

ZWCAD 2009

Reliable CAD for 2D&3D Design



ZWSOFT

Powered by IntelliCAD Technology Consortium

www.zwcad.org

Company Overview



ZWSOFT (ZWCAD Software Co., Ltd.) is committed to providing the most reliable and cost-effective CAD solutions. Our products meet the needs of users across the 2D/3D design industry, including architecture, engineering, construction (AEC), mechanics, manufacturing, and electronics -- anyone who creates or uses CAD drawings.

ZWSOFT has developed advanced technology through collaboration with many well-known organizations worldwide. It is a Commercial and Board Member of ITC (IntelliCAD Technology Consortium), and a Founding Member of ODA (Open Design Alliance). ZWSOFT also partners with Microsoft, Intel, Spatial, as well as university research institutes to provide our customers with the best CAD applications -- easy to use, affordable, and productive.

Founded in 1998, ZWSOFT is located in Guangzhou, China. Today, it employs about 360 staff, and is supported by an international network of highly skilled strategic partners, distributors, and resellers.

All ZWCAD products are DWG-compatible CAD programs for 2D and 3D design, which give our customers maximum returns on their investment. With its quality products and excellent service, ZWCAD is fast becoming the leading brand in the country, and is now proving competitive in over 75 countries, with more than 150,000 users throughout the world. Our products provide cost-effective solutions for SMEs (Small and Medium-sized Enterprises) and individual designers, and have also earned a high reputation in many world-famous corporations, including Carrefour, HITACHI, HONDA, LG, TOSHIBA, among others.

ZWCAD



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Top 10 Reasons for Choosing ZWCAD

1. Unrivaled DWG Compatibility



2. Easy to Use

ZWCAD's menus, toolbars, command line, drawing area, properties palette, and dialog boxes are arranged in a friendly style, which conforms to users' operation habits. Customization files equivalent to those in AutoCAD® mean that you can easily transfer your CAD environment between the two. This lets AutoCAD® - trained users begin to work with ZWCAD immediately.

3. Fast Speed

ZWCAD 2009 performs much faster than any previous versions. Essential functions are faster, such as Stretch, Explode, Regen, Insert, PasteClip, and Refedit. Overall, the performance of the ZWCAD 2009 is increased significantly. Faster speed reduces your drafting time and makes the drafting experience smoother.

4. Powerful Functions

ZWCAD offers comprehensive and powerful functions for entire graphical design processes, from drafting preparation to drawing export. New functions include tool palettes, eTransmit, multiple grips editing, filter, and more. Additional 88 Express Tools specifically designed to users' requirements are also included.

5. Better APIs

You can expand ZWCAD with useful add-ons by employing many application programming interfaces (APIs): LISP, VBA, SDS, and DRX. We have partnered with over 40 developers in the fields of architecture, construction, electronics, engineering, manufacturing, and mechanical design. "ZWCAD + Add-ons" meets your professional needs.

6. Copyright Assured & Quality Approved

Commercial and Board Member of ITC
 Founding Member of ODA
 16 years of experience in CAD development
 Outstanding R&D team with 150 talented engineers



7. Thoughtful Supports

Local technical supports are available. ZWSOFT in China and local partners all over the world are pleased to offer you Five-star services and supports. On-line support or on-site visiting are ready on your request.

8. Global Strategy

ZWSOFT cooperates with many well-known organizations:



ITC



ODA



Microsoft



Intel



Spatial

ZWCAD is available in many localized versions:



Chinese



Czech



English



German



Japanese



Hungarian



Korean



Polish



Russian



Spanish

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9. Large Customer Base

Popular in over 75 countries with more than 150 000 users, ZWCAD is used by world-class enterprises, including the following:

TOSHIBA

HITACHI
Inspire the Next

NEC

LG
Life's Good

EMERSON

TCL

HONDA
The power of Dreams

Carrefour

SIEMENS



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10. Cost-effective

ZWCAD combines an affordable price with creative functions. This combination helps you to quickly and easily create drawings with significant cost savings!

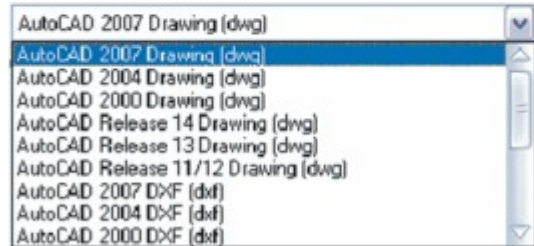
ZWCAD 2009

1 Basic Features

1-1 Compatibility

◆ DWG Support

ZWCAD's native file format is DWG, so it can open, edit, and save any existing DWG file generated by AutoCAD® from version 2.5 to 2009 without conversion or data loss. This makes ZWCAD compatible with a wide range of AutoCAD®-generated contents.



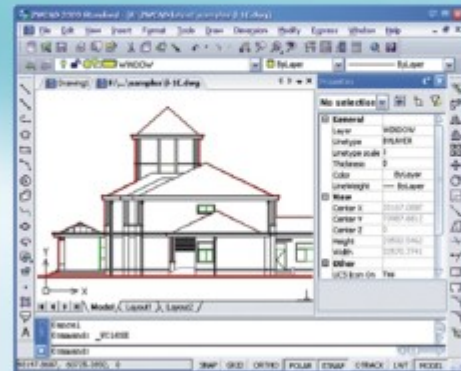
P. 1-1 DWG Support

◆ Commands and Aliases

The commands and aliases of ZWCAD are also compatible with AutoCAD®.

◆ Friendly User Interface

ZWCAD's menus, toolbars, command line, drawing area, properties palette, and dialog boxes are arranged in a friendly style, which conforms to users' operation habits. This lets AutoCAD® - trained users begin to work with ZWCAD immediately.



P. 1-2 Friendly Interface

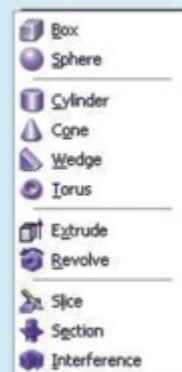
◆ Resource Files

All the resource files from mainstream CAD platforms can be used with ZWCAD, such as Windows TTF and AutoCAD® SHX fonts, linetype (.lin), hatch pattern (.pat), slide (.sld) and unit (.unt) files.

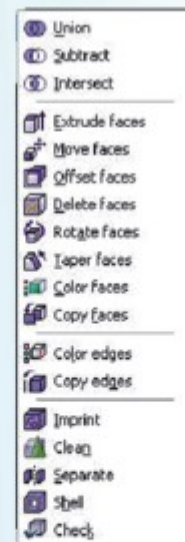
◆ Creating and Modifying 3D Models

ZWCAD can create simple 3D models using solid modeling.

You can modify 3D models with commands like Union, Subtract, and Intersect.



P. 1-3 3D Model Creation



P. 1-4 3D Model Edit

◆ Programming with ZWCAD

You can customize and extend ZWCAD through LISP, VBA, SDS and DRX programming languages and interfaces.

LISP is an AutoLISP-compatible programming language designed to extend and customize functions performed by ZWCAD.

Microsoft VBA (Visual Basic for Applications) is an object-oriented programming environment designed to provide rich development capabilities similar to those of Visual Basic 6 (VB). The primary difference between VBA and VB is that VBA runs in the same process space as ZWCAD, providing a faster programming environment.

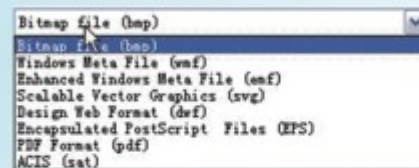
SDS (Solutions Development System) is a C/C++ programming interface compatible with the ADS* (AutoCAD* Development System) interface.

DRX (DWGDirect Runtime Extension) is the newest and most powerful programming interface in ZWCAD. It is similar to ARX (AutoCAD* Runtime Extension).

• 1-2 Features

◆ Export

With the Export command, drawings can be exported in raster and vector formats, including BMP, WMF, EMF, SVG, DWF, EPS, PDF, and SAT.



P. 1-5 Export File Formats

◆ Layer Properties Manager

Layer management applies properties to groups of objects, such as Color, Linetype, and Lineweight. In addition, layers can be frozen (invisible) or thawed (visible), locked (visible but not editable) or unlocked (editable). The current state of all layers can be archived through the States Manager for reuse in other drawing projects.



P. 1-6 Layer Properties Manager

◆ Linetype Manager

The Linetype Manager adds new linetypes to drawings from existing linetype (.lin) files. You can change the names and descriptions of linetypes, and specify global and current object scale factors to achieve the proper size.

Linetype Filter, which contains a comprehensive list of linetypes, makes it easy to separate linetypes by type.



P. 1-7 Linetype Manager

◆ **Text**

For annotation of drawings, ZWCAD provides multi-line text and single-line text capabilities, with options for setting text styles.

ZWCAD is able to fit text along arcs with Arcstext command.



P. 1-8 Text Style Manager



P.1-9 Arcstext

◆ **Drawing**

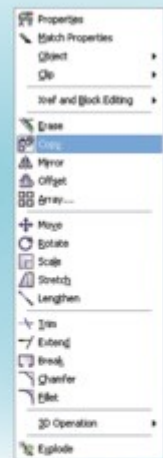
The majority of ZWCAD's drawing commands are compatible with those in AutoCAD®. Users already familiar with AutoCAD® commands and features can begin to draw and edit in ZWCAD immediately. There is little re-learning required.

◆ **Editing**

ZWCAD contains a full set of editing tools for modifying drawings. Standard functions include Copy, Move, Array, Mirror, Offset, and Trim.



P. 1-10 Draw Command



P. 1-11 Modify Command

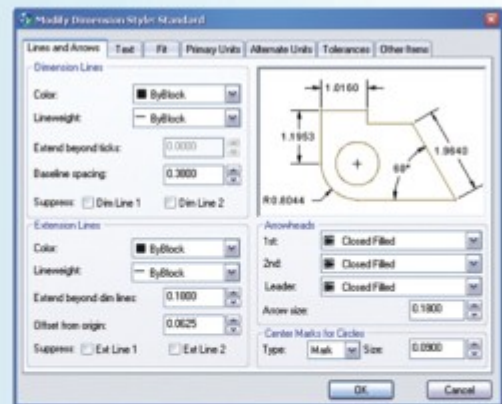
◆ **Dimensioning**

You can dimension objects one at a time, or you can place series of dimensions.

With ZWCAD, you can easily manage different dimension styles within your project.



P. 1-12 Dimension Commands



P. 1-13 Dimension Style Setting

◆ Gradient Hatches

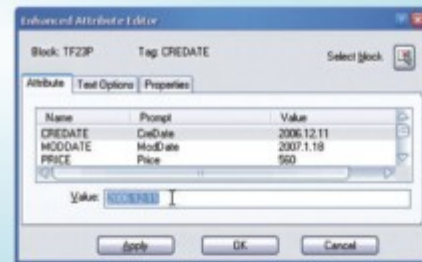
With the powerful gradient hatch feature, it is easier to fill areas of your drawings with varying colors.



P. 1-14 Gradient Hatch

◆ Blocks and Attributes

Create blocks, and then save them in your current drawing or as external files. You can also create blocks with attributes (text-based data), which can then be extracted to external files for use with spreadsheets, databases, and word processors.



P. 1-15 Attribute Editor

◆ Raster Image Manager

The Raster Image Manager allows you to attach image files to drawings, and then detach, locate, reload, or unload attached images. ZWCAD lists all image files associated with drawings, along with details, such as pixel width, color depth, resolution, and the file path.



P. 1-16 Raster Image Manager

◆ Real-Time Zoom and Pan

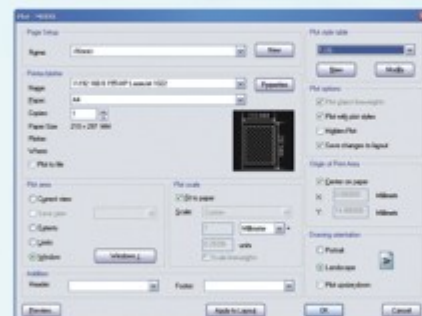
Instantly switch among different views of drawings, between zoomed-in detailed views and zoomed-out overviews.

◆ Unlimited Undo/Redo

When changes are made frequently to drawings, it can be more convenient to backstep, instead of deleting and redrawing. The history list allows you to undo and redo actions without limit.

◆ Plotting

You can print your drawings easily by selecting settings in the plot dialog box. Page setup allows you to set the default plotter type, paper size, plot area, plot scale, and so on.

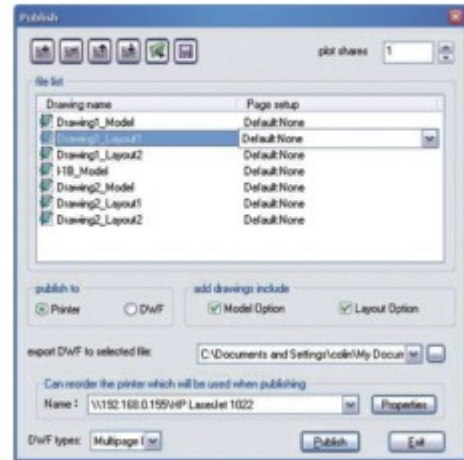


P. 1-17 Plot Dialog Box

2 Advanced Features

◆ Publish

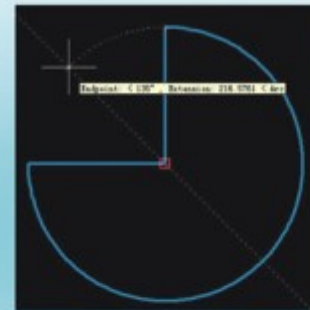
Publish provides a convenient way of creating hardcopy and electronic copies of sets of drawings. With the Publish function, you can assemble collections of drawings, specify their plot information, and then have them printed in sequence automatically. Drawings are output to printers or plotters, or saved as DWF files for viewing by your clients.



P. 2-1 Publish

◆ AutoTrack

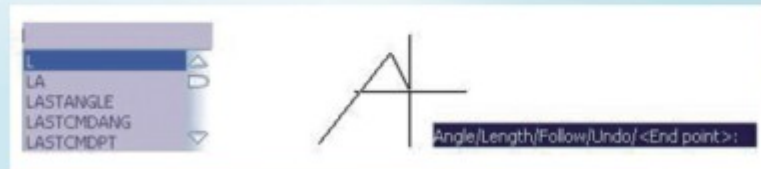
AutoTrack combines polar tracking with object snap tracking. Together, they help you snap to difficult geometry more easily. When polar tracking and object snap tracking are turned on, temporary alignment paths show precise positions and angles.



P. 2-2 AutoTrack

◆ Dynamic Prompt

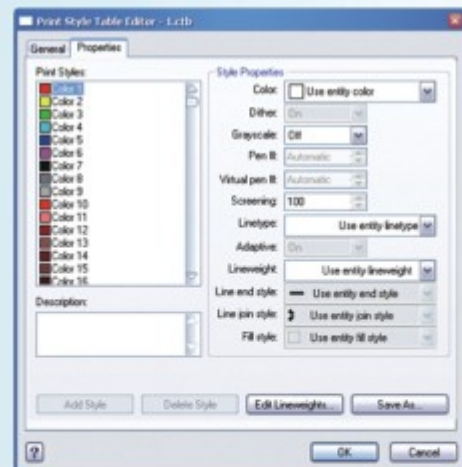
Dynamic prompt provides tooltips that display useful information next to the cursor. It also lists all possible commands; you can quickly choose one by typing just the first several letters of the command, instead of its whole name.



P. 2-3 Dynamic Prompt

◆ Plot Style Support

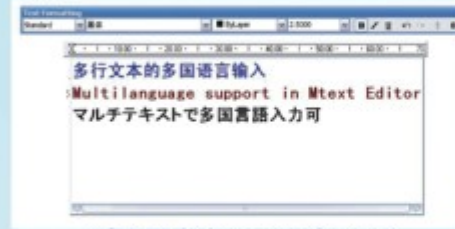
Plot styles change colors and lineweights of objects through a batch process. With CTB and STB plot styles in ZWCAD, you can adjust lineweights and colors all at once before printing.



P. 2-4 Plot Style

◆ **Multi-Language Support in Mtext Editor**

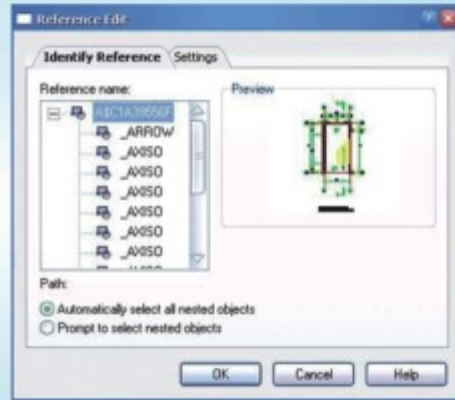
Multiple languages like Chinese, English, French, Spanish, Portuguese, and Japanese can be entered and displayed in the Mtext Editor simultaneously. This is convenient for collaboration between international users.



P. 2-5 Multi-language Support

◆ **Modifying References and Attributes**

In-place reference editing allows you to modify externally referenced drawings and to redefine block definitions, without needing to open external DWG files.



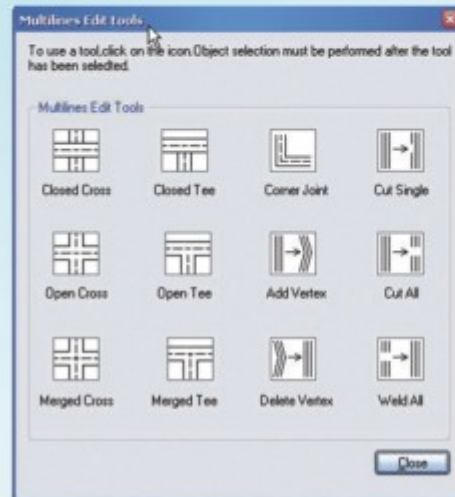
P. 2-6 Reference Edit

◆ **Quick Dimension**

The Qdim command creates and edits batches of dimensions, including baselines and continued dimensions, radius and diameter dimensions, and ordinate dimensions.

◆ **MLine & Mledit**

Multilines are objects composed of multiple parallel lines. You can define your own multiline styles, and then save them for later use. You can edit the multiline objects with Mledit command.



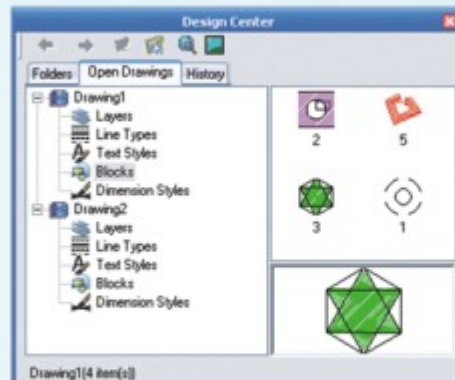
P. 2-7 Mledit

◆ **Wipeout**

With Wipeout command, you can create masks to hide underlying objects. Masks are polygonal areas bounded by a frame and filled with the background color. You can turn masks on for editing, and off for plotting.

◆ **Design Center**

The improved Design Center offers a convenient way to manage the elements of drawings, such as dimension styles, blocks, text styles, line types, and layers. To copy them from any source drawing to your current drawing, just drag and drop.



P. 2-8 Design Center

◆ **Quick Calculator**

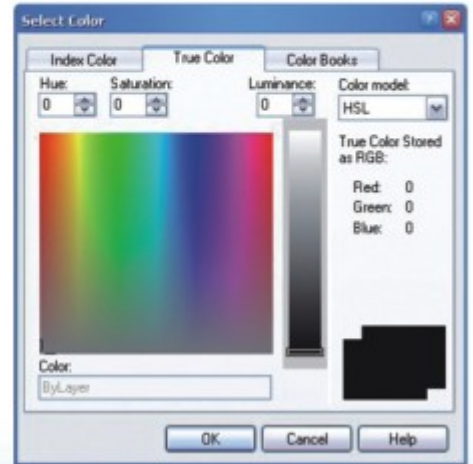
The QuickCalc includes all basic functions found in most standard calculators. In addition, QuickCalc offers advanced calculations, such as geometric functions, scientific functions, and units conversion. It also features a variables area and a unique text calculation area.



P. 2-9 Quick Calculator

◆ **True Color System**

ZWCAD displays drawings with True Colors, allowing you to choose from over sixteen million possible colors.



P. 2-10 True Color

◆ **OLE Support**

Object linking and embedding (OLE) is a Windows feature that embeds data from other applications into drawings, and vice versa. For example, ZWCAD drawings can be inserted in Word or Excel documents, and spreadsheets can be placed in drawings. To edit the document in the source application, simply double-click the OLE object.

◆ **Render**

Renderings are made more realistic through the addition of materials and lights to 3D models.



P. 2-11 Render with lights

◆ **Proxy Object Display and Edit**

ZWCAD displays and edits objects created by other applications, such as AutoCAD® Architecture, AutoCAD® Mechanical, and AutoCAD® Electrical.

◆ **MDE & MDT**

You can work more efficiently in Multiple Document Environment (MDE). ZWCAD is capable of opening up to 255 files in one session.

ZWCAD provides a Multiple Document Tab (MDT), which lets you select from multiple open documents quickly.

◆ **Express Tools**

ZWCAD's Express Tools contains a library of productivity tools that extends its power. These easy-to-use tools cover a wide range of drafting options, such as layer management, dimensioning, drawing, object selection, and object modification.



P. 2-12 Express Tools

3 What's New in ZWCAD 2009

◆ Greater Stability

The stability of ZWCAD has been greatly improved with strict debugging using an automated test system. More than 20,000 drawings are employed for stability testing.

- 1) Many functions have been rewritten to assure greater stability. These include Undo, Explode, Insert, PasteClip, Stretch, RefEdit, Offset, Trim, Extend, and Snap.
- 2) The automatic backup function protects your work from unexpected crashes.



P. 3-1 Greater Stability

◆ Faster Speed

Overall performance is improved with the increased processing speed of a large number of crucial functions, such as RefEdit, Insert, Pasteclip, Explode, Regen, Stretch, Trim and Extend.

◆ Easier Operations

Functions of ZWCAD are made more efficient so that you can improve your working efficiency.

1) Aerial View Window

With the help of Aerial View Window, you can pan and zoom large drawings in a window. This action zooms and pans the drawing quickly.



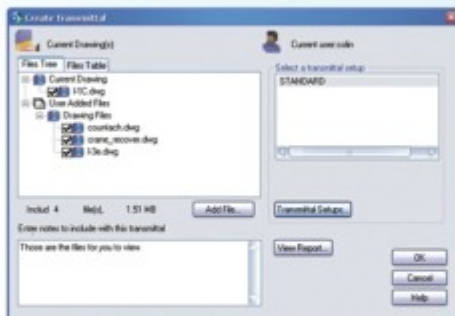
P. 3-2 Aerial View Window

2) eTransmit

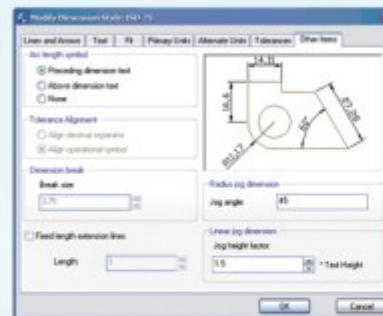
eTransmit improves collaboration between clients. It collects all relevant files in a single package, including drawings, images, external references, and fonts.

3) Jogged and Arc Length Dimensions

ZWCAD 2009 adds jogged dimensions and arc length dimensions, in addition to improving dimensions overall. Dimension styles are created and modified with the dimension style manager.



P. 3-3 eTransmit Manager



P. 3-4 Jogged Dimension and Arc Length Dimension Manager

4) Multiple Grips Editing

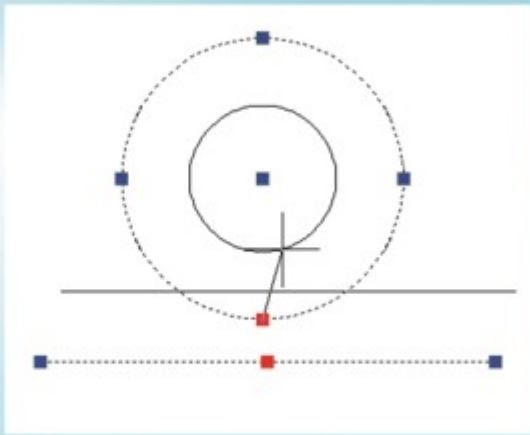
With the powerful new Multiple Grips Editing function, you can work with more than one grip at a time. Objects can be stretched through multiple grips, and you can use new system variable to control the grips (Grips, GripBlock, and GripTips).

5) Filter

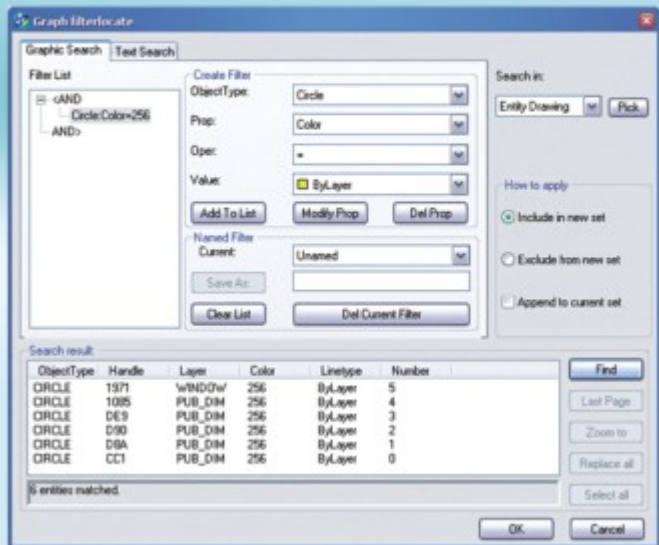
With the Filter function, you can search for text data or graphical entities through a variety of filter conditions – even searches of custom objects and their locations. Filter also supports searching previously filtered results and creating selection sets.

6) Improved Undo

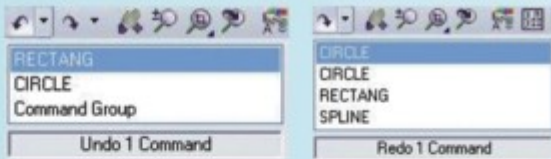
Undo\Redo history list helps you execute multiple redoes or undoes.



P. 3-5 Multiple Grips Editing



P. 3-6 Filter Manager



P. 3-7 Undo\Redo History List

◆ Better DRX

DRX programming interface (similar to ARX in AutoCAD®) is provided, with the improvement of Insert\Pasteclip\Explode\Extend\Trim\Stretch functions for custom objects. This allows you to develop your application with greater efficiency.

4 ZWCAD 2009 vs. AutoCAD® 2009

The core engine of ZWCAD is based on latest IntelliCAD (www.intellicad.org) technology, a powerful CAD platform that hosts many design applications. ZWCAD uses DWG as its native drawing format, and offers you reliable compatibility with AutoCAD® content, from version 2.5 to 2009.

The following table compares the major features between ZWCAD and AutoCAD® .

	ZWCAD 2009	AutoCAD® 2009	AutoCAD® 2009 LT
Compatibility			
Native DWG & DXF Support	2.5~2009	2.5~2009	2.5~2009
AutoCAD® Command	Yes	Yes	Yes
AutoCAD® Menu(.mnu)& Alias Support	Yes	Yes	Yes
TTF & SHX Font Support	Yes	Yes	Yes
AutoCAD® 3D Surface	Yes	Yes	No
ACIS 3D Solid	Yes	Yes	No
AutoLisp(including DCL)	Yes	Yes	No
AutoCAD® Development System (ADS)	SDS (similar to ADS)	Yes	No
VBA Included	Yes	Yes	No
Object ARX	DRX(similar to ARX)	Yes	No
Advanced Features			
Publish	Yes	Yes	Yes
Entity Snap Tracking	Yes	Yes	Yes
True Color System	Yes	Yes	Yes
Design Center	Yes	Yes	Yes
Tool Palettes	Yes	Yes	Yes
Quick Calculator	Yes	Yes	Yes
Hatch-clip	Yes	Yes	Yes
Gradient Hatch	Yes	Yes	Yes
CTB and STB Plot Style	Yes	Yes	Yes
Explorer (Layers, Blocks, Linetypes)	Yes	Yes	Yes
Unlimited Undo/Redo	Yes	Yes	Yes
Right-click Customization	Yes	Yes	Yes
Menu, Toolbar & Alias Customization	Yes	Yes	Yes
Polygonal Viewports in Layouts	Yes	Yes	No
ActiveX In-place Editing	Yes	Yes	Yes
External Reference	Yes	Yes	Yes
Xref, In-place Editing	Yes	Yes	No
Quick Select	Yes	Yes	Yes
Quick Dimension	Yes	Yes	No
Raster Image	Yes	Yes	Yes
Multilines & Multiline Editing	Yes	Yes	No
Filter	Yes	Yes	Yes
eTransmit	Yes	Yes	Yes
Unique Features			
Batch Plot (pltplot)	Yes	No	No
Block Extraction	Yes	No	No
Image with TFW coordinate file	Yes	No	No



FAQ

Q: What are the limitations of ZWCAD trial version?

A: The ZWCAD trial version offers 30 days evaluation of all functions in ZWCAD. During the first 30 days, there are no limitations.

After the evaluation period, three functions are limited: (1) Export function is disabled; (2) plots have watermark (3) users cannot save drawings with more than 8,000 entities. All other functions remain.

To continue using ZWCAD without these limitations, purchase a permanent license online or through one of ZWCAD's local resellers.

Q: How can I get the trial version of ZWCAD?

A: You can download the ZWCAD trial version from our website at www.zwcad.org. You can also download the trial version from popular download sites, such as www.download.com and www.tucows.com. If you have any problems with the download, contact us and we will provide another download link, or send you the Demo CD by mail.

Q: What file formats can I use with ZWCAD 2009?

A: With ZWCAD 2009, you can open or save drawings in following formats: dwg, dxf, dwf, dwt. In addition, you can export drawings in these raster and vector formats: bmp, wmf, svg, dwf, eps, pdf, and sat.

Q: Can I develop my own applications with ZWCAD? Can I run AutoLISP directly in ZWCAD?

A: Yes, ZWCAD supports several APIs for developing your own applications: LISP (similar to AutoLISP), VBA, SDS (similar to ADS), and DRX (similar to ARX).

In addition, most AutoLISP applications can be migrated to ZWCAD directly with just little or no modification.

Q: Is there an academic version of ZWCAD?

A: Yes, we are glad to provide academic version of ZWCAD at a low cost. The academic version is the same powerful full-function software as the regular retail Professional version of ZWCAD.

The academic version is offered at a discount to the staff and students of accredited academic institutions; it is not meant for commercial use. To purchase ZWCAD academic version, please contact the local dealer nearest you, or contact us at sales@zwcad.com.

Q: Does ZWCAD support Windows Vista? What are the system requirements of ZWCAD?

A: In general, ZWCAD works well under “ Windows XP / Windows 2003 / Windows Vista ” systems. And at this time, ZWCAD does not support Linux and Mac operating systems.

The system requirements for ZWCAD are as follows:

Processor: Pentium III 800 Mhz or advanced

RAM: 512 MB (recommended)

Video: 1024 x 768 VGA with True Color (minimum)

Q: How can I get the price information of ZWCAD and purchase it?

A: You can get price quotations and make purchases of ZWCAD from your local dealer. For more details about dealers or any other information, please contact us at sales@zwcad.com, or visit our website at www.zwcad.org.

ZWSOFT Gallery

▶ ZWSOFT 10th Anniversary



▶ China CAD Software Solution Tour 2008



▶ ZWCAD Overseas Exhibition (2008)



● ZWCAD at Metaltech (Malaysia)

● ZWCAD at DMS (Japan)



● ZWCAD at ATM (Thailand)

● ZWCAD at DMI (India)

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Technical Support

**Five-star service is part of our commitment to quality.
We want to meet your expectations with excellent support.
To ensure that we provide you with the quickest response, ZWCAD maintains several channels for technical support:**

Technical Mailbox: *tech@zwcad.com*

Please describe your technical problem in detail and attach any relevant information. We will respond to you in three working days after receiving your email.

Instant Messenger: MSN: *tech_zw@hotmail.com* **Skype:** *tech_zw*

Live IM support is available every working day between 8:30 am and 5:30 pm GMT+8.

Chat on zwcad.org: Technical Live Support

To chat with a ZWCAD technician, go to *www.zwcad.org*, and then click the icon for Live Technical Support. This service is available every working day between 8:30 am and 5:30 pm GMT+8. After hours, you may leave a message, and our staff will answer your question on the next working day.

Support Requests:

Submit your requests through our formatted questionnaire at *www.zwcad.org/SupportRequest.asp*. A support engineer will reply to you within two working days.

Help Forum:

ZWCAD hosts an online discussion group at our website. Visit *www.zwcad.org/forum/default.asp* to ask questions or share your expertise in ZWCAD.

More Information:

Consult the SUPPORT section of the ZWCAD website to get more information, such as Demonstration, Documentation, FAQs, and so on.



ZWCAD Worldwide

Argentina Australia Austria Bahrain Belgium Brazil Bulgaria Canada Chile Colombia Costa Rica Croatia Czech Denmark Ecuador Egypt England Estonia Finland France Germany Greece Holland Hungary Indian Indonesia Israel Italy Japan Jordan Kazakhstan Kenya Latvia Lebanon Lithuanian Malaysia Mexico Moldova Montenegro New Zealand Nigeria Norway Oman Pakistan Panama Paraguay Peru Philippines Poland Porto Rico Portugal Qatar Romania Russia Saudi Arabia Serbia Singapore Slovakia Slovenia South Africa South Korea Spain Sri Lanka Sweden Switzerland Taiwan Thailand Turkey UAE Ukraine Uruguay USA Vietnam ...

ZW[®]SOFT

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ZWCAD Reseller

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