AutoXChange Changelog

Filename & Versioning Convention

AutoXChange distribution packages follow the naming pattern:
`<BaseProgram>_<Platform>_<ODAToolkit>_<CodeVersion>.<ext>`

- **Base Program**: `ax2023` / `AX2025` / `ax2025` / `AX2026` / `ax2026` / `AX2027` / `ax2027` / `axConverter_so`
- **Platform**:
  - `W64` : Windows 64-bit (`.zip` or `.exe`)
  - `L64` : Linux 64-bit (`.tar.xz` , `.tar.gz` , or `.gz`)
  - `L64G8` / `L64G8.3` : Linux 64-bit built with GCC 8.3 (Ubuntu 20.04 / older `glibc` compatibility)
  - `L64G11` : Linux 64-bit built with GCC 11 (Ubuntu 22.04 / newer `glibc` and updated third-party libraries)
- **ODA Toolkit**: `23_12` (`23.12`), `25_11` (`25.11`), `27_06b` (`27.06b`), `27_07` (`27.07`), `27_08` (`27.08`), `27_09` (`27.09`)
- **Code Version**: `148c` through `164i` (plus earlier references `56a` , `146u` , `147n` , `147p`)

Version `164` Series (`AX2026` , ODA `27.08` & `27.09` — October–November 2026)

Version	Date	Package / Artifact	Platform	ODA
`164`	2026-10-14 2026-10-15	`AX2026_W64_27_08_164.zip`	W64	27.08
`164b`	2026-10-18 2026-10-19	`ax2026_L64_27_09_164b.tar.xz` `AX2026_W64_27_09_164b.zip`	L64 (GCC 11) W64	27.09
`164c`	2026-10-20	`ax2026_L64_09_164c.tar.gz`	L64 (GCC 8.3)	27.09
`164d`	2026-10-21	`ax2026_L64_09_164d.tar.xz`	L64 (GCC 8.3)	27.09

`164e`	2026-10-27
	2026-10-28
		`ax2026_L64G8.3_27_09_164e.tar.xz`
		`ax2026_L64G8.3_27_09_164e.tar.gz`
		`ax2026_L64G8_27_09_164e.tar.gz`
			L64G8.3
			L64G8.3
			L64G8
				27.09

`164f`	2026-10-29	`AX2026_W64_27_09_164f.zip` `ax2026_L64G8_27_09_164f.tar.gz`	W64 L64G8	27.09
`164g`	2026-10-31	`ax2026_L64G11_27_09_164g.tar.xz`	L64G11	27.09

`164h`	2026-11-01	`ax2026_L64G8_27_09_164h.tar.xz`
		`ax2026_L64G11_27_09_164h.tar.xz`
		`AX2026_W64_27_09_164h.zip`
			L64G8
			L64G11
			W64
				27.09

`164i`	2026-11-05
	2026-11-07
	2026-11-08
		`AX2026_W64_27_09_164i.zip`
		`ax2026_L64G8_27_09_164i.tar.xz`
		`ax2026_L64G11_27_09_164i.tar.xz`
			W64
			L64G8
			L64G11
				27.09

- `164` **(2026-10-14 – 2026-10-15)**:

    - Implemented Automatic Building Shell Creation (`STORE_GROUP` layer polylines with Group ID text and color assignment, plus display-order control to place shells behind storefronts) demonstrated on Federal Realty `Assembly Row`.
    - Fixed common-area hatch bleed on GGP/Brookfield `4563-LP1` (Shops at La Cantera).
    - Relaxed the Windows MSVC Redistributable version check (`14.30+`) and removed debug exit code `222`.
- `164b` **(2026-10-18 – 2026-10-19)**:
    - Upgraded both Linux (Ubuntu 22.04 / GCC 11 under WSL2) and Windows builds to **ODA Toolkit** `27.09` with corrected static library link ordering.
- `164c` **(2026-10-20)**:
    - Built `ODA 27.09` Linux version on Ubuntu 20.04 with **GCC 8.3** for older `glibc` / `libstdc++` compatibility; verified conversion of 4 German `docuex` drawings (`2026_TT40_1OG.dwg` , `2OG` , `3OG` , `EG`).
- `164d` **(2026-10-21)**:
    - Fixed Linux segmentation fault when running with `-trace` by replacing `std::filesystem` calls under GCC 8.3, and fixed additional issues found in the debugger.
- `164e` **(2026-10-27 – 2026-10-28)**:
    - Introduced explicit GCC version tagging in Linux package names (`L64G8` / `L64G8.3` vs `L64G11`).
    - Fixed memory leaks.
    - Removed `-march=native` from the Linux `g++` compiler flags (build `ax2026_L64G8_27_09_164e.tar.gz`) to fix `Illegal instruction (core dumped)` crashes on deployment CPUs lacking build-host AVX/CPU extensions.
- `164f` **(2026-10-29)**:
    - Fixed GGP/Brookfield logo rendering regression on `4563-LP1` (`W64` and `L64G8`).
    - *(Related)* Updated standalone `LinkList_2026_W64_27_09_14.zip` with `north.io` OEM license key checking (`10/28/2026`).
- `164g` **(2026-10-31)**:
    - Integrated **LinkList** functionality directly into AutoXChange (`ax2026_L64G11_27_09_164g.tar.xz`), alongside the Brookfield logo fix on GCC 11 / Ubuntu 22.04.
- `164h` **(2026-11-01)**:
    - Optimized two heavily used core routines, reducing conversion time on `4563-LP1` from `3.2s` to `1.2s` and achieving a `13%–15%` overall speedup across the 86-drawing Brookfield benchmark suite (`1.5s` per drawing for standard SVG conversion, `2.2s` with fills).
    - Released synchronized `.tar.xz` (`L64G8` and `L64G11`) and `.zip` (`W64`) packages.
- `164i` **(2026-11-05 – 2026-11-08)**:
    - Fixed remaining UIC bugs, including `s601b` and the “lollipop” room polygon issue.
    - Major internal C++ refactoring and modernization: broke up 4,000+ line routines into modular subroutines, migrated JSON processing from `RapidJSON` to `Boost.JSON` , and migrated Excel processing from `OpenXLSX` to `xlnt` .
    - Updated `AX2026_W64_27_09_164i.zip` on 11/8/2026 to bundle `xlnt.dll` and remove `OpenXLSX.dll` (`xlnt` is statically linked on Linux `L64G8` and `L64G11`).

Version `163` Series (`AX2026`, ODA `27.06b`, `27.07`, & `27.08` — September–October 2026)

Version	Date	Package / Artifact	Platform	ODA
`163`	2026-09-03	`AX2026_W64_27_07_163.zip` `ax2026_L64_27_06b_163.tar.xz`	W64 L64	27.07 27.06b
`163a`	2026-09-08	`AX2026_W64_27_07_163a.zip` `ax2026_L64_27_06b_163a.tar.xz`	W64 L64	27.07 27.06b
`163b`	2026-09-09	`AX2026_W64_27_07_163b.zip` `ax2026_L64_27_06b_163b.tar.xz`	W64 L64	27.07 27.06b
`163c`	2026-09-14	`AX2026_W64_27_07_163c.zip` `ax2026_L64_27_06b_163c.tar.xz`	W64 L64	27.07 27.06b
`163d`	2026-09-15	`AX2026_W64_27_07_163d.zip` `ax2026_L64_27_06b_163d.tar.xz`	W64 L64	27.07 27.06b
`163e`	2026-09-17	`AX2026_W64_27_07_163e.zip` `ax2026_L64_27_06b_163e.tar.xz`	W64 L64	27.07 27.06b
`163g`	2026-09-23	`AX2026_W64_27_07_163g.exe`	W64	27.07
`163h`	2026-09-23	`AX2026_W64_27_07_163h.exe`	W64	27.07
`163i`	2026-09-26	`AX2026_W64_27_07_163i.zip`	W64	27.07
`163j`	2026-09-28 2026-09-29	`AX2026_W64_27_07_163j.exe` `AX2026_W64_27_07_163j.zip`	W64	27.07

`163k`	2026-10-06
	2026-10-07
		`AX2026_W64_27_06_163k.zip`
		(misnamed)
		`AX2026_W64_27_08_163k.zip`
			W64	27.08

`163L`	2026-10-07	`AX2026_W64_27_08_163L.zip`	W64	27.08

`163n`	2026-10-13
	2026-10-14
		`AX2026_W64_27_08_163n.zip`
		`ax2026n2.exe` / `ax2026n3.exe` /
		`ax2026n4.exe`
			W64	27.08

- **`163` (2026-09-03)**: Consolidated `AX2026` Windows (`27.07`) and Linux (`27.06b` for GCC 8.3 compatibility) builds.
- **`163a` (2026-09-08)**: Fixed license key check where `163` was checking `ax19` instead of `ax26`; added ABSS Software (`abss-software.com`) OEM key; added initial `cadviewer_ViewSet` (`-viewset`) and `-shell` support for UrbanEdge (with `MacAddress_L64_06_02_23-26_07_163a.gz`).
- **`163b` (2026-09-09)**:
  - Updated `-verify` to output `Read AutoXChange 2026 Key` and `Version: 7` along with host IP/MAC addresses and domain name, while removing the internal OEM customer list from `-verify` output.
  - Updated Key Generator (`MacAddress_L64_06_02_24-26_07_163b.gz`) to print `Write AutoXChange 2026 Key` and `Version: 7`.
- **`163c` (2026-09-14)**: Fixed drawing dimensions/extents calculation bug when running `-last -extents` (or `-paper` falling back to ModelSpace) on drawings with uninitialized PaperSpace (`64E989C1965210A0FB1201E7CC61D4F9_48423.dwg` for Simsoft), which had caused lineweights to be off by a factor of 10.
- **`163d` (2026-09-15)**: Fixed DGN extents and coordinate mapping to SVG space (`0460000Z.dgn`, `0460006a.dgn`, `FP-01.dwg`).
- **`163e` (2026-09-17)**:
  - Fixed tiny font-size scaling in DGN files (`Chemical.dgn` from Oak Ridge): when text size is < 0.2, set `font-size` to `0.2` and adjust `transform="scale(...)"` accordingly.
  - Fixed very small radius circles in `rdash.io` (`B9-HOPE-LANDSCAPE-CONCEPTUAL-17-10-2024.dwg`) being tessellated by ODA into 1001-vertex polylines and collapsed into zero-width points.

- `163g` **(2026-09-23)**:
  - Fixed regression where `BlockName` was dropped from the `OutputGroup` routine.
  - Included initial UIC fixes and the 1001-point small circle fix.
- `163h` **(2026-09-23)**:
  - Fixed UIC bug on Floors 10 and higher reported by Madan.
  - Adjusted spline hatch tolerance setting so curved/spline-bounded hatches in logos (UIC logo) render cleanly without polyline jaggedness.
- `163i` **(2026-09-26)**: Suppressed AutoCAD internal/hidden layers whose names begin with `*` (such as `*ADSK_CONSTRAINTS` on Siemens `civil_example-imperial 1.dwg`) by default.
- `163j` **(2026-09-28 – 2026-09-29)**:
  1. Fixed UIC Legend placement and titles.
  2. Changed UIC columns to be hatched rather than solid-filled.
  3. Eliminated spurious black rectangle near the UIC Title Block by ignoring empty text boxes inside hatches when other entity types are present in the hatch.
- `163k` **(2026-10-06 – 2026-10-07)**:
  - Upgraded Windows build to **Visual C++ 2026** and **ODA Toolkit** `27.08` (initially uploaded as `AX2026_W64_27_06_163k.zip` due to a filename typo, then re-uploaded as `AX2026_W64_27_08_163k.zip`).
  - Fixed OLE Embedded Object / Paintbrush Bitmap rendering (`NF062063-PLA001-L-2026-9.dwg` Total logo) and fixed the program exit fault after OLE processing.
  - Fixed line width problems in Xelians / `NF062063-PLA001-L-2026-9.dwg` when using `-last -extents`.
- `163L` **(2026-10-07)**: Fixed `*` hidden layers (such as `*ADSK_CONSTRAINTS`) still appearing when `-rl` / `-tl` processing was active on drawings without matching RL/TL layers.
- `163n` **(`ax2026n2` – `n4`, 2026-10-13 – 2026-10-14)**:
  - Added UIC Department ID on layer `RM$TXT-DEPTID` and room Area (formatted in sq ft) on layer `RM$TXT-AREA`, plus view-shifting parameter for UIC layouts.
  - Added startup check for installed Microsoft Visual C++ Redistributable version in the Windows Registry (diagnosed via `ax2026n2.exe`, `ax2026n3.exe`, `ax2026n4.exe` to prevent stack overflow and allow VC++ `14.30+` / VS 2022+).

Version `162` Series (`AX2025` / `AX2026` / `AX2027`, ODA `27.07` — August 2026)

Version	Date	Package / Artifact	Platform	ODA
`162`	2026-08-16	`ax2025_L64_27_07_162.tar.xz`	L64	27.07

`162a`	2026-08-20
	2026-08-21
		`ax2025_L64_27_07_162a.tar.xz`
		`AX2027_W64_27_07_162a.zip`
		`ax2027_L64_27_07_162a.tar.xz`
		`AX2026_W64_27_07_162a.zip`
		`ax2026_L64_27_07_162a.tar.xz`
			L64
			W64
			L64
			W64
			L64
				27.07

`162b`	2026-08-23	`ax2026_L64_27_07_162b.tar.xz` `AX2026_W64_27_07_162b.zip`	L64 W64	27.07
`162c`	2026-08-25 2026-08-27	`ax2025_162c.zip`	W64	27.07
`162d`	2026-08-26	`ax2025_162d.zip` `ax2026_L64_27_07_162d.tar.xz`	W64 L64	27.07

Version	Date	Package / Artifact	Platform	ODA

`162d2` – `d4`	2026-08-27	`ax2025_162d2.zip`
		`ax2025_162d3.zip`
		`ax2025_162d4.zip`
			W64	27.07

- `162` / `162a` **(2026-08-16 – 2026-08-21)**:
  - Upgraded ODA Toolkit from `25.11` to `27.07` and transitioned base product naming to `AX2026` (`ax2026`).
  - Enabled Linux binary security hardening flags: `PIE` (`-fPIE -pie`) and Immediate Binding / Full `RELRO` (`-Wl,-z,relro,-z,now`).
  - Upgraded third-party libraries: `cryptopp-modern` `2026.8.1` , `zlib` `1.3.2` , `freetype` `2.14.2` , `openssl` `3.6.3` , `libpng` `1.6.58` , `openexr` `3.4.13` , `libxml2` `2.15.3` , `curl` `8.21.0` , `libexpat` `2.8.2` , `libraw` `0.22.1` , `pcre2` `10.147` , `oneTBB` `2023.0.0` , `manifold` `3.3.2` , `FreeImage` `3.18.0` , and `LibTIFF` `4.6.0` .
  - Added License Flag 20 (`UIC Mode`).
- `162b` **(2026-08-23)**: Added new license key salt for `AX2026` keys (with `MacAddress_L64_06_02_21-26_07_162b.gz`).
- `162c` **(2026-08-25)**: Added `-L1` , `-L2` , `-L3` custom title-block text parameters for UrbanEdge LOD generation.
- `162d` / `162d2` / `162d3` / `162d4` **(2026-08-26 – 2026-08-27)**:
  - Added `-EI` (`EnhanceItems`) parameter to highlight secondary stores in grey/cyan on UrbanEdge LOD drawings.
  - Fixed `-POLYDIMDIS` and UrbanEdge logo formatting on page 2.
  - Updated v7 (`ax26`) and v8 (`ax27`) license key handling (with `MacAddress_L64_06_02_22-26_07_162d.gz`).

Versions `159` , `160` , & `161` Series (`AX2025` , ODA `25.11` — March–July 2026)

Version	Date	Package / Artifact	Platform	ODA
`159`	2026-03-18	`ax2025_L64_25_11_159.tar.xz` `AX2025_W64_25_11_159.zip`	L64 W64	25.11
`159a`	2026-04-16	`AX2025_W64_25_11_159a.zip`	W64	25.11
`159b`	2026-04-21	`AX2025_W64_25_11_159b.zip`	W64	25.11
`159c`	2026-04-22	`AX2025_W64_25_11_159c.zip`	W64	25.11
`159d`	2026-04-23	`AX2025_W64_25_11_159d.zip`	W64	25.11
`159e`	2026-04-24	`AX2025_W64_25_11_159e.zip`	W64	25.11
`159f`	2026-04-26	`AX2025_W64_25_11_159f.zip`	W64	25.11
`159g`	2026-04-26	`AX2025_W64_25_11_159g.zip`	W64	25.11
`159h`	2026-05-01	`AX2025_W64_25_11_159h.zip`	W64	25.11
`159i`	2026-05-03	`AX2025_W64_25_11_159i.zip`	W64	25.11
`159j`	2026-05-06	`AX2025_W64_25_11_159j.zip`	W64	25.11
`159k`	2026-05-07	`AX2025_W64_25_11_159k.zip`	W64	25.11
`159L`	2026-05-08	`AX2025_W64_25_11_159L.zip`	W64	25.11
`159m`	2026-05-08	`AX2025_W64_25_11_159m.zip`	W64	25.11
`160`	2026-05-26	`ax2025_L64_25_11_160.tar.xz` `AX2025_W64_25_11_160.zip`	L64 W64	25.11
`160a`	2026-06-26	`AX2025_W64_25_11_160a.zip`	W64	25.11

Version	Date	Package / Artifact	Platform	ODA
`161`	2026-07-08	`axConverter_so.25.11.161.tar.xz` `AX2025_W64_25_11_161.zip`	L64 (`.so`) W64	25.11
`161a`	2026-07-12	`AX2025_W64_25_11_161a.zip`	W64	25.11
`161a2`	2026-07-13	`AX2025_W64_25_11_161a2.zip`	W64	25.11

- `159` **(2026-03-18)**: Fixed `propertyName` / `propertyNumber` swap in JSON output and consolidated Brookfield and Linux updates.
- `159a` **(2026-04-16)**: Fixed Valgrind memory leaks and SVG fill opacity bug; added OEM entries for `EFALIA` (`efalia.com`) and `SNCF RESEAU` (`sncf.fr`); added multi-currency, metric/imperial unit conversion, and Federal Realty / Propidex support.
- `159b` / `159c` / `159d` **(2026-04-21 – 2026-04-23)**: Added 5-year quarterly historical data tab to TmsDemo JSON (`159b`); guarded `convertFromUnicode` UTF-8 fallback with `#ifndef WIN32` (`159c`); fixed command-line parser splitting unquoted Chinese/multi-byte filenames at `.` (`159d`).
- `159e` / `159f` / `159g` **(2026-04-24 – 2026-04-26)**: Changed AutoCAD `SOLID` entities from `bRGB` (fill+stroke) to `fRGB` (fill only) so `ZW` minimum line width does not create thick borders on SNCF drawings (`159e` , fixed without `-hlall` in `159f` , and fixed wide lines on `VIP22 2.dwg` in `159g`); fixed command-line splitting on `(` (`159f`).
- `159h` / `159i` **(2026-05-01 – 2026-05-03)**: Added working directory diagnostics and fixed Unicode filename path/base/extension splitting on Chinese Windows Server (`159h` , `159i`); added equipment rack processing for Distribution Management (`DC PET layout`).
- `159j` **(2026-05-06)**: Unified `svgToWorldUnits` and lower-left point calculation between SVG metadata and coordinate generation using `$LUNITS` and `$INSUNITS` .
- `159k` / `159L` / `159m` **(2026-05-07 – 2026-05-08)**:
  - Implemented `svgToWorldUnits` scaling for both `-last` (`-last -extents`) and Layouts (`sLO_1` class per layout viewport) (`159k`).
  - Fixed regression where `sLO_1` CSS scale caused layout elements to disappear on `Ala Moana Site Plan` (`159L` , `159m`).
- `160` **(2026-05-26)**: Fixed DWF-to-PDF input extension check (for `netfiles.de` `blocks_and_tables.dwf`) and added Corporate Office Tower (`840S`) multi-floor demo generation.
- `160a` **(2026-06-26)**: Fixed `-LOD` to accept either `-RL` or `-DL` for the lease line layer; added Boost-based store shell polygon merging (`-shell`).
- `161` **(2026-07-08)**:
  - Fixed customer issues for Project Associates and Aoki (Japanese customer).
  - Split `DataMining` code into five modular sections to streamline builds and built the Linux JNI shared library `axConverter_so.25.11.161.tar.xz` for Cisco alongside `AX2025_W64_25_11_161.zip` .
- `161a` / `161a2` **(2026-07-12 – 2026-07-13)**:
  - Set existing ModelSpace layers (including `UE_TNT_LEASE LINE`) to black/white for UrbanEdge `-LOD` generation while preserving PaperSpace logos and newly added LOD layers (`161a`).
  - Restored store window zooming, space hatching, and dimensioning on `Waugh Chapel- MASTER PLAN_10222024L_Layout_SITE LOD` (`161a2`).

Version `158` Series (`AX2025`, ODA `25.11` — February–March 2026)

Version	Date	Package / Artifact	Platform	ODA
`158`	2026-02-22	`AX2025_W64_25_11_158.zip`	W64	25.11
`158 nrc1`	2026-02-23 2026-02-24	`AX2025_W64_25_11_158 nrc1.exe`	W64	25.11
`158b`	2026-02-24	`AX2025_W64_25_11_158b.zip`	W64	25.11
`158d`	2026-02-25	`AX2025_W64_25_11_158d.zip`	W64	25.11
`158e`	2026-02-27	`AX2025_W64_25_11_158e.zip`	W64	25.11
`158f`	2026-02-28	`AX2025_W64_25_11_158f.zip`	W64	25.11
`158g`	2026-03-01	`AX2025_W64_25_11_158g.zip`	W64	25.11
`158h`	2026-03-01	`AX2025_W64_25_11_158h.zip`	W64	25.11
`158i`	2026-03-02	`AX2025_W64_25_11_158i.zip`	W64	25.11
`158j`	2026-03-03	`AX2025_W64_25_11_158j.zip`	W64	25.11
`158k`	2026-03-04	`AX2025_W64_25_11_158k.zip`	W64	25.11
`158L`	2026-03-04	`AX2025_W64_25_11_158L.zip`	W64	25.11
`158m`	2026-03-05	`AX2025_W64_25_11_158m.zip`	W64	25.11
`158n`	2026-03-09	`AX2025_W64_25_11_158n.zip`	W64	25.11
`158o`	2026-03-13	`AX2025_W64_25_11_158o.zip`	W64	25.11

- `158` **(2026-02-22)**: Fixed linetype scaling being applied multiple times when a drawing has multiple viewports (e.g., `3442-SP1` Ala Moana with 2 viewports vs `4108-SP1` Mayfair with 1 viewport).
- `158 nrc1` / `158b` **(2026-02-23 – 2026-02-24)**: Fixed ModelSpace lineweights and linetypes (`158 nrc1`); differentiated PaperSpace entities drawn directly in PaperSpace from ModelSpace entities viewed through a PaperSpace viewport on `1st Floor Architectural` (`158b`).
- `158d` / `158e` / `158f` / `158g` / `158h` **(2026-02-25 – 2026-03-01)**: Fixed Brookfield ModelSpace extents bug by skipping Hatch entities during overall drawing extents calculation and cleaned up console `cout` / `ShowError` debug messages (`158e`); MegaDemo (`TmsDemo`) generation fixes (`158f` – `158h`).
- `158i` / `158j` **(2026-03-02 – 2026-03-03)**: Fixed Direct Distance (`-odd`) calculation and renamed output to `-distances.json` (`158i`); fixed `-model` conversion instability when `-rl` / `-tl` layers do not exist in the drawing (`158j`).
- `158k` / `158L` **(2026-03-04)**: Fixed intermittent non-zero exit code (`-1073741819` access violation) when running `-odd -nrf -q` on Brookfield `2000-LP1.dwg` .
- `158m` / `158n` / `158o` **(2026-03-05 – 2026-03-13)**: Fixed Brookfield DWG Extract (`-dx2`) and DWG Merge (`-du2`) regressions (`3768-LP4.dwg` , `3051-LP1A.dwg` , `4142-LP0.dwg` , `4263-SP1.dwg` , `3045-SP1.dwg`) where room outlines/IDs and `TENANT-NAME` placeholders were not matching.

Versions `155` , `156` , & `157` Series (`AX2025` , ODA `25.11` — December 2025 – February 2026)

Version	Date	Package / Artifact	Platform	ODA
`155`	2025-12-15	`ax2025.zip` `AX2025_W64_25_11_155.zip`	W64	25.11

Version	Date	Package / Artifact	Platform	ODA
`156`	2026-01-07 2026-01-08	`ax2025_L64_25_11_156.gz` `AX2025_W64_25_11_156.zip`	L64 W64	25.11
`156a`	2026-01-12	`AX2025_W64_25_11_156a.zip`	W64	25.11
`157`	2026-01-28 2026-01-29 2026-02-01	`AX2025_W64_25_11_157.zip` `ax2025_L64_25_11_157.tar.xz`	W64 L64	25.11
`157a`	2026-01-29	`AX2025_W64_25_11_157a.zip`	W64	25.11
`157b`	2026-01-30	`AX2025_W64_25_11_157b.zip`	W64	25.11
`157d`	2026-02-15	`AX2025_W64_25_11_157d.zip`	W64	25.11
`157e`	2026-02-19	`AX2025_W64_25_11_157e.zip`	W64	25.11
`157f`	2026-02-20	`AX2025_W64_25_11_157f.zip`	W64	25.11
`157g`	2026-02-21	`AX2025_W64_25_11_157g.zip`	W64	25.11
`157h`	2026-02-21	`AX2025_W64_25_11_157h.zip`	W64	25.11

- `155` **(2025-12-15)**: Removed `tmsExtentsCalculation` debug layer from SVG output; fixed Brookfield `CAD-95`.
- `156` **(2026-01-07 – 2026-01-08)**:
  - Added SVG `<metadata>` fields (`cadviewer_SVGCreationDate`, `cadviewer_SourceCreationDate`, `cadviewer_SourceModDate`, `cadviewer_SourceFormat`).
  - Implemented `-LOD` and `-lodid` automatic Lease Outline Drawing generation with room dimensioning (feet-inches format, collinear segment handling, viewport adjustment, outputting `_ID_<id>.svg` and `_Layout_SITE_LOD.svg`).
  - Fixed `&` in layer names (`&`) causing orphan `_block` layers.
- `156a` **(2026-01-12)**: Fixed `-last` ModelSpace clipping and `cadviewer_Initial_Viewport()` regression introduced by LOD extents changes.
- `157` **(2026-01-28 – 2026-02-01)**:
  - Upgraded project to C++17 with directory scanning and wildcard input support.
  - Added UIC (University of Illinois Chicago) department hatch and dynamic legend generation.
  - Added `-v` / `-version` command-line flags.
  - Added short-segment filtering for LOD dimensions; fixed Alcoa drawing issue.
  - Re-uploaded stripped Linux binary (`92 MB` vs `250 MB` with symbols) on 2/1/2026.
- `157a` **(2026-01-29)**: Fixed line-width issue for Brookfield (`3204-SP1.dwg` / `CAD-45`).
- `157b` **(2026-01-30)**: Restored multi-byte/Unicode filename support (broken since `146u`) and added `-i`, `-o`, `-f` support under `"Parameters"` (in addition to `"General"`) in `-json` parameter files.
- `157d` **(2026-02-15)**: Fixed `.nZW` CSS class conflict with `sLW_*` classes for Firefox/ `canvg` PDF export.
- `157e` / `157f` **(2026-02-19 – 2026-02-20)**: Rewrote layout and viewport lineweight and linetype scaling.
- `157g` **(2026-02-21)**: Changed `.ZW` to use `var(--tmsMinLineWidth)` instead of scaled `var(--tmsCalcMinLineWeight)`.
- `157h` **(2026-02-21)**: Adjusted viewport linetype scaling.

Version `154` Series (`AX2025`, ODA `25.11` — November–December 2025)

Version	Date	Package / Artifact	Platform	ODA
`154`	2025-11-04 2025-11-07	`AX2025_W64_25_11_154.zip` `ax2025_L64_25_11_154.tar.xz`	W64 L64	25.11
`154a`	2025-11-17	`ax2025_L64_25_11_154a.tar.xz` `AX2025_W64_25_11_154a.zip`	L64 W64	25.11
`154b`	2025-11-18	`AX2025_W64_25_11_154b.zip` `ax2025_L64_25_11_154b.tar.xz`	W64 L64	25.11
`154c`	2025-11-20	`AX2025_W64_25_11_154c.zip` `ax2025_L64_25_11_154c.tar.xz`	W64 L64	25.11
`154d`	2025-11-21	`AX2025_W64_25_11_154d.zip` `ax2025_L64_25_11_154d.tar.xz`	W64 L64	25.11
`154e`	2025-11-24	`AX2025_W64_25_11_154e.zip` `ax2025_L64_25_11_154e.tar.xz`	W64 L64	25.11
`154e2`	2025-11-24	`AX2025_W64_25_11_154e2.zip`	W64	25.11
`154f`	2025-11-25	`AX2025_W64_25_11_154f.zip` `ax2025_L64_25_11_154f.tar.xz`	W64 L64	25.11
`154g`	2025-12-03 2025-12-04	`AX2025_W64_25_11_154g.zip` `ax2025_L64_25_11_154g.tar.xz`	W64 L64	25.11
`154h`	2025-12-04	`AX2025_W64_25_11_154h.zip` `ax2025_L64_25_11_154h.tar.xz`	W64 L64	25.11
`154h2`	2025-12-05	`AX2025_W64_25_11_154h2.zip`	W64	25.11
`154i`	2025-12-09	`AX2025_W64_25_11_154i.exe`	W64	25.11
`154_RC1`	2025-12-09	`AX2025_W64_25_11_154_RC1.zip`	W64	25.11

- `154` **(2025-11-04 / 2025-11-07)**:
  - Fixed UrbanEdge (`Waugh Chapel- MASTER PLAN_10222024.dwg`) `-rl` / `-tl` parsing error and added support for `-rl` without `-tl` (using entity handle).
  - Updated Direct Distance (`-odd`) calculation (11/7/2025 build) to compute the minimum distance between all polygon vertices of both rooms (per Brookfield Leasing group request).
- `154a` **(2025-11-17)**: Initial fix for Matechco (`a1st.dwg`) `-MAPBLOCK` and Brookfield (`3727-SP1.dwg` , `4351-SP1.dwg` , `4472-SP1.dwg`).
- `154b` **(2025-11-18)**: Fixed missing `ZW` (zero-width) output on Matechco sprinkler drawings (`a1st.dwg` , `A2nd Floor.DWG` , `120.DWG`) with `-MAPBLOCK="(F|P).*>*extents*" -hlall` and added `text { stroke-width: 0.1px; }` CSS to `cv_styles` .
- `154c` **(2025-11-20)**:
  - Fixed RL/TL `NODE_` path generation (preventing Brookfield line-style `m0,0` move commands from breaking RL/TL room polygons on UrbanEdge).
  - Added initial `-CreateUrbanEdgeDummy` (`-cue`) CSV-to-DWG tenant name matching.
- `154d` **(2025-11-21)**: Fixed non-uniformly scaled block flag in `-MAPBLOCK` causing crashes on Matechco drawings; updated `-CreateUrbanEdgeDummy` DWG output.
- `154e` / `154e2` **(2025-11-24)**: Fixed Linux crash on Matechco `2nd_floor.dwg` (`154e`); added `_detailed.json` output to `-CreateUrbanEdgeDummy` (`154e2`).
- `154f` **(2025-11-25)**: Updated UrbanEdge JSON header fields (`propertyNumber: "RVWC"` , `propertyName: "Waugh Chapel"`), injected

calculated area as `"Actual Footprint SF"`, and added dummy JSON/outlines for `Vacant` spaces.

- `154g` **(2025-12-03 – 2025-12-04)**: Fixed North arrow rendering (`bRGB_7` instead of `noStroke fRGB_7`) and renamed view layers to `UE_VIEW-*`.
- `154h` / `154h2` **(2025-12-04 – 2025-12-05)**: Deleted pre-existing room hatches on Occupancy Cost and Kiosk layers while preserving legend hatches; mapped `Vacant` to `Available` on Status/DDLP; sorted JSON output (`154h`); added `_counts.json` output and CSS class updates (`154h2`).
- `154i` / `154_RC1` **(2025-12-09)**:
  - Added `-logo` parameter to embed corporate logos into storefronts linked with `NODE_x_image` IDs.
  - Fixed crash on `ibaseit.com` `EC.02.dwg` embedded TIFF images (`154i`).
  - Prevented duplicate Room IDs (`_Dupe`) when running `-cue` followed by `-logo` (`154_RC1`).

Version `153` Series (`AX2025` , ODA `25.11` — October 2025)

Version	Date	Package / Artifact	Platform	ODA
`153`	2025-10-13	`ax2025_L64_25_11_153.tar.xz` `AX2025_W64_25_11_153.zip`	L64 W64	25.11
`153c`	2025-10-21	`ax2025_L64_25_11_153c.gz`	L64	25.11
`153d`	2025-10-27	`ax2025_L64_25_11_153d.gz` `AX2025_W64_25_11_153d.zip`	L64 W64	25.11
`153e`	2025-10-29	`AX2025_W64_25_11_153e.zip` `ax2025_L64_25_11_153e.tar.xz`	W64 L64	25.11

- `153` **(2025-10-13)**: Added `-odd` (Output Direct Distance) and `-odj` (Walking Distance) support with `V6.2.17` license flags (Flags 15–18: Data Mining Type F/P, Modify Attributes EP, Compute Walking Distances) and AgenziaZero (`Agent0`) attribute updates.
- `153c` **(2025-10-21)**: Fixed license flag initialization order (moved `GetMacInfo` before flag checks for Distances, DXn, EuroP); allowed short (≤ 5 chars) OEM keys for KUBUS and cleaned up `-verify_detail` output (accompanied by `MacAddress_L64_06_02_18.gz`).
- `153d` **(2025-10-27)**: Added license key flag check (Flag 19) for Raytheon CALS G4 (`-cals`) output (accompanied by `MacAddress_L64_06_02_19.gz`).
- `153e` **(2025-10-29)**: Fixed nearest-point calculation on Corridor Lines so walking distances and drawn paths work properly (`3204-LP2-CL_distance.dwg`).

Version `152` Series (`AX2025` , ODA `25.11` — August–October 2025)

Version	Date	Package / Artifact	Platform	ODA

`152`	2025-08-01
	2025-08-04
	2025-08-05
		`AX2025_W64_25_11_152.zip`
		`ax2025_L64_25_11_152.gz`
		`ax2025_L64_25_11_152.tar.xz`
			W64
			L64
			L64
				25.11

`152a`	2025-08-07	`AX2025_W64_25_11_152a.zip`	W64	25.11
`152b`	2025-08-10	`AX2025_W64_25_11_152b.zip`	W64	25.11
`152b2`	2025-08-11	`AX2025_W64_25_11_152b2.zip`	W64	25.11
`152b3`	2025-08-12	`AX2025_W64_25_11_152b3.zip`	W64	25.11
`152b5`	2025-08-19	`AX2025_W64_25_11_152b5.zip`	W64	25.11
`152b6`	2025-08-20	`AX2025_W64_25_11_152b6.zip`	W64	25.11

Version	Date	Package / Artifact	Platform	ODA
`152b7`	2025-08-20	`AX2025_W64_25_11_152b7.zip`	W64	25.11
`152b8`	2025-08-21	`AX2025_W64_25_11_152b8.zip`	W64	25.11
`152c`	2025-08-22 2025-08-25	`AX2025_W64_25_11_152c.zip` `ax2025_L64_25_11_152c.tar.xz`	W64 L64	25.11
`152d`	2025-09-03	`AX2025_W64_25_11_152d.zip`	W64	25.11
`152e`	2025-09-04	`AX2025_W64_25_11_152e.zip`	W64	25.11
`152f`	2025-09-04	`AX2025_W64_25_11_152f.zip`	W64	25.11
`152g`	2025-09-09	`AX2025_W64_25_11_152g.zip`	W64	25.11
`152h`	2025-09-10	`AX2025_W64_25_11_152h.zip`	W64	25.11
`152n`	2025-10-01	`AX2025_W64_25_11_152n.zip`	W64	25.11
`152o`	2025-10-01	`AX2025_W64_25_11_152o.zip`	W64	25.11
`152p`	2025-10-06 2025-10-07	`AX2025_W64_25_11_152p.exe` `ax2025_L64_25_11_152p.gz`	W64 L64	25.11
`152q`	2025-10-08	`AX2025_W64_25_11_152q.zip`	W64	25.11

- `152` **(2025-08-01 – 2025-08-05)**:
  - Added `-dxlist` command to count and output blocks used in a drawing (for Hyphen).
  - Fixed `cadviewer_multiPages` array cleanup when using `-basic` (for `netfiles.de`).
- `152a` **(2025-08-07)**: Fixed page change matrix for `netfiles.de` (`-basic` with `-f=svg` and `-f=svgz`).
- `152b` / `152b2` / `152b3` **(2025-08-10 – 2025-08-12)**: Fixed multi-page PDF import: re-instantiated PDF importer per page so it does not repeat Page 1, handled `PDF2_Text` layers, fixed `_` vs `__` in page change matrix, fixed `currentPage`, and ensured `-last` converts a single page while `-basic` converts all pages.
- `152b5` / `152b6` **(2025-08-19 – 2025-08-20)**: Fixed PDF-in `-last` with `-f=svgz` producing empty output (`netfiles.de` / American Farmhouse PDF).
- `152b7` / `152b8` **(2025-08-20 – 2025-08-21)**:
  - Fixed first page in `-basic` page change matrix having `_Page_1` appended and uncompressed first `.svgz` page (`152b7`).
  - Fixed `-pg=n` defaulting to Page 1 in `LastSavedView`, fixed DWF `-basic` page change matrix mismatch, and disabled `dwgpostcompare.dwg` output in Release mode (`152b8`).
- `152c` **(2025-08-22 – 2025-08-25)**: Fixed `-pg=n` adding `-basic` `_Page_n` suffix to the output filename; fixed Linux SVG/SVGZ output and `-basic` Page 1 page change array.
- `152d` **(2025-09-03)**: Fixed `-tltag` attribute selection (was defaulting to the first attribute instead of the specified tag) and layer names with spaces for UrbanEdge (`UEP_SAMPLE_MASTER DRAWING.dwg`); added debugging for `kvados.cz` `AC10xx` magic number check.
- `152e` **(2025-09-04)**: Updated DWG sentinel/magic number reading for `kvados.cz`.
- `152f` / `152g` / `152h` **(2025-09-04 – 2025-09-10)**: Added snap point tuples to SVG metadata (`-hl` / snap layer support for UrbanEdge) and detailed file header debugging with `-debug` for `kvados.cz`.
- `152n` **(2025-10-01)**: Properly named successor to `151m` (internally `152m`); formatted `"spaceNumber" :` with a space before the colon on top-level space entries in `_distance.json` for easier searching while keeping inner distance entries as `"spaceNumber":`.
- `152o` **(2025-10-01)**: Fixed Univ. of Missouri RL/TL issue where `<` in room names (`G013<2`) broke XML/SVG attributes and classes (escaped `<` to

`<` in `cvjs:roomName` and sanitized `cvjs:roomId`/class).

- `152p` **(2025-10-06 – 2025-10-07)**: Fixed `-MAPBLOCK` regex, block scaling crash, and XRef block name matching (checking base block name `BLOCK` instead of `XREF$0$BLOCK`) on Matechco sprinkler drawings (`4030_18th_Ave-FP-101_First_Floor_FP_Plan_Rev.00.dwg`); added `-stats` parameter to report total and mapped blocks.
- `152q` **(2025-10-08)**: Fixed Brookfield `CAD-101` (polylines starting with a bulge/arc segment were ignoring points before the first non-arc segment; changed to always include the first point) and Bank Austria / Omninecs fix.

Version `151` Series (`AX2025`, ODA `25.11` — June–September 2025)

Version	Date	Package / Artifact	Platform	ODA
`151`	2025-06-11 2025-06-12	`AX2025_W64_25_11_151.zip` `ax2025_L64_25_11_151.gz`	W64 L64	25.11
`151a`	2025-06-12	`ax2025_L64_25_11_151a.gz`	L64	25.11
`151c`	2025-06-13	`ax2025_L64_25_11_151c.gz`	L64	25.11
`151d`	2025-06-16	`AX2025_W64_25_11_151d.zip` `ax2025_L64_25_11_151d.gz`	W64 L64	25.11
`151f`	2025-06-24	`AX2025_W64_25_11_151f.zip` `ax2025_L64_25_11_151f.gz`	W64 L64	25.11
`151j`	2025-07-10	`AX2025_W64_25_11_151j.zip`	W64	25.11
`151m`	2025-09-30	`AX2025_W64_25_11_151m.zip`	W64	25.11

- `151` **(2025-06-11 / 2025-06-12)**: Fixed OEM license table processing and added `"Licensed for the Exclusive Use of ..."` banner for OEM customers; fixed duplicate license check on Linux.
- `151a` **(2025-06-12)**: Fixed OEM and IP key verification on Linux and cleaned up `-verify_detail` output.
- `151c` **(2025-06-13)**: Added `Flags:` output (with obfuscated random numbers above valid flags) and locked version line to `-verify_detail`; removed 29-day limit when specifying OEM key by number or URL in the Key Generator.
- `151d` **(2025-06-16)**: Fixed DWF-to-PDF conversion issue for `dda.gov.ae` (`A-ABC-1570.dwf`) and resolved display artifacts on `iqdigi.com` reference drawing (`Cad File for reference 1.dwg`).
- `151f` **(2025-06-24)**: Fixed DWF-to-PDF conversion with `-basic` (`dda.gov.ae` `DRAINAGE_DRAWINGS.dwf` and single-page DWFs) by skipping the blank ModelSpace page for DWF input (treating `-basic` as `layouts_only` for DWF); also fixed Brookfield `CAD-88`.
- `151j` **(2025-07-10)**: Added StoreFront-to-Corridor distance calculations to Walking Path; added ability to scale DWF text when converting to PDF (`dda.gov.ae`); reorganized Visual Studio project structure for Git.
- `151m` **(2025-09-30)**: *Note: Actually version `152m` internally (misnamed file due to copy-paste from an older filename).* Fixed infinite loops in corridor walking distance calculation on drawings with multiple corridor loops (`4279-LP1` / `4279-LP2` Willowbrook) by checking whether subpath start points had already been traversed.

Version `150` Series (`AX2025`, ODA `25.11` — April–May 2025)

Version	Date	Package / Artifact	Platform	ODA
`150`	2025-04-16	`AX2025_W64_25_11_150.zip` `ax2025_L64_25_11_150.tar.xz`	W64 L64	25.11

Version	Date	Package / Artifact	Platform	ODA
`150b`	2025-04-22	`AX2025_W64_25_11_150b.zip`	W64	25.11
`150c`	2025-04-23	`AX2025_W64_25_11_150c.zip`	W64	25.11
`150d`	2025-04-27	`AX2025_W64_25_11_150d.zip` `ax2025_L64_25_11_150d.gz`	W64 L64	25.11
`150d2`	2025-04-27	`AX2025_W64_25_11_150d2.zip`	W64	25.11
`150f2`	2025-04-30	`AX2025_W64_25_11_150f2.zip`	W64	25.11
`150g`	2025-04-30	`AX2025_W64_25_11_150g.zip`	W64	25.11
`150h`	2025-05-04	`AX2025_W64_25_11_150h.zip`	W64	25.11
`150h2`	2025-05-05	`AX2025_W64_25_11_150h2.zip`	W64	25.11
`150i`	2025-05-15	`AX2025_W64_25_11_150i.zip`	W64	25.11
`150j`	2025-05-16	`AX2025_W64_25_11_150j.zip`	W64	25.11
`150k`	2025-05-30	`AX2025_W64_25_11_150k.zip`	W64	25.11

- `150` **(2025-04-16)**:
  - Implemented initial “Close To with Blocking Lines” proximity calculation (checking line intersections with `tmsBlockingLayer` and outputting distances to JSON).
  - Enabled Version 6 license check with Data Mining (Type F) permission for `-dx2`.
- `150b` **(2025-04-22)**: Made layer name matching case-insensitive across `-rl`, `-tl`, `-du2`, `-dx2`, etc.
- `150c` **(2025-04-23)**: Added `MText` support (in addition to `Simple Note` / `Text`) for Room IDs in `-dx2` and `-du2` (for Smelter).
- `150d` **(2025-04-27)**:
  - Fixed illegal character handling in block names for Construtivo (`kaio2.dwg`) by keeping block names as `OdString` rather than converting to Unicode.
  - Placed proximity helper lines behind a debug flag.
- `150d2` **(2025-04-27)**: Added `"Future Tenant"` tab generation for ~8% of stores in `-cde`.
- `150f2` **(2025-04-30)**:
  - Separated distance calculation into its own command-line parameter `-OutputDistances` (`-odj`).
  - Fixed JSON syntax (`" ,"`) and property/plan name matching; added randomized lease expiration months and extra business data fields.
- `150g` **(2025-04-30)**: Added Food Court store name list for central atrium spaces, expanded merchandise categories, and fixed Occupancy Cost calculation.
- `150h` **(2025-05-04)**:
  - Added `-BlockingLines` (default `VizQuery_Blocking`) and `-CorridorLines` (default `VizQuery_Corridors`) parameters.
  - Tied `VIEW-OCCUPANCY-COST-PLAN` hatch color coding to the calculated Occupancy Cost percentage.
- `150h2` **(2025-05-05)**: Added `_spaces.json` output (`spaceNumber`, `spaceHeader`, etc.) to `-cde`.
- `150i` **(2025-05-15)**: Configured `-odj` scaling and adjacency detection for Brookfield drawings (`4279-LP1-block.dwg`) without requiring blocking lines; generated `commands.json` parameter whitelist for Schneider (`AX-311`).
- `150j` **(2025-05-16)**: Further refinements to Brookfield distance and adjacency output.
- `150k` **(2025-05-30)**: Implemented walking distance calculation along corridor paths (`VizQuery_Corridors`) using recursive path-finding and

closest point from store to corridor line (optimized with Room Prefix filter from 2.8 hours down to 16 seconds in Release mode).

Version `149` Series (`AX2025` ODA `25.11` & `ax2023` ODA `23.12` — March–April 2025)

Version	Date	Package / Artifact	Platform	C
`149`	2025-03-18	`AX2025_W64_25_11_149.zip` `ax2025_L64_25_11_149.tar.xz`	W64 L64	2
`149a`	2025-03-19 2025-03-24	`AX2025_W64_25_11_149a.zip` `ax2025_L64_25_11_149a.tar.xz`	W64 L64	2
`149b`	2025-03-20	`AX2025_W64_25_11_149b.zip`	W64	2
`149c`	2025-03-24	`AX2025_W64_25_11_149c.zip` `ax2025_L64_25_11_149c.gz`	W64 L64	2
`149c2`	2025-03-24	`ax2025_L64_25_11_149c2.gz`	L64	2
`149d`	2025-03-24	`ax2025_L64_25_11_149d.tar.xz`	L64	2
`149e`	2025-03-25	`AX2025_W64_25_11_149e.zip`	W64	2
`149f`	2025-03-26	`AX2025_W64_25_11_149f.exe` `ax2025_L64_25_11_149f.gz`	W64 L64	2

`149h`	2025-03-31	`ax2023_L64_23_12_149h_HPE.tar.xz`
		`AX2025_W64_25_11_149h.zip`
		`ax2025_L64_25_11_149h.tar.xz`
			L64
			W64
			L64
				2
				2
				2

`149i`	2025-04-02	`ax2025_L64_25_11_149i.tar.xz` `AX2025_W64_25_11_149i.zip`	L64 W64	2
`149k`	2025-04-05	`AX2025_W64_25_11_149k.exe` `ax2025_L64_25_11_149k.gz`	W64 L64	2
`149L`	2025-04-07	`AX2025_W64_25_11_149L.exe` `ax2025_L64_25_11_149L.gz`	W64 L64	2
`149L2` – `L6`	2025-04-08	`ax2025_L64_25_11_149L2.gz` .. `149L6.gz`	L64	2
`149m`	2025-04-08	`AX2025_W64_25_11_149m.zip` `ax2025_L64_25_11_149m.gz`	W64 L64	2
`149n`	2025-04-09	`AX2025_W64_25_11_149n.exe` `ax2025_L64_25_11_149n.gz`	W64 L64	2
`149o`	2025-04-14	`AX2025_W64_25_11_149o.zip`	W64	2

- `149` **(2025-03-18)**: Streamlined layer and lineweight change checks during entity processing, resolving a Linux `Signal 11` crash on GoEshow drawings and improving conversion speed.
- `149a` **(2025-03-19 / 2025-03-24)**:
  - Fixed Venetian (`P1_Podium_L03.dwg`) block dash-array/linetype rendering.
  - Added `-NOBLOCKEXTENTS` (`-NBE`) parameter.
  - Re-uploaded Linux `.tar.xz` on 3/24/2025 with `adinit.dat` included.
- `149b` **(2025-03-20)**: Fixed linetype scaling on entities (specifically layer `Door` on Henderson `Trend Plaza` drawings; enforced minimum linetype scale of `0.1`).
- `149c` / `149c2` **(2025-03-24)**: Fixes for Henderson (`Trend Plaza_South Wing_L3`) and debugging for Linux Chinese/Korean font rendering (`SIMSUN.TTC` , `fontconfig` , and `\M+` multi-byte strings).
- `149d` **(2025-03-24)**: Removed forced stroking of all text containing `\M` strings so Asian TrueType fonts render properly; verified DGN loading and postbind DWG generation.

- `149e` **(2025-03-25)**: Solved Xref loading in neutral/release directories for ProjectAssociates (`G-200003-WK.DWG`).
- `149f` **(2025-03-26)**:
  - Added global linetype dash-array adjustment so Henderson drawings load rapidly in CADViewer.
  - Fixed `-last` extents calculation by ignoring a stray outlier text entity in `Asset Tracking CMH Terminal 1STFLOOR.dwg` .
- `149h` **(2025-03-31)**:
  - Built special `ax2023` (`ODA 23.12`) Linux binary for HPE along with standard `AX2025` Windows/Linux packages.
  - Fixed ODA Bounding Box coordinate calculation for RL/TL when used with `-nbe` .
  - Divided square-millimeter area calculations by `1,000,000` to output m^2.
  - Added `-createdummyentities` (`-cde`) parameter.
- `149i` **(2025-04-02)**:
  - Enhanced `-cde` to read a JSON file, update room text, and create colored hatches on `VIEW-*` layers using `LayerColors.csv` .
  - Renamed VizQuery layers (`VizQuery_ID` , `VizQuery_Space` , etc.).
  - Added `-du2` (DWG updater) and `-dx2` (DWG scraper) parameters.
- `149k` **(2025-04-05)**:
  1. Added `-building` (`-bldg` , default `Venetian`) and `-floor` (`-flr` , default `L03`) parameters.
  2. Added `detailTabs` for `Vacant` spaces.
  3. Changed `m2` unit string to `m\u00B2` and fixed JSON comma formatting.
  4. Copied summary information into `detailTabs` .
  5. Expanded store name lists (regular, luxury, anchor) and removed duplicates.
- `149L` **(2025-04-07)**:
  - Replaced `#` with `_` in SVG CSS linetype class names (e.g., `.sLt_#21_DASHED6` -> `.sLt__21_DASHED6`), fixing `CAD-95` PDF printing.
  - Expanded US and European store lists (496 retailers, 204 luxury, 96 anchor).
- `149L2` – `149L6` **(2025-04-08)**:
  - Allowed `LayerColors.csv` in lowercase (`layercolors.csv`) or CamelCase, and searched both the drawing directory and working directory.
  - Fixed `OdError_InvalidIndex` (`Invalid index` exception) on Debian 11 during `CreateDummyEntities` hatch loop indexing.
- `149m` **(2025-04-08)**:
  - Updated `-cde` to output both `_simple.json` (Scraper format) and `_detailed.json` .
  - Added `netfiles.de` OEM license entry.
- `149n` **(2025-04-09)**: Fixed color assignment bugs in `-cde` (cleared spurious colors and wrong layer colors in `Vacant` areas).
- `149o` **(2025-04-14)**:
  - Updated `-cde` to attach specially formatted hyperlinks to room polygons so SVG conversion generates `NODE_` links directly without needing `-rl` / `-tl` .
  - Added `-cde=**basic**` and `-cde-basic` to initialize all spaces as `Vacant` using a JSON parameter file (`at` , `ht` , `rl` , `tl`).

Version `148` Series (`AX2025` , ODA `25.11` — March 2025)

Version	Date	Package / Artifact	Platform	ODA
`148c`	2025-03-11	`AX2025_W64_25_11_148c.zip`	W64	25.11

Version	Date	Package / Artifact	Platform	ODA
`148d`	2025-03-11	`AX2025_W64_25_11_148d.zip`	W64	25.11
`148e`	2025-03-11	`AX2025_W64_25_11_148e.zip`	W64	25.11
`148f`	2025-03-14	`AX2025_W64_25_11_148f.zip`	W64	25.11

- `148c` **(2025-03-11)**: Initial build in Hamburg for Bank Austria (BA / Omninecs) and Brookfield Properties Retail (BPRetail) regression testing.
- `148d` **(2025-03-11)**: Fix for BPRetail conversion server control and regression test drawings.
- `148e` **(2025-03-11)**: Attempted Xref binding/loading fix for ProjectAssociates (`G-200003-WK.DWG` referencing `Plantmap.dwg`).
- `148f` **(2025-03-14)**:
  - Fixed BPRetail (`4386-SP1.dwg`) conversion with `-last -extents -rl -tl -q -ial -lws` .
  - Removed the `normalize` license check for Bank Austria.

Early Mentions & Pre-148 Releases (2021 – March 2025)

Version `56a` (October 1, 2021)

- Referenced during testing of a RedBeanSoft drawing where rotated text was not rendering as expected.

`ax2023` (`ODA 23.12`) Updates (June 21 – July 4, 2023)

- **Licensing (`-hlall` & Block Processing)**: Added license key validation for `-hlall` and block-related processing (built for ProtecSRL, FDVHuset, and Omninecs) as well as the WAPA `svg-in` parser.
- **Invisible Attributes (`-ia`) & `-hlall`** : Investigated Rome/Omninecs (`gg4.dwg`) regression with `-hlall` and `-ia` (blank/invisible attributes command).
- **Drawing Compare (`-compare`)**: Added change-classification classes to identify specific types of modifications and support reporting multiple changes on a single entity (e.g., both position and color changes) for SNCF.

Versions `146u` , `147n` , `147p` (Referenced March 2025 & January 2026)

- `146u` : Noted as the last version before a multi-byte/Unicode filename regression (later fixed in `157b`).
- `147n` / `147p` : Noted on 3/10/2025 that `147n` worked while `147p` introduced a breaking change on an SVG conversion test case.