



ITEM	Description	Quantity	Unit
1	Drawing	1	Sheet
2	Isometric View	2	Views
3	Flange View	1	View
4	Section	1	Section
5	Isometric View	1	View
6	Isometric View	1	View
7	Isometric View	1	View
8	Isometric View	1	View
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10	Isometric View	1	View
11	Isometric View	1	View
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100	Isometric View	1	View

CADopiaTM

Reviewer's Guide





CADopia Reviewer's Guide

Contents

CADopia – An Introduction	3
Customer Profiles	4
Key Features	5
Standard DWG file format.....	5
Familiar User Interface	5
Easy to learn & use	5
Comprehensive drafting tools.....	6
Advanced 3D functionality.....	7
CADopia Standard and CADopia Professional - A Comparison	15
System Requirements	17
About CADopia	17



CADopia – An Introduction

CADopia is a smart tool for those who need a full-featured Computer-Aided-Design (CAD) software without the high cost. Designed for engineers, architects, designers and drafters, CADopia is a *No compromise* solution.

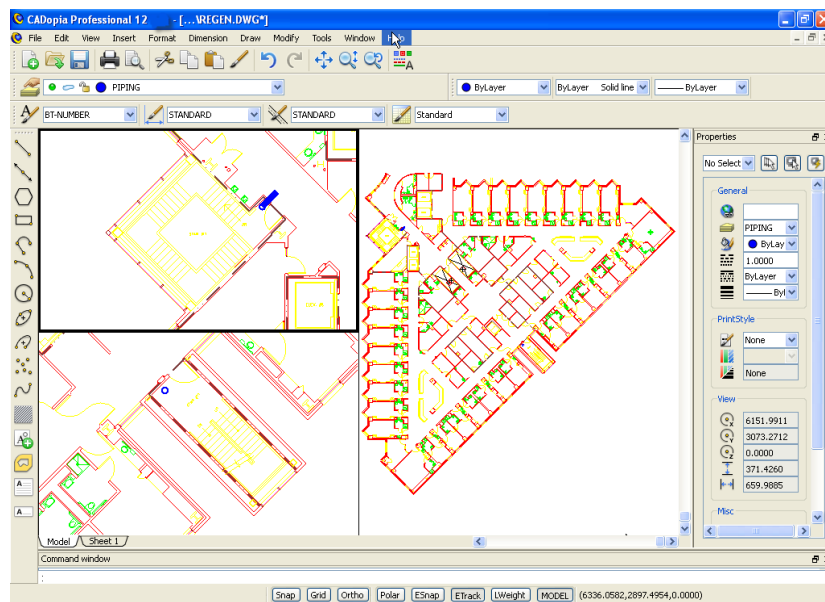
CADopia has all the useful features of the industry standard CAD software and it creates DWG™ format files natively. These files can be shared between users of other software that create DWG format drawings without translation or conversion.

Now, enterprises can put CAD software on every desktop and laptop using CADopia's network licensing and

terminal server deployment tools without impacting either their IT budget or the productivity of their employees.

You can learn to use CADopia in one afternoon if you are already familiar with AutoCAD. You can be productive almost immediately without requiring any retraining.

CADopia has been designed with these objectives in mind, so there is no switching cost in terms of lost productivity or retraining, freeing you from the endless cycles of subscription upgrades. CADopia licenses are perpetual licenses.





Customer Profiles

From large aircraft manufacturers to small architectural and engineering practices –companies of virtually all sizes in over 80 countries use CADopia for creating, editing, and viewing their technical drawing.

CADopia users' applications range include:

Surveying & Civil Engineering
Aeronautical drafting.
Machinery Design and drafting
Bicycle, Boat & Model Trains Design.
Swimming pool layout design

Audio visual systems Design
Mining Equipment Design
Musical instruments design
Robot design
Power utilities
Chemical modeling
Golf course layout design
GIS and mapping applications
Facilities layout design
Advertising layouts
Exhibition supplies design
Pollution Control Equipment Design

Customers include:





Key Features

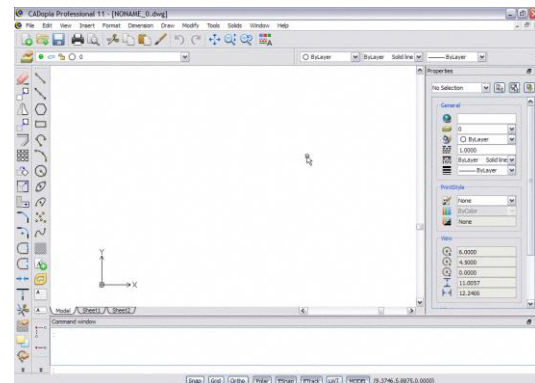
Highlights

- Industry standard CAD software
- Standard DWG file format
- Familiar User Interface
- Easy to learn and use
- Comprehensive drafting tools
- Advanced 3D functionality
- Supported on both Windows (32 & 64 bit)
- Stable, production worthy tool

If you have used other popular CAD software, you can learn to use CADopia in a few hours – no long learning curve and loss of productivity. CADopia supports the standard command interface as well as menus, toolbars, aliases and keyboard shortcuts.

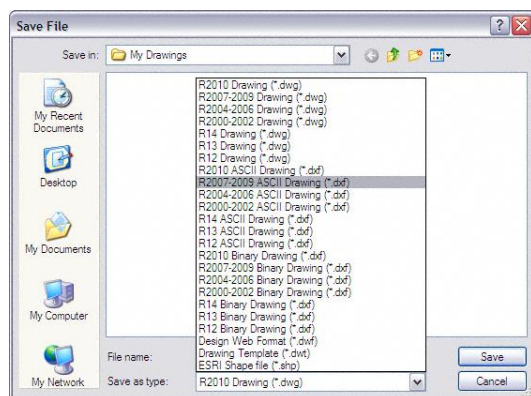
Standard DWG file format

CADopia's native file format is DWG, which allows you to open AutoCAD drawings, allowing you to collaborate easily with your colleagues and clients. There is no need to convert the file from one format to another – you work with DWG files directly. You can also export the drawings in a wide variety of formats including Adobe PDF and Autodesk DXF.

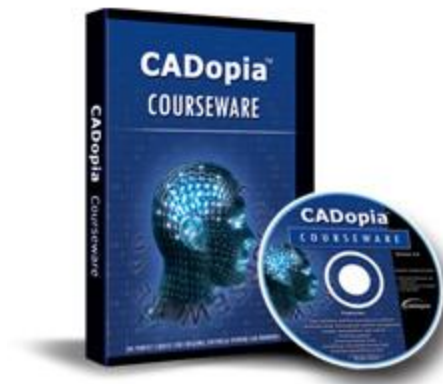


Easy to learn & use

Extensive help files and documentation are included to help you get the most out of the software. A courseware is available that lets you go through self-paced, projects based exercises.

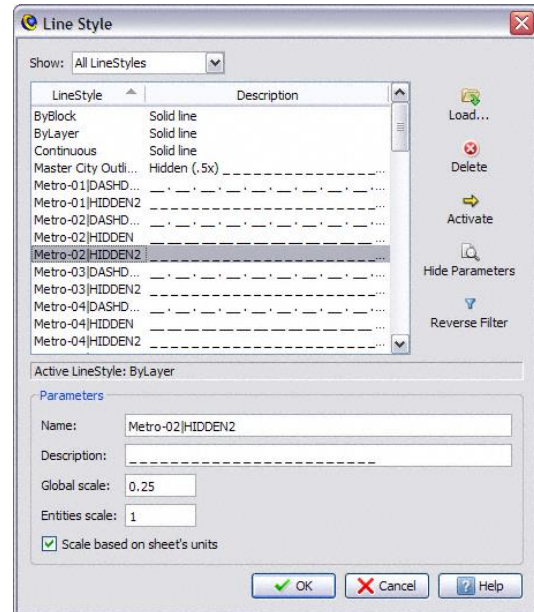


Familiar User Interface

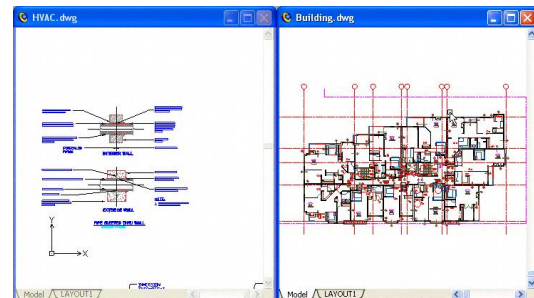
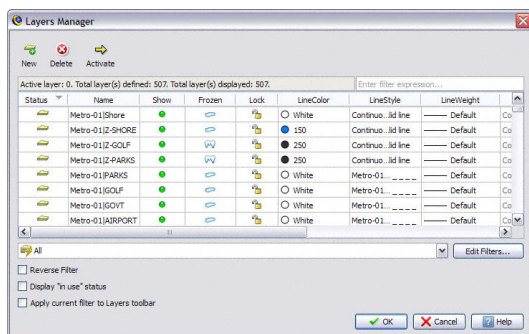


Comprehensive drafting tools

CADopia includes a comprehensive set of easy to use precision drafting tools, allowing you to complete your drawings precisely and efficiently. The resulting drawings are suitable for precision construction or manufacturing applications.



From WYSIWYG graphical editing using grip points to custom construction plane, entity snaps, grids, entity and polar tracking – all the familiar and productivity enhancing drafting tools are included in CADopia.



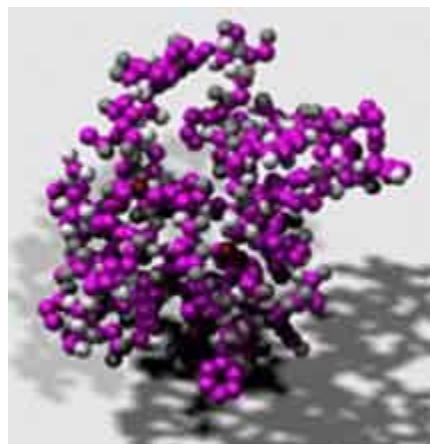


Advanced 3D functionality

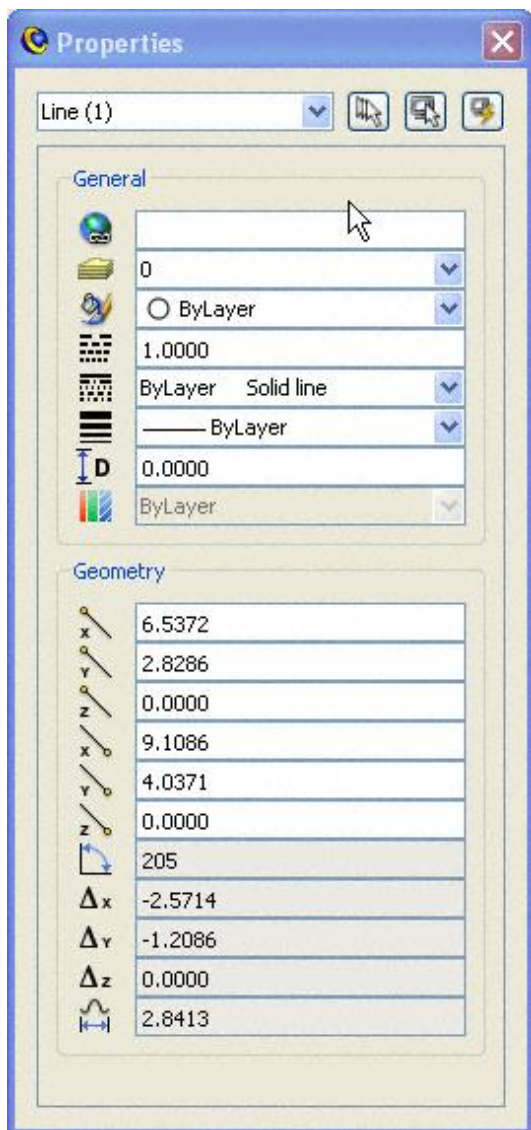
CADopia uses ACIS solid modeling engine to provide you most advanced 3D modeling tools. You can use basic shapes such as box, cone, sphere, cylinder and combine them using union, subtract and intersect tools to create very complex, mathematically complete 3D models suitable for downstream engineering analysis and manufacturing. Advanced functionality such as lofting, sweeping along a path, extrusion and revolution are supported.



Coiled spring & a lofted object created in CADopia



Insulin model created in CADopia



Property sheet in CADopia

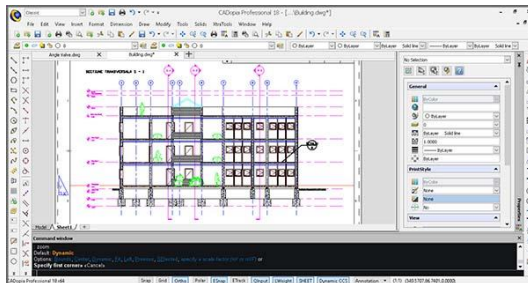


New in CADopia 18

DWG 2018 Support

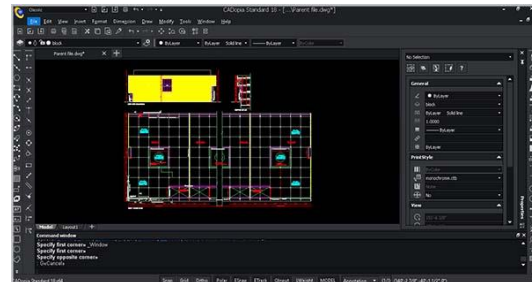
CADopia 18 supports reading the new DWG 2018 format drawing files and it continues to maintain compatibility with legacy DWG files.

Read and modify DWG files up to the latest version of this popular format (R2018). With CADopia 18 you can create or modify drawings and save them directly in DWG, up to version 2013-2017 or any previous version. Your files can easily be shared with users of other CAD software such as AutoCAD® or MicroStation®. Other file formats supported include DXF, DWF, DWT or DGN (import).



Fresh User Interface

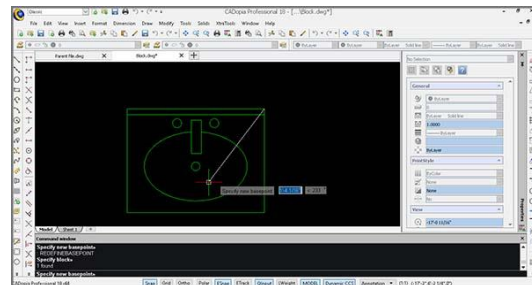
CADopia 18 sports a fresh and modern look and feel that supports auto-hiding palettes, command line completion, history for undo-redo and a welcome screen. You can switch to the classic interface too if you prefer.



Redefine Base Point of a Block

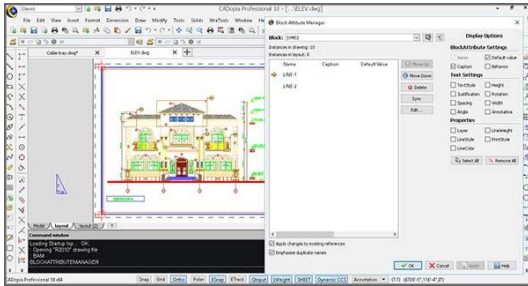
Change the base point of a block in your drawing, without exploding it

The new REDEFINEBASEPOINT command allows you to set a new base point for blocks. The new base point applies to the selected block and any previous insertion of the block get the new base point. This eliminates the steps of exploding and recreating the block before replacing it.



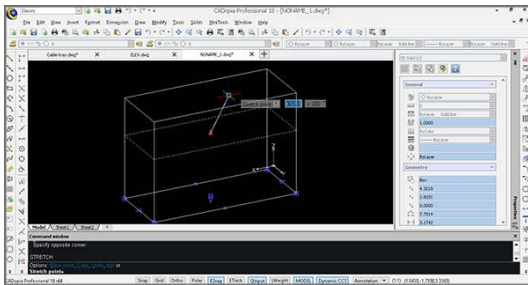
Edit Block Attributes properties

The new Block Attributes Manager lets you redefine the attributes definitions of a block intuitively. You may define the visibility of an attribute, change the order, default values and other parameters, directly from a comprehensive dialog box.



Modify 3D solid primitives

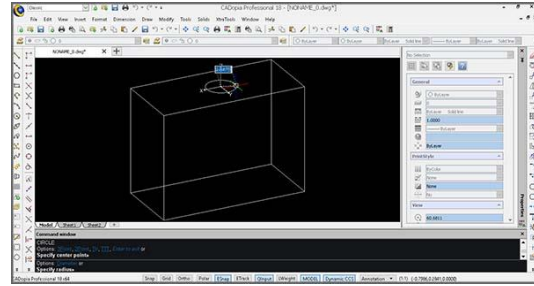
New grip points in 3D solid primitives allow you to edit the dimensions of the solid directly. You may also use Quick Input to input a new value. Alternatively, you may change the shape by editing the values in the properties palette for the selected primitive.



Dynamic Custom Coordinate System (CCS)

Enable the Dynamic CCS to automatically align the coordinate system to the face you are editing

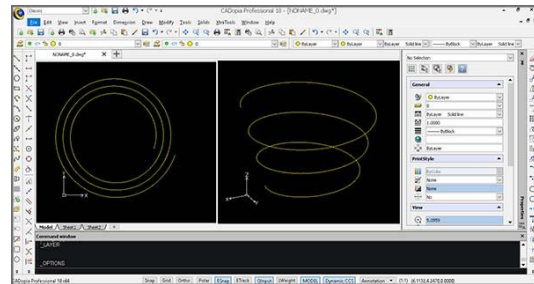
The Dynamic CCS can be turned on or off from a toggle in the bottom of the User Interface or by pressing F6. When enabled the CCS gets aligned to the surface automatically as you move over it.



2D SPIRAL and 3D HELIX

Create 2D spirals and 3D helices

The HELIX is a new entity that can be used in 2D to create spirals or in 3D to create helices. You may further use an HELIX as an extrusion path and create complex shapes such as bolt threads, circular stairs or ramps.



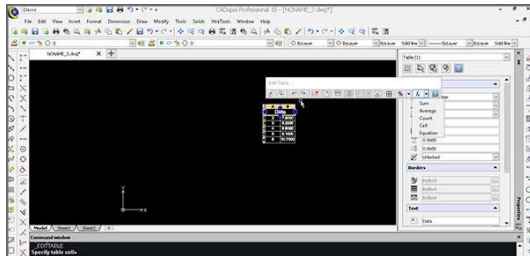
Formulas in Tables and Export to Excel

Use formulas in tables from within your drawings and improve workflows with Microsoft Excel® using import from/export to Excel feature.

On selecting a table, you will now see a contextual ribbon that allows you to insert formulas such as the sum or average of a column or equations. You may also use Paste selected to copy a table from Excel or use the new EXPORTTABLE command to export a

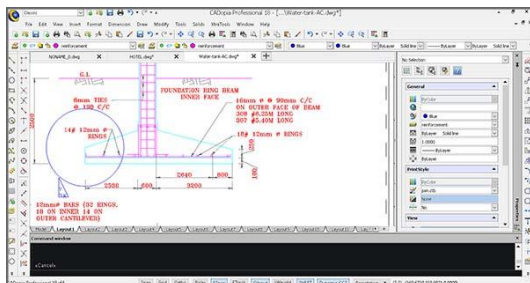


table in your drawing to a .CSV file that can be further processed in Excel or other spreadsheets.



Annotate with MultiLeaders

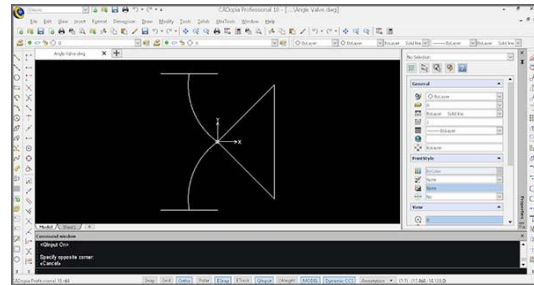
Use MultiLeaders to annotate drawings with a single text and multiple arrows. The command MULTILEADER is also associated to the MULTILEADERSTYLES command for creating and managing MultiLeader styles and for maintaining a consistent style across your drawings. EDITMULTILEADER is used to edit MULTILEADER entities. For example, you can add another arrow to the same text.



Usability Improvements

Move entities incrementally with arrow keys, copy entities to current layer or paste content from the clipboard to the current layer

You may now select entities and move them with the arrows of your keyboard by an increment that can be adjusted in the options. This helps to adjust the position of entities in an interactive way.



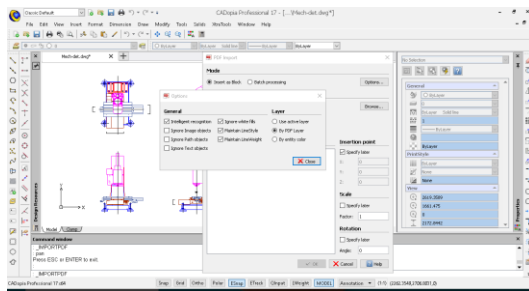
While using the COPY command you may also select to copy entities directly to the current layer instead of their original layer. Similarly, the PASTE command allows you to place the content of the clipboard to the current layer.



New in CADopia 17

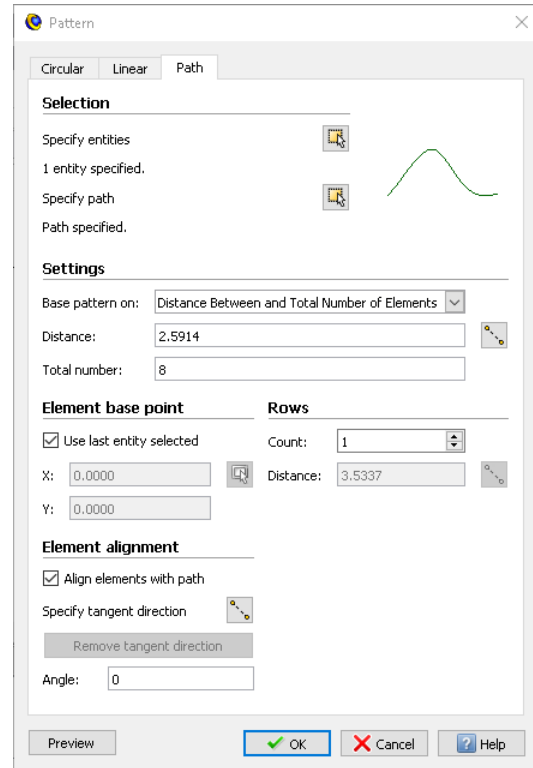
Advanced PDF to DWG conversion

New features allow to recover more information from the PDF
Besides converting or batch-processing your PDF files into DWG files, CADopia 2017 now offers the option to recover the layers organization and names and allows you to maintain the LineStyle and LineWeight of entities.



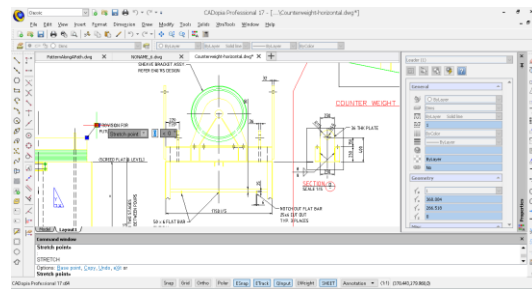
Pattern Along Any Path

Copy entities along a path defined by another entity
Array multiple copies of a chosen entity along a line, polyline, arc, circle, ellipse or spline. Different options let you define the distance and total number of insertions but also how to align each insertion with the chosen path.



Multifunctional Grips

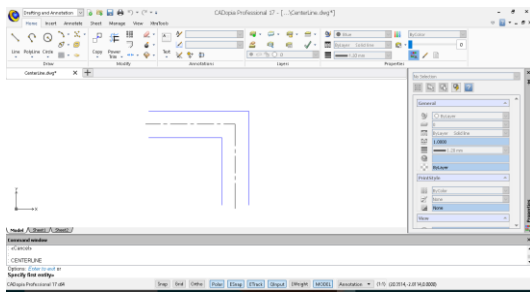
Quick editing options appear when you fly over mid and end point grips
Fly over entity grips and you will discover new contextual shortcut menus offering quick editing features that can vary based on the entity type: edit the length or stretch an entity from its end point grip, change the radius of an arc, insert a vertex on a polyline or convert an arc into a polyline.





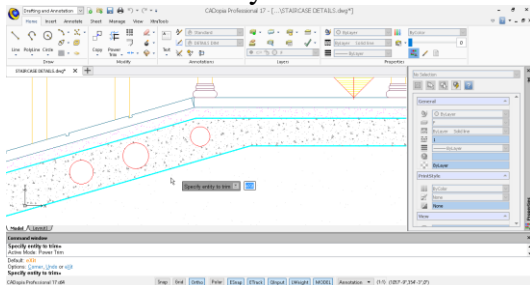
Insert Center Lines

Insert Centerlines between pairs of lines, concentric arc and polyline segments. Very popular for Mechanical design but also helpful in other situations, the CENTERLINE command will draw a line at equidistance of the pair of entities you selected. The CENTER linestyle will be assigned by default and you can fine tune the extension of the Centerline.



Trim and PowerTrim in Hatches and Gradients

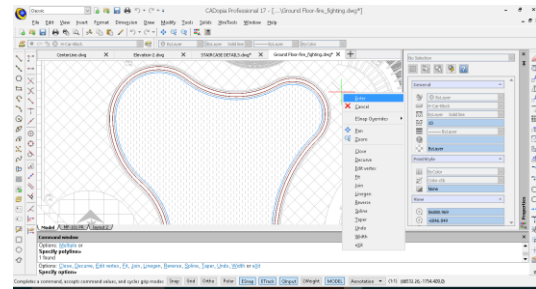
Unrivalled flexibility to edit the shape of your hatches and gradients. You can now trim hatches and gradients with the TRIM and POWERTRIM commands. It's never been easier to edit the shape of the areas containing hatches and gradients. Divided hatches and gradients maintain associativity and remain as one entity.



Polylines Editing Improvements

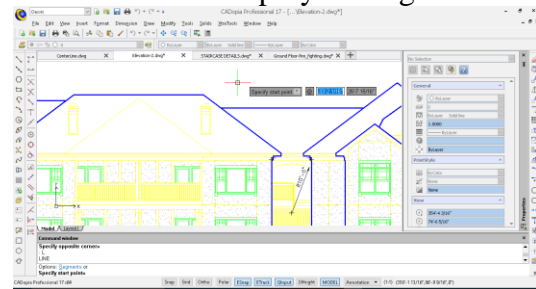
Add vertex to midpoint, convert a segment to an arc or line and more

New options in the command EDITPOLYLINE ensures increased productivity in the editing of polylines. You may convert an arc segment into a line and vice-versa, you may also add a vertex to the midpoint of a segment and change its position. Other new options include Taper and Reverse.



Relative Angles in Coordinate Input

Use the “@” prefix to enter the angle from the last given segment. You can now use the “@” prefix to enter relative angles just like you are already used to for relative distances. This unique ability simplifies significantly the coordinate input when you draw successive lines or polyline segments.

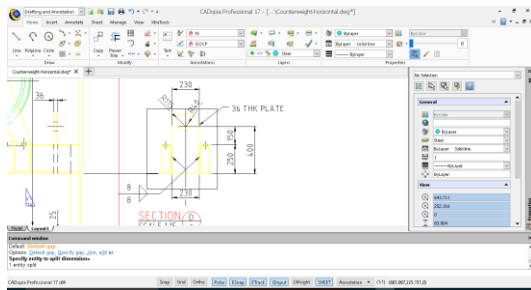


Split Dimension Lines

Split Dimension lines and extension lines to avoid any overlap. Improve the readability of your annotations, when a dimension line or an extension line is overlapping another entity the command SPLITDIMENSION



will help you split them with a default or manual distance without breaking the associativity.



Advanced Block Attributes Editing

New dialog for advanced editing of block attributes and properties
Select one or more block insertions and use this new dialog to edit one or more attributes but also block properties such as layer, linestyle, color, text style and more.

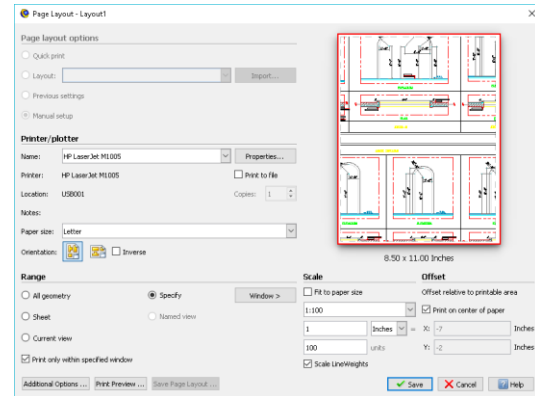
ChangeSpace

Move entities from Model Space to Layouts and vice-versa
The new CHANGESPACE command facilitates the migration of content between Model and Paper Spaces. Besides moving the entities, this command will insert the entities at the same location and at the right scale considering the scale ratio of the viewport in the layout.

Dynamic Print Preview

The Print settings dialog has been redesigned to improve productivity
Enjoy a reorganized dialog for Print settings with a dynamic preview representing your drawing as it would be printed. You no longer need to switch

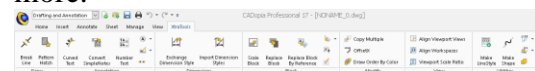
between settings and preview to adjust your print configuration.



More XtraTools™ Commands

More power features to help you solve tedious tasks

Take a look to the XtraTools² menu or ribbon tab and you will discover many new features to manage layouts viewports, import/export dimension styles, create nice text labels, scale blocks, define draw order by color, and more.



SetByLayer

Change property overrides of selected entities to ByLayer

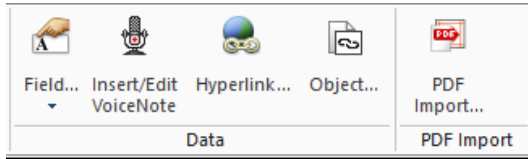
The new SETBYLAYER command helps you to edit entities that should inherit layer properties and decide which properties are affected: color, linetype, lineweight.



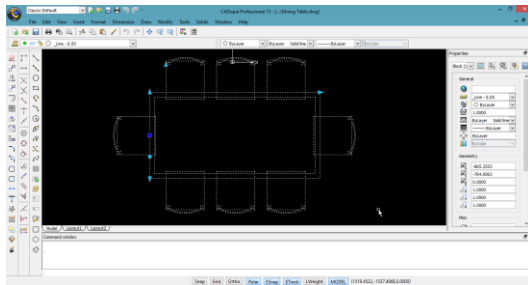
New in CADopia 15

The new features in CADopia 15 include:

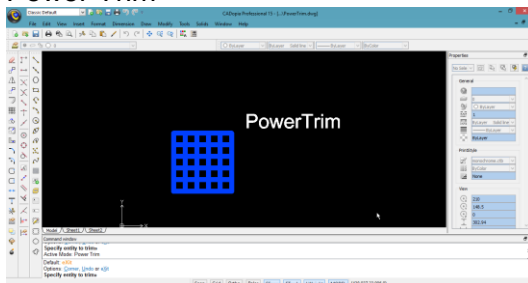
Support for PDF import & conversion to DWG format



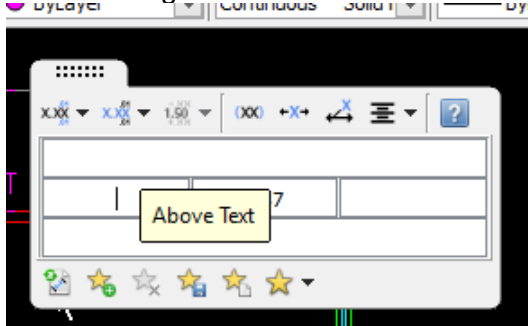
Support for using existing Dynamic Blocks



Migration Assistant
Power Trim

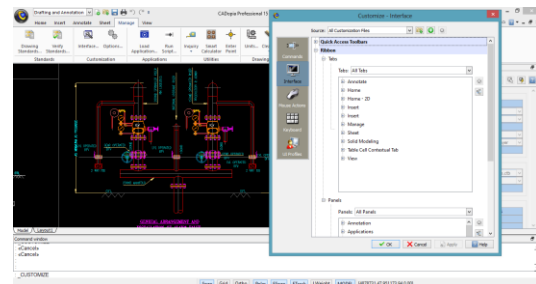


Quick Modify
Enhanced in-place text editing
Table Editing



Dimension palette

Customizable ribbon interface



Try it yourself & prepare to be impressed!

1. Open a drawing with entities that can be trimmed in CADopia 15
2. Type powertrim on command line
3. Move the mouse over the entities to be trimmed.

If you have used traditional trimming methods before, you will appreciate the productivity gains this feature provides to you. No need to define awkward cutting edges, simply move the mouse over the entities to be trimmed and the software does the job for you.



CADopia Standard and CADopia Professional - A Comparison

FEATURES	CADopia Standard Edition	CADopia Professional Edition
File support		
AutoCAD DWG support	Yes	Yes
PDF Import & Convert to .DWG	No	Yes
DXF support	Yes	Yes
Template drawings support	Yes	Yes
Drawing Web Format	Yes	Yes
Audit & Recovery of files	Yes	Yes
Popular Raster files support	Yes	Yes
PDF export	Yes	Yes
SVG export	Yes	Yes
ACIS SAT export	Yes	Yes
User Interface		
Multiple drawing editing	Yes	Yes
Dockable properties toolbar	Yes	Yes
Properties tool palette	Yes	Yes
Tool matrix	Yes	Yes
Right click context menus	Yes	Yes
Command prompt	Yes	Yes
Options manager	Yes	Yes
Standard command sequence	Yes	Yes
Layer Management		
Layers Toolbar	Yes	Yes
Layer tools	Yes	Yes
Viewing		
Non-rectangular viewports	Yes	Yes
Viewport clipping	Yes	Yes
Dimensions		
Dimensions	Yes	Yes
Dimension styles	Yes	Yes
Dimension Palette	Yes	Yes

Blocks and external references		
External Reference Manager	Yes	Yes
In place editing of blocks and external references	Yes	Yes
External references clipping	Yes	Yes
Hatch & color fill		
Hatch patterns	Yes	Yes
Gradient & solid fill	Yes	Yes
Miscellaneous key features		
True color support	Yes	Yes
VoiceNotes	Yes	Yes
Wipeout	Yes	Yes
Tables & Table editing	Yes	Yes
Migration Assistant	Yes	Yes
Text		
Multiline text editor	Yes	Yes
Spell checking	Yes	Yes
TrueType fonts	Yes	Yes
Multi-language character support	Yes	Yes
3D solid modeling		
3D primitives support	No	Yes
Extrusion & revolution	No	Yes
Lofting	No	Yes
Sweep along a path	No	Yes
Mass properties calculation	No	Yes
3D Booleans (union, intersect, subtract)	No	Yes
Shell	No	Yes
Fillet	No	Yes
Edge & face editing operations	No	Yes
Interference checking	No	Yes
Slice	No	Yes
Section	No	Yes
3D Rotation	No	Yes
3D Mirror	No	Yes
3D Align	No	Yes
Model integrity checking	No	Yes
3D Pattern	No	Yes
Integrated Lightworks Artisan Rendering	No	Yes*
Pre-configured workflows	No	Yes*
Shaded/rendered/wireframe/mesh display modes	No	Yes*
Schemes	No	Yes*
Lights settings	No	Yes*
Material library	No	Yes*
Camera settings	No	Yes*
Backgrounds	No	Yes*
Export of rendered images	No	Yes
‘What if’ scenario testing	No	Yes



System Requirements

- Microsoft Windows 10, Windows 8(64 bit only).
- Intel Core 2 Duo (minimum) or higher (recommended).
- 4 GB of RAM.
- 1 GB of free hard-disk space for installation.
- High Color (16 bit) graphics card (3D graphics accelerator card recommended).
- 1024 x 768 screen resolution
- High speed Internet access for product downloads and technical support.

About CADopia

CADopia (www.cadopia.com) is creating the industry standard for an affordable and powerful CAD solution. With a user base spanning over 80 countries across the globe, CADopia is one of the world's most popular providers of professional CAD software. Founded in 1999 in San Diego, CADopia is a privately held California Corporation. For more details about CADopia, please visit CADopia's web site at www.cadopia.com.

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