# progeCAD 2026 What's New

#### **PERFORMANCE**

- New engine, Intellicad 13.1.
- Updating drawings is up to 2x faster.
- Opening drawings with 3D solids is up to 10x faster.
- Regenerating drawings is up to 1.5x faster.
- Working with view changes, the view cube, and section planes in large drawing files are several times faster.
- Faster Hatch command and Boundary specification.
- $\circ$  AI Translator: significantly improved translation time (up to 100x on large drawings).
- Improved LISP performance.
- Faster entity creation for IcARX applications.
- Improved BEDIT preview speed.
- Removed lag starting PAN.
- Improved speed dragging entities on command MOVE, COPY, PASTE.
- Improved opening speed of OPTIONS, SETTINGS dialogs.
- Improved smoothness of mouse movement working with grips.

#### **NEW FEATURES**

- o **AEC Module:** Walls, windows, roofs, slabs, stairs, and roof slabs infill according to the section fill settings if they are sectioned using the Section Plane command.
- o Increased precision of Object Snaps intersection working with large coordinates.
- o Print to .png files with a transparent background via new "PublishToWeb PNG (Transparent).pc3" printer.
- New Smart Regen. This feature enables Automatic Regen in drawing with less than 100.000
  entities. The value can be customized by the user, to obtain the best useful result, based on the
  type of working drawings.

- o Use an interactive dialog box with the 3D Positioner command to accurately input distances and angles to move or rotate entities along one or more axes, calculate values, and apply them or undo them as you work.
- o Improve Trim/Extend commands. Choose between manually or automatically selecting entities for cutting edges and boundary edges when using the Trim and Extend commands.

  Added Quick Mode. All objects automatically act as cutting edges.
- o Clone command ADDSELECTED extended, now compatible with more entities: ellipses, splines, infinite lines, rays, points, wipeouts, 3D polylines, tables, images, and tolerances.
- o Quick Calculator on the Properties pane: use the calculator with the Properties palette to change the properties of objects.
- o Assign a digital signature to .dwfx files using the "Attach Digital Signatures" Windows command.
- o New command **MKSHAPE** creates shape files (.shp) and compiles them into compiled shape files (.shx) by using the Make Shape command (or use the Compile to SHX command to compile .shx files manually).
- o New command **MKLTYPE** creates a linetype definition from selected entities and saves it to an .lin file by using the Make Linetype command.
- o When importing .dgn files, specify conversion settings for external references and shapes.
- o Solid Profile command creates a projection of profile lines of three-dimensional solids in a layout viewport.
- o New command **SURFNETWORK** creates three-dimensional surfaces between networks of open curves, including surface and solid edges in the U- and V-directions.
- o New command **SURFOFFSET** for surfaces to create parallel surfaces at a specified distance from a source surface or region.
- o Use the Fillet command for surfaces to create surfaces that fillet an area between two existing surfaces or regions.
- o Use the Extend command for surfaces to extend surfaces to a specified distance.
- o Use the Trim command for surfaces to trim surfaces and regions where they meet edges of other entities.
- Draw truncated solid cones.
- o View and modify lookup tables for advanced block definitions.
- o Reverse all changes made to one or more advanced block references by using the Reset Advanced Block command.
- o GEO command: Look up an address when setting a geographic location.
- o Preview print jobs using visual styles.
- o Use OpenType Fonts.
- o Use .ico files for custom buttons located on the ribbon, menus, and toolbars.

- o **Drawing Materials work with Artisan** (e.g. Importing a Revit with materials, now Artisan reads the material data).
- o Material dialog to create and edit drawing materials.

#### **RASTER DRAW**

Raster Draw toolset is included with progeCAD 2026.

Use Raster Draw tools in a specialized toolset to edit scanned drawings and convert raster images to DWG objects.

This new feature package includes Image editing and cleanup, Vectorization tools, and Image transformation functionality.

# o Converting Raster Entities to Vector (\_VECTORIZEIMAGE)

The command allows you to vectorize an image or part of it into basic CAD entities (mainly polylines and circles). There are various secondary options such as color, layer on which to insert, portion to vectorize etc. The main option is the vectorization method. Two main algorithms supported: Zhang Suen and Guo-Hall (the centerline of the pixels). Instead, the Canny method creates vector lines based on the contours of pixels.

## Recognizing and Converting Text (\_IRCTEXT)

Use the text recognition tools to select raster text in your drawing and convert it to CAD text or multiline text (Mtext).

#### o **REMOVE (IRUB)**

You can erase raster data within a rectangular region.

## o CROP (\_ICROP)

Erase all the raster data outside a defined rectangular region.

## o MERGE VECTOR (\_IVMERGE)

Merging vectors creates a raster equivalent of a vector entity.

When working with a hybrid drawing, you can merge vectors into an existing image or a new raster image. Vector merging allows you to make precise changes to your raster image with progeCAD while keeping your data in raster format.

## O Draw Freehand Sketches (\_ITOUCHUP)

You can draw freehand sketches which are then automatically converted to raster when inserted into the image.

#### o Invert ( IINVERT)

You can use the Invert filter to reverse the light and dark shades of any image. It allows you to invert bitonal, color, and grayscale images.

#### o Correct distortions (\_IBIAS)

You can use the Bias tool to correct distortions in the image aspect ratio.

# o Scale (\_ISCALE)

You can adjust the image scale to match the scale of a vector drawing or another image.

## o Mirror (\_IMIRROR)

You can mirror or flip an image along the horizontal or vertical axis.

#### o Displace (\_IDISPLACE)

The command moves an image by a specified offset.

## o Rotate (\_IDESKEW)

You can rotate an image to match the rotation angle of a vector drawing or another image.

# o Insert (\_IINSERT)

You can insert various supported image types and formats into a drawing.

## Change color depth (\_IDEPTH)

You can alter the color depth of an image switching between 1-bit bitonal, 8-bit grayscale and 32-bit true color images.

# New blank image (\_INEW)

You have the option to create a blank image specifically for use with the image merge and vector merge commands. To do this, you first define an image frame within the New Image dialog box. Once created the image will be placed in the temporary files, you can later save it to the desired location.

#### o Save (ISAVE & ISAVEAS)

After editing an image, you can save the image with a different file name, format, or location without affecting the drawing file. The Save As option is especially useful when working with a non-editable image that you need to modify.

## Raster Data Query (\_RASTERDATAQUERY)

The command interactively displays the cursor location and data about the image pixel at that location.

The Raster Data Query dialog box always tracks the cursor location and displays the color values of the image pixel at that location.

# Toggle frames (\_IFRAME)

An image frame surrounds an image. You can hide the frame while still keeping the image visible.

o Extra functions for select, zoom, display and erase images (\_ISELECTALLINSERTIONS, IERASEINSERTION, IHIDEINSERTION, ISHOWINSERTION, IZOOMTOINSERTION).

#### **BIM functions**

- o Convert .rvt and .rfa files to .ifc files by using the RVT to IFC command.
- o Check .ifc files for errors by using the IFC Validate command.
- o Manage layers for .ifc underlays in the BIM Properties pane.
- Unload BIM underlays in the Xref Manager dialog.
- o Use the AEC Styles Manager to manage styles for dimensions, spaces, structural members and structural member shapes, roof slabs and roof slab edges, AEC polygons, list definitions, mask blocks, mass elements, materials, multi-view blocks, and profiles.
- Use the **Corner Window** command to draw a corner window at the intersection of two linear walls.
- o Attach railings to stair components.
- o Extract data from .ifc, .rvt, and .rfa files.

#### **User interface**

- o New AutoCAD®-style Options dialog. The new Options dialog is available by typing **OPTIONNEW**.
- o Layout Tabs: Ctrl+click to select multiple layouts or Shift+click to select a range of layouts.
- o Layout Tabs: Drag and drop the layouts tab to reorder them.
- Control how various UI elements work with running and one-time entity snaps by setting the SNAPUIDISPLAY system variable.
  - Controls how various UI elements work with running and one-time entity snaps. This system variable affects the following UI elements: Draw > Entity Snaps ribbon panel, Tools > Entity Snaps menu, Entity Snaps toolbar, Ctrl (or Shift)+Right-click menu, and Entity Snap Settings status bar menu.
  - 0 = When not in a command, the UI elements display running entity snaps and allow you to change them. When in a command, the UI elements display the running entity snaps; when selected, the running entity snaps are temporarily disabled and the selected one-time entity snap is temporarily activated.
  - 1 = When not in a command, the UI elements display running entity snaps and allow you to change them. When in a command, the UI elements do not display running entity snaps and allow you to set a one-time snap.
  - 2 = When not in a command, running entity snaps do not display on the ribbon, menu, toolbar, and Ctrl (or Shift)+Right-click menu. These UI elements are used only for setting one-time snaps when in a command. The Entity Snap Settings status bar menu is used exclusively for setting running entity snaps, even when in a command. This behavior is similar to other CAD programs.

o Control the behavior of status bar menus that support multi-selection by setting the STATBARMENUMODE system variable.

Controls the behavior of status bar menus that support multi-selection. This system variable affects the Entity Snap Settings status bar menu and the Panels Visibility menu, which displays when you right-click an empty area of the status bar.

- 0 = Single selection. The status bar menu closes after choosing one option.
- 1 = Multiple selection. The status bar menu closes when picking outside the menu.
- 2 = Multiple selection. The status bar menu closes when the mouse moves outside the menu.

Note that if a command is running and you choose a one-time snap on the Entity Snap Settings status bar menu (when the <u>SNAPUIDISPLAY</u> system variable is set to 0 or 1), multiple selection is not available.

- o New **Quick Calculator**. Performs a full range of mathematical, scientific, and geometric calculations, creates and uses variables, and converts units of measurement. You can use the calculator with the Properties palette to change the properties of objects or directly in the command line.
- Tool Palettes. Added new tabs. The AEC Arch with the main commands of the architectural module, the Raster Draw for the new image management system and the "2D Cars" tab with new car blocks for plans and elevations.

#### **API**

- o LISP: Completely refactored to improve performance and increase compatibility with other CAD applications.
- NET: Support for advanced blocks,
   IntelliCAD.ApplicationService.DocumentExtension.GetAcadDocument(), and the UcsToDisplay method of the IntelliCAD.Internal.Utils class.
- o IcARX: Enhanced support for user interface development and improved performance for entity creation.
- o VBA: Use the table.setformula method, use formulas with the table.SetText method, and use new methods related to multileader styles.
- o Load .arx, .crx, and .dbx files by using the Load Application command.

#### **DATAEXTRACTIONNEW** command

The new Extract Data command is completely refactored to improve performance. Scanning, sorting, and reporting from large data sets for data extraction is much faster.

- o Report on the properties of drawings (such as file size, path, etc.), system variables stored in drawings, and the number of entities in drawings (such as total circles).
- o When refining data for the report, hide and unhide columns, and drag and drop columns to reorder them.
- o When selecting entities to report on, filter the list by displaying only blocks with attributes.

- o Right-click a linked table in the drawing and choose Data Extraction > Data Extraction Settings to change the report template, entities, columns, filters, etc. that are used to generate the table.
- o Extract data from external references, advanced blocks, attributes, and AEC entities.
- o Extract data from .dgn, .ifc, .rvt, and .rfa files, depending on the program version.
- o Create filters to extract data that meets specified conditions.
- o Preview entities when choosing which entities to extract data from.

## **System variables**

- O New system variables: BACTIONBARMODE, BGRIPOBJCOLOR, BGRIPOBJSIZE, BPARAMETERCOLOR, BPARAMETERFONT, BPARAMETERSIZE, BPTEXTHORIZONTAL, DRAWORDERCTL, FILLETRAD3D, OLEACCURACY, PRESELECTIONEFFECT, PRESELECTIONEFFECTCOLOR, SELECTIONAREAOPACITY, SELECTIONEFFECTWIDTH, SURFU, SURFV, PDFSHX, SMOOTHMESHCONVERT, SNAPUIDISPLAY, STATBARMENUMODE, and TRIMEXTENDMODE.
- o Updated system variables: PICKDRAG, REGENMODE, BKGEDITTEXTCOLOR, BKGEDITTEXTTRANSPARENCY, and POINTCLOUDPOINTMAX.
- New system variable defaults: ATTDIA default is 1, FILEDLGSTYLE default is 1, FILETYPEASSOC default is 0, OLEQUALITY default is 3, POINTCLOUDPOINTMAX default is 10000000, SELECTIONEFFECTCOLOR default is 161.
- o Renamed system variables: RASTERPREVIEW renamed to THUMBSAVE, REGENTOOLTIP renamed to REGENNOTIFY.
- o REGENMODEGLOBAL is now hidden.