

# Application Note

## B&R PLC and Automation Studio



This document guides you through the setup of proprietary vendor specific software installed on your 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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## Prerequisites for This Guide

The following guide will assist you to setup a remote and online connection to the B&R equipment placed on the customer site using the B&R Automation Studio Software.

This guide concentrates on a B&R X20 1483 PLC with Ethernet, but may also work with other Ethernet enabled B&R PLCs.

This guide refer to Automation Studio version 3.081, but other versions and other B&R software packages may also work.

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 B&R PLC and the B&R Automation Studio software installed.
- You have the B&R / 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.

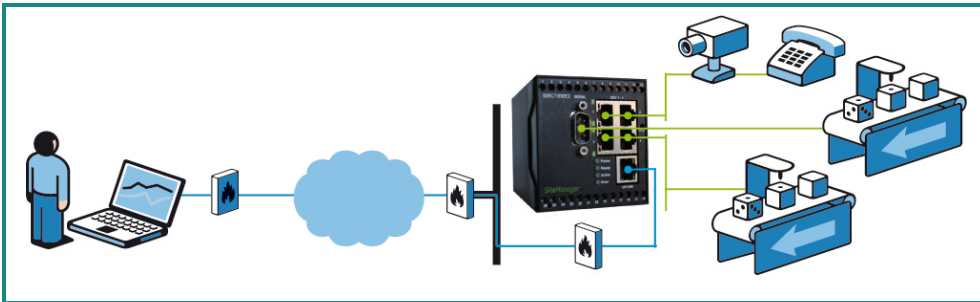
## System Overview

The communication path is as follows:

**Automation Studio** → **LinkManager** → GateManager → SiteManager → PLC.

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

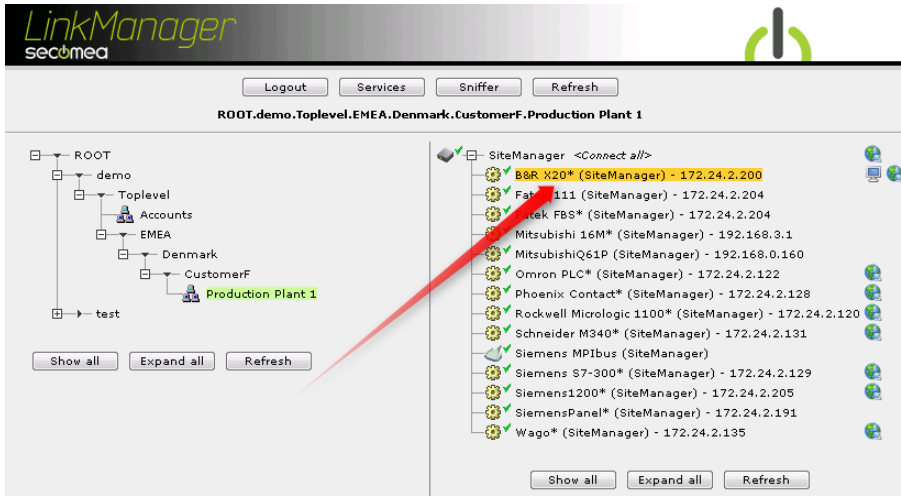
The following system overview depicts a SiteManager 3134 at the customer location.



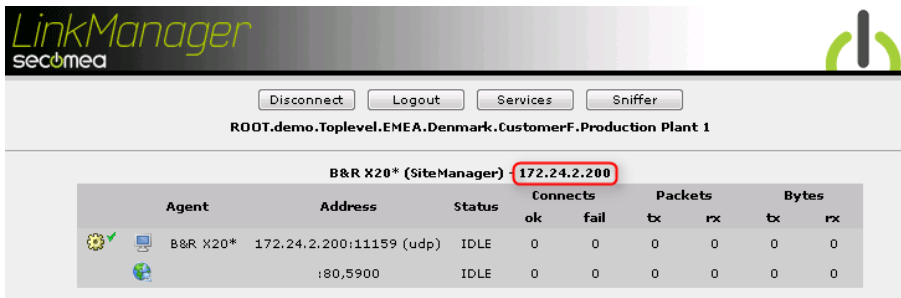
The procedures in the following apply to any SiteManager model.

# 1. Ethernet Connection

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):

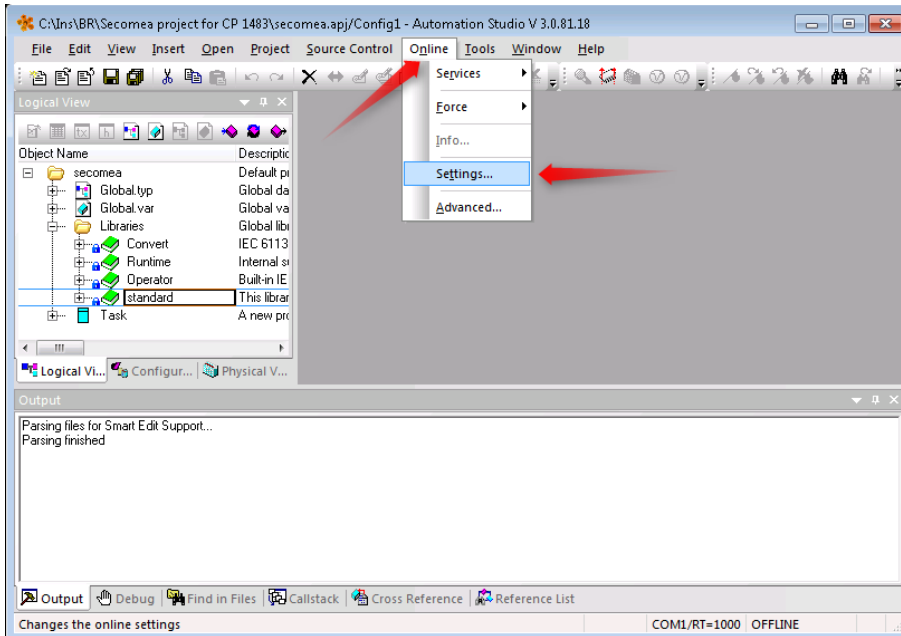


**Hint:** You are in principle now connected to the PLC, and you could make a ping to the PLC IP address.

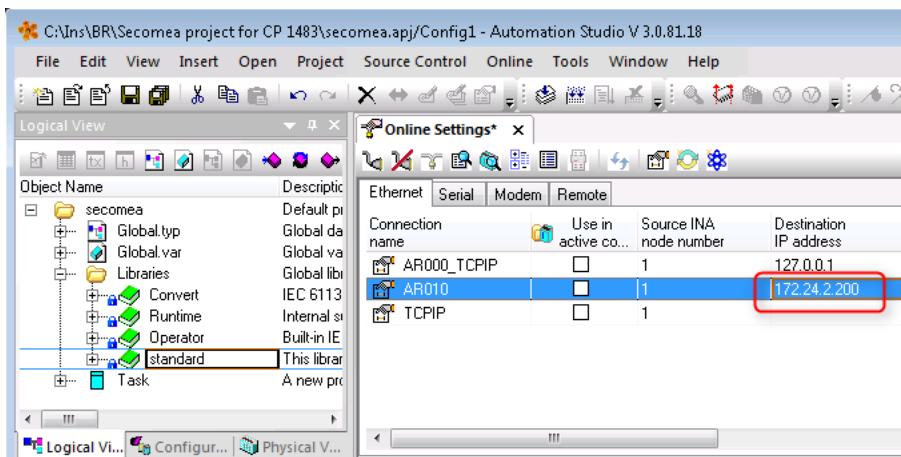
3. Start the Automation Studio and communicate on the IP address as you would normally have done if you were sitting in the local network with the PLC. The following illustrates some basic screenshots:

**NOTE:** The Automation Studio's network Browse function will not work via the LinkManager connection. This is due to the UDP discovery from Automation Studio not being directed to available routes of the PC, but is done as a UDP broadcast.

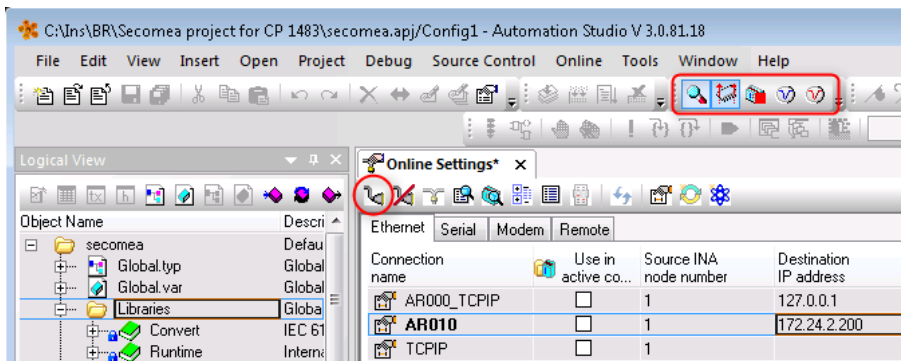
- Open your project in the Automation Studio, and select **Online** → **Settings**.



- Ensure that your project's AR010 connection is configured with the IP address that the LinkManager is connected to.



- If matching the LinkManager, you can go Online on the PLC by pressing Connect:



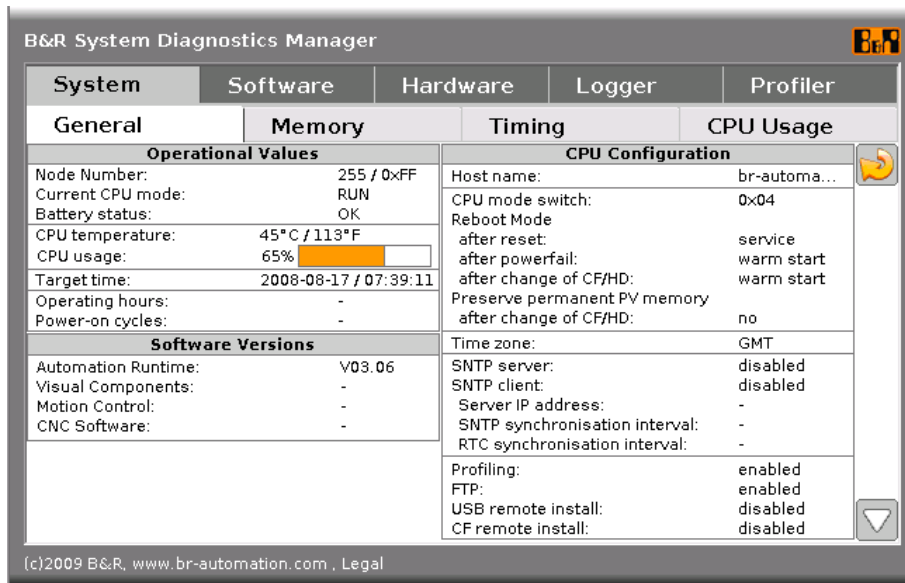
7. You can now also observe data traffic in the LinkManager:



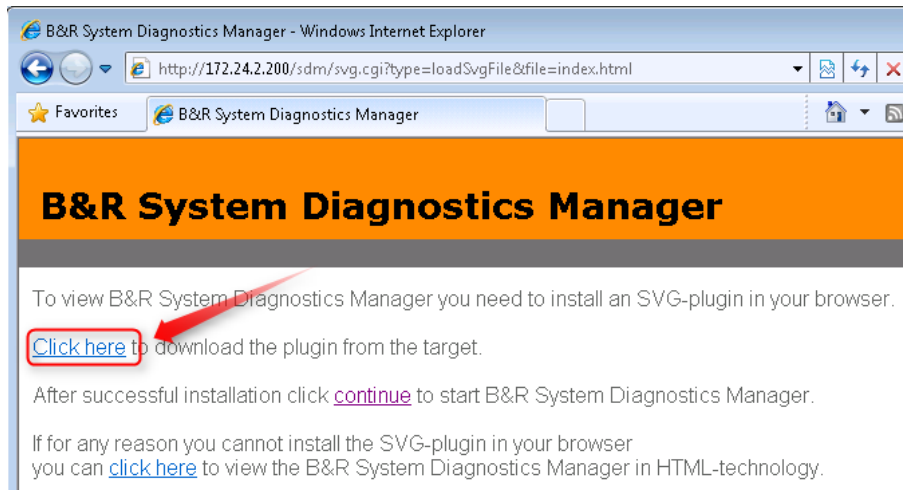
8. You can also try to click the globe icon.



9. This will start your default web browser for the PLC. Here you can enter immediately the HTML based Diagnostics Manager menu:



10. If you want to enter the advanced Diagnostics Manager GUI, you may have to download the Renesis Player-Browser.msi plugin by clicking the link.



**NOTE:** After installing pressing continue does not bring you the advanced GUI, you may have an incompatibility between your browser and the SVG plugin.

11. You also have the option to access the PLC Web GUI before you actually connect to the PLC with the LinkManager. This is done by clicking the globe icon next to the PLC in the tree view:



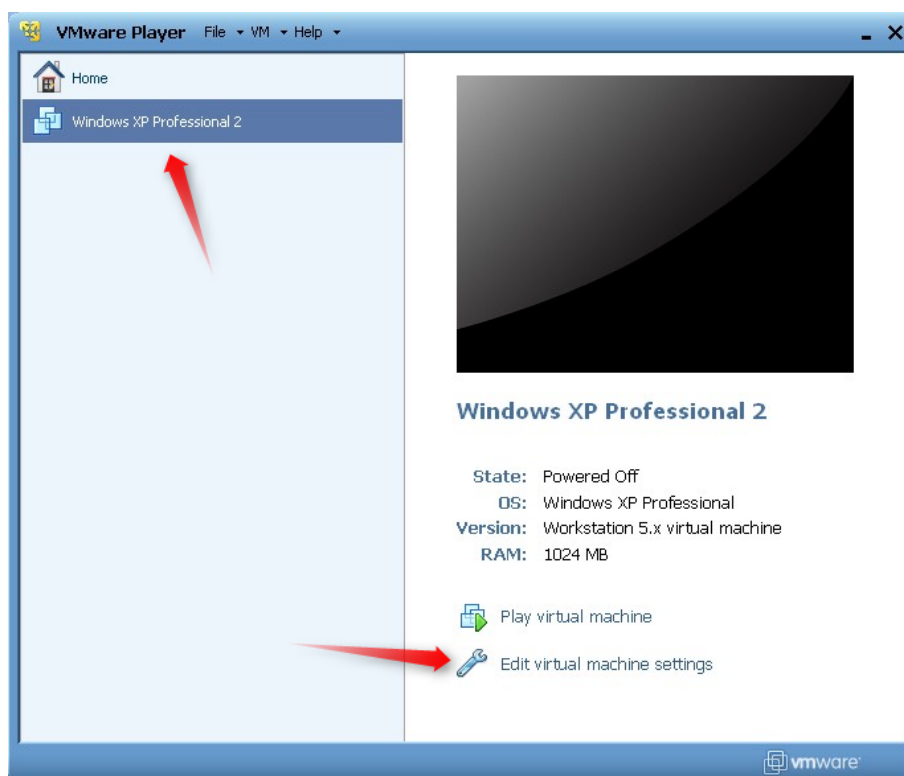
## 2. Ethernet connection via WindowsXP under VMWare

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

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

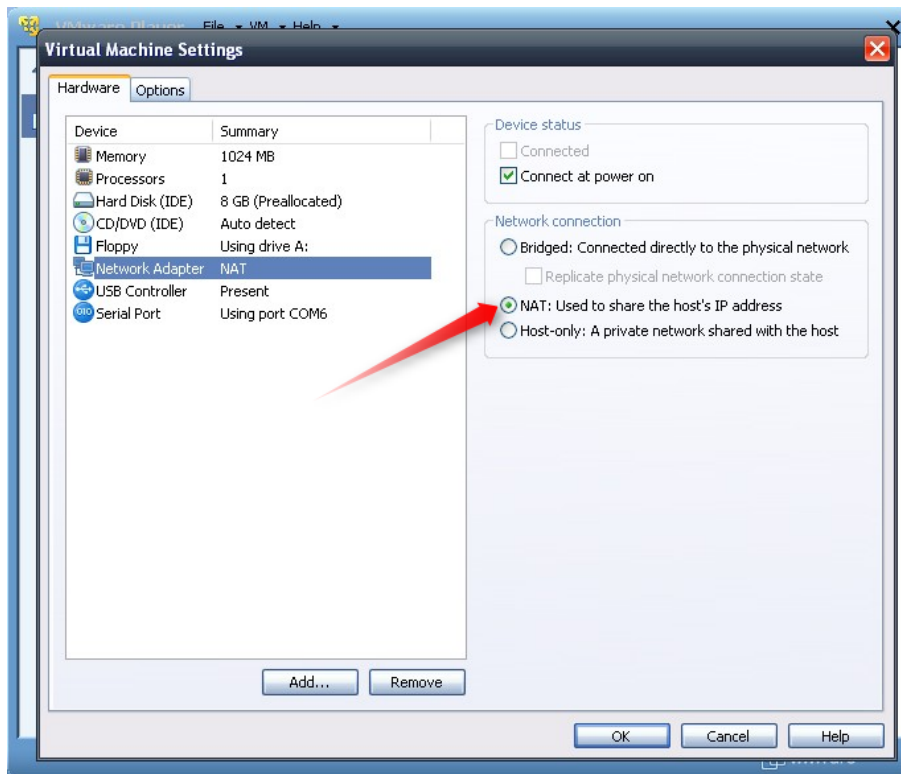
The following illustrates VMWare Player, which can be downloaded from <http://www.vmware.com/support/product-support/player/>

1. Locate your WindowsXP that has Automation Studio installed, and enter **Edit virtual machine settings**.





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



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

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## Notices

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