# AutoCAD 2017.1 Update/Enhancement Preview Guide

#### Introduction

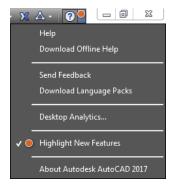
The AutoCAD 2017.1 Update offers several valuable enhancements to AutoCAD 2017, including:

- PDF Import enhancements
- Improved Text to Mtext conversion
- Off-screen selection
- Improved linetype gap selection
- Improved support for high resolution displays
- Improved performance for 3D navigation

After installing the update, new functionality is highlighted with orange circles on the Insert and Express Tools ribbon tabs as well as on the Help menu. This makes it easy for you to identify and access updated tools.



Once you become familiar with the new functionality you can turn off the new feature highlighting from the Help menu.



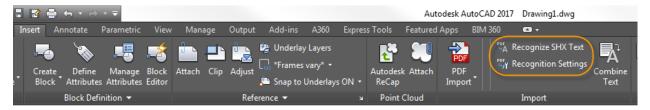
#### PDF Enhancements

PDF files are the most common file format used when exchanging design information between designers, contractors, clients, et al. In AutoCAD 2017, AutoCAD included the ability to import PDF files. The PDFIMPORT command imports PDF data into AutoCAD as 2D geometry, TrueType text, and images.

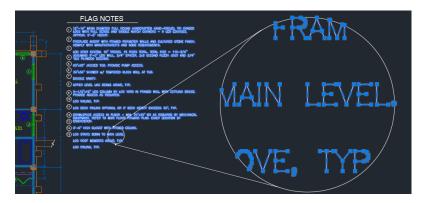
#### SHX Text Recognition

One shortcoming of PDFIMPORT is that Adobe's PDF file format doesn't recognize SHX fonts. When plotting to PDF, text defined with SHX fonts is written out and stored in the PDF as wireframe geometry, therefore, the text is also brought in as wireframe geometry during import.

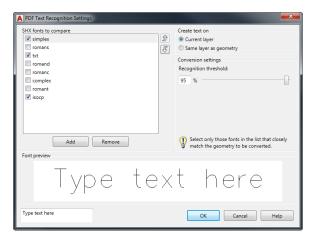
The AutoCAD 2017 Update offers a SHX text recognition tool that enables you to select imported PDF wireframe geometry representing SHX text and convert it to text objects. Access this functionality from the Recognize SHX Text tool (PDFSHXTEXT command) on the Insert ribbon tab.



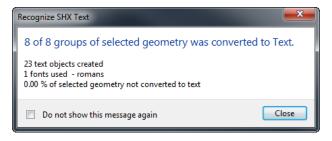
The SHX recognition tool analyzes clusters of geometry (e.g. lines, polylines, etc.) from your selection set and compares them to characters in specified SHX cache files.



A Settings option is available to help you manage which SHX fonts to compare against the selected text, as well as control some settings during the conversion. The most common SHX fonts are listed by default. You can add or remove SHX fonts based on your needs and then select which fonts in the list you want to compare against the selected text.



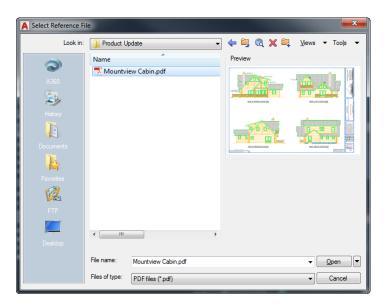
After comparing the geometry to the SHX fonts, the geometry that matches is automatically replaced with one or more mtext objects. A message box displays the results.



#### Additional PDF Import enhancements

In addition to the SHX recognition tool, the AutoCAD 2017 Update offers the following PDF Import enhancements:

- The PDF import and attach tools (PDFIMPORT and PDFATTACH commands) display thumbnail previews of PDF files in the Select File dialog.
- Fixed orientation problems with rotated TrueType text. It no longer creates upside-down text.
- Improved scaling of PDF geometry from layouts. Geometry is scaled to real-world size in Model space if all the viewports are of the same scale.
- Better Form data support when importing PDFs.



#### Text to Mtext Enhancements

The Convert to Mtext express tool enables you to combine many individual text objects into one multi-line text object. This can be particularly useful after recognizing and converting SHX text from an imported PDF file. You can access the Convert to Mtext tool (TXT2MTXT command) from the Express Tools ribbon tab or from the Combine Text tool on the Insert ribbon tab next to the Recognize SHX Text tool.



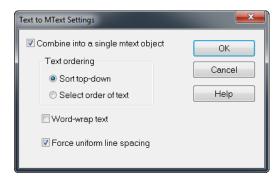


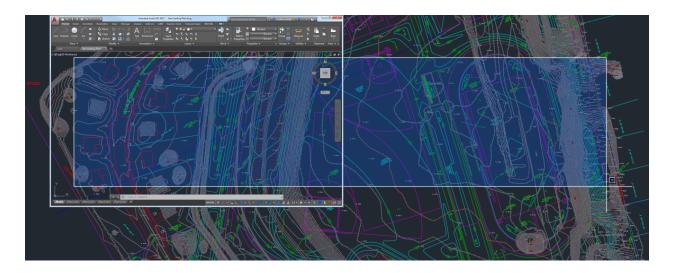
The following are enhancements to the TXT2MTXT express tool:

- You can select Mtext objects in addition to text objects.
- A Settings option on the Command line displays the Text to MText Settings dialog.
- Character codes translate correctly between Text and Mtext (for example the degree symbol appeared as %%d when converted to Mtext).
- The "Select objects" prompt adheres to standard error checking and messaging. For example, objects on locked layers are filtered from the selection set, and so on.
- Justification (Top left, Top center, Top right) is inferred for the Mtext object being created based on the positioning of the text objects in the drawing instead of always using Top left justification. When no justification can be logically inferred, it defaults to top-left.
- Numbered and lettered list formatting is inferred when the word-wrap text box is checked. If a line starts with one or two characters followed by a period and up to 10 spaces, list formatting will be applied automatically.
- An option was added to the Settings dialog box to not combine selection into a single mtext objects (converts text object to mtext without combining).
- The top-down sorting order is relative to the current UCS and sorting is left-to-right when text objects are collinear. When multiple text objects are collinear, they are treated as if on the same line with a space between them.
- A new Settings option enables you to force uniform line spacing or maintain existing line spacing.

#### Off-screen Selection

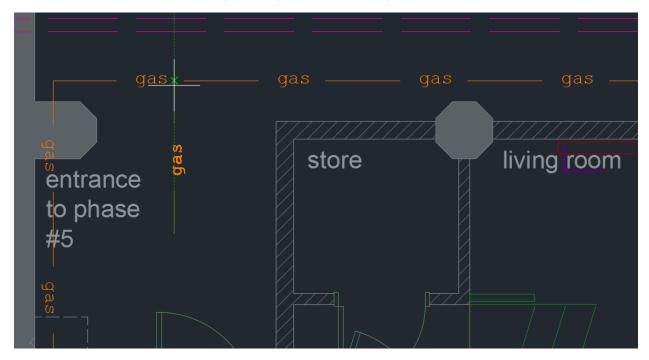
With the AutoCAD 2017 Update you can begin a selection window in one part of your drawing and then pan and zoom to another part while maintaining selection of the off-screen objects!





### Linetype Gap Selection Enhancements

Linetype gap behavior is enhanced to support complex and DGN linetypes. In addition, this feature works with all objects, such as polylines with width and splines. Now you can select complex and DGN linetypes or snap to them by picking on the gaps between the geometry.



# High Resolution (4K) Monitor Support

The AutoCAD 2017 Update supports higher display resolutions and pixel densities to ensure the best possible viewing experience even on 4K displays and higher. Commonly used user interface elements, such as the Command Line, Layer Manager, ViewCube, Pick Box, and Grips are appropriately scaled and displayed as per the Windows setting.

# 3D Navigation Performance

The AutoCAD 2017 Update offers significant improvements when using zoom, pan and 3D orbit operations in commonly used visual styles.



## Autodesk Desktop App

The AutoCAD 2017 update is available as a download through your AutoCAD Subscription. You can access it from the Autodesk Desktop App when you're logged into your Autodesk account.

