



LorusTask Ver 3.0.0

OPERATION MANUAL



M-Bus

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CONTENTS

- 1. Introduction
- 2. Main features
- 3. System requirements
- 4. Software installation
- 5. Start the application
- 6. Properties management
- 7. Data and device management module
 - 7.1 Device data readout
 - 7.2 Device management and configuration
- 8. Data exports
- 9. Backup options
- 10. Configuration menu
 - 10.1 Display options
 - 10.2 Automatic readout scheduler
 - 10.3 Password settings
- 11. ista M-Bus devices
 - 11.1 Ultrasonic meters
 - 11.2 Mechanical meters
 - 11.3 Energy calculator
 - 11.4 M-Bus interfaces
- 12. ista Technical support



Lorus Task

Version 3.0.0

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1. Introduction

LorusTask is powerful software for read out of M-Bus Meters. Energy meters/devices with an M-Bus interface can be configured and read by LorusTask. This software is developed for reading of device data in M-bus network through serial interface. It gives wide possibilities for defining meters and organizing them. It supports standard exports of data.

This program is complete software for reading M-Bus network. Typically, one network consists of maximum of 250 slaves. So in this software, user can manage with different networks. Gateway to the M-Bus network is provided by M-Bus level converter. The software can reads particular or all devices and saves read data. Read data is seen in the main program. The user can initiate reading at any moment after selects the device or network.



2. Main features

- Simple, user friendly and modular design
- Data display The read results can be displayed directly on-line
- Checking and verification of M-Bus installation
- Data integration of various M-Bus meter models
- Add, delete and edit M-Bus meters with identification
- Selection of communication modes
- Readout function for individual device
- Readout function for total M-Bus network
- Export of readout data for individual device
- Export of readout data for total devices
- Optional readout scheduler for automatic readouts
- Optional password security for start/termination of software
- Optional remote reading through GSM (CSD) modem communication

3. System requirements

- Operating system Microsoft[®] Windows[®] XP SP2 / Vista / 7
- Processor Intel Pentium, Intel Xeon, Intel Core™
- Microsoft[®] .NET Framework version 4.0 or higher
- Minimum 512 MB RAM (1 GB recommended)
- Minimum 100 MB free capacity on hard disk memory
- Microsoft[®] Office (MS Excel and MS Word)
- Adobe Reader[®]
- USB Port(s) / Serial port(s)
- Standard mouse and keyboard
- CD-ROM Drive (for software installation from disc)
- VGA Monitor 1024x768 or higher resolution

Additional recommendations:

- Uninterrupted Power Supply (UPS)
- Anti-Virus/Anti-Spyware Protection



4. Software installation

- The software can be installed from CD or other medium which is provided by ista
- This software is using Microsoft .NET Framework. Please make sure that .NET is installed before proceeding with installation.
- Administrator rights are needed for installation process. It is a recommended best practice to back-up your system and data before you remove or install software.
- Insert the CD, if the CD does not start automatically, browse to your CD-ROM drive and double-click "lorustask_setup.exe".
- Follow the on-screen instructions to successfully complete the installation.
- Software licensing should be done by ista for corresponding installation on the PC before starting the usage of software.

5. Start the application

 Start the application by double click on the link available on desktop or from "Start - Programs - LorusTask" menu.



Start - Programs - LorusTask menu



- When software starts for first time, licensing code should be entered to unlock software. Please contact ista technical team for licensing issues.
- **The available property/network details will be displayed in main window.**
- Property details should be configured for each installation as per M-Bus network architecture.



6. Properties management

To manage the M-Bus devices for each property or project, it may be configured as different properties in main window as per designed/installed architecture. It can be various M-Bus loops; each can include maximum 250 devices. The property configuration will be done by ista technical team.

Please follow below instructions to manage different properties:

- Select the property by clicking on the corresponding network.
- Click "List of devices" button to see the total available devices in the property.
- Select background grid colour for each property by clicking "Background colour"
- Click "Open Property" button to open and manage individual properties. Another way to open the property is from main menu item "File Open".
- Data readout & device configuration options are inside of each property window.





7. Data and device management module

7.1 Device data readout:

Data readout section includes following features:

- Perform readout from M-Bus network for each device
- Checking parameters for each device
- Verifying communication status in M-Bus network for each device
- Export downloaded data in convenient method

To familiarize with data readout section, please follow below instructions:

- Open corresponding property from main window.
- Available devices in the property will be listed as showing below, if configured.
- Devices will be displayed with its details (address, description, baud rate etc).
- Last readout data will be shown at right portion of window (if available).

S	atus	Comment							Timepoint : 2013-04-15 11:0	07:59
4		11							Bus address : 000, Ident.Nr Manufacturer : LUG, Versio Medium : Heat (outlet) (4), A	:: 66548138 n : 003 Access number : 31
									01 : Actuality duration = 8 s	
									02 : Averaging duration = 8 s	
14 I In	Bus addr m	S	MAN	Identifica	Description	Status			04 : Volume = 6760.16 m ³	
	66548138	2400 Baud		66542132	T#A Flat-1604		_		05 : Power = 0 kW	
	66548114 100	2400 Baud	LUG	66548114	T#A_Elet-1404				07 : Flow temperature = 18 °C	
-	66540271 100	2400 Baud	LUG	66540271	T#A_Flat-1208				08 : Return temperature = 6 °C	
-	66540448 100	2400 Baud	LUG	66540448	T#A_Flat=0605				10 Volume = 6520 72 m ³	11.9 K
-	66455725	2400 Baud	LUG	66455725	T#A Flat-0808				Storage no. 1	
-	66540276	2400 Baud	LUG	66540276	T#A Flat-0306				Storage no. 1	
-	66540278	2400 Baud	LUG	66540278	T#A Flat-1308				12 : Fabrication No. = 6654813	38
-	66540698 100	2400 Baud	LUG	66540698	T#A Flat-0205				13 : On time = 1/424 h 14 : On time = 277 h	
	66540283	2400 Baud	LUG	66540283	T#A Flat-0508				value during error state	
-	66540285	2400 Baud	LUG	66540285					15 : On time = 277 h Storage no. 1 value during	o error state
-	66540291	2400 Baud	LUG	66540291					16 : Date = 2013-01-01	
	66540292	2400 Baud	LUG	66540292	T#A_Flat-1506				17 : Energy = 19659 kWh	
	66540294	2400 Baud	LUG	66540294	T#A_Flat-1002				Storage no. 2	
-	66540299	2400 Baud	LUG	66540299	T#A_Flat-0709				Storage no. 3	
	66540303	2400 Baud	LUG	66540303	T#A_Flat-0203				19 : Energy = 17928 kWh Storage no. 4	
	66540275	2400 Baud	LUG	66540275	T#A_Flat-0606				20 : Energy = 16877 kWh	
	66540308	2400 Baud	LUG	66540308	T#A_Flat-0209				Storage no. 5 21 · Energy = 14621 kWb	
	66666608	2400 Baud	LUG	66666608	T#A_Flat-1403				Storage no 6	
	66540314	2400 Baud	LUG	66540314	T#A_Flat-0309					
	66540320	2400 Baud	LUG	66540320	T#A_Flat-1405					
	66637180	2400 Baud	LUG	66637180	T#A_Flat-1503				START Readout	
	66540328	2400 Baud	LUG	66540328	T#A_Flat-0706			_		
									e10	
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t vi	alues will be stor	ed in "Long da	atabase	" 🔳 •						
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- Perform readout of devices in property window by any of below two options:
 - By single device: Right click on the device and select "Readout Device".
 - By total network: Click "START Readout" button to read all devices together. When this option has been selected, it will update devices data one by one. It may take several minutes to finish the process depends upon device count and communication status).

1 Bus address: 000, Ident Nr.: 66548138 Manufacturer: LUG, Version: 003 Meanufacturer: LUG, Version: 003 Manufacturer: LUG, Version: 003 Meanufacturer: LUG, Version: 003 device: Image: Construction: Constructin: Construction: Construction: Construction: Con	S	itatus		Comment							Timepoint : 2013-04-15 11:07	:59	
devices	1		-								Bus address : 000, Ident.Nr.	66548138	
Status : 96 Coulds (147), Recoord (140, 140, 140, 140, 140, 140, 140, 140,											Manufacturer LUG, Version Medium : Heat (outlet) (4) Ac	. 003 ross number : 31	
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280 IIII 2400 Baud LUG 66540229 T#A_Flat-1001 291 IIII 2400 Baud LUG 66540229 T#A_Flat-1201 292 IIII 2400 Baud LUG 66540229 T#A_Flat-1201 292 IIII 2400 Baud LUG 66540229 T#A_Flat-1002 293 IIII 2400 Baud LUG 66540229 T#A_Flat-1002 293 IIII 2400 Baud LUG 66540239 T#A_Flat-1002 293 IIII 2400 Baud LUG 66540239 T#A_Flat-0203 303 IIII 2400 Baud LUG 66540303 T#A_Flat-0209 304 IIII 66540303 T#A_Flat-16005 180 191 Energy = 18825 kWh 305 IIII 2400 Baud LUG 66540303 T#A_Flat-16005 191 191 Energy = 19827 kWh 306 IIII 2400 Baud LUG 66540303 T#A_Flat-1603 191 Energy = 14621 kWh 307 IIII 2400 Baud LUG 66540320 T#A_Flat-1605 110	1	66540283		2400 Baud	LUG	66540283	T#A_Flat-0508				15 : On time = 277 h		
291 111 2400 Baud LUG 66540291 T#A_Flat-1201 Storage no. 1 292 111 2400 Baud LUG 66540292 T#A_Flat-1506 17 Energy = 19659 kWh 294 111 2400 Baud LUG 66540292 T#A_Flat-1506 17 Energy = 19659 kWh 303 111 2400 Baud LUG 66540293 T#A_Flat-0203 18 Energy = 19835 kWh 303 111 2400 Baud LUG 66540237 T#A_Flat-0203 19 Energy = 19827 kWh 303 111 2400 Baud LUG 66540237 T#A_Flat-0203 19 Energy = 19877 kWh 304 112 2400 Baud LUG 66540237 T#A_Flat-1605 19 Energy = 19877 kWh 305 111 2400 Baud LUG 66540320 T#A_Flat-1605 10 Storage no. 5 21 Energy = 14621 kWh Storage no. 6 21 Energy = 14621 kWh Storage no. 6 11 Storage no. 6 11 Energy = 14621 kWh Storage no. 6 11 Energy = 14621 kWh Storage no. 6 11 Energy = 14621 kWh	1	66540285	100	2400 Baud	LUG	66540285	T#A_Flat-1501				16 : Date = 2013-01-01	error state	
292 III 2400 Baud LUG 66540229 T#A_Flat-1002 294 III 2400 Baud LUG 66540229 T#A_Flat-1002 294 III 2400 Baud LUG 66540229 T#A_Flat-1002 293 III 2400 Baud LUG 66540229 T#A_Flat-1002 200 IIII 2400 Baud LUG 66540239 T#A_Flat-0203 200 IIII 2400 Baud LUG 66540203 T#A_Flat-0209 200 IIII 2400 Baud LUG 66540203 T#A_Flat-10209 200 IIIII 2400 Baud LUG 66540203 T#A_Flat-10209 2010 IIIII 2400 Baud LUG 6654021 T#A_Flat-10209 2011 2400 Baud LUG 66540203 T#A_Flat-10309 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	1	66540291		2400 Baud	LUG	66540291	T#A_Flat-1201				Storage no. 1		
294 101 2400 Baud LUG 66540294 Tr#A_Flat-1002 298 101 2400 Baud LUG 66540294 Tr#A_Flat-1002 303 101 2400 Baud LUG 66540295 Tr#A_Flat-0009 303 101 2400 Baud LUG 66540275 Tr#A_Flat-0606 306 101 2400 Baud LUG 66540303 Tr#A_Flat-0606 308 101 2400 Baud LUG 66540305 Tr#A_Flat-1603 308 101 2400 Baud LUG 66540314 Tr#A_Flat-1033 314 101 2400 Baud LUG 66540320 Tr#A_Flat-1403 320 101 2400 Baud LUG 66540320 Tr#A_Flat-1303 320 101 2400 Baud LUG 66540320 Tr#A_Flat-1405 320 101 2400 Baud LUG 66540320 Tr#A_Flat-1503 328 101 2400 Baud LUG 66540322 T#A_Flat-0706	1	66540292		2400 Baud	LUG	66540292	T#A_Flat-1506				17 : Energy = 19659 kWh Storage no. 2		
299 111 2400 Baud LUG 66540299 T#A_Flat-0709 Storage no. 3 300 111 2400 Baud LUG 66540303 T#A_Flat-0203 275 112 2400 Baud LUG 66540275 T#A_Flat-0209 308 111 2400 Baud LUG 66540275 T#A_Flat-0209 308 111 2400 Baud LUG 66540275 T#A_Flat-103 309 111 66540314 T#A_Flat-103 Storage no. 5 310 111 2400 Baud LUG 66540320 T#A_Flat-1403 320 111 2400 Baud LUG 66540320 T#A_Flat-16030 320 112 2400 Baud LUG 66540320 T#A_Flat-16030 320 112 2400 Baud LUG 66540320 T#A_Flat-1603 320 112 2400 Baud LUG 66540320 T#A_Flat-1503 328 112 2400 Baud LUG 66540322 T#A_Flat-0706	1	66540294	:101	2400 Baud	LUG	66540294	T#A_Flat-1002				18 : Energy = 18835 kWh		
303 301 2400 Baud LUG 66540303 T#A_Flat-0203 275 302 2400 Baud LUG 66540303 T#A_Flat-0206 303 302 302 2400 Baud LUG 66540303 T#A_Flat-0209 304 302	1	66540299	100	2400 Baud	LUG	66540299	T#A_Flat-0709				Storage no. 3		
275 111 2400 Baud LUG 66540225 T#A_Flot-0006 200 Energy = 16877 kWh 2400 Baud LUG 66540275 T#A_Flot-2009 200 Energy = 16877 kWh 2400 Baud LUG 66540326 T#A_Flot-1403 200 Energy = 14621 kWh 314 111 2400 Baud LUG 66540327 T#A_Flot-1403 200 320 112 2400 Baud LUG 66540327 T#A_Flot-1503 200 328 111 2400 Baud LUG 66540328 T#A_Flot-0706 Y	1	66540303	:101	2400 Baud	LUG	66540303	T#A_Flat-0203				Storage no. 4		
306 111 2400 Baud LUG 66640308 T#A_Flat-0209 211 2100 Baud LUG 66640308 T#A_Flat-1403 211 2100 Baud LUG 66640318 T#A_Flat-1403 211 2100 Baud LUG 66640318 T#A_Flat-1403 211 210 211 210 211 <td>1</td> <td>66540275</td> <td>100</td> <td>2400 Baud</td> <td>LUG</td> <td>66540275</td> <td>T#A_Flat-0606</td> <td></td> <td></td> <td></td> <td>20 : Energy = 16877 kWh</td> <td></td> <td></td>	1	66540275	100	2400 Baud	LUG	66540275	T#A_Flat-0606				20 : Energy = 16877 kWh		
608 IIII 2400 Baud LUG 66666608 T#A_Flat-1403 Storage no 6 314 IIII 2400 Baud LUG 66540314 T#A_Flat-0309 Storage no 6 320 IIII 2400 Baud LUG 66540320 T#A_Flat-1405 Storage no 6 180 IIII 2400 Baud LUG 66540320 T#A_Flat-1503 StART Readout StART Readout 328 IIII 2400 Baud LUG 66540328 T#A_Flat-0706 IIIII StART Readout	1	66540308	:00	2400 Baud	LUG	66540308	T#A_Flat-0209				21 : Energy = 14621 kWh		
314 IIII 2400 Baud LUG 66540314 T#A_Flat-0309 320 IIIII 2400 Baud LUG 66540320 T#A_Flat-1405 180 IIIII 2400 Baud LUG 66540320 T#A_Flat-1503 328 IIIII 2400 Baud LUG 66540328 T#A_Flat-1503	1	66666608	:100	2400 Baud	LUG	66666608	T#A_Flat-1403				Storage no 6		
320 111 2400 Baud LUG 66540320 T#A_Flat-1405 180 111 2400 Baud LUG 66637180 T#A_Flat-1503 328 111 2400 Baud LUG 66540328 T#A_Flat-1503	1	66540314	:00	2400 Baud	LUG	66540314	T#A_Flat-0309						1
180 111 2400 Baud LUG 66637180 T#A_Flat-1503 328 111 2400 Baud LUG 66540328 T#A_Flat-0706	1	66540320	:00	2400 Baud	LUG	66540320	T#A_Flat-1405						
328 1 2400 Baud LUG 66540328 T#A_Flat-0706	1	66637180	10	2400 Baud	LUG	66637180	T#A_Flat-1503				START Readout		
	1	66540328	-	2400 Baud	LUG	66540328	T#A_Flat-0706			-			
										•			
,	/	66540328	-100 2001	2400 Baud	LUG	66540328	T#A_Flat-0706				START Readout	J	
DCD						CON	FIG & DATA	T	Print			Close Property	
CONFIG & DATA II Print II Close Property		alues will be	stor	ed in "Long d	atabase								

- The energy or counting value will be displayed on "output" field after each device's readout (when the readout is in progress).
- **The status of communication will be displayed on the "status" field.**
- Communication status symbol in second column is for easy status display.
 - Cross mark : if couldn't communicated to device
 - Tick mark : if successfully downloaded the data from device
- Please check for any error messages in "status-comment" section.



7.2 Device management and configuration:

Device management section includes following features:

- Add, edit, remove M-Bus devices
- Providing identification name and details for the device
- Communication settings (COM port, baud rate etc.)

To familiarize with device management section, please follow below instructions:

- Open corresponding property from main window.
- Press button "CONFIG & DATA" in the property window

S	atus	Commen	1						Timepoint : 2013-04-15	11:07:59	
1		1	8						Bus address : 000, Ider	nt.Nr. : 66548138	
									Manufacturer : LUG, Ve	ersion : 003	
									Medium : Heat (outlet) (4), Access number : 31	
									Status : 96		
									01 . Actuality duration = 8	S 9 c	
14 N	A-Bus device	e							03 : Energy = 20005 kWh	0.3	
In	Bus addr m	Output	MAN	Identifica	Description	Status			04 : Volume = 6760.16 m ⁴	1	
	CC549129	2400 Baud		CCE 49129	TBA FI-1 1004	Claras			05 : Power = 0 kW		
	00040130	2400 Daud	LUG	0010100	T#A_FIAL*1604			_	06: Volume flow = 0.003 07: Flow temperature = 1	m²/h 8 °C	
	66546114	2400 Baud	LUG	66546114	1#A_Flat-1404			_	08 : Return temperature =	-6 °C	
	665402/1	2400 Baud	LUG	66540271	1#A_Flat-1208				09 : Temperature differen	ce = 11.9 K	
	66540448	2400 Baud	LUG	66540448	T#A_Flat-0605				10 : Volume = 6520.72 m ² Storage no. 1		
	66455725	2400 Baud	LUG	66455725	T#A_Flat-0808				11 : Energy = 16877 kWh		
	66540276	2400 Baud	LUG	66540276	T#A_Flat-0306				Storage no. 1	40120	
	66540278	2400 Baud	LUG	66540278	T#A_Flat-1308				13 : On time = 17424 h	40150	
	66540698	2400 Baud	LUG	66540698	T#A_Flat-0205				14 : On time = 277 h		
8	66540283	2400 Baud	LUG	66540283	T#A_Flat-0508				value during error sta 15 : On time = 277 h	ate	
	66540285	2400 Baud	LUG	66540285	T#A_Flat-1501				Storage no. 1 value of	during error state	
	66540291	2400 Baud	LUG	66540291	T#A_Flat-1201				16 : Date = 2013-01-01		
	66540292	2400 Baud	LUG	66540292	T#A_Flat-1506				17 : Energy = 19659 kWh		
-	66540294	2400 Baud	LUG	66540294	T#A_Flat-1002				Storage no. 2		
	66540299	2400 Baud	LUG	66540299	T#A_Flat-0709				Storage no. 3		
	66540303	2400 Baud	LUG	66540303	T#A_Flat-0203				19 : Energy = 17928 kWh		
2	66540275	2400 Baud	LUG	66540275	T#A_Flat-0606				20 : Energy = 16877 kWh		
1	66540308	2400 Baud	LUG	66540308	T#A_Flat-0209				Storage no. 5		
	66666608	2400 Baud	LUG	66666608	T#A_Flat-1403				Storage no 6		
-	66540314	2400 Baud	LUG	66540314	T#A_Flat-0309						
	66540320	2400 Baud	LUG	66540320	T#A_Flat-1405						
	66637180	2400 Baud	LUG	66637180	T#A_Flat-1503				START Readout		
	66540328	2400 Baud	LUG	66540328	T#A_Flat-0706			-	Contra redución		
				_					💼 CTS	0563926179 Timeout 120 s	ec
				1					DCD		
				CONF	FIG & DATA	11	Print		4	Close Prop	erty
	luos will be stor	od in "Long d	atabaco								

• Configuration window will be displayed with below major tabs:

- COM Port
- List of devices
- Data & Export



COM Port and communication settings:

- Select "COM Port" tab and provide port number in the provided field (Serial interface number which is connected to M-Bus level converter).
- All available serial ports of the PC will be displayed in section "Available serial ports". Click "Refresh" to update the status of ports.
- Select appropriate baud rate for M-Bus devices.

Configuration	
¹ Tools	
F COM Port III List of devices Data & Export LANGUA	AGE
COM Port and Baudrate	Available serial ports
COM 2 🗄 🗆 USB Check Connection	COM1 COM2
O 300	
2400	
O 9600	
TCP->RS232 converter Or Other slow connection	
COM port type on Unknown	
Communication device on LorusTask side Unknown	
First communication device on M-Bus side Unknown	
Second communication device on M-Bus side Unknown	Refresh Try to get more information

Enable "Modem" option and other related settings if you are using GSM modem to read devices. (Optional settings)

3			
DM Port III List of devices Data & Export LANGL	JAGE		
M Port and Baudrate M 2 Image: USB Check Connection C 300 2400 C 9600 TCP->RS232 converter Or Other slow. connection connection connection	Available serial ports COM1 COM2	✓ Modem Modem Pre call Call number 0563926173 ✓ GSM Modem COM ✓ Check CTS line ✓ Check DCD line ✓ Ignore DSR Use "Ignore DSR" if for example built-in internal modem is using. Connection timeout 120 ✓ connection timeout 120 ✓ sec	
vice on M-Bus side Unknown			
cond communication			
vice on M-Bus side Unknown 🗸	Defeat		



Add, edit and remove devices:

■ In "List of devices", you can view and manage M-bus devices.

x	Bus address	lc	s s Maximum	Identificatio	Serial No.	Primar	MAN Med	Medium	Baudra	te Description	Enabl	
7	66548138	100		66548138	66548138	000	LUG 04 03	Heat (outlet)	24	00 T#A Flat-1604		
7	66548114	-1101		66548114	665 6	6548138			24	00 T#A Flat-1404		
7	66540271	-100	1	66540271	665 F	emove De	vice	Alt+R	24	00 T#A Flat-1208		
7	66540448	-100	2	66540448	665 E	dit Device		Alt+E	24	00 T#A_Flat-0605	<u> </u>	
7	66455725	100	1	66455725	664 I	nsert Devid	e	Alt+I	24	00 T#A_Flat-0808		
7	66540276	-100	4	66540276	665 E	nable read	out for all	Ctrl+E	24			
7	66540278	100		66540278	665 C	Disable read	lout for all	Ctrl+D	24	00 T#A_Flat-1308		
7	66540698	100	3	66540698	66540698	000	LUG 04 03	Heat (outlet)	24			
7	66540283	-1101	-	66540283	66540283	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-0508	<u> </u>	
-	66540285	-100	2	66540285	66540285	000	LUG 04 03	Heat (outlet)	24	00 T#A Flat-1501		
	66540291	-100	1	66540291	66540291	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-1201		
	66540292	-1101	2	66540292	66540292	000	LUG 04 03	Heat (outlet)	24	00 T#A Flat-1506	<u> </u>	
7	66540294	-100	-	66540294	66540294	000	LUG 04 03	Heat (outlet)	24	00 T#A Flat-1002		
V	66540299	100	<u>,</u>	66510299	66510299	000	LUG 01 03	Heat (outlet)	24	00 T#A_Flat-0709	<u> </u>	
7	66540303	-100	1	66540303	66540303	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-0203	2	
2	66540275	100	3	66540275	66540275	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-0606	<u> </u>	
7	66540308	-100	-	66540308	66540308	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-0209		
7	66666608	100	3	66666608	66666608	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-1403	<u> </u>	
7	66540314	-100	1	66540314	66540314	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-0309		
5	66540320	-100	2	66540320	66540320	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-1405	<u> </u>	
5	66637180	100	1	66637180	66637180	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-1503		
7	66540328	100	1	66540328	66540328	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-0706		
2	66540330	100	1	66540330	66540330	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-0105		
2	66540331	100	1	66540331	66540331	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-0109		
5	66540341	100	1	66540341	66540341	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-1203		
7	66540342	100	, ,	66540342	66540342	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-0803		
7	66947999	100	1	66947999	66947999	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-0906		
2	66540344	100	1	66540344	66540344	000	LUG 04 03	Heat (outlet)	24	00 T#A_Flat-0303		
	00540345	-0101		00540045	00040240	000	110.04.02	1.1		T#A FI-+ 0201		

- Various menu options will be available with right click menu on each device.
 "Tools" menu items on top also is for same functions.
- Device addressing method should be decided and configured before adding devices. There are two methods to address the devices:
 - By primary address : Address can be assigned from 0 to 250
 - By secondary address : Address is manufacturer provided serial number



Add M-bus devices by right click menu item "Insert Device". ("Tools" menu)

😑 Insert Device		
New bus address (8 digits) 66342221 Secondary bus address = Identification no.	Baudrate ○ 300 ○ 2400 ○ 9600	Disable readout from device - Device is temporarily not reachable -or Device is removed -or Not configured
Description Fourth Floor - 434 Tenant Mr. Jose General meter Medium Set Medium manually	Installation point Corridor - Common Entry	Serial No. Serial number = Fabrication number, or Identification number (if there are no farbrication number in data telegramm) Set serial number manually (max. 9 digits)
58-020-0008 1 Rihan Heights Tower-A-(L1-L16)		Cancel Save and Close

- Provide meter address, baud rate and description. Other information fields are optional. Click "Save and close" button to save device.
- Add all devices with short description (location) as per installed schedule. This refers to the identification for each device and appears everywhere with meter address. (For example, data exports)
- Select "Disable readout from device" option, if you want to ignore this device from readout process when performing total readout.
- Call the existing device information by right click menu item "Edit Device".

Bus address 66540510	Baudrate	Disable readout from device - Device is temporarily not reschable -or Device is removed -or Not configured
Description #A_Flat-1409 Tenant fr. xxxxx General meter ledium Set Medium manually eat (outlet)	Installation point Apartment	Serial No. Serial number = Fabrication number, or Identification number (if there are no farbrication number in data telegramm) Set serial number manually (max. 9 digits) 66540510
8-020-0008 1 Rihan Heights Tower-A-(L1-L16)		Cancel Save and Close

Contract Remove a device from property by menu item "Remove Device".



- We can edit or add description to the device in main configuration window also. Double click on the description field of each device and provide the information and continue to next device.
- Remove the tick mark from "Enable Readout" field for disabling the readout of that device when performing the total readout of property.

5	8 M-Bus dev	ices										
>	Bus address	lc	s	Identificatio	Serial No.	Primar	MAN Med	Medium	Baudrate	Description	Enable Readout	
R	66258996	10	1	66258996	66 258 996	000	106.04.04	Heat (outlet)	2400	12-203		
Ī	65913240	10	1	65913240	65 91 3 240	000	LUG 04 02	Heat (outlet)	2400	13-303		
	65913241	10	1	65913241	65 913 241	000	1116.04.02	Heat (outlet)	2400	14-403		
1	65912855	10	1	65912855	65 912 855	000	1116.04.03	Heat (outlet)	2400	15-504		
Ī	66258992	10	1	66258992	66 258 992	000	1116.04.04	Heat (outlet)	2400	15-502	Γ	
1	66258995	10	1	66258995	66 258 995	000	1116.04.04	Heat (outlet)	2400	15-503	<u> </u>	
1	65912854	10		65912854	65 912 854	000	1116 04 03	Heat (outlet)	2400	LG Roteil-14815-2		
1 P	65919295	10	1	65919295	65 919 295	000	1116 04 03	Heat (outlet)	2400	LG Retail-10		
1 P	65919525	10	1	65919525	65 919 525	000	1116.04.03	Heat (outlet)	2400	LG Retail-09	2	
1 in	65313323 6E010726	100	~	6E010726	65 010 726	000	1110.04.03	Host (outlet)	2400	LG Dotail-27		
H-	65313720	100	1	CE012100	6E 010 100	000	1110 04 03	Heat (outlet)	2400	LG_REGIEZ7		
	66531568	10	1	66531568	66 531 569	000	1116 04 02	Heat (outlet)	2400	LG Roteil-19		
F	65913215	-00	1	65013215	65 913 215	000	1110 04 02	Heat (outlet)	2400	LG_Retail-13		
	65913207	10		65913207	65 913 207	000	111G 04 02	Hest (outlet)	2400	LC Dotail-1/815-1		
	65313207	-00-		66250117	66 259 117	000	LUC 04 02	Heat (outlet)	2400			
	66233117	-00	-	66233117	66 253 TT7	000	LUC 04 03	Heat (outlet)	2400	LC Dateil 298.99	I. I.	
	00012700	- 10	~	00012700	65 312 700	000	LUC 04 03	Heat (outlet)	2400	LG_Retail 23/Runestded	T I	
	00203030	-80		00203030	66 255 035 CC E1E 272	000	100 04 04	Heat (outlet)	2400	LC_Retail-23(SuperMark		
	00010270	-00	~	00010270	66 515 273	000	LUC 04 03	Heat (outlet)	2400	LG_Retail.09	10 17	
	660334663 6E012242	100		66534663 66612242	66 534 663 65 012 242	000	LUC 04 03	Heat (outlet)	2400	ME Dotail 22	N N	
	600010242	101		00010242	65 57 5 242	000	LUC 04 02	Heat (outlet)	2400	ME Dotoil 21	10 17	
	00004010	100	-	00534510	66 E24 EE1	000	LUC 04 03	Heat (outlet)	2400	ME Detail 10		
	00004001	-10	× .	00534551	66 534 551 66 534 616	000	LUC 04 03	Heat (outlet)	2400	MF_Reduiris		
	00004010	10	~	00004010	66 534 616	000	LUC 04 03	Heat (outlet)	2400	MF_Retail 97	N I	
	00004040	-00	~	00004040	66 534 546 CC 534 546	000	LUC 04 03	Heat (outlet)	2400	MF_Retail 24		
	000034047	-80		00534547	66 534 547	000	LUC 04 03	Heat (outlet)	2400	MF_Retail 30		
	000034000	-00-	×.	00534050	00 534 650	000	LUG 04 03	Heat (outlet)	2400	MF_Retail 22		
	000034400	-00	×	00534400	66 534 406	000	LUG 04 03	Heat (outlet)	2400	MF_Retail-33		
H	00534000	-10	1	00534600	00 534 608	000	100 04 03	meat (outlet)	2400	MF_Detail-20	I¥ IZ	
IN IS	00534537	-00-	1	00534537	00 534 537	000	100 04 03	meat (outlet)	2400	MF_metall=25	M	
IN IS	00534566	-10	~	00534588	00 534 568	000	100 04 03	meat (outlet)	2400	MIT_METAII-24	M	
IN IS	00919010	-10	1	00919010	00 919 010	000	100 04 03	meat (outlet)	2400	MIT_METAILHI	M	
IN IN	05919049	- 40	4	00919049	00 919 049	000	LUG 04 03	meat (outlet)	2400	LG_Retail-11	M	
	00259067	10	1	00259067	00 259 067	000	LUG 04 03	meat (outlet)	2400	MF_Retail-10	M	
	00259070	-10	1	00259070	00 259 070	000	LUG 04 03	meat (outlet)	2400	MF_Retail-12	M	
ľ	00515267	-00	1	00515267	00 515 267	000	LUG 04 03	meat (outlet)	2400	MF_Retail-09	M	
N	66515325	30	1	66515325	66 515 325	000	LUG 04 03	Heat (outlet)	2400	MF_Retail-08	M	
	66531226	100	1	66531226	66 531 226	000	LUG 04 03	Heat (outlet)	2400	MF_Retail-07	M	
19	66531234	300	1	66531234	66 531 234	000	LUG 04 03	Heat (outlet)	2400	MF_Retail-11	M	
1	66531641	300	1	66531641	66 531 641	000	LUG 04 03	Heat (outlet)	2400	MF_Retail-28	M	
١V	66534532	300	1	66534532	66 534 532	000	LUG 04 03	Heat (outlet)	2400	MF_Retail-18	M	

Click "Save" button once you finished all the configurations.



Symbols for the medium of devices:

For easy identification, software is using different symbols for each type of device. This symbol will be shown with device after first readout is finished. Please refer below information about various symbols:



:	Warm or mixed water
:	Cold water
:	The medium is unknown (No readout of the device yet)
:	Oil (black)
:	Unknown medium (dark gray)
:	A/D transformer (dark yellow)
:	Heat return or supply
:	Heat / Cold
:	Gas (magenta)
:	Other medium (light Grey)
:	Electricity (yellow)
:	Pressure (brown)
:	Cold
:	Steam (light blue)
:	Bus / System (dark magenta)
:	Compressed air (dark green)
:	Heating cost allocator (green)

Please click "Save" Or "Save and close" button to save all configuration options.



Data backup and export:

"Data & Export" tab is having the following features:

Backup folder		
	rom Property 68-020-0008 1 Rihan	
F:\Lorus Backups		
	Export to Excel	Last Readout Report
	Export Device data	Sort by
	Event Date (Lest Desident)	C Primary bus address
		loenuncation no. Description
	Advance System Export	
	Print	Cancel Save Save a
		7:19
		Q P 1 1 23-04-1
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start 🤌 🚆 🔕 🧔		
start 🥔 🚆 💽 💿		

- Backup will be saved in the selected backup folder with date stamp.
- In this section, backup will be done only for the opened property.

Data Exporting

- Click "Export Data (Last Readout)" to export last available readout data for all devices with description.
- The exported excel file sorting order can be selected before starting export process (By primary address, identification number, description).
- Click "Export device data" to select a device file and export all available data reads (all previous read history) for a selected device.
- Data exporting option will be available in main property window also (Right click menu) for easy exports. Please refer Data export section for details.
- Click "Save and close" button to update and exit from configuration window.



8 Data exports

Data exports includes export of device data to an excel file based on below options.

Export data (Last readout)

This will export last available readout data for all devices of selected property.

Export device data

This will export all available data for a selected device including all previous reads.

Bus address: 000, ident/M:: 0034114 Manufacture: ULG, Version: 003 Medium:: Heat (outlet) (4), Access number:: 29 Status:: 90 01: Actually duration = 8 s: 02: Energy = 17841 kWh 04: Volume:: 5644 013 01: Actually duration = 8 s: 03: Energy = 17841 kWh 04: Volume:: 5644 013 06: Power = 01 kW 05: Power = 01 kW 06: Volume integrature = 1° C 08: Return temperature = 1° C 09: Temperature = 1° C 00: Return temperature = 1° C 09: Temperature = 1° C 00: Return temperature = 1° C 09: Temperature = 1° C 00: Return temperatur	S	tatus		E Comment							Timepoint : 2013-04-15 11:0	08:05	
44 M-Bus devices											Bus address : 000, Ident.Nr Manufacturer : LUG Versio	n : 003	
44 M-Bus devices 0 0.4.Lully duration = 8 s 44 M-Bus addrin n 0.0.p.t.t MAN Identifica Description 56549138 10 2400 Baud LUG 65549138 TrA_Flat-1604 66540271 2400 Baud LUG 65549138 TrA_Flat-1604 TrA_Flat-1604 7 66540271 2400 Baud LUG 665491 65549138 TrA_Flat-1604 7 66540275 10 2400 Baud LUG 665401 Feport Data (Last Readout) 7 66540276 10 2400 Baud LUG 6654027 TrA_Flat-0005 7 10 2400 Baud LUG 6654027 TrA_Flat-0005 11 11 Encery = 14/22 Wh 8 2400 Baud LUG 6654028 TrA_Flat-0005 11 11 Encery = 14/22 Wh 10 2400 Baud LUG 6654028 TrA_Flat-0005 11 12 Eabcard Mon 66540114 11 2400 Baud LUG 6654028 TrA_Flat-1000 11 Encery = 14/22 Wh 12 12 12 12<											Medium : Heat (outlet) (4), A	Access number : 29	
44 M - Bus devices 0 Active services 0 Active services Bus add: Bus add: Costa add: Bus add: Costa add: Costadd: Costa add:											Status : 96		
44 M-Bus devices 0 2 Averaging duration = 8 s n Bus addr. n - Output MAN Identifica. Description 1 Bus addr. n - Output MAN Identifica. Description 2 66540135 11 AVA Bus addr. N MAN Identifica. 2 66540135 11 AVA Export Device data MAN MAN Identifica. Description 2 66540271 11 2400 Baud LUG 66548114 Man MAN Identifica. Description 2 66540276 11 2400 Baud LUG 66540276 Tax_Fini-1500 Tax_Fini-1308											01 : Actuality duration = 8 s		
42 M-B-US GeV/Ces 05 Energy = 1751 KWi n Bus addr. 10 Unup 1 n Bus addr. 10 Unup 1 66548138 111 Energy = 1624 KWi 66548138 111 Energy = 1422 KWi 66548211 111 Energy = 1422 KWi 7 6654821 7 111 Energy = 1422 KWi 7 111 Energy = 1422 KWi 7 111 Energy = 1422 KWi 8654921 111 Energy = 1422 KWi 7 111 Energy = 1422 KWi 8654925 111 2400 Baud LUG 66540275 111 Energy = 1422 KWi Storage no. 1 112 Energy = 1422 KWi Storage no. 1 113 Energy = 1422 KWi Storage no. 1 114 Gef40275 111 2400 Baud LUG 66540275 112 Energy = 1422 KWi Storage no. 1 113 Energy = 1422 KWi Storage no. 1 114 Gef4028 114 Gef4028 112 Energy = 1422 KWi Storage no. 1 113 Energy = 1422 KWi Storage no. 1 114 Gef4028 112 Energy = 1422 KWi 115 Contime = 102 h Value during error state 116 Gef40228 112 Energ											02 : Averaging duration = 8 s		
Disc Statu: Output Number (Section 2) Disc Statu: OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Statu: OS: Volume flow = 0.005 m ² h OS: Statu: OS: Power = 0.1 kW OS: Statu: OS: Power = 0.1 kW OS: Statu: OS: Volume flow = 0.005 m ² h OS: Statu: OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW OS: Power = 0.1 kW <th>44 </th> <th>M-Bus dev</th> <th>ICe</th> <th>S Ordered</th> <th>I MAN</th> <th>11 doort Corre</th> <th>Description</th> <th>Chatrus</th> <th></th> <th><u> </u></th> <th>04 Volume = 5541 65 m³</th> <th></th> <th></th>	44	M-Bus dev	ICe	S Ordered	I MAN	11 doort Corre	Description	Chatrus		<u> </u>	04 Volume = 5541 65 m ³		
c 6654313 111 2400 Baud LUG 6654313 T#A_Flat-1604 2 66549114 111 2400 Baud LUG 665491 Readout Device 06 100 mm flow = 0.005 m/h 2 66549114 111 2400 Baud LUG 665491 Readout Device 06 100 mm flow = 0.005 m/h 2 66549114 112 2400 Baud LUG 665491 Readout Device 06 111 mm erature = 7 °C 08 Return temperature = 19 °C 08 121 mm erature = 17 °C 08 111 mm erature = 17 °C 11	- n	. Dus addr	m	Output	MAN	Identifica	Description	Status		Ľ	05 : Power = 0.1 kW		
6656111 2400 Baud LUG 66548114 Readout Device 66548114 66640271 111 2400 Baud LUG 6654 Return thermperature = 19 °C 00 °C Return thermperature = 17 °C 00 °C 00 °C No	1	66548138	100	2400 Baud	LUG	66548138	T#A_Flat-1604				06 : Volume flow = 0.005 m ³ /h		
66540271 100 2400 Baud LUG 66540 Readout Device 66640446 101 2400 Baud LUG 6664 Export Device data 66640446 101 2400 Baud LUG 6664 Export Data (Last Readout) 1 101 2400 Baud LUG 6664027 104 704 1 2400 Baud LUG 6664027 104 704 704 1 2400 Baud LUG 6664027 104 704 704 1 2400 Baud LUG 6664028 174 Flat-1308 101 111 Energy = 14622 kWh 1 2400 Baud LUG 66540283 174 Flat-1501 104 104 104 104 104 1 2400 Baud LUG 6654028 174 Flat-1501 104 104 104 104 104 104 104 104 104 104 104 105 104 104 104 104 104 104 105 104 104 104 104 104 104<	1	66548114	100	2400 Baud	LUG	66548	66548114				07 : Flow temperature = 19 °C		
66540448 2400 Baud LUG 6656 Export Device data 66540276 2400 Baud LUG 6656 Export Data (Last Readout) 66540276 2400 Baud LUG 66540278 TMA_Flat-0306 66540276 2400 Baud LUG 66540278 TMA_Flat-1308 66540276 2400 Baud LUG 66540278 TMA_Flat-1308 66540276 2400 Baud LUG 66540278 TMA_Flat-1308 66540285 2400 Baud LUG 66540281 TMA_Flat-1301 66540285 2400 Baud LUG 66540291 TMA_Flat-1501 66540281 2400 Baud LUG 66540291 TMA_Flat-1201 7 66540291 2400 Baud LUG 66540291 TMA_Flat-1002 8 66540294 2400 Baud LUG 66540294 TMA_Flat-1002 8 66540295 7MA_Flat-1002 TMA_Flat-1002 TMA_Flat-1003 8 66540294 7MA_Flat-1002 TMA_Flat-1003 TMA_Flat-1003 8 66540295 7MA_Flat-1003 TMA_Flat-1004 Storage no. 5	1	66540271	:001	2400 Baud	LUG	66540	Readout Device				09 : Temperature difference =	, 12.4 K	
66455725 2400 Baud LUG 66540276 T#A_Flat-3036 Storage no. 1 11		66540448	-101	2400 Baud	LUG	66540	Export Device data				10 : Volume = 5290.4 m ³		
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66540299 2400 Baud LUG 66540299 T#A_Flat-0709 Storage no. 3 66540295 2400 Baud LUG 66540275 T#A_Flat-0203 Storage no. 4 66540275 2400 Baud LUG 66540275 T#A_Flat-0209 T#A_Flat-0209 66540275 2400 Baud LUG 66540308 T#A_Flat-0209 T#A_Flat-0209 66566088 111 2400 Baud LUG 66560316 T#A_Flat-1403 665640320 112 2400 Baud LUG 66560314 T#A_Flat-1405 665640328 112 2400 Baud LUG 665637180 T#A_Flat-1405 66540328 112 2400 Baud LUG 66540328 T#A_Flat-10706 CTS 0563926179 CONFIG & DATA Print Storage no. 2		66540294	300	2400 Baud	LUG	66540294	T#A_Flat-1002			_	Storage no. 2 18 · Energy = 16243 kWh		
66540303 11/2 2400 Baud LUG 66540303 T#A_Flat-0203 19 : Energy = 15339 W/h Storage no. 4 66540305 11/2 2400 Baud LUG 66540306 T#A_Flat-0209 10 66540305 11/2 2400 Baud LUG 66540306 T#A_Flat-0209 10 66540306 11/2 2400 Baud LUG 66540309 17#A_Flat-103 10 66540314 11/2 2400 Baud LUG 66540320 T#A_Flat-103 10 66540320 11/2 2400 Baud LUG 66540320 T#A_Flat-103 10 66540320 11/2 2400 Baud LUG 66540320 T#A_Flat-103 10 66540328 11/2 2400 Baud LUG 66540320 T#A_Flat-10706 10 CTS 0563926179 Timeout 120 sec 0CONFIG & DATA Print Close Property		66540299	-100	2400 Baud	LUG	66540299	T#A_Flat-0709				Storage no. 3		
664025 W 2400 Baud LUG 66540275 T#A_Flat-0606 T#A_Flat-0606 66540308 W 2400 Baud LUG 66540308 T#A_Flat-0209 Print 200 Baud LUG 66540308 T#A_Flat-1403 201 Baud LUG 66540308 T#A_Flat-1403 201 Baud LUG 66540308 T#A_Flat-1403 201 Baud LUG 66540309 T#A_Flat-1403 201 Baud LUG 66540309 T#A_Flat-1405 201 Baud LUG 66540309 T#A_Flat-1503 START Readout START Readout START Readout 0563926179 Timeout 120 sec CTS DCD 0563926179 Timeout 120 sec		66540303	-101	2400 Baud	LUG	66540303	T#A_Flat-0203				19 : Energy = 15339 kWh		
66540368 2400 Baud LUG 66540308 T#A_Flat-0209 50rage no. 5 21: Energy = 13623 kWh 666540368 2400 Baud LUG 6666606 T#A_Flat-1403 50rage no. 6 51: Energy = 13623 kWh 66540320 11 2400 Baud LUG 66540309 1 50rage no. 6 51: Energy = 13623 kWh 66540320 11 2400 Baud LUG 66540320 T#A_Flat-1403 51: Energy = 13623 kWh 66540320 11 2400 Baud LUG 66540320 T#A_Flat-1503 57: Energy = 13623 kWh 66540322 11 2400 Baud LUG 66640328 T#A_Flat-1703 57: Energy = 13623 kWh 66540328 11 2400 Baud LUG 66540328 T#A_Flat-0706 57: Energy = 13623 kWh CTS CONFIG & DATA Print 0563926179	-	66540275	-100	2400 Baud	LUG	66540275	T#A Flat-0606				20 : Energy = 14622 kWh		
¹ CONFIG & DATA ¹ CONFIG & DATA ¹ Print ² 1: Energy = 13623 kWh ¹ Constraint of constrain	-	66540308	-0000	2400 Baud	LUG	66540308	T#A Elat-0209				Storage no. 5		
Construct Min Construct Min	-	66666608	-100	2400 Baud	LUG	66666608	T#A Elat-1403				21 : Energy = 13623 kWh Storage no. 6		
CONFLICE CONFLICE CONFLICE Conflict Imagination Start Star	-	66540314	-000	2400 Baud	LUC	66540314	T#A_Elat-0309						
00040320 IIII A_Finiti 1405 START Readout 066637180 IIII A_Finiti 1405 START Readout 066640328 IIII A_Finiti 1405 START Readout	-	00040314	-000	2400 Daud	LUG	00040014	T#A_FI-+ 1405						
Ob05/160 III Print START Readout START Readout START Readout START Readout START Readout	-	00540320	.101	2400 Daud	LUG	00040020	T#A_FI8t-1405			_			
CTS 056540328 CTS 0563926179 Timeout 120 sec CONFIG & DATA If Print Close Property		66637180	300	2400 Baud	LUG	6663/180	1#A_Flat-1503				START Readout		
CONFIG & DATA Print CTS 0563926179 Timeout 120 sec CONFIG & DATA If Print Close Property		66540328		2400 Baud	LUG	66540328	T#A_Flat-0706	1					
CONFIG & DATA II Print II Close Property										-			
CONFIG & DATA II Print II Close Property											CTS 0563	926179 Timeout 120 sec	
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Below are the different ways to do data exports in software:

- By using right click menu in each property windows
- By using "Data & Export" tab in configuration window of each property
- By using right click menu in main window
- By using main menu item "Export to Excel" in main window



Sample Data Exports:

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 | 2 | T#A_Flat-0101
T#A_Flat-0102

 | 0 | 66540367 | 66540367 | 15-4-13 1
 | 1:11:52 | 10438.00 | kWh | 2676.36 | m ³ |
 | 0.00 kV | 0.6 |
| 5
 | 3 | T#A_Flat-0103

 | 0 | 66540415 | 66540415 | 15-4-13 1
 | 1:14:21 | 29451.00 | kWh | 7377.34 | m ³ | (
 | 0.00 kV | / 0.0 |
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 | 4 | T#A_Flat-0104

 | 0 | 66548010 | 66548010 | 15-4-13 1
 | 1:22:01 | 33095.00 | kWh | 12704.30 | m ³ | 8
 | 8.20 kV | / 1.0 |
| ß
 | 5 | T#A_Flat-0105

 | 0 | 66540330 | 66540330 | 15-4-13 1
 | 1:10:23 | 22079.00 | kWh | 4735.12 | m ³ |
 | 3.20 kV | 0.0 |
| 3
 | 7 | T#A_Flat-0107

 | 0 | 66540374 | 66540374 | 15-4-13 1
 | 1:12:10 | 13335.00 | kWh | 3785.08 | m ³ |
 | 0.00 kV | 0.0 |
| 0
 | 8 | T#A_Flat-0108

 | 0 | 66540439 | 66540439 | 15-4-13 1
 | 1:14:54 | 8894.00 | kWh | 4217.98 | m ³ | (
 | 0.00 kV | / 0.0 |
| 1
 | 9 | T#A_Flat-0109

 | 0 | 66540331 | 66540331 | 15-4-13 1
 | 1:10:29 | 19611.00 | kWh | 6579.42 | m ³ |
 | 3.40 kV | / 0.6 |
| 3
 | 11 | T#A Flat-0202

 | 0 | 66540410 | 66540410 | 15-4-13 1
 | 1:13:49 | 14403.00 | kWh | 5712.08 | m ³ |
 | 2.10 kV | / 0.2 |
| 4
 | 12 | T#A_Flat-0203

 | 0 | 66540303 | 66540303 | 15-4-13 1
 | 1:09:32 | 15239.00 | kWh | 6919.07 | m ³ |
 | 2.40 kV | / 0.2 |
| 5
 | 13 | T#A_Flat-0204

 | 0 | 67229114 | 67229114 | 15-4-13 1
 | 1:11:07 | 1271.00 | kWh | 94.62 | m ³ | 0
 | 0.00 kV | 0.0 |
| 7
 | 14 | T#A Flat-0205

 | 0 | 66540708 | 66540708 | 15-4-13 1
 | 1:19:34 | 12095.00 | kWh | 2870.07 | m ³ |
 | 0.00 kV | 0.6 |
| 8
 | 16 | T#A_Flat-0207

 | 0 | 66540362 | 66540362 | 15-4-13 1
 | 1:11:33 | 7284.00 | kWh | 3627.15 | m ³ | (
 | 0.00 kV | / 0.0 |
| 9
 | 17 | T#A_Flat-0208

 | 0 | 66540411 | 66540411 | 15-4-13 1
 | 1:13:56 | 9539.00 | kWh | 4174.87 | m ³ | (
 | 0.00 kV | / 0.0 |
| 0
 | 18 | T#A_Flat-0209

 | 0 | 66540308 | 66540308 | 15-4-13 11
 | 1:09:44 | 6886.00 | kWh | 1220 40 | m ³ | i
 | 3.70 KV | 0.2 |
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 | 20 | T#A_Flat-0302

 | 0 | 66540370 | 66540370 | 15-4-13 1
 | 1:11:58 | 7521.00 | kWh | 2709.97 | m ³ |
 | 0.00 kV | / 0.0 |
| 3
 | 21 | T#A_Flat-0303

 | 0 | 66540344 | 66540344 | 15-4-13 1
 | 1:10:53 | 12886.00 | kWh | 7232.80 | m ³ | (
 | 0.00 kV | / 0.0 |
| 4
 | 22 | T#A_Flat-0304

 | 0 | 66548027 | 66548027 | 15-4-13 1
 | 1:22:06 | 25589.00 | kWh | 11289.37 | m ³ |
 | 3.60 kV | 0.7 |
| 6
 | 24 | T#A Flat-0306

 | 0 | 66540276 | 66540276 | 15-4-13 1
 | 1:08:32 | 13075.00 | kWh | 4458.91 | m ³ |
 | 5.00 kV | / 0.3 |
| 7
 | 25 | T#A_Flat-0307

 | 0 | 66540694 | 66540694 | 15-4-13 1
 | 1:19:21 | 7499.00 | kWh | 2528.98 | m ³ | (
 | 0.00 kV | / 0.0 |
| 8
 | 26 | T#A_Flat-0308

 | 0 | 66540552 | 66540552 | 15-4-13 1
 | 1:16:43 | 13752.00 | kWh | 4967.47 | m ³ |
 | 0.30 kV | / 0.5 |
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9 Backup options

There are two different methods to take the backup of property data:

By using main menu item "File - Backup"

- This option will take backup of all existing properties in main window.
- By doing backup with this option, it may take some time to finish depend upon property data size and number of properties.



S By using "Data & Export" tab of configuration window in each property

- This option is to do the backup of individual property.
- Backup folder can be changed by using "Backup folder" button.

Control in Listor devices	Data & Export LANGUAGE (1) Into	
C:\Llears\PowerEdge\Docume		
Backup folder	art Backup from Property 68-020-0008 1 Rihan	
E:\Lorus Backups		
	Export to Excel	
	Export Device data	X



10 Configuration Menu

"Configuration" menu includes following items as described below:

- 1. Options (for symbol size and status display of devices)
- 2. Readout scheduler (for automatic readout of properties)
- 3. Password settings (for start/termination of software)

10.1 Display options:

 Select symbol size for displaying properties in main window and devices in property windows. Small and big symbol sizes are available.

Symbo	ol Size		
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Last F	Readout timepoir	t state	
•	< 10	days	
•	< 30	days	
•	< 100	days	
٠	> 100 days		
٠	State unkno	wn or Readout dis	abled

- Select days to show various colours in main window on each property grid.
- Colours will be shown by comparing last readout data time point with number of days provided.



10.2 Automatic readout scheduler:

Readout Scheduler is useful to schedule automatic readouts of devices at various timing. Configure automatic readouts for each property as per below available options.

Modus	Property Nu	Loop	BusSwitc	Description	COM	Connection type	- 10-1
	68-020-0001	1	0	Sky Tower(1) Loop-1 (GF-F	2	COM2	C Disabled
	68-020-0001	2	0	Sky Tower(1) Loop-2 (F06	2	COM2	
	68-020-0001	3	0	Sky Tower(1) Loop-3 (2A_F	2	COM2	Short Interval Mode
	68-020-0001	4	0	Sky Tower(1) Loop-3 (3A_F	2	COM2	C 15 Min C 30 Min C 60 Min C 120 Min
	68-020-0001	5	0	Sky Tower(1) Loop-4 (4B_F	2	COM2	Long Interval Mode
	68-020-0002	1	0	Sun Tower2_Loop-1a (GF t	2	COM2	Daily
	68-020-0002	2	0	Sun Tower2_Loop-1 (F06-F	2	COM2	C INI-III
	68-020-0002	3	0	Sun Tower2_Loop-2 (F18-F	2	COM2	Weekiy
	68-020-0002	4	0	Sun Tower2_Loop-3 (F40-F	2	COM2	O 10 Days (on 1st, 10th and 20th of the Month)
	68-020-0008	1	0	Rihan Heights Tower-A-(L1	2	COM2	C Monthly
Daily	68-020-0008	2	0	Rihan Heights Tower-A-(L1	2	COM2	Wontiny
Daily	68-020-0008	20	0	Rihan Heights Tower#A ET	2	COM2	Global Settings for "Long Interval Mode"
	68-020-0008	3	0	Rihan Heights Tower-B	2	COM2	1 1 1 1
Daily	68-020-0008	30	0	Rihan Heights Tower#B ET	2	COM2	Start time O' Clock
	68-020-0008	4	0	Rihan Heights Tower-C	2	COM2	Day for weekly read
😗 Daily	68-020-0008	40	0	Rihan Heights Tower#C ET	2	COM2	
	68-020-0008	5	0	Rihan Heights Tower-D	2	COM2	Date for monthly read
Daily	68-020-0008	50	0	Rihan Heights Tower#D ET	2	COM2	
	68-020-0008	6	0	Rihan Heights Tower-E	2	COM2	68-020-0008 2 Rihan Heights Tower-A-(L17-L31)
Daily	68-020-0008	60	0	Rihan Heights Tower#E ET	2	COM2	Property will be readout daily at 1 O' Clock local time
	68-020-0009	1	0	Guardian - RT	2	COM2 OnBoard > Modem_1	
	68-020-0009	2	0	Guardian - OT	2	COM2 OnBoard > Modem_1	Next readout Friday, May 03, 2013 1:00 AM
	68-040-0010	1	0	LRDM	2	COM2 103 > Modem_10Bit_C	
	68-040-0012	1	1	Lake Shore Tower(Y2) L1	2	COM2	
	68-040-0012	2	2	Lake Shore Tower(Y2) L2	2	COM2	
	68-040-0012	3	3	Lake Shore Tower(Y2) L3	2	COM2	Auto-Save Last Readout Data
							Connection timeout
							E E LI E LI LA LI
							IM Enable Readout Scheduler
1						1	Save and launch first readout Cancel Save and Close

Short interval mode (15, 30, 60, 120 minutes intervals)

- **The configured properties will be read in each selected interval of an hour.**
- For example; 15 Min configuration will read the property at timings like 0:00, 0:15, 0:30, 0:45, 1:00 etc.
- This option is useful for properties with less number of devices (for testing).

Long interval mode

- Daily : Readout will happen daily at selected start time
- Weekly : Readout will happen weekly on selected day and at selected time
- Monthly: Readout will happen monthly on selected date at selected time

Global settings for all "Long interval mode" configurations:

Start time	: Applicable input for all long interval modes
Day for weekly read	: Applicable input for weekly read mode
Date for monthly read	: Applicable input for monthly read mode

Note: The "Global settings" is applicable for all properties



- The "next readout time" will be calculated as per current system time.
- Select/deselect "Enable Readout Scheduler" to enable/disable scheduling for all the properties.
- Select "Auto-save Last Readout Data" to save last readout export automatically after each scheduler read-out.
- Click "Save and Close" button to update and exit readout scheduler.
- Click "Save and launch first readout" button to start readout one time immediately through scheduler for all configured properties.

10.3 Password settings:

This is to provide one administrator password to manage operation of software.

- **C** Enter the password in field to control termination of software.
- By default, password will be blank. i.e., no password will be required for operation.
- Select "Enable password to Open also" option to restrict the start of software with same password.
- Once assigned a password, software will request for the password when you are trying to terminate software.
- The assigned password should be entered when you are trying to change existing password. If password is blank, software will not request for password.
- Click "Save and Close" button to save and exit from password settings.

	art / Terminating of LorusTask
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11 ista M-Bus Devices

11.1 Ultrasonic meters:

Ultego III Eco – cold energy meter



11.2 Mechanical meters:

Sensonic II – energy meter





istameter – water meter



11.3 Energy calculator: Sensonic II Calculator (T25/T250)







11.4 M-Bus interfaces:

M-Bus Level converter (LC 250)



ista Bus switcher



12 ista Technical support

For any technical queries related to the system, please contact us:



ista Middle East FZE, Dubai Branch : P O Box 502302 - Dubai, Abu Dhabi Branch : P O Box 130158 - Abu Dhabi, United Arab Emirates.

Tel : +971 4 4541212 Fax : +971 4 3639148

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