

Application Note

Omron Safety PLC and G9SP Configurator



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 Omron safety PLC placed on the customer site using your Omron G9SP Configurator software installed on your PC.

Prerequisites for this guide are:

- You have an operational LinkManager installed on your PC with a GateManager certificate that allows you to connect to the SiteManager agents.
- You have the Omron software installed.
- You have the Omron device agent installed and configured on the SiteManager at the remote site, and there is access between the SiteManager and the Omron PLC.
 - A USB attached PLC (such as the G9SP) must be configured with agent device type **Omron / USB PLC** on the SiteManager. Note that this connection type requires a SiteManager model with USB support and minimum SiteManager version 12035 and LinkManager version 12155.

If any of these prerequisites are not met, you should contact the person / department responsible within your own company or at the company responsible hereof.

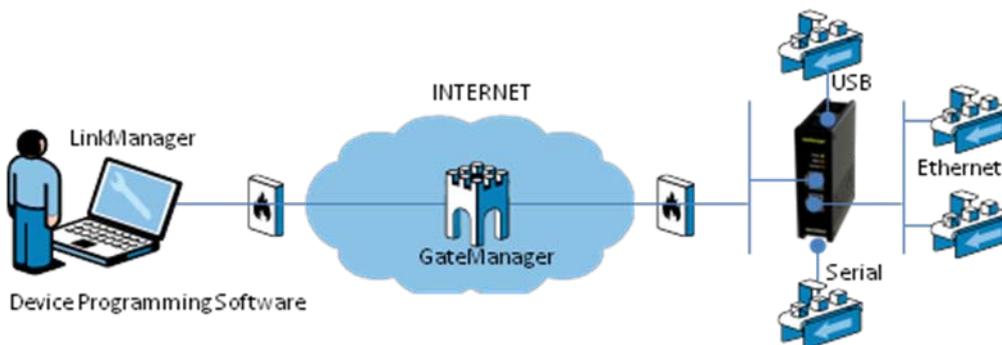
System Overview

The communication path is as follows:

G9SP Configurator → **LinkManager** → GateManager → SiteManager → PLC.

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

The following system overview depicts a SiteManager 3229 at the customer location:



1. USB Connection with G9SP

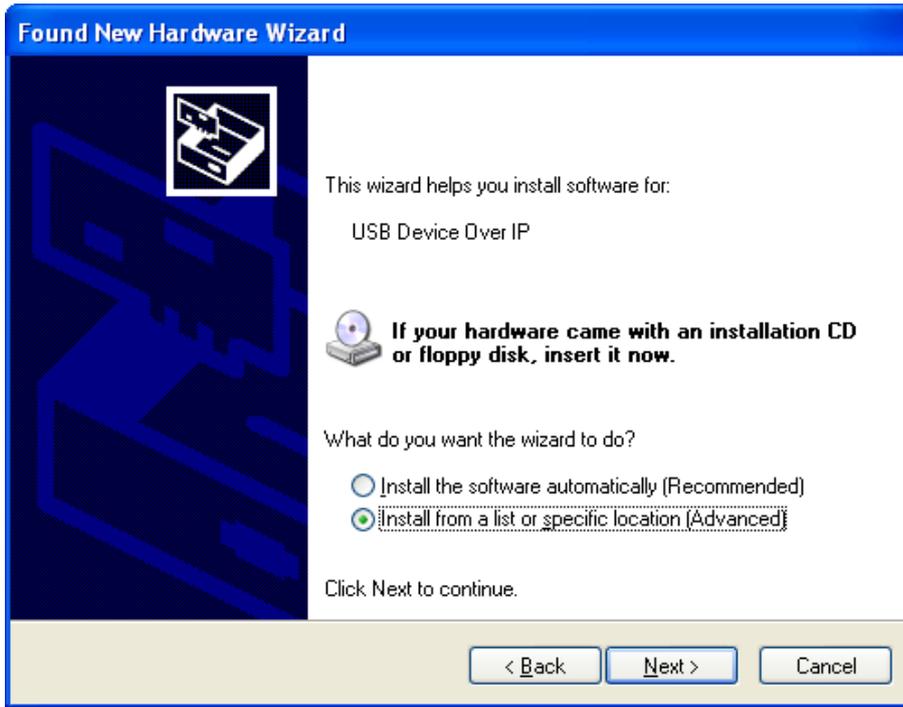
1. Locate the Omron USB PLC agent and click on it to establish a connection to it:



2. First time the connection is opened, the "Found New Hardware" Wizard will pop up. Select to not search for drivers on Windows Update site.

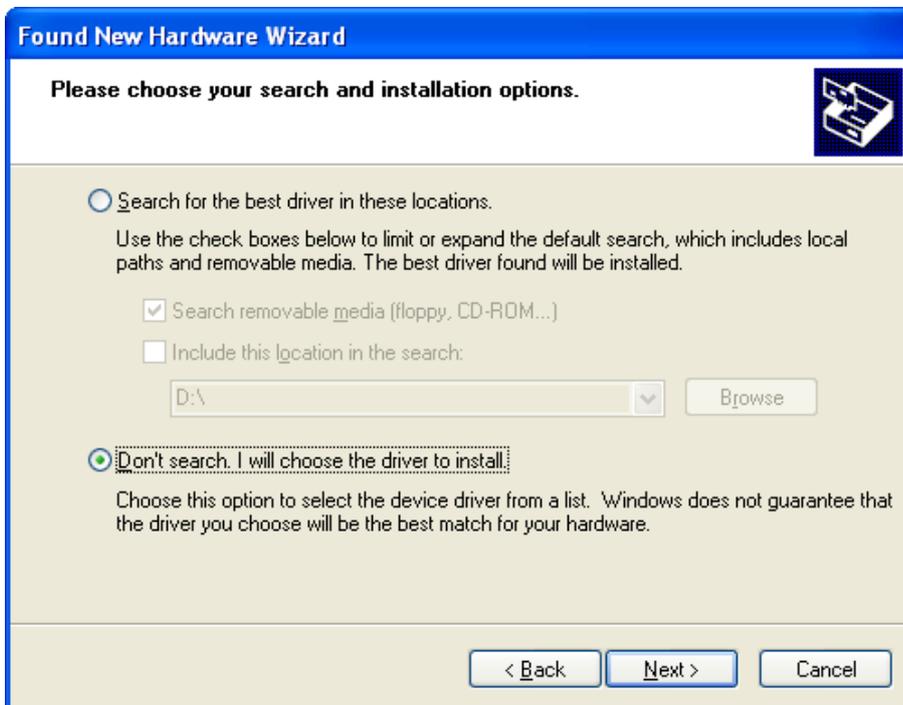


3. Select Installs from a specific location.

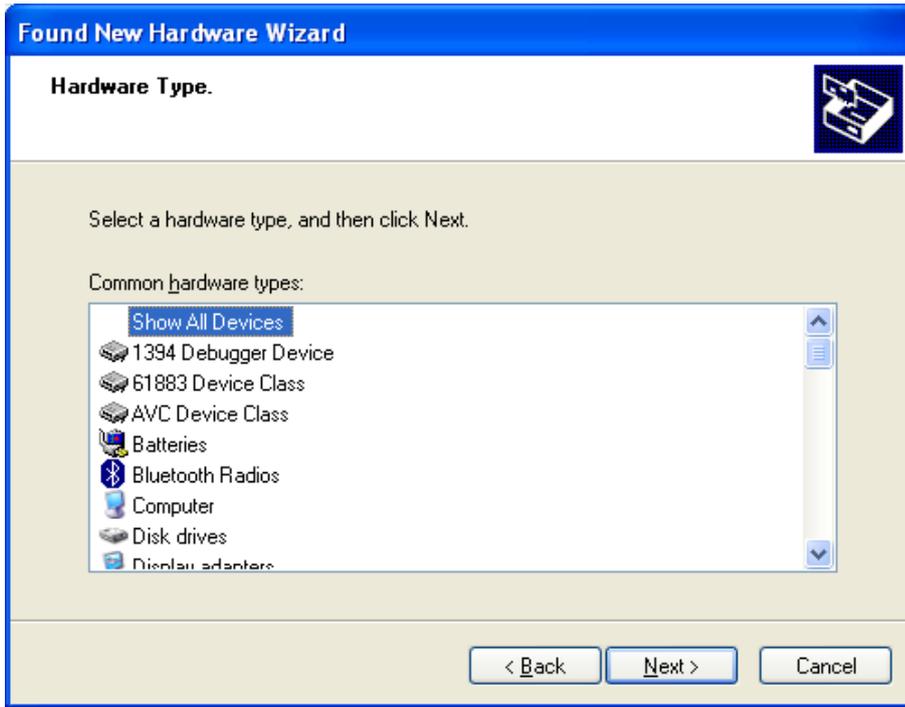


NOTE: In later LinkManager firmware the text “USB Device Over IP” may change to reflect the name of device USB driver.

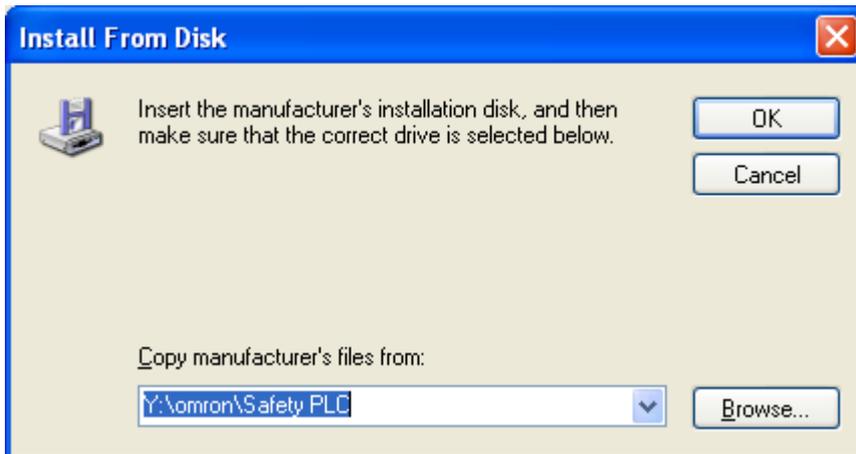
4. Even though the driver is already installed into the Windows driver store, Windows may not automatically choose to bind it (because it is not WHQL signed). So select don't search as in most cases In most cases it is necessary to select the driver manually



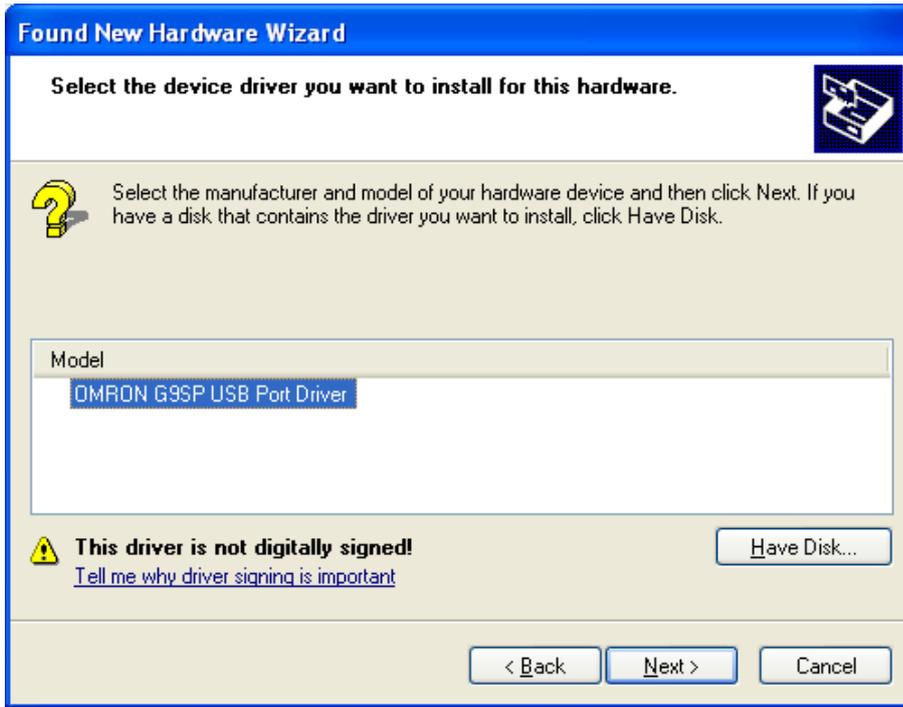
5. In the Hardware Type list select **Show All Devices**:



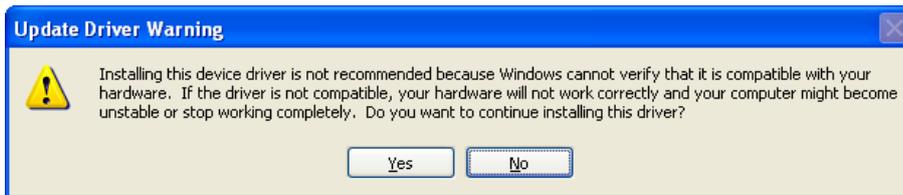
6. Browse to the location of the Omron USB driver files (**omrg9spusb.inf** and **G9SP_CUSB.sys**)



7. Select the **OMRON G9SP** driver



8. Windows may warn that the driver may be incompatible with the hardware. Select "Yes" to continue installing anyhow:



9. You will get a warning that the driver is not WHQL signed. Select "Continue Anyway".

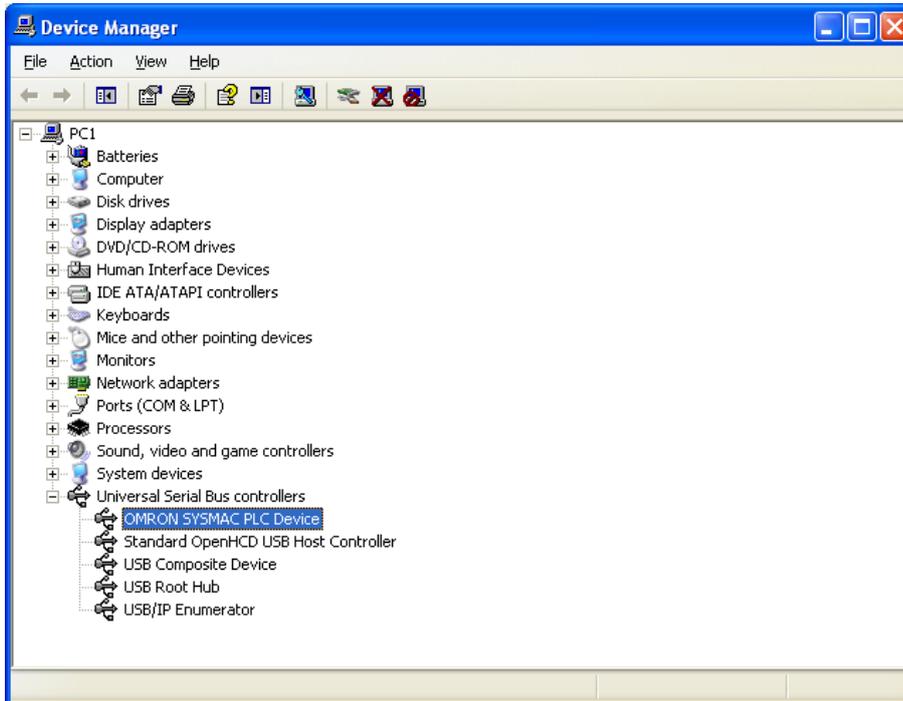


10. The driver should now be installed.

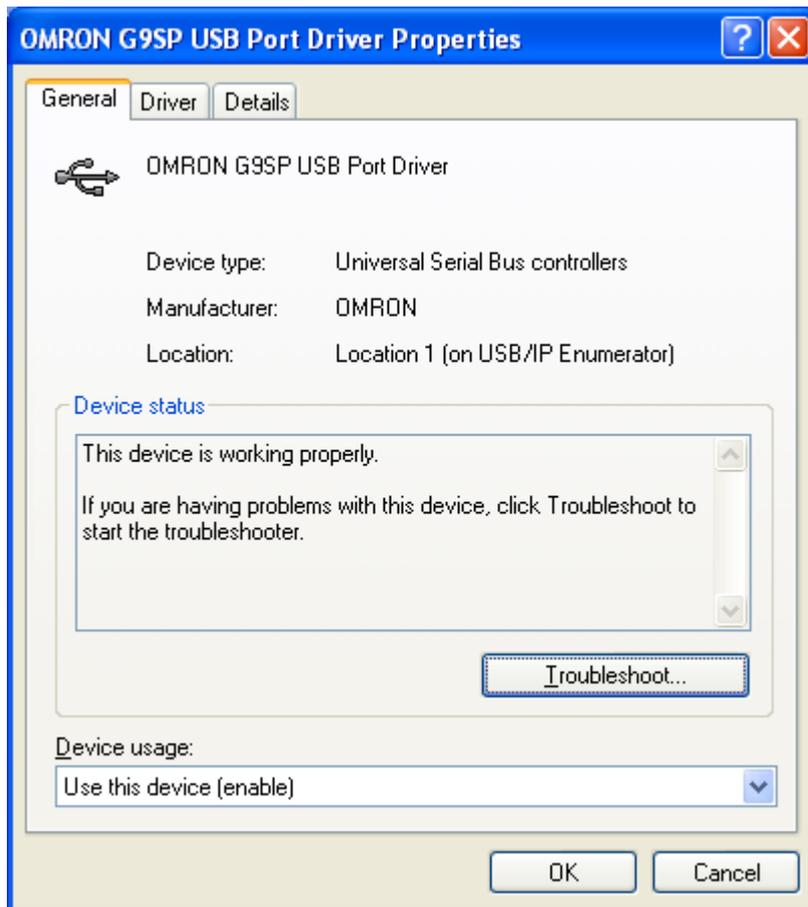


11. Optionally, you can verify that the driver started correctly.

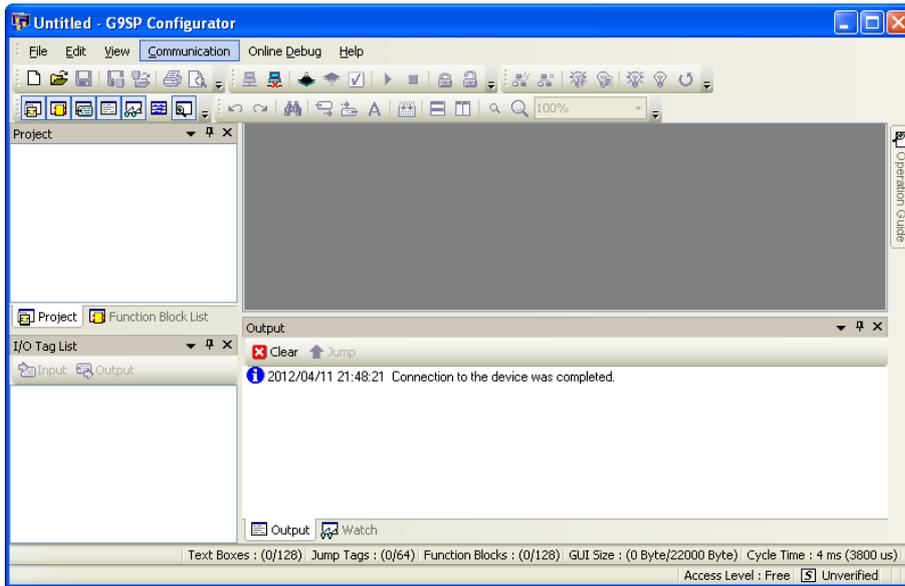
Omron has (incorrectly) classified the PLC USB driver as a USB controller, so you will find the driver in the section "Universal Serial Bus controllers":



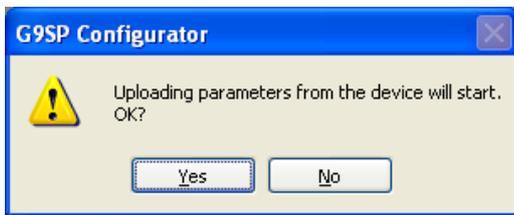
12. Check that Device status says "This device is working properly".



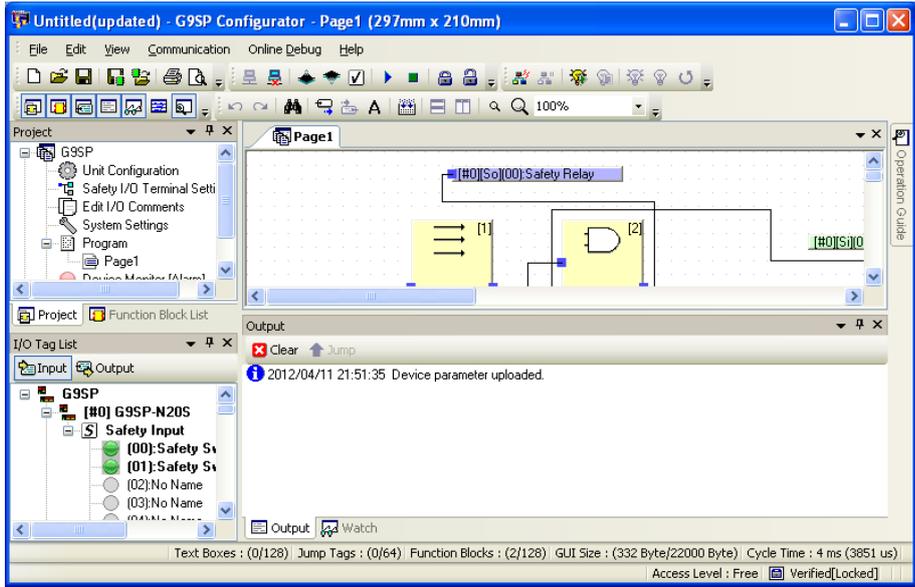
13. In G9SP Configurator, select **Communication > Connect**



14. Select **Communication > Upload**



15. Project uploaded and displayed in G9SP Configurator:



IMPORTANT: If LinkManager status is DOWN:



In the current LinkManager version, the connection is not automatically re-established in case the PLC restarts, or if the cable is un-plugged/re-plugged.

It is necessary to Disconnect and re-establish the connection (first step of this section).

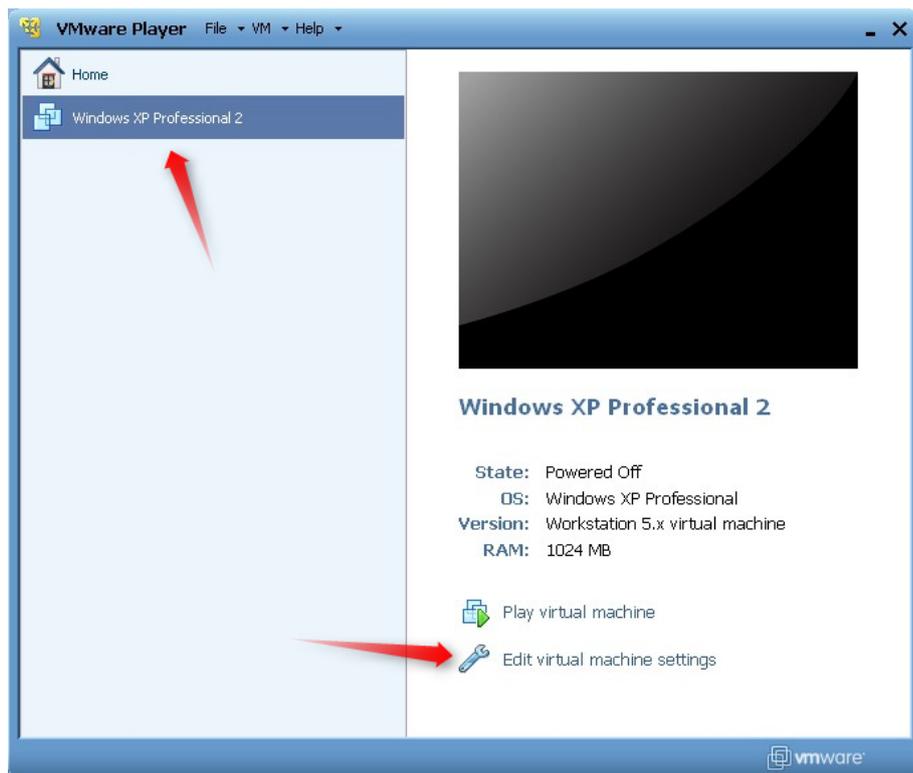
2. USB connection via Windows XP under VMWare

You can run the G9SP Configurator software inside a VMWare engine, to an Omron safety PLC that is USB attached to a SiteManager.

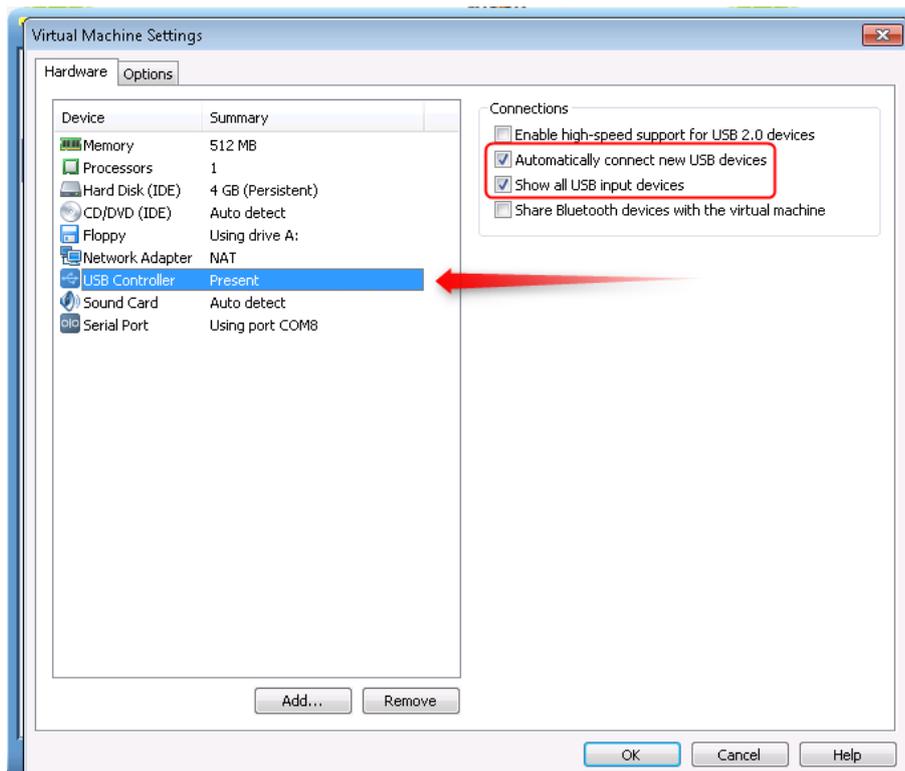
Important: LinkManager must run inside the virtual machine also and must be version 12155 or later.

The following illustrates VMWare Player, which can be downloaded from <http://www.vmware.com/support/product-support/player/>, and for LinkManager running outside the virtual machine (i.e. on the host system)

1. Locate your Windows XP that has the G9SP Configurator installed, and enter **Edit virtual machine settings**.



2. Make sure that **USB Controller** has been added as Hardware component:



3. Start the VMWare engine and the LinkManager inside the VMWare engine.
4. Follow the procedure of section 1 **USB Connection with G9SP** to get access to the PLC via LinkManager

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Secomea A/S
Denmark

CVR No. DK 31 36 60 38

E-mail: sales@secomea.com
www.secomea.com