Hardware Notes - Creo 4.0

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

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	Platform Support				
Partner	Operating System	Operating System levels			
	Windows 10 Professional 64-bit Edition ³ Windows 10 Enterprise 64-bit Edition ³ Windows 10 Enterprise 2015 LTSB 64-bit Edition ³	Base OS Anniversary Edition			
Microsoft	Windows Server 2012 R2 64-bit Standard Edition ¹	Base OS			
	Windows 8.1 64-bit Edition Windows 8.1 Pro 64-bit Edition	Base OS, Update (KB 2919355)			
	Windows 7 Professional 64-Edition Windows 7 Ultimate 64-Edition Windows 7 Enterprise 64-Edition	Base OS, Service Pack 1			
NOTES					
1. Windows Server 2012 R2 is supported in Batch Mode only and is NOT supported for Creo Schematics.					

	Operating System	Recommended amount	
	Windows 10 64-bit	4GB or higher	
Main Memory (RAM)	Windows Server 2012 R2	4GB or higher	
,	Windows 8.1 64-bit	4GB or higher	
	Windows 7 64-bit	4GB or higher	
internal Browser Support	One of the following: • Microsoft Internet Explorer 11.0 • Embedded Chromium Browser		
Browser Support for PTC Creo 4.0 Help Center	PTC Creo Help supports Internet Explorer 9.0 and later, and Mozilla Firefox 10.0.1 and later. The Help Center opens in your default browser.		
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) ²		
Misc.	DVD drive		

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 4.0, a PTC certified or supported hardware configuration is recommended. Graphics cards that support at least OpenGL 4.0 are recommended for Creo 4.0.

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.

Dual Monitor Support

Limited dual monitor support is provided in Creo 4.0. 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 4.0 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.

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 4.0.

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 <u>Platform Support</u> web page as our hardware partners complete certifications in preparation for production Creo 4.0 shipment.

Workstation Vendor	Certified and Supported Graphics Cards			
	AMD (ATI)	NVIDIA	INTEL	
<u>Dell</u>	Yes	Yes	No	
Cisco	No	Yes	No	
<u>Fujitsu</u>	Yes	Yes	No	
<u>HP</u>	Yes	Yes	Yes	
HPE	No	No	Yes	
<u>IBM</u>	No	Yes	No	
Lenovo	Yes	Yes	Yes	
Microsoft	No	No	Yes	
MSI	No	Yes	No	
<u>Toshiba</u>	No	Yes	No	

Desktop Virtualization Environment Support

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

- PTC Creo 4.0 Parametric
- PTC Creo 4.0 Direct
- PTC Creo 4.0 Layout
- PTC Creo 4.0 Simulate
- PTC Creo 4.0 Options Modeler

Refer to the official PTC Platform Support web page for specific hardware partners and available configurations.

Supported Peripherals and Accessories

3D Controllers for Creo 4.0

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	<u>Certified</u>
SpaceMouse Pro	3.16.1	<u>Certified</u>
SpaceNavigator	3.16.1	Certified
SpaceNavigator for Notebooks	3.16.1	Certified

SpacePilot Pro	3.16.1	<u>Certified</u>

Plotters and Printers

Creo 4.0 supports HPGL, HPGL/2 and PostScript standard plotting formats. In addition, Creo 4.0 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.

3D Printers

To speed up the development of Additive Manufacturing functionality, PTC is partnering with Stratasys, a manufacturer for 3D printing equipment, to streamline 3D printing workflows by using direct interaction between PTC Creo and supported Stratasys 3D printers. Support for additional printers is planned.

Objet500 Connex3	Certified
Objet Studio 9.2.11.6581 prerequisite.	<u>Oortmod</u>

Supported MCAD Systems

You can integrate several MCAD systems with Creo 4.0

Platforms	Creo Elements/Direct (all languages)	CATIA (English only)	Unigraphics (English only)
64-bit Windows 7, 8.1 and 10.0	18.1	n/a	NX7

Supported Finite Element Solvers

You can integrate several Finite Element Solvers with Creo 4.0 for use in FEM mode. The following table lists the supported Finite Element Solvers and platforms.

Platforms	NASTRAN	ANSYS
64-bit Windows 7, 8.1 and 10.0	2012	14.5

Platform Support for Data Exchange

Processor	Format	Import / Export	Platform Windows 64-bit	
	Image Formats			
ВМР	*.bmp – Edit via Image Editor, used in style feature as trace sketch, export parts and assemblies via Distributed Pro/BATCH	I/E	Yes	
EPS	*.eps – Save a Copy of parts and assemblies, export parts and assemblies via Distributed Pro/BATCH	Е	Yes	
GIF	*.gif – import via Image Editor, used in style feature as trace sketch	ı	Yes	
HDR	*.hdr – import via Image Editor	ı	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	
PDF	*.pdf – Save a Copy of parts, assemblies and drawings, export parts and assemblies via Distributed Pro/BATCH	E	Yes	
Picture	*.pic – Save a Copy of parts, assemblies and drawings	Е	Yes	
PNG	*.png – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	
PTC Bumpmap	*.tx1 – Edit via Image Editor	I/E	Yes	
PTC Color Texture	*.tx4 – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	
PTC Decal	*.tx3 – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	
PTC Image	*.imf – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	
RGB	*.rgb – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	
RLA	*.rla - Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	
Session Texture	*.mem – Import via Image Editor	ı	Yes	
Shaded Image	*.shd – Edit via Image Editor, Save a Copy of parts and assemblies	I/E	Yes	
SHIMA-SEIKI	*.pic – Edit via Image Editor, used in style feature as trace sketch	I/E	Yes	
TGA	*.tga – Edit via Image Editor, used in style feature as trace sketch	I/E	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	
2D Formats				
Adobe Illustrator	*.ai	I	Yes	
CGM	*.cgm	I/E	Yes	
DWG	*.dwg	I/E	Yes	
DXF	*.dxf	I/E	Yes	
IGES	*.igs	I/E	Yes	
Medusa	s.* – Format generated by UNIX on export	I/E	Yes	

	*.she – Format generated by Windows on export *.asc – (import)		
PDF	*.pdf – Direct drawing export	Е	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
STEP	*.stp – (import/export) *.step – (import)	I/E	Yes
Stheno	*.tsh	I/E	Yes
	3D Formats		
ACIS	*.acs	I/E	Yes
Autodesk Inventor	*.iam, *.ipt	1/L	Yes
CATIA V4	*.model – (import/export) *.exp, *.session – (import) Requires PTC Creo CATIA V4 Collaboration Extension license for export and update	I/E	No
CATIA V5	*.CATPart *.CATProduct *.cgr - Facet Only Requires PTC Creo CATIA V5 Collaboration Extension license for export and update	I/E	Yes
DWG	*.dwg – import with embedded ACIS, export facet geometry	I/E	Yes
DXF	*.dxf – import with embedded ACIS, export facet geometry	I/E	Yes
Granite	*.g	I/E	Yes
JT	*.jt Requires Interface for JT license	I/E	Yes
IBL	*.ibl	1	Yes
ICEM	*.icm	1	Yes
IGES	*.igs – (import/export) *.iges – (import)	I/E	Yes
Neutral	*.neu	I/E	Yes
Optegra visualize	*.gbf Facet Only	Е	Yes
Parasolid 3D	*.xmt, *.xmt_txt, *.x_t, *.xmt_neu, *.x_n *.xmt_bin, *.x_b - (import) *.x_t - (export)	I/E	Yes
PDF	*.pdf – Direct model export	Е	Yes
Points	*.pts	I	Yes
Creo View	*.ed (structure) & *.ol (models) *.edz (compressed structure and models) *.pvs (structure) & *.ol (models) *.pvz (packaged structure and models)	I/E	Yes
Render	*.slp – Facet Only	Е	Yes
Rhino	*.3dm	ı	Yes
SolidEdge	*.par, *.asm.	ı	Yes
SolidWorks	*.sldprt, *.sldasm.	I/E	Yes
STEP	*.stp – (import/export) *.step – (import)	I/E	Yes
STL	*.stl – Facet Only	I/E	Yes
U3D	*.u3d	Е	Yes
Unigraphics	*.prt (UG format) Requires PTC Creo UG/NX Collaboration Extension license for export and update	I/E	Yes
VDA	*.vda	I/E	Yes
VRML	*.wrl – Facet Only	I/E	Yes
Wavefront	*.obj	1	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
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

EDMD	*.idx	I/E	Yes
IDF	*.emn – (import/export) *.emp – library file (import)	I/E	Yes
Neutral	*.nwf	I/E	Yes
Creo Schematics	*.xml	-	Yes
Visula	*.evs	I/E	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.