

Hardware Notes - Creo 2.0

Parametric, Direct, Layout, Schematics, Options Modeler, Simulate

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| Platform Support | | | |
|--|---|-------------------------------------|--|
| Partner | Operating System | Operating System levels | |
| Microsoft | Windows 10 Professional 64-bit Edition ⁵ Windows 10 Enterprise 64-bit Edition ⁵ Windows 10 Enterprise 2015 LTSB 64-bit Edition ⁵ | Base OS | |
| | Windows Server 2012 R2 64-bit Standard Edition ^{1&2} | Base OS | |
| | Windows Server 2008 R2 64-bit Edition ² | Base OS | |
| | Windows 8.1 32 and 64-bit Edition ³ Windows 8.1 Pro 32 and 64-Edition ³ | Base OS, Update (KB 2919355) | |
| | Windows 8 32 and 64-bit Edition ⁴ Windows 8 Pro 32 and 64-Edition ⁴ | Base OS | |
| | Windows 7 Professional 32 and 64-Edition Windows 7 Ultimate 32 and 64-Edition Windows 7 Enterprise 32 and 64-Edition | Base OS, Service Pack 1 | |
| | Windows XP Professional x64 Edition | Base OS, Service Pack 2 | |
| | Windows XP Professional Edition; | Base OS, Service Pack 1, 2 and 3 | |
| | NOTES | | |
| | 1. Windows Server 2012 R2 is supported on Creo 2.0 M150 and later. | | |
| 2. Windows Server 2008 and 2012 are supported in Batch Mode only, and are NOT supported for Creo Schematics. | | | |
| 3. Windows 8.1 is supported on Creo 2.0 M100 and later. | | | |
| 4. Windows 8 is supported on Creo 2.0 M030 and later. | | | |
| 5. Windows 10 is supported on Creo 2.0 M190 and later. | | | |

| System Requirements | | |
|---|--|--------------------|
| | Operating System | Recommended amount |
| Main Memory (RAM) | Windows 10 64-bit | 4GB or higher |
| | Windows Server 2012 R2 | 4GB or higher |
| | Windows Server 2008 R2 | 4GB or higher |
| | Windows 8 and 8.1 64-bit | 4GB or higher |
| | Windows 8 and 8.1 32-bit | 3GB ¹ |
| | Windows 7 64-bit | 4GB or higher |
| | Windows 7 32-bit | 3GB ¹ |
| | Windows XP x64 (64-bit) | 3GB or higher |
| | Windows XP (32-bit) | 3GB ² |
| Internal Browser Support | One of the following: <ul style="list-style-type: none"> • Microsoft Internet Explorer 11.0⁴ • Microsoft Internet Explorer 10.0³ • Microsoft Internet Explorer 9.0 • Microsoft Internet Explorer 8.0 • Microsoft Internet Explorer 7.0 • Microsoft Internet Explorer 6.0 (SP1 or later) Mozilla based browser (embedded with Creo 2.0) | |
| Monitor | 1280 x 1024 (or higher) resolution support with 24-bit or greater color | |
| Network | Microsoft TCP/IP Ethernet Network Adapter | |
| Mouse | Microsoft-approved 3-button mouse | |
| File systems | NTFS - Universal Naming Convention (UNC) ⁵ | |
| Misc. | DVD drive | |
| NOTES | | |
| 1. 32-bit operating systems can physically allocate only 3GB of RAM. RAM greater than 3GB (if installed) will remain un-utilized. | | |
| 2. For Windows XP you must enable the /3GB switch in order to utilize up to 3GB. | | |
| 3. IE 10.0 is supported on Creo 2.0 M080 and later. | | |
| 4. IE 11.0 is supported on Creo 2.0 M100 and later on Windows 7, 8.1 and 10. | | |
| 5. PTC does not test any specific technologies which provide UNC support (Samba, DFS, WebDAV, NAS appliances, etc.) | | |

Limitations of 32-bit Windows platforms

Due to the inherent hardware memory limitations of 32-bit platforms, PTC will no longer offer technical support for “out of memory conditions” on 32-bit hardware for Creo 2.0 in cases where /3GB switch is utilized. Customers planning on upgrading to Creo 2.0 must carefully examine whether their current 32-bit hardware will be adequate for their large assembly needs and consider switching to 64-bit hardware.

Graphics Information

For 3D-hardware acceleration, an OpenGL graphics card must be used that has been tested in a PTC-certified configuration. To ensure the compatibility of a graphics driver with Creo 2.0, a PTC certified or supported hardware configuration is recommended. Graphics cards that support at least OpenGL 3.1 are recommended for Creo 2.0.

PTC recognizes that customers can benefit from using latest graphics driver and performance optimizations and improvements made by PTC's Graphics Hardware Partners. With new workstations being continuously certified by PTC, the most current graphics drivers used in the certification process can now be re-applied to previously certified configurations, as long as the configuration belongs to the same combination of workstation and graphics hardware families.

For users of Direct3D on Windows 7, the March 2009 or later release of the DirectX 10.0 End User Run Time libraries must be installed. Additionally, Medium to High-End graphics cards that fully support Direct3D 10.0 are recommended for adequate performance. Visit the Microsoft website for more information about downloading and installing Direct3D.

Dual Monitor Support

Limited dual monitor support is provided in Creo 2.0. PTC has successfully performed limited testing of some graphics card models from AMD and NVIDIA that support dual monitor capabilities. If your graphics card is certified for Creo 2.0 and provides dual monitor support**, PTC expects that it will run in this mode without issue. PTC will provide limited support to resolve issues arising when running in dual monitor mode, however, the entire solution will not be submitted for formal certification as a complete configuration.

Note: In the event that dual monitor mode fails, we advise use of Span mode as a workaround.

**Consult with AMD, NVIDIA, or the hardware platform partner to confirm the availability of this functionality with a given graphics card that has been certified with Creo 2.0.

Certified and Supported Graphics Cards

PTC provides Customer Support for all certified and supported graphics cards. Graphics cards are part of a fully-certified or supported configuration (such as a workstation model, operating system, graphics card, graphics card driver).

PTC does not certify or support graphic cards independently from the configurations in which they are certified or supported. Refer to the official PTC [Platform Support](#) web page for specific hardware partners and available configurations.

Additional certified and supported workstation hardware information will be added to the PTC [Platform Support](#) web page as our hardware partners complete certifications in preparation for production Creo 2.0 shipment.

| Workstation Vendor | Certified and Supported Graphics Cards | | |
|---------------------------|--|--------------------------|-------|
| | AMD (ATI) | NVIDIA | INTEL |
| Dell | Yes | Yes | No |
| Cisco | Currently none available | Yes | No |
| Fujitsu | Yes | Yes | No |
| HP | Yes | Yes | Yes |
| IBM | Currently none available | Yes | No |
| Lenovo | Yes | Yes | Yes |
| Microsoft | Currently none available | Currently none available | Yes |
| MSI | Currently none available | Yes | No |
| Toshiba | Currently none available | Yes | No |

Desktop Virtualization Environment Support

PTC has certified the following PTC Creo Applications to work in Virtualized Desktop Environments:-

- PTC Creo 2.0 Parametric M060 and later
- PTC Creo 2.0 Direct M060 and later
- PTC Creo 2.0 Layout M060 and later
- PTC Creo 2.0 Simulate M060 and later
- PTC Creo 2.0 Options Modeler M060 and later

Refer to the official PTC [Platform Support](#) web page for specific hardware partners and available configurations.

Supported Peripherals and Accessories

3D Controllers for Creo 2.0

Please refer to <http://www.3dconnexion.com/service/drivers.html> for specific driver information. Using the latest driver provided by 3DConnexion is fully supported by PTC.

| Device | 3DxSoftware version | Status |
|------------------------------|---------------------|---------------------------|
| SpaceExplorer | 3.16.1 | Certified |
| SpaceMouse Pro | 3.16.1 | Certified |
| SpaceNavigator | 3.16.1 | Certified |
| SpaceNavigator for Notebooks | 3.16.1 | Certified |
| SpacePilot Pro | 3.16.1 | Certified |

Plotters and Printers

Creo 2.0 supports HPGL, HPGL/2 and PostScript standard plotting formats. In addition, Creo 2.0 supports the Microsoft Print Manager.

Emulation

Various manufacturers produce printers and plotters that may be compatible with or emulate a device that use a format which is supported by PTC. Most devices are not specifically tested by PTC and therefore, may not produce correct plotted output. PTC Technical Support will attempt to provide support for any printer which is using a standard supported format, but only to the extent of verifying the output to a previously tested and readily available printer. Any support pertaining to the correctness of emulation can only be made by the manufacturers of the device in question, and not by PTC.

The Microsoft Printer Manager creates an emulation of what appears on the screen and attempts to print this. Since this emulation is between the Print Manager driver and the printer/plotter driver, quality and results may vary.

Supported MCAD Systems

You can integrate several MCAD systems with Creo 2.0

| Platforms | Creo Elements/Direct (all languages) | CATIA (English only) | Unigraphics (English only) |
|------------------------------|--------------------------------------|----------------------|----------------------------|
| 32-bit Windows XP, Windows 7 | 18.1 | n/a | NX7 |
| 64-bit Windows XP, Windows 7 | 18.1 | n/a | NX7 |

Supported Finite Element Solvers

You can integrate several Finite Element Solvers with Creo 2.0 for use in FEM mode. The following table lists the supported Finite Element Solvers and platforms.

| Platforms | NASTRAN | ANSYS |
|------------------------------|---------|-------|
| 32-bit Windows XP, Windows 7 | 2012 | 14.5* |
| 64-bit Windows XP, Windows 7 | 2012 | 14.5* |

NOTES

*ANSYS 13.0 supported for Creo 2.0 F000-M040. ANSYS 14.5 supported for Creo 2.0 M050 and later.

Platform Support for Data Exchange

| Processor | Format | Import / Export | Platform | |
|--------------------------------|--|-----------------|----------------|----------------|
| | | | Windows 32-bit | Windows 64-bit |
| Image Formats | | | | |
| BMP | *.bmp – Edit via Image Editor, used in style feature as trace sketch, export parts and assemblies via Distributed Pro/BATCH | I/E | Yes | Yes |
| EPS | *.eps – Save a Copy of parts and assemblies, export parts and assemblies via Distributed Pro/BATCH | E | Yes | Yes |
| GIF | *.gif – import via Image Editor, used in style feature as trace sketch | I | Yes | Yes |
| HDR | *.hdr – import via Image Editor | I | Yes | Yes |
| JPEG | *.jpg – Edit via Image Editor, used in style feature as trace sketch, Save a Copy of parts and assemblies, export parts, assemblies and drawings via Distributed Pro/BATCH | I/E | Yes | Yes |
| PDF | *.pdf – Save a Copy of parts, assemblies and drawings, export parts and assemblies via Distributed Pro/BATCH | E | Yes | Yes |
| Picture | *.pic – Save a Copy of parts, assemblies and drawings | E | Yes | Yes |
| PNG | *.png – Edit via Image Editor, used in style feature as trace sketch | I/E | Yes | Yes |
| PTC Bumpmap | *.tx1 – Edit via Image Editor | I/E | Yes | Yes |
| PTC Color Texture | *.tx4 – Edit via Image Editor, used in style feature as trace sketch | I/E | Yes | Yes |
| PTC Decal | *.tx3 – Edit via Image Editor, used in style feature as trace sketch | I/E | Yes | Yes |
| PTC Image | *.imf – Edit via Image Editor, used in style feature as trace sketch | I/E | Yes | Yes |
| RGB | *.rgb – Edit via Image Editor, used in style feature as trace sketch | I/E | Yes | Yes |
| RLA | *.rla - Edit via Image Editor, used in style feature as trace sketch | I/E | Yes | Yes |
| Session Texture | *.mem – Import via Image Editor | I | Yes | Yes |
| Shaded Image | *.shd – Edit via Image Editor, Save a Copy of parts and assemblies | I/E | Yes | Yes |
| SHIMA-SEIKI | *.pic – Edit via Image Editor, used in style feature as trace sketch | I/E | Yes | Yes |
| TGA | *.tga – Edit via Image Editor, used in style feature as trace sketch | I/E | Yes | Yes |
| TIFF | *.tif – Edit via Image Editor, used in style feature as trace sketch, Save a Copy of parts, assemblies and drawings, export parts and assemblies via Distributed Pro/BATCH | I/E | Yes | Yes |
| 2D Formats | | | | |
| Adobe Illustrator | *.ai | I | Yes | Yes |
| CGM | *.cgm | I/E | Yes | Yes |
| DWG | *.dwg | I/E | Yes | Yes |
| DXF | *.dxf | I/E | Yes | Yes |
| IGES | *.igs | I/E | Yes | Yes |
| Medusa | s.* – Format generated by UNIX on export *.she – Format generated by Windows on export *.asc – (import) | I/E | Yes | Yes |
| PDF | *.pdf – Direct drawing export | E | Yes | Yes |
| Creo Elements/View & Creo View | *.ed (structure) & *.plt (drawing) *.edz (compressed structure and drawings) *.pvs (structure) & *.plt (drawing) *.pvz (packaged structure and drawings) | E | Yes | Yes |
| STEP | *.stp – (import/export) *.step – (import) | I/E | Yes | Yes |
| Stheno | *.tsh | I/E | Yes | Yes |

| 3D Formats | | | | |
|--|--|-----|-----|-----|
| ACIS | *.acs | I/E | Yes | Yes |
| Autodesk Inventor | *.iam, *.ipt Requires installation of and licensing for Autodesk Inventor | I | Yes | Yes |
| CATIA V4 | *.model – (import/export) *.exp, *.session – (import) Requires Interface for CATIA II license | I/E | Yes | No |
| CATIA V5 | *.CATPart *.CATProduct *.cgr - Facet Only Requires Interface for CATIA V5 license | I/E | Yes | Yes |
| DWG | *.dwg – with embedded ACIS | I | Yes | Yes |
| DXF | *.dxf – with embedded ACIS | I | Yes | Yes |
| Granite | *.g | I/E | Yes | Yes |
| JT | *.jt Requires Interface for JT license | I/E | Yes | Yes |
| IBL | *.ibl | I | Yes | Yes |
| ICEM | *.icm | I | Yes | Yes |
| IGES | *.igs – (import/export) *.iges – (import) | I/E | Yes | Yes |
| Neutral | *.neu | I/E | Yes | Yes |
| Optegra visualize | *.gbf Facet Only | E | Yes | Yes |
| Parasolid 3D | *.xmt, *.xmt_txt, *.x_t, *.xmt_neu, *.x_n *.xmt_bin, *.x_b – (import) *.x_t – (export) | I/E | Yes | Yes |
| PDF | *.pdf – Direct model export | E | Yes | Yes |
| Points | *.pts | I | Yes | Yes |
| Creo Elements/View & Creo View | *.ed (structure) & *.ol (models) *.edz (compressed structure and models) *.pvs (structure) & *.ol (models) *.pvz (packaged structure and models) | I/E | Yes | Yes |
| Render | *.slp – Facet Only | E | Yes | Yes |
| Rhino | *.3dm | I | Yes | Yes |
| SolidWorks | *.sldprt, *.sldasm Requires installation of SolidWorks or SolidWorks Explorer and a license of SolidWorks. | I | Yes | Yes |
| STEP | *.stp – (import/export) *.step – (import) | I/E | Yes | Yes |
| STL | *.stl – Facet Only | I/E | Yes | Yes |
| U3D | *.u3d | E | Yes | Yes |
| Unigraphics | *.prt (UG format) Requires UG license and installation | I/E | Yes | Yes |
| VDA | *.vda | I/E | Yes | Yes |
| VRML | *.wrl – Facet Only | I/E | Yes | Yes |
| Wavefront | *.obj | I | Yes | Yes |
| ECAD Formats | | | | |
| Allegro | *.mdb – For board outline files *.mdc – For component placement files *.mdf – For footprint files, such as the ones in component outline libraries | I/E | Yes | Yes |
| DAZIX | *.edn – Neutral file of the board outline and component placement. Dazix refers to this as a core file. *.edp – Profile file that contains component outlines. Dazix refers to this as a library file | I/E | Yes | Yes |
| EDMD | *.idx | I/E | Yes | Yes |
| IDF | *.emn – (import/export) *.emp – library file (import) | I/E | Yes | Yes |
| Neutral | *.nwf | I/E | Yes | Yes |
| Creo Schematics | *.xml | I | Yes | Yes |
| Visula | *.evs | I/E | Yes | Yes |
| NOTES | | | | |
| Object Linking and Embedding (OLE) may provide additional format support but is dependent on operating system, installed software components, and third-party support for OLE. | | | | |

