Installation Notes

By Delcam plc

Important Notice

Contents

Installation Notes

*PLEASE READ THIS SECTION BEFORE YOU DO
ANYTHING ELSE*

Before Installing

If you have an existing installation of PowerINSPECT, it is strongly recommended that you **back up all custom information** associated with that installation. This includes custom report templates.

If you have installed **beta or pre-release versions** of PowerINSPECT since the last customer release (version 4.2) then you are strongly advised to uninstall these versions before installing this version of PowerINSPECT. There are a few known issues where earlier beta release of PowerINSPECT are known to interfere with the installation and use of CimCore PowerINSPECT 4.3. It is not necessary to uninstall previous release versions of PowerINSPECT (ie versions 4.2, 4.1, 4.0, 3.05, 3.0, 2.2, 2001, 1355, 1200 and before).

Note : Take care before uninstalling PowerINSPECT version 1200 – **UNINSTALLING POWERINSPECT 1200 MAY DAMAGE YOUR SYSTEM!** Consult the "Uninstalling PowerINSPECT 1200 Damages System Fonts" part of the "Troubleshooting" section towards the end of this guide.

Prerequisites

Hardware

Point Cloud Recommended

To use CimCore PowerINSPECT 4.3's point cloud functionality, a computer with dual 3.0 GHz Intel Pentium IV (or equivalent) processors, 1.5 GB of RAM, 60 GB hard disc space (including 10 GB free in the Windows temporary directory) and an NVIDIA Quadro4 380 XGL graphics card is recommended. Note that ATI graphics cards (Radeon, FireGL, etc) are not supported.

Point Cloud Minimum

To use CimCore PowerINSPECT 4.3's point cloud functionality, CimCore PowerINSPECT 4.3 requires a computer with a 1.8 GHz Intel Pentium IV (or equivalent) processor, 512 MB of RAM, 20 GB hard disc space (including 5 GB

free in the Windows temporary directory) and an NVIDIA Quadro FX 500 graphics card. Note that ATI graphics cards (Radeon, FireGL, etc) are not supported.

Recommended

When CimCore PowerINSPECT 4.3's point cloud functionality is not going to be used, a computer with a 1.5 GHz Intel Pentium IV (or equivalent) processor, 512 MB of RAM, 2 GB hard disc space and an NVIDIA Quadro4 380 XGL graphics card is recommended. Note that ATI graphics cards (Radeon, FireGL, etc) are not supported.

Minimum

When CimCore PowerINSPECT 4.3's point cloud functionality is not going to be used, CimCore PowerINSPECT 4.3 requires a computer with a minimum of a 800 MHz Intel Pentium II (or equivalent) processor, 256 MB of RAM, 250 MB hard disc space and an NVIDIA GeForce4 graphics card. For use with larger CAD files a faster processor, more RAM and a more recent graphics card will give better performance. Note that ATI graphics cards (Radeon, FireGL, etc) are not supported.

Operating System

CimCore PowerINSPECT 4.3 requires Microsoft Windows XP Professional. Note that Microsoft Windows 2000, Windows NT 4.0, Windows 98, Windows 98 SE and Windows Me are no longer supported by CimCore PowerINSPECT 4.3.

IMPORTANT: The initial release of PowerINSPECT 4.3 does not support Windows Vista. Support for Windows Vista will be added with the release of a service pack.

Microsoft Internet Explorer 6.0

CimCore PowerINSPECT 4.3 requires Microsoft Internet Explorer 6.0 (or later) to be installed. You can download or order a free copy of the latest version of Internet Explorer from the Microsoft web site at http://www.microsoft.com/windows/ie/.

Microsoft .NET Framework 1.1

Some of the optional add-ins and utilities that are installed with CimCore PowerINSPECT 4.3 require the Microsoft .NET Framework Version 1.1 to be installed. This can be downloaded for free from the Microsoft web site. A link to the download page is included in the Windows Start button entry for CimCore PowerINSPECT 4.3 when it is installed.

Dongle and Protection File

PowerINSPECT will only work if you have a valid dongle and license file installed. Both of these should be provided by your reseller.

Please ensure that the date and time are correct on your computer before running PowerINSPECT for the first time. Changing the time and date may prevent PowerINSPECT from validating the protection file. If this happens then you should contact your reseller for assistance.

If you are using USB dongles for PowerINSPECT or any other product then you should ensure that you remove the USB dongles from the PC before installing

PowerINSPECT. You should not re-insert the USB dongles until after the PowerINSPECT installation is complete and the computer has been restarted. This is necessary because the SafeNet Sentinal driver software that PowerINSPECT uses to communicate with dongles may not install correctly if a SafeNet Sentinal USB dongle is inserted into the computer during the driver installation.

For more detail on the dongle and protection file, see "The License File" on page 4 of this guide.

Installing PowerINSPECT

CimCore PowerINSPECT 4.3 has been designed to run under Microsoft Windows XP Professional . To install PowerINSPECT you should be logged on as a user with administrative privileges.

Note: There is a bug in the Install Shield tool used to install PowerINSPECT which means that attempting to install on Windows XP without administrative privileges will cause a blank error message to be displayed during the installation initialisation. Accepting the message terminates the installation.

The PowerINSPECT installation should start automatically when you insert the PowerINSPECT CD into your computer's CD-ROM drive. If this does not happen, then open Windows Explorer by double-clicking on the "My Computer" icon on your desktop, open the CD-ROM drive and double-click the file named "Setup.exe".

Follow the instructions that appear on the screen to install PowerINSPECT.

The installation mechanism first checks that your computer meets the minimum operating system requirements for CimCore PowerINSPECT 4.3. If your operating system is not supported or needs a service pack or Internet Explorer installing, it will tell you what component needs installing and stop the installation. Please install the required component and restart the PowerINSPECT installation.

Note: For more details about the hardware and operating system required, see "Prerequisites" on page 1 of this guide.

Next the installation program checks that required system files are present in versions acceptable to CimCore PowerINSPECT 4.3. If it detects that some system files need to be upgraded to run CimCore PowerINSPECT 4.3, it will first install these necessary files. If this is the case, you will have to restart your computer before the main PowerINSPECT installation can start. The installation resumes automatically when you log back into your computer after the restart.

After installing PowerINSPECT you must run it at least once while logged on to Windows as a user with administrative privileges. If you run PowerINSPECT for the first time as a Windows user without administrative privileges it will display the message, "The registration process has failed," and exit. To resolve this you must log back on as an administrative user and run PowerINSPECT once.

Microsoft Excel

PowerINSPECT can generate printed reports in two ways- using its own internal HTML format and using Microsoft Excel. To use the Excel option, you must have Excel 2003, Excel 2002 (Office XP), Excel 2000 or Excel 97 installed on your computer. Excel 2003, Excel 2002 or Excel 2000 are recommended, as there are a number of known issues when using PowerINSPECT with Excel 97.

Installation on Multiple Computers

PowerINSPECT requires Microsoft Internet Explorer 6.0 before it can be installed on a computer (see the "Prerequisites" section of this guide, above).

It is inappropriate to include all of the installation packages for all language version of these products on the installation CD so the relevant language versions for your country must be downloaded from the Microsoft web site or ordered on CD.

If you want to install PowerINSPECT on multiple computers it is recommended that you download the latest version of Internet Explorer and burn it to a CD or DVD. You can then install Internet Explorer from this CD, rather than having to download it for each computer on which you are installing PowerINSPECT.
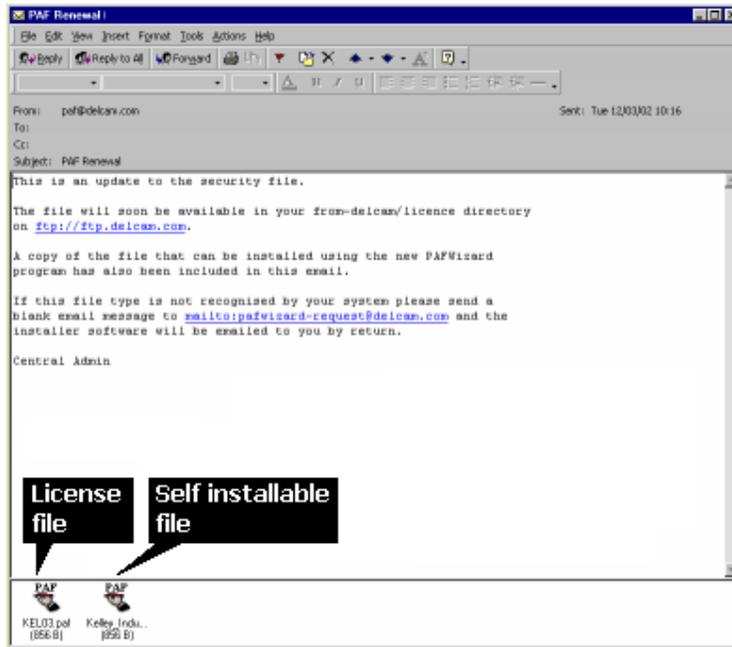
The License File

CimCore PowerINSPECT 4.3 uses the PAF and FLEX licensing systems. With the PAF licensing system PowerINSPECT runs with a dongle connected to the parallel port (printer port) or USB socket of the computer it will be used on and requires a license file. The FLEX system (also know as network licensing) is a cost option which can be used to restrict the number of simultaneous PowerINSPECT users but not which workstation it is run on, allowing users to make more efficient use of fewer licenses by sharing them on the network. The FLEX system is not covered by this guide.

The licence file for the PAF system is called "dcam.paf" and contains your personal authorisation codes. It is stored in "C:\Program Files\Common Files\Delcam" on your computer.
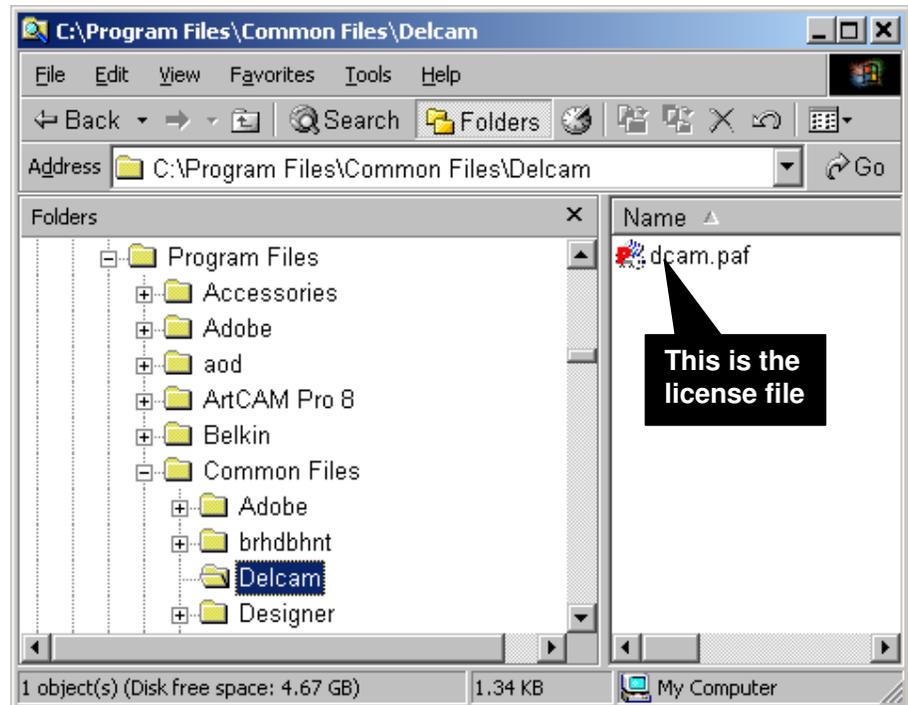
The licence file is provided by your reseller and is normally sent to you in an e-mail similar to the one shown below.

The first attachment in the e-mail is the licence file. You can double-click on this file to view it with the PAF Wizard. The second attachment is the Self Installable Licence file. Double-click on this file to use the Delcam PAF Wizard to install the licence on your computer to the correct location with the correct file name.

Note : Please check the system time and your local zone before starting PowerINSPECT. If your computer time and data is not correct you can lock the dongle. You can check the time settings using the Windows control panel.

New Users

For new users, when the first paf is installed, the file will be installed into the following folder:

C:\Program Files\Common Files\Delcam

The file called dcam.paf should then remain in this directory as this is the path that PowerINSPECT will use to check the license. If the file does not exist in this directory, an error will be produced when PowerINSPECT is starting up. There should not be more than one paf file in this directory.

Existing Users

For existing users of PowerINSPECT (up to version 4.025), the paf file is installed in the following path:

C:\dcam\config\pass

The file called dcam.paf should then remain in this directory as this is one of the paths that PowerINSPECT will use to check the license. If the file does not exist, an error will be produced when PowerINSPECT is starting up. There should not be more than one paf file in this directory.

For versions later than 4.025, PowerINSPECT checks for the license in two areas, one in C:\dcam\config\pass and the other in C:\Program Files\Common

Files\Delcam. If there is no paf in any of these two areas, an error will be produced. A valid paf only needs to be in one of these two folders, so existing users are encouraged to still use the C:\dcam\config\pass path.

Setting the Language and the Fonts

When you start PowerINSPECT you can configure the language and the fonts used in the PowerINSPECT information window. This must be done BEFORE opening a file – you cannot do it while an inspection session is underway.

Setting up the Language

1. Select **View-Language** from the menu bar.
2. From the dialog box displayed, select the language you want to use, then click on the OK button.

Setting up the Fonts

1. Select **View-Fonts** from the menu bar.
2. From the dialog box displayed, select the Fonts (Style, Size) you want to use when displaying information. You are advised to select a standard font such as "Courier" for the best results.

Connecting PowerINSPECT to the CimCore CMM

When PowerINSPECT is running, an icon is displayed in the Windows taskbar (on the bottom right side of your screen). The colour of this icon indicates the state of the inspection device (usually a CMM) connection.

This icon can have four different colours for the four connection states:

- RED: PowerINSPECT is not connected to the CMM.

- GREEN: PowerINSPECT is connected to the CMM but is not collecting contact points.

- BLUE: PowerINSPECT is connected to the CMM and collecting contact points for inspection.

- YELLOW: PowerINSPECT is connected to the CMM and collecting contact points for calibration.

Configuring the Connection

THIS SHOULD NORMALLY BE CARRIED OUT BY CIMCORE ON THE ORIGINAL INSTALLATION. ON SUBSEQUENT INSTALLATIONS (UPDATES) THIS SHOULD NOT BE NECESSARY.

The connection to the CimCore CMM is carried out using the CMMDriver Configuration dialog box:

- Select "Configuration" from PowerINSPECT's "CMM" menu to display the CMMDriver Configuration dialog box.
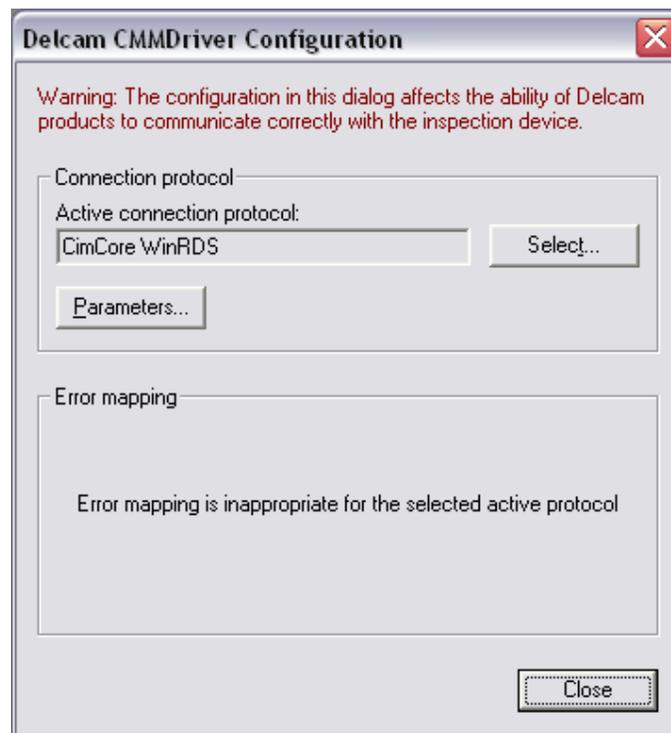
Selecting the Connection Protocol

1. Click on the "Select" button in the "Connection protocol" area of the CMM Driver Configuration dialog box. This displays the Select Connection Protocol window, which lists the connection protocols available.

2. In the Select Connection Protocol window, click on CimCore WinRDS, then click on the "OK" button.

Connecting to the CimCore CMM

Before using PowerINSPECT, please check if the connection to the inspection device can be established:

- Click on **Tools – Machine – Connection** from PowerINSPECT's menu. to switch the connection on or off.

  If the icon in the Windows task bar does not turn green when you try to connect then the connection has failed. You should also get an error message box. If this happens then contact CimCore for support.

NOTE: THIS IS A GUIDE TO THE STATE OF YOUR CONNECTION, BUT THE ONLY WAY TO BE CERTAIN IS TO TAKE POINTS WITH YOUR CIMCORE CMM AND CHECK THAT THEY ARE RECEIVED BY POWERINSPECT.
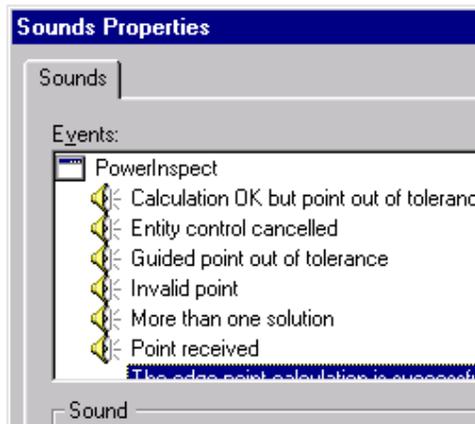
PowerINSPECT Sounds

PowerINSPECT can play a sound for each inspection event, for example, when a measured point falls inside or out of tolerance. This feature means that you will not have to check your screen for the inspection results every time: you will be notified by a different sound for each inspection event.

The PowerINSPECT Sound scheme can be customised using the standard Windows **Sound Properties** dialog box.

1. Select **Start – Settings – Control Panel**, then click the **Sounds** icon to display the list of available events on your system.

2. Scroll down the list until you reach the PowerINSPECT events, and choose a different sound file (.wav) for each event.

You can find additional sound files in the \Redist\Sounds folder on the PowerINSPECT installation CD.

3. When you have assigned the required sound files to the different PowerINSPECT events, click on OK to close the **Sounds Properties** dialog box.

Note :   To use this feature, a sound card must be installed on your computer.

Important Note for Users of Rigid Probes

This note is intended for users of Rigid Probes (normally supplied with inspection arms).

It is important to probe the first point correctly, approaching the surface from the direction of the surface normal.

This allows PowerINSPECT to determine the surface offset from the probe centre. This is necessary to determine the true position of the surface. For example, when probing a circle, PowerINSPECT needs to determine whether the surface is on the "inside" or the "outside" of the probed circle.

If the probe is NOT nearly perpendicular to the surface for the first point, PowerINSPECT may measure the feature incorrectly. This only applies to the first point probed in a feature.

Shown below are examples of how to probe a plane and a sphere correctly. Each example shows a right way and a clearly wrong way, as well as a typical 'borderline' case which might cause problems. You should always be sure to probe the first point correctly.

NOTE: THIS APPLIES TO GEOMETRIC ENTITIES. IN THE CASE OF SURFACE INSPECTION, EVERY SINGLE POINT SHOULD BE APPROACHED IN THE NORMAL DIRECTION.
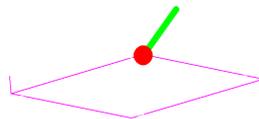
Plane

Right way- probe nearly perpendicular to surface
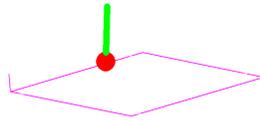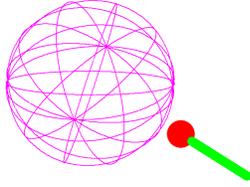
Wrong way- probe nearly parallel to surface

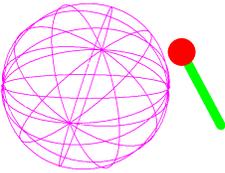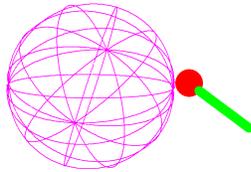Typical problem- probe at an angle to surface

Sphere

Right way- probe nearly perpendicular to surface

Wrong way- probe nearly parallel to surface

Typical problem- probe at an angle to surface

Troubleshooting

Dongle Error Message while Starting PowerINSPECT.

Note: If you suspect dongle problems you should test the software using only the PowerINSPECT dongle. Ensure that only one paf file is present in the folder; all old paf files should be removed from this folder. See the License File section of this document for more details.

PowerINSPECT refuses to start with one of the following messages on the screen:

"NO DONGLE FOUND ! Please plug-in the Dongle and press OK"

Check that the PowerINSPECT dongle has been correctly connected to the computer parallel port.

If several dongles are connected try changing the order.

Check that the Sentinel Driver version 5.33 or higher has been correctly installed. Reboot the computer after the sentinel driver installation.

If you suspect dongle problems you should test the software using only the PowerINSPECT dongle. If the problems persist you should contact CimCore for support.

"Password Not Found in the protection file for this Software"

Please verify the contents of the dcam.paf file or contact your local dealer.

Your PowerINSPECT licence may have expired. Please contact your local dealer for code renewal. DO NOT CHANGE THE SYSTEM DATE! This will not solve this problem but will cause another one.

Check that the contents of the dcam.paf file is really a FULL ASCII TEXT FILE. Use the Delcam PAF Wizard to avoid these problems (To use from Windows Start Menu: Start- Programs- Delcam-PAFWizard- PAFWizard2031- PAF Wizard)

"FATAL ERROR : Please Contact Delcam"

Please contact CimCore for support.

The Dongle is connected but PowerINSPECT still refuses to start

Check again that the Dongle is connected properly. Try using the PAF Wizard to check the state of the Dongle. If it all appears to be correct, the Dongle may be faulty. Contact CimCore for support.

(To use from Windows Start Menu: Start- Programs- Delcam-PAFWizard- PAFWizard3000- PAF Wizard)

Open PAF File   Open FLEX File   Check Dongle
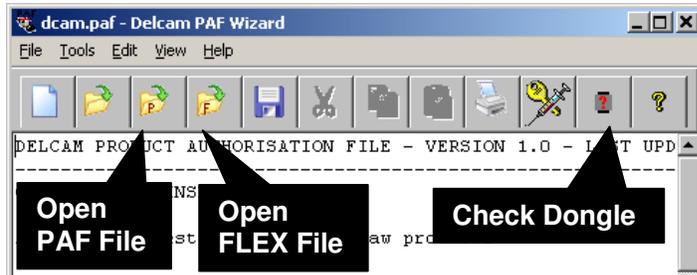
Error Message while Using Microsoft Excel

"The Excel MACRO has failed to create the REPORT because NO PRINTER HAS BEEN INSTALLED on your computer. Please Install a printer and start again."

(On Earlier Versions the message reads, "Excel Error 1004")

Please check that a printer driver has been installed in Windows. If it is necessary to run PowerINSPECT on a computer without a printer, you should make sure that a printer driver is installed and set for use, even if the printer is not physically connected.

Open every template file and update the page setup with a correct paper format , then save the template File. Then try again.

Compiler Error

Please check that the MS GRAPH option has been installed during the Excel installation. If not reinstall this option from the Excel CD-ROM and start again.

The Excel windows is locked and I cannot use it anymore

Instead of killing the Excel Program, use the FILE/LAUNCH EXCEL command from PowerINSPECT, this will unlock Excel properly.

Workarounds from Previous Versions

A set of knowledge base articles is included on the CimCore PowerINSPECT 4.3 release CD. Consult the ReadMe file in the root of the CD.

Uninstalling PowerINSPECT 1200 Damages System Fonts

The release version of PowerINSPECT version 1200 unregisters Windows system fonts when it is uninstalled. This will significantly change the appearance of Windows and Windows Applications. Some Windows applications may no longer work. In some instances Windows may not be able to start at all! None of these problems will be seen until you restart your computer after uninstalling PowerINSPECT 1200.

This problem is fixed by running the "PIRepair.exe" program which is located in the "\PIRepair" folder on the PowerINSPECT installation CD. This program is run automatically when PowerINSPECT 1300 onwards is installed.

DO NOT UNINSTALL POWERINSPECT 1200 FROM A COMPUTER IF PIREPAIR.EXE HAS NOT BEEN RUN OR POWERINSPECT 1300 ONWARDS HAS NOT BEEN INSTALLED FIRST! IF IN DOUBT, DO NOT UNINSTALL POWERINSPECT 1200 AT ALL!