

CoCreate® Modeling™ 17.0

Version History

CoCreate Modeling is the world's #1 explicit 3D CAD system. This table highlights the primary product capabilities delivered in each of the past several releases of CoCreate Modeling.

CoCreate Modeling		13	14	15	16	17
Explicit Solid Modeling	Single-click deletion of all features in a pattern	•	•	•	•	•
	Specify draft angle during extrude and mill	•	•	•	•	•
	3D CoPilot for all 3D direction and 3D curve options	•	•	•	•	•
	New task panel for easy command access	•	•	•	•	•
	Lightweight graphic models (large assemblies)		•	•	•	•
	Views, filters and search options in structure browser		•	•	•	•
	3D Configurations support multiple views (exploded)		•	•	•	•
	Drag-and-drop 2D modifications		•	•	•	•
	Edge and face blending, smart taper feature, advanced shelling, modify in section			•	•	•
	Assembly handling: 3D move by box, mirror, compare parts geometrically			•	•	•
	New rendering with fast rendering and photo-realistic imaging			•	•	•
	Improved usability with blends and chamfers; combined insert and create blend				•	•
	Sweep improvements – sweep along non-tangential planar curves				•	•
	Shared feature patterns – easy modification of user-defined features patterns				•	•
	In-place editing of blend and chamfer labels, also with numeric data calculation				•	•
	Real-time explicit modeling					•
	Real-time rendering, including textures, shadows and mirror plane					•
Drive 3D design changes with intelligent 3D dimensions					•	

CoCreate Modeling Upgrade Comparison 17.0 (Continued)

CoCreate Modeling		13	14	15	16	17
Explicit Solid Modeling Continued	Context-sensitive mini-toolbars for fast access to common tools and options					•
	Extended Probe tool for selecting hidden elements					•
	Tab-through of automatic feature recognition selection					•
	New active drag handles for direct model modification			•	•	•
	New 3D Pull and Push paradigm for easy model modification					•
	Pull operation supports overlapping 2D profiles, with automatic trimming					•
	Stretch single face or groups of faces					•
	Enter precise values in 3D CoPilot to drive dimension driven changes					•
	Redefine reference positions interactively for 3D CoPilot					•
	Drag Tool for creating 2D equidistant profiles					•
	Full 2D CoPilot support integrated in the 3D CoPilot when referencing a plane					•
	2D CoPilot support creating arcs and circles					•
	2D CoPilot: measure relative to surrounding geometry, snap to clip lines, use drag-and-drop techniques to move, stretch and rotate 2D profiles					•

CoCreate Modeling Upgrade Comparison 17.0 (Continued)

CoCreate Modeling		13	14	15	16	17
CoCreate Modeling	Advanced 3D curve capabilities for freeform design	•	•	•	•	•
	Advanced design techniques with radial patterns	•	•	•	•	•
	Improved unite capability (Glue)	•	•	•	•	•
	Advanced clash: threads, clearance, open states			•	•	•
	Global language support for drawings, part names, annotations, output formats			•	•	•
	Viewport default settings, e.g., with selections for backgrounds				•	•
	Radial offset of selected faces and radial move of recognized features				•	•
	Modify 3D extensions to tangent recognition to allow extended modifications				•	•
	Create advanced 3D patterns (including geometry, features, part, assemblies)					•
	Define, visualize and work with stock-finished relationships					•
	Stepped Hole tool to create blind hole and through hole combinations quickly					•

CoCreate Modeling Upgrade Comparison 17.0 (Continued)

Additional Functionality Included in CoCreate Modeling		13	14	15	16	17
Drafting	BOM Editor (add-on module) supported	•	•	•	•	•
	Store fonts in MI files	•	•	•	•	•
	Save plot configurations automatically	•	•	•	•	•
	View text before placing dimensions	•	•	•	•	•
	Advanced in-context modification options of drawing		•	•	•	•
	Advanced modification tools for dimensions, notes and symbols		•	•	•	•
	Automatic slot center lines		•	•	•	•
	Create geometry with CoPilot's fly-by highlighting		•	•	•	•
	Improved Revision checker includes textual reports		•	•	•	•
	Unlimited UNDO and REDO			•	•	•
	Global language support based on Unicode			•	•	•
	ANSI-compliant chamfer dimension				•	•
	Grouping of dimensions, text and symbols (ASME support of symbol, text and dimension alignment)				•	•
	Radius and diameter dimensions with extended lines					•
	Projected reference points (PRP) with arcs					•
	Arc angle dimensioning					•
	Ellipse and B-spline dimensioning					•
	Base dimensions					•
	Modify dimensions by adding a slant					•
	DXF/DWG paperspace support					•
PDF export extensions					•	

CoCreate Modeling Upgrade Comparison 17.0 (Continued)

Additional Functionality Included in CoCreate Modeling		13	14	15	16	17
Annotation	Generate drawings from surface or face parts	•	•	•	•	•
	Thread lines supported in aligned section views	•	•	•	•	•
	Advanced plot configuration (HPGL, PS, PDF)	•	•	•	•	•
	Real-time graphical dimension feedback	•	•	•	•	•
	Right-mouse click to change dim orientation	•	•	•	•	•
	New wizard for create drawing and add view		•	•	•	•
	Easier update of views, e.g., multiple views and definitions		•	•	•	•
	Symbol browser		•	•	•	•
	Broken view, merge geometry, create ellipses and slot center lines		•	•	•	•
	Unlimited UNDO and REDO			•	•	•
	Shaded views – shaded, photorealistic, and mixed views				•	•
	True 64-bit support for extended memory usage				•	•
	Grouping of dimensions, text and symbols for easier update				•	•
	Modify cutaway border and depth					•
	Section and detail views for broken views					•
	Blend dimensions					•
	Base dimensions					•
	Ellipse and B-spline dimensioning					•
	Radius and diameter dimensions with extended lines					•
	Arc angle dimensions					•
Chamfer dimension extensions					•	

CoCreate Modeling Upgrade Comparison 17.0 (Continued)

Additional Functionality Included in CoCreate Modeling		13	14	15	16	17
Annotation Continued	Detail and partial views for sheet metal flats					•
	Modify dimensions by adding a slant					•
	DXF/DWG paperspace support					•
	PDF export extensions					•
	Read-only protection in Settings Browser					•
	Symbols: tolerance, welding and surface (ISO 1302-2002 support)					•
3D Documentation	Enhanced wizard to transfer 3D annotations to 2D	•	•	•	•	•
	New load font and delete font command		•	•	•	•
	Reference additional information via URL for 3D dimensions		•	•	•	•
	Secure standard parts against sectioning		•	•	•	•
	Geometric dimensioning and tolerancing			•	•	•
	Surface, welding and user-defined 3D symbols			•	•	•
	Transfer of 3D symbols to 2D			•	•	•
	Intelligent 3D dimensioning based on geometry selected					•
	Transfer of intelligent 3D dimensions to 2D					•
	Publish intelligent 3D dimensions to eDrawings™					•
	Welding symbol extensions according to DIN 18 800-1					•
	Surface symbols extensions (ISO 1302-2002 support)					•

CoCreate Modeling Upgrade Comparison 17.0 (Continued)

Data Interfaces Included in CoCreate Modeling	13	14	15	16	17
2D DXF and DWG 2004 (Annotation and Drafting)	▼	▼	▼	▼	▼
2D DXF and DWG 2006 (Annotation and Drafting)		▼	▼	▼	▼
2D DXF and DWG 2008 (Annotation and Drafting)				▼	▼
Support for legacy (Shift JIS, Roman8) DXF and DWG				▼	▼
2D DXF and DWG 2010 (Annotation and Drafting)					▼
eDrawings publishing and viewing	▲	▲	▲	▲	▲
3D annotations like dimensions included in eDrawings		▲	▲	▲	▲
Automatic 3D flags for any imported surface fixes	▼	▼	▼	▼	▼
Large-assembly improvements (part-by-part)	▼	▼	▼	▼	▼
Target resolution can be set for IGES and SAT		▲	▲	▲	▲
ACIS SAT enhanced to merge faces		▲	▲	▲	▲
STEP data exchange – option for encoding type (Unicode or legacy)				▼	▼
ACIS SAT data exchange – support for version ACIS SAT R18				▼	▼
IGES data exchange – support for empty parts, containers and part-wise export for large assemblies				▲	▲
3D STEP data export for technical illustrations with Arbortext® IsoDraw®				▲	▲
GRANITE® 3D data exchange with leverage with PTC's Product Development System (*.g format)					▼
GRANITE 3D data export for leverage for Pro/ENGINEER®-based applications (*.neu format), to maintain associativity between exported geometry and Pro/ENGINEER-based applications					▲
ProductView 3D data export for technical illustrations with Arbortext IsoDraw®					▲
ProductView 3D data export for enterprise visualization with ProductView					▲
Pro/ENGINEER 3D data exchange for parts and assemblies					▼

▼ read only ▲ write only ▼ read and write

CoCreate Modeling Upgrade Comparison 17.0 (Continued)

Simplification of 3D Modules	13	14	15	16	17
Photorealistic rendering module	Included in CoCreate Modeling			Included in CoCreate Modeling	
GOelan™ CAM interface					
hyperFACT® CAM interface					
Open CAM interface					
3D machining capabilities & predefined features					
3D annotation and 3D documentation					
3D IDF interface					
Rendering					
3D geometric dimension and tolerancing (GD&T)	Included in CoCreate Advanced Design	Included in CoCreate Advanced Design	Included in CoCreate Advanced Design	Included in CoCreate Advanced Design	Included in CoCreate Advanced Design
Design part relations					
Design assembly relations					
Plastic, mold, core and cavity design					
3D design simplification					
3D inspection definition and closed-loop analysis					
3D animation and AVI output					
3D predefined mechanisms (gear, cam, screw, rack)					
3D realistic motion simulation					
Support for 3D curve and surface modification with wire editor					

CoCreate Modeling Upgrade Comparison 17.0 (Continued)

Supported Platforms	13	14	15	16	17
Windows® 7 64-bit Editions of Ultimate, Enterprise and Professional					•
Windows 7 32-bit Editions of Ultimate, Enterprise and Professional					•
Windows Vista® 64-bit Editions of Ultimate, Enterprise and Professional					•
Windows Vista 32-bit Editions of Ultimate, Enterprise and Business			•	•	•
Windows Vista 64-bit Editions of Ultimate, Enterprise and Business			•	•	•
Windows XP Professional 32-bit Edition	•	•	•	•	•
Windows XP Professional 64-bit Edition		•	•	•	•
Windows 2000™	•	•	•		
HP-UX® 11i	•				
Pro/ENGINEER 3D data exchange for parts and assemblies					•

Learn More

For more information about CoCreate Modeling 17.0, please visit: www.ptc.com/go/cocreate