Modern**S**ystems**A**utomation GmbH
Boschstraße 18
D-67346 Speyer
Tel. 06232/318710 Fax. 06232/318720

„VIT for Automation“ Edition WinCC

Its neither a SCADA system nor a new Control software!

But it just transfers “online” the PLC’s information (Symboltable, Datablocks) to Your SCADA-Database

Therefore You do not need anymore

- **to create Tags manually**
- **to find the correct adressinformations**
- **to do manual corrections caused by modified PLC Software**
- **to waste Your time whilst commissioning due to twice used addressinformations or wrong addressinformations**
- **to document Your interface between PLC and SCADA-System**
- **to verify all Tags**

Basically all information you need at the SCADA-System for Visualization and Control , are already defined and documented in your S7-Project. If you want to use these informations at your SCADA-System, you have to create a tag-database with comments, driverinformations and the right addresses –based on your S7-PLC-Code. Normally you get this information by printouts of the S7-Datablocks or by the IO-Symboltable. All these informations have to be entered manually to the SCADA-System by entering it to an excel sheet and import it afterwards. Whilst entering all this informations lots of errors like typing errors or wrong addresses are possible. If all this work is done you have to keep the Tag-Database up to date and consistent to the PLC Code. Its quite normal whilst the engineering phase, to extend S7-Entries to delete them or to drop them. All of us know about the trouble whilst commissioning, caused by not existing PLC-addresses, wrong addresses or twice used addresses or wrong and misleading comments

All informations you need to have are already at the S7-Projectfile, why do we not use them as a common database to create the Tag-Database and to keep it consistent ?

Because you didn’t know since now about VIT for Automation. This tool allows to create , verify and modify the Tag- and Alarmdatabase using directly the S7-Projectfile, without having S7-Engineeringtools installed. Just open with VIT the S7-Projectfile, select the entries at a datablock or the symbollist and drop them to the SCADA-System. Determining the right address and the driversyntax is done by VIT. It was never been easier to analyse the SCADA- and PLC-System, because VIT compares online Tagnames and addressinformations. Everything You need, is the SCADA-System and VIT for Automation.

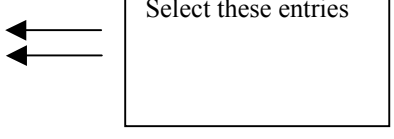
How can I create a Tag for an Input/Output (Symbollist) or an Datablock entry ?

Start VIT and open your S7-Projectfile. Select the symbollist or the desired datablock (you do not need the S7-Programming environment). Thos example uses different entries of the symbollist.

SIMATIC S7-Project

Symboltable

	Symbol	Adresse	Datentyp	Kommentar
1	BoilerPump1Running	I 0.0	BOOL	Pump1 is running
2	BoilerPump2Running	I 1.0	BOOL	Pump2 is running
3	BoilerPump1Setpoint	QW 150	WORD	Analogsetpoint for Pump1
4	BoilerPump2Setpoint	QW 152	WORD	Analogsetpoint for Pump2
5	LocalWaterPump1On	I 0.1	BOOL	local control of W-Pump1
6	LocalWaterpump2On	I 1.1	BOOL	local control of W-Pump2
7	AutomaticManual	M 10.0	BOOL	Operating Mode
8	BoilerPump1MaxPressure	T 10	TIMER	Max Pressure
9	Boiler1	DB 100	DB 100	BoilerSignals

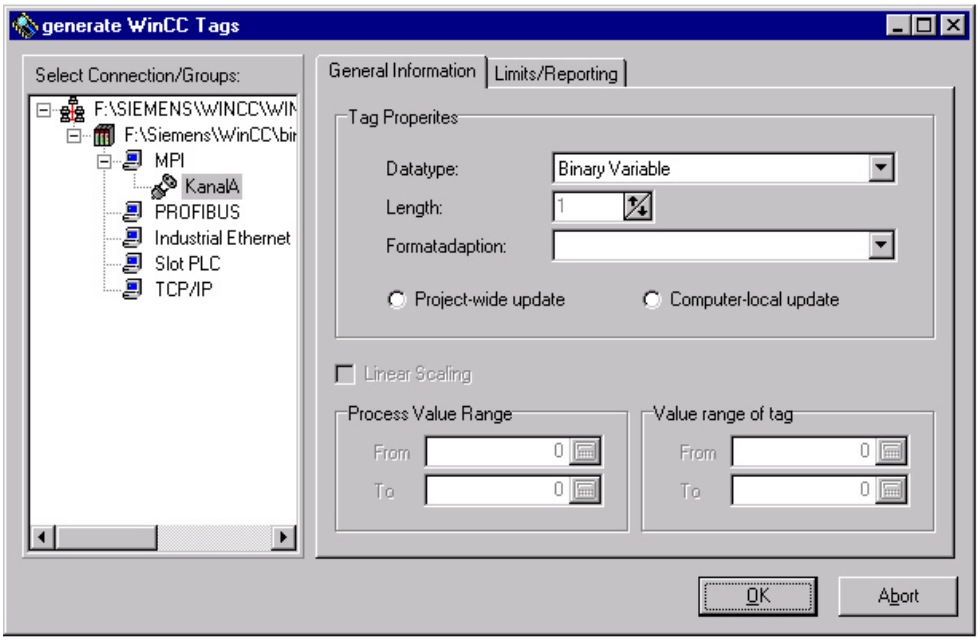


You can also sort all entries by smbolname, address, … or using a special filter to select only entries beginning with „pump“

2. Just click the Menu item „Generate Tags“

At the following dialog you may select your driver channel, enter Min/Max and additional informations. These modifications are used for generating all selected Tags.

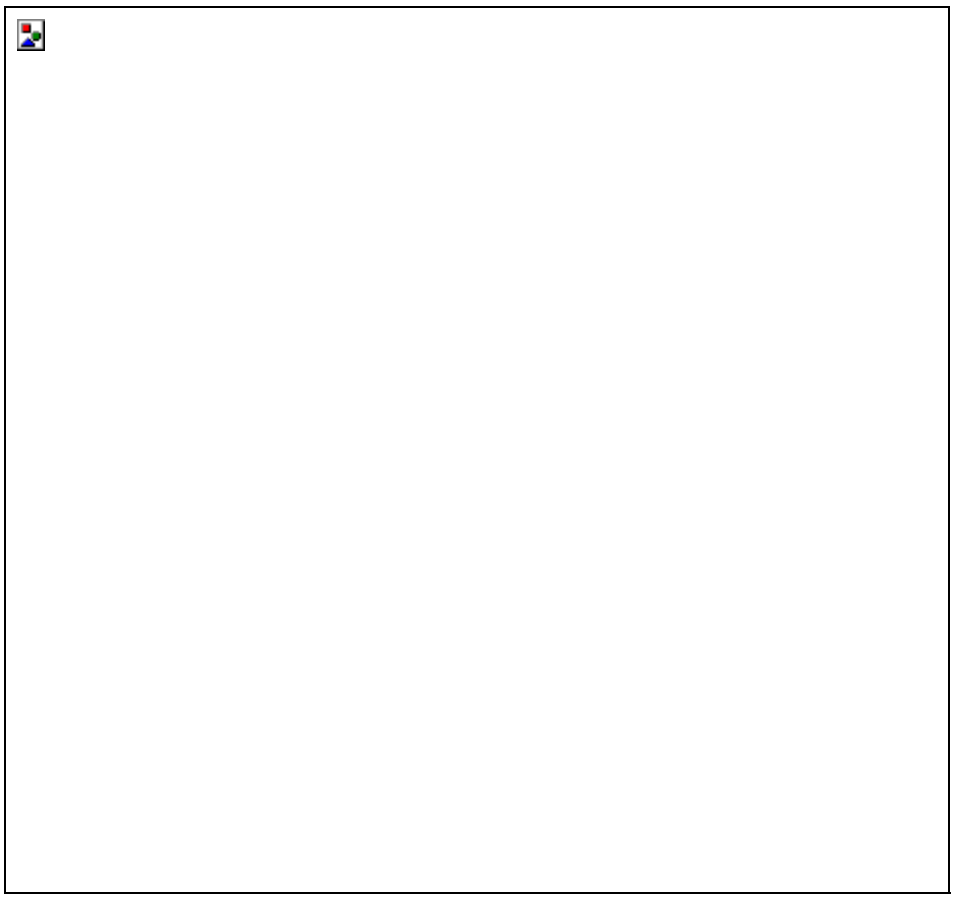
Modern**S**ystems**A**utomation GmbH
Boschstraße 18
D-67346 Speyer
Tel. 06232/318710 Fax. 06232/318720



3.) Just click at O.K. and all selected Tags are created online in Your SCADA-System, without doing any import / exports. The PLC-Names are used as Tagnames. You can also define a präfix or postfix block (for ´example DBxxx, entry of the symbolslist or simple text like “TRIAL”)

Name	Type	Parameters
Local_WaterPump1On	Binary Tag	I0.1
Local_WaterPump2On	Binary Tag	I1.1

Modern**S**ystems**A**utomation GmbH
Boschstraße 18
D-67346 Speyer
Tel. 06232/318710 Fax. 06232/318720



If you have identically units at your plant, you can use the symboltableentry (like Steam1 as a prefix).

What happens, if the Tag already exists ?

You get a message and you can choose to override the address and comment from Your SCADA-Tag. If somebody needs to extend the datablock or to delete entries, it's a easy thing to correct the Tags. Just mark them all and click at "Generate Tags", so all adresses will be corrected

How can I determine differences between PLC and SCADA-System ?

Just select the verify entry from the menubar or click at the verify icon. Vit now compares all Tags and PLC informations. The result is displayed with different colors (Name and address is equal, just name is equal or just address is equal. You also get the information, how many Tags are located at each address. So its very easy to locate not used informations or twice used addresses like the following example shows.
At the bottom window you get detailed information about the tags located at the selected top entry. For the example we created a second tag at the same address as the first one and you will see both tags at the detailed window, also the hit counter shows two entries.

Symbolname	Address	Datatype	Comment	Hits	Comparing Names
AutomaticManual	M 10.0	BOOL	Operating Mode	...	
Boiler1	*DB 100*	*DB 100*	*BoilerSignals*	...	
BoilerPump1MaxPressure	T 10	TIMER	Max Pressure	...	
BoilerPump1Running	I 0.0	BOOL	Pump1 is running	...	
BoilerPump1Setpoint	QW 150	WORD	Analogsetpoint for Pump1	...	
BoilerPump2Running	I 1.0	BOOL	Pump2 is running	...	
BoilerPump2Setpoint	QW 152	WORD	Analogsetpoint for Pump2	...	
Local WaterPump1On	I 0.1	BOOL	local control of W-Pump1	... 1	Local_WaterPump1On - BIT - MPI - I0.1
Local WaterPump2On	I 1.1	BOOL	local control of W-Pump2	... 2	Local_WaterPump2On - BIT - MPI - I1.1

Modern**S**ystems**A**utomation GmbH
Boschstraße 18
D-67346 Speyer
Tel. 06232/318710 Fax. 06232/318720

Tags at the same address or within same Range

Tagname	Comment	Blocktype	Driver	Address	Add.Info
Local_WaterPump2On_1		BIT	MPI	I1.1	
Local_WaterPump2On		BIT	MPI	I1.1	

Whats about documentation?

You can use the standard printout or the export function to export the coparison results to an excel, html or CSV File.

virshort.XLS

	A	B	C	D	E	F	G
1	Symbolname	Address	Datatype	Comment	Hits	Comparing Names	Alarme
2	AutomaticManual	M 10.0	BOOL	Operating Mode			
3	Boiler1	DB 100	DB 100	BoilerSignals			
4	BoilerPump1MaxPressure	T 10	TIMER	Max Pressure			
5	BoilerPump1Running	I 0.0	BOOL	Pump1 is running			
6	BoilerPump1Setpoint	QW 150	WORD	Analogsetpoint for Pump1			
7	BoilerPump2Running	I 1.0	BOOL	Pump2 is running			
8	BoilerPump2Setpoint	QW 152	WORD	Analogsetpoint for Pump2			
9	Local WaterPump1On	I 0.1	BOOL	local control of W-Pump1	1	Local_WaterPump1On - BIT - MPI - I0.1	
10	Local WaterPump2On	I 1.1	BOOL	local control of W-Pump2	2	Local_WaterPump2On - BIT - MPI - I1.1	
11							

How can I create my Tag Logging Entries ?

In the same way as creating tags. You get a dialog similar to the WinCC Dialog, so You can define the message number and the source for the alarmtext (tagname, description from the PLC, ..)

Be interested ?

Get your trial version at www.msautomation.de

If you want more detailed information just call us.
+49 6232 318710 Mr. Orschiedt , Modern Systems Automation GmbH