Application Note Schneider Twido PLC and Twido Suite

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 a Twido controller placed on the customer site using the Twido Suite software.

This guide concentrates on the Twido TWDLCAE40DRF controller attached to the SiteManager via the USB-to-RS485 converter (TSXCUSB485), but may also work with other USB enabled Twido PLCs and software packages.

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 Twido PLC and the Twido designer software installed on your PC.
- You have connected the SiteManager with a USB cable to the USB-to-RS485 converter (set to TER MULTI), which is connected to the Twido PLC using the Twido programming cable.
- You have configured the agent on the SiteManager to type Schneider > USB adapter.

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:

Twido Suite \rightarrow LinkManager \rightarrow GateManager \rightarrow SiteManager \rightarrow PLC.

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

The following system overview depicts a SiteManager 1029 at the customer location:



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1. USB Connection via LinkManager

The following steps have been performed with Twido Suite software and USB drivers already installed on the same PC where the LinkManager is activated.

1. Locate the agent configured with the Twido USB device and click on it to establish a connection to it:



2. Select the mode you want to operate in. In this guide, "Programming" Mode is used.



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3. Connect to the PLC to upload the program from the PLC, by selecting "Open an existing project".



4. Select the Controller, and click the Load button at the bottom of the window.







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5. the Twido Suite will now search the installed COM ports on the computer for the PLC (A COM port in this case is mapped to a USB driver)

TwidoSuite		
	Analyzing port 6 on 20	

6. Next, it will show a list of available COM ports. If you are unsure of what COM port to use, check the MODBUS driver, which was installed during the Twido Suite installation. In this scenario, we can launch the MODBUS Serial Driver by right-clicking on the icon in the system tray, and select configure.





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7. In the dropdown-menu, notice the COM port marked (ready). In this example it is COM6.

MODBUS Driver - MODBUS01					
Configuration Runtime Serial Port/Modem Use Modem COM Port COM6 (T Baud Rate COM7 COM8 COM9 © 1 Bit C 2 Bits Mode (Data Bits) © ASCII (7 bits) Phone Number	Configuration Runtime Debug About Serial Port/Modem Use Modem COM Port COM6 (TSXCUSB485) [ready] Baud Rate COM7 COM8 COM8 COM9 Image: Common com				
Apply Undo Default					
ОК					

8. Revert to the Twido Suite, and select the corresponding COM port (in this case, COM6). Then, click OK.

Select a Connection			
Туре	Name	Connection mode	IP address/Number
Pc	COM6	Serial	COM6,Punit
Pc	COM1	Serial	COM1,Punit
Pc	COM2	Serial	COM2,Punit
Pc	COM4	Serial	COM4,Punit

Establish communication				
ОК	Cancel			





9. The Twido Suite will now connect to the PLC, and upload the project.

TwidoSuite		
	Establishing the communication	

10. You are now online with the PLC.

		(III) Telemecan	ique 🛛 🖛 🗆 🗙
		PI]_	29270
Project Desori	De Program Report		Stop 👀
		Configure Program Debi	19
→ 1 2 3	Ladder T S S S S N 130% T % L L F	THEX P P abc Symbols	Disconnect
	1 LD	AUX	Animate the program
Subroutines			Manage animation tables
	SHOR	%MW0 := %MW0 + 1 %MW0 := %MW0 + 1	Check PLC
	<u> L</u> }		Monitor hardware configuration
	Rung 1 %MWD > 10000 %MWD > 10000	%MW0 := 0 %MW0 := 0	Monitor software
	5012710000	9012 / 0	Monitor
	Rung 2	%MW1 = %MV1 + 1	configuration Monitor the
	SHOR	%MW1 := %MW1 + 1 3/3/1	- behavior
			1. T
	Rung 3 %MW1 > 1000 %MW1 > 1000	%MW1 := 0 %MW1 := 0	
		3/0	1
			×
	🖉 🥀 Twidos	Suite 2.20	

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2. USB connection via Windows XP under VMWare

You can run the Twido Suite software inside a VMWare engine, to a Twido PLC that is USB attached to a SiteManager.

Important: Note that LinkManager can only run inside VMWare if the host OS is Windows 7 and the PC's CPU has support for virtualization.

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

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

🛞 VMware Player File + VM + Help +	_ ×
Home	
Windows XP Professional 2	
	Windows XP Professional 2
	State: Powered Off OS: Windows XP Professional Version: Workstation 5.x virtual machine RAM: 1024 MB
	Play virtual machine
	₪ vm ware [.]



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

Virtual Machine Settings				
Hardware Options				
Device Memory Processors Hard Disk (IDE) CD/DVD (IDE) Floppy Network Adapter	Summary 512 MB 1 4 GB (Persistent) Auto detect Using drive A: NAT Present	Connections Enable high-speed support for USB 2.0 devices Automatically connect new USB devices Show all USB input devices Share Bluetooth devices with the virtual machine		
Sound Card	Auto detect Using port COM8			
	Add Remove]		
		OK Cancel Help		

- 3. Start the VMWare engine and the LinkManager inside the VMWare engine.
- 4. Follow the procedure of section **1** on page **4** to get access to the PLC via LinkManager.



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