

Issue	Description and Solution	Fixed in Version
Watermarks: No color parameter defined	<p>For watermarks, setting the color is very important, but for the described interface (not working at the time), there is no color parameter included.</p> <p>Resolution</p> <p>There are two new parameters:</p> <p>-wm_color – use AutoCAD Color Index (1-255) -wm_rgb – use (nnn,nnn,nnn) where each Red/Green/Blue value nnn is between 0 and 255</p>	19.05.20
Watermark: output on SVG but location/size wrong	<p>Watermarks: DWG->SVG/PDF -wm_xpos="80%" -wm_ypos="20%" -wm_size="10%", output on SVG but location/size wrong</p> <p>AX2019wPDF_W32_19_05_17 -i=City_map.dwg -o=City_map_water_percent.svg -f=svg -basic -trace -wm_content="Hello World" -wm_xpos="80%" -wm_ypos="20%" -wm_size="10%"</p> <p>Calculation is done testing with SVG, but both insertion point and size of content is completely off, therefore no visual content. Likely same with PDF.</p> <pre><g id="layer_0" class="layer_0" cvjs:layerName="0" cvjs:status="ON" visibility="visible"> <g style="font-family:'ARIAL'; stroke:none; fill:black ;" > <g font-size="0.839235" > <text id="cv_415" x="2500" y="1804.79" >Hello World</text> </g></pre> <p>Resolution</p> <p>Position is changed. Note, however, that size must be in absolute DWG values, not percentages.</p>	19.05.20
PDF Closed Polygons Not Closed	Closed Polygons output to PDF need the closed flag set.	19.05.19

Issue	Description and Solution	Fixed in Version
Frame border element got exceeding width	In view on CV-JS download samples reference drawing, the frame suddenly has an exceedingly line-width.	19.05.19
PDF Line Thickness Is Wrong	All lines in PDF are the same thickness even though different line thicknesses are set in the drawing.	19.05.19
Transcode issue, AX2019 unable to parse RM\$ and RM\$TXT on Linux	<p>rl/tl not able to parse a layername with \$ in it on Linux. Had to rename to _ to make things work.</p> <p>RESOLUTION</p> <p>The linux bash shell treats any command line string beginning with a \$ as an environment variable. For instance, \$HOME is replaced with /usr/<user> where <user> is typically the user name. On my system that would be /usr/scott, the root directory for my username.</p> <p>In order to use a dollar sign you must substitute it in the same manner that spaces are substituted (although they can be used directly by enclosing the string in quotes, so it is not exactly the same). So use %20 for spaces and use %24 for dollar signs. So RM\$TXT would be RM%24TXT. This substitution is not needed if the \$ is the last character, so RM\$ works, but RM\$TXT does not. Putting the string in quotes ("RM\$TXT") does not help.</p> <p>The full list of substitutes are:</p> <p>%20: <space> %21: ! %22: " %23: # %24: \$ %25: % %26: & %27: ' %28: (%29:)</p>	19.05.18
Area calculation command not working for rl/-tl case.	Venetian: To build demo, we need -la to function properly in the -rl/-tl case. Currently command -la works together with -hl.	19.05.18

Issue	Description and Solution	Fixed in Version
AX seems to have lost the ability to remove small text objects in conversion when font-size is very small.	<p>The snap toolkit has an issue with very small rotated text objects which gives an wrong extent. We wrote an algorithm in AX that would remove text object below a given threshold. This capability seems lost on the attached file. The small text objects can be on a layer or in a block definition it seems</p> <p>There should also be a parameter to remove any text below a given % of extents, and/or to stroke text out below a given threshold.</p>	19.05.18
Command -stroke / -st has no effect on file	Converting attached file DC-32.dwg to SVG, if using -stroke, there is no difference in file size or appearance on the output.	19.05.18
Embedded temporary files are not cleaned up after conversion	In the attached file A-108_6TH__FLOOR.dwf, AX leaves 424 temporary png files on the server after conversion. No clean-up taking place	19.05.18
Emnedded bitmap images loose accuracy/sharpness, objects becomes jagged	<p>Rolta images change "sharpness" in conversion. Could be a tiff type not properly handled? See attached files.</p> <p>Running in 19.05.17 creates same result, with the difference that AX leaves 2 bitmap files in the folder, which are not removed after conversion</p>	19.05.18
In conversion, some large letters "p" appers in converted SVG file	In CV-JS download sample file, some large letters "p" appears in the converted objects. Could be a letter size calculation that is off.	19.05.18
Some entities explode in size, thickness must be off?	On attached drawing, in the frame to the left, there is a large gray object. In PDF it is jagged, in SVG it is more like an oval size shape. Inspecting on 5_16, this looks like a hatch where width of objects have exploded in size.	19.05.18
Special support for RL/TL based on Multiple Attributes	The Room Layer/Text Layer processing works on Attributes, Text, and MText, but the user needs it based on a combination of multiple attribute values.	19.05.17

Issue	Description and Solution	Fixed in Version
Invisible Attributes Should Convert to SVG	Invisible Attributes should be converted to SVG but have their visibility set to hidden.	19.05.17
Transparent Embedded bitmap has black background	Rolta sample DWF drawing A-101_Ground_Floor_Plan.dwf, converting DWF->SVG, the background of the upper right bitmap is black and the bitmap itself is polluted. -cq=0, -cq=1 exhibits the black background, -cq=2 makes AX hang up.	19.05.17
Resulting PDF is 0 bytes	DWF->PDF: resulting pdf is 0 bytes. The same Rolta reference file, in which bitmaps converts incorrect with black background when doing DWF->SVG, when converting DWF->PDF the resulting PDF file is 0 byte.	19.05.17
Needs two executions to create an output SVG	<p>Needs two executions to create an output SVG. 1st time creates a temp png file that is used in the second run. Rolta Report:</p> <p>1: Running AX2019. no svg output is created, but a single temporary png file is created</p> <p>2: Running AX2019 a second time. A large set of temporary .png files are created (and not cleaned up afterwards) and an SVG output file is created.</p> <p>The process can be repeated. Remove the temporary files and AX2019 needs two executions to produce the output.</p>	19.05.17
Embedded bitmap is black	Embedded bitmap is black + embedded bitmap is "corrupted" with pixels in different colors. See attachment, issue with embedded bitmaps, background change color to black, some optimization appears to go wrong, giving a portion of the image that is cluttered with pixels different from original image.	19.05.17

Issue	Description and Solution	Fixed in Version
PDF Line Thickness Is Wrong	All lines in PDF are the same thickness even though different line thicknesses are set in the drawing.	19.05.17
AX2019 stops if not a full absolute path is set in -o=	<p>AX2019 has lost the ability to set an output file name that is created in the current folder.</p> <pre>C:\xampp\htdocs\cadviewer_3_2_0\converters\ax2019\windows\dev>ax2019 -i=A-001_Site_Setting_Out_Plan.dwf -o=test_1.svg -f=svg -basic</pre> <p>Output Directory Does Not Exist</p>	19.05.16
Check Directory Existence	The output directory should be checked for existence and that it is write enabled before any other processing is done.	19.05.16
Suppress extra messages	The message warning that a font file is not found should only be output once per font.	19.05.16
Non-solid Hatches Do Not Convert	Non-solid hatches do not convert	19.05.16
Ignore Xrefs where the file is not found	<p>If an External Reference file is not found a text is output near the origin stating the file is not found. This text is included in the extents calculation and can result in major errors in that calculation since the text is later suppressed.</p> <p>Resolution</p> <p>When processing the entities, the Block Reference for an External Reference (XREF) where the file is not found is dropped from processing.</p>	19.05.16
Diameter Symbol comes out in Unicode	In some circumstances, the diameter symbol (Ø) is output in PDF as Unicode (\U+2205). Interestingly, the text running vertically is correct while the text running horizontally is in Unicode.	19.05.16

Issue

Description and Solution

DWG->SVG: Line thickness excessively large

DWG->SVG -> Line thickness of entities in SVG are excessive largely in Model Space.

19.05.16

Embedded bitmap has black background

Embedded bitmap in attached DWF is rendered with a black background in the converted PDF file. Black and white pixels may be swapped.

19.05.16

Resolution

The FreeImage Color Quantization routine (which turns a 24-bit image into an 8-bit color image) had a bug that resulted in white backgrounds being turned into black in certain circumstances. The happens when using the Wu Xiaolin algorithm.

We have added a new parameter to allow the user to set the algorithm to use or to skip Color Quantization entirely.

-quant or -cq parameter:

0: No color quantization applied.

1: Xiaolin Wu color quantization algorithm (good compression but occasional unpredictable errors)

2: NeuQuant neural-net quantization algorithm by Anthony Dekker (does not appear to do anything)

3: Lossless Fast Pseudo-Quantization Algorithm by Carsten Klein (extremely good compression but takes a very long time - this is the

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Block conversion problem	<p>We are still having the problem of wrong layer during conversion:</p> <ul style="list-style-type: none"> - we have a dwg file (in attachment: test_layers.dwg) with three layers("0", "ASSET" and "Room"). Two blocks (chairs) are on layer "ASSET". - we convert the dwg using: <code>./ax2019_L64_19_04_15 /tmp/test_layers.dwg /tmp/test_layers.svg -f=svg</code> <p>The final svg has:</p> <ul style="list-style-type: none"> - polyline on layer "ROOM" (correct) - one block on layer "ROOM" (wrong, should be layer ASSET) - one block on layer "ASSET" (correct but both blocks should be here) <p>if we add more blocks only one will remain on layer ASSET and all the other will be wrongly moved to layer "ROOM"</p>	19.05.16
Add margin to PDF output	<p>Add a blank margin around PDF drawings. This should be defined in output units, so points, or inches. So anything under 1 and larger than 0 is treated as inches and anything larger than 1 is treated as points (1/72 of an inch).</p>	19.05.15

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<p>On most drawings, the drawingCoordinates matrix passed in SVG conversion contains an incorrect lowerLeft and upperRight</p>	<p>The incorrect calculated lowerLeft and upperRight, makes area and distance calculations incorrect, and also provides an incorrect transformation when passing redlines over to DwgMerge.</p> <p>Attached meter_01.dwg, provides a correct drawingCoordinates matrix and svgToWorldUnits value. Using these values, DwgMerge proves to work well, areas and distances are measured correctly in CV-JS.</p> <p>Attached drawing P2_Hotel_L07.dwg exhibits an incorrect drawingCoordinates matrix and svgToWorldUnits value seen in many drawings. Using these values, distance and area calculation in CV-JS is incorrect, DwgMerge place objects in wrong locations.</p> <pre>{ "globalOrigin": { "x": -209650, "y" : -144301}, "units": "mm", "svgToWorldUnits": 0.00470214 }</pre> <pre>cadviewer_drawingCoordinates={ "DWG": { "lowerLeft": { "x": -237197, "y" : -71675.2}, "upperRight": { "x": 182103, "y" : 216928} }, "SVG": { "lowerLeft": { "x": 0, "y" : 1539.03}, "upperRight": { "x": 2500, "y" : 181.975} }, "Drawing Height": 1721}XXX</pre>	19.05.15
Scaling Factors Off	In some circumstances the calculated SVG scaling factors are incorrect.	19.05.15
Frozen layer objects included in extents calculation	<p>Frozen layer objects included in extents calculation with drawings 3MD80188014.dwg (base) and REFGA3.dwg (Xref).</p> <p>Resolution</p> <p>Recalculated extents entity by entity as the toolkit extents were erroneous In multiple ways.</p>	19.05.15
Empty or blank text used in Extents Calculation	Empty or blank text (both Text and MText entities) used in Extents Calculation. They should be excluded.	19.05.14

Issue	Description and Solution	Fixed in Version
Invisible attribute for Attributes ignored	The < Invisible > attribute on Attributes is being ignored.	19.05.14
Text Spacing is not used	When going to PDF, text spacing is not preserved.	19.05.13
Embedded bitmap is missing	An embedded bitmap is missing in DWG->PDF conversion. The temporary bitmap file is created, but not embedded in output PDF See attached SNCF drawing. Fails on Linux and Windows. Resolution Bitmap was rotated in the DWG file. Had to rotate upon extraction and modify all height/width parameters.	19.05.13
Add Watermark to PDF Output	Generalized facility to add a watermark to a drawing. Add parameters for contents, height, font and location.	19.05.13
Program Crashes on	Program Crashes on Startup	19.05.12
DefaultFont Parameter is Ignored	The default font is hardcoded to Arial and the DefaultFont parameter is ignored.	19.05.12
-REPO not being followed	The Repository parameter (-repo) is supposed to ignore paths defined in XRef names and only search in directories named in the XPath parameter. This is not happening.	19.05.11
Unicode characters not stroked out	Unicode characters beginning with \U+01 through \U+09 are not being stroked out.	19.05.11
Unable to open directory: .\ on Linux	If an XRef is hardcoded to the path .\ it gives an "Unable to open directory: .\" message when processing XRefs on Linux.	19.05.11
cvjs:tag Elements Must	cvjs:tag elements must use & instead of just & (SVG Only)	19.05.10

Issue	Description and Solution	Fixed in Version
Stroking Japanese	Stroking Japanese Characters has stopped working.	19.05.10
Second Fill attribute	When doing Room Layer/Text Layer processing (RL/TL) there is both	19.05.09
Port New Toolkit to Linux	<p>Port the latest version of the OpenDesign toolkit (Version 2019_2) to Linux.</p> <p>Resolution</p> <p>AX2019 is ported to Linux using GCC 4.4. This version does not support PDFImport due to compiler limitations. That will be handled separately. With this version now available on both Linux and Windows, AutoXChange 19.04.XX is officially retired.</p>	19.05.08
Xref w/o an extension is not found	Xref is not found if it is saved in the base drawing w/o an extension. This is only a problem on Linux.	19.05.08
Frozen layer objects included in extents calculation	<p>Frozen layer objects included in extents calculation with drawings 3MD80188014.dwg (base) and REFGA3.dwg (Xref).</p> <p>Resolution</p> <p>This was an OpenDesign Toolkit error that was fixed in the latest version (2019_2).</p>	19.05.08
Files with embedded TIFFs will not process through -basic	<p>The second time an embedded TIFF is processed on Linux the conversion stops.</p> <p>Resolution</p> <p>Directly accessing the pixel data array caused a memory corruption problem. Changed back to using the slower, but obviously safer, SetPixelColor function in FreeImage.</p>	19.04.27 19.05.08
Text Converted to Uppercase	All text in es_isocp.shx font ends up as Uppercase.	19.04.27 19.05.08
Embedded TIFF Files Will Not Display	TIFF files that are embedded in a DWG will not display/convert.	19.04.26 19.05.07

Issue	Description and Solution	Fixed in Version
French Linetypes are Ignored	<p>The French equivalents of the standard line types (Dot, DotDashed, etc) are ignored. They should be mapped to their standard equivalent like German equivalents are.</p> <p>Resolution</p> <p>Added the following linetypes: TIRETPT (DASHDOT), INTERROMPU (DASH), POINTILLE (DOT), CACHE (HIDDEN), DIVISE (DIVIDE), FANTOME (PHANTOM), AXES (CENTER), BORDURE (BORDER)</p>	19.04.26 19.05.07
Strange Message Output on Linux	<p>The message "sh: 1: aws: not found" is output when running on Linux. This should be eliminated.</p> <p>This message is from checking the Network Address for an Amazon Web Instance when not running on an AWS server. It has no real effect but does not look good.</p> <p>Resolution</p> <p>Added the parameter -network (-nw). If this parameter is not used then the check for the AWS Network Address is not made.</p>	19.04.26 19.05.07
Line Types Not Utilized	Any linetypes beyond the standard set (Continuous, Dot, Dot-Dash, etc) are being ignored.	19.04.26 19.05.07
XRef and Font names are not Case Insensitive on Linux	<p>The actual file name must match the case used in the AutoCAD file or it will not be found. So, if the actual file name is filename.dwg and the XRef name stored in the DWG is FILENAME.dwg they will not match.</p> <p>Resolution</p> <p>We run all matches in findFile through case-insensitive matching. If multiple possible files are found (FILE.dwg, file.dwg, and File.dwg are all separate file names on Linux) then no match is found and an error is output.</p>	19.04.25 19.05.06
French CONTINU Linetype Not Recognized	<p>The French CONTINU linetype should be treated the same as the English CONTINUOUS.</p> <p>Resolution</p> <p>The test for CONTINUOUS now tests against just CONTINU which covers both names.</p>	19.04.25 19.05.06
Trace and Error Messages	Some Trace and Error messages have an extra semicolon in them.	19.04.25
XRefs With No Extension	If the XRefs is listed as just "filename" with no ".dwg" or ".dxf" (or	19.04.25

Issue	Description and Solution	Fixed in Version
Font Files Not Found	SHX files in the Linux font directory are not being found. Only files in	19.04.24
Testing for Empty File	The program gives: Assertion Failed: charIndex < getData()-	19.04.24
Stroked Characters are	When text characters are stroked out the characters can be shifted	19.04.23