help	st					<u>_ 0 ×</u>
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Cursor (del TxtColor 0.0 Font "M	5 5,255,255 fault) 1,0 S Sans Serif'',9,0000 M,Sp,1	Main TEMPERATURE SETPOINT	≈5.0If*C Edit			

Edit object inserting

6.4 Inserting a Gauge object

Insert another Label, positioning it below SETPOINT and modify the text in OUTPUT.

Insert now a *Gauge* object () alongside of the previous Label; link it to NUM, Out, 1 gate using the Property Editor.

In this way the value of the device output power will be displayed in bar format.



Gauge object inserting

6.5 Inserting a Led object

Insert another Label, positioning it below OUTPUT and modify the text in INTERNAL ALARM.

Insert now a *Led* () .alongside of the previous Label. To "give animation" to the object it is necessary to specify which is the condition that make it change colour; modify Led ON conditions property linking led activation condition to *Internal_Alarm*, *l* (Internal_Alarm, 1 == true) alarm activation. A red led will be shown in presence of the alarm, otherwise led will be green.

🎸 Template Builder	- Test		<u> </u>
File Edit Help	d Advanced		
X 🖻 🛍 🕞 🗆		DI 🖳 🔜 📓 🛛 💌 💿 🗮 📑 🎯 🖾 🗔 🗂	
7 Property Editor		🎸 Main	
Led			
Property	Value		
ID	0		
Left	145	TEMPERATURE %5.0If °C	
Тор	100	SETPOINT Edit	
Width	17		
Height	17		
Description		INTERNAL ALABM	
BkColor	192,192,192		
Cursor	(default)		
Aspetto stato OFF	11		
Aspetto stato ON	01	Conditions list	<u>_ X</u>
Background color	0,128,128	Condition "EVN,Internal_Alarm,1":6,1 Add	+ 1
Led ON conditions			
		Dele	te
		Edi	+ 1
			<u> </u>
		Ok	
		Cano	el 🛛

Led object inserting

6.6 Completing template

All variables read from device 1 are now displayed; to display also device 2 variables it is enough to select the Frame we have created, copy and paste it in the template. Be careful to not paste it in the source frame; to avoid this mistake click in a free object area of the template before pasting it. Now we have only to modify variables links in Label, Edit, Gauge and Led objects to obtain a supervision interface for the *Test Device #2*.

🎸 Template Builder	- Test								
File Edit Help									
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* 🖻 🛍 📐 🗋 A 🚥 불 💵 👪 🔜 🖼 🖉 💿 🧮 🗒 📧 🗆 🗂									
🎸 Property Editor		🎸 Main							
Led	1								
Property	Value	TEST DEVICE #1	TEST DEVICE #2						
ID	0								
Left	145	TEMPERATURE %5.0If *C	TEMPERATURE %5.0If *C						
Тор	100	SETPOINT Edit	SETPOINT Edit						
Width	17	,							
Height	17		OUTPUT 30%						
Description		INTERNAL ALARM	INTERNAL ALARM						
BkColor	192,192,192								
Cursor	(default)								
Aspetto stato OFF	11								
Aspetto stato ON	01								
Background color	0,128,128								
Led ON conditions	"""EVN,Internal_Alarm,2								
1									

Two devices supervision template

To complete the template, insert now a *BkBitmap* object (background bitmap,) previously created using any graphic design software (for example *Paint*) and saved in project Bitmaps folder.



Background bitmap inserting

7. Winlog Pro code example

Now create the code function that allows showing the template at runtime startup.

In Code folder create a file and rename it Main; opening it, Code Builder starts.

77 Project Manager		- 🗆 🗙
File Edit View Project Tools He	p	
🛛 - 🛱 🛱 🎇 🖓 🗳 - 🔍	· · · · · · · · · · · · · · · · · · ·	
Ecramics Kiln - Forno per ceram Grame Spinning machine - Impianto di I Grame Test Configuration Gates Code	Rename File	
Recipes Reports Template Images	Name Main OK Cancel	
<>		

Creazione di un file di codice

Code Builder is the **Winlog Pro** programming environment; we will use it only to define a function that will open the main template at the application startup.

Copy and paste the following code:



To check syntax of the code use function Check syntax (🕍).

🔏 Code Builder - [Main.wll]	- II X
🔀 Files Edit Search Compile Window Help	_ B ×
🗅 🖆 💷 🕐 🖳 💉 🍾 潹 ≿ 🦖 🥐	
V/ Function called at Winlog startup	<u> </u>
Function void main()	
#Startup	
Information	×
//********	
// Open default page	na
//*************************************	
TPageOpen("Main");	
end	
1: 1 Insert Syntax checking	1.

Code syntax checking

8. Project execution

Our example is complete.

Wire devices to the serial port; to run the project, in **Project Manager** select Execute... from Project menu.

Now we are entering in the "run-time" phase that is application execution mode. **Winlog Pro** samples variables from devices and processes results in graphical representations (trends and template) and in tabular representations (reports and historical data).

At project startup, main template will appear automatically.

From Supervision menu you can display graphical trends; select menu item Charts... and define the group of variables that you want to display as graphical trends.

Again in Supervision menu you can display both the online status (Status>Alarms...) and the story (Historical>Alarms...) of all alarms that have been created with **Gate Builder**.



Project execution