Interní informace

merbon scada

Implementation guide - simple



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1 Introduction

1.1 Merbon SCADA

Merbon SCADA is a server application used for process visualisation. The package is designed for creating monitor networks of various technologies through telemetric networks and different types of local communication. The system takes advantage of the most modern software tools and communication standards, but incorporates a great deal of verified "technically standard" solutions as well. The modularity of the system enables gradual construction of the dispatching sites from the simplest visualisation of metering data to distributed integrated systems. Particular emphasis is placed on high reliability, fast application engineering and easy settings even for less experienced users.

1.2 Project engineering

This manual is intended to describe the process of implementation and configuration of RcWare Vision project in a Merbon SCADA Server environment. In the first part it shows how to set up automatic project launching and periodic trend data saving in a Merbon DB from a PLC in RcWare Vision. The second part deals with user policies of Merbon SCADA server. The last part describes the export of SCADA project, upload of the project to Merbon SCADA Server, and remote project configuration at the Merbon SCADA Server. The last chapter, "Basic problem diagnostics", helps the user in case of troubles with implementation.





Merbon SCADA Server toplogy

Merbon SCADA Server manages communication with the PLCs. It establishes and checks the communication with PLCs and displays the current values on its web pages. The trend values may be optionally saved in a database: the data may be written directly by the PLCs, or by the Merbon SCADA Server.

The Domain Server is used for definition of users and user groups. The Alarm Server then controls alarm processing, alarm history saving, and sending of alarm messages.



2 RcWare Vision – The Editor

As a compatibility with RcWare Vision projects is required, projects may be exported to Merbon SCADA directly from RcWare Vision. What must be preserved are all principles of datapoint engineering, mapping to the PLC project data, plant graphics engineering, and communication channel definition (see the engineering notes at <u>https://domat-int.com/en/downloads/technical-documentation</u>, *RcWare Vision Function Overview*). This document supposes that the project is fully functional and communicative in the RcWare Vision environment.

There are also parameters which are specific for the RcWare Vision installation rather than for the project. Those parameters which are transferred to the Merbon SCADA Server XML definition files are described below.

2.1 Automatic project start on startup

When the project definition is exported, the *Settings – PC Resources – On* Startup configuration is included, namely *Stations for online communication on program start*. There is a list of all projects which are launched after the Merbon SCADA server service starts. Click the *Use parameters* button to save settings and apply changes after the RcWare Vision restarts.

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Don't ask on application close			
It is necessary to exit RcWare and run	it again to confirm changes and m	ake them active !!	
	🔰 💙 Use parame	ters	V OK X Cancel

PC Resources settings



Check the exported configuration in the *scada\cfg\behaviours.config* file.

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Exported behaviours.config file

The project GUID can be found in the data point editor when unlocked:

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2.2 History

History data may be saved either as text files in the project folder (file history), or in an external database (Merbon DB). Depending on the preferred way, follow one of the configuration below.



2.2.1 Merbon DB

If there is a Merbon DB installed in the Merbon SCADA site, the following configuration must be set up. Configure the parameters in the *Settings – SQL Server Settings* dialogue, see Merbon DB installation notes.

SQL server settings		×
☐ Read data from S ▼ S	QL server 🔽 Read data from Re ave data to selected server	Ware DB server Prefer reading from file
Computer name or IP address http://localhost:9876/RcW/ Login name admin Password ** Client ID Client ID Use http proxy HTTP Proxy HTTP Proxy Http proxy user Http proxy password	s areDbAccess Server response timeout [ms] 120000 Values count in one save 1000 Values count in one reading cycle 5000 Data dump limit 50000 Max. log file size (kB) 500000 Test	Saved stations ✓ Save only selected stations 2018_07_30_TEST Interval:1 min, RT:No, r/w:Yes ALARM_EMAIL_NET4 0 bod0 pro ukládání BARTH Interval:1 min, RT:No, r/w:Yes CZT_D_085 Interval:1 min, RT:No, r/w:Yes MAIL_TEST_INET4 0 bod0 pro ukládání NERBON_SAMPLE_PROJECT Interval:1 min, RT:No FORSCHE_PROSEK Interval:1 min, RT:No, r/w: RUZOVY_DVUR_BROUMOV Interval:1 min, RT:No TEST Interval:1 min, RT:Yes, r/w:No TESTI 0 bod0 pro ukládání
Don't use http proxy for lo	ocal addresses	
Vuse parameters		V OK X Cancel

SQL Server settings

Writing to database from Merbon SCADA

The essential settings are marked red in the image above. This configuration allows Merbon SCADA Server to write to the database. Check the *Read data from RcWare DB server* option. Check also the *Save data to selected server* (which is the Merbon DB server) option if the Merbon SCADA server shall read data from PLCs and save them to the database. The projects concerned must be selected (only those projects are enabled which have at least one data point set as *History-> Long term – SQL database* or *Save on value change*) as well as the required data saving interval. **Every particular project must be selected and saved by the Set button separately.** Saving intervals on the individual datapoints are not taken into account. All history data points have a common saving interval set in the dialogue mentioned above.



Writing to database from PLC

Setting *Data from RT* and *Read-only* is used when the PLC itself writes data to the database directly, i.e. not using RcWare Vision. If PLCs write directly to the database at all projects, the *Save data to selected server* option may be unchecked. **Every particular project must be selected and saved by the Set button separately. The setting applies for this particular project.**

Computer name or IP address refers to the Merbon DB endpoint (= where the Merbon DB is installed). The username and password must be entered as well (default is admin/rw). If there are no special requirements regarding data saving and optimisation, click the *Set default* button and all parameters are automatically set to default values.

Click Use parameters to save the whole setting.

To write data to a database directly from a PLC, a Database Adapter has to be installed.

At <u>http://localhost:11112/admin/#/login</u> (login: admin, heslo: rw) create a user for saving data from the PLCs.

In IDE, PLC properties – Merbon DB Parameters set up the database adapter URL, TCP port, and credentials of the user which was created in the previous step. See also Merbon IDE Help (Database).



Setup of saving data from a PLC to a database



Then the variable saving must be set in IDE – see Merbon IDE help (press F1) – Process station... - Saving data in a database.

In the IDE, the variables to be written to history must be set. After this, the Solution must be compiled in order to update the .vlist file (the file which describes mapping of variables in IDE).

In RcWare, unlock the data file (padlock icon) and select the datapoints to be written to history. In the **Edit** menu select **Group functions**.

RcWare Computer: HONZAV-NNB	Registration: DOMAT -	testy - [MERBON_SAMPLE_	ROJECTeditor[C:\RcWare\DATA\MERBON_SAMPLE_PROJECT\]]
View Communication Settings	Window Access	Operator File transfers	Tagging Edit Help
	۹	🗮 🎛 🛛 🗮 🏫 📑	🕫 Off- Group functions Ctrl+G
第: 日本国 ほぼ	1 2010 10:52 29	1 2022 10 07 25	Back up parameters of selected DP
	tualization time	lerbon_Sample_Project_R/	Delete data point Del
Th 13.0 Th 13.0 Th 13.0	.2022 15:54:48 😭 🔶 .2022 15:54:48 😭 🌩 .2022 15:54:48 😭 🜩	Teplota - výst. z kotle Teplota - zpát. do kotle Teplota - prostor kotelna	Copy tagged DP to clipboard Ctrl+C Paste DP from clipboard Ctrl+V Paste DP from clipboard, no renumbering
Th 01.1 Th 01.1 Th 01.1	.2018 10:52:34 😭 🗭 .2018 10:52:34 😭 Al .2018 10:52:34 😭 Al	Alr nizka_tepl_TV ir vysoka_tepl_TV ir vysoka_tepl_prost	Paste DP from clipboard, no renumbering, keep GUID Move tagged DP behind cursor Ctrl+X
Th 01.1 Th 01.1 Th 01.1 Th 01.1 Th 01.1	.2018 10:52:34 😭 Al .2018 10:52:34 😭 Al .2018 10:52:34 😭 Al .2018 10:52:34 😭 Al	ir nizky_tlak Ir vysoky_tlak Ir CO_1st Ir CO_2st	A Tagged DP renumbering C Create new GUID IDs at tagged DPs A M Import from *.DTR file (RcWare DOS)
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Th 01.11 Th 01.11 Th 01.11	.2018 10:52:34 😭 Al .2018 10:52:34 😭 Al	Ir PORUCHA_det_plyn Ir TL_STOP	ALARM A Potvrd Smaz

Group editing of data points

In the Group editing, select the **SSCP Driver** tab. Check the **Update from file** option, and optionally **Set CommUID to 0 for not foud variables** if there are some variables to be identified which do not exist in the IDE anymore. Then click the "…" button and select the .vlist file (its name must **not** contain " *utf8*") from the Merbon IDE project folder. Finally, check the **RtID** checkbox, and fill in the history runtime identification string which must match with that defined in the IDE (in PLC properties). Check **Rt History** and **Use RT History**.



Eunctions for gr	roup data points' parameters settings	— C	x c
Staefa Simatic Dependencies and b SSCP driver SoftF	Mbus Modicon Adam AMiT TECO Electricity Ups Jocking Alarms History <u>C</u> ommunication DP inputs/outputs RcWa PLC Link OPC Client SAIA SAIA_EX Modbus TCP Landis & Gyr	BACnet are OPC Serve Rvd & Gyr	Linde er Script SAUTER
Set CommUID	Value 0 Replace string in name for Update from file C:\Programy\IDE2\proj\serial2\bin\PLC_d2c717f0.9 Set CommUID to 0 for not found variables PLC123		
 ✓ RT History ✓ System time ✓ Slave Id ✓ Set 	✓ Use RT history System time		
🧶 📃 🚀 Nu	ull settings		🗸 ОК

Setup of reading history from a database for RcWare data points

The last step is clicking the **Set** button.

After the definition is exported, the configuration can be checked in the file *projects*[*project GUID*].*rcwaredbconfig*:

□ □ □ □ ↓ 40b8e9d6-e008-4015-b2c7-c2305a4a3b92										
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	<u>406</u>	8e9d6-e008-4015-b	2c7-c2305a4a3b92	.data	04/10/	2018 13:26	DATA File		146 KB	
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Exported rcwaredbconfig definition in a file explorer

2.1 File history

If the Merbon DB is not available at the Merbon SCADA installation, history is saved in files (similarly to RcWare Vision). All history data points shall



have the *History -> Long term – monthly files* attribute and required sampling period set.

File history is the main, default way of a history data storage. It is powerful enough for projects sized about 5000...10000 data points and sampling period of 5 minutes and longer. For larger projects and / or more frequent sampling, where reading from files would lag the system, a powerful database is used. All data are saved to history files too by default. (Data may be copied from files to database at any time using a special utility called Data Pump.) If there is a requirement (e.g. to save disk space) not to save history to the history files anymore (so it would only be saved to the database), select *File history for reading only* in the export dialogue.

File history for reading only -> this option is set in the *Export for Merbon* SCADA dialogue. Consider if it is required to save data both to files and to the

database.

SCADA2 Export	×
Export to Mervis SCADA Report	
Basic settings Advanced settings	
Path to create SCADA project C:\vision_data_export Root alam path in AlamServer Path for saving text history files C:\vision_data\ile_history Path for overflow buffers Leave out check before export Create new station GUID on duplicity (saves file) Create new schema GUID on duplicity (saves file) Create inghts Zerate rights Valarm operation [project_name]_RIZENI Zet projects access user rights Use MervisDb driver for all communication parameters: Set energly groups visibility Invisible Load groups visibility Den toreate Re/WareDb v1 definitions Den toreate Bre/WareDb v1 definitions	✓ Export access policy rights RcLink communication with: localhost ✓ V2 drivers ✓ SoftPLCAlarm scripts to SoftPLCAlarmCore ✓ allow "mactive acknowledged" state ✓ set alarm masks ✓ force alarm memory enabled Schema - local station if not found Don't act SQL bistory when only hysteresis selected Fish history read only Check only if you do not want save data to file Frankfer force refresh setting history anymore. Set commercor indication delay (v2 drivers only) 300 300 [sec] ✓ Preserve tab characters in text interfaces' values ✓ Preserve tab characters in text interfaces' values ✓ SCADA server Urit http://localhost.8520 User name: admin Password: "" Project stat/stop timeout: 60 ✓ force stat after upload Delete current values files (.datax) on project stat Export stations separately
Profile: cmbProfile Save profile Load profile	Export all Export selected stations
	▲ Close



Setup of file history as read-only

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📑 Videos												
🏰 Windows (C	:)											

Exported filehistoryconfig file in File explorer

After export, the settings can be checked in the file named *projects* [*project GUID*] [*project GUID.filehistoryconfig*], which contains the path where history shall be saved. (It is defined at the Merbon SCADA export dialogue.)

3 User policy – schemas, editing

3.1 Extension of read / write rights

Merbon User policy allows setup of user rights at several levels. There are user rights to:

- Projects
- Schemas (plant graphics)
- Data point groups (as configured and seen in RcWare Vision)
- Read / write -> data points in a particular project
- Data point table / schemas / graphs view

To access projects and schemas, the user rights need not to be specified, as all users are allowed to access all schems and projects. The users only need to have granted rights to read, or to read and write.

All projects are exported and uploaded to the server using the standard way of engineering, see below. Users and groups are defined at the domain server which can be accessed from a web browser at <u>http://localhost:9696</u>. This port number can be changed if necessary.

Enter the credentials which have been entered at the Merbon SCADA installation procedure, and connect to the Domain server.



Merbon editor	
Username	
Password	
Remember me:	
Log in	

Domain server login

"merb	ON SCADA									G•
Show Dom	ain Details Show User	Show Groups Create User Create Group	Aass Group Add Clear Selection							dormain. admin 🔍
	Role 🔨		Username 🔺		Mail 🔨	Phone 4	^	Description 🔨	Status 🔨	
Filte	f.	Filter		× Filter		Filter	× FI	ter	× Filte	м X
🗖 Stan	dard User	admin					A	dministrator	OF	(
Dom.	ain Admin	domain.admin					D	omain administrator account.	OF	(
Stan	dard User	shorturl					D	efault user used for creating short	t URL addresses OF	(
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Domain server main page

The exported projects have two groups predefined: *ScadaAdmins* and *AllUsers*.

ScadaAdmins:

- Projects all
- Schemas all
- Data point groups all
- Read / write -> data points in a particular project read and write
- Data point table / schemas / graphs view all options

AllUsers:

- Projects all
- Schemas all
- Data point groups all
- Read / write -> data points in a particular project read only
- Data point table / schemas / graphs view all options



New users can be defined by clicking the Create User button and attaching them to *ScadaAdmins* and *AllUsers* groups.

A new user must have his user name defined (*Login*), and password (*Password*). The password must have at least 5 characters, containing at least one small character and one numeral. Items *Name*, *Surname* and *Description* are optional and are used to specify the user in more detail if required.

DEFAULT_DOMAIN		
Login (*):		
Password (*):		
Retype Password (*):		
Password and Retype password must be the same Password must contain at least 5 characters Password must contain minimum one lower case letter Password must contain minimum one digit Password can not contain login name		
Name:		
Surname:		
Description:		
	Create	Close

Definition of a new user in the Domain Server

After a new user is defined, it must be assigned to a group to acquire his access rights. This can be done by two ways:

Add a user to group using the tool panel which is in the *Show users* tab. Go to *Groups* and click *Name* to selct a group. The group will be added by clicking *Add*. All changes must be confirmed by the *Save* button.





Adding a user in a group in User editor

or

- go to *Show groups*, and click the group the user shall be added to. In the tool panel in *Users* click the *Name* field to select a user. Click *Add* to add the user to group. Confirm all changes by clicking *Save*.

m	erbon' scada						G•
	Domain Details Show Users Show Groups Create User Create Group Mass Group Add Clear Selectiv	an				Acrossic. a	edmin 🔍
	Name 🔨	Description A	Status 🔨	Group members role 🔨	Group Informat	tion	-
	Filter ×	Fitter ×	Filter ×	Filter ×	User Members.	Standard User	•
	dministrators	Administrators	OK	Standard User	Name (*) Description	Alarm server administrators Users that can administer the a	alarm se
C	larm server administrators	Users that can administer the alarm server.	ок	Standard User	Status	Ok	
۰0	larm server impersonators	Users that can call alarm server functions on behalf of somebody else.	ок	Standard User	Users		-
	llUsers		OK	Standard User	domain.admin		Add
	Iomain administrators	Users that can edit all information in the domain.	ОК	Standard User	Permissions		÷
	Iomain viewers	Users that can see all users and groups in the domain.	ОК	Domain Admin			
	cada server administrators	Users that can administer the scada server.	ОК	Standard User			
D 8	cadaAdmins		OK	Standard User			
	cadaSystemEventViewers	ScadaSystemEventViewers	OK	Standard User			
						Save Delete Reload	

Adding a user in a group in Group editor

Then log in to the Merbon SCADA server to check that the rights were applied correctly.





Login to the Merbon SCADA server

3.2 Export of the definition

After all project parameters have been set in RcWare Vision, the definition for Merbon SCADA must be exported. The export dialogue is in *Settings -> Export to SCADA2*.

		1 1	Off-line							
V R. T. M User definition										
SQL server setting	5	×								
SCADA_DEM ** Connection defin	tion	9.2018 15:4	17:25 ch 1 00:00[mm:ss] 00:00[mm:ss]						
RB Tools menu	,			Value		Part Par2	Allock SH HH LH SU EX P	tor. RCAdd	Reg addr sk Sr.	scher
System activities	watch							1.1.0.[0]	1	
								1.1.1.[0]	1	
Export to scadaz.			2.0					[e] 1.1.2[0]	ch1 1	
Create new statio	•		2AP DX	Datast	Court			0 [C] 11 12 [15] met	bon_SCADA_demoltoperv 9/1/0/0 ch 1 FE 1	den
S New technology	chema	-	UN NO	PORVIG	Smac	A 10		0 [6] 1110/15/ama main 117 hostings only	selemmentolydeley Arstetut 1/2/314/0 PF 1	den
Schema pictures	dministration	-	WP	CET				0 C 11111000 dama main 119 int col	eduler, base Topy also 27166710/0 ch 13,0 1	dee
Language setting	and administration		0.010	061	-			0 C 11405 mehor	SCADA demotro real 10/4/0/0 ch 1 1	den
Station statistics		18 real		SET				0 6 1.1.13/15)A demo main 118 anal sch	eduler base TodVake 3/336/12/0 ch 1 1	der
		n	WP					0 6 1.1.5.1151 mebon	SCADA demo.chlazeni 11/1/0/0 ch 1 FE 1	den
 Execute SERVER fr 	inction for ALARM reporting	zadan	21.0 °C		+ INIT			0 e 1.1.6.[15] methon_SCAD	A_demo.tepiota_zadana 12/4/0/0 ch 1 2	den
Show server repo	ts	kance	0.0 °C					0 [C 1.1.7.[15] merbon_SCADA	_demo.teplota_kancelar 13/4/0/0 ch 1 1	den
Allow voice mess	iges	alarmu	VYP	ZAP	VYP			0 E 1.1.8[15] meton_SC	ADA_demo.reset_alamu 14/1/0/0 ch 1 FE 1	der
 Show info about 	inknown SMS messages		-5.0 °C		 INIT 			0 6 1.1.14.[15]n_SCADA_demo.main.t1_e	guithermalcurve.TX1 8941/4/84/0 ch.1 1	
PLC Manipulation	Othe		-15.0 °C		+ INIT			0 6 1.1.15.[15]n_SCADA_demo.main.t1_e	squithermalcurve.FX1 8941/4/48/0 ch.1 1	
Tee manpatone	- Curre	_	90.0 °C		+ INIT			0 6 1.1.16 (15)_SCADA_demo.main.11_eq	uithemalcurve.Ty1 8941/4/100/0 ch.1 1	
Tu 11.09.2018 15:47:2	ekvitema_kotel.ty1		80.0 °C	-	 INIT 			0 E 1.1.17.[15]n_SCADA_demo.main.t1_e	quithemalourve.FY1 8941/4/64/0 ch.1 1	
Tu 11.09.2018 15:47:2	ekvitema_kotel.tx2		5.0 °C		• INIT			0 E 1.1.18[15)n_SCADA_demo.main.t1_e	guthermalicurve. TX2 8941/4/88/0 ch.1 1	
Tu 11.09.2018 15:47:2	ekvitema_kotel.ts2		-5.0 °C		• INIT			0 [C] 1.1.19[15)n_SCADA_demo.main.t1_e	quithemalcurve.Fi/2 8941/4/52/0 ch.1 1	
Tu 11.09.2018 15:47.2	ekvitelina_kotelty2		70.0 °C		* INIT			0 e 1.1.20(15)_SCADA_denia.main11_eq	uthemakurve. 112 894174/104/0 on 1 1	
Tu 11.03.2018 15:47:2	ekvitema_koteLtj2		60.0 C		• INI		<u>₩</u>	0 6 1.1.21.[1531_SCADA_demo.man.ti_e	gamemacuve F12 0341/4/60/0 ch.1	
Tu 11 09 2018 15:47.2	ekvitelina_koteltiu		0.010	-	* 1911			0 C 11 22 15 x SCADA date min 1 a	gunemacuve 1/3 0941/4/52/0 ch 1 1	
Tu 11 00 2010 15 47 2	aludama katalka		ED 0 10		• INIT			0 cl 11 24 HES SCADA demonstration	Allem alcone TV2 0041 (4/100/0 alc 1 1	
Tu 11.09.2018 15:47:2	ekvitema kotel tu3		40.0 °C		+ INT			0 6 1125/15in SCADA demomain(1 e	quitemalouve Fy3 8941/4/72/0 ch 1 1	
Tu 11 09 2018 15:47 2	ekvitema koteltui		25.0 °C		+ INT			0 6 1126 115 n SCADA demo maint1 e	cuithermalicarve TX4 8941/4/96/0 ch 1 1	
Tu 11.09.2018 15:47:2	ekvitema kotel.ts4		15.0 °C		+ INIT			0 6 1.1.27 (15)n SCADA demo.main.t1 e	guithemalcurve.F/4 8941/4/60/0 ch 1 1	
Tu 11.09.2018 15:47:2	ekvitema_koteLty4		40.0 °C	-	+ INIT			0 6 1.1.28 [15]_SCADA_demo.main.t1_eq	uithemskurve. TY4 8941/4/112/0 ch.1 1	
Tu 11.09.2018 15:47:2	ekvitema_kotel.tj4		30.0 °C		+ INIT			0 E 1.1.29.[15]n_SCADA_demo.main.t1_e	quithemalcurve.FY4 8941/4/76/0 ch.1 1	
Tu 11.09.2018 15:47:2	ekvitema_koteLtdy		10.0 °C		+ INIT			0 6 1.1.30.[15]n_SCADA_demo.main.t1_ex	guithermalcurve.TDY 8941/4/80/0 ch.1 1	
Tu 11.09.2018 15:47:2	ekvitema_koteLtdy		0.0 °C		* INIT			0 E 1.1.31.[15]n_SCADA_demo.main.11_e	guithemalcurve.FDY 9941/4/44/0 ch.1 1	
Tu 11.09.2018 15:47:2	🛐 ekvitema_koteLout		65.0 °C					0 C 1.1.32 [15] SCADA_demo.main.11_et	puthermalcurve.Out 8341/4/116/0 ch 1 1	
Tu 11.09.2018 15:47:2	ekvitema_kotely_man_mod	e	Aut.	Man	Aut			0 6 1.1.33 15 bon_SCADA_demo.main.t1	_equithermalcurve.en 8941/1/9/0 ch 1 FE 1	
Tu 11.09.2018 15:47:2	ekvitema_kotel_y_man_val		66.0 °C		+ INIT			0 6 1.1.34 [15]n_SCADA_demo.main.11_ec	puthermalcurve.Out 8941/4/116/0 ch 1 1	
Alams Dependencies between RdWare systems communication	and blocking RdWare OPC Server	History R ights to sche re access po re access po	urning mode Import/Export mas via internet IIS - RoWeb ficy ficy also locally	Export/Interval						

Export to Scada2

3.3 Export dialogue and settings

The Export to Merbon SCADA dialogue is displayed:



CADA2 Export			
xport to Mervis SCADA Report			
Basic settings Communication History	settings Scada server upload Advanced settings Al	arm settings	
Path to create SCADA project	C:\vision_data		
Root alarm path in AlarmServer	Imported from RcWare:	Set default	
Path for saving text history files	C:\vision_data\scada		
Path for overflow buffers			
Leave out check before export Create new station GUID on duplic Create new schema GUID on dupl	tity (saves file) icity (saves file)		
User rights			
Create rights Full control [] Full control [] Read only []	project_name]_ RIZENI project_name]_ UDRZBA project_name]_ DOZOR		
Projects domain name	EFAULT_DOMAIN		
Export RC access policy rights			
Set run for exported projects on So	ada server startup emplates		
Export stations separately			
Profile:	Save profile Load profile	Export all	Export selected stations
			V Close

Dialogue for Merbon SCADA export

If a project is exported after all necessary parameters have been set up, the dialogue setting is saved for all following exports. The setting also ccan be saved in profiles – use the "Save profile" button in the lower part of the dialogue. A profile can be read and activated using the "Load profile" button.

Dialogue – Basic settings:

- Path to create SCADA project folder where files with Merbon SCADA projects will be exported (folders *cfg* and *projects*)
- Root alarm path in AlarmServer root folder for tree structure of alarm server in a particular project
- Path for saving text history files in case database is not used for history storage. This path is saved in the config file at every project -> projects\(project GUID)\(project GUID).FILEHISTORYCONFIG
- Leave out check before export check of incompatible settings. If you are sure that it is not necessary, it can be left out. Checking of large project takes more time. If there is incompatibility and the project is not checked, the conversion process returns errors and terminates.

Note: Leaving out check before export can also be useful for more exact specification of an error in the Merbon SCADA server log when attempting to start the service.

- Create new Station GUID on duplicity (saves file) on duplicity, the GUID in the RcWare Vision project is changed as well.
- 17 07/2022 This document is current for version Merbon SCADA installer 1.8.1.



- Create new schema GUID on duplicity (saves file) on duplicity, the schema GUID in the RcWare Vision project is changed as well.
- Create rights:
 - Full control [project_name_RIZENI]
 - Alarm operation [project_name_UDRZBA]
 - Read only [project_name_DOZOR]

User groups are created (see 8.2) and exported as far as to the project (*cfg**projects.config*) and schema

(projects\project GUID\schemas\schemas.config) level and data points.

- Project domain name Domain name at the Domain server. Must be kept as is
 _____DEFAULT_DOMAIN".
- Set projects access user rights in projects.config this options allows creation of user groups Full control, Alarm operation and Read only in exported projects.
- Export access policy rights Export of rights to schemas and graph templates (predefined view in RcWare Vision).projects\project GUID \schemas\schemas.config
- Set run for exported projects on SCADA server startup always let active. After SCADA server (re)start, projects will start communication to PLCs, which is required in 99 % of installations.
- **Do not export schemas and graph templates** only the datapoint table will be exported. This is useful if only the datapoint table shall be updated and there are big schemas (plant graphics, floor plans) in the project, which would slow down the export.
- Export stations separately at sites with large number of projects (100+) the projects can not be exported all at once. (RcWare Vision would consume too much resources and Windows would shut it down.) Check this to export projects one after another and save Windows resources.
 Note that if there are projects exported which contain schemas with references to other projects, this option must be NOT checked for successfull export. (= All projects must be exported together.)
- **Export all...** all projects contained in the DATA folder in the RcWare Vision installation will be exported
- Export selected stations only projects selected by user will be exported.

Dialogue – Communication:



DA2 Export		
port to Mervis SCADA Benort		
asic settings		
V2 drivers		
Transfer force refresh setting		
Set comm error indication delay (v2 drivers only)		
[300 [sec]		
Use port mapping file		
MervisDb driver		
Use MervisDb driver for communication		
parameters:	(if empty, MervisDb driver is used for all	communication)
channels to use MervisDb driver in separate stations. Example: [DEM0,1,5,12];[TEST,3,8]		
Allow write from MervisDb driver History data is saved from PLC		
OPC UA driver		
Use OpcUa driver for datapoints with OPC communication		
parameters: [DEMO cislo_hw_kanalu id_opc_serveru opc_items_prefix];[TEST cislo_hw_kanalu id_opc_serv	erulopc_items_prefix]	
format: [projects_name]hw_channel_nolopc_server_urilopc_items_prefix user_name password asy	vnc_mode];[]]	
RcLink driver		
RcLink communication with: localhost		
ofile: Save profile Load profile	Export all	Export selected stations
,		

Communication settings

- **V2 drivers** SCADA used different versions of communication drivers (SSCP, SoftPLC link ...) in the past. Now, V2 drivers are used as a standard. For new projects, this option should be checked.
- **Transfer force refresh setting** For SoftPLC Link: If the driver should take the PC time rather than PLC time for datapoint refresh, this is defined in the communication definition data point in RcWare Vision (Force refresh). Check this to take over this setting from the RcWare Vision data file.
- Set comm error indication delay (V2 drivers only) time delay to indicate communication failure at a data point (caused e.g. by a bad communication line)
- Use port mapping file
- Use Mervis DB driver for all communication if the data source for the complete project is a database (the communication with PLCs will not be established at all). SCADA only communicates with the database rather than with PLCs.
 - o Allow writing from Mervis DB driver
 - History data is saved from PLC: PC actively pushes data to the database
- Use OpcUa driver for datapoints with OPC communication this setting is used for internal testing purposes only.

Merbon SCADA does not support OPC communication in the current version.



• **RcLink communication with**: SCADA communicates to a running instance of RcWare Vision rather than direct to PLCs. Here, enter the IP address of the server where RcWare Vision is running.

settings Communication History settings Scada server upload Advanced set	Alarm settings	
B settings Use DB profiles (RcWareDb v2) Create profile for each datapoints group Don't create RcWareDb v1 definitions Force DB saving setting Save to DB Use datapoint's timestamp when saving value Don't set SQL history when only hysteresis selected File history read-only	Use own DB server settings Own DB settings For station: all DB server uri http://localhost:98 Login name Password Client ID RcClient1	76/E sgDbAccess

Dialogue – History settings

History settings dialogue

- Use DB profiles use more databases from a single project. Now not definable in RcWare Vision.
- Force DB saving setting check to overwrite the Save data to selected server in the SQL Server setting dialogue. At the selected points, data will be saved to database.
- Use datapoint timestamp for saving normally, the SCADA server timestamp is used when saving data to database. If this setting is enabled, the datapoint timestamp is used instead.
- **Do not set SQL history when only hysteresis selected** if there is hysteresis history set in the data file, these data points are saved in database automatically (even if the SQL history tag is not set). To prevent this, check this feature, and only the SQL history tagged data points will be saved to database.
- File history read-only History files can be read, yet not written. Old RcWare Vision history files can be used and copied to the respective Merbon SCADA folder to display trends recorded in RcWare Vision.



 Use own DB server settings – overrides the DB server settings as in RcWare Vision. Use this when the database settings should not be configured in RcWare.

DA2 Export		
ort to Mervis SCADA Report		
sic settings Communication History settings Scada server upload Advanced settings Alarm settings		
Upload projects to Scada server		
SCADA server		
Uit: http://localhost:8520		
User name: admin		
Password: **		
Project start/stop timeout: 60 + [sec]		
Force project start after upload		
Delete current values files (.datax) on project start		
ofile: Save profile Load profile	Export all	Export selected stations

Upload to SCADA server dialogue

Scada server upload dialogue

- Upload project to SCADA server Fill in URL and credentials to Scada server, and upload projects to this server after conversion. The projects must exist on the SCADA server already (= be defined in projects.config), otherwise the upload fails (see chapter 4).
 - Force project start after upload after project upload the project is launched (LocalRun) regardless of its previous state. If unchecked, the project is set to its previous state.
 - Delete current values files (.datax) on project start the .datax file is deleted when restarting. Not necessary to use at version 1.6.6 and later. This option may be useful at older SCADA versions, where the .datax file may contain out-of-date values, and the changes initiated by user would not be reflected in the datapoint table or schemas after the project is overwritten.

!!!Note!!! If there are user-edited texts in the schemas, the .datax file must NOT be deleted. Otherwise all changes in values made by users during the SCADA project operation would be lost.



Dialogue description – Extended settings (only those settings which now affect the exported project properties are described here)

ADA2 Export		
xport to Mervis SCADA Report		
asic settings Communication History settings Scada server upload Advanced settings Alarm settings		
A Automatically convert stations referenced in schemas		
Schema Local station if not found		
Allow user text edit in schemas		
Schema links manning file		
	1	
	-	
Schemas button style RcWareVision		
Preserve tab characters in text interfaces' values		
Create TimeSpan data point for input variables of "TIME" type (SSCP v2 only)		
Set empty groups visibility		
Load groups to set list from saved headers list		
Create MervisAnalytics configuration		
Save periodical export flag as Energis export tag		
For datapoints with Energis_Node_Id set only		
Profile: Save profile Load profile	Export all	Export selected stations
		Clos

Advanced settings

- Automatically convert stations referenced in schemas this setting is to be let active. If there are references to data points outside of the exported projects in the schemas, connections will be created by exporting .data files from the referenced projects.
- Schema local station if not found: this setting needs not to be enabled at this moment. If a schema contains references to other projects which are not available, the export process tries to find the datapoint in the currently exported project.
- Enable user text editing in schema must be enabled if schemas contain texts to be edited by users when the SCADA service is running (note that the .datax files must NOT be deleted when copying the exported SCADA projects to SCADA server).
- Schema links mapping file
- Schemas button style style of the default look of buttons in the schemas. There are two options:
 - o RcWare Vision standard look with a 3D effect
 - Mervis button is displayed as a square which takes over the colours set up in the schema, which indicates if the button is pressed or not.



- **Preserve tab character in text interfaces values** Fix for a particular case where Tab characters were replaced by space characters unitentionally.
- Create TimeSpan data point for input variables of TIME type (SSCP v2 only) If a TIME value is on a data point input, it will create a TimeSpan data point type rather than take over the RcWare Vision data type
- Set visibility of empty groups:
 - o Invisible the groups are not displayed in the datapoint table
 - Load groups to set list from saved header list the saved header list to display is loaded.

Dialogue description – Alarm settings

a anttinga Communication History	oottingo Coodo oo	ruor unload 🗍 Aduanced eetting	as Alarm settings		
c settings Lommunication History	settings 5 cada se	rver upidad Advanced settini			
SoftPlc/Rt2 alarmy					
SoftPlc/Rt2 alarm skripty na Sol	tPIcAlarmCore				
I allow "inactive acknowledge	d" state				
IV set alarm masks	1				
I force alarm memory enabled					
Rt2 alarm point					
☑ Use Rt2 AlarmPoint DP Core					
✓ set own alarm masks					

Alarm settings

- SoftPLC alarm scripts to SoftPLC AlarmCore check to use alarm scripts with SoftPLC RT or Merbon RT alarms.
- Allow "inactive acknowledge" state check this option so this state (responding Merbon IDE alarm behaviour) will be included in SCADA export.
- Set alarm masks select a file which contains alarms' state text values. RcWare Vision includes two files with CZ/EN text values responding Merbon IDE alarm settings in folder on path RcWare\Utilities\ScadaConverter\Resources by default. The texts can be customized and translated.
- Force alarm memory enabled: "Active alarms" bookmark will include all alarms. This is important setting for correct alarms state icons behaviour as well.



4 Export of SCADA project and upload to Merbon SCADA

If a previous version of a project had been uploaded to the SCADA server before, it is recommended to back it up. See "C:\vision_data\scada\projects".

In the "vision_data" folder there are already uploaded projects.



The vision_data folder

Next, open *Settings -> Export to Scada2* in RcWare Vision. In the SCADA2 Export dialog enter the path for project, history files, and access policies, as described above. The export may be executed for selected projects only, or for all projects in the DATA folder. The export process reports the progress in a text window.

C:\RcWare\Utilities\ScadaConverter\ESG.Vision.Proxy.DataConverter.ConsoleTestHost.exe	-		\times
C\RcWare\Utilites\ScadaConverter\ESG.Vision.Proxy.DataConverter.ConsolFestHost.exe Scada project converting v. 0.9.18.620 Converting files from C:\Apps\RCWare_Vision\RCWare\Export_vision_data\rc_temp\ to C:\Apps\RCWare_Vision\RC ision_data\ - using v2 drivers - using v2 drivers - using softPlc Alarm DP Core - read-only file history - trying to preserve tabs in string interfaces - importing as TimeSpan if source variable is SSCP Time - using v2 drivers - using rkMareVision' schema button style - using rkMareVision's chema button style - reading schema: Vymenik [STANLCE]: Converting schema: Vymenik [STANLCE]: Schema cheves - style - styles - styl	— Ware∖	Export_	× vi
			\sim

Exported SCADA projekt

If the export has been executed successfully, the dialogue returns message *"Data exported"*. Press Enter to complete the export process.

In the exported folder, the project is in two folders: *"projects"* and *"cfg"*. If there have been other projects exported into the same folder before, they can be identified by their unique GUIDs (see 2.5.2) or folder creation date.



📙 🛃 📕 🖛 proj	ects			- 🗆	×
File Home	Share View				~ ?
← → • ↑ <mark> </mark>	> This PC > Windows (C:) > vision_data > scada >	projects >	✓ ♂ Search projects		Ą
📃 Desktop	🖈 ^ Name	Date modified	Туре	Size	
🖊 Downloads	* 12ce38c4-2ef9-42da-9b5c-c287f84a43	11 11/10/2018 15:49	File folder		

Exported SCADA project

📙 🛃 📕 🖛 cf	ġ				- 0	×
File Home	Share View				,	^ ?
Pin to Quick Copy access	Paste ↓ Cut ∞ Copy path ↓ Paste shortcut	Move Copy to * to *	New item ▼ The sy access ▼ Folder	Properties	Select all Select none Invert selection	
Cli	pboard	Organise	New	Open	Select	
\leftrightarrow \rightarrow \checkmark \uparrow	→ This PC → Windows	(C:) > vision_data > _export > so	cada > cfg	✓ Ö Search of	ġ	9
💻 This PC	^ Name	^	Date modified	Туре	Size	
💼 3D Objects	🔛 beha	iviors.config	04/10/2018 13:20	6 CONFIG File	1 K	В
Desktop	📔 proj	ects.config	04/10/2018 13:20	6 CONFIG File	5 K	В
🔮 Documents						
Downloads						

Exported config files

Copy the project folder (*Exported SCADA project* image) to *"C:\vision_data\scada\projects"* and the configuration files (*Exported config files*) to *"C:\vision_data\scada\cfg"*. The result should be similar to the screenshot below.



cfg and projects folders in vision_data

Then restart the Merbon SCADA service "Merbon SCADA # MerbonSCADAServer".

The service ca	an be	e restarted from th	e M	erbon SCADA installe	er in	the Services
panel by click	ing t	the Restart button	C	, or the Stop button		and then the
Start button		at the Merbon SCA	4DA	# MerbonSCADASer	<i>ver</i> s	ervice.



<	Services						_	×
Se	ervice name	Status	PID	Version	Package Version	Actions	Log	_
D	S2Database	Running	3844	10.2.15	1.0.0.20180723			
М	Merbon SCADA # MerbonSCADAServer		17368	0.9.0	2.0.0.20180723			
м	1erbon.NetCoreServiceShell Server # MerbonDomainServer2	Running	7868	1.0.0	2.0.0.20180723			

Merbon SCADA # MerbonSCADAServer service in the installer

Another way to restart the service is to open the PC application *Services* and locate the *Merbon SCADA # MerbonSCADAServer* service. Right click the service and select *Restart*.



Merbon SCADA # MerbonSCADAServer service in the Services application

Log in to Merbon SCADA to check the user rights policy for every user.



5 Basic problem diagnostics

- Service running/stopped (list of all Domain Server/SCADA Server services)
 Reasons why the SCADA Server service does not start:
 - Licence problem listed in the SCADA server log together with the particular problem description (bad HW imprint, licence timeout, maximum datapoint number exceeded)
 - XML error (list in a log where the service is installed or in the command line if launched from a command line)
 - Check the service settings so that it starts automatically after crashing
 - Duplicate project GUID (in case not all projects have been exported or checked)
 - Service is running, login not possible the login attribute is displayed, but login is not possible
 - SCADA server is not responding: big size or number of projects; large projects take more time to start (very big projects take minutes)
 - Wrong username or password: definitely check if the name and password are correct. If you are 100 % sure, try Ctrl-F5 at the login page. If the page contents disappears, maybe the SCADA web server is not running (check in the IIS).
 - \circ Duplicate binding of TCP port :80 on the SCADA Server web in IIS:
 - After Windows upgrade, it may happen tat a duplicate binding to port 80 is created in the SCADA server web in IIS. The duplicate binding mist be removed for the SCADA server to work correctly:
 - Start the IIS Manager. A shortcut can also be found here: C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Administrative Tools



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Photos								
👿 iis.png	>							

Searching the IIS

If there is a black square at the web icon, the web is stopped.

💐 Internet Information Services (IIS) Mana	iger	- 🗆 X
← → CESKTOP-2MTDK64	→ Sites → MerbonScada_Web →	😰 🛛 🟠 🔞 🗸
File View Help		
File View Help Connections	WerbonScada_Web Home Filter	Actions
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neady		1.::

The IIS dialogue

In the *Connections* section, select the MerbonScada_Web, and in the right part select *Bindings*.



→ OESKTOP-2MTDK64	Sites MerbonScada_Web	😰 🖂 😭 🔞
<u>F</u> ile <u>V</u> iew <u>H</u> elp		
onnections DESKTOP-2MTDK64 (AzureAD\Pet Application Pools Call Sites Call Content of the Site Call Content of the Sit	MerbonScada_Web Home Filter Image: Show All Group by: Area Image: Show All ASP.NET Image: Show All Group by: Area Image: Show All Image: Show All Asp.NET Image: Show All Image: Show All Group by: Area Image: Show All <	Actions Explore Edit Permissions Edit Site Bindings Basic Settings View Applications View Virtual Directories Manage Website Restart Start Start
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>	Features View	

• Now select the duplicate binding and click *Remove*.

	νοπ	IP Address	Binding Informa		Add
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					Remove
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The bindings management dialogue

• The last step is to start the web – *Start*.





Starting the web service

- Domain Server not started user can not log in
- A project is not communicating:
 - Always check if all projects are running in Merbon SCADA after upload: Project statistics (find the projects which need further examination)
 - Check the cfg->behaviors file, if the project with the particular GUID is in the list of projects to start automatically
 - Check of connection channel +
 - Check in the project statistics the total number of data points, and compare them with licenced datapoints (in RcWare Ctrl-T / Ctrl-U or in the Stations statistics) and learn for how many datapoints the Merbon SCADA licence is installed. The last project which exceeds the datapoint limit is not started. The "number of licensed data points exceeded" message is displayed in log / command line.

• Some schemas are not visible:

- Possible duplicate schems GUIDs schemas not exported (the project was not checked or warning was ignored). To be checked in the project export folder - have all schemas been exported?
- User policy set incorrectly (if "Export user policy" checked at export)
 Check in RcWare Vision for every project concerned.
- A group of data points is not communicating in Merbon SCADA, while everything is OK in RcWare Vision:
 - The reason may be that Merbon SCADA communicates using groups. If any data point has a configuration error, the whole group containing



this data point has a communication error. Please check if all data points are really communicating in RcWare Vision even if the group reading is off (setup in the communication data point – the key icon). Only data points which are set up incorrectly should display as in comm failure.

- Mostly, special data point types show problems, such as TPG, scripts, PLC time setup, etc. A data point may contain a script which is not supported in Merbon SCADA, a TPG may contain invalid exceptions, or the data type may overflow if its value is too high.
- When exporting alarms from RcWare there is a dialogue "Error during retrieving configuration":
 - Check if the alarm export form really contains the correct user name and password. Next, check in Domain server if the user is assigned to the *Alarm server administrators* group (see the Implementation manual).
 - If the problem persists, stop the Merbon Alarm server service and open the folder C:\Apps\Merbon\Alarm Server Warehouse. Open folders cfg and history and delete all files they contain. Next, start the Merbon Alarm server service, restart RcWare Vision and try if the alarm export is working properly.
 - If the above steps do not help and the export still does not work, reinstall the Merbon Alarm server. Use Merbon SCADA installer to uninstall the Merbon Alarm server service. Then open C:\Apps\Merbon\ and delete all folders which were created by the Alarm server installer:
 - Merbon Alarm Server,
 - Merbon Messaging,
 - Alarm Server Bridge,
 - Alarm Server Bridge Logs,
 - Alarm Server Warehouse.
 - Then reinstall the service and proceed again with the export.

The most frequent errors that can be found in the SCADA server log (C:\Apps\Merbon\Merbon SCADA Server Logs):

• HW fingerprint in the licence does not fit the hardware where SCADA runs – SCADA server service impossible to start

[Critical] - No valid license found

[Critical] - License module checks: ESG.SCADA.Server.Host ->

System.UnauthorizedAccessException: Incorrect HW Win32_NetworkAdapterConfiguration-MACAddress ...

This happens then the hardware information read from the machine does not match the information contained in the activated licence file. The reasons may be as follows:

- 1) The .licact file used when installing the software was activated with a hardware fingerprint created on another machine than the SCADA server is running.
- 2) One or more parameters in the system had changed, or a piece of hardware was replaced (processor, network card, motherboard, etc.)



 SCADA is operated in a virtual OS whose configuration had changed – see above. A MAC address may change when Windows are upgraded, it is recommended to configure a fixed MAC address in the virtual system.

Solution: If you encounter this type of error, please contact Domat technical support. Your licence will be reactivated.

• **Maximum data point number exceeded** – some of the projects are stopped [Critical] - Data point count limit exceeded. [Critical] - Cannot load data of project 'MERBON_SCADA_DEMO'. Error:

System.UnauthorizedAccessException: Data point count limit exceeded. ...

This error appears mostly when the SCADA server wa expanded by one or more new projects, or added extra datapoints to one or more of projects. This resulted in exceeding the maximum number of licensed data points in the system. Check the number of employed datapoints in RcWare or in the project overview in the Merbon SCADA menu (*Statistics*).

Solution: Remove some unnecessary data points from your projects. Remove unnecessary projects. If another system expansion is necessary, contact Domat sales and buy extra datapoints for your licence.

• Errors in projects.config

[Error] - DIAG (SCADA start error) SCADA-service - StartFailed (Error: Loading Projects failed.

- | Hodnota GGGroup není platnou hodnotou pro parametr PermissionOwnerType.
- Požadovaná hodnota GGGroup nebyla nalezena)

[Critical] - Merbon SCADA server cannot be started: System.AggregateException: Došlo k jedné nebo více chybám. ---> System.Exception: Loading Projects failed. --->

System.FormatException: Hodnota GGGroup není platnou hodnotou pro parametr PermissionOwnerType. ---> System.ArgumentException: Požadovaná hodnota GGGroup nebyla nalezena. ...

[Error] - DIAG (SCADA after init) SCADA-service - StartFailed (Message: Initialization of Scada server has failed) (Duration: 00:00:09.0870046)

[Error] - DIAG (SCADA start error) SCADA-service - StartFailed (Error: Loading Projects failed.
 | Znak < (šestnáctková hodnota 0x3C) nelze použít jako první znak názvu.: řádek 18, pozice 18)
 [Critical] - Merbon SCADA server cannot be started: System.AggregateException: Došlo k jedné nebo více chybám. ---> System.Exception: Loading Projects failed. --->

System.Xml.XmlException: Znak < (šestnáctková hodnota 0x3C) nelze použít jako první znak názvu.: řádek 18, pozice 18 v System.Xml.XmlTextReaderImpl.Throw(Exception e) ...

Syntax error in the projects.config file. Most probably caused by manual editing of the file.

Solution: Loading Projects failed – search the mentioned value in the file (here GGGroup) and correct it to a valid value. Initialization of Scada server has failed – the line and position of the error is specified, go to the projects.config file and fix the error. Mostly it is a syntax error.

• Error in behaviors.config

[Error] - DIAG (SCADA after init) SCADA-service - StartFailed (Message: Initialization of Scada server has failed) (Duration: 00:00:09.5008805)



[Error] - DIAG (SCADA start error) SCADA-service - StartFailed (Error: Loading Behaviors failed. | Znak < (šestnáctková hodnota 0x3C) nelze použít jako první znak názvu.: řádek 4, pozice 6)

[Critical] - Merbon SCADA server cannot be started: System.AggregateException: Došlo k jedné nebo více chybám. ---> System.Exception: Loading Behaviors failed. --->

System.Xml.XmlException: Znak < (šestnáctková hodnota 0x3C) nelze použít jako první znak názvu.: řádek 4, pozice 6 v System.Xml.XmlTextReaderImpl.Throw(Exception e) ...

Syntax error in the *projects.config* file. Mostly caused when editing the file manually.

Solution: The error type and position is specified here. Go to the file and fix the syntax error.

• Error in the project – setting of a particular data point or more data points (wrong channel, misassigned .vlist, etc.)

[Error] - Data of MERBON_SCADA_DEMO cannot be loaded: ArgumentException: Unknown Serialization type id 28bbfc1d-9f90-4339-9f9a-8b3ebd3488cd ...

The problem originated when editing the project in RcWare.

Solution: Search for the datapoint GUID in the log ("28bbfc1d-9f90-4339-9f9a-8b3ebd3488cd" in the example above) in the .data file in the exported project (open in notepad++ or similar editor). This shows the datapoint concerned. Then search this point in RcWare, check and fix possible problems.

If the error in the datapoint is not apparent, contact Domat technical support please.



6 Unsupported scripts in RcWare Vision

Full compatibility of scripts can not be maintained due to different architecture against RcWare Vision. Scripts must be considered individually for each project.

RcWare Vision evaluates scripts in the application GUI. The Merbon SCADA components are running on a server. This means that any interactivity, 3rd parties code integration, etc. are not supported.

RcWare Vision is tolerant to script errors. Components do have more strict supervision, and if a script error appears, the result is undefinable.

Script functions which are not supported in Merbon SCADA:

GetValueFromDialog() GetParticularData() and other database read functions GetLoggedUserName() TimeProgFunc() SetParameter() SendSMS() RunRCInternalFunction() GetConnectionStatus() SetUserButtonPressed() InterfaceAlarmEnabled()

Time functions in scripts now work in the UTC time zone (rather than following the local time). This is because they are processed on the server, and the time zone of the client platform is thus unknown.