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**SUMMARY / PURPOSE / CATCHWORDS:**

This document outlines how Graphical User Interfaces (GUIs) for Moog Industrial legacy products can be used with 64-bit operating systems on PCS.

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## Table of Contents

|                                                           |          |
|-----------------------------------------------------------|----------|
| <b>1. DOCUMENT HISTORY</b> .....                          | <b>2</b> |
| <b>2. INTRODUCTION</b> .....                              | <b>3</b> |
| 2.1. GENERAL PROPERTIES.....                              | 3        |
| 2.2. WINDOWS XP MODE.....                                 | 3        |
| 2.3. USING LEGACY GUIs IN WINDOWS XP MODE.....            | 4        |
| 2.4. USB TO SERIAL COMMUNICATIONS IN WINDOWS XP MODE..... | 6        |

## 1. Document History

| Revision | Description     | Author | Date       |
|----------|-----------------|--------|------------|
| A        | First document. | E Daly | 30.06.2014 |
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**Table 1: Document history**

## 2. Introduction

### 2.1. General Properties

The purpose of this document is to provide information about using older Graphical User Interfaces (GUIs) for Industrial legacy products with newer PCs and laptops. Legacy products are defined as products that have entered their End Of Life phase. Some are Obsolete (no longer supported), some are in the Repairs only phase and some are currently in their Last Time Buy phase where final orders are being delivered.

The GUIs for these products were created and compiled for use on computers using a 32-bit operating system. They do not function (or function intermittently) on the 64-bit operating systems installed on most modern PCs and laptops.

The terms 32-bit and 64-bit refer to the way a computer's processor (also called a CPU), handles information. The 64-bit version of Windows handles large amounts of random access memory (RAM) more effectively than a 32-bit system.

Most programs can work on either a 32-bit or 64-bit operating system. However, some notable exceptions are antivirus programs and some older GUIs.

Operating systems up to and including Windows XP were 32-bit operating systems. Vista, Windows 7 and Windows 8 are 64-bit operating systems.

### 2.2. Windows XP Mode

One method of using the legacy GUI programs on 64-bit operating systems is by installing a virtual Windows XP Mode program on the PC or laptop. This is a fully licensed XP version of Windows that can be installed on Windows 7 machines. It opens in a separate window on the PC and any program can be run in XP mode. It has no effect on the standard Windows operating system initially installed on the machine.

- 1) Download WindowsXPMode\_en-us.exe (469.8MB file – or latest version) from the Microsoft Download Centre @

<http://www.microsoft.com/en-us/download/details.aspx?id=8002>

- 2) Download Windows6.1-KB958559-x86-RefreshPkg.msu (15MB file – or latest version) from the Microsoft Download Centre @

<http://www.microsoft.com/en-us/download/details.aspx?id=3702>

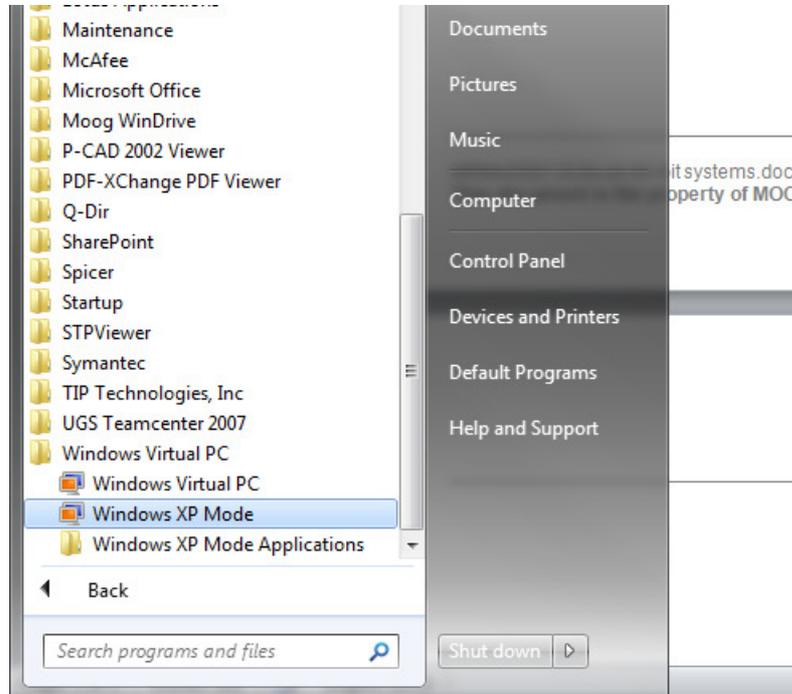
- 3) Full information and Installation instructions can be found on the Microsoft website @

<http://windows.microsoft.com/en-us/windows7/install-and-use-windows-xp-mode-in-windows-7>

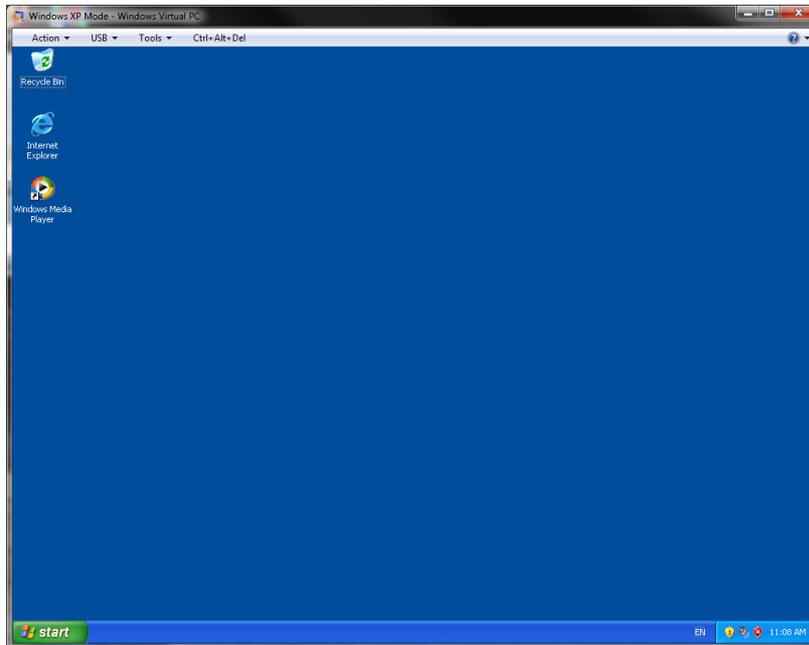
Please read all instructions on the Microsoft website before choosing to install Windows XP Mode.

## 2.3. Using legacy GUIs in Windows XP mode

Once Windows XP mode has been installed on the PC or laptop, the legacy GUI must be re-installed in the virtual PC. Open Windows XP mode:



Windows XP mode will open in it's own window – may take a moment to open the virtual PC:

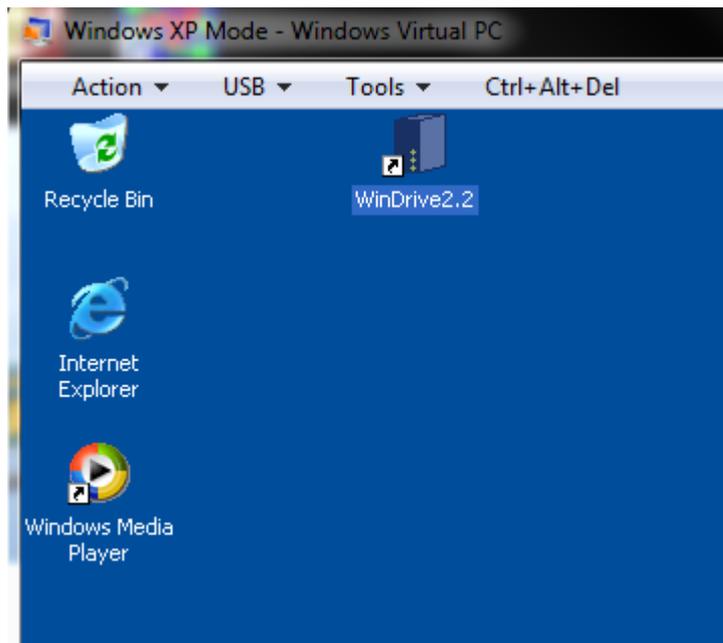


All standard network drives and disk locations are now accessible through the Windows XP mode.

**Notes:**

- Shortcut keys like “Windows-E” for explorer do not work in Windows XP mode.
- Internet connection may not be accessible in Windows XP mode so ensure the GUI installation files are located on the PC or laptop or an accessible network location.

Re-install the required GUI e.g. WinDrive 2.2 for the DMC, RMC and T200 legacy product ranges.



If using a USB to RS232/RS485 adapter, click the USB button on the top of the Windows XP Mode screen and select “USB-Serial Controller D Attach”.

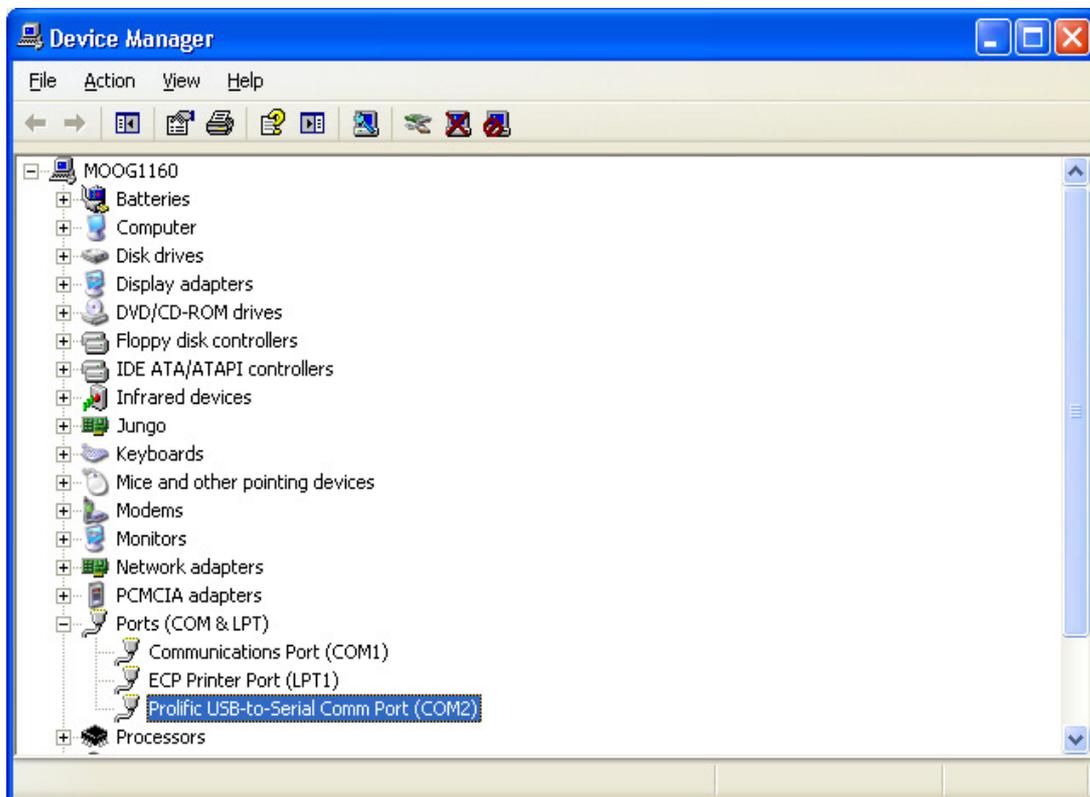
Open and use the GUI as normal.

## 2.4. USB to serial communications in Windows XP mode.

PCs and laptops are seldom supplied with RS232 terminals as standard. More frequently, a USB to serial port adapter is required. Fortunately, these are quite inexpensive and simple to use. Ensure that the correct driver is installed before first plugging in the USB to RS232 adapter or the device may not work. Simply plug out the device and plug in after the driver has been installed if this is the case.

One issue seen with these devices is that the USB port can be quite a high number in the list of PC ports. Windrive 2.2 and other GUIs only offer COM ports 1-4 as viable COM ports for connecting with Servo Drives so it may be necessary to change the USB COM port number.

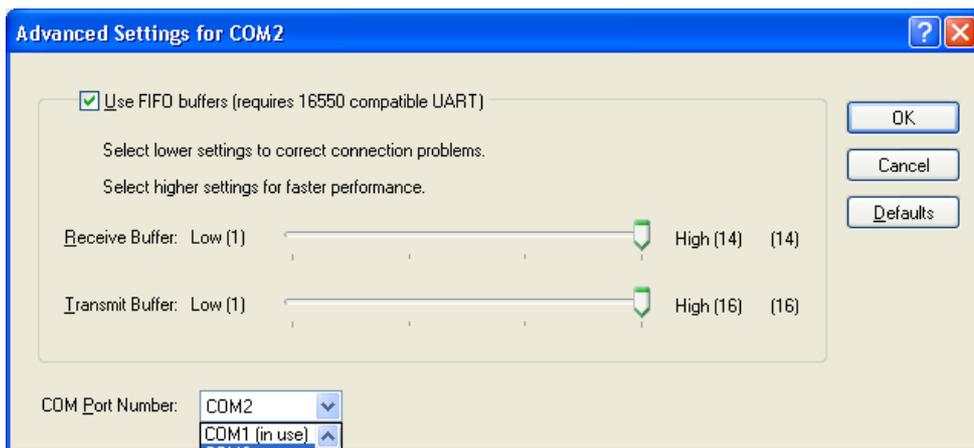
Check Device Manager in the Control Panel – System Properties to see what USB port the laptop is using:



1) Right click the USB port highlighted above.



2) Click advanced.



Select an available (not in use) COM port in the range 1-4. OK.

3) Back in WinDrive (Windrive 3.0 used for this example), ensure that you have the same COM port selected:

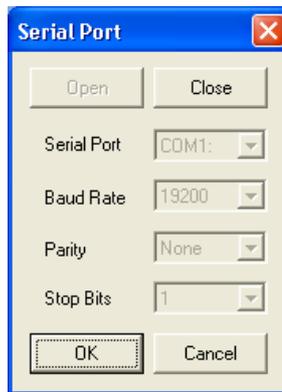
At this message when opening WinDrive, do not click OK



4) Click on the other window opened when opening WinDrive.

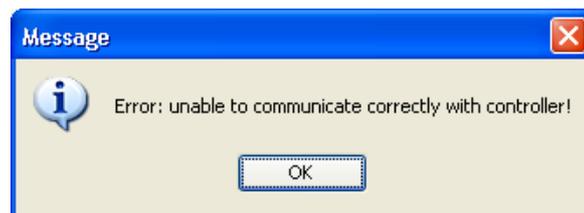


5) Click Protocol, Configure Serial Port.



6) Close COM1, Select the same COM port as in the steps above, click Open and OK.

7) Then go back to this error message and click OK.



8) Click Retry - should now be communicating with WinDrive.

