Application Note Fatek PLC and WinProLadder

This document guides you through the setup of proprietary vendor specific software installed on you PC. Your supervisor may provide you with additional or alternative instructions.

The document consists of standard instructions that may not fit your particular solution. Please visit our support website for latest revisions of documentation and firmware:

http://www.secomea.com

Version: 1.0, March 2011



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Prerequisites for This Guide

The following guide will assist you to setup a remote and online connection to the Fatek equipment placed on the customer site using your WinProLadder programming software.

This guide concentrates on the Fatek FBS 10MAu PLC with Ethernet, but may also work with other Ethernet enabled Fatek PLCs.

Prerequisites for this guide are:

- You have an operational LinkManager installed on your PC with a LinkManager certificate that allows you to connect to the SiteManager agents.
- You have the Fatek PLC and the WinProLadder software installed.
- You have the Fatek / Ethernet device agent installed and configured on the SiteManager at the remote site, and there is access between the SiteManager and the PLC.

If this is not the case, we kindly ask you to contact the person / department responsible within your own company or at the company responsible hereof.

System Overview

The communication path is as follows:

WinProLadder \rightarrow LinkManager \rightarrow GateManager \rightarrow SiteManager \rightarrow PLC.

This guide will elaborate on the components marked with **bold**.

The following system overview depicts a SiteManager 3134 at the customer location.



The procedures in the following apply to any SiteManager model.

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1. Ethernet Connection

The following describes how to connect with WinProLadder to a Fatek PLC equipped with an Ethernet module that is attached to a SiteManager via Ethernet (directly or via an Ethernet switch).

1. Login with your LinkManager and locate the agent that represents your TCPI/IP attached PLC. Click the text (that turns orange at mouse over) to connect to the PLC.



2. You will not see any activity on it yet. This only starts when you connect to the PLC via your project (Make a note of the IP address of the PLC):

LinkManager sectimea													
	Disconnect Logout Services Sniffer ROOT.demo.Toplevel.EMEA.Denmark.CustomerF.Production Plant 1												
			Fatek FBS* (S	iteManag	er) - 17	2.24.2.20	4						
	Agent		Address	Status	Conr	ects	Pac	kets	By	tes			
					ok	fail	tx	rx	tx	rx			
	;⊛*	Fatek FBS*	172.24.2.204:500,502	IDLE	0	0	0	0	0	0			

Hint: You are in princple now connected to the PLC, and you could make a ping to the PLC IP address.

3. Start WinProLadder and communicate on the IP address as you would normally have done if you were sitting in the local network with the PLC. The following illustrates how to upload the project from the PLC:



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4. Select File \rightarrow Open \rightarrow Connect To PLC

🖼 WinProladder			
File Edit View Project	Ladder	PLC Tool Window Help	
🗋 New Project	Ctrl+N		
🚔 Open	۱.	🚔 Open 🛛 🚽 C	trl+0
🎽 Save	Ctrl+S	Connect To PLC	Strl+L
Save As	•	1 C:\Documents and Settings\admin\My Documents\Secomea.pd	lw
Close	L		
Import	•		
Export	+		
Printer Setup			
Print Content Setup	Ctrl+P		
Exit			

5. Answer NO, to open associated project file.

Connection		
🚺 Want t	o open the assoc	iated project file ?
Yes	No 🦰	Cancel

6. Set you On-Line settings to TCP and the IP address to match the one shown in the LinkManager.

On-Line				
	Connection Nam	ie		Auto Check
	Advanced	Add	<u>E</u> dit	Delete
	Details Attribute	Data		
	Station Number	r 1 Internet(TC)		
	IP	172.24.2.20	4	
	Port No.	500		
	,		ОК	Cancel



7. The project successfully uploaded from the PLC if you see the following screen:

PLC Status	
ltem	Status
 Station Number Model PLC Status MEMORY_PACK Syntax Check Password Main Program Password Sub-Program Password Data Password Program ID PLC ID Calandar 	1 FBs-10MA(v4.65) Stopped Not Set OK Not Set Not Set Not Set Not Set Not Set Not Set
Available program size Used program size Free program size Min. OS version for operation	20224Word OWord 20223Word v4.00
	ж. П

8. You can now also observe data traffic in the LinkManager:

Linkl	Maria	nager									h
		RO	Disconnect Logo DT.demo.Toplevel.EMEA.	ut Denmari	Service	es merF.Pro	Sniffer duction	Plant 1			
			Fatek FBS* (Si	teManag	er) - 17	2.24.2.20)4				
		Adduose	Ctature	Conr	nects	Pac	kets	By	tes		
		Agent	Address	status	ok	fail	tx	rx	tx	rx	
	₿1	Fatek FBS*	172.24.2.204:500,502	UP:1	1	0	20	20	260	3,993	



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2. Ethernet connection via WindowsXP under VMWare

You can run the WinProLadder software inside a VMWare engine, to a Fatek PLC that is Ethernet attached to a SiteManager.

Note: LinkManager must be installed on the hosting machine, and <u>NOT</u> inside the VMWare Windows XP image. LinkManager cannot run inside a VMWare virtual machine.

The following illustrates VMWare Player, which can be downloaded from http://www.vmware.com/support/product-support/player/

1. Locate your WindowsXP that has WinProLadder installed, and enter **Edit vir**tual machine settings.

🤫 VMware Player File + VM + Help +	_ ×
VMware Player File + VM + Help +	 X X
	Description of the second seco

2. Make sure the Network Adapter settings is set to NAT:



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DOVICO	Summary	- Device status
Memory	1024 MB	
Processors	1	Connect at power on
Hard Disk (IDE)	8 GB (Preallocated)	
CD/DVD (IDE)	Auto detect	-Network connection
Floppy	Using drive A:	O Bridged: Connected directly to the physical network
USB Controller	Present	Replicate physical network connection state
Serial Port	Using port COM6	ONAT: Used to share the host's IP address
		 Host-only: A private network shared with the host

- 3. Start the VMWare engine and on the host PC start LinkManager.
- 4. Follow the procedure of section **1. TCP Ethernet Access** to get access to the PLC via LinkManager

Appendix B, About the Fatek Ethernet Adaptor Configuration utility

The Fatek Ethernet Adaptor Configuration utility uses UDP broad cast to discover Fatek PLCs in the local network, when configured to "Intranet" as Configuration Channel. LinkManager does not support UDP broad casts, and the utility will therefore not be able to discover Fatek PLCs via the LinkManager.

You will, however, be able to use "Internet" as Configuration Channel, provided that you have made an agent in the SiteManager that defines UDP port 111

The agent in the SiteManager should be of type **Custom / Device** and state udp=111 as service:

IDLE	#74	Fatek 111	Custom 👻	Device 👻) (172.24.2.204 udp=111	P	Û
UP:1	#73	Fatek FBS*	Fatek Automation 👻	Ethernet 👻		172.24.2.204	1	Û

Connect with LinkManager to the agent:

Linkl secome	Manag ª	ier							(1	
Disconnect Logout Services Sniffer ROOT.demo.Toplevel.EMEA.Denmark.CustomerF.Production Plant 1											
		Fatek 111	(SiteManage	r) - 172	.24.2.204	ŧ.					
				Conr	nects	Pac	kets	By	tes		
	Agent	Address	status	ok	fail	tx	rx	tx	۳x		
	😳 🖌 🛛 Fatek	111 172.24.2.204:111 (u	idp) IDLE	0	0	0	0	0	0		

You can now start locate the PLC via LinkManager using the Ethernet Adaptor Configuration utility, and click on the PLC to configure the properties:

88	Ethernet adaptor Configuration				
A	bout				
	Configuration Channel	net C RS232		Remote IP: 172.24.2.204	
	IP Address/Name	Ethernet Address	OP Mode	Comment	Seq.
	172.24.2.204 <fatekwall></fatekwall>	4c:49:0:0:23:de	Server	Fatek Unit in Secomea	1
	Properties	Get	Мар	Exit	

NOTE: UDP port 111 will be included in a future release of the standard Fatek agent (newer than version 4.4.0.11122) and subsequently you will not have to define a Custom agent for UDP 111.





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