How to Install MODUS™ 1.0 Software

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1   BASIC REQUIREMENTS

➢ Minimum 80 GB disk space (160 GB or more recommended).

➢ Intel® Core2 Duo Processor running at least 2.4 GHz.

➢ Minimum 2 GB RAM (4 GB recommended with large CAD models).

➢ 4 USB ports (for printers, memory devices, DK2 dongle, etc.)

➢ Network card required for PC connection to UCC controllers. Further network cards may be required for connection to a company network.

➢ Minimum 256 MB RAM graphics card (512 MB or more recommended). The following link has information on cards recommended by Tech Soft America (the developers of the HOOPS graphics engine): http://developer.hoops3d.com/graphicscards/graphicscards.html (or contact Renishaw for further information on graphics card support).

1.1   Supported Operating Systems

➢ Microsoft® Windows 2000 (Service Pack 4 or later)

➢ Windows XP Professional 32 bit (Service Pack 1 or later). If WinXP Service Pack 2 or later is installed, then the Windows Firewall must be switched OFF.

1.2   System Configuration

Internet Explorer 5.01 or higher must be installed (however this does not need to be used as the default browser).

Display settings should be set to at least 1024x768 with colour depth set to High Colour or True Colour (recommended). Lower settings are allowed but the interface may appear distorted. It is also good practice to obtain the latest versions of the drivers for your graphics card display adapter.

1.3   Graphics Card Settings

The tooltips for the icons in the Model window may be displayed briefly but then become obscured by the icons.

This type of display behaviour can occur when the 'Enable write combining' option is enabled in the graphics setting on a PC. To disable this option, from the Control Panel select Display then select the Settings tab page. Click Advanced. In the dialog box displayed, select the Troubleshoot tab page. Uncheck 'Enable write combining' and save your changes. If this does not resolve the display corruption, ensure you have downloaded and installed the latest driver for your graphics card. If you still have display corruption, try decreasing the hardware acceleraton on the Troubleshoot tab page. If there are still problems after applying these changes, contact Renishaw and give the model and driver version for your graphics card.

1.4   Memory Optimisation

This feature is for the benefit of those users who have at least 4 GB of physical memory on their PC. Importantly, the maximum amount of memory that can be supported on Windows XP Professional is 4 GB.

Modus has been modified to work with the large address aware linker option, which is set as a flag (/LARGEADDRESSAWARE) in the link options of the Modus project in Visual Studio .NET. This modification allows the operating system to be aware that it can allocate more than 2 GB to the application. It allows the physical memory usage of Modus to exceed 2 GB, which allows the loading of very large (200+ MB) CAD files.

Additionally, the virtual address space has to be altered in the operating system. Normally, the virtual address space of processes and applications is limited to 2 GB unless the /3GB switch is used in the Boot.ini file. To enable this switch on a PC using Windows XP Professional, follow these steps:

1. Open the Control Panel on your computer.

2. Double-click the System icon to open the System Properties dialog.

3. Select the Advanced tab.

4. Click the Settings button for Startup and Recovery.

5. In the Startup and Recovery dialog, click the Edit button.

6. This opens the boot.ini file in Notepad. The file looks like this:

    [boot loader]
    timeout=30
    default=multi(0)disk(0)rdisk(0)partition(1)\WINDOWS
    [operating systems]
    multi(0)disk(0)rdisk(0)partition(1)\WINDOWS="Microsoft Windows XP Professional" /noexecute=optin
    /fastdetect

7. Edit the file by adding /3GB to the end of the last line:

    [boot loader]
    timeout=30
    default=multi(0)disk(0)rdisk(0)partition(1)\WINDOWS
    [operating systems]
    multi(0)disk(0)rdisk(0)partition(1)\WINDOWS="Microsoft Windows XP Professional" /noexecute=optin
    /fastdetect /3GB

8. Save and close the file.

9. Click OK to accept changes in Startup and Recovery, then System Properties dialogs.

10. Reboot the PC for these changes to take effect.

Users running multiple applications on their Modus systems should check the implications of making this change to the boot procedure on their other applications.
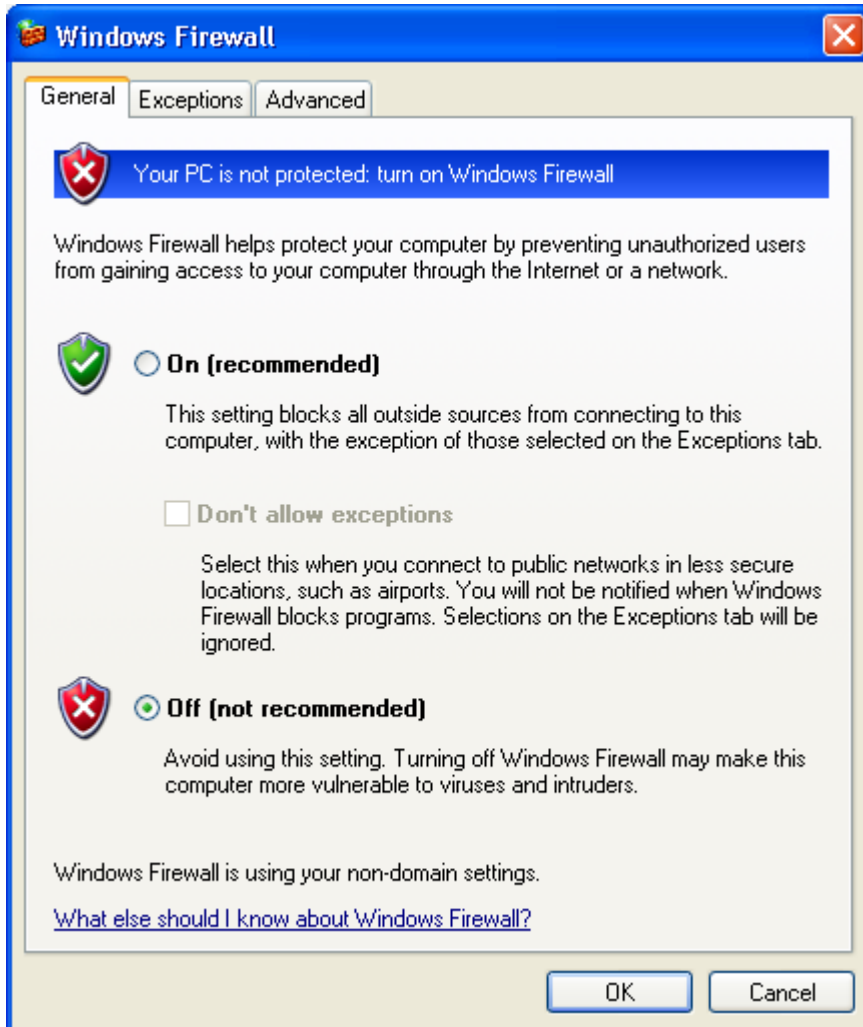
2   BEFORE YOU INSTALL MODUS™ VERSION 1.0

➢   Ensure that your PC system meets the basic requirements as described above.

➢   Release notes are available on the installation CD for reading or printing.

➢   These installation notes are available on the installation CD as a PDF file for printing.

3 INSTALLING MODUS™

3.1 Switching off the Firewall

If you are running Windows XP with SP2 or later, you will need to switch off the Firewall before installing and using Modus. From the Control Panel, select the Windows Firewall icon. In the following dialog, click the Off button:

3.2 Installing Modus with UCCserver

If you are installing Modus on a system where UCCserver is not currently installed:

1. Install Modus.

2. Install UCCserver.

If you are installing Modus on a system where UCCserver is currently installed:

1. Install Modus.

2. From the Windows Start menu, select Programs>Renishaw CMM Installation Manager. The Installation Manager must be run in advanced mode, either by pressing CTRL+ALT+A in the Installation Manager, or by adding the command line parameter **/a** to the Start menu shortcut.

3. Select the UCCserver installation from the lower left panel in the Installation Manager.

4. Click Repair in the menu bar in the right-hand pane.

3.3 Start the Installation

Double-click the installation file for Modus. This is called Modus_10_setup.exe. Read the release notes when the installation procedure displays them. If you wish to read them later, by default they are installed in

C:\Program Files\Renishaw\Modus\1.0\Release Notes and can be accessed from the Windows Start menu > All Programs> Modus > Documentation.

3.4   User Rights and Configuration Management

The Modus installation creates three Windows local user groups; Modus Administrator, Modus Supervisor and Modus Operator. These are used to prevent unauthorised changes to the CMM configuration file from within Modus, and to output set-up data within LaunchPad for Q-DAS. The installation process places the user performing the installation into the Modus Administrator group. You can allocate other users to groups using the Windows Control Panel options. For more information see the Modus online Help topic, 'User Privileges'.

4   BEFORE YOU RUN MODUS™ VERSION 1.0

4.1   Print Device

Before you run Modus, you must either have a local or network printer installed, or install software that creates a PDF printer driver. This is required by the reporting functions within Modus and warning dialogs are displayed if a print device is not correctly configured.

4.2   File and Printer Sharing

File and Printer Sharing must be enabled for the SQL Server to install correctly.

To check this, from the Start menu select Settings>Control Panel>Administrative Tools>Services. Scroll down the list on the right and check that there is a Server item with the status 'Started'.

If the Server item is not present:

1.   From the Start menu select Settings>Control Panel>Network Connections.

2.   Right-click on a connection and select Properties. The list in the middle of the General tab must show File and Printer Sharing.

3.   If File and Printer Sharing is not shown, click Install, select Service and then click Add.

4.   Select File and Printer Sharing, then click OK.

5.   Restart the computer and check that the SQL Server has now started (as described above).

5   TROUBLESHOOTING

5.1   View Layout

The Modus installer installs two default view layout files. They are called ModusLayout10.vsf and ModusDefaultLayout10.vsf. If you make changes to the layout of windows and menus in Modus, the changes are saved to ModusLayout10.vsf when you close Modus. You can also save changes manually by using View>Save View Layout from the Modus main menu bar. This prompts you to save the view layout and allows you to specify a name for your view layout file and a location to save it in.

5.2   USB Dongle Hardware

If you are using a USB DK2 dongle and all of the Modus 1.0 software displays DK2 error messages, the DK2 USB drivers may not have been properly installed. Remove the USB DK2 dongle and reboot the PC. Log in and reconnect the USB DK2 dongle. Windows should display the 'Add hardware' wizard. Follow the installation options and Microsoft Windows should install the relevant drivers.

5.3   On-Line Help

If an error is displayed when you try to access the Modus Help file, right-click on the MODUS10_LNG.CHM file (where _LNG indicates the language of the Help file) in Microsoft Windows Explorer, select Properties and click Unblock.