

Creo Elements/Direct Modeling

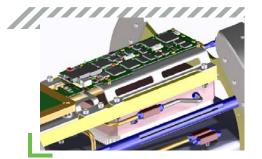
Creo Elements/Direct Modeling is a comprehensive system for mechanical engineers and designers who create products using the 'direct modeling' approach to 3D CAD. It includes the market's most comprehensive direct modeling capabilities, as well as a full range of extensions. You, or anyone on your team, can pick up and work on a direct 3D product design with minimal ramp-up time. And you can easily incorporate multi-CAD data from partners or suppliers and then go on to quickly produce a digital prototype or proposal.

Comprehensive Set of Direct Modeling Capabilities:

- · Shave time off design cycles by repurposing or radically transforming existing designs
- · Rapidly iterate product designs to unlock opportunities for better products
- Accommodate major, unexpected design changes at any stage thus keeping the transition to manufacturing on schedule
- · Increase engineering productivity by eliminating bottlenecks and delays via flexible design teams
- · Leverage multi-source CAD data in the design process
- Move from 2D to 3D easily and/or switch from other 3D CAD systems
- Accelerate product development by taking advantage of integrations with other Creo and PTC products for advanced CAE, CAM, Augmented Reality, enterprise-wide visualization and technical illustration.

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BENEFITS OF SUBSCRIPTION >>>



Creo Elements/Direct 3D Access:

A CAD viewer for sharing 2D and 3D product design concepts across the organization and the supply chain

Creo Elements/Direct Advanced Design:

A set of five integrated Creo Elements/Direct Modeling modules that work together to resolve potential manufacturing issues in your digital prototype

Creo AR Design Share:

You can view and share designs, securely collaborate with colleagues, customers, suppliers and stakeholders across the enterprise, and access your designs anywhere, anytime

Creo Elements/Direct Cabling:

Creates cables, harnesses, and bill-of-materials documentation, including drawings for electrical cables, harness routes, and nail boards

Creo Elements/Direct Finite Element Analysis:

A powerful Finite Element Analysis (FEA) tool for quickly analyzing your product's performance under real-world design conditions

Creo Elements/Direct Mold Base:

Helps with the tedious task of creating mold plates and components by way of its highly interactive and intelligent tooling

Creo Elements/Direct Part Library:

A library of over 173,000 ANSI, DIN, ISO and JIS components, such as bolts, washers, nuts and miscellaneous hardware

Creo Elements/Direct Sheet Metal:

Extends the 3D CAD power of Creo Elements/Direct Modeling by giving you fast, flexible 3D design and data management capabilities

Creo Elements/Direct Surfacing:

Gives you powerful and robust surfacing capabilities to create stylized surfaces and design freeform shapes

Creo Simulate/Creo Advanced Simulate:

A set of advanced capabilities which enables you to study in greater depth how advanced, nonlinear effects could influence the performance of your products in development

Creo Elements/Direct Model Manager



>>> THE CREO ADVANTAGE:

Creo is a 3D CAD solution that helps you build better products faster by accelerating product innovation, reusing the best of your design, and replacing assumptions with facts. Go from the earliest phases of product design to a smart, connected product with Creo. And with augmented reality in each seat of Creo, everyone can easily visualize your designs. In the fast- changing world of the Industrial IoT, no other company can get you to substantial value as quickly and effectively as PTC.

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Creo Elements/Direct Model Manager

Product data management companion for Creo Elements/Direct Modeling

Creo Elements/Direct Model Manager manages your product design data within a central database, effectively coordinating development efforts without imposing overhead on the team.

Creo Elements/Direct Model Manager is the integrated product data management companion for Creo Elements/ Direct Modeling. With Creo Elements/Direct Model Manager, companies can streamline the efforts of development teams to track and manage design data across the product's lifecycle.

Key Benefits

Speed development and cut costs

Cut engineering time and drive manufacturing costs down by managing multiple product configurations with high cross-leverage and also by reusing shared parts and assemblies across product platforms.

System of record

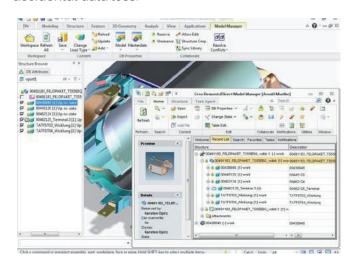
Use Creo Elements/Direct Model Manager as your centralized workgroup database and share released design data with other enterprise systems, such as ERP. This flexibility can support a broad range of enterprise data management strategies and systems.

Data management you will not outgrow

Creo Elements/Direct Model Manager scales from the global enterprise down to the one-person shop. Any size company can easily move beyond 3D CAD into an orchestrated 3D product development and lifecycle management process.

Streamline processes

Eliminate the time and expense of manual data management processes. Ensure design integrity and work with up-to-date revisions of design data across the development team with safeguards against accidental data loss.



Stay up-to-date with integrated Creo Elements/Direct Model Manager status and revision notifications from inside the Creo Elements/Direct Modeling structure browser.

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Features and Specifications

The standard for out-of-the-box data management

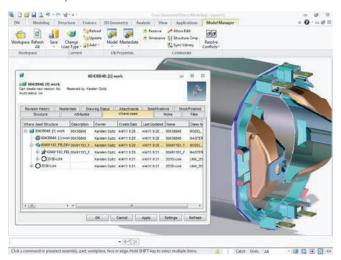
- Relieve data management headaches with a 15-minute, 6-button click installation
- Achieve the benefits that come with product data management – pre-configured with industry best practices

Integrated experience

- Experience a real-time, seamless product data management system inside Creo Elements/ Direct Modeling
- Restore your entire Creo Elements/Direct
 Modeling design session with a single mouse-click,
 and immediately pick up right where you left off
 with revision and viewpoint settings

Manage 3D-to-2D associative drawings

- Create fully associative 2D drawings with Creo Elements/Direct Modeling and automatically manage their 3D-to-2D relationship – from design to manufacturing
- Update drawing title blocks automatically with database attributes such as revision number and change notes
- Create and save an Adobe® PDF document (with optional watermarks) with 3D models



Access, track, and manage model and drawing database properties with Creo Elements/Direct Model Manager.

 Add database attributes, such as material properties, to create multiple variations of 3D models

Manage supplier components

 Create and manage supplier components as inseparable assemblies

Manage stock, pre-machined and finished parts

 View relationships between stock or raw parts, pre-machined parts, and finished parts

Bill-of-materials

 Create, manage, modify, and export bill-ofmaterials (BOM) from Creo Elements/Direct Model Manager. Requires the add-on Creo Elements/Direct BOM Editor

Workspace

- Interact with product design data through a familiar Microsoft® Windows Explorer® look and feel, including convenient access to My Recent Items, favorites, and saved searches
- Find product design data using any defined criteria, and save the search to watch it dynamically update with the latest results
- Track down products and quickly understand the effects that a single design change will have on multiple product assemblies

Workflow

- Add new users to Creo Elements/Direct Model Manager and easily assign permissions using pre- defined or specially configured groups
- Manage and control revision history for all your 3D design data, including non-mechanical components

Status and notifications

- Get real-time status alerts and pop-up notifications of updates and revisions as you work in Creo Elements/Direct Modeling
- Subscribe to email notification of changes to any type of product design data

Assembly management

- Free up desktop resources when loading large, complex products
- Design within the context of your assembly structure by loading only the desired parts and assemblies

Distributed product development

- Improve cross-locale support for distributed product development
- Use with single-site or multi-site implementations

Prerequisites

· Creo Elements/Direct Modeling

Platform Support and System Requirements

Please visit the PTC support page for the most up-todate platform support and system requirements.

>>> THE CREO ADVANTAGE:

Creo is the 3D CAD solution that helps you accelerate product innovation so you can build better products faster. Easy-to-learn Creo seamlessly takes you from the earliest phases of product design to manufacturing and beyond. You can combine powerful, proven functionality with new technologies such as generative design, augmented reality, real-time simulation, additive manufacturing and the IoT, to iterate faster, reduce costs and improve product quality. The world of product development moves quickly, and only Creo delivers the transformative tools you need to build competitive advantage and gain market share.

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