

### GateManager BASIC Guide

# Using SiteManager Embedded for Windows

GateManager™ BASIC

GateManager™ Basic Release 01 02/2016 Technical Support https://hirschmann-support.belden.eu.com

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Printed in Germany Hirschmann Automation and Control GmbH Stuttgarter Str. 45-51 72654 Neckartenzlingen Germany Tel.: +49 1805 141538 This guide is intended for first time users of the Secure Remote Access Solution, who need a practical introduction to the Hirschmann GateManager Basic Administration solution together with the SiteManager Embedded (SM-E) for Windows software.

The same configuration steps are used for hardware-based SiteManagers, such as the GECKO.

This guide will lead you through different roles and processes related to installing and configuring the SiteManager, GateManager Administration of users and using LinkManager.

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### 1 Introduction

### 1.1 Prerequisites for This Guide

Prerequisites for this guide are:

- You have administrator privileges to install a program on your Windows PC or laptop.
- Your PC has outgoing access to the Internet via https. This applies for both your corporate firewall and any personal firewall installed on your PC.
- You have an available SiteManager license on your GateManager.
- You have a Windows machine to install SiteManager Embedded (SM-E) on (supported platforms: Windows XP/7/8, Standard or Embedded). Alternatively, you could use a hardware SiteManager such as a GECKO, running at least v02.0.00 software.
- You have received, by email, a GateManager administrator certificate with a link to the GateManager web portal.

### 1.2 Component Analogies

With the Hirschmann Remote Access solution you are introduced to three components. To place them into a context that you may be familiar with, we have made analogies to traditional modem solutions:

**SiteManager**. This component is comparable with the traditional dial-up modem attached to the machine at the customer site. The big difference is that SiteManager utilizes the existing network infrastructure to obtain an Internet connection.

**LinkManager Client Software**. This is comparable with the modem dial-up software on the service engineer's PC. The big difference is that the service engineer does not need to administer a list of phone numbers. The list of devices that the service engineer can connect to is automatically updated when a new SiteManager and its configured "Device agents" are connected. Point and click and the LinkManager user gets instant access to the device over the Internet.

**GateManager Server**. This component acts as a switchboard for connections between LinkManagers and SiteManagers, and ensures that neither LinkManagers nor SiteManagers need to have public addresses on the Internet. For the BASIC package the GateManager is used only for administering users, but you can upgrade to a domain administrator account that allows you to check logs, fine grain LinkManager access to certain devices etc. (read more in section 5. Additional Features Upgrading your GateManager Administrator account from BASIC to PREMIUM).

### 1.3 About Roles referred to in this Guide:

Through the document the header will indicate the role you are undertaking.

Roles will be marked as follows:



### LinkManager User.



This role is held by the PLC programmer or service engineer:

Connect remotely to equipment for servicing/programming the equipment.

Optionally configure the SiteManager and devices agents on the SiteManager, if not done by the SiteManager Installer role.

### 1.4 Illustration of role locations

The typical setup relative to the Internet would be like this:



### GateManager Server

However, following this guide for the first time, you will probably play all roles and be physically located more like this:



### 1.5 If something should not work out as expected

We experience that this guide works for 95% of all users, whereas the last 5% may require a little more advanced configuration depending on special infrastructure setup.

The solution does allow for adaptation to highly complex and security restricted infrastructures involving for example a Web proxy or NTLM authorization server, but it is out of scope of this guide to elaborate on these topics.

If you run into problems, then do not hesitate to contact us and we will guide you in the right direction, or help you troubleshoot.

### 2 Basic Setup and connection

This section explains the basic installation and configuration of SM-E software and accounts, for making full access to the PC on which the SM-E is installed.

## 2.1 ROLE: SiteManager Embedded (SM-E) Installer

Download the SM-E from this location:

http://www.hirschmann.com/en/QR/SRA-SiteManager-Download

#### 2.1.1 SM-E Installation

- Copy the SiteManager Embedded exe files onto the Windows machine on which it should be installed.
- Run the exe file and click Next > until finished.



A Web browser should open automatically with the SM-E Setup Assistant.

NOTE: If a browser does not automatically open, it may be that the SM-E service has not started (this may happen on Windows XP Embedded). In that case you should restart the Windows machine, which will automatically start the service, or you can start the service manually.

- Select Start -> Run and type the command services.msc.
- Scroll to the SiteManager Embedded and click start

Norvices						_ 7
File Action View	Help					
← → 🔳 🖆 🖉	) 🗟 😫 🖬 🔸 🗉 🗉 🖦					
Services (Local)	Services (Local)					
	SiteManager Embedded	Name 🗵	Description	Status	Startup Type	Log On As
(	Start the service	Shell Hardware Det	Provides n Transports	Started	Automatic Disabled	Local System Local System
	Description: Provides remote access for LinkManager users	SiteManager Embe Smart Card SNMP Service	Provides re Manages a Includes a Receives tr	Started	Automatic Automatic Disabled Manual	Local System Local Service Local System Local Service

Now click the SM-E shortcut on the desktop to open the SM-E Web GUI:



### 2.1.2 Configure the GateManager settings

The following steps are the same for SM-E and a hardware-based SiteManager such as the GECKO. In the SM-E Web click the Fix button for the GateManager settings:

(-)(-) • http://128.8.1.1.144/	6 🖕 Settlerage - Hindmass X	
(h) HIRSCH	IANN 🙀 SiteManager Embedded	
	SETUP • GateManager Status Log • HELP	
	About	
	Hirschmann SiteManager Embedded for Windows - Setup Assistant	
	Pending SiteManager Embedded license from GateManager	
	1. GateManager: Not configured Fix	
	2. Device Agents: No Agents License Fix	
	3. Chat / Scratchpad: Empty Edit	
	You can open the Setup Assistant at any time by clicking on Resture in the top menu.	
	Note: If you click on <b>the set of the set of</b>	
		Î

Enter the GateManager Server name and Token.

(C)	D - C Stationer - Hindmann, X	••• • ••• 0 ☆ 0
(b) HIBSCHM	IANN SiteManager Embedded	
0		
	SETUP • GateManager Status Log • HELP	
	Help Continue Setup >	^
	GateManager not connected. 🗔	
	Remote Management: Enabled	
	Go To Appliances: Automatic Login V	
	GateManager Address: * [191.242.155.140 ] [1]	
2	Appliance Name: SiteManager	
	Web-proxy Address:	
	Web-proxy Password:	
	Address on LinkManager:	
	* = Mandatory field	~
🚳 📋 🧿 🍊 🔤	🚰 🧶 🚺 🏈 🚔 🕹 🕫 and	- ■ ► 〒 ◆ <sup>15:19</sup> / <sub>2015/11/17</sub>

SiteMana	ger GECKO
Configuration	
Operation	● On ○ Off
GateManager Server	193.242.155.140
GateManager Token	Hirschmann
Name	Ger_NT_SM_1
Webproxy Address	
Webproxy Account	-
Webproxy Password	

IMPORTANT: The information to enter in this screen is found in the lower section of the email you received from the GateManager with the GateManager X.509 Certificate.

Helio John John Helio H
This mail contains an updated X.509 certificate for the GateManager administrator login.+
The password associated with the certificate is: 2312j3hsjdhsd+
This is an update to an existing certificate, so just replace the old certificate file with the attached file, JohnJohn-US,gmc.+
ta de la construcción de la constru
Follow this link to the GateManager administrator login screen: https://us.sra.hirschmann.com/admin (or alternatively: https://52.3.71.186/admin).+
It is recommended to bookmark this page in your browser. The login screen will ask you to load the certificate file and enter the password.+
e)
GateManager has been verified to work with Internet Explorer 9 (IE8 also works), Google Chrome, Apple Safari, and Mozilla Firefox.+/
Please ensure that your browser is up-to-date and has JavaScript and TLS 1.0 enabled if you have problems connecting. +/
Additional Information
The certificate in this mail is issued to user "John John US" in domain "ROOT" on server "Hirschmann US GateManager".
Hirschmann appliances, such as a SiteManager that should be administered by this account or by UnkManager users created by this account, should be configured with the following GateManager settings:+-
GateManager server: 133.242.155.140-
Catewanager loken: Uemo.Hirschmann China-
For more mormation prease check www.mschmank.com
*

Click Save and Connect, and click the refresh icon periodically.

ρ-	G SteManager - Hinchmann, X	
(h) HIRSCH	HMANN 🙀 SiteManager Embedded	
	SETUP • GateManager Status Log • HELP	
	About The Litemanager has not been able to connect to the Usbernanager as expected.	
	Check the following:	^
	E. There is the 10 - Observances existing in strategic currents.     The instrument of the observances of the observance of the obser	
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	1 Save Marcetery teal	v
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After a short while the status should change to this:

GateManager	connected: 193.242.155.140:443 (LAN) 💧 Not Attached! 🞸
Remote Management:	Enabled 🗸
Go To Appliances:	Automatic Login
GateManager Address: *	193.242.155.140
Domain Token: *	Demo.Hirschmann China
Appliance Name:	SiteManager
Web-proxy Address:	
Web-proxy Account:	
Web-proxy Password:	
Address on LinkManager:	
	* = Mandatory field
	Save More >> Reconnect

You do not need to do more locally to the SM-E.

In reality you could now ship the Windows machine or GECKO to a new site.

Once the Windows machine is connected to a network that has Internet access, the SM-E or GECKO will automatically connect to the GateManager.

## 2.2 ROLE: GateManager BASIC Admin

#### 2.2.1 Install the GateManager Administrator certificate

Locate the email you received from the GateManager with the GateManager Certificate, and save the attached file to your hard disk:



This mail contains an updated X.509 certificate for the GateManager administrator login. The password associated with the certificate is: 2312j3hsjdhsd

This is an update to an existing certificate, so just replace the old certificate file with the attached file, JohnJohn-US.gmc.

Follow this link to the GateManager administrator login screen https://us.sra.hirschmann.com/admin (or alternatively: <a href="https://sra.hirschmann.com/admin">https://sra.hirschmann.com/admin</a> (or alternatively: <a href="https://sra.hirschmann.com/

GateManager has been verified to work with Internet Explorer 9 (IE8 also works), Google Chrome, Apple Safari, and Mozilla Firefox. Please ensure that your browser is up-to-date and has JavaScript and TLS 1.0 enabled if you have problems connecting.

Open the link in the same email. (There may be two links with a DNS name and IP address respectively and you can use either of them)

This will open the login screen of the GateManager:

Б	HIRSCHMANN
	GateManager
Administrator L	ogin
● Certificate: 选择S ✔ Re	 7件 未选择任何文件 member Certificate
O User name:	
Password:	
Login	

**Note:** The GateManager administrator portal requires minimum MS Internet Explorer 9, Apple Safari, FireFox or Google Chrome.

Browse for the certificate you just saved, and enter the password you were informed of by the administrator.

If you have not yet received the password via email or verbally, you should contact the person that is listed in the **signature section** of the email with the certificate (do not hit reply on the email, as it is auto-generated from the GateManager)

#### 2.2.2 Create LinkManager user account

When logged in select the Accounts tab, and select the "+" icon to create a new account:

Tree									My Accou	int Abou	t Logoff
♥♥≌島⊑≜≢♥◀	(+ -) Å	- Hirschmar	in China								
Hirschmann China BRONZE	Domain	Activity	Accounts	Licenses	Appliances	Alerts	Actions	Messages	Relays	Reports	Audit
- 🐕 Zhangmeng.Li@belden.com (Li Zhangmeng) - 🖁 Zhangmeng.Li@belden.com (Li Zhangmeng) - 🚼 Zhangmeng.Li@belden.com (Li Zhangmeng)		Selected 0 of 3 accounts									
– 🙀 <sup>1</sup> Test (Hirschmann SiteManager Extended, 5 Agents #6a)			Login 🔹		Name 0	E-m	ail 0	Role 0	Auth \$	Last login 🕸	From \$
– 🖼 ' Test (LinkManager #7b)					12			Pressie.		2015-11-	

Fill in the following information:

Account Audit
Account Name: Rose
Account Role: LinkManager User 🗸
Account Language: English
Description:
Group Member:
Person Name Rose Andersen
Emaily rose@armeinc.com
Degree Tafe:
Heison tino:
Disabled: Auto-Disable: Never 👻 🦞
Last Login:
Created: 2014-02-10 Renewed:
Expires:
Authentication: X.509 Certificate (with password) 🗸
Duration: Permanent -
Mail Template: Use default 👻
Message:
GM Address:
Zin Format:
New password:
Panashi 3
amb new password: Auto pessword:
Save

- 1. The **Account Name**. This will become the file name of the LinkManager certificate file (in this case Rose.Imc)
- 2. **Person Name, Email** and optionally **Mobile** number. In this exercise you will likely issue the account to yourself. You can later create accounts for other users. (All users will share the same LinkManager floating license)
- 3. Type a **Password**. If you create the account for another user, you should inform this password to the user verbally or in a separate email. Alternatively select "Auto password", which will automatically create a password and include it in a separate mail to the user.
- 4. When pressing **Save**, the email is automatically sent from the GateManager.

### 2.2.3 Create LinkManager Mobile user account

The account is created identically to the LinkManager account.

Login to the GateManager portal and select Accounts and Create new account:

Tree	My Account A	bout Logoff
٩ 🔪 🖉 🖉 🖉 🖉 ۹	🚽 🎄 - Hirschmann China	
Hirschmann China BRONZE	Domain Activity Accounts Licenses Appliances Alerts	Actions
- 👷 Zhangmeng.Li@belden.com (Li Zhangmeng)	Messages Relays Reports Audit	
– 🙎 Zhangmeng.Li®belden.com (Li Zhangmeng) – 🐯 Zhangmeng.Li®belden.com (Li Zhangmeng)	\$ 1 🕂 🛨 == 💷 1	Selected
- 📮 <sup>1</sup> Test (LinkManager #7b) - 📮 <sup>1</sup> Test (LinkManager #7c)	E Login + Name ¢ E-	nail 0
- Test (Hirschmann SiteManager Extended, 5 Agents #	<u>\$</u> Rose (Rose Andersen)     Rose Andersen     Andersen	inc.com

Now fill in the following details:

Account Au	dit	
Account Name: Account Role: Account Langua Description:	Rose LMM LinkManager Mobile - Assign license:	
Group Member:	ь. •	
Person Name Email: Mobile: Person Info:	Rose Andersen rose@acmeinc.com	
Disabled: Last Login: Created: Renewed: Expires:	Auto-Disable: Never V	
Authentication: Duration: Mail Template: Message:	Username and Password  Permanent  Use default	
New password: Repeat:		

- 1. The **Account Name**. This will become the login login ID for the account
- 2. Role LinkManager Mobile. Note that the check box "Assign License" appears when selecting this role. When checking this box, this account will allocate the free LinkManager Mobile license and subsequently allow remote access by this account (if not checking the box, the account will still be working, but remote access is blocked)
- 3. **Person Name**, **Email** and optionally **Mobile**. The Mobile number is relevant if using two-factor security with SMS code.

- 4. If the GateManager has a SMS modem associated, you would have the option to select SMS code in combination with the login ID and password and thereby ensure two-factor login. Otherwise the only option will be **Username and Password**.
- 5. Type a **Password**. If you create the account for another user, you should inform this password to the user verbally or in a separate email. Alternatively select "Auto password", which will automatically create a password and include it in a separate mail to the user.
- 6. When pressing **Save**, an email with a link to the LinkManager Mobile login page is automatically sent from the GateManager

### 2.2.4 Assign License to the SM-E or Hardware SiteManager

If the SM-E has been configured correctly according to section 2.1.2 Configure the GateManager settings, the SM-E or hardware SiteManager should appear in the tree view. Place your cursor on it and press **Bind license and attach here**. A SiteManager license will then be bound to the SM-E.



### 2.3 ROLE: LinkManager User

### 2.3.1 Install and login to the LinkManager

The previous step has generated an email from the GateManager that includes a LinkManager certificate (.lmc). Save the attached certificate to your computer.



Download and install the LinkManager software by clicking the appropriate link in the email.

**IMPORTANT**: You must have administrator privileges on the PC in order to install LinkManager.

**HINT**: You can also install LinkManager inside a VMWare virtual machine if the host OS is Windows 7 and the CPU supports virtualization. You can also run your programming software inside a virtual machine and connect to devices via LinkManager installed on the host OS if the virtual machine is configured for "NAT".

Eventually, when you click Finish in the installation wizard, the bubble help of the LinkManager icon will show the IP address of the GateManager to which it is connected. Your default web browser will open, showing the LinkManager Web GUI.



**Hint:** If The LinkManager icon does not display the GateManager IP address for a long while, it could indicate that something on the PC is preventing the LinkManager from starting correctly. Consult the FAQ here for trouble shooting info:

http://www.hirschmann.com/en/QR/SRA-LinkManager-Download

Browse for the certificate you just saved and enter the password you specified for the account earlier:

(f) HIRSCHMANN	📓 LinkManager
	Å Please install LinkManager User Certificate.
	The GateManager administrator has sent you an email which contains a LinkManager User Certificate file (file type is . <i>Imc</i> ).
-	Press the "Browse" button to select the certificate file from your local computer, fill in the certificate's password, and press "Install".
	Certificate file: C:\Users\test\Desktop\Zhangmeng.Li@beld Browse Password:
	Remember password
	Install About

When clicking Install, you will be prompted to login. Repeat the password from above, and click Login:

Login	
ficate: Zhangmeng.Li@belder	n.com 🔻
word	Change
Remember password	
Open last domain: ROC	)T.Demo.Hirschmann China
Connect last device: Fu	II Access (SiteManager)
and a second second second	
	ricate: Zhangmeng.Li@belder vord

You are now logged in.

ROOT.Demo.Hirschmann China
₽ <sup>4</sup> — Zhangmeng.Li@belden.com [CNSHA1LT0462
Show all Refresh

#### 2.3.2 Connect to the PC via the SM-E

Click on the SiteManager <Connect All>

				-
Zhangmeng.Li@belden.co	n: ROOT.Demo.Hirs	ichmann China		
- 🛃 ROOT.Demo.Hirschmann China	<b>*</b> *	∃- SiteManager	[CNSUZ1DT911]	<connect all=""></connect>
Show all Refresh	31	— Zhangmeng.l	i@belden.com [C	NSHA1LT0462
		Show all	Expand all	Refresh
		Show all	Ex	pand all

You are now connected to the IP address of the PC.

			June		ulidu		
ROOT.Den	no.Hirsch	mann C	hina				
SiteMana	ger [CNSI	UZ1DT9	11]				
	-	Conr	nects	Pac	kets	By	tes
Address	Status	ok	fail	tx	rx	tx	rx
iess 192.168.1.53	IDLE	0	0	0	0	0	0
(udp)	IDLE	0	0	0	0	0	0
:80	IDLE	0	0	0	0	0	0
172.10.10.56:80,443,23,22	IDLE	0	0	0	0	0	0
:161 (udp)	IDLE	0	0	0	0	0	0
192.168.1.59	IDLE	0	0	0	0	0	0
(udp)	IDLE	0	0	0	0	0	0
172.10.10.110:80,443,23,22	IDLE	0	0	0	0	0	0
:161 (udp)	IDLE	0	0	0	0	0	0
12	Address 192.168.1.53 (udp) :80 172.10.10.56:80,443,23,22 :161 (udp) 192.168.1.59 (udp) 2 172.10.10.110:80,443,23,22 :161 (udp)	Address         States           192.168.1.53         IDL           192.168.1.53         IDL           180         IDL           180         IDL           192.168.1.53         IDL           180         IDL           192.168.1.54         IDL           192.168.1.59         IDL           192.168.1.59         IDL           192.168.1.59         IDL           192.168.1.59         IDL           192.168.1.59         IDL           192.168.1.59         IDL           100         IDL           101         IDL           102         IDL           103         IDL           104         IDL           105         IDL           105         IDL           105         IDL           105         IDL           105         IDL           105         IDL	SiteMarrier CONSULTANT           Address         Sate         Constraint           192.168.1.53         DLE         0           (udp)         DLE         0           180         IDLE         0           180         IDLE         0           172.10.10.56:80,443,2322         IDLE         0           192.168.1.59         IDLE         0           192.168.1.59         IDLE         0           192.168.1.59         IDLE         0           192.168.1.59         IDLE         0           100         IDLE         0           1010         IDLE         0           102         IDLE         0           103         IDLE         0           104         IDLE         0           105         IDLE         0           104         IDLE         0	SiteMatures Unitarial SiteMatures Unitaria SiteMatures Unitaria SiteMatures Unitarias Unita	SiteHausserie           Address         Constrained ok         Fail         Fail	SiteManuscription           Address         Panue         Converts         Packets           192.168.1.53         IDLE         0         0         0           192.168.1.53         IDLE         0         0         0           192.168.1.53         IDLE         0         0         0           180         IDLE         0         0         0           172.10.10.56:80,443,23,23         IDLE         0         0         0           192.168.1.59         IDLE         0         0         0         0           192.169.1.59         IDLE         0         0         0         0           104.1         IDLE         0         0         0         0           102.1         IDLE         0         0         0         0           102.1         IDLE         0         0         0         0	SiteMausure (USUSURE)         Packer / Packer

Round-trip time: Measurement in progress... 🧔

You can now connect to any application on that IP address. (Note that MS Remote Desktop can be auto-started with the screen icon).



Or you could connect to a special service running on the Windows machine. In this example where the connection is made with GP-Viewer to the WinGP server on the machine:



HINT: You will notice that the LinkManager shows that the data counters reflect the transferred data.

		Di	sconnect Logout	Services		Sniffer		Chat		
			ROOT.Den	no.Hirsch	mann C	hina				
			SiteMana	ger [CNS	UZ1DT9	111				
		Acout	Address	Chature	Con	nects	Pac	kets	By	tes
		Agent	Address	Status	ok	fail	tx	rx	tx	rx
⊕*	-	Full Access	192.168.1.53	UP:1	2	0	7	6	1,367	1,86
	-		(udp)	IDLE	0	0	0	0	0	0
	•		:80	IDLE	0	0	0	0	0	0
101		bat	172.10.10.56:80,443,23,22	IDLE	0	0	0	0	0	0
			:161 (udp)	IDLE	0	0	0	0	0	0
⊕*	믕	lzm	192.168.1.59	IDLE	0	0	0	0	0	0
			(udp)	IDLE	0	0	0	0	0	0
@*		switch2	172.10.10.110:80,443,23,22	IDLE	0	0	0	0	0	0
					0	0		0	0	0

### 2.4 ROLE: LinkManager Mobile User 🗳

LinkManger Mobile can be seen as a "light-weight" version of LinkManager that can be used from most devices with a web browser, such as PCs, Smartphones and tablets.

With LinkManager mobile you can connect to the Web GUI (http/https) on a device.

#### 2.4.1 Login and connect to a web GUI with LinkManager Mobile

As result of creating the account in section 2.2.3, you will have received an email with a link to the LinkManager Mobile login screen.

You can activate the link from most platforms with a suitable web browser supporting https and java script.

Hello Rose Andersen
This mail is a notification that the LinkManager Mobile account "Rose LMM" has been created for login to the Hirschmann GateManager server. The password associated with the account is: whkqxj0124
Follow this link to the LinkManager Mobile login screer: https://gatemanager.hirschmann.com (or alternatively: https://193.242.155.140).
(It is recommended to bookmark this page in your browser)
In the Login screen type your username <sup>1</sup> Rose LMM <sup>a</sup> and the password.
LinkManager Mobile has been verified to work with iPhone, iPad, and Android smart phones, as well as Internet Explorer 8, Google Chrome, Apple Safari, and Mozilla Firefox.
Please ensure that your browser is up-to-date and has JavaScript and TLS 1.0 enabled if you have problems connecting.
Additional information

Login with the user name from the email. The password is either provided in a separate email, or verbally, depending on how the administrator created the account.

	LinkManager <i>Mobile</i>
GateManag	er
Username:	_
Rose LMM	
Password:	

Click on the blue bar to unfold devices in the root domain, and connect to the Full Access agent.

Refresh		GateManager	Logof	
Online	Offline (*	Flagged		
🛛 Filter items				
Demo.Hirsch	mann China 🌔		111 (	>
💓 SiteMana	ger [OEM-TA8KL	.VOUGFF]		2
	•		6	5

### 3 SM-E Basic - Adjusting Agents

This section describes how to extend SM-E Basic to allow access to selected services on the windows computer.

In extension to the default Full Access agent on SM-E you can create agents that allow access to specific services on the computer. This can be used to limit remote access to the computer, or to enable connection buttons on LinkManager or LinkManager Mobile for accessing the selected services.

## 3.1 Connect to Device Agents section in the SiteManager GUI

Connect to the Web GUI of the SM-E. This can be done either from the LinkManager Mobile, LinkManager or from the GateManager Portal:

From LinkManager Mobile: Select the SiteManager and click WWW:



Or from LinkManager: Select the globe next to the SM-E

Logou	It Services	GM Login	Sniffer	Chat	Refresh	
	Zhangmeng.	Li@belden.com: R	OOT.Demo.Hirse	chmann China	a	
ROOT.Demo	Hirschmann China		<b>4</b> * •	- SiteManager	[CNSUZ1DT911]	<connect a<="" td=""></connect>
Show all	Refresh		21	Zhangmeng.L	i@belden.com [C	NSHA1LT04
				Show all	Expand all	Refresh

Or from the GateManager Portal: Click the SiteManager GUI button.



When connected, the first screen is the Setup Assistant, where you click the **Edit** button for Device Agents:



**Note:** The connection is made as a proxy connection via the GateManager, and is using a randomized port number, (in this case 55700 as indicated in the address line). Your outgoing firewall must support http and https access via the port range 55000-59999 for remote web access to work.

### 3.2 Enable standard connect buttons for Agents

For a SiteManager Agent you can enable buttons for WWW, VNC and RDP access that will appear in LinkManager and LinkManager Mobile for connecting to the device.

Typically these buttons are not enabled default, as the corresponding service (listen socket), may not be available for the device that the Agent represents.

## 3.2.1 Example: Enable VNC button for the default Full Access agent

Click the Parameter details for the Full Access agent.

	GateManager Agents						
					Using 1 of 2 basic agents		
Status	Disable	S/N	Device Name	Dev	ice Type	Device IP & Parameters	Comment
IDLE		#A1	Full Access	GENERIC	Windows PC 🔹	PC 172.24.2.158	
					Save New		Parameter Details

Check "VNC", and select Save and Back.

"Full Access" - GENERIC Windows PC A	gent - Setup Assistant
--------------------------------------	------------------------

When you configure an agent to monitor a TCP/IP enabled devices located on either the DEV network or Uplink network of the SiteManager, you must specify the device IP address below.

Click [Save] and then [Back] to make the SiteManager instantly try to connect to the device.

If not successful, the Agent will report an error, and the agent will not be registered on the GateManager and subsequently not on LinkManagers either.

		Help	Continue Setup #
Device Address: *	PC		
Address on LinkManager:	172.24.2.158		
Address on GateManager:			
Extra TCP ports:			
Extra UDP ports:			
Extra GTA Service:			
RDP Login:			
RDP Password:			
Enable UDP Broadcast:			
Enable RDP service:	LinkManager Only		
Enable WWW service:	LinkManager Only		
Enable VNC service:	🕢 🗌 LinkManager Only		
	$\bigcirc$		
Custom Settings:			
	Save Back		
	* = Mandatory field		

## 3.3 Using Agents with custom LinkManager Mobile connect buttons

Some agents, such as Pro-face and Schneider, includes own custom connect buttons. These do not need to be defined specifically for the agent

### 3.3.1 Example: Create a new Pro-face Agent

Select New.

	A		- 1 TT 1	
	(h) HIRSCHMA	NN SiteManage	er Embedded	
		SETUP • GateManager S	tatus Log • HELP	
		About		
		GateManager Agents -	Setup Assistant	
	You c and T	an configure an agent to monitor a device connect CP/IP enabled devices located on either the DEV r	ted to the SiteManager Serial port setwork or Uplink network of the SiteManager.	
	Click and s the d	[New], and give the Agent a name (this name will elect a suitable device type (first vendor, then mo evice address and other relevant parameters.	be what the LinkManager user will see), del). Then click on 📸 to specify	
	The S go ID doma	iteManager will instantly try to connect to the dev LE and appear on the GateManager and any Linkh in of the SiteManager.	ice, and if successful the Agent will lanager that have been granted access to the	
	If not the G	successful, the Agent will report an error, and the ateManager and subsequently not on LinkManager	agent will not be registered on rs either.	
			Help Continue Setup >	
		Using 1 of 5 extend	led agents	
Status Disable	S/N Device Name	Device Type	Device IP & Parameters	Comment
IDLE 🗌 🖛	A1 Full Access	GENERIC V Desktop PC	▼ 172.24.2.158	
		Save	New	

😵 🟮 🤮 🖪 🧉 🏈 💽 🏉 🔛 🛷 🔛 🖏 😒 🔤 👘 🗞

Fill in the information:

	Using 2 of 2 basic agents							
Status	Disable	S/N	Device Name	Dev	ice Type		Device IP & Par	ameters
IDLE		#A1	Full Access	GENERIC	All ports, 1	-way NAT 👻	PC 172.24.2.158	ÊÛ
new:		#01	Panel	GENERIC	Ethernet 🗸	•	PC	60
			0	ifm electronic / IMO / IMO / IMO / IMO / IMO / Soft / Invensys Wonderware / Karwaski Robotics / Lenze		Save	Č.	

- 1. Type a meaningful name that will describe the agent when logged into LinkManager or LinkManager Mobile
- 2. Select the Pro-face agent from the scroll bar. In case of SM-E the only connection type will be Ethernet.
- 3. Hint: Other options could have been Generic / Web access, which would have limited access to a web server on the computer
- By just stating PC, the SM-E will just leave it up to Windows which IP address should be used when remote accessing from LinkManager. If the computer had multiple network adapters, you may wish to associate a specific address.

Select Save and observe that the Status of the agent goes "idle".

				Using 2 of 2 basic agents					
Status	Disable	S/N	Device Name	Devi	се Туре	Device IP & Parameters			
IDLE		#A1	Full Access	GENERIC -	All ports, 1-way NAT 🔹 👻	PC 172.24.2.158	P		
IDLE		#01	Panel	Pro-face +	Ethernet 👻	PC	P		
$\smile$					Save				

You can now close the SiteManager web GUI window.

## 3.3.2 Configure the Pro-face Remote HMI APP to connect via the Agent

You probably already have downloaded and installed the Pro-face app from Apple App Store or Google Play, in which case you would just need to create a new connection profile.

Log into the Pro-face Remote HMI, and select "+" to create a new connection profile.



Enter the following settings:

enor DK 😤	11.19 Not Chargi
Connection	
Server Name	Demo.Hirschmann
IP Address	193.242.155.140
Port	5900
Others	
Comment	Comment
Save Password	OFF

- 1. **Server Name**. Define a name of choice. In this case we have just entered the name of the GateManager through which the LinkManager Mobile connects.
- 2. **IP Address**: Enter the IP address of the GateManager server. You can find this in any mail received from the GateManager (see example in section 2.1.2)
- 3. Port. Enter Port 5900.

**NOTE:** You should always use port 5900, even if the panel is using a port such as 10000, as the case is for Pro-face. GateManager will automatically map port 5900 from the LinkManager Mobile to the port used by the agent towards to the device.

Click **Done** in the Pro-face app to save the settings.

### 3.3.3 Connect to the Pro-face agent with LinkManager Mobile

In the LinkManager Mobile view, you will discover the new Vendor agent.



If you select the agent, you will see the HMI button specific for the Proface agent.

& Back	Pro-Face HMI (SM-HERLE	EV-DEMO)-172
	HMI	

**NOTE:** The HMI button is only displayed if the agent can detect that the HMI server application is started.

Clicking the HMI button will establish a connection to port 5900 on the GateManager, which is mapped to the WinGP port (10000) on the Proface panel:

Back	GateManager	
	Referen	
	Start Pro-face Remote HMI App	
	Connect to this server:	
	Demo.Hirschmann China	
	Port: 5900	
	CLOSE	

**NOTE:** Within 60 seconds you should connect with the Pro-face Remote HMI app, otherwise the connection is closed again, and you would need to repeat the above procedure.

### 3.3.4 Connect with the Pro-face Remote HMI APP

Click the home button on your tablet or smart phone to return to the home screen and select the Pro-face Remote HMI app. Login and click the connection profile you just created in section 3.3.2.



You will now be prompted for the password for the panel itself:



**NOTE:** Reaching the above screen means that everything is setup correctly.

Entering the correct password will bring you to the Panel view.



You can now operate the panel as you would do if connected to the panel from the local network.

# 4 SM-E Extended – Accessing external devices

By upgrading to SiteManager extended, you can use SM-E to access other devices in the same network as the computer running SM-E

### 4.1 Installing licenses on (own) GateManager

**NOTE:** If you running on a hosted server, your hosting provider will place the ordered license in your domain, and you can continue with section **4.2 Upgrading SM-E Basic to SM-E Extended**.

If you have your own GateManager server, you will receive the license as a text file attached to an email. Open the text file and copy the contents to the clipboard.



Select Licenses and the "+" sign.



Paste the license into the text field, and click Install.



### 4.2 Upgrading SM-E Basic to SM-E Extended

**NOTE:** This section assumes you have a SM-E or hardware SiteManager with a SiteManager Basic license attached to it, and have received a SiteManager 5 or 10 Node License. If your device already has a 5 or 10 Node License, you can jump to section **4.3 Define device agent for external device** 

Locate the SiteManager in the GateManager Portal, and click the "+" sign to upgrade the license.

Tree					My Account	About	
٩ (	(+) - (+)	- SiteManag	er [OEM-TA8	KLVOUG	FF] 🚠 - Hirschr	nann Chin	a
Hirschmann China BRONZE	Appliance	Agents	Backups	Audit			
- Store LMM (Rose Andersen) - Store LMM (Rose Andersen) 1 (SiteManager Embedded Basic, )	Name:	SiteManage [OEM-TA8KI	r LVOUGFF]				
- 1 (LM Mobile #1307)	Product:	SiteManage	r for Pro-face	IPC	1	$\bigcirc$	
– 📑 <sup>1</sup> (LinkManager #1304)	Serial:	6110:00139 ULRDb31xii	950F96A4- <hw< td=""><td></td><td></td><td></td><td>3</td></hw<>				3
	Created:	2014-02-07	15:39				
- Q Kose [PH-DTP-PC]	Source IP:	94.18.233.	162			CU	-
🖨 💞 SiteManager [OEM-TA8KLVOUGFF	Firmware:	oper:v6110	_14072				-
- 🥵 ✓ Full Access (SiteManager)	License:	Basic, 2 Age	nager Embedr ents #12e1)	ted +			
	SiteMa	nager GUI	• 😡 Cha	at 🛛	Disable	🗊 Delete	

Available licenses will be listed. Click Upgrade to bind the license.



### 4.3 Define device agent for external device

Connect to the SiteManager GUI, and select Edit for 2. Device Agents.

(f) HIRSCHMANN	SiteManager Embedded
SET	UP • GateManager Status Log • HELP About
Hirschmann Site	Manager Embedded for Windows - Setup Assistant
1. GateManager: 2. Device Agents:	193.242.155.140 Connected to 193.242.155.140:443 (LAN) Edit
3. Chat / Scratchpad:	Empty
You can open the Se Note: If you click or Please cor	etup Assistant at any time by clicking on serup in the top menu. Meteo it shows specific help for the current configuration page. sult the online help as your first step in solving setup problems.

Select New and fill in the details.



- 1. Fill in the name that will appear in LinkManager
- 2. Select the type of device. In this example we will connect to an Ethernet attached Pro-face panel
- 3. Enter the IP address of the device. The IP address must be accessible from the computer on which SM-E is installed.

Click Save and Refresh a couple of times until the Agent becomes idle, which indicates that SM-E can reach the device.

Status	Disable	S/N	Device Name	Devi	Device IP & Parameters	
IDLE		#A1	Full Access	GENERIC -	Windows PC 👻	PC 172.24.2.158
IDLE		#01	Small panel	Pro-face 👻	Ethernet 👻	172.24.2.126

Login to LinkManager, click Refresh to update changes, Click "+" to unfold the agents on the SiteManager, and connect to the new agent, by clicking the agent description.



You are now connected directly to the IP address of the device.

Disconnect			onnect	Logout Ser	Services Sniffer Chat						
				ROOT.Demo.Hi	rschmann (	China					
				small panel	(SiteManag	er)					
					Charles	Connects		Packets		Bytes	
Agent			Address		ok fail	fail	tx	rx	tx	nx	
;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	📕 Sm	all panel	172.24.2.126	80,10000,8000-80	30 IDLE	0	0	0	0	0	0
	6			:21	IDLE	0	0	0	0	0	0
				0 0000 (	TOU C	0	0	0	0	0	0

Now start the native application for the device and define the target IP address:



### 5 Additional Features

### 5.1 Upgrading your GateManager Administrator account from BASIC to PREMIUM

With your current GateManager BASIC account, you are only using the GateManager administrator account to manage your LinkManager accounts.

You can, however, upgrade to GateManager PREMIUM and receive a Full GateManager administrator account.

This upgrade will add the following features to your current account:

- Organize equipment in domains per customer, factory, access levels or other logical structure (create domains and drag and drop devices and SiteManagers into relevant domains)
- Give LinkManager accounts individual access to domains (all LinkManager accounts will, when logging in, pull a license from the same LinkManager floating license pool on the server)
- Access the LinkManager GUI of your users, so you can provide remote assistance by looking at the same LinkManager screen that the user sees locally.
- Distribute messages for LinkManager users, that are automatically displayed to the users when logging into LinkManager (it could be notification of server maintenance)
- Have the possibility to apply alert rules that will result in email reports when triggered (such as failed, connected etc.)
- Create and administer co-administrators for GateManager Console access.

### 6 Appendix A: Further Support

### Technical Questions

For technical questions, please contact any Hirschmann dealer in your area or Hirschmann directly. You will find the addresses of our partners on the Internet at http://www.hirschmann.com Contact our support at https://hirschmann-support.belden.eu.com

You can contact us in the EMEA region at

- ► Tel.: +49 (0)1805 14-1538
- E-mail: hac.support@belden.com

in the America region at

- ▶ Tel.: +1 (717) 217-2270
- E-mail: inet-support@belden.com

in the Asia-Pacific region at

- ▶ Tel.: +65 68549860
- E-mail: inet-ap@belden.com

### Hirschmann Competence Center

The Hirschmann Competence Center is ahead of its competitors:

- Consulting incorporates comprehensive technical advice, from system evaluation through network planning to project planning.
- Training offers you an introduction to the basics, product briefing and user training with certification.
- The current training courses for technology and products can be found at http://www.hicomcenter.com
- Support ranges from the first installation through the standby service to maintenance concepts.

With the Hirschmann Competence Center, you have decided against making any compromises. Our client-customized package leaves you free to choose the service components you want to use. Internet: <u>http://www.hicomcenter.com</u>

### 7 Appendix B: Third-Party Software

The software solution uses open source software originated from third parties that is subject to their respective licenses.

Firmware/Software for SiteManager, LinkManager and GateManager

(NOTE: The list below represents a common denominator for all product categories. Each of the products contains only a subset of these software components)

Linux		_			http://www.kernel.org
Apache	http	d	-		http://httpd.apache.org
OpenSSL			_		http://www.openssl.org
mod_ssl			_		http://www.modssl.org
axTLS	(originating	from	BSD)	-	http://axtls.sourceforge.net
busybox		-	-		http://www.busybox.net
tinylogin		-			http://tinylogin.busybox.net
ISC	DHCP		_	http:	://www.isc.org/software/dhcp
DNRD		-			http://dnrd.sourceforge.net/
ethtool		-		http://fr	eshmeat.net/projects/ethtool
expat		-			http://expat.sourceforge.net
FreeS/WAN	-				http://www.freeswan.org
hping –					http://www.hping.org
hwclock –				http://fre	shmeat.net/projects/hwclock
iproute2 –	http://www.lin	uxfounda	ation.org/colla	borate/wor	kgroups/networking/iproute2
traceroute -	http://www.linux	foundati	on.org/collabo	orate/workg	groups/networking/traceroute
bridge-utils	<ul> <li><u>http://www.l</u></li> </ul>	inuxfoun	dation.org/col	laborate/w	orkgroups/networking/bridge
vconfig	-		http://w	ww.candel	atech.com/~greear/vlan.html
iptables					<ul> <li><u>http://www.netfilter.org</u></li> </ul>
OSSP	mm		_	htt	p://www.ossp.org/pkg/lib/mm
Net-SNMP		-		htt	p://net-snmp.sourceforge.net
ntpdate	-		http://www.ee	ecis.udel.e	du/~mills/ntp/html/index.html
pppd		-		http://	/freshmeat.net/projects/pppd
RP-PPPoE	-		http://ww	w.roaring	penguin.com/products/pppoe
e2compr		-		htt	p://e2compr.sourceforge.net
lilo		-		htt	p://freshmeat.net/projects/lilo
U-Boot		-		<u>htt</u>	p://www.denx.de/wiki/U-Boot
Im_sensors		-	-		http://www.lm-sensors.org
pcmcia_cs		-		<u>http</u>	://pcmcia-cs.sourceforge.net

ez-ipupdate		-	http://ez-ipupdate.com
Open1X		-	http://open1x.sourceforge.net
FreeRADIUS			- <u>http://freeradius.org</u>
ser2net		_	http://sourceforge.net/projects/ser2net
Squid		_	http://www.squid-cache.org
glibc		_	http://www.gnu.org/software/libc
libGD		-	http://www.libgd.org
uClibc		_	http://www.uclibc.org
SquashFS		_	http://squashfs.sourceforge.net
UnionFS		_	http://www.fsl.cs.sunysb.edu/project-unionfs.html
VirtualBox		-	http://www.virtualbox.org
SDL		_	http://www.libsdl.org
com0com		-	http://com0com.sourceforge.net
gSOAP		_	http://gsoap2.sourceforge.net
NSIS		_	http://nsis.sourceforge.net
AES	crypto	routines	<u>http://www.gladman.me.uk/</u>
Cntlm		-	http://cntlm.sourceforge.net/
wcecompat (S	M-E for W	inCE only) http://	/wcecompat.sourceforge.net

