

# Creo™ Elements/Direct™ Modeling Express

## EDITION COMPARISON CHART

Learn how upgrading to Creo Elements/Direct Modeling 19.0, the leading direct 3D CAD design software, can deliver faster design cycles and responsiveness to change throughout your design process.

Direct Modeling	Creo Elements/ Direct Modeling Express 6.0	Creo Elements/ Direct Modeling 19.0
Work with assemblies, parts, surfaces and wireframe models	•	•
Create and edit models using direct drag-and-drop techniques	•	•
Modify models using commands such as mirror, stretch and scale	•	•
Create and edit assemblies using either a top-down or bottom-up approach	•	•
<b>Designing Sheet Metal Parts</b>		
Design 3D sheet metal parts in either the folded or flat pattern		•
Create and modify bends and lips, including corner and bend reliefs		•
Fold and unfold sheet metal parts with automated flats generation and animation		•
<b>Handling Assemblies</b>		
Create assemblies that have unlimited unique parts	Max 60	•
Share assemblies and parts; create once and share multiple instances	•	•
Manage and edit assemblies using the same drag-and-drop techniques used with files and folders	•	•

Associative 2D Drawings	Creo Elements/ Direct Modeling Express 6.0	Creo Elements/ Direct Modeling 19.0
Automatically create associative 2D drawings from 3D models	•	•
Update 2D drawings and dimensions automatically when the 3D model has been modified	•	•
Export drawings with 2D IGES and Autodesk® DWF and DWG formats		•
Free access to Creo Elements/Direct Drafting – a complete 2D design and drafting CAD system		•
<b>3D Visualization</b>		
Use enhanced realism to generate a realistic model impression with shadows and reflections	•	•
Apply real-time rendering by assigning material and scene attributes		•
Create photorealistic images with reflective material properties, lighting and background scenes		•
Define your own archive of rendering objects, such as sceneries and materials		•
Place images, such as logos and labels, on surfaces		•
<b>3D Machining</b>		
Create and modify machining features, such as outer threads and through holes		•
Create and modify patterns of geometric custom process features and plastic features		•
<b>Data Exchange</b>		
Import 3D geometry, and edit assemblies and parts automatically, as if the design data is native	•	•
Import STEP and 3D IGES formats	•	•
Export and publish VRML and STL formats	•	•
Export and publish eDrawings® files		•
Export STEP, 3D IGES, SAT (ACIS) and IDF (PCB IF) formats		•
Share 3D designs with Creo		•

Interoperability with Creo Apps	Creo Elements/ Direct Modeling Express 6.0	Creo Elements/ Direct Modeling 19.0
Creo Parametric		•
Creo Simulate		•
Creo View MCAD		•
Creo Illustrate		•
<b>3D Documentation</b>		
Create and edit 3D documentation, including notes, surface, welding and GD&T symbols		•
Export and share 3D documentation and non-geometric information with eDrawings files		•
<b>Licensing</b>		
Individual registered user license	•	
Activate license through Internet connection	•	
Floating license flexibility with Creo Elements/Direct License Server		•
<b>Languages</b>		
English, German, Italian, Japanese, Simplified Chinese	•	•
French, Spanish		•
<b>Add-On Modules</b>		
Creo Elements/Direct Cabling		•
Creo Elements/Direct Surfacing		•
Creo Elements/Direct Sheet Metal		•
Creo Elements/Direct Advanced Design		•
Creo Elements/Direct Mold Base		•
Creo Elements/Direct Finite Element Analysis		•
Creo Elements/Direct Part Library		•
Creo Elements/Direct 3D Access		•

Integrated Data Management	Creo Elements/ Direct Modeling Express 6.0	Creo Elements/ Direct Modeling 19.0
Creo Elements/Direct Model Manager		•
Creo Elements/Direct BOM Editor		•
Creo Elements/Direct Task Agent		•
CAD Data Adapters		
Dassault Systèmes CATIA V4		•
Siemens NX <sup>®</sup>		•
Siemens I-deas <sup>®</sup>		•
Siemens Solid Edge <sup>®</sup>		•
Autodesk <sup>®</sup> Inventor <sup>®</sup>		•
Dassault Systèmes SolidWorks <sup>®</sup>		•
3D Publishing		
Creo Elements/Direct Interface for Lattice <sup>®</sup> XVL		•
Creo Elements/Direct Interface for Adobe <sup>®</sup> PDF		•
eDrawings Professional for Creo Elements/Direct Modeling		•
Programming Interfaces		
Application integration interface		•
3rd-party application integrations		•
Professional Support		
Worldwide support centers		•
Phone and email support options		•
Software maintenance: major and minor releases		•
Access to online support and license exchange		•
Software updates via electronic download		•

Training	Creo Elements/ Direct Modeling Express 6.0	Creo Elements/ Direct Modeling 19.0
Classroom training		•
Onsite training		•
<b>Creo Elements/Direct eLearning Library</b>		
Consulting services		•
Implementation assistance		•
Product customization		•
Process optimization		•

**Learn more**

For more information, please visit: [www.PTC.com/go/modelingexpress](http://www.PTC.com/go/modelingexpress)

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