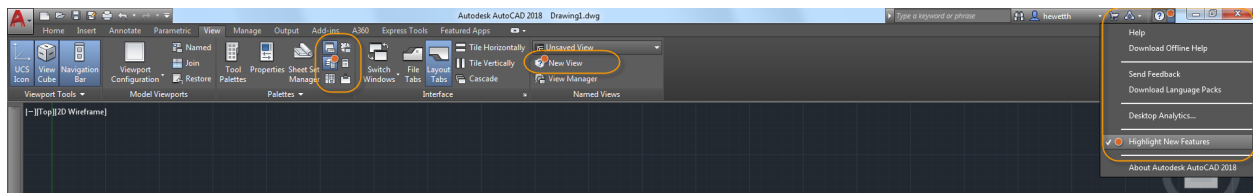


AutoCAD 2018.1 and AutoCAD LT 2018.1 Update Preview Guide

The AutoCAD 2018.1 Update offers new software enhancements and tools to simplify your workflows and improve productivity. To help you quickly identify new features in the user interface, make sure the Highlight New Features option in the Help menu is turned on.

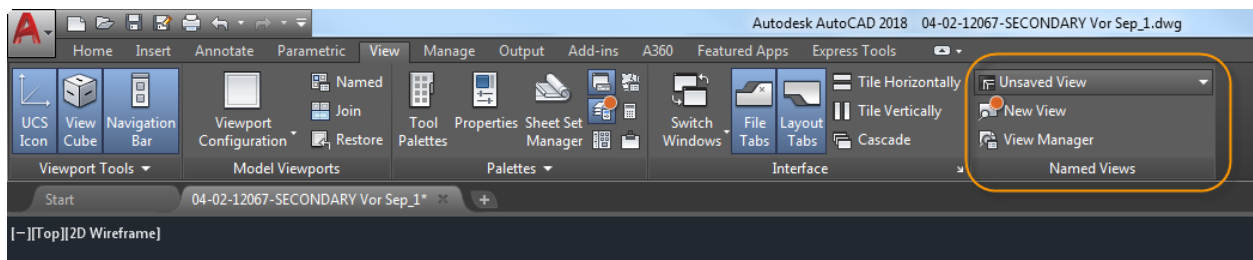


Views and Viewports

Enhancements in the AutoCAD 2018.1 Update make working with named views and layout viewports easier than ever!

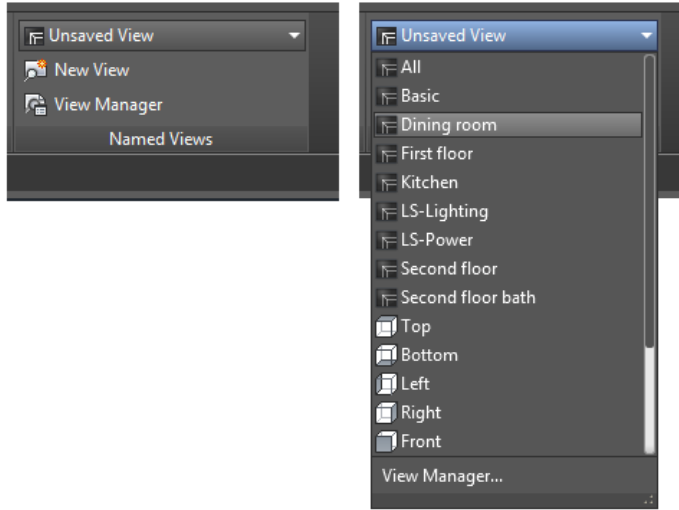
Named Views

A new Named Views panel is added to the View ribbon tab with tools to easily create, restore, and edit named views.

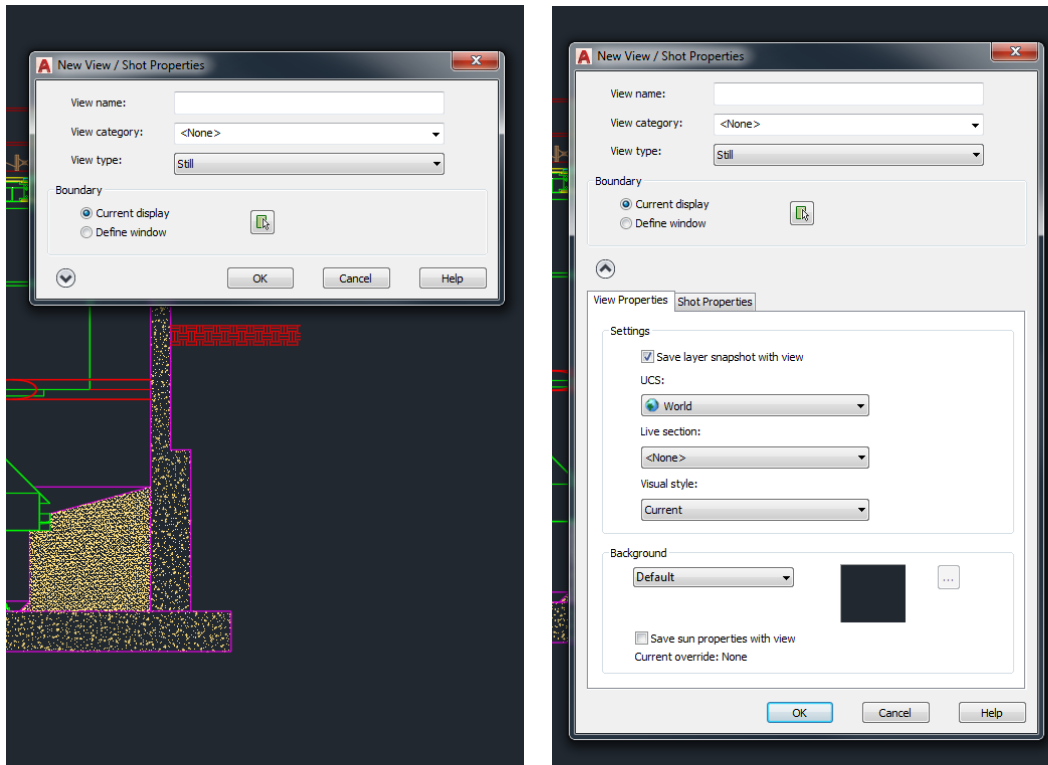


* Not all functionality is available in AutoCAD LT.

The View dropdown list in the panel allows you to easily restore named views by selecting it from the dropdown list:



The New View tool offers a simplified version of the New View/Shot Properties dialog box with only the most basic controls for creating a new view. You can expand it to access the full set of View and Shot Properties.*



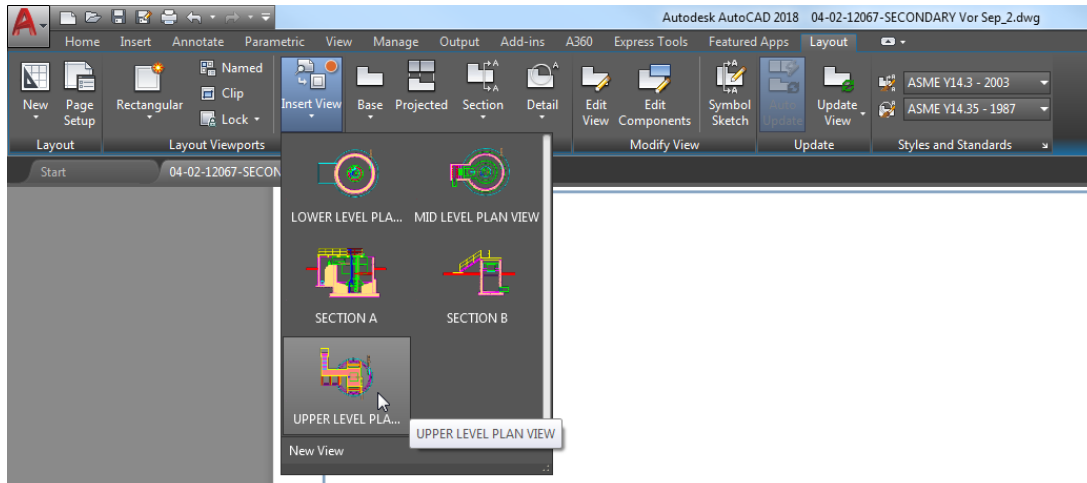
The View Manager button displays the View Manager dialog box. From there, you can edit and manage named views.

* Not all functionality is available in AutoCAD LT.

Inserting Named Views as Viewports

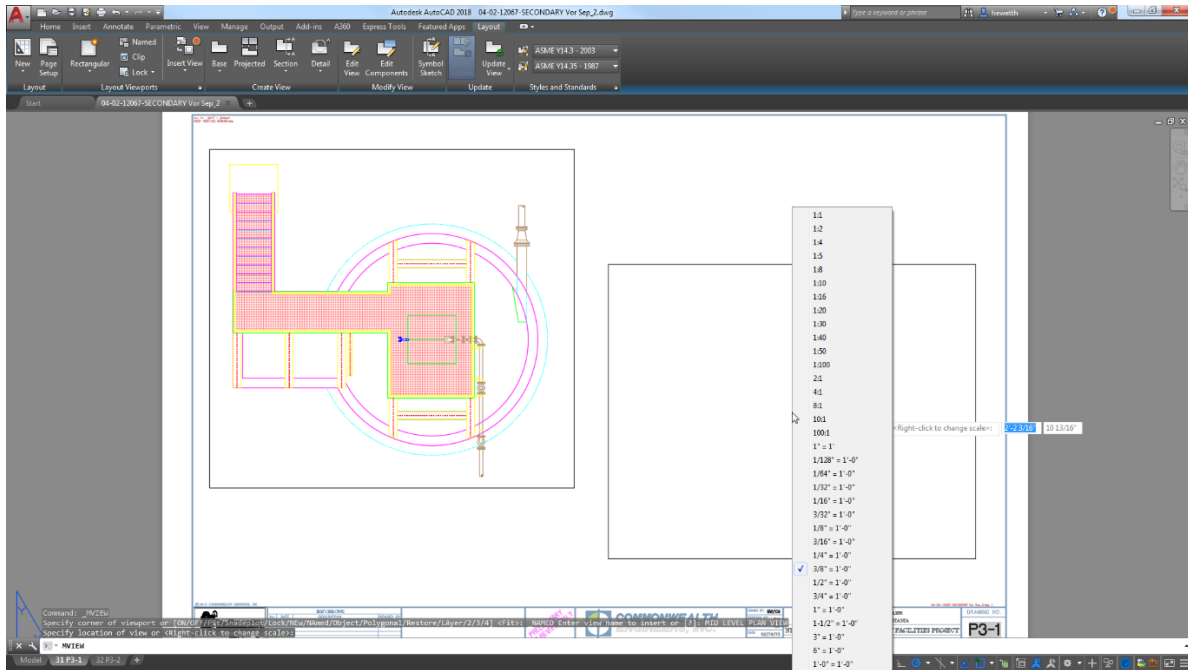
Now for the cool part: inserting named views onto a layout!

The Layout ribbon tab is a contextual tab that is displayed when a layout is made active. If you click on the Layout ribbon tab, you will see that it now includes a new Insert View tool. The Insert View tool displays all the named model views in the drawing as either a gallery with thumbnail preview images, or a simple list (depending on whether you have GALLERYVIEW enabled).



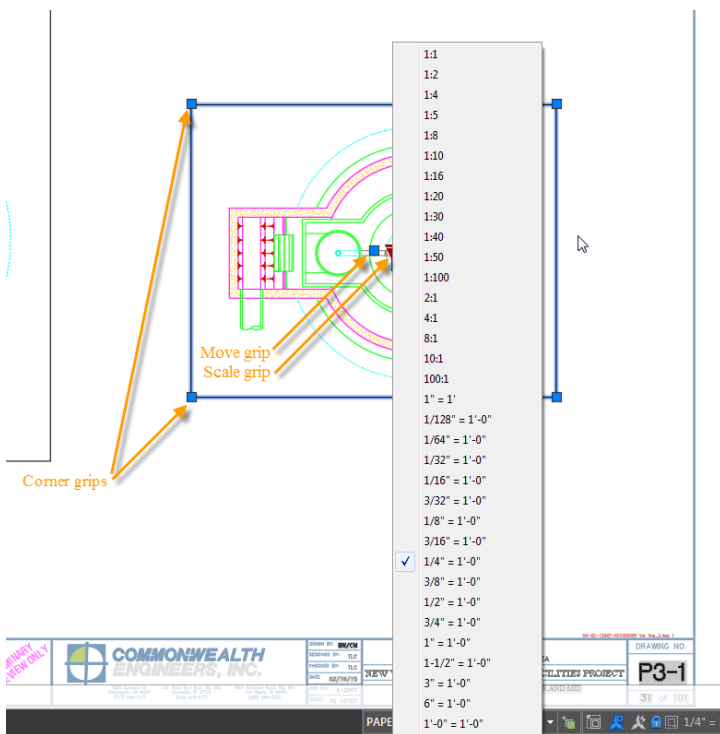
Simply select a view from the gallery and place it onto your layout. The result is the same as the multi-step process of creating a layout viewport, making it active, selecting a view, setting the scale, resizing the viewport, and locking it. Now, you can do it in a single step—enabling you to add many views very quickly!

AutoCAD applies the annotation scale of the view to the viewport scale if it will fit on the sheet. If it doesn't fit, AutoCAD estimates and applies a standard scale based on the size of the named view and the layout in order to fit on half the sheet. You can easily change the scale during insertion by selecting the desired scale from the right-click menu.



Viewport Grip Enhancements

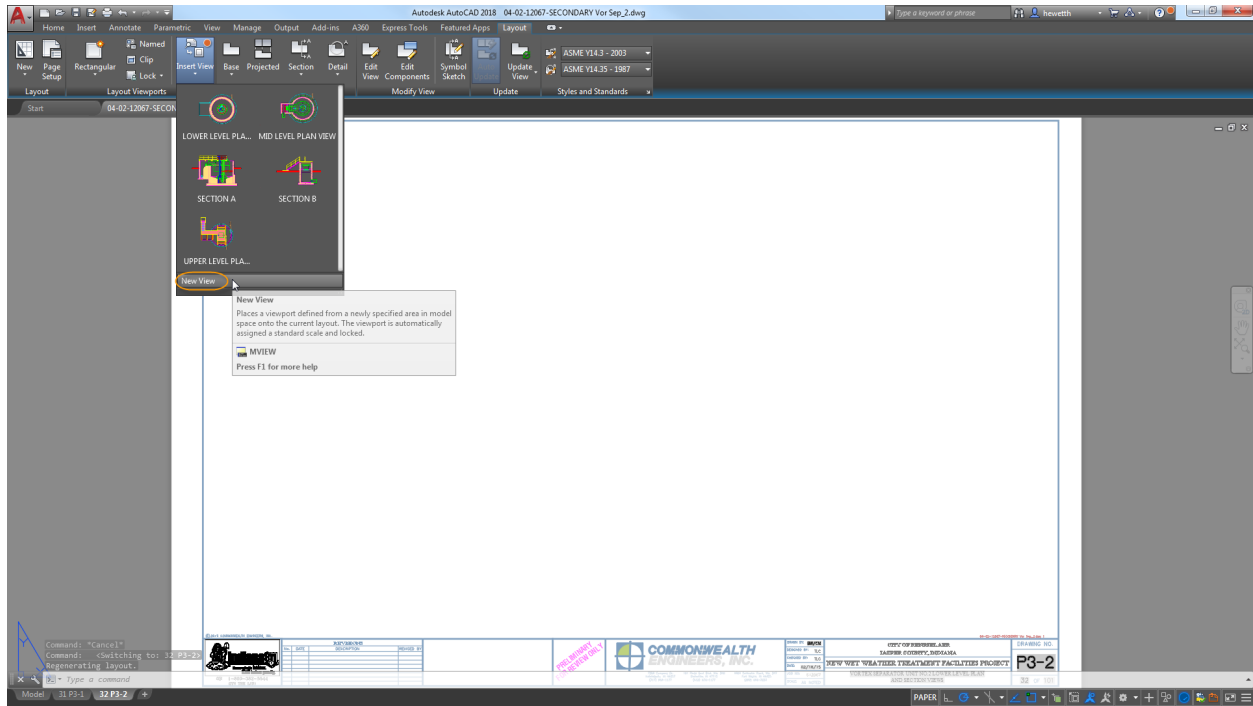
You can easily change the scale of or move a paper space viewport at any time by selecting it and then using the move grip or the triangular scale grip. You can also use viewport grips at the corners to modify the viewport boundary—but you're much less likely to need them as viewport boundaries automatically resize when you change the viewport scale!



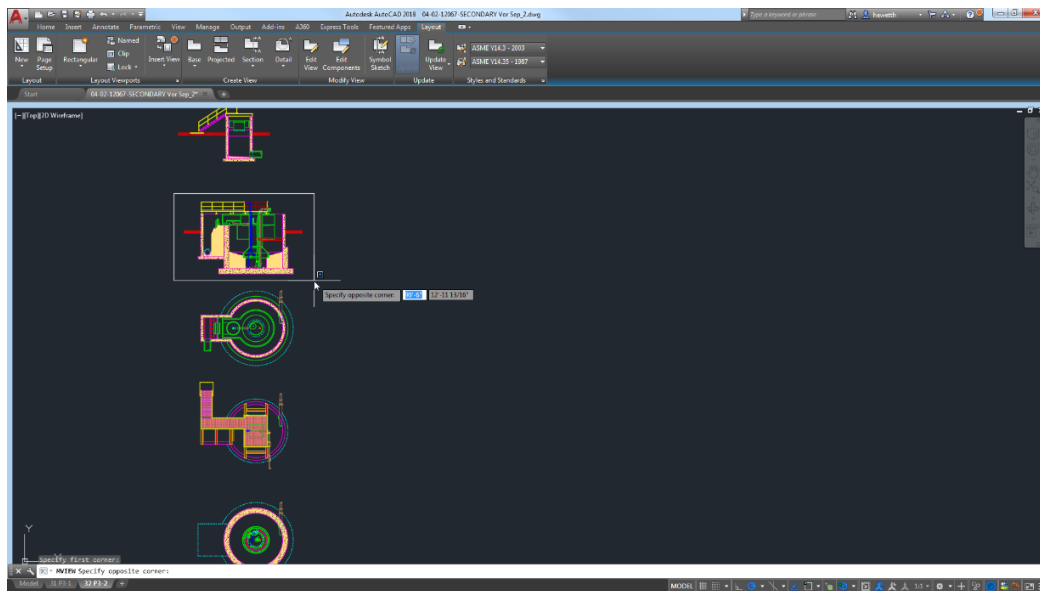
* Not all functionality is available in AutoCAD LT.

Inserting a New View as a Viewport

You can quickly create new model views—even while working on a layout—by selecting the New View tool from the Insert View gallery control.



This allows you to specify the view area in model space and then immediately place the view on the layout. If the drawing contains no named views, selecting the Insert View tool from the Layout ribbon tab automatically launches the New View behavior.



With these enhancements to views and viewports, we think you'll be able to reduce clicks and save time!

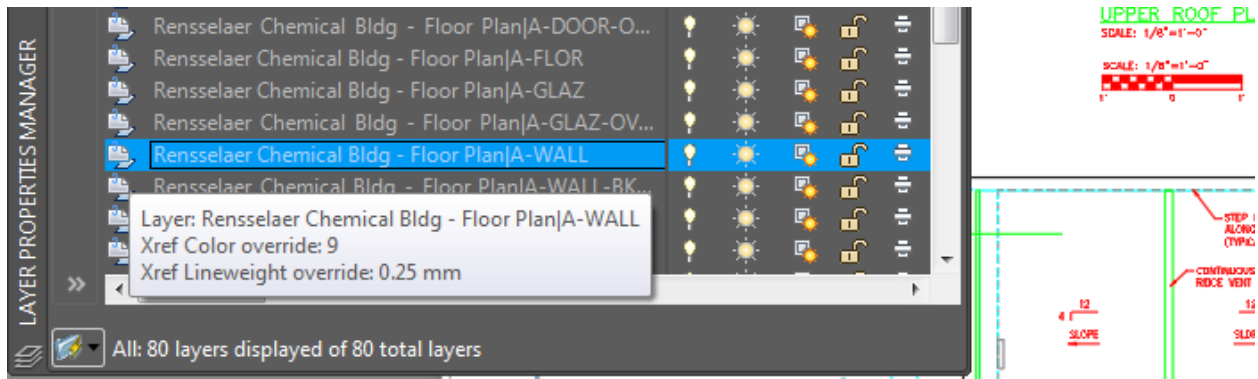
* Not all functionality is available in AutoCAD LT.

Layer Property overrides

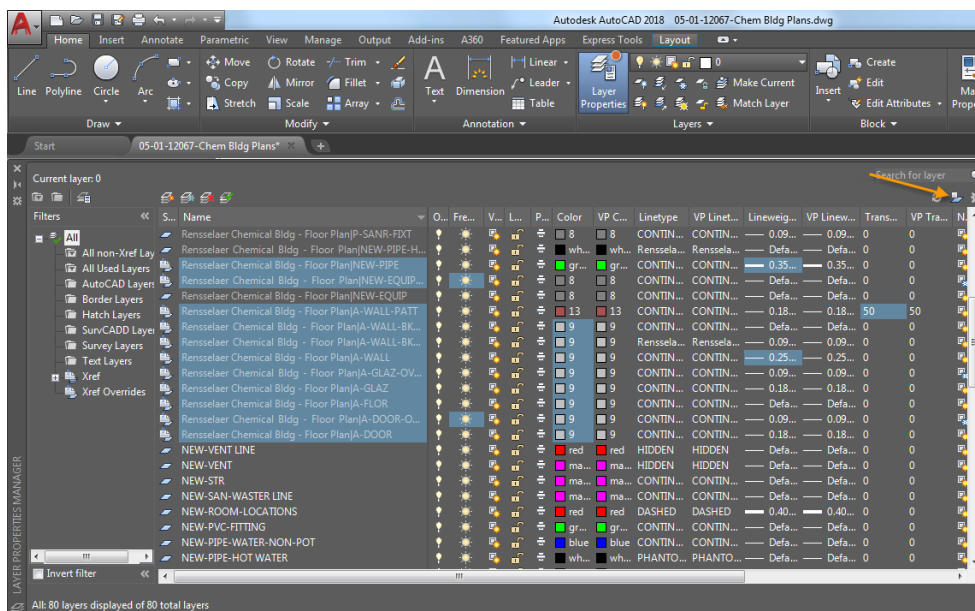
Improvements to the Layer Manager and other Layer controls make it easier to identify overrides and to restore them to their default values.

Layer Properties

The Layer Properties Manager includes a new status icon to indicate when an Xref layer contains overrides. Passing the cursor over the icon displays a tooltip listing all of the applied the layer overrides.

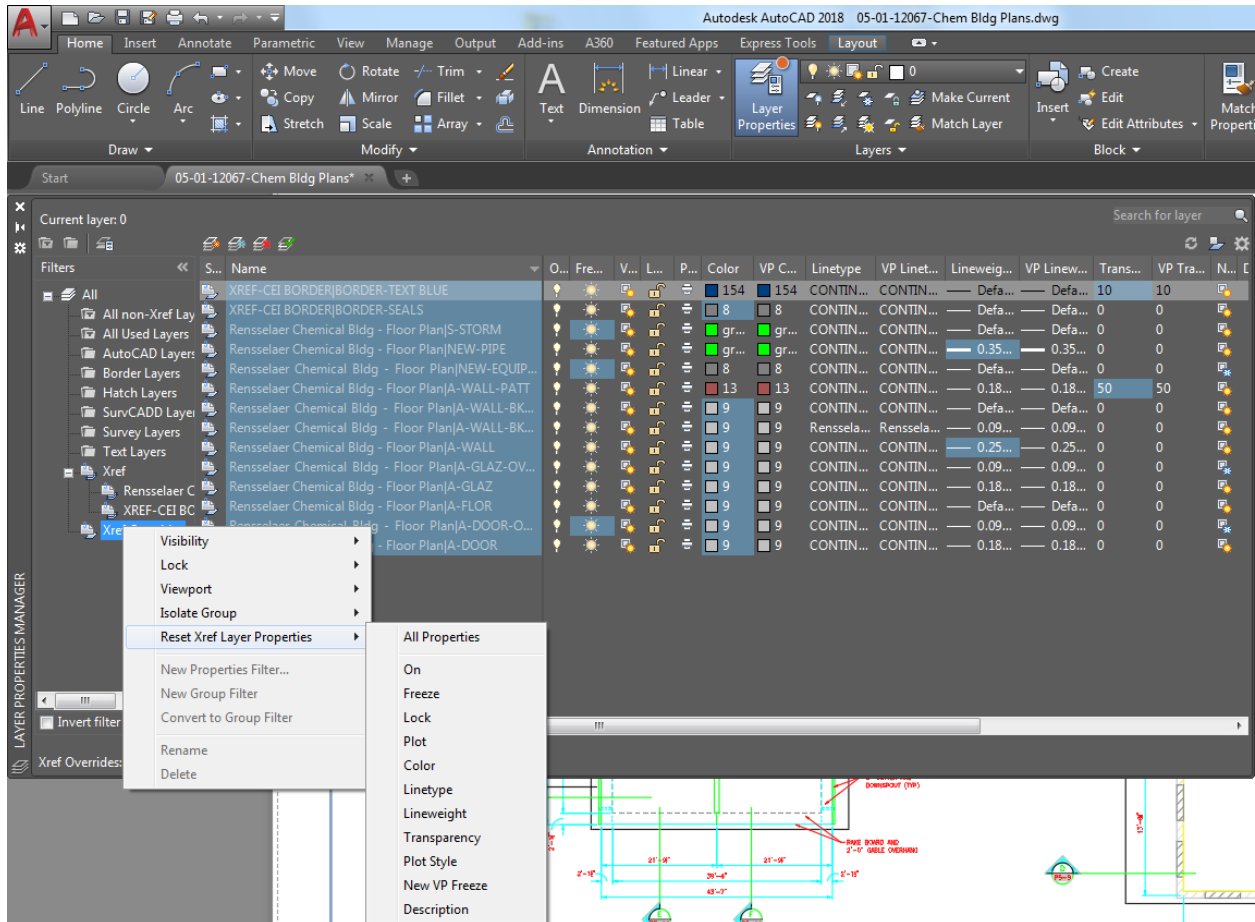


A new toggle in the Layer Properties Manager makes it even easier to identify Xref layer overrides by applying a background color to any and all layers and properties with overrides—including both Xref and viewport overrides.



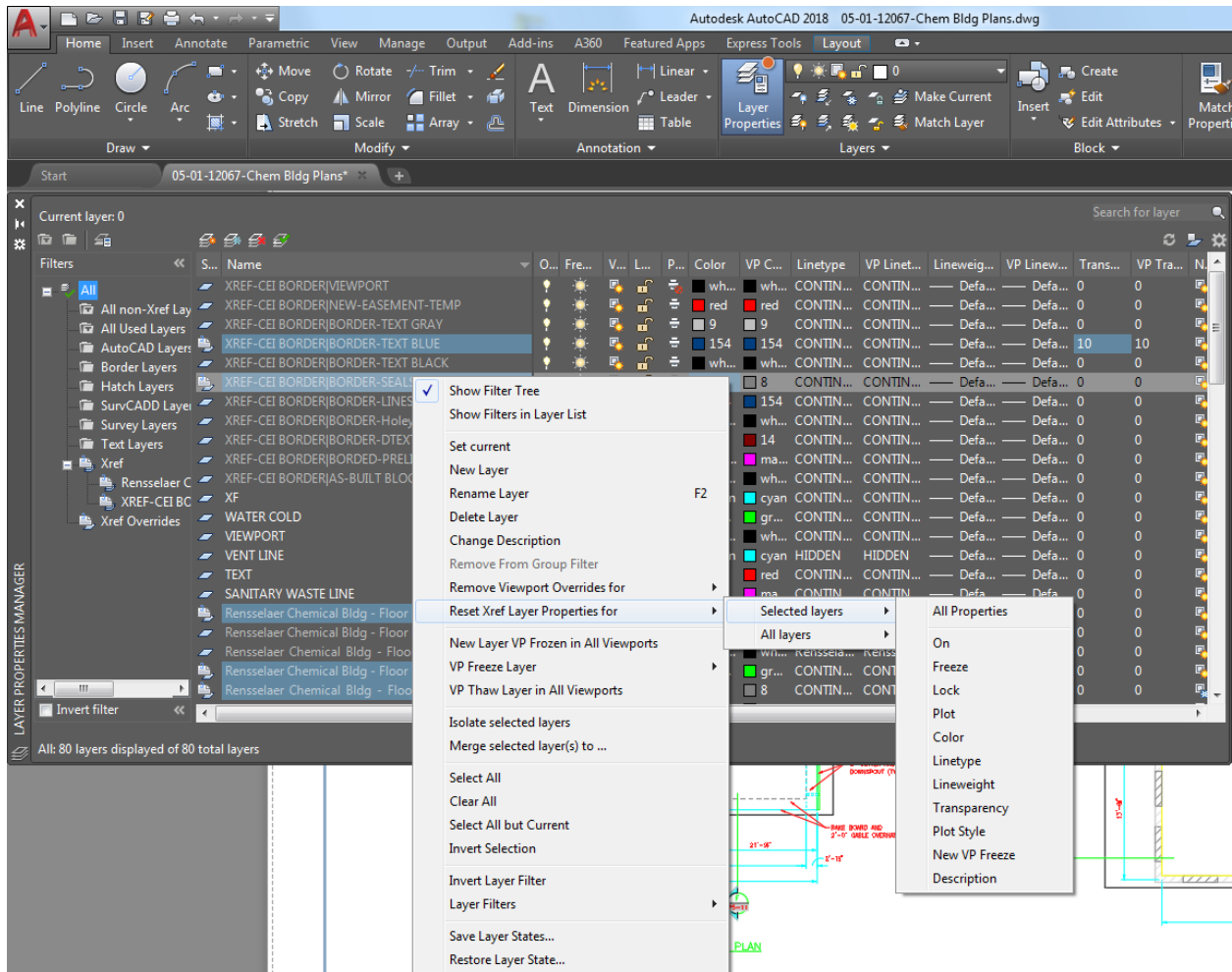
* Not all functionality is available in AutoCAD LT.

To further aide in identifying Xref layers with overrides, a new Xref Overrides layer filter is available. Simply select the Xref Overrides filter to see a list of all the Xref layers in the drawing with applied overrides. A right-click menu option enables you to easily reset any or all of the Xref layer properties to their original values.



* Not all functionality is available in AutoCAD LT.

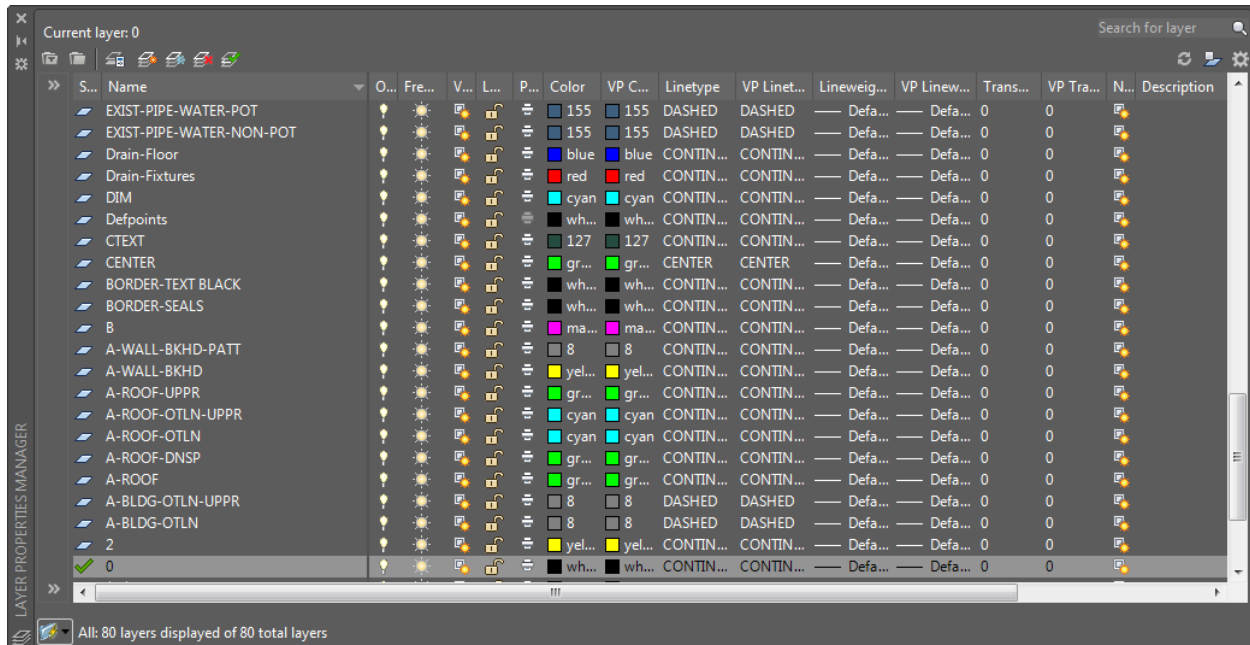
A similar option is available when you right-click on any layer in the layer list with Xref layer overrides. You can choose to reset Xref layer properties for just the selected layers or for all layers.



Additionally, a new XREF option in the -LAYER command offers command line access to remove Xref overrides, and a previously hidden option in the VPLAYER command for removing Viewport Overrides [reMoveoverrides] has been exposed.

* Not all functionality is available in AutoCAD LT.

Note: The order of the columns in the Layer Properties Manager has changed for Layouts and the Global and VP properties for each Layer property are now grouped together. To simplify the Layer Properties Manager, the Plot Style and VP Plot Style columns are no longer displayed for drawings in Color Dependent mode (PSTYLEMODE=1).



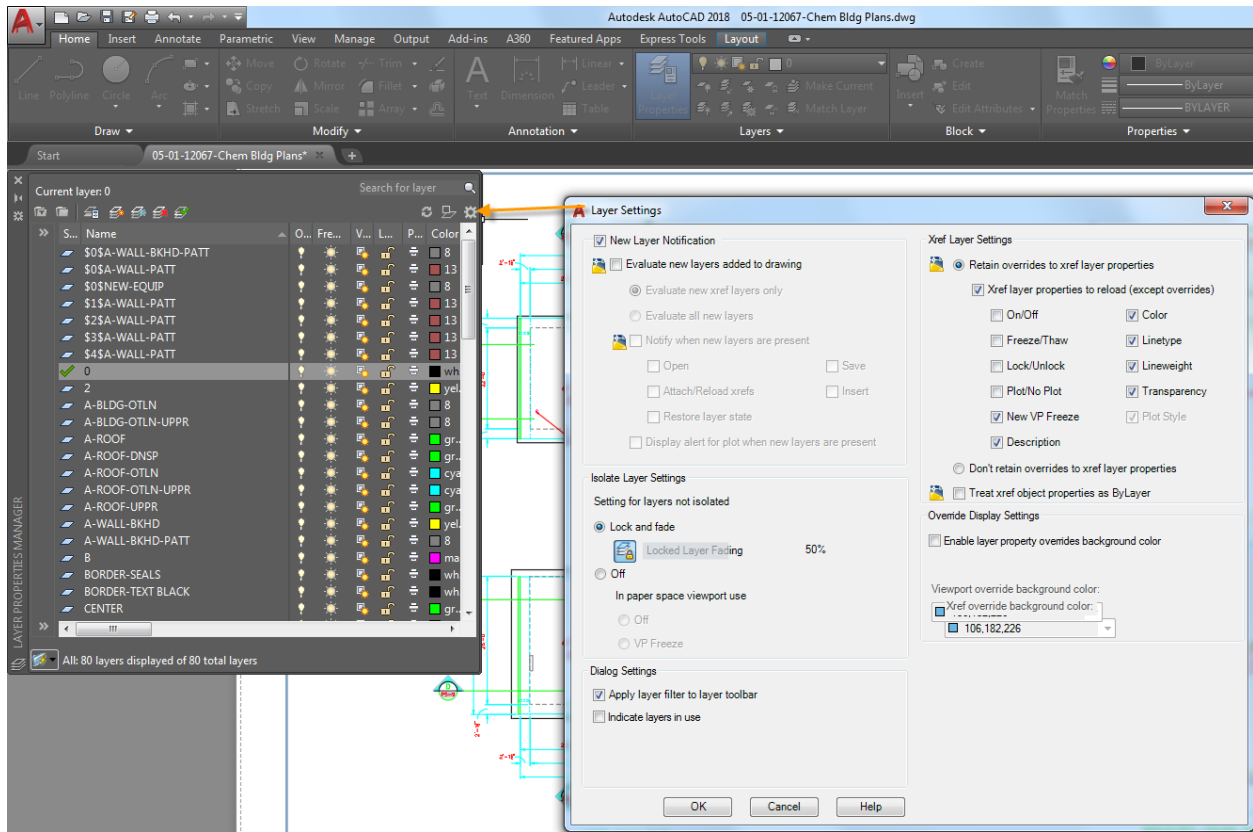
Layer Settings

The Layer Settings dialog box is updated to include new controls for managing Xref layer properties. Access it from the Settings icon in the upper righthand corner of the Layer Properties Manager. The option to Retain changes to Xref layers (VISRETAIN system variable) has moved from the Options dialog box (Open and Save tab) to the Layer Settings dialog box.

With the option to retain overrides to Xref layer properties enabled (VISRETAIN = 1), you can now specify which, if any, Xref layer properties you want to reload, offering you more flexibility to control Xref overrides. The various layer property options are stored in the registry via the new VISRETAINMODE system variable.

* Not all functionality is available in AutoCAD LT.

Another new control in the Layer Settings dialog box, Treat Xref object properties as ByLayer, offers easy access to the XREFOVERRIDE system variable (which enables you to force object properties of Xref objects to use ByLayer properties).



Additional enhancements to layer behavior

A new system variable, XREFLAYER, allows you to specify a default layer on which to place attached Xref files regardless of which layer is set as current.

When you rename or delete an Xref layer in the Xref drawing, it will automatically be renamed/deleted when you reload it in the host drawings.

Improved 3D navigation performance

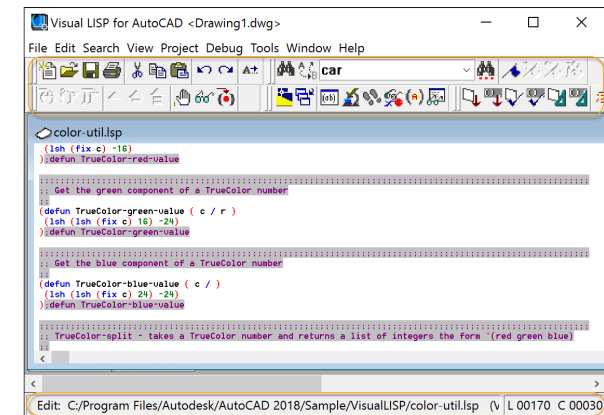
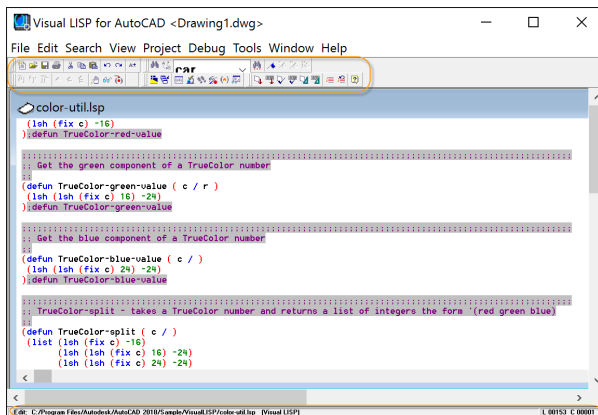
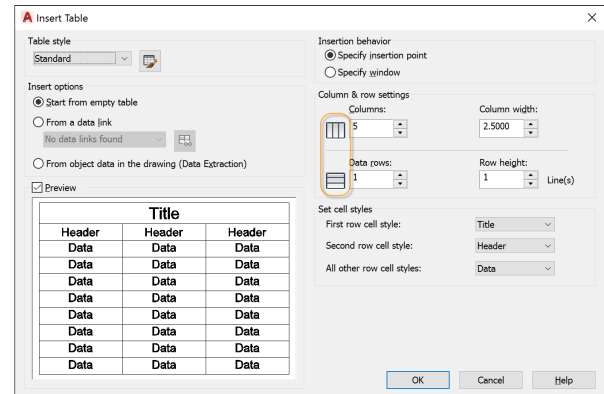
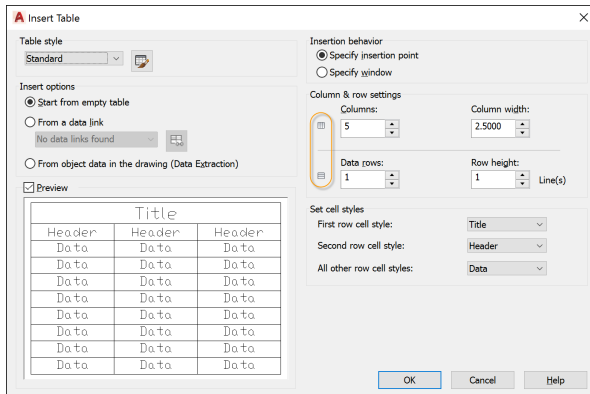
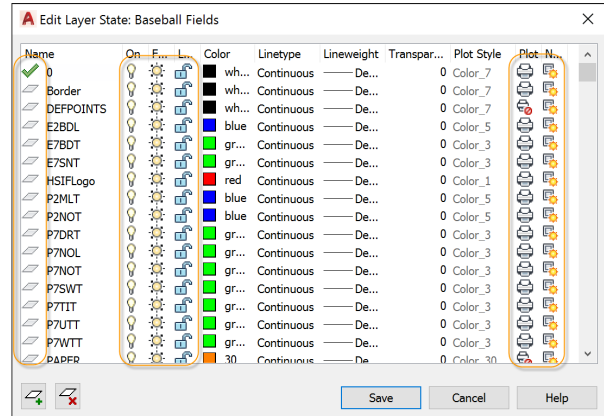
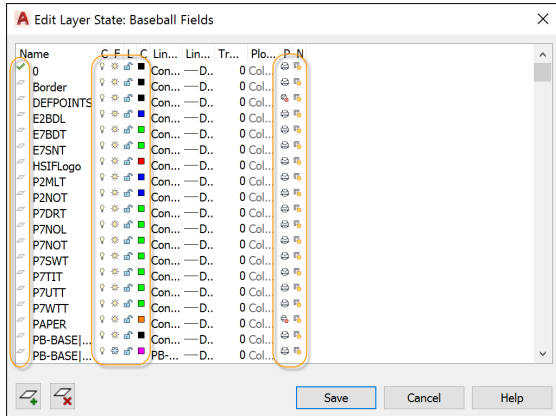
The navigation speed of 3D models (when viewing with the most common visual styles) continues to improve with the AutoCAD 2018.1 Update. The 3D graphics performance for the Wireframe, Realistic, and Shaded visual styles has increased significantly, depending on the content of the DWG files tested. Measuring the frames-per-second performance in six large benchmark models, the median FPS performance increase in AutoCAD 2018 Update was 175% faster (2.75x) than the FPS in AutoCAD 2017, and 37% faster (1.37x) than in AutoCAD 2018 (pre-update). For best results, use these 3D visual styles in their default states on a 64-bit machine with a compatible graphics card. The commands offering the greatest benefit from these

* Not all functionality is available in AutoCAD LT.

performance improvements include those that are most used: 3DORBIT, ZOOM, PAN, and VSCURRENT.

High resolution (4K) monitor support

Support for high resolution monitors continues to be improved in the AutoCAD 2018.1 Update. More than 200 dialog boxes and other User Interface elements have been updated to ensure the best possible viewing experience on 4K displays and higher. Just a few examples include the Edit Layer State and Insert Table dialog boxes as well as the Visual LISP editor.



* Not all functionality is available in AutoCAD LT.

Performance Enhancements

Plot and Preview offer significant performance improvements for drawings with missing SHX fonts.

Standards Checking

Custom line type properties are supported when checking STANDARDS with multiple custom line type definitions in drawing.

Object Selection

Crossing window and Fence selections are supported when trimming or extending lines that are not on the current UCS plane.