Application Note Omron HMI and CX-Designer

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

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1. Prerequisite for this guide

The following guide will assist you to setup a remote and online connection to the equipment placed on the customer site using your proprietary vendor specific software installed on you PC. A prerequisite for this guide is:

- 1. You have an operational LinkManager installed on your PC and you are able to see the vendor specific equipment.
- 2. You have the proprietary vendor specific software installed on your PC.
- 3. You have the Omron device agent installed and configured on the SiteManager at the remote site.

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 Remote Device Management system is a complete end-to-end solution for easy and secure remote access, monitoring and management of industrial equipment for the automation- and machine builder industry.

The Remote Device Management solution enables machine builders, service providers and end-users to instantly access, monitor, and manage machines and equipment remotely and effectively over secure high speed internet connections.

The following system overview is with a SiteManager 3034 or 3134 at the customer location:



Figure 1 - System overview



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2. Logon the LinkManager

This describes how to logon your LinkManager software. If you are already logged on, please go to number 3.

- 1. Start the LinkManager from the START > Programs > Secomea Link-Manager.
- 2. Select Console menu from the LinkManager Tray Icon menu.
- 3. Login uses the GateManager certificate and password which is obtained from your GateManager administrator. Then please click **Login**.

LinkManager secomea		ch
GateManager: Certificate: Password:	Login Secomea GateManager Demo V CN=Mif, OU=ROOT (MIF Field Engineer PC2) V	
Login	Certificates Setups Advanced	

Figure 2 LinkManager login Screen

3. Click and Choose in the LinkManager

This describes how to click and choose the device you wish to get online with. If you are already online, please go to number 4.

4. Click **<Connect all>** to connect to all devices or click a specific device to connect to only this single device:



Figure 3 LinkManager Screen (example) Access to all devices or to a single device



4. Configuration of Omron HMI

This describes how to configure the Omron HMI through the web interface, in case this is not already done. If you are already online with your CX-Designer, please go to number 5.

1. If it is possible to access the HMI web interface directly, please go to list number 5, figure 8.



Figure 4 LinkManager Screen

2. Click < Connect the specific Omron HMI >

🍘 LinkManager 6041 Console - HKK_Homer - Windows Internet Explorer											
🚱 🔾 🗢 🖞 http://10.127.128.129:3/console/ 🗸 💀 49 🗙 🚼 Google 🖉 🗸											
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Link	Manager								(
		Disconnect ROOT.demo.Topleve	Logout el.EMEA.I	Denmar	Sniffer rk.Custon	herD					
		Omron HMI (Sit	teManage	r) - 192	2.168.1.2						
	Agent	Address	Status	Conr	nects	Pac	kets	By	tes		
	Agein	Address	Status	ok	fail	tx	rx	tx	rx		
	😳 🖌 🚷 Omron HMI	192.168.1.2:80,9600	IDLE	0	0	0	0	0	0		
		:9600 (udp)	IDLE	0	0	0	0	0	0		
Done			😜 In	ternet	Protected	Mode: O	ff		- - -	۹ 100%	▼

Figure 5 LinkManager Screen

3. Click on the < icon > shown in figure 5 to access the Omron HMI interface.



Figure 6 HMI web Interface Screen



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- 4. Log-on / start the Omron HMI web interface
- 5. Select >> Operation <<



Figure 7 HMI Web Interface Screen

6. Click >> system menu <<

BNS Web Interface Version 1.3 - Windows Internet Explorer								
() v db http://10.127.128.129:59002/operation.htm	V R fy X Live Search							
<u>File Edit View Favorites Tools Help</u>								
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🔠 🔻 🕁 LinkManager 6041 Console 🔥 NS Web Interface Versio 🗴	🛐 🔹 🔝 🕤 🖃 👼 👻 Page + Safety + Tools + 🌒 +							
System Menu	Exit							
Initialize PT Settings Project	Password							
Comm, Data Special Check Screen	Handware Check							
Comm. Auto-return ON OFF Ethernet Settin	ng							
Time-out 3 △ ▼ Network Add	1 Node Add. 2							
Retry Counts 5 △ ▽ Sub-net Mask 2	55 255 255 Ø							
Serial Port A Default GW								
NT Link 1:N △ ▽ Detail LAN SPEED	AUTO 1ØBASE-T							
Serial Port B	Enable Disable							
None △ ▽ Detail Mac. Address 00	777/037054B							
Ethernet Disable Enable IP Address	Show Table							
Controller Disable Enable								
	Write							
system menu								
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Figure 8 HMI Web Interface Screen

- 7. Select >> Comm. <<
- 8. Remember the field >> Node Add. = 2 << if the Omron HMI as the IP address X.X.X.2



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- 9. Remember that the field >> Network Add = 1 must match the routing table in the PLC
- 10. Click Ethernet -> Enable and Click >> Show Table <<

🖉 NS Web Interface Version 1.3 - Windows Internet Explorer											
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😢 🔹 🗄 LinkManager 6041 Console 🗄 NS Web Interface Versio 🗙 🎽 🐐 🔝 👘 🔹 🖶 🖉 Page 🔹 Safety 🕶 Tools 🔹 🖗 👻											
System Menu											
Initialize	IP Addr	ress Tabi	le			Password					
Comm.	Node	IP Addre	299		1 /4	Hardware Check					
Comm.	101	192	168	1	101						
Time-out	1	192	168	1	1	e Add. 2					
Interval	2	192	168	1	2						
Retry Counts	3	192	168	1	3	255 0					
Serial Port F	5	192	168	1	5	0 0					
NT Link 1:N	Ø	0	0	0	0	10BASE-T					
Serial Port E	0	0	0	0	0	Disable					
None	0	0	0	0	0						
Ethernet					,	able					
Controller			Back								
	write										
					_						
system menu											
		¢C	opyright OM	IRON Corpo	ration 2008,	8, 2009. All Rights Reserved.					

Figure 9 HMI Web Interface Screen

- 11. Type in the IP address of the SiteManager DEV1 interface
- 12. In the guide we are using IP address 192.168.1.101
- 13. Click >> Back <<
- 14. Click >> Write <<
- 15. The HMI save the changes



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5. Online with Omron HMI and CX-Designer



Figure 10 CX-Designer Screen

- 1. Start CX-One
- 2. Start CX-Designer.

The HMI require that the CX-Designer is installed on the host parallel with the LinkManager.

3. Click >> PT <<, >> Transfer << and >> Transfer Setting <<

Comms. Method	
Auto-reset after the transmission Auto-reset after the transmission Transfer Options Transfer with the symbol table Clear history data after transfer This will be active when the system program is Ver.6.6 or later.	Comms. Route Pass through PLC (1) (2) PCPLCNS (1) (2) PCPLC[Network]PLCNS
Direct data transfer to NS/Computer- Comms. Method Ethernet Set(S) Communicate with multiple software tools via USB.	Data transfer to the NS through PLC Computer (1)Comms. Method Set(C)
Bank	PLC [Network] (2)Comms. Method Set(S) NS
OK(O) Canc	el(L) Help(H)

Figure 11 CX-Designer Communication Method Screen

- 4. Choose "Ethernet" for direct data transfer to NS/Computer
- 5. Click >> Set...(S) << for settings



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Network Settings [Ethernet]	
Network Driver FINS Source Address Network: 1 • Node: 0 • Unit: 0 •	
FINS Destination Address Network: 1 Node: 2 Unit: 0	
Frame Length Response Timeout (s)	
Host Link Unit Number Network Operating Level • • • • •	
OK Cancel He	lp

Figure 12 CX-Designer Network Settings Screen

- 6. FINS Source Address Network. Must be the same as the "Network Add" used in the HMI See figure 13
- 7. FINS Destination Address Network. Must be the same as the "Network Add" used in the HMI See figure 13
- 8. FINS Destination Address Node. Must be the same as the "Node Add." used in the HMI See figure 13
- 9. Click >> OK <<

System Menu						Exit		
Initialize	F	PT Sett	ings	Project	P	d I		
Comm.	Ň	Data Chec	a k	Special Screen			Hardwar Check	e \
Comm. Auto-return	ON	OFF		Ethernet Set	ting	_		
Ţime-ouț	3			Network Add	1	Node	e Add.	2
Interval				IP Address	192	168	1	2
Retry Counts	5	Δ		Sub-net Mask	255	255	255	0
Serial Port A				Default GW	0	0	0	0
NT Link 1:N	Δ		Detail	LAN SPEED	AU	TO	10BAS	BE-T
Serial Port B		1 =	Deto: 1	FTP/Web	Ena	ble	Disa	ble
Inone			Detail	MAC Address	алалар	A37A54	3	

Figure 13 HMI Web Interface Screen



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Network Settings [Ethernet]
Network Driver Workstation Node Number 101 ÷ Auto-detect
IP Address Port Number 192 . 168 . 1 . 2 9600
OK Cancel Help

Figure 14 CX-Programmer Screen

- 10. Click >>Driver <<
- 11. Uncheck "Auto-detect"
- Specify "workstation Node Number" to 101 same as the last number in the IP address of the SiteManager DEV1 interface. In the guide we are using IP address 192.168.1.101
- 13. Specify the Target HMI IP address In the guide we are using IP address 192.168.1.2
- 14. Click OK



Figure 15 CX-Designer Screen

15. Click >> PT <<, >> Transfer [From PT] <<



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CX-Designer 🛛 🔀							
Do you want to start transferring?							
Yes No							
Transfer Setting							
Ethernet							
Setting							
I Do not show this dialog again.							

Figure 16 CX-Designer Screen

16. Click >> Yes << to start transferring

Transfer[From PT]	
Now uploading(1%)	
	Cancel

Figure 17 CX-Designer Screen

17. You are now transferring from the HMI to your remote PC with CX-Designer.



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6. Notices

Publication and copyright

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