



ZWCAD 2017 SP1

Product Release Note
ZWCAD PRODUCT TEAM

ZWSOFT | 2016/10/2

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ZWCAD 2017 SP1 Release Note

32bit: VERNUM=2016.09.30(10203)_Win32

64bit: VERNUM= 2016.09.30(10203)_x64

It's almost a month since the last time we released ZWCAD 2017 Update2, here I am very glad to tell you that ZWCAD 2017 SP1 is ready today.

ZWCAD 2017 SP1 is aimed to improve the program utility for our customers' all day work, so we combined a lot of bug fixes, API improvements and also some most wanted new commands/features in this version.

Below chapters will give you a brief introduction about the stability/efficiency conditions and what's new in this SP1 version.

1 Stability & Efficiency

1.1 Stability Monitoring

Stability is the most important aspect for an industry software. The ZWCAD R&D team has adopted a series of measures, such as CR report mechanism and code optimization, to enhance the stability of ZWCAD 2017.

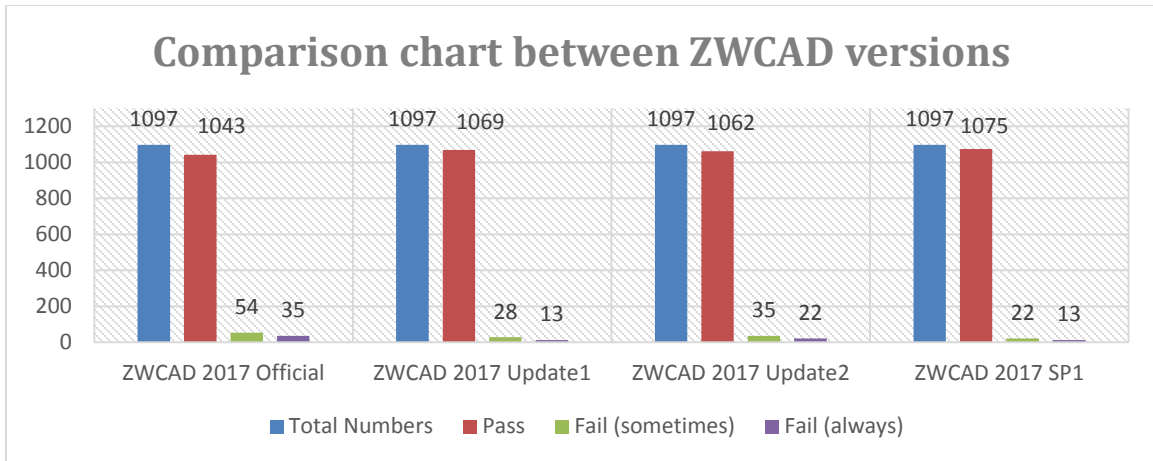
We have collected hundreds of thousands of drawings different industries for stability test. Our latest test result shows that the stability of the SP1 version is slightly better than the previous version.

1.1.1 Vertical comparison:

Operation: Open & Save

Number of samples: 1097 drawings

Drawing size: from 1M to 200M+



As you can see, ZWCAD 2017 becomes more and more stable from Official to SP1.

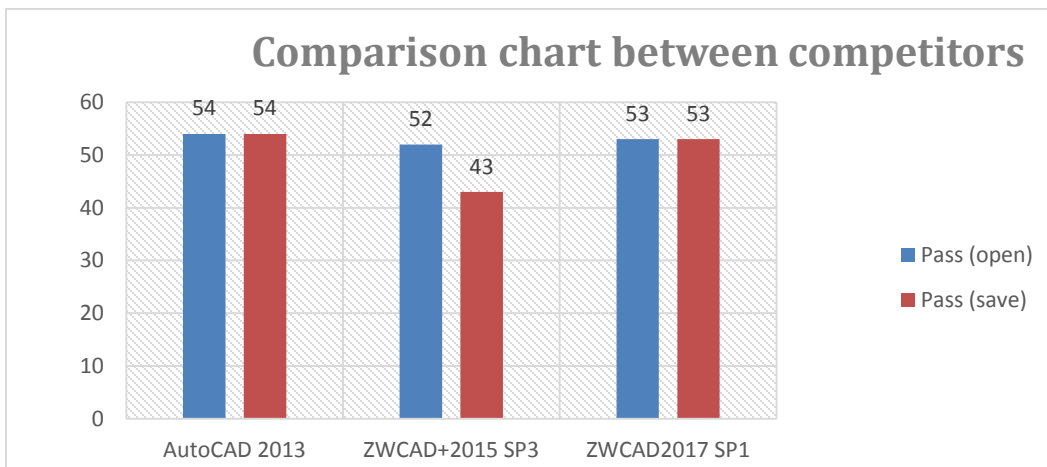
ZWCAD 2017 SP1 opens 1075 drawings among 1097 test drawings, opens **13 more** drawings than the previous Update1 version.

1.1.2 Horizontal comparison:

Operation: Open & Save

Number of samples: 54 drawings

Drawing size: from 1M to 200M+



As you can see, for the 54 drawing samples, ZWCAD 2017 SP1 opens and saves 53 drawings correctly, it is much better than ZWCAD+ 2015 SP3.

1.2 Efficiency monitoring

Our R&D team newly develops a new kernel to bring better performance for ZWCAD

2017.

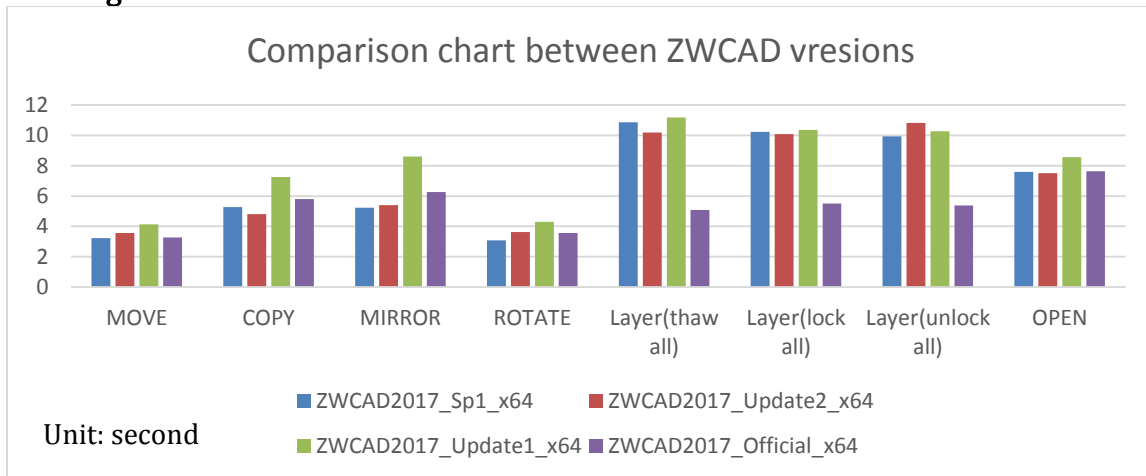
The efficiency for most frequently used commands, such as move, copy, rotate are greatly improved. And the new 64bit version brings the ability to deal with some really big drawings.

1.2.1 Horizontal comparison:

Operation: Some most frequently used commands such as move, copy, mirror, etc.

Number of samples: 24 drawings

Drawing size: From 1M to 30M+



Operation efficiency keeps stable in ZWCAD 2017 SP1, and some are improved slightly in SP1 when compared the previous versions.

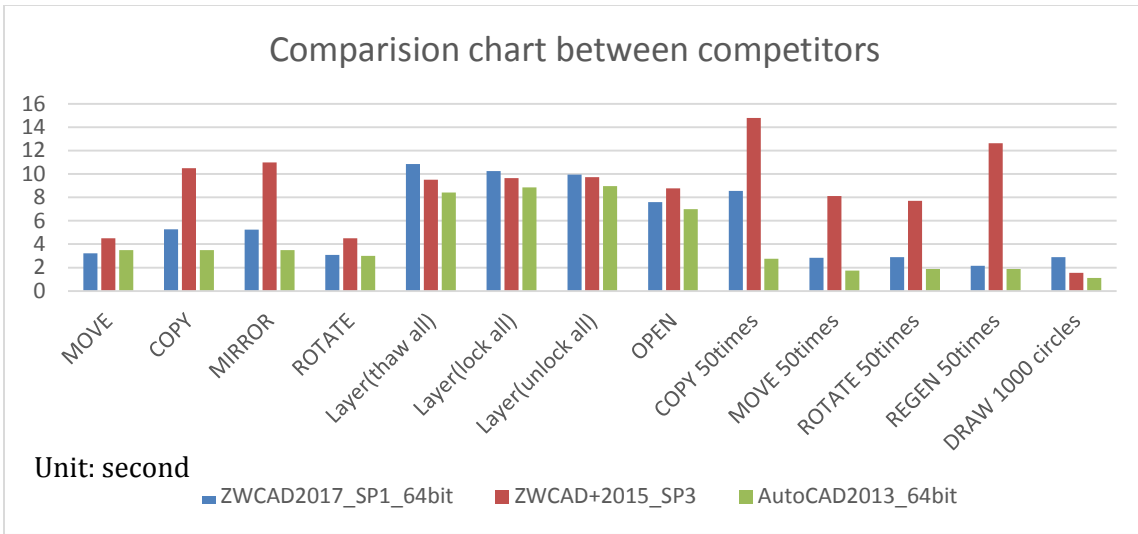
Note: As ZWCAD 2017 Update1 have newly added reactor mechanism for API, so you can see Update1 efficiency drops a lot in this chart.

1.2.2 Horizontal comparison:

Operation: Some most frequently used commands such as move, copy, mirror, etc.

Number of samples: 24 drawings

Drawing size: From 1M to 30M+



According to our sample test, most operations in ZWCAD 2017 SP1 are much better than ZWCAD+ 2015 SP3, while slightly lower than AutoCAD 2013.

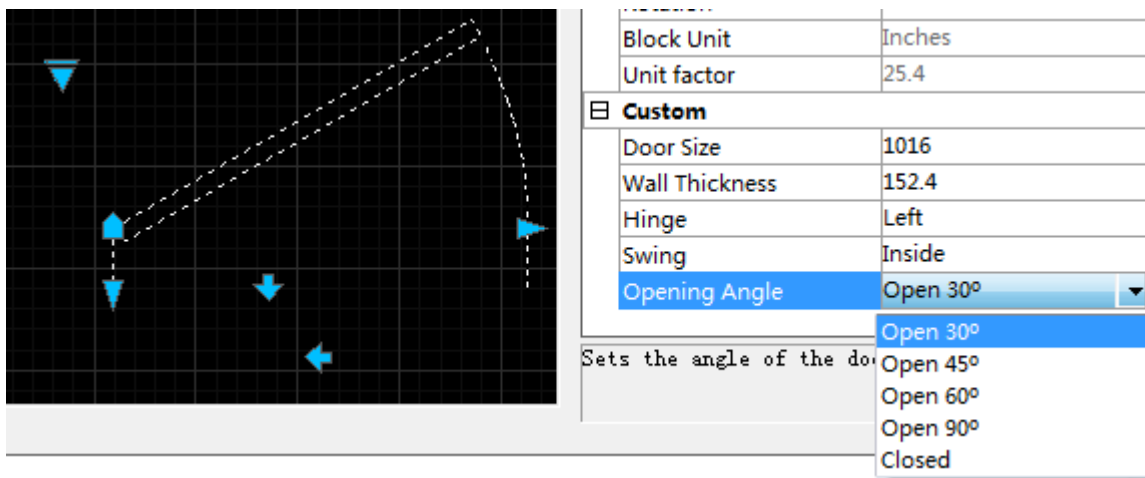
2 What's New

Compared with the previous ZWCAD 2017 Update2 version, the enhancements are listed as below:

2.1 New/Enhanced Features

2.1.1 Dynamic Block Custom Parameters Editing in Properties Panel

Besides manipulating the geometry of the dynamic block by custom grips, now ZWCAD 2017 SP1 also supports editing the custom parameters in Properties panel.



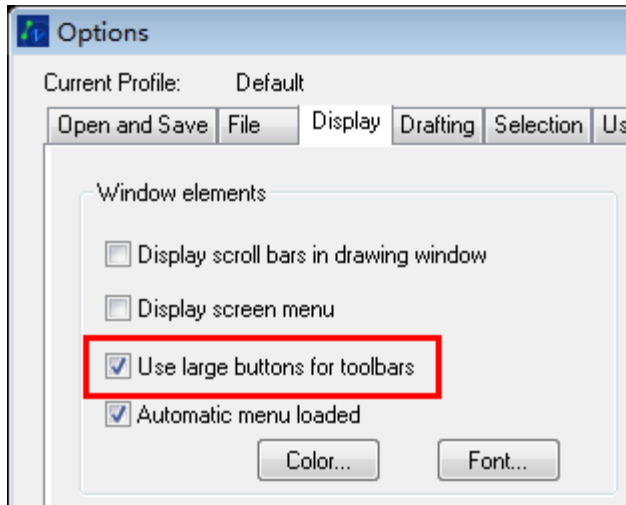
2.1.2 Copy ZWCAD Objects and Paste to Word/Excel

In ZWCAD 2017 SP1, users can select the objects they want to insert, then copy and paste to the Word/Excel file directly.

This feature is very helpful during product instruction manual creation.

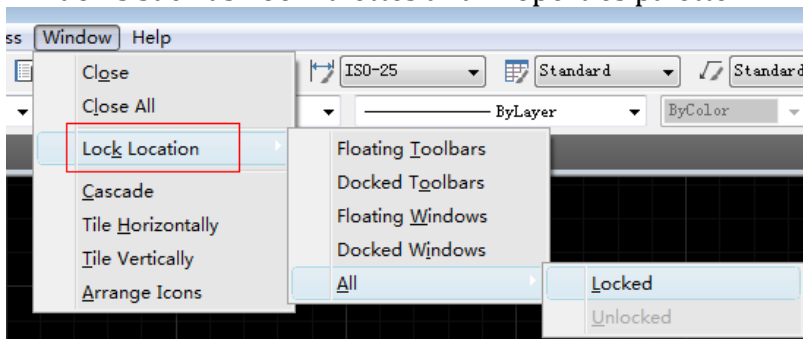
2.1.3 Large Buttons for Toolbars

It supports displaying buttons in a larger format at 32 by 32 pixels, thus provides better compatibility for high-resolution screen.



2.1.4 Lock Location

ZWCAD 2017 SP1 allows you to lock the location and size of toolbars, and docked windows such as Tool Palettes and Properties palette.

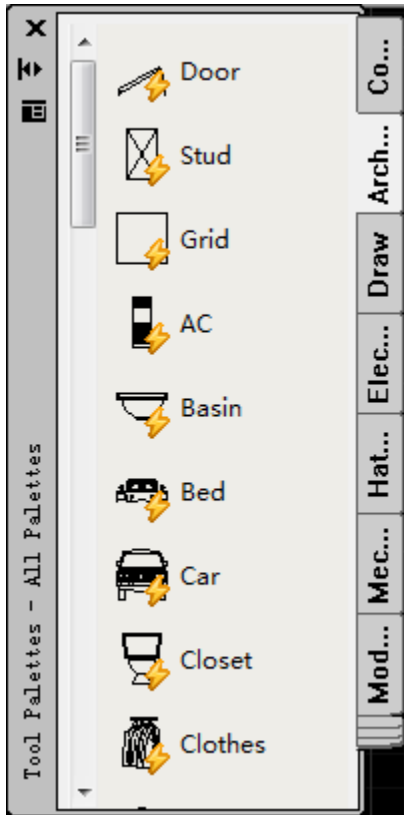


System variable to invoke this feature: LOCKUI

2.2 New/Enhanced Commands

2.2.1 TOOLPALETTES

This command opens the "Tool Palettes" window. Tool Palettes use tabs to organize, share, and place commands, blocks, and other tools.

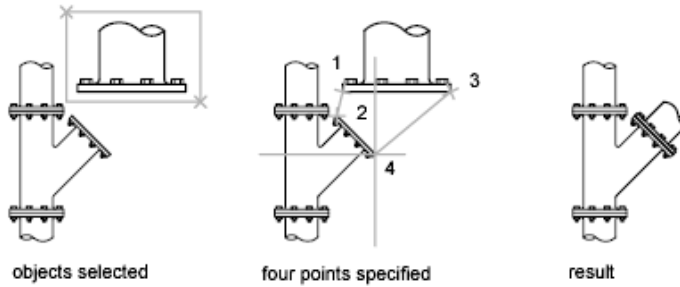


2.2.2 TOOLPALETTECLOSE

Closes Tool Palette window.

2.2.3 ALIGN

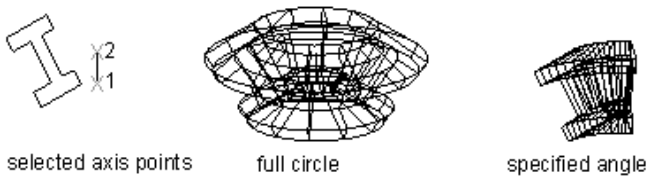
Selects objects in 2D and 3D to align, adds source points to the objects which need to be aligned, and adds destination points to the objects which need to be aligned to source objects.



The ALIGN command is among the most wanted commands after the official release of ZWCAD 2017, as it is quite convenient to adjust the size and position of an inserted block with this command.

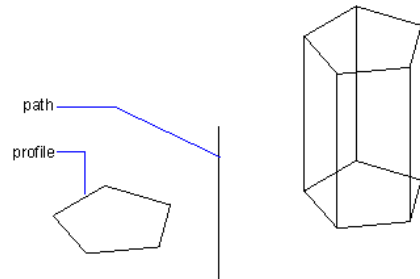
2.2.4 REVOLVE

This command creates solids by rotating the selected 2D entities around the selected axis.



2.2.5 EXTRUDE

Now the “Closed Polylines” are supported as the selected objects to extrude.



2.2.6 SPLINEDIT

ZWCAD 2017 SP1 newly adds to an option to command “SPLINEDIT”, which allows users to convert the spline to a polyline.

```

Command: SPLINEDIT
Select a spline:
Enter an option [Fit data/Close/Move vertex/convert to Polyline/Refine/rEverse/Undo/eXit] <eXit>:

```

2.3 New System Variables

The new system variables are listed as below:

Variables	Description
LOGFILEMODE	Control whether the log file is maintained and the contents of text window are written to the log file.
LOGFILENAME	Set the file name of the log file for the current drawing.
LOGFILEPATH	Specify the save path for the log files
ROAMABLEROOTPREFIX	Store the full path to the root folder, in which roamable customizable files were installed.
ZWCMDLINE	Turns on or off dynamic input function.
LOCKUI	Locks the position and size of toolbars or docked, floating windows.

2.4 API Enhancement

2.4.1 ZRX

Newly adds and fixes 45 ZRX interface:

1	AcDb3dSolid::getSection	add
2	acdbHostAppMinorVersion	add
3	AcDbObjectContextInterface::desc	add
4	acedGetAcadDoc	add
5	AcGeClipBoundary2d::AcGeClipBoundary2d	add
6	AcPIPlotConfigManager::acadErrorHandler	add
7	AcPIPlotConfigManager::errorHandler	add
8	AcApDocManagerReactor::documentBecameCurrent	fix
9	AcDb2dPolyline::getEndPoint	fix
10	AcDbBlockReference::appendAttribute	fix
11	AcDbDatabase::insert	fix
12	AcDbDynBlockReference::resetBlock	fix
13	AcDbEntity::getGeomExtents	fix
14	AcDbEntity::setXData	fix
15	acdbEntNext	fix
16	AcDbPlotSettingsValidator::setCanonicalMediaName	fix
17	AcDbText::setAlignmentPoint	fix
18	acedCommand	fix
19	acedEntSelacedInitGet	fix
20	acedGetCommandForDocument	fix
21	AcEdInputContextReactor::beginEntsel	fix
22	AcEdInputContextReactor::endEntsel	fix
23	AcEdInputPointMonitor::monitorInputPoint	fix
24	AcEdJig::acquirePoint	fix
25	acedRedraw:acedRedraw	fix

26	acedRetList	fix
27	acedSSGet	fix
28	acedSSGet	fix
29	AcGeCurve3d::getProjClosestPointTo	fix
30	AcGeLine3d::getClosestPointTo	fix
31	AcGeLine3d::isPerpendicularTo	fix
32	AcGeLineSeg2d::getBisector	fix
33	AcGePoint3d::convert2d	fix
34	AcLyLayerFilterManager::getFilters	fix
35	AcPIPlotFactory::createPreviewEngine	fix
36	acplPublishExecute	fix
37	addCommand	fix
38	ads_entmake	fix
39	CAdUiPalette::AddPalette	fix
40	CAdUiPalette::SetName	fix
41	CAdUiPaletteSet::AddPalette	fix
42	CAdUiPaletteSet::RemovePalette	fix
43	CAdUiTabExtensionManager::AddTab	fix
44	CComPtr<IAcadApplication>	fix
45	sendStringToExecute	fix

2.4.2 .NET

Newly adds and fixes 7 .NET interface

1	ZWCAD.IZcadApplication.GetLicenseSerial	add
2	Hatch.GetLoopAt Method	add
3	Dimension.GetDimstyleData	add
4	Application.SetSystemVariable	fix
5	ZwSoft.ZwCAD.ApplicationServices.Application.Preferences	fix
6	BlockTableRecord.DrawOrderTableId	fix
7	Editor.GetFileNameForOpen	fix

2.4.3 VBA

Newly adds and fixes 16 VBA interface

1	AcadDocument.Setvariable	add
2	AcadPlotConfiguration.StandardScale	add
3	AcadPViewport.Display	add
4	ZcadApplication	add
5	AcadAttribute.TextGenerationFlag	fix
6	AcadEntity\AcadLWPolyline	fix
7	AcadLayouts.Item	fix
8	AcadMenuBar.Item	fix
9	AcadModelSpace.AddExtrudedSolidAlongPath	fix

10	AcadModelSpace.InsertBlock	fix
11	AcadPopupMenu.Item	fix
12	Document.Layouts	fix
13	Document.open	fix
14	Document.Plot.SetLayoutsToPlot	fix
15	Document.Utility.TranslateCoordinates	fix
16	object.GetXData	fix

2.4.4 LISP

Newly adds and fixes 37 LISP interface

1	get-license-serial	add
2	vl-member-if	add
3	vl-string-mismatch	add
4	Wscript.Shell.exec	add
5	action_tile	fix
6	dclis_cancel	fix
7	dclslide_image	fix
8	defun	fix
9	entget	fix
10	entmake	fix
11	equal	fix
12	eval	fix
13	GetBoundingBox	fix
14	initget	fix
15	mapcar	fix
16	member	fix
17	princ	fix
18	rtos	fix
19	setenv	fix
20	setvar	fix
21	vla-add	fix
22	vla-ConnectServer	fix
23	vla-GetDynamicBlockProperties	fix
24	vla-get-PropertyName	fix
25	vla-InsertBlock	fix
26	vla-offset	fix
27	vla-put-activetextstyle	fix
28	vla-put-color	fix
29	vla-put-rotation	fix
30	vlax-get	fix
31	vlax-method-applicable-p	fix
32	vlax-safearray-put-element\vlax-safearray->list	fix
33	vl-catch-all-apply	fix
34	vl-catch-all-error-p	fix
35	vl-cmdf	fix

36	vlr-acdb-reactor	fix
37	vl-registry-read	fix

3 Bug fixed

Since the release ZWCAD 2017 Update2 version, more than 500 bugs have been fixed, some of which are listed as below:

ID	Description
T10897	PLOT: Can't add SHPG/LHPGL printer
T10650	DIMASSOC: System variable DIMASSOC doesn't work as expected
1406	PLOT\LAYER: Objects on turn off layer cannot be printed out
T11395	OPEN: Can't open attached drawing "d15.dwg"
T11378	REFEDIT: Can't exit REFEDIT mode in attached drawing
T11435	OPEN: Can't open attached drawing "SM BLED_2016 09 12.dwg"
T11408	TEXT: Can't add underline text with "%U" while editing single line text
T11514	OPTIONS: Don't support network folder as the template drawing file path
T11527	OPEN: The program crashes while opening attached drawing
T11307	PLOT: The truetype font print result is wrong in Japanese version
T11385	PROPERTIES: Some columns location are wrong in properties palette
T11220	LOCKUP: Can't lockup block
T11301	TRIM: Can't trim Polyline correctly if selecting all entities as the cutting edge
T11017	TOOLBAR\VPORPTS: Can't enter scale manually in toolbar
T11204	VIEWPORT: the scale can be modified even the viewport is locked
T10768	WIPEOUT\PORPERTIES: The width and height value is allowed to set as 0 in properties
T10905	Hatch: The display of hatch pattern is wrong
T11102	COPYCLIP\DIMENSION: Copy and paste the objects, the arrow head is changed to the other type
	PLOT\STB: Doesn't support stb
...	

4 Known Issues

Some of the important known issues are listed as below:

ID	Description
1303	LOCKUP/UNLOCK: Can't unlock the objects which are lockup in ZWCAD+ 2015.
3797	SMARTVOICE: Can't not preview the region when the cursor hover over the SmartVoice mark.
/	Smartsel/Property: The minimize button is working.
T11293	Viewport/Mspace: Can't switch to the selected viewport.
/	The Status of UNDO/REDO button is not right.
/	
/	