



ZWCAD 2018 Official

Product Release Note
ZWCAD PRODUCT TEAM

ZWSOFT | 2017/8/30

Thank you for downloading ZWCAD 2018 Official

August 2017

Dear Friends,

We are so excited that ZWCAD 2018 Official is released now. 2018 comes with a brand-new designed user interface since featured the third generation core. It has many significant new features in some areas of the product. What's more, the stability and efficiency in 2018 are highly improved as well. We believe this new release will help users become more productive than ever.

Also we'd like to thank you for your participation in our Alpha and Beta tests this two months.

This release delivers stability and efficiency tests, new features and improvements, fixes and limitations in ZWCAD 2018 Official.

Sincerely,

Your ZWCAD Team

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ZWCAD 2018 Official Release Note

VERNUM= 2017.08.22(21234)

Overview

This release includes the stability and efficiency tests in ZWCAD 2018 firstly, and then describes the new features and improvements, finally it will show the bug fixes and the known issues with workarounds.

ZWCAD 2018 Official has the following new features and improvements:

New features:

1. New user interface
2. Adds Partial CUI, Toolbar and more customization elements in CUI function
3. Adds QUICKCALC command, support quick calculator function
4. Adds AIDIMFLIPARROW command, to flip over arrows of dimensions
5. Adds SOLPROF command, to create profile for 3D solid
6. Adds MVSETUP command, to setup drawing specification, insert title, create and adjust layout viewports
7. Adds OOPS command, to undo erase operations
8. Adds IMAGEQUALITY command, to control the quality of image display
9. Improves Help document readability

Improvements

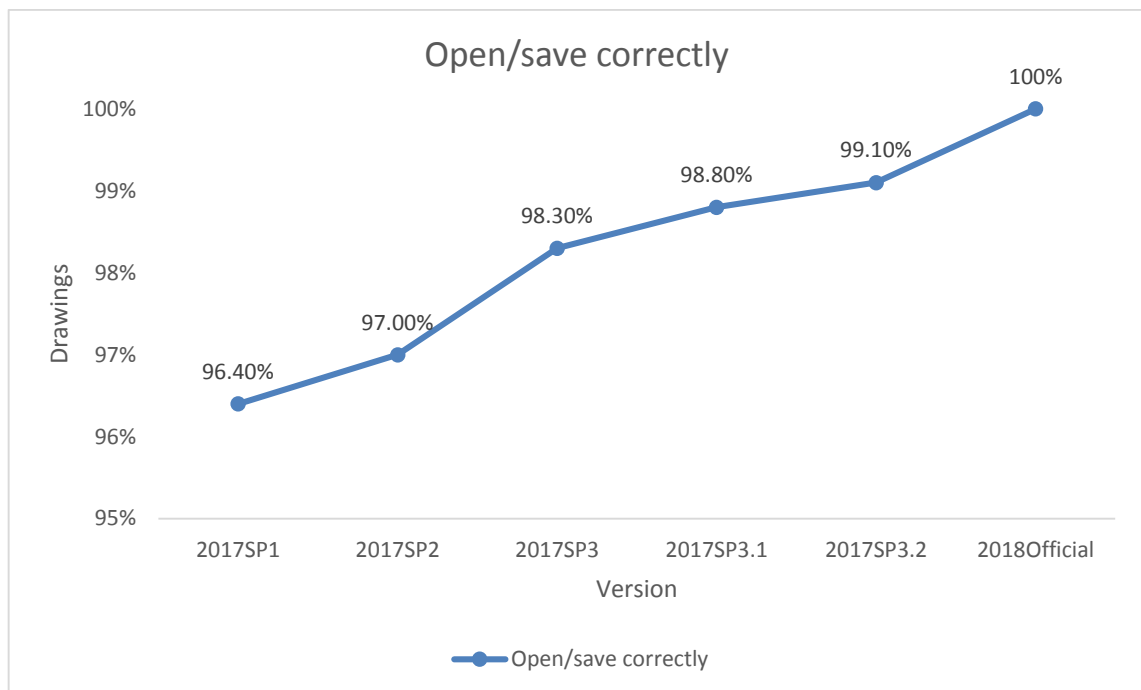
1. Supports to scale in High-Resolution Displays correctly
2. Supports to display all results in Find list
3. Supports to change Grid major and minor lines colors
4. Improves by previewing the value in Eattedit dialog box
5. Improves the Publish function with Publish options
6. Supports to snap apparent intersection in snap mode
7. Improves the OLE grip usability
8. Simplifies installation process

Stability & Efficiency

The following section describes the stability and efficiency tests in this release.

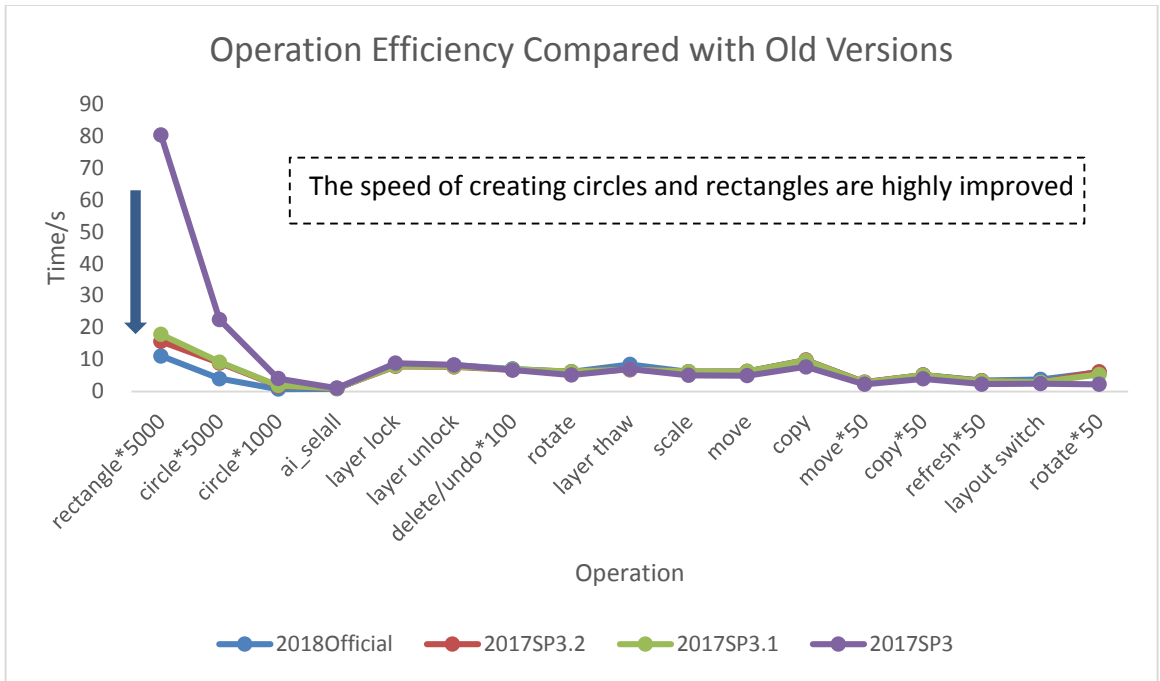
Stability Test

2018 Official becomes more stable than ever, throughout the automatic test by monitoring the error during Open/Save operations in over 1266 complex drawings. Specifically speaking, the Open/Save correct rate reaches to 100% compared with major versions of ZWCAD 2017.

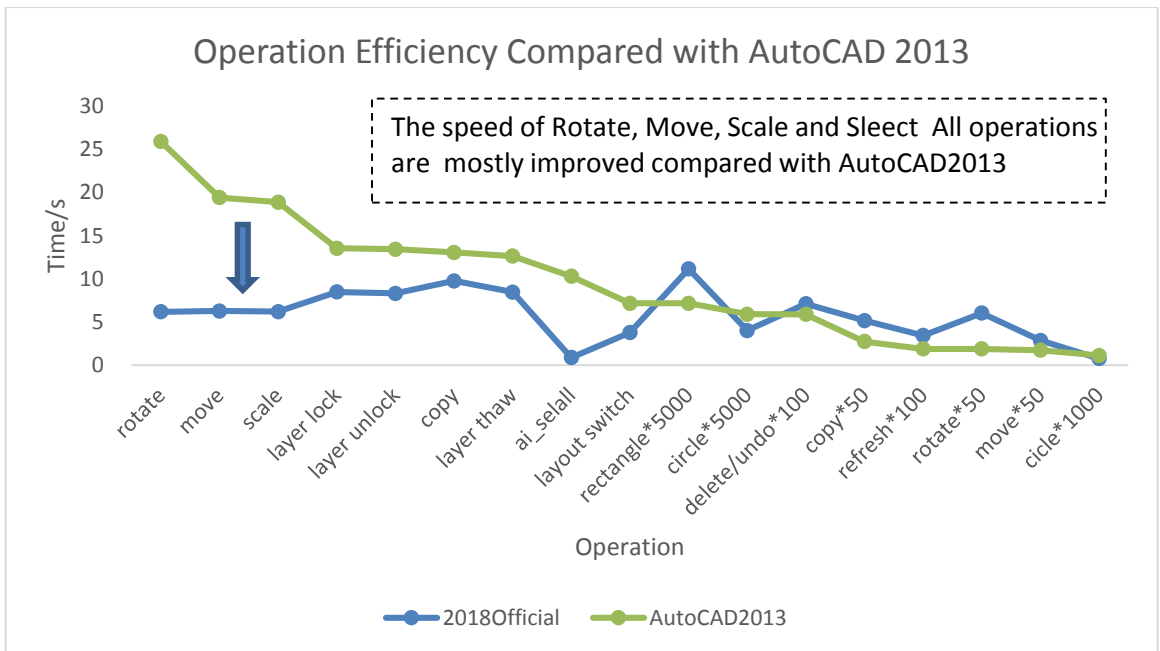


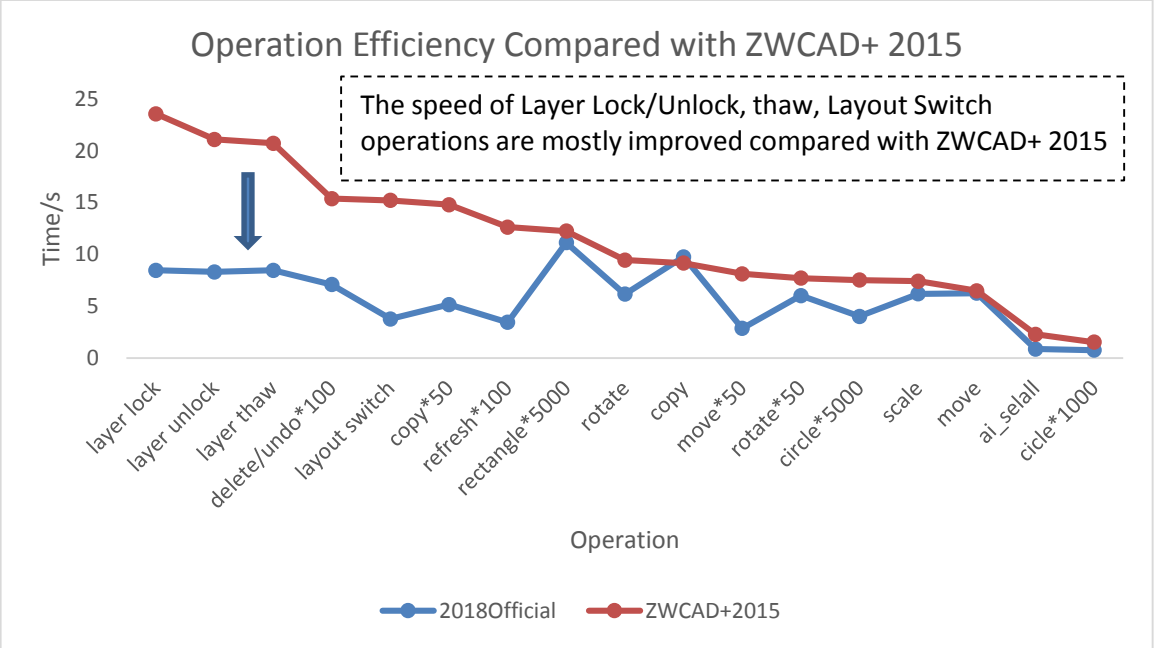
Efficiency Test

2018 Official improves the speed of creating circles and rectangles, and maintains the high efficiencies for other frequently used operations, such as Layout switch, Layer thaw, Layer lock/unlock, Array, etc., according to the automatic test with multiple comprehensive drawings, as the following picture shown.



Compared with AutoCAD 2013 and ZWCAD+ 2015, ZWCAD 2018 Official also improves most of operations according to the test, as the following tables shown:





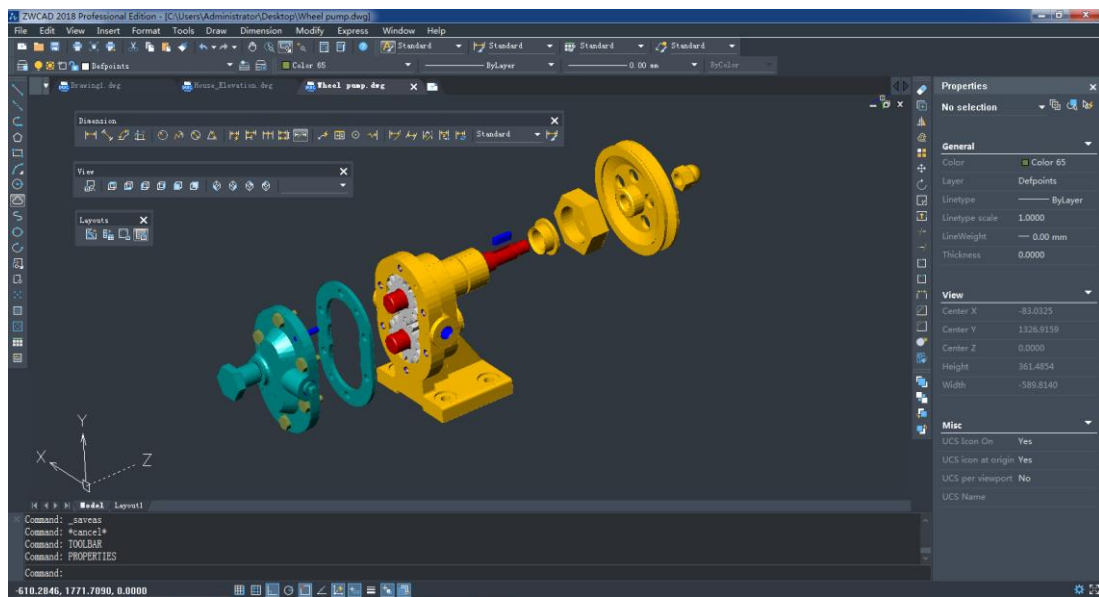
New Features

The following section describes some details of new features in this release

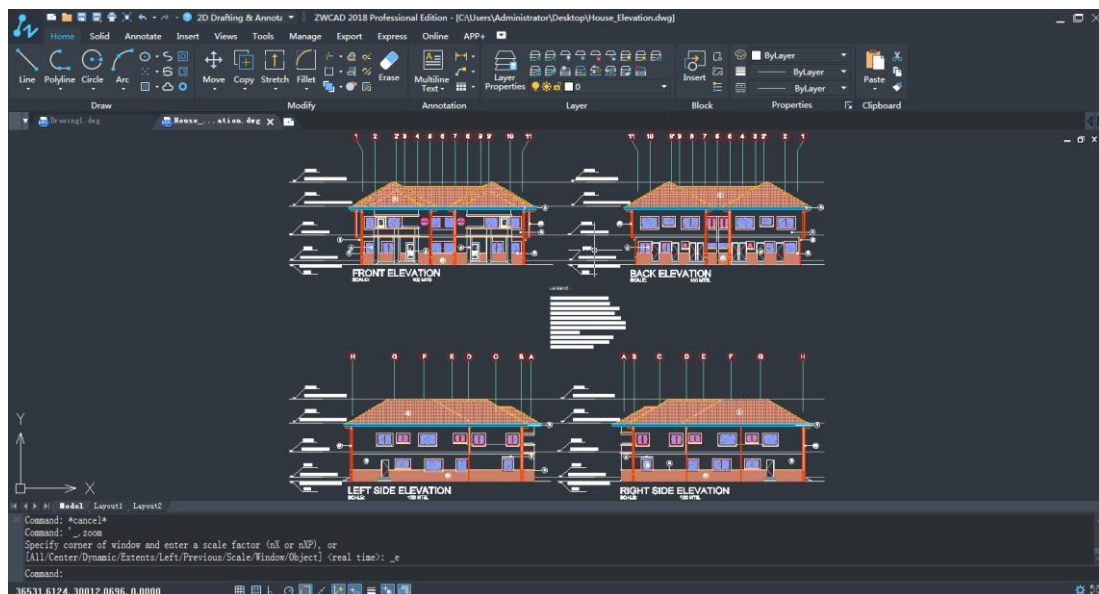
New user interface

ZWCAD 2018 adopts a brand new designed UI in dark theme, which the lower brightness and higher contrast of such design can greatly reduce the visual fatigue from long time drafting.

The following displays the Classic and 2D Drafting & Annotation workspaces.



Classic workspace

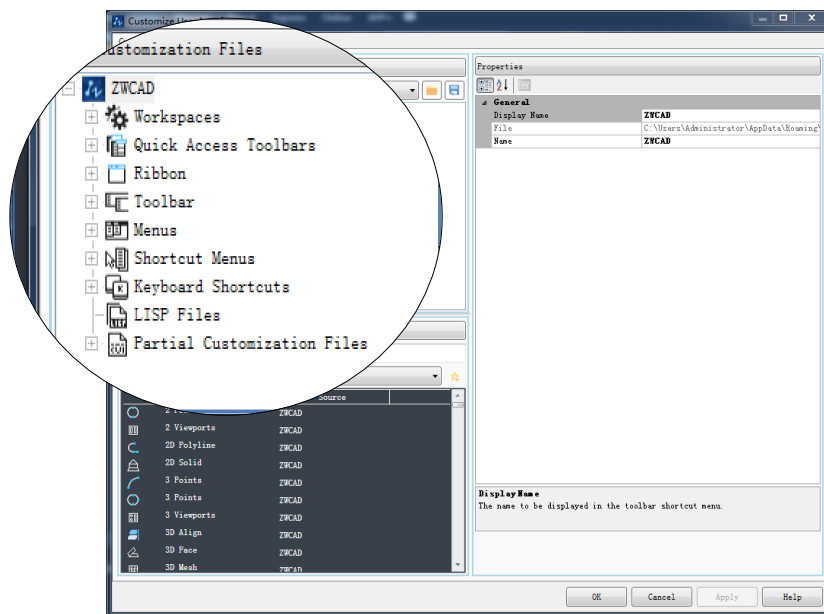


2D Drafting & Annotation Workspace

Rich Customization for User Interface

ZWCAD 2018 provides a rich customization for users, including the following elements:

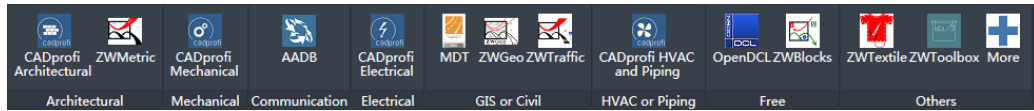
- Workspaces
- Quick Access Toolbars
- Ribbon
- Toolbar
- Menus
- Shortcut Menus
- Keyboard Shortcuts
- LISP Files
- Partial Customization Files



CUI command dialog box

Compared with the 2017 version, which only supports Workspaces, Quick Access Toolbars and Ribbon, now ZWCAD 2018 is available to customize almost all the user interface elements. Specifically:

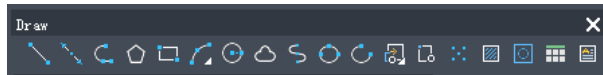
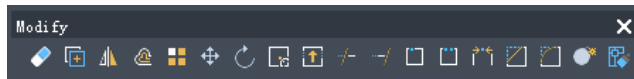
- **Partial Customization Files (Partial CUI)**
Partial CUI is compatible to the main .cuix file, i.e., users can load the partial CUI file together with the main .cuix file, or unload it from the current workspace. It is mostly used for developers to customize their .cuix file for their applications, or users can also use it to make their own interface. The following is an example to use partial CUI to create the APP+.



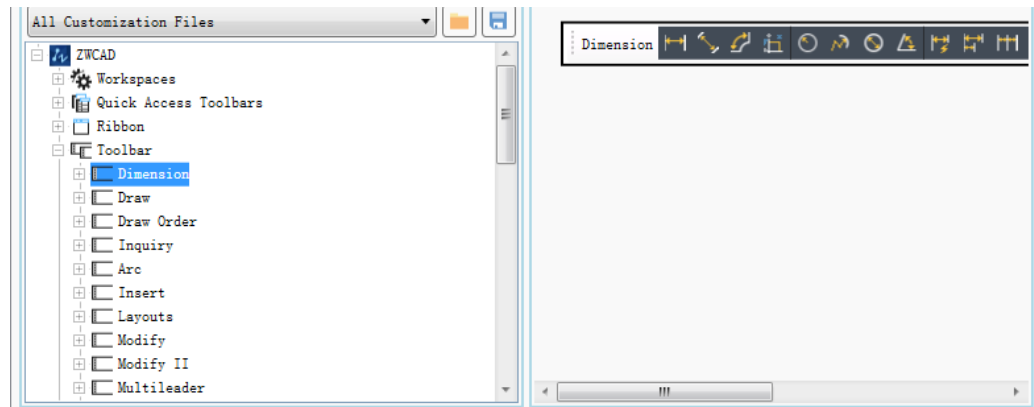
APP+ interface in ZWCAD

- **Toolbar**

Toolbars now are available to be customized via CUI function. Users can input Customize command and then select Toolbar option, or directly input CUI command to open the Toolbar customization dialog box.



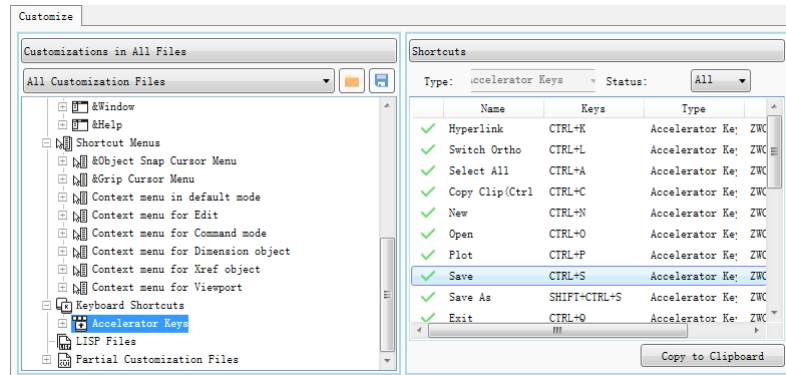
Toolbars in ZWCAD



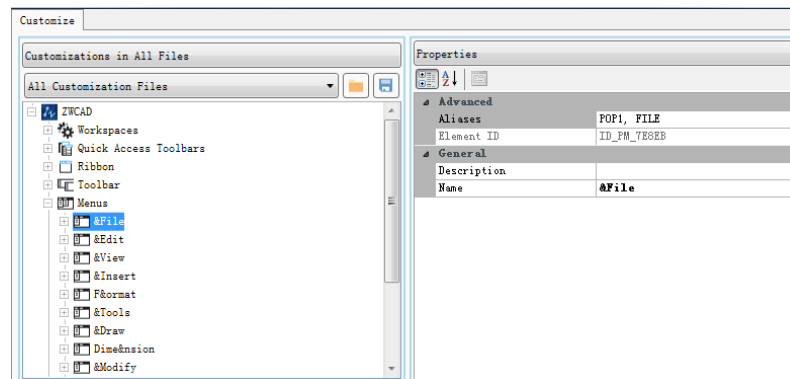
Customize toolbars in CUI

- **Menus and Shortcuts**

ZWCAD 2018 also adds menus, shortcut menus, keyboard shortcuts and LISP files in CUI function. The old method to customize menu by writing the MNU files and loading via Menuload command is still available, but to include the menu customization into CUI will make users or developers more easily to create customization files.



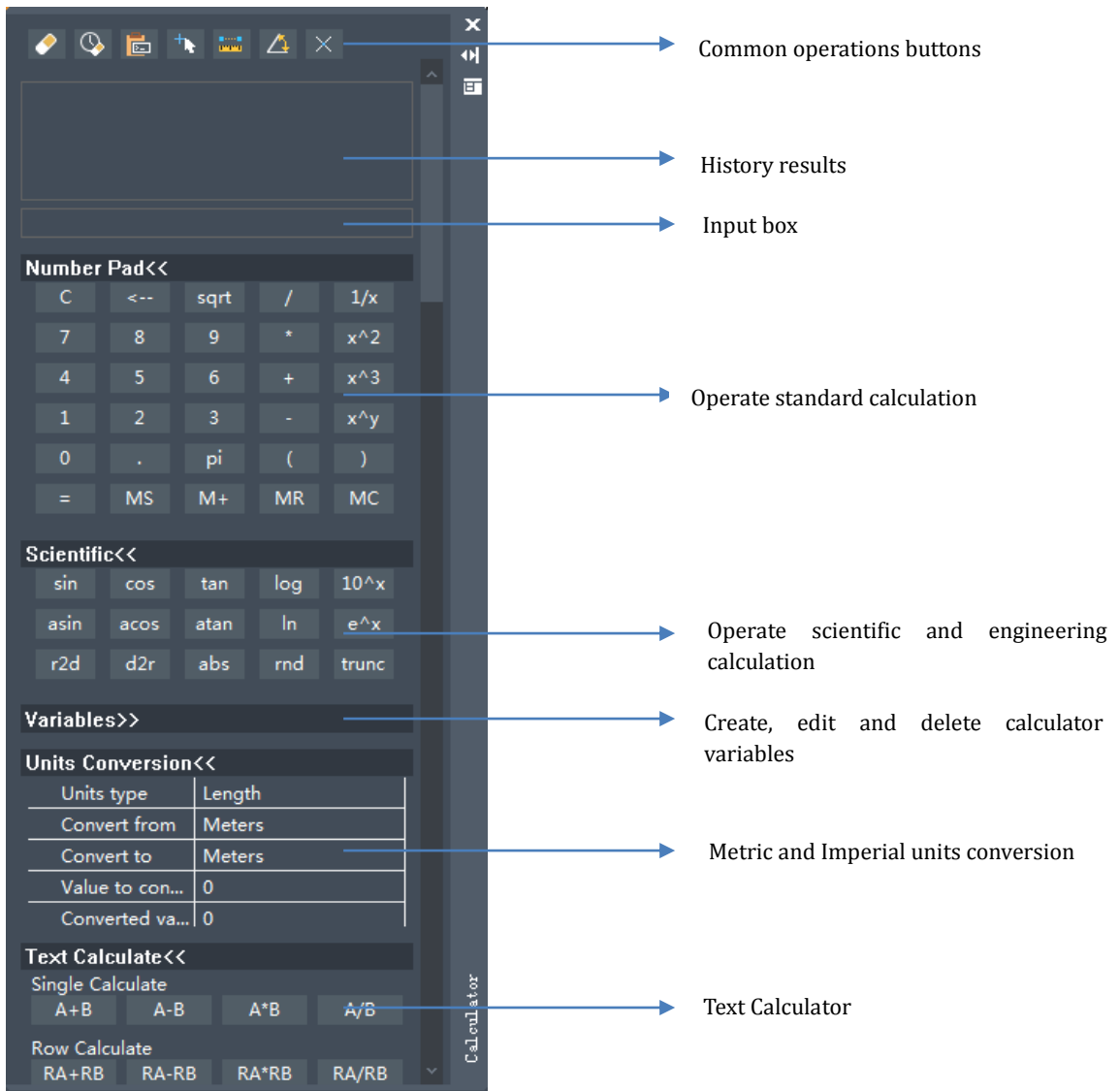
Keyboard shortcuts customization



Menus customization

Quick Calculator

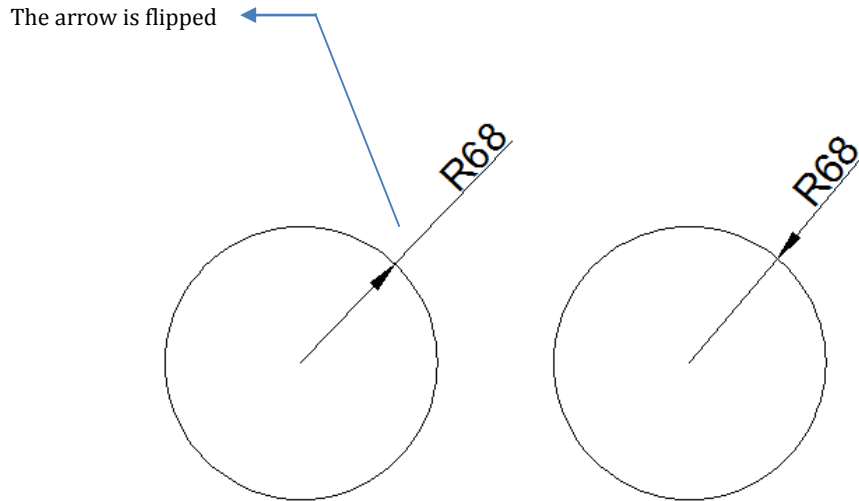
ZWCAD 2018 now supports quick calculator function. Beside the basic calculating function, it also supports scientific calculation, unit conversion, variables and numeric text Calculation.



Quick Calculator interface

Dimension Arrow Flip

ZWCAD 2018 supports flip over arrows of a dimension with AIDIMFLIPARROW.



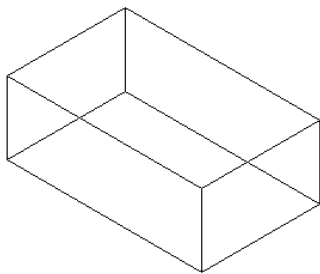
To flip the arrow of the dimension

Solid Profile

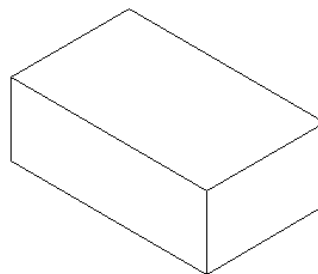
With the SOLPROF command, users can create a 2D representation of the 3D solid projected onto the plane.

For example, to create the profile for the following box:

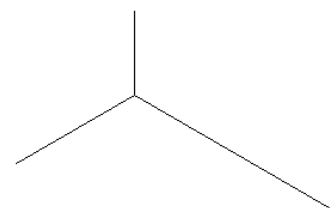
Command: SOLPROF
Select objects: <Select 3D Solid to generate profiles>1 found
Display hidden profile lines on separate layer? [Yes/No] <Y>:Y
Project profile lines onto a plane? [Yes/No] <Y>:N
Command:



3D Box



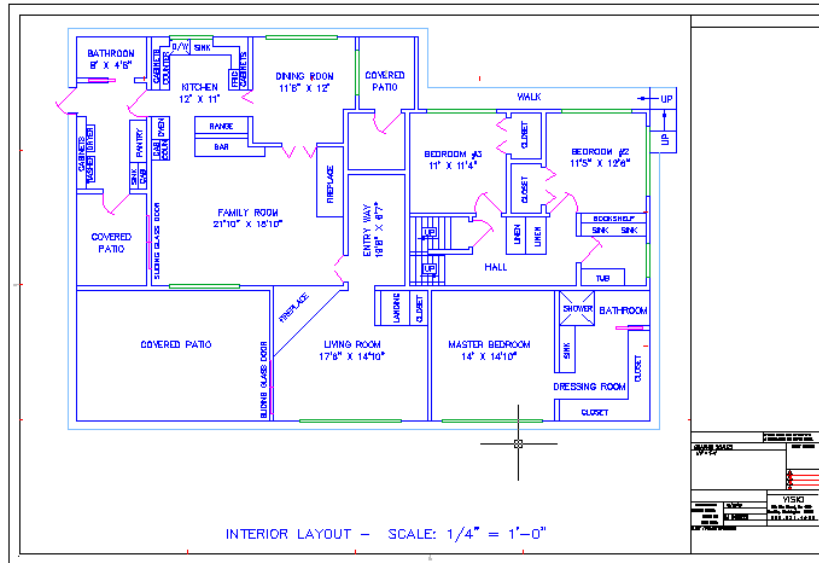
Visible Lines



Hidden Lines

MVSETUP

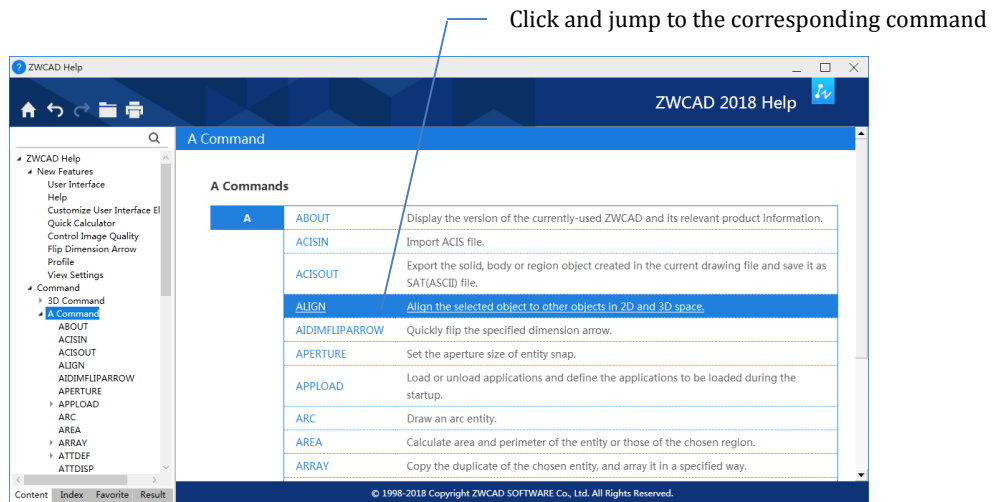
With the MVSETUP command, users can set the drawing specifications, insert the title blocks, create and adjust layout viewports, etc.



An example to create frame and title

Improves Help Document Readability

The ZWCAD Help is reconstructed in this version, so users have a better experience on using help document to work. Users can directly click the links in the content areas, and it will jump to corresponding commands, variables or any other keyword that users expect to see.



Interactive user interface

New Commands

- **AIDIMFLIPARROW:** Quickly flip the specified dimension arrow
- **CUILOAD:** Load the specified customization file (CUIx)
- **CUIUNLOAD:** Unload the specified customization file (CUIx)
- **CUSTOMIZE:** Customize the short key for commands and the toolbars
- **IMAGEQUALITY:** Control the display quality of images
- **MVSETUP:** Sets the drawing specification, insert the title block, create and adjust layout viewports
- **OOPS:** Restore the last objects erased by ERASE command
- **QUICKCALC:** Open or close the quick calculator
- **SOLPROF:** Create the 2D profile for 3D solid object
- **SHADE:** Get the solid entities shaded and displayed in the current drawing
- **3DOPEN:** Converts the current DWG/DXF drawing into Z3 format and starts ZW3D automatically to open this drawing

New System Variables

- **ADCSTATE:** Controls whether the current state of Design Center window is open or close
- **FRONTZ:** Stores the distance from front clipping plane to the target plane for the current viewport, in drawing units only when the VIEWMODE system variable is set to 1 and “the front clip-not-at-eye” is also set to 1
- **GRIDMAJOR:** Controls the frequency compared between major grid and minor grid. The range of effective value is from 1 to 100

Improvements

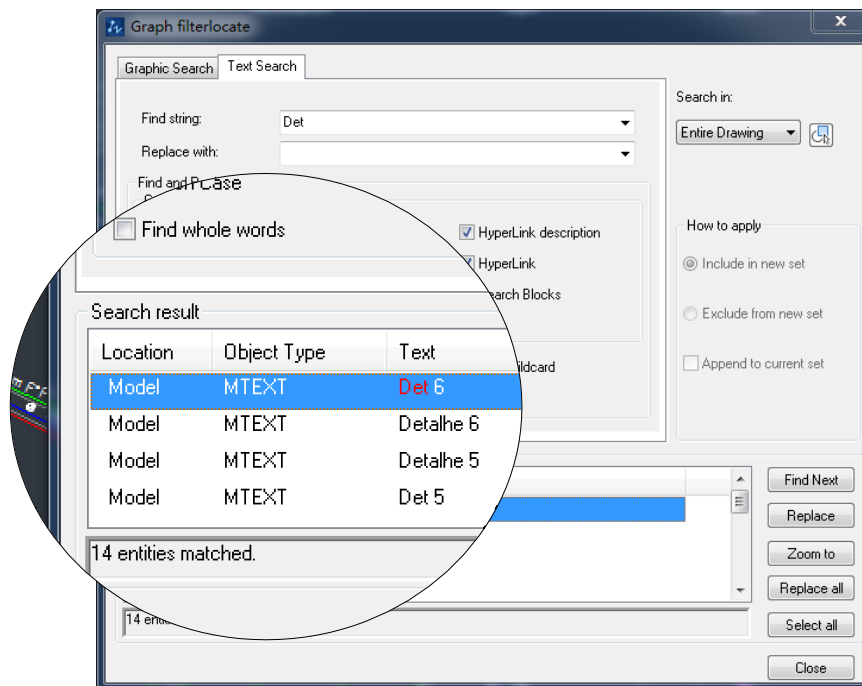
The following section describes the improvements in this release.

Better supports for High-Resolution Displays

ZWCAD 2018 now is compatible with high-resolution 4K displays. Users can use every pixel on their screen without worrying if the interface will scale correctly. Open ZWCAD in such monitor, the menus, ribbon, command line and other elements will be scale correctly.

Displays all results in Find list

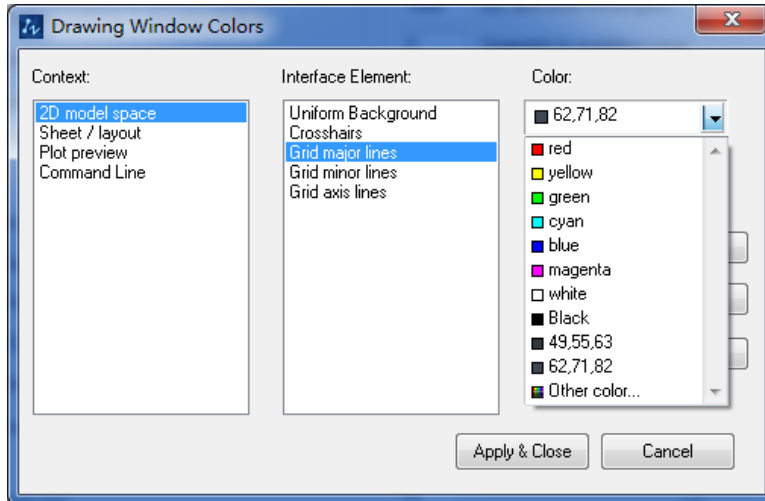
Now ZWCAD supports to display all the matched results in the Find dialog box



Display all the results in Find dialog box

Changes Grid color

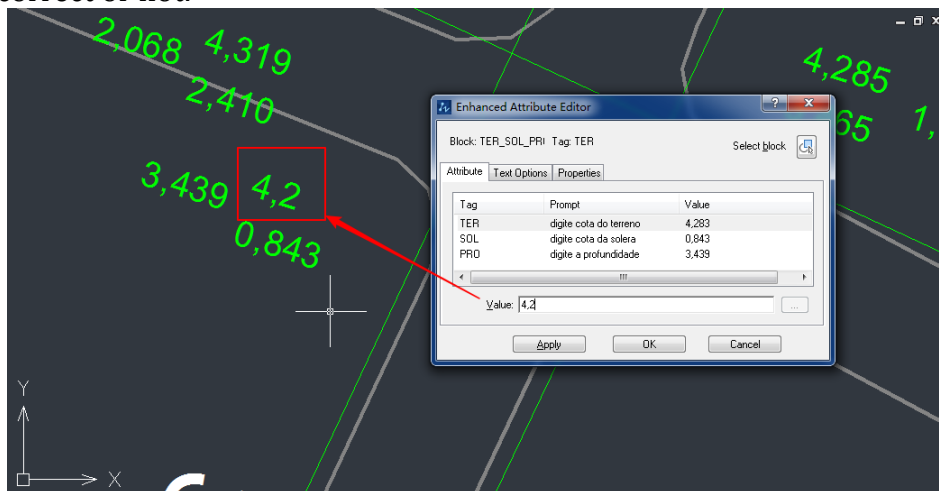
Now users can change the grid color as they want, including the major and minor colors.



Change Grid lines colors

Attributes preview in Eattedit dialog box

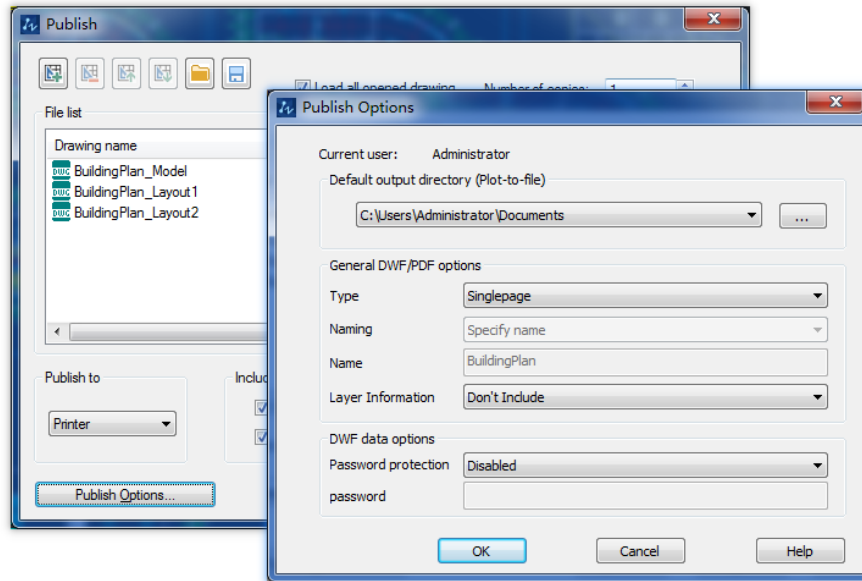
When editing the attribute in the Enhanced Attribute Editor dialog box, users can see the result preview in the drawing area while inputting values in the text box. This preview can help users to instantly and intuitively check whether the value is correct or not.



Preview the result in drawing area

Adds Publish option in Publish

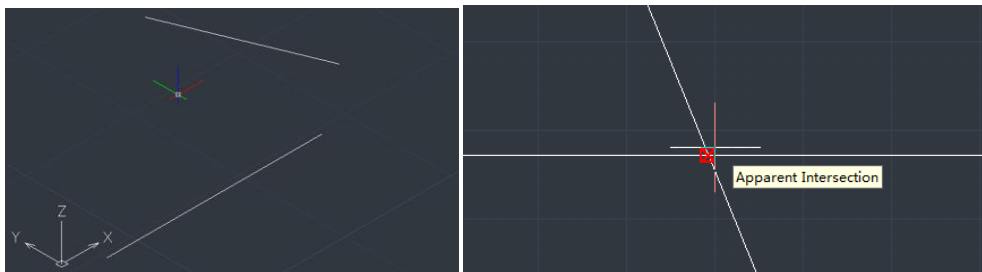
When users publish a project, they can click the Publish Options in the Publish dialog box, which they can set up the default output directory, single or multiple pages, file information and DWF password protection.



Publish option dialog box

Improves snap mode with apparent intersection

ZWCAD 2018 now is available to snap the apparent intersection. Mostly apparent intersection is used in the 3D models and views. When the objects in 3D views are not actually intersected, but in the current view, they are intersected, as the following picture shown.



Snap the apparent intersection

Improves OLE grip usability

Now ZWCAD 2018 can snap the grip of the OLE object and change the size. When select the OLE object and change the "Lock aspect" item in the Properties, for example, change "Lock aspect" to 0, then width and height will be adjusted separately, while 1 they will maintain the original proportion.

Amount	Name	RSOC	MAT	DIA	DIS	INC
1	MAT_DIA_DIS_INC	C. A.	%%c	1. 20C	100.18	i=0, 00055
1	MAT_DIA_DIS_INC	C. A.	%%c	1. 20C	102.65	i=0, 00035
1	MAT_DIA_DIS_INC	C. A.	%%c	1. 20C	117.6	i=0, 00035
1	MAT_DIA_DIS_INC	C. A.	%%c	1. 20C	89.9	i=0, 00037
1	MAT_DIA_DIS_INC	C. A.	%%c	1. 20C	95	i=0, 00033
1	MAT_DIA_DIS_INC	C. A.	%%c	1. 20C	97.4	i=0, 00032
1	MAT_DIA_DIS_INC	C. A.	%%c	1. 50C	119.3	i=0, 00031
1	MAT_DIA_DIS_INC	C. A.	%%c	1. 50C	121.14	i=0, 00031
1	MAT_DIA_DIS_INC	C. A.	%%c	1. 50C	58.55	i=0, 00167
1	MAT_DIA_DIS_INC	C. A.	%%c	1000n	102.2	i=0, 00033
1	MAT_DIA_DIS_INC	C. A.	%%c	1000n	104.98	i=0, 00045
1	MAT_DIA_DIS_INC	C. A.	%%c	1000n	72.14	i=0, 00065

Change OLE size when Lock aspect is 0

Simplifies installation process

To install ZWCAD, now only one click can finish all the processes, no need to click next step several times.



ZWCAD install process

API Improvements

New and fixes functions in LISP:

No.	Function Name	Modify	ID
1	VI-arx-import	Add	T13934
2	Setenv	Fix	T14104
3	VI-vbaload	Fix	T13688
4	VI-reactors	Fix	T14692
5	vlax-safearray->list	Fix	8905
6	Vlax-safearray-type	Fix	T14443

7	ssget	Fix	T13607
8	Vlr-editor-reactor	Fix	T14238
9	Vlax-invoke	Fix	T14189
10	getstring	Fix	T14186
11	entlast	Fix	T14183
12	Prin1	Fix	T14012
13	Vl-load-com	Fix	T14051
14	vla-put-coordinates	Fix	T13977
15	menucmd	Fix	T13996
16	vlax-curve-getpointatdist	Fix	T13878
18	initget	Fix	T13870
19	vlr-owner-remove	Fix	T13513
20	vlax-invoke	Fix	T13472
21	type	Fix	T13364
22	Vlr-reactors	Fix	T13364
23	Vlr-add	Fix	T13364
24	Vlr-reactions	Fix	T13364
25	Vlr-remove	Fix	T13364
26	Vlr-remove-all	Fix	T13364
27	Vlax-get	Fix	T13380
28	Vlax-make-variant	Fix	T13274

New and fixes functions in VBA:

No.	Function Name	Modify	ID
1	ZcadDictionary. GetObject Method	Fix	T14393
2	Utility .AngleFromXAxis Method	Fix	T14047
3	Utility .GetEntity Method	Fix	T13805
4	Utility. GetAngle Method	Fix	T13803
5	Utility. GetCorner Method	Fix	T13803
6	Utility. GetDistance Method	Fix	T13803
7	Utility. GetInteger Method	Fix	T13803
8	Utility. GetKeyword Method	Fix	T13803
9	Utility. GetOrientation Method	Fix	T13803
10	Utility. GetPoint Method	Fix	T13803
11	Utility. GetReal Method	Fix	T13803
12	Utility. GetString Method	Fix	T13803

13	Utility. GetSubEntity Method	Fix	T13803
14	Utility. GetInput Method	Fix	T13804
15	object.SendCommand Method	Fix	T13044
16	ZcadMenuGroup.Toolbars Property	Fix	T13832
17	object.Dictionaries Property	Fix	T14066

New and fixes functions in ZRX:

No.	Function Name	Modify	ID
1	ZcDbSpline::toPolyline	Add	330
2	ZcEdInputPointMonitor::monitorInputPoint	Fix	T14075
3	zcedEntSel	Fix	T14351
4	ZcGeEllipArc3d::closestPointTo	Fix	8493
5	ZcDbDatabase:: readDwgFile	Fix	T14345
6	CZdUiDockControlBar::Create	Fix	T14242
7	zcdbEntLast	Fix	T14183
8	CZdUiDialog::SetControlProperty	Fix	T14082
9	ZcDbRasterImage	Fix	8225
10	zcedCommand	Fix	8224
11	zcedSetVar\zcedRedraw	Fix	7735
12	zcGeEllipArc3d:: intersectWith	Fix	7671
13	ZcDbDatabase::setPelevation	Fix	7584
14	ZcDbTable::setBlockTableRecordId	Fix	T11924
15	zcedDragGen	Fix	3162
16	ZcDbEntity::getGeomExtents	Fix	1617
17	IZcadPopupMenu::put_Macro	Fix	T13947
18	IZcadPopupMenu::put_Enable	Fix	T13947
19	IZcadPopupMenu::put_Check	Fix	T13947
20	IZcadPopupMenu::RemoveFromMenu Bar	Fix	T13947
21	IZcadPopupMenu::get_OnMenuBar	Fix	T13947

New and fixes functions in .NET:

No.	Function Name	Modify	ID
1	BlockReference.GetDynamicBlockProperties Method	Add	T14158
2	CircularArc2d.Set Method	Add	T14133

3	DatabaseServices.Curve.ReverseCurve Method	Add	T14049
4	DatabaseServices.Curve.GetGeCurve Method	Add	T14016
5	DatabaseServices.Polyline.JoinEntities Method	Add	T13663
6	CircularArc3d.IntersectWith Method	Fix	T14250
7	MText.Text Property	Fix	T13741
8	PolylineCurve2d.StartParameter Property	Fix	T13735
9	PolylineCurve2d.EndParameter Property	Fix	T13735
10	PolylineCurve2d.StartPoint Property	Fix	T13735
11	PolylineCurve2d.EndPoint Property	Fix	T13735

Bug Fixes

There are 709 bug fixes in ZWCAD 2018 Official. The following list contains parts of bug ID and corresponding descriptions for issues fixed in this release.

Bug ID	Description
Open and Save	
T13987	Open: Not able to open dxf files whose DWGCODEPAGE is UTF-8
T13503	Open: New text height is not kept as it should
User Interface	
T11315	Menu: Cannot parse the first level menu character "<-<-<" correctly
T12594	Menuload\flyout: The triangle sign is not clear for flyout menu
T14479	menuload:cannot recognize the submenu in attached menu file
Design	
T11336	Mtext: After press underline button in MTEXT editor, the input "%U" is not parsed correctly
T13589	hatch:cannot change scale of hatch which is not in the pattern file
T14249	plot: support ISO full bleed plot format
API	
T11417	Lisp\entmake: Failed to create block by entmake function
T14128	ZRX: The attachment program will be stuck when running without focus
T13044	vba:SendCommand does not wait for next instruction

**For the complete list of bug fixes list, you can visit the following website:*

<https://zwcad.freshdesk.com/solution/articles/24000013922-what-s-fixed-in-zwcad-2018-official>

Limitation and notes

The following section describes limitations and workarounds (where applicable) about this release.

Bug ID	Description	Workaround
T14802	UCS: Cannot create and adjust UCS in the first time	When open ZWCAD, switch to layout first and then use UCS, then the UCS can be created.
--	The manual activation and return website is not available	Go to the website and login with license: http://support.zwcad.net:8888/flexnet/operationsportal/logon.do