
APPLICATION NOTE

SECURE REMOTE ACCESS VIA SECOMEA GATEWAY REMOTE ACCESS



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1 Introduction

1.1 Scope of the document

This document describes how to establish a secure connection to an ABB AC500 PLC or CP600 panel using Secomea gateway.

The Gateway provides monitoring and control functions of field devices via internet access or cellular network from a central site or control center. The devices offer industrial quality connectivity for TCP/IP based protocols.

1.2 Compatibility

The application note explained in this document have been used with the below engineering system versions. They should also work with other versions, nevertheless some small adaptations may be necessary, for future versions.

- AC500 V2, V3 PLC and CP600 HMIs
- Automation Builder in any version, we recommend using the latest version
- Internet access or Sim card to access the internet

1.3 Components

The three main components, used in this document are explained here:

SiteManager™

- On site in the factory (hardware)

LinkManager™

- Internet or Windows based client for the technician or end user (for desktops and mobile devices)

GateManager™

- M2M server that connects the SiteManager and the LinkManager (cloud-based or standalone)

1.4 Roles referred to in this Guide

LinkManager User

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

- Connect remotely to equipment for servicing/programming the equipment.

SiteManager Installer

This role covers the following tasks:

- Physically Install SiteManagers (often done by the service engineer or the customer)
- Configure network settings (primarily GateManager access)

2 Remote Connections

2.1 What is VPN

A VPN is a “Virtual Private Network”. This meant that there was no separate physical connection, but an existing communication network that was used as a transport medium. So, it's kind of like connecting directly to the other company network via a network cable, but without doing this physically. Nowadays it is normal that a VPN connection is encrypted and you can only connect to a network where the necessary information is known.

In short, you connect to an end device (firewall, router) in the network and then work in the target network as if you were connected locally.

2.2 What is DynDNS

DynDNS or “Dynamic Domain Name System” is a method with which DNS entries in domains can be updated dynamically. This is particularly advantageous if the connection destination does not have a fixed IP address and you do not always want to search for the new IP in order to connect.

This could be the case if you want to login to a router without a fix IP address.

You can configure such a DynDNS address for the terminal server and then log in from anywhere on the server using this address.

2.3 Conclusion

Advantages of VPN:

- Secure connection through encryption
- Can be configured for a permanent connection

Disadvantages of VPN:

- An additional client is required

Advantages of DynDNS:

- No additional software required

Disadvantages of DynDNS:

- Unencrypted access.
- Open to the outside world. Anyone who knows the URL can access it.

If you want a secure connection, you should definitely use VPN to work on the terminal server from outside. It is much safer to work with this method thanks to the encryption of the data transfer and the general access protection.

However, if you don't want an extra client or for whom security is not so important, because it is a sealed off system and no sensitive data is used there anyway, you can also use DynDNS.

It's really recommended to use a secure connection. A proven solution that has already been qualified with AC500 and CP600 devices is to use the 3rd party Secomea gateway.

2.4 What is the benefit of using Secomea

Allowing remote access to PLCs and connected equipment like the robots and HMI. This enables configuration, programming and diagnostics with the standard PC-based configuration tool from anywhere, just as if you were there on site. Once a customer grants permission, after ensuring hardware and software related security conditions are met, ABB or partner service personnel can access and supervise connected equipment remotely. Ultimately leading to increased efficiency and fast troubleshooting.

2.5 Remote Access benefits

Remote Access helps reduce commissioning and warranty costs. It ensures quick access to the site to react to unplanned tasks. You will be able to obtain instant detailed information on cell performance, process quality and health. Benefits include:

- Remote Access and Remote Monitoring on the same secure platform
- Remote solution to perfect troubleshooting
- Reduction of service incidents
- Faster issue resolution
- Improved Technical Support efficiency
- Access to all benefits of the Automation Builder platform
- Increased flexibility with common support platform

Functionalities	Automation Builder	PLC	HMI
Connection to a controller	X	X	X
Modifying or loading of a project	X	X	X
Viewing Event Logs	X	X	X
Backup and restore	X	X	X
Reboot the controller	X	X	X
File Transfer	X	X	X
Debug program	X	X	X
View and configure input/output	X	X	X

Cyber Security

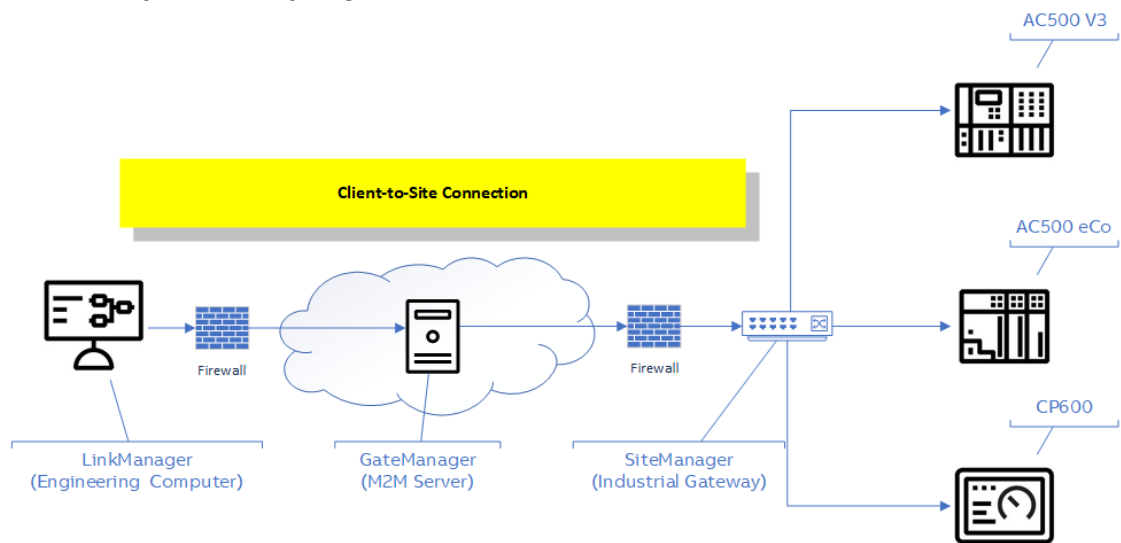
- Security certified ref. IEC 62443 / NIST / BSI
- Strong end-to-end encryption
- Two-factor and three-factor authentication
- Event test logs
- Role-based account management
- Standard measures to mitigate the risk of vulnerabilities due to incorrect configuration or human inattention

3 GateManager Introduction

The GateManager is your central drag'n'drop tool for seamless user and device management, providing secure access to PLCs, HMIs and other equipment remotely. It operates as a secure termination point for LinkManager Clients and SiteManager Gateways. All encrypted traffic between LinkManager Clients and industrial devices controlled by the SiteManagers is handled by the GateManager.

With the GateManager IoT server, you administer accounts and individualized access, manage devices, configure alarms, send invitations to users and much more.

The GateManager Server hosted by Secomea is designed to deliver the convenience of fast and easy web access, while avoiding internal server setups. When you choose the GateManager cloud server, you receive an isolated private domain on the GateManager server, and you are ready to go.



3.1 GateManager Setup

3.1.1 Logging on to the GateManager

The Secomea GateManager is a web-based utility that can be accessed through any browser you will need the following to access your GateManager Portal.

Login information:

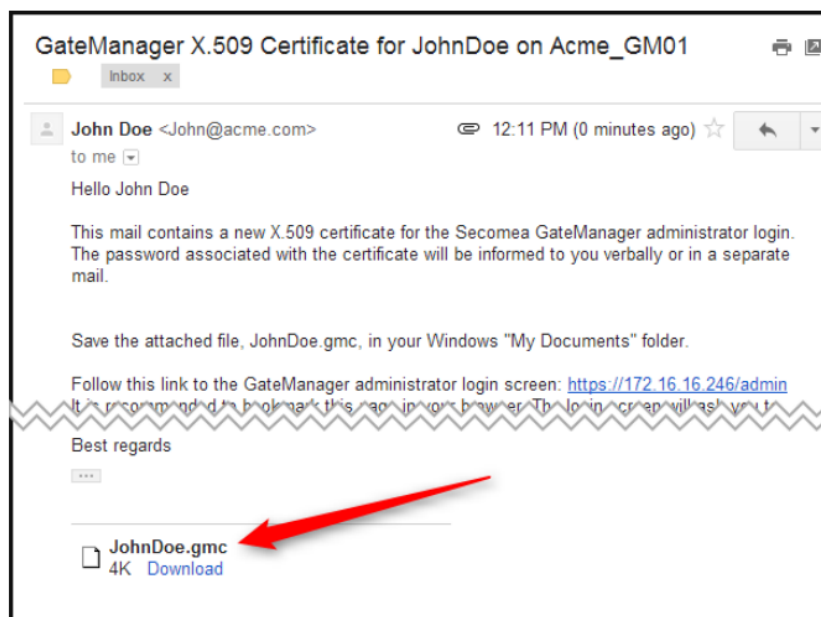
- gmc license file and a password

All this information is sent to you in an e-mail by the local administrator.

The steps below will describe how to login with the credentials and how to utilize the portal to setup your Secomea based solution.

In the e-mail you will receive all the following information:

1. The gmc security file, you will need to save this to a folder on your computer
2. The password attached to the gmc file
3. The link to the specific GateManager server
4. The GateManager address in IP address format [used in the setup of SiteManager(s)]
5. The GateManager domain token [used in the setup of SiteManager(s)]



Source: http://www.gate-manager.it/app_notes/GateManager_5_Server_STEP2_v2.pdf

Please note:

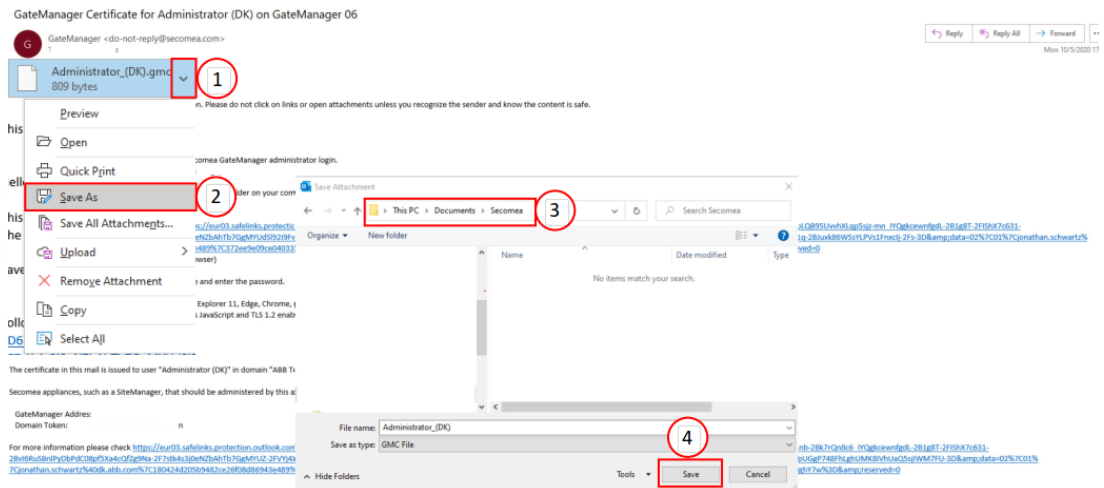
- The e-mail that you receive from the global domain administrator is only for the intended administrator(s) of this domain
- All the information in this mail will enable you to setup and administrate the domain

Logging into the GateManager is a three-step process:

Step 1

Save the .gmc logon encryption file to a directory on your computer

1. Click on the "v" to open the options menu for the attached file
2. Click on "Save As"
3. Select the folder you want to save the logon encryption file to
4. Click on "Save" to save the .gmc file to the selected folder



Step 2

Copy the assigned password and clicking on the link to the GateManager domain

1. High-light and copy the password that you have been assigned in the mail
2. Click on the link to the GateManager Service to open it up in the default browser
3. Please remember to bookmark this page in your default browser

Hello Test Administrator

This mail contains your personal certificate for the Secomea GateManager administrator login.

The password associated with the certificate is: xEbGjT4sgbpiUz

Save the attached file, Administrator_(DK).gmc, in a document folder on your computer.

Follow this link to the GateManager login screen: <https://eur03.safelinks.protection.outlook.com/?url=http%3A%2F%2Furl2565.secomea.com%2F%2Fclick%3Fupn%3D6pFP3pW0nHRS5jffJf4o4N468suL9VfXbWNE8HjxwMgnPblQ895UvvhXlqp5sjz-mn-1YQgkcewnfgdl-2B1gBT-2F5hX7c631-2Bv6RuS8nIPyD6PdC08pf5Xa4CfZg9Na-2F7stk4s3j0eNzbAhTb7GgMYUdS92j9fwH29V0LEBzKsc5TxVcxWBFxmodSy8DcBt6xR0ITZCPQZGkzw7losRH-2F24oQay-2B879unY2X84XIOsE8EZxG4yClVZKLFJ4LTuZH2D2eXgTz1hwik-2B11q-2Bjuxk86W5sYLPvs1Fmxcj-2F5-2F8&data=02%7C01%7CJonathan.schwartz%40dk.abb.com%7C180424d205b9482ce26f08d86943e489%7C72ee9e09ce04033a64ac07073a91ecd%7C0%7C1%7C637375087601311813&data=IMauY18XS8kZ%2FR6H98lyb6B8ecA8cHXLz%2Bki2gAw0%3D&reserved=0>
(It is recommended to bookmark this page in your browser)

Step 3

Logging in to the GateManager

1. Your default browser will open up a GateManager login screen
2. Select "Certificate"
3. Click on "Choose File" and select the file from the saved location
4. Paste in the previously copied password in the "Password" field
5. Click "Login"
6. Create a new password for your GateManager account
7. Click "Continue"

GateManager 06 Login

2 ☐ Certificate: 3 Choose File No file chosen Cancel

☒ Remember certificate

☐ User name:

4 Password: [Forgot password?](#)

5 Login

Change password

Select a new password for your account.

Username: Administrator (DK)

6 New password:

Repeat password:

☐ Show password

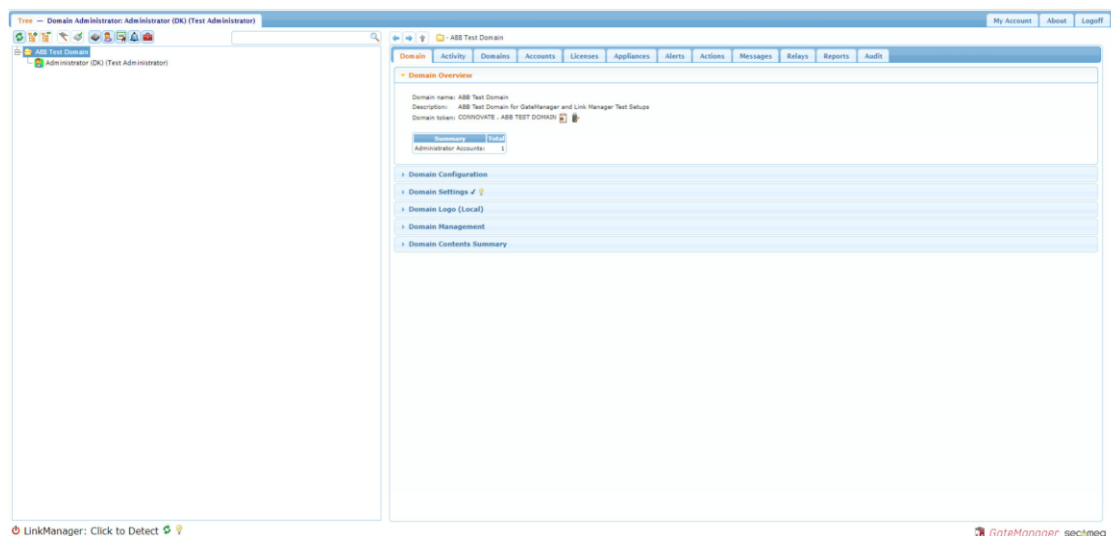
7 Continue

3.1.2 Adding a LinkManager user to Domain

The LinkManager user is a way to gain access to all the resources within the GateManager domain, this user will be able to login to all of the SiteManagers on the domain. The GateManager administrator must setup and send the LinkManager login details to the users that are needed on the domain.

You will need to be logged on as GateManager administrator to be able to create or edit LinkManager / SiteManager users / utilities.

Current domain setup is shown below

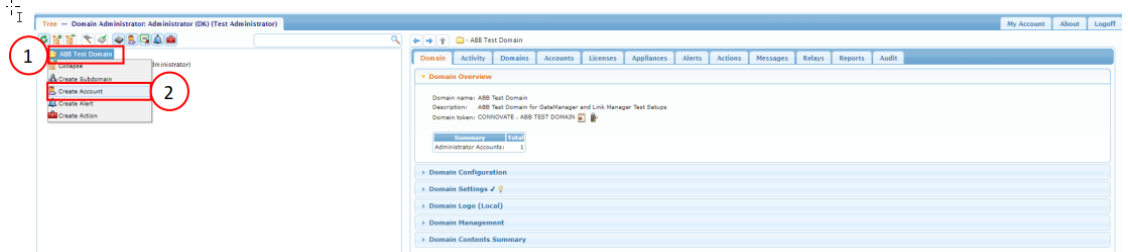


Creating a new LinkManager user is a two-step process

Step 1

Creation of a new account

1. Right-click on the top of the domain (here "ABB Test Domain")
2. Select "Create Account"



Step 2

Setting up account details and sending an e-mail to the LinkManager User

1. Fill in the LinkManager account name and select "LinkManager User" in the drop-down menu
2. Fill in the account user details
3. Select the method of signing in and set, if needed, a fixed time limit on the account
4. Fill in the contact details of the person that you want to send the e-mail containing the security certificate and login details
5. To send the e-mail and activate the account click "Save"

The screenshot shows the 'Account' configuration page in the LinkManager interface. The page has tabs for 'Account', 'Joined Domains', and 'Audit'. The 'Account' tab is active. The form contains several sections: 'Account Name' (ABB Test Domain LM User 1), 'Account Role' (LinkManager User), 'Account Language' (English), 'Description', 'Group Members', 'Person Name' (Test Person), 'Email' (test.person@abb.com), 'Mobile' (1234 1234 1234), 'Person Info' (More information here), 'Password changed' (Created: 2020-10-06), 'Disabled' (checkbox), 'Auto-Disable' (Never), 'Authentication' (Certificate / Password), 'LinkManager 7.x compatible certificate' (checkbox), 'Create Password' (checkbox), 'Create Certificate' (checkbox), 'Message' (text area), 'Deliver to' (checkbox, checked), 'Zip Format' (checkbox), and 'Save' / 'Cancel' buttons. Red boxes and numbers 1 through 5 indicate the steps: 1 points to the account details section, 2 points to the person details section, 3 points to the authentication section, 4 points to the message and deliver to section, and 5 points to the Save button.

4 LinkManager Setup

4.1 Setting up LinkManager on your computer

The LinkManager user is a way to gain access to all of the resources within the GateManager domain, this user will be able to login to all of the SiteManagers on the domain. The GateManager domain administrator will send you an e-mail containing all the login information and certificates, this section is an instruction on how to setup the LinkManager and on how to access the domain data providers.

This can be done in 3 steps:

Step 1

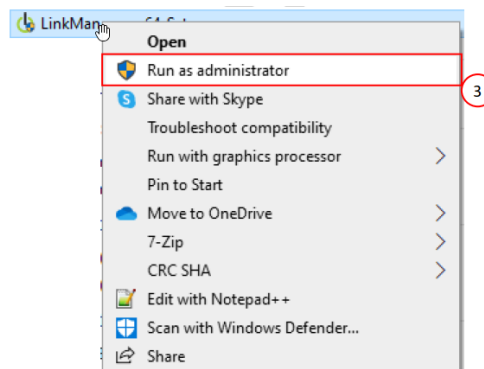
Downloading and installing the latest version of LinkManager from Secomea

1. Open your default browser and go to:
<https://ftp.secomea.com/pub/download-linkmanager.html>
2. Select the version of link manager that you need 32/64 bit and download it
3. Right-click and run it as administrator
4. LinkManager will now run as a plug-in in your default browser



[LinkManager \(6041\) 32 bit Windows installer \(exe\)](#)
[LinkManager \(6041\) 64 bit Windows installer \(exe\)](#)

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Step 2

Setting up the LinkManager connection in your browser

1. Open the e-mail you have received from the GateManager administrator containing the LinkManager .Imc security certificate.
2. Save the .Imc to a folder on your computer
3. Copy the password from the mail using "CTRL-C" command
4. Click on the link in the e-mail to the LinkManager account to open it in your default browser

LinkManager 7.x Certificate for ABB_SE_TESTER on GateManager 06

GateManager <do-not-reply@secomea.com>

To
ABB_SE_TESTER.Imc
4 KB

2

Reply Reply All Forward ...
Wed 10/7/2020 12:38

This email originated from outside of your organization. Please do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hello :

This mail contains an update for your user certificate for the Secomea LinkManager.
The password associated with the certificate is: 121121121121121 3

You must save the attached file, ABB_SE_TESTER.Imc, to your local hard drive (or other suitable storage) before you can import it into the LinkManager.

Upgrading your LinkManager

You can upgrade your LinkManager by running the installer again: <https://eur03.safelinks.protection.outlook.com/?url=http%3A%2F%2Furl2565.secomea.com%2F%2Fclick%3Fupn%3DymGnL3qMPAPmv8CuDSV-2Bwm-2FC18yqAE4GMR22ff4stgw05RGu3lh-2B3opKf7YfJfcdgKUGu9agkCQpQ-3D-3Dhgvh-IYQkcewmfjgdL-2B1g8T-2F5hX7c631-2Bv6RuS8nIPyObPuVAbKh5YntapiwmlmFhNNcJgmAl-2BtL9zmGNqxfZzFdDujC6UV9-2BEVouCDK-2F5P2j7-2BnQK4ZENMLcm3Dy72j9gGivVOEGvFutetO1Vus2PNKtautqLPs-2FthOYVwuZtoixWeki-2B6UQPIL9-2Fq31h5D0sM6N2X-2BAyy4NBEVzOYcm-2FM6-2BxdvQqilXNjsCHMdnI-3D&data=02%7C01%7CJonathan.schwartz%40dk.abb.com%7C7970f49d2b45486c1d2a08d86aad0555%7C372ee9e09ce04033a64ac07073a91ecd%7C0%7C1%7C637376638647812747&data=VOX5jst0%2Frt%2FpIpa6w0KVMhLOHTIUjvXwWzA9e4%3D&reserved=0> 4

You do not have to uninstall your current version of LinkManager and your settings will be preserved.

Upgrading a LinkManager User certificate

Open the LinkManager Console, and click on the [Certificate] button on the Login page.

Then find the old certificate in the list, and click on the renew certificate button to replace it with the saved file.

Note that you have to repeat this procedure on all PCs where you use the LinkManager console.

----- Additional information -----

The certificate in this mail is issued to user "ABB_SE_TESTER" in domain "ABB Test Domain" on server "GateManager 06".

Upgrading a LinkManager User certificate

Open the LinkManager Console, and click on the [Certificate] button on the Login page.

Then find the old certificate in the list, and click on the renew certificate button to replace it with the saved file.

Note that you have to repeat this procedure on all PCs where you use the LinkManager console.

----- Additional information -----

The certificate in this mail is issued to user "ABB_SE_TESTER" in domain "ABB Test Domain" on server "GateManager 06".

Step 3

Logging in to your LinkManager account

1. After opening the link you will see the login screen to the GateManager domain
2. Click on "Choose File" to be able to select the .Imc file that you have just saved to your computer
3. Click on the "Password field" and then right-click and paste in the password to the Link-Manager
4. Click on "Login" to login to the GateManager domain
5. You should now be logged into the LinkManager account on the GateManager domain

**Please note:**

- There are no attached SiteManager applications in this example.

5 SiteManager Setup

5.1 Using Appliance Launcher to setup a SiteManager

The SiteManager is a transparent access gateway that will permit both access to and from the application(s) attached to the device ports on the unit. This supports network, USB and serial traffic, since there are all these types of ports on the SiteManager hardware.

We will be setting up a SiteManager to run on our GateManager domain in this section, to do this we will go through 3 steps.

Step 1

Downloading and installing the latest version of Secomea Appliance Launcher

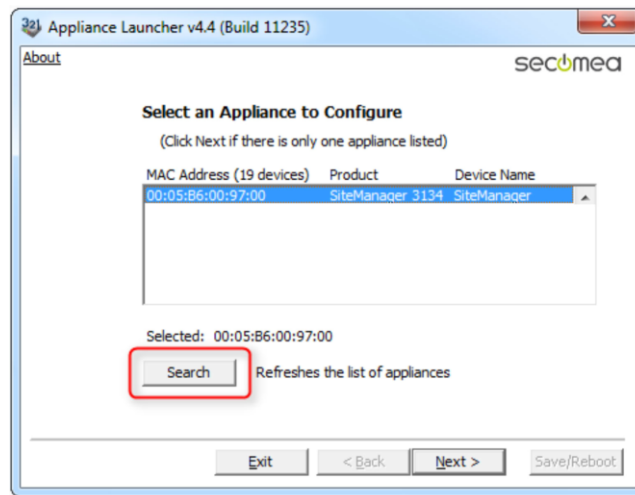
1. Open your default browser and go to:
<https://kb.secomea.com/helpdesk/KB/View/25067532-downloads-appliance-launcher>
2. Install it on your computer
3. Connect your SiteManager to a 24VDC power supply and then connect your computer to one of the SiteManager device ports.
4. Connect the "Uplink1" port to the internet either through your router / firewall or directly



Step 2

Installing and run Secomea Appliance Launcher

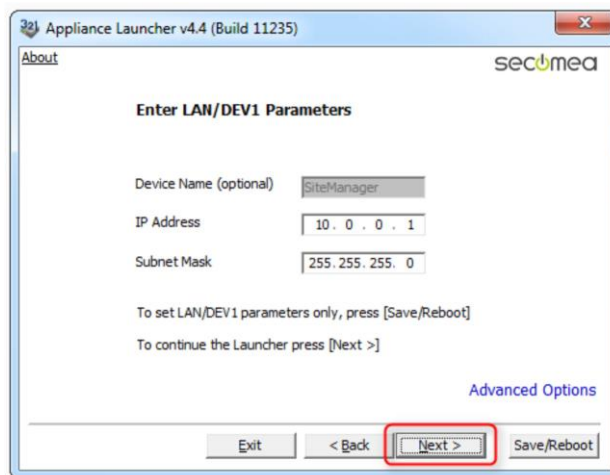
1. Download the application
2. Right-click and then run the Appliance Launcher as an administrator
3. Click Search to get up the list of appliances
4. Select the SiteManager you want to set up
5. Click "Next >" to proceed to the next step of the setup



Step 3.1

Setup the SiteManager—LAN/DEV1 Port Parameters

1. Type in the IP and SubNet that you need to communicate with your hardware
2. Click "Next >" to proceed to the next step



Step 3.2

Setup the SiteManager—WAN/UPLINK Parameters

1. Type in the configuration needed to connect through your firewall or with your Internet Service Provider (ISP)
2. Click "Next >" to proceed to the next step

Step 3.3

Setup the SiteManager—WAN2/UPLINK2 Parameters (only if needed to run this)

1. Setup the secondary ISP settings in these parameters either on WAN2 or as a 3/4/5G provider
2. Click "Next >" to proceed to the next step

Step 3.4

Setup the SiteManager—GateManager Connection

1. Type in the GateManager IP address and the Domain Token, this is provided in the mail with the login information (see section describing the LinkManager setup)
2. Now type in the appliance name, this will be visible when
3. Click "Next >" to proceed to the next / final step
4. Click "Save/Reboot" and then finish the setup and exit the Appliance Launcher

Appliance Launcher v4.4 (Build 11235)

About

secomea

Enter GateManager Parameters

GateManager IP address: 1 130 . 226 . 210 . 167 DNS

GM Domain Token: 2 SecomeaVar

GM Appliance Name:

Web-Proxy IP address: DNS

Web-Proxy Account:

Web-Proxy Password:

To disable the GateManager functionality - clear the GM Address field.

Exit < Back Next > Save/Reboot

Appliance Launcher v4.4 (Build 11235)

About

secomea

Finish

Press the [Save/Reboot] button to save your settings and reboot the appliance.

Pressing Exit will exit the Launcher and no changes will be saved.

<Click> - copy current settings to clipboard

Exit < Back Save/Reboot

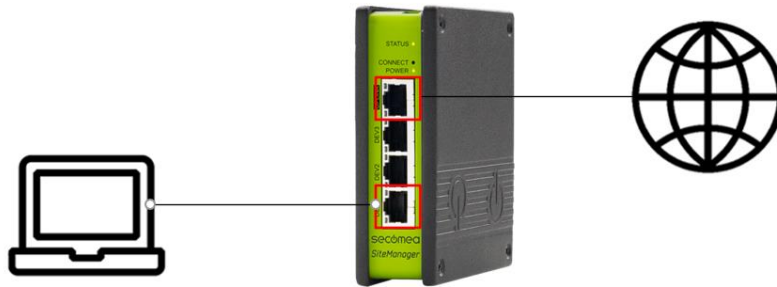
The SiteManager is a transparent access gateway that will permit both access to and from the application(s) attached to the device ports on the unit. This supports network, USB and serial traffic, since there are all these types of ports on the SiteManager hardware.

We will be setting up a SiteManager to run on our GateManager domain in this section, to do this we will go through 3 steps.

Step 1

Connect the device to the WAN / Internet

1. Connect the "Uplink1" port to the internet either through your router / firewall or directly



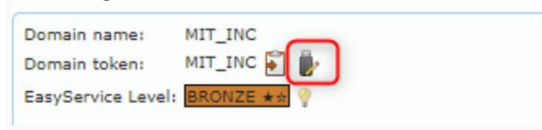
Step 2

Creation of the SiteManager configuration as GateManager administrator

1. Login to the GateManager and press the root folder of the domain that you wish for the SiteManager to be part of.



2. In the right hand click the USB icon next to the "Domain token:" field.



3. GateManager will open the window seen below – fill out the "Appliance Name:" – you can also fill out the other fields if you already know what they are going to be.

The screenshot shows the 'Create USB Configuration' window in GateManager. The window has a title bar and a close button. The main content area contains the following fields and controls:

- GateManager Address: 193.242.155.177
- Domain Token: MIT_INC
- Appliance Name: (empty field, highlighted with a red box)
- Web Proxy: Show
- UPLINK Port: Show
- UPLINK2 Mobile Broadband: Show
- UPLINK2 WiFi: Show
- DEV1 Port: Show
- Admin Password: (empty field)
- Enable debug log: ☐
- Disable USB Config: ☐
- Create (highlighted with a red box) Cancel

4. Click the "Create" button – and save the file – after that copy it to the root of your USB-stick.

5. Power on the SiteManager and wait for "POWER" to have a permanent green light and "STATUS" to have a permanent red light or it is blinking 2 times red.
6. Insert the USB stick into one of the USB slots and wait "STATUS" led to start blinking 2 times red.
7. When both the "POWER" and "STATUS" have a green light your SiteManager is ready to be used
8. It will show up in GateManager with Appliance Name you gave it and have a green checkmark



5.2 SiteManager Connection

5.2.1 Connection to the SiteManager GUI

The SiteManager is a transparent access gateway that will permit both access to and from the application(s) attached to the device ports on the unit. This supports network, USB and serial traffic, since there are all these types of ports on the SiteManager hardware.

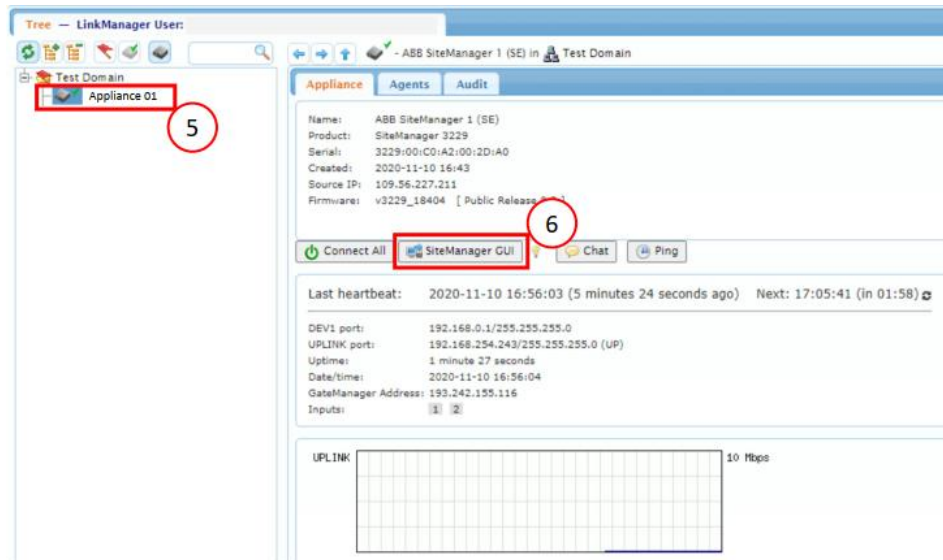
This section will go through the way to setup the devices attached to the SiteManager through the connection and the Graphical User Interface (GUI).

Step 1

Connect to the device through your LinkManager application

1. Open the bookmark that you have created for your logon to the Secomea utilities
2. Click on the LinkManager utility
3. Select the correct certificate, type in the password for the certificate
4. Click on "Login" to log in to the LinkManager account
5. Select the appliance that you need to add appliances to
6. Click on the "SiteManager GUI" to open and log in to the SiteManager GUI



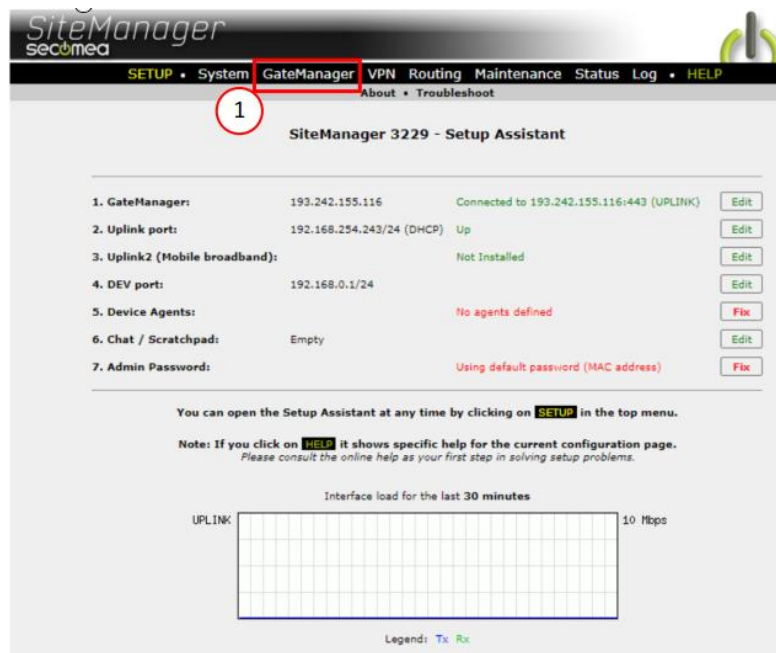


When you log in to the SiteManager GUI you are able to setup the appliance agents for the hardware that you wish to connect to. With the correct setup you are able to access all the features that you want in the connected appliance.

Step 2

How to add an appliance agent on your SiteManager

1. Click on "GateManager" to access the setup of appliance agents
2. Click on "Agents" to access the setup of appliance agents
3. Click on "New" to add an appliance agent to the SiteManager
4. You are now ready to continue with the setup of the appliance agent that you need





5.3 AC500 V2 on SiteManager

5.3.1 Setting up the SiteManager to run with AC500 V2

Now that you have added the appliance agent, we have to set it up as a AC500 V2 PLC. This will be done by completing the following steps:

Step 3a

How setup an AC500 V2 PLC on your SiteManager

1. Click on "Device Name" field and fill out a unique name on the SiteManager
2. Click on the left drop-down menu "Device Type" and select "ABB"
3. Click on the right drop-down menu "Device Type" and select "PLC"
4. Click on the edit icon to access the parameters menu of the appliance agent

The figure consists of three screenshots of the GateManager Agents web interface, illustrating the configuration steps for an AC500 V2 PLC. Each screenshot has a red circle with a number indicating a specific step.

Screenshot 1 (Step 1): The interface shows a table with columns: Status, Disable, S/N, Device Name, Device Type, Device IP & Parameters, Tunnel, and Comment. The 'Device Name' field is highlighted with a red circle labeled '1'. Below the table, there is a 'new:' button and a text input field containing '#00'.

Screenshot 2 (Step 2): The 'Device Type' dropdown menu is open, showing a list of manufacturers including Allen-Bradley, ABB, Axis Communications, B&R, Beckhoff, Beijer, Bihl+Wiedemann, Bosch Rexroth, BRControls, Cognex, Comau Robotics, Control Techniques, COPA-DATA, Crouzet, Danfoss, Delta Electronics, Eaton Moeller, ELAU, and ESA. The 'ABB' option is highlighted with a red circle labeled '2'.

Screenshot 3 (Step 3): The 'Device Type' dropdown menu is open, showing a list of device types including Robot, Robot (Legacy Driver), PLC, Serial PLC, and USB. The 'PLC' option is highlighted with a red circle labeled '3'.

Screenshot 4 (Step 4): The interface shows the configuration for the AC500 V2 PLC. The 'Device Name' field contains 'ABB AC500 V2', the 'Device Type' dropdown is set to 'ABB', and the 'Device Type' dropdown is set to 'PLC'. The 'Tunnel' column has an edit icon highlighted with a red circle labeled '4'.

We have setup the basic parameters of the appliance agent, we now need to setup the advanced settings. This will define how we connect and what we are able to access through the connection.

Step 3b**How setup an AC500 V2 PLC on your SiteManager**

1. Click on and type in the device IP address in the "Device Address" field
2. Fill in the ports needed for access to the specific TCP ports in the "Extra TCP ports"
3. Click on "Ping" to test the connection IP address
4. Click on "Save" to save the configuration of the connection
5. Finally click on "Back" to get back to the appliance agent overview.

"ABB AC500 V2" - ABB PLC Agent

Device Address: * 192.168.0.10 1

Address on LinkManager:

Address on GateManager:

Always On: ☐

Extra TCP ports: 20,21,80,443,1200, 1201 2

Extra UDP ports:

Extra GTA Service:

Bypass GateManager HTTPS proxy: ☐

Enable WWW service: ☒ ☐ LinkManager Only ☐ No OUTPUT1 signal

Enable VNC service: ☐ ☐ LinkManager Only ☐ No OUTPUT1 signal

Enable RDP service: ☐ ☐ LinkManager Only ☐ No OUTPUT1 signal

Custom Settings:

4 Save Back Ping 3

* = Mandatory field

You can now log out of the SiteManager and utilize the connection as described in the final section.

Please note:

- The IP address typed in is the standard IP address of the AC500 platform
- The ports typed in are the ports needed to connect and fully utilize the features of the connection

5.4 AC500 V3 on SiteManager

5.4.1 Setting up the SiteManager to run with AC500 V3

Now that you have added the appliance agent, we have to set it up as an AC500 V3 PLC. This will be done by completing the following steps:

Step 4a

How setup an AC500 V3 PLC on your SiteManager

1. Click on "Device Name" field and fill out a unique name on the SiteManager
2. Click on the left drop-down menu "Device Type" and select "ABB"
3. Click on the right drop-down menu "Device Type" and select "PLC"
4. Click on the edit icon to access the parameters menu of the appliance agent

The figure consists of three screenshots of the 'GateManager Agents' web interface, illustrating the configuration steps for an AC500 V3 PLC. Each screenshot shows a table with columns: Status, Disable, S/N, Device Name, Device Type, Device IP & Parameters, Tunnel, and Comment. The interface also includes buttons for 'new', 'Save', 'New', 'Search', and 'SNMP >>'.
- The first screenshot shows the 'Device Name' field (labeled 1) and the 'Device Type' dropdown menu (labeled 2) being opened to select 'ABB'.
- The second screenshot shows the 'Device Type' dropdown menu (labeled 3) being opened to select 'PLC'.
- The third screenshot shows the 'Device Name' field filled with 'ABB AC500 V3', 'Device Type' set to 'ABB', and 'Device Type' set to 'PLC'. The 'Tunnel' column has an edit icon (labeled 4) highlighted.

We have setup the basic parameters of the appliance agent, we now need to setup the advanced settings. This will define how we connect and what we are able to access through the connection.

Step 4b**How setup an AC500 V3 PLC on your SiteManager**

1. Click on and type in the device IP address in the "Device Address" field
2. Fill in the ports needed for access to the specific TCP ports in the "Extra TCP ports"
3. Click on "Ping" to test the connection IP address
4. Click on "Save" to save the configuration of the connection
5. Finally click on "Back" to get back to the appliance agent overview.

"ABB AC500 V3" - ABB PLC Agent

Device Address: * 192.168.0.10 (1)

Address on LinkManager:

Address on GateManager:

Always On: ☐

Extra TCP ports: 20,21,80,443,1214,11740 (2)

Extra UDP ports:

Extra GTA Service:

Bypass GateManager HTTPS proxy: ☐

Enable WWW service: ☒ ☐ LinkManager Only ☐ No OUTPUT1 signal

Enable VNC service: ☐ ☐ LinkManager Only ☐ No OUTPUT1 signal

Enable RDP service: ☐ ☐ LinkManager Only ☐ No OUTPUT1 signal

Custom Settings:

Save (4) Back Ping (3)

* = Mandatory field

You can now log out of the SiteManager and utilize the connection as described in the final section chapter.

Please note:

- The IP address typed in is the standard IP address of the AC500 platform
- The ports typed in are the ports needed to connect and fully utilize the features of the connection

5.5 CP600 HMI on SiteManager

5.5.1 Setting up the SiteManager to run with CP600 Panel

Now that you have added the appliance agent, we have to set it up as a CP600 HMI Panel.

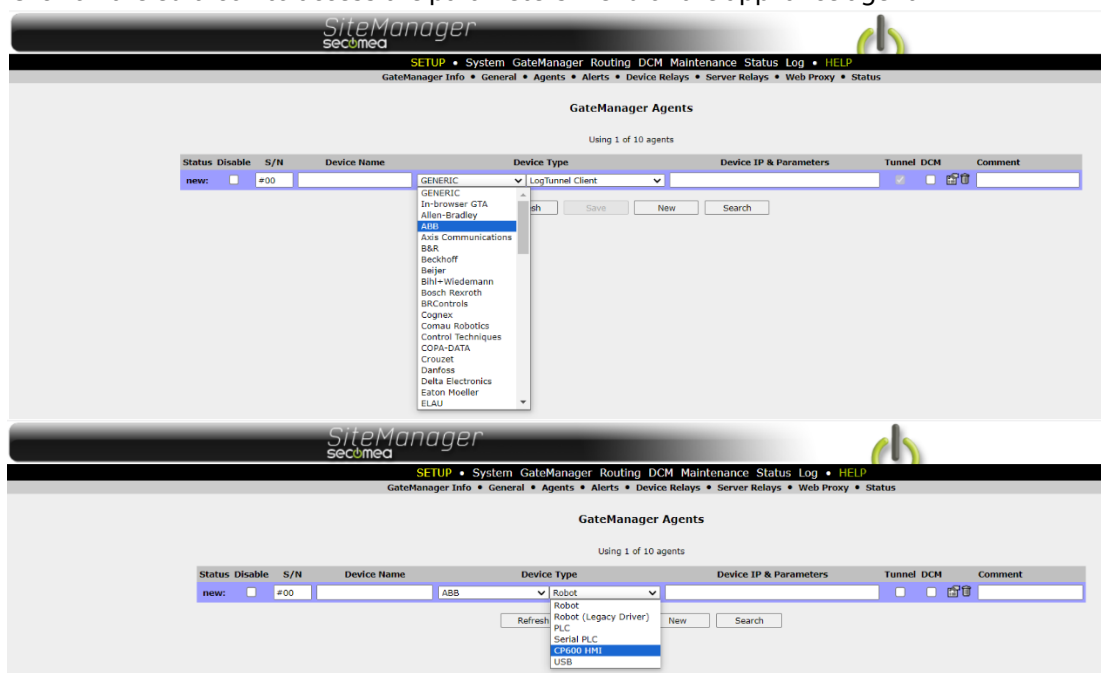
This will be done by completing the following steps.

5.5.2 BSP V1.3.x

Step 5a

How setup a CP600 Panel on your SiteManager

1. Click on "Device Name" field and fill out a unique name on the SiteManager
2. Click on the left drop-down menu "Device Type" and select "ABB"
3. Click on the right drop-down menu "Device Type" and select "CP600 HMI"
4. Click on the edit icon to access the parameters menu of the appliance agent



We have setup the basic parameters of the appliance agent, we now need to setup the advanced settings. This will define how we connect and what we are able to access through the connection.

Step 5b

How setup an AC500 V3 PLC on your SiteManager

1. Click on and type in the device name in the "Device Name" field
2. Click on and type in the device IP address in the "Device Address" field
3. Fill in the ports needed for access to the specific TCP ports in the "Extra TCP ports"
4. Click on "Ping" to test the connection IP address
5. Click on "Save" to save the configuration of the connection
6. Finally click on "Back" to get back to the appliance agent overview

New "" - ABB CP600 HMI Agent

Device Name: * CP607 1

Device Address: * 192.168.0.30 2

Address on LinkManager:

Address on GateManager:

Always On: ☐

Extra TCP ports: 8000,18756-18759,5100 3

Extra UDP ports:

Extra GTA Service:

Custom Settings:

4

* = Mandatory field 5

6

You can now log out of the SiteManager and utilize the connection as described in the final section chapter.

Note



- The IP address typed in is the IP address of the panel connected
- The ports typed in are the ports needed to connect and fully utilize the features of the connection

5.5.3 BSP V1.0.x

Step 5a

How setup a CP600 Panel on your SiteManager

5. Click on "Device Name" field and fill out a unique name on the SiteManager
6. Click on the left drop-down menu "Device Type" and select "Exor"
7. Click on the right drop-down menu "Device Type" and select "Ethernet HMI"
8. Click on the edit icon to access the parameters menu of the appliance agent

The first screenshot shows the 'GateManager Agents' interface with a table of agents. The 'Device Name' field is highlighted with a red circle and the number 1. The 'Device Type' dropdown menu is open, showing a list of manufacturers, with 'Exor' selected and highlighted with a red circle and the number 2. The second screenshot shows the same interface, but the 'Device Type' dropdown menu is now closed, and the 'Device Type' field is set to 'Ethernet HMI'. The 'Device Name' field is still highlighted with a red circle and the number 3.

We have setup the basic parameters of the appliance agent, we now need to setup the advanced settings. This will define how we connect and what we are able to access through the connection.

Step 5b

How setup an AC500 V3 PLC on your SiteManager

7. Click on and type in the device IP address in the "Device Address" field
8. Fill in the ports needed for access to the specific TCP ports in the "Extra TCP ports"
9. Click on "Ping" to test the connection IP address
10. Click on "Save" to save the configuration of the connection
11. Finally click on "Back" to get back to the appliance agent overview

"ABB CP600 Panel" - Exor Ethernet HMI Agent

Device Address: * 192.168.0.30 1

Address on LinkManager:

Address on GateManager:

Always On: ☐

Extra TCP ports: 20,21,22,80,443,1200,1201,1217,11405 2

Extra UDP ports:

Extra GTA Service:

Custom Settings:

Save
Back
Ping
3

* = Mandatory field

You can now log out of the SiteManager and utilize the connection as described in the final section chapter.

Note



- The IP address typed in is the IP address of the panel connected
- The ports typed in are the ports needed to connect and fully utilize the features of the connection

6 Appliance agent connections

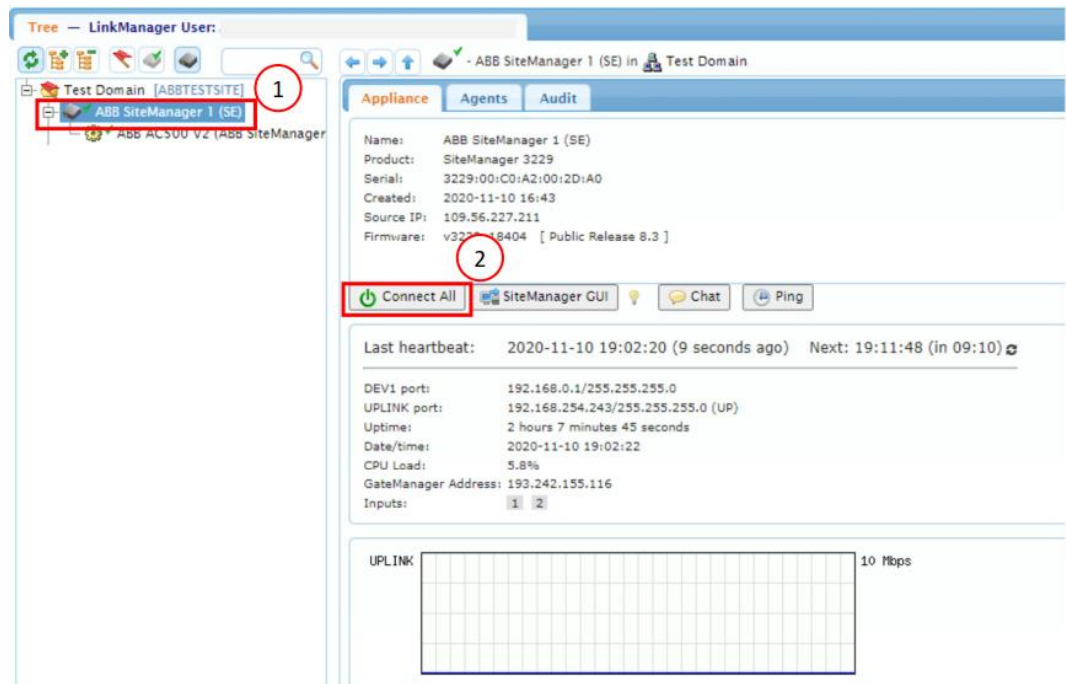
6.1 Connecting to the ABB appliances on the Site Manager

In this step we will connect to the appliances connected to the SiteManager, we can either connect to all the applications or to one specific.

Step 6a

Connecting to all the appliances on your SiteManager

1. Click to select the SiteManager
2. Click on "Connect All" to connect to all of the appliances connected to the SiteManager



Step 6b**Connecting to a single appliance on your SiteManager**

1. Click to open the SiteManager
2. Click to select the appliance that you want to connect to
3. Click on "Connect" to connect to the appliance selected

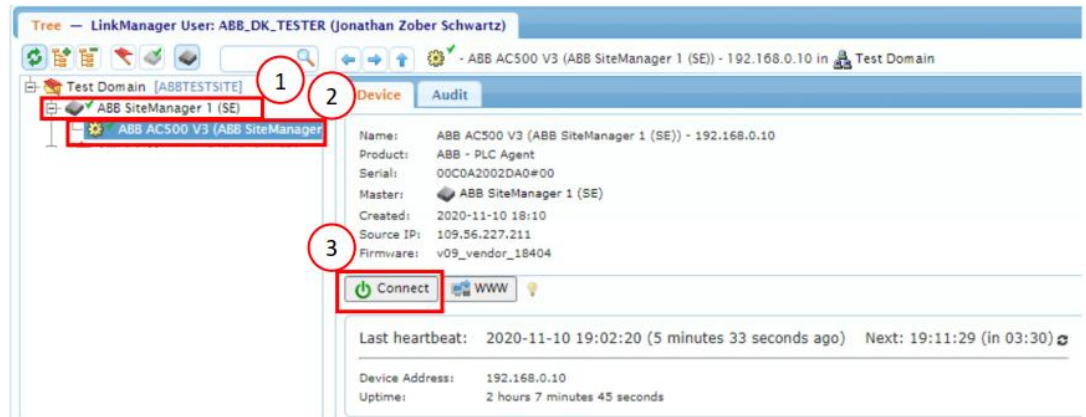


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