Autodesk Product Design Suite
What’s New
The Autodesk solution for Digital Prototyping
Product Design Suite 2015—Editions

Autodesk Product Design Suite is a comprehensive solution for Digital Prototyping, delivering 2D and 3D design, visualization, simulation, and data management software to help you make great products.

<table>
<thead>
<tr>
<th>Edition</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Premium</strong></td>
<td>Provides an essential solution for Digital Prototyping, delivering 2D and 3D design, visualization, and data management.</td>
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<tr>
<td><strong>Ultimate</strong></td>
<td>Builds on the functionality in the Premium edition, delivering comprehensive Digital Prototyping with tools for integrated simulate, control systems, tooling, and visualization.</td>
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# Autodesk Product Design Suite 2015

<table>
<thead>
<tr>
<th>Feature</th>
<th>Premium</th>
<th>Ultimate</th>
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<tbody>
<tr>
<td>Autodesk® Inventor®</td>
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<tr>
<td>Autodesk® AutoCAD®</td>
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<td>Autodesk® AutoCAD® Mechanical</td>
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<td>Autodesk® AutoCAD® Raster Design</td>
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<td>Autodesk® ReCap™</td>
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<td>Autodesk® Vault Basic</td>
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<td>Autodesk® Navisworks® Simulate</td>
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<td>Autodesk® 3ds Max® Design</td>
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<td>Autodesk® Showcase®</td>
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<td>Autodesk® Inventor® Professional</td>
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What’s new Inventor 2015

Direct Edit, freeform and new constraint tools and settings
Improved start up and learning experience
Workflow enhancements – parts, assemblies, drawings, sheet metal
Simplification of 3D Model and Sketch tabs
3D Model and Sketch panels streamlines
More panels hidden by default
Access hidden panels with new Show Panel icon
Sketch tab always available
Additional Ribbon enhancements
New Button resize option for more flexibility
Access Help for customizing ribbon
Performance improvements in Wrap to Surface/Face
Modeling robustness
View entire parameter names in parameters dialog box
Double-click anywhere on a balloon to edit
Move a split table to another sheet
Keep your parts list sorted automatically
Identify drawing view associative sheet reference in View Labels
Point Cloud enhancements
New access to the BIM Simplify commands

Twist angle control rotations in sweep features
Default thread and hole depth and value
Use a window to select points to place punch
More accurate prompts for delete flat pattern and convert flat pattern
Folded parts in browser show EOF instead of EOP
Apply sheet metal punch features across bends
View entire property names in the Bend Edit box
Use Cut Norman in Cut dialog box
Enhances orientation control in flat pattern
Select A-side for flat pattern and punch tool
Unfold/Refold imported Sheet Metal part with zero radius bend
Last one wins with new Relax Mode
Improved access to 2D sketch constraints settings
Delete Constraint and Delete Coincident Constraint
Sketch behavior improvements
Create point at virtual intersection of two sketch elements
Specify a text style when creating text in your sketch
Reuse frame members, and change reused frame members
Get the correct length automatically on double-mitered frame members
What’s new Inventor 2015
Exceptional modeling

- Parametric design
- Freeform modeling
- Direct editing tools
What’s new Inventor 2015
Freeform modeling

- Easily and quickly model organic shapes
- Explore more design concepts
- Incorporate freeform and parametric workflows into a single model
Freeform Modeling
What’s new Inventor 2015
Direct editing

- Easily manipulate native or imported geometry
- Parametrically move, size, rotate, and delete imported solid models or native Inventor files
Direct editing
What’s new Inventor 2015
Home and learning experience

Inventor Home

- Your personal dashboard
- Template display options
- Recently used files
- ‘Pin’ your favorites
Home and learning experience

Customize in-product communication
Home and learning experience

Tutorials and training. Track your learning.
Home and learning experience

Contextual help and global search
What’s new Inventor 2015
Large assembly enhancements

Speed the creation, design, and documentation of large assemblies and generate views in a fraction of the time with Express Mode.
Large assembly enhancements

Express Mode

- Create components
- Create sketches
- Create work geometry
- Support edit in place
- Parts & sub assemblies
- Pattern/mirror component
- Assemble command
- Attach point clouds
- Create assembly sections
- Optimize loading behavior to be incremental
What’s new Inventor 2015

Drawings

- Now use Express data ≈ 4-6x faster than 2014
  - All drawing view previews
  - Raster view creation
What’s new Inventor 2015
Sketch constraint enhancements

Relax Mode allows for easy creation and manipulation of constraints.

Relax Mode
- Relax dragging
  - “Last one wins”
- Relax settings
  - Disable Relax Mode
  - Constraint filters
  - Preserve dimensions with equation
Sketch enhancements

- Constraints
  - Enhanced inference
  - Display on creation
  - Show when selected
  - Delete selected
Sketch enhancements

- Enable styles drop-down within sketch text
- Create point at virtual intersection of two sketch elements
Sketch enhancements
Autodesk Vault 2015 | What’s new

- Improved Inventor integration
- Data standardization
- Item and BOM enhancements
- Thin Client
What’s New Vault 2015
Improved Inventor integration

- Helps better identify downloaded version after system or user edits are made
- User status enables appropriate commands
Improved Inventor integration

- Alternate display method display when files have been modified by system or user (+ property)
- Improved filtering to locate modified files

Support item-oriented workflows
- AutoCAD and Inventor add-ins recognize item search and records within Open/Place dialog box
- Create virtual components based on item information
What’s New Vault 2015
Data Standard

- Ensure compliance with company standards
- Provides out of the box templates and customizable tools
- Customizable interface

- Enforce file detail and behavior
- Custom forms to capture data on save
- Integrate with Vault Explorer
What’s New Vault 2015
Item and BOM enhancements

- Single click item create
- Item numbering
- Drag-drop & copy-paste support
- Enhanced item editing

- Edit nested items
- Drag and Drop Row Order
What’s New Vault 2015
Thin client

- New Project Explorer interface
- Configurable views and properties
- Command banner includes common user actions such as preview and download
- Multiple browser support
  - IE, Chrome, Firefox
- New web service
  - http://<servername>/AutodeskTC
What’s new in AutoCAD Mechanical 2015

Modernized experience focused on usability and documentation enhancements, new features include:

- Dark theme
- Text editing enhancements
- Model space view
- Line smoothing
- Bill of material enhancements
- Balloon commands
- Symbol enhancements
- Content Manager live update
What’s new AutoCAD Mechanical 2015

Refined interface

New, dark-themed interface that includes the ribbon, status bar, and palettes.
What’s new AutoCAD Mechanical 2015

Text editing enhancements

- Better visibility and control
- Auto bullets & numbering
- Improved fraction handling
- Text alignment
What’s new AutoCAD Mechanical 2015
Model space viewports

- Bright blue boundary to identify the active viewport
- Resize by dragging viewport boundaries both horizontally and vertically at the same time
- Hold the ‘Ctrl’ key to split a modelspace viewport
- Join or remove viewports by dragging a boundary to the edge
What’s new AutoCAD Mechanical 2015
Line smoothing

Lines, arcs, and circles look smoother

Anti-aliasing
What’s new AutoCAD Mechanical 2015
Bill of material (BOM) enhancements

- Create BOM first, then part reference.
- Zoom to or highlight from BOM/Parts List dialog box
What’s new AutoCAD Mechanical 2015
Balloon commands

Access balloon commands easily

- Three new commands in the Ribbon make modifying balloons easier.

1. Renumber
2. Collect
3. Reorganize
What's new AutoCAD Mechanical 2015
Symbols - Welding

Resize welding symbol elements independently of the text height with new scale factor setting

Control the gap between first and second process or the gap between a process and a contour with new process gap setting

Scale factor (SF), text height (H) to control welding symbol appearance

Process gap
Symbols – Surface texture symbol

Support attachment to feature control frame symbol.

Specify surface texture requirements on a top view, using surface indication leaders.
Symbols – Datum identifier, target symbols and feature control frame symbol

- Support attachment to feature control frame symbol.

- Updated ISO drafting standards.

- Support the use of additional symbols specified by the updated ISO drafting standards
What’s new AutoCAD Mechanical 2015
Content manager live update

- Content available through Autodesk Exchange as revised throughout the year
- Refresh your content library
- Optionally replace content in your design whenever new content is available
What’s new AutoCAD Electrical 2015

Inventor 2D/3D interoperability

Cabinet design
- Associate 2D/3D parts
- Consistent search and place experience
- Integrated with Cable and Harness
What’s New Autodesk Mockup 360

Autodesk® Mockup 360 software provides real-time collaboration and large-scale design mockup capabilities for Inventor users, their suppliers, and their customers.
What’s New Autodesk Mockup 360
Next-generation design collaboration

Collaborate in real time with other teams and suppliers with a 3D multi-CAD mockup of your design to help ensure its success.

*Product Design Suite subscribers entitled to manage 5 concurrent Mockup 360 projects.

+ many more
The Autodesk solution for Digital Prototyping

- Sales & Marketing
- Design & Engineering
- Digital Prototyping
- Manufacturing & Production
- Test & Validation
Autodesk Application Manager

- Ships and auto-installs with 2015 Autodesk products & suites
- Keeps customers informed of product updates & extensions
- Seamlessly downloads and installs updates
- Can be centrally managed from Autodesk Account portal

For more information see: www.autodesk.com/applicationmanager
Autodesk Exchange | Apps

- Achieve greater speed, accuracy, and automation from concept to manufacturing

- Over 100 available Inventor apps
AutoCAD Raster Design

- Autodesk® AutoCAD® Raster Design adds powerful raster editing and raster-to-vector conversion tools to your design workflow.
Autodesk ReCap

- Autodesk ReCap is a family of software and services to create intelligent 3D models from captured photo and laser data.