



Build Your One AutoCAD® Toolsets IQ!

AutoCAD 2021, AutoCAD Web & Mobile New Features

Presented by: Sheen In Liew, Sophia Lee

Moderated by: Cynthia Claire Tan



About Us:

- Sheen In Liew
 - Autodesk Technical Support Specialist
 - Japan, JP
- Sophia Lee
 - Autodesk Technical Support Specialist
 - Singapore, SG
- Cynthia Claire Tan
 - Autodesk Technical Support Specialist
 - Singapore, SG



Before We Get Started...

- Feel free to leave questions in the questions window.
 - We'll answer as time allows.
- This session will be recorded.
- Links are available in:
 - Registration reminder
 - Post-Webinar survey

Welcome to the Autodesk Help Webinar Series!

Build Your AutoCAD IQ! Live

- ✓ Hosted by Autodesk Technical Support
- ✓ 20-40 minute demo
- ✓ Q&A in the chat window as time allows
- ✓ Sessions are recorded
- ✓ Links provided in the post-webinar survey

Completed Topics

23 January 2020

Creating Custom Catalogs in AutoCAD Plant 3D

21 November 2019

Diagnose and Remedy Common Problems in AutoCAD Drawings

19 September 2019

AutoCAD Architecture Project Navigator

18 July 2019

AutoCAD Tips & Tricks

16 May 2019

Manage your Bill of Material efficiently with AutoCAD Mechanical Toolset

Build Your AutoCAD IQ! YouTube

- **Watch Past Webinars on Autodesk landing page**
- **Download Datasets from same site**
- (Script, PPT, Sample DWGs)

[Build Your AutoCAD IQ! Webinar Playlist](#)

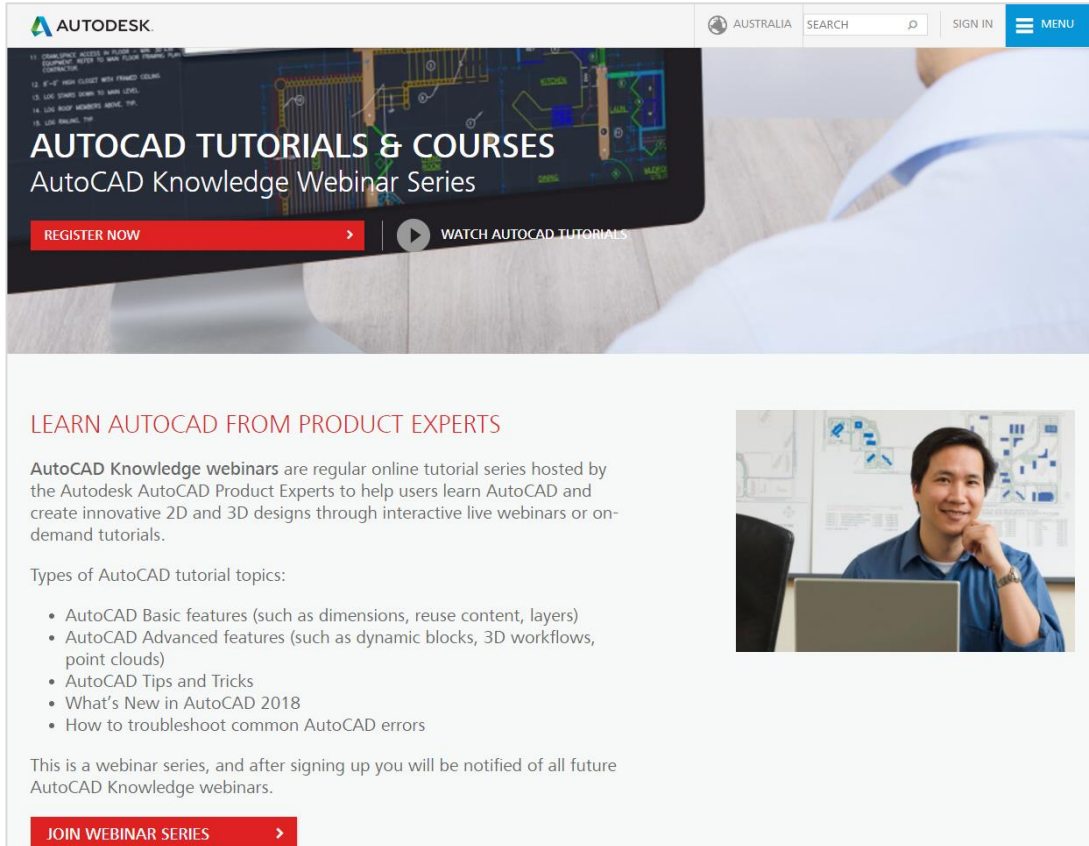
Build Your AutoCAD IQ! Beyond

Sign up & Join the conversation!

- **Build Your AutoCAD IQ! Webinar Landing Page**
 - *Register for the series, or send to your colleagues*
- **Autodesk AutoCAD Community Forums**
 - *Ask your peers and share your knowledge*
- **AutoCAD Customer Council**
 - *Join the Beta to influence the future of AutoCAD!*
 - *For AutoCAD:*
Autocad.beta@autodesk.com
 - *For AutoCAD LT:*
Autocad.lt.council@autodesk.com
- **Autodesk Help Webinars**

Autodesk Help Webinars Landing Pages

- Our Help Webinars are available here, even if you had to miss any of the sessions.. You can watch them any time !



The screenshot shows the Autodesk Australia landing page for the AutoCAD Knowledge Webinar Series. The page features the Autodesk logo, a navigation bar with 'AUSTRALIA', 'SEARCH', 'SIGN IN', and 'MENU'. The main content area has a dark background with the text 'AUTOCAD TUTORIALS & COURSES' and 'AutoCAD Knowledge Webinar Series'. Below this is a red 'REGISTER NOW' button and a play button icon with the text 'WATCH AUTOCAD TUTORIALS'. The page also includes a section titled 'LEARN AUTOCAD FROM PRODUCT EXPERTS' with a description of the webinar series, a list of topics, and a 'JOIN WEBINAR SERIES' button. A photo of a man in a blue shirt sitting at a desk with a laptop is also visible.

AUTODESK AUSTRALIA SEARCH SIGN IN MENU

AUTOCAD TUTORIALS & COURSES

AutoCAD Knowledge Webinar Series

REGISTER NOW WATCH AUTOCAD TUTORIALS

LEARN AUTOCAD FROM PRODUCT EXPERTS

AutoCAD Knowledge webinars are regular online tutorial series hosted by the Autodesk AutoCAD Product Experts to help users learn AutoCAD and create innovative 2D and 3D designs through interactive live webinars or on-demand tutorials.

Types of AutoCAD tutorial topics:

- AutoCAD Basic features (such as dimensions, reuse content, layers)
- AutoCAD Advanced features (such as dynamic blocks, 3D workflows, point clouds)
- AutoCAD Tips and Tricks
- What's New in AutoCAD 2018
- How to troubleshoot common AutoCAD errors

This is a webinar series, and after signing up you will be notified of all future AutoCAD Knowledge webinars.

JOIN WEBINAR SERIES

AutoCAD Landing Pages by Country :

www.autodesk.com.au/campaigns/autocad-tutorials

www.autodesk.com.sg/campaigns/autocad-tutorials

www.autodesk.in/campaigns/autocad-tutorials

Autodesk Knowledge Network

knowledge.autodesk.com

AutoCAD LT

- Getting Started
- Learn & Explore
- Downloads (Hotfixes, Licensing fixes etc.)
- Troubleshooting
- System Requirements

Customer Service

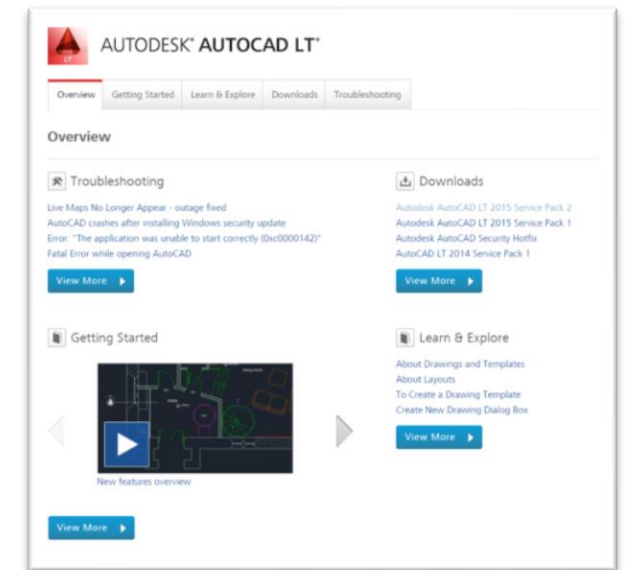
Installation, Activation, & Licensing

Account Management

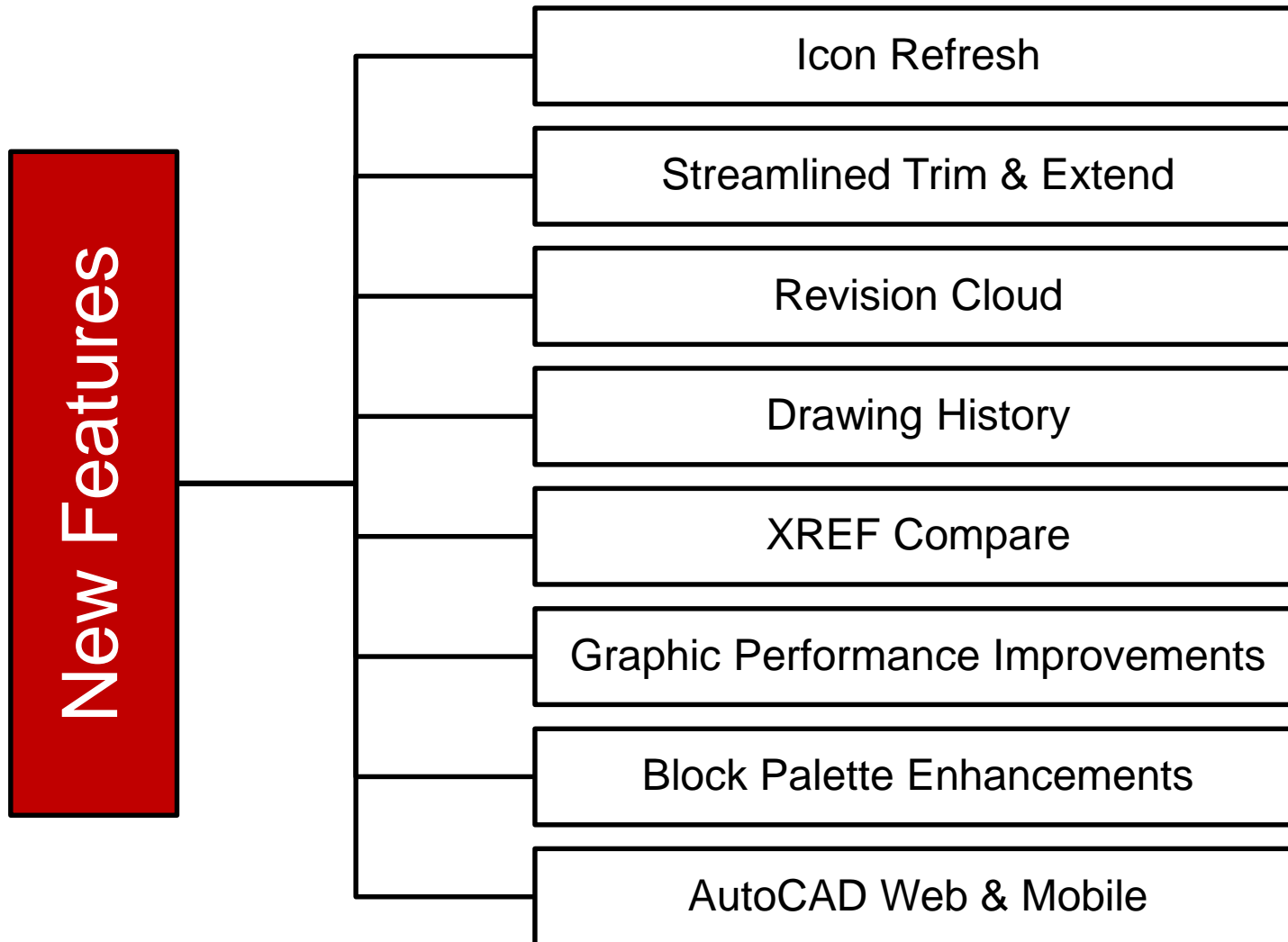
AutoCAD

- Getting Started
- Learn & Explore
- Downloads (Hotfixes, Licensing fixes, etc.)
- Troubleshooting
- System Requirements

Community (Forums, Blogs, Ideas, Articles, Screencast.)

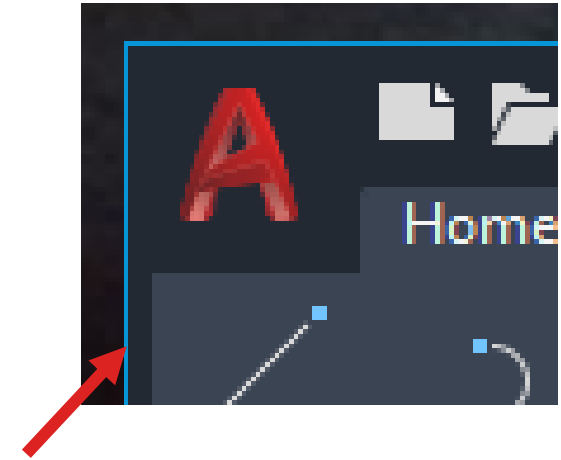


This Webinar's Agenda

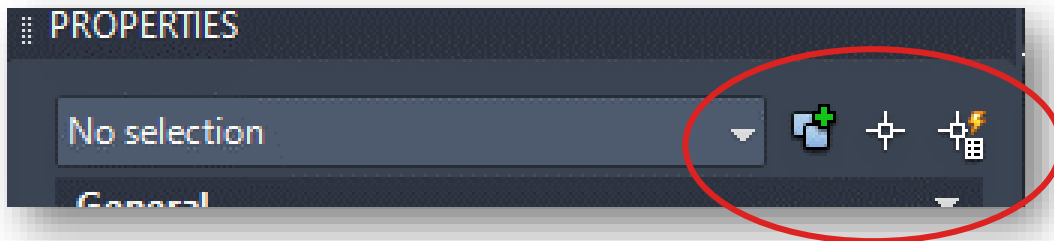


Icon Refresh

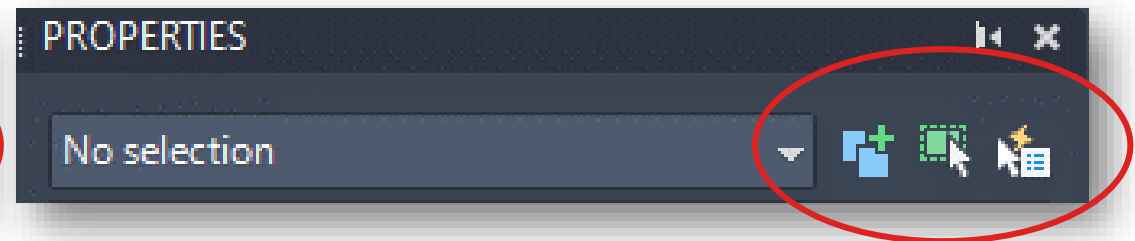
- Icon Refresh on some key Palettes and Dialogs
 - **Palettes:** Properties, Xref, Layer Palette
 - **Dialogs:** Options, File Open, Plot Dialog



AutoCAD 2020

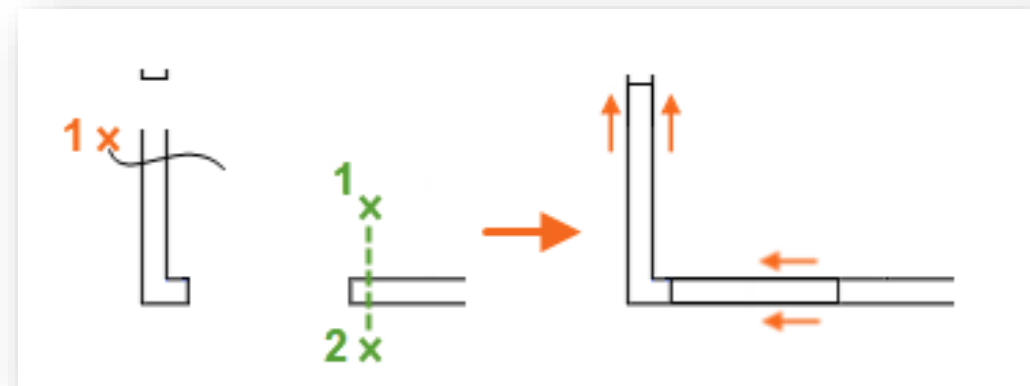
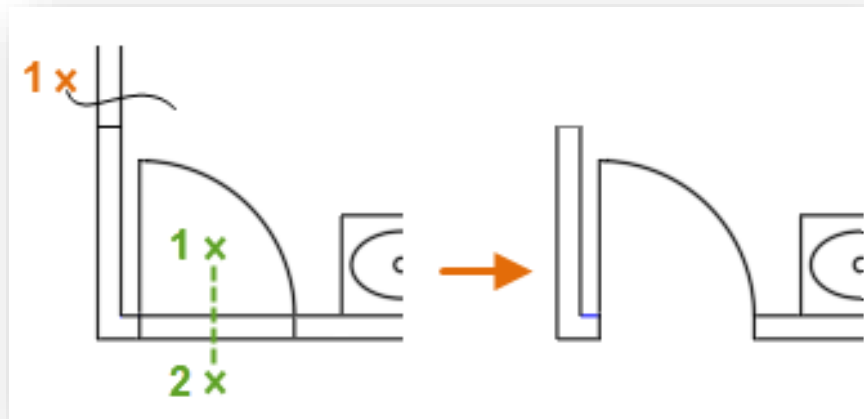


AutoCAD 2021



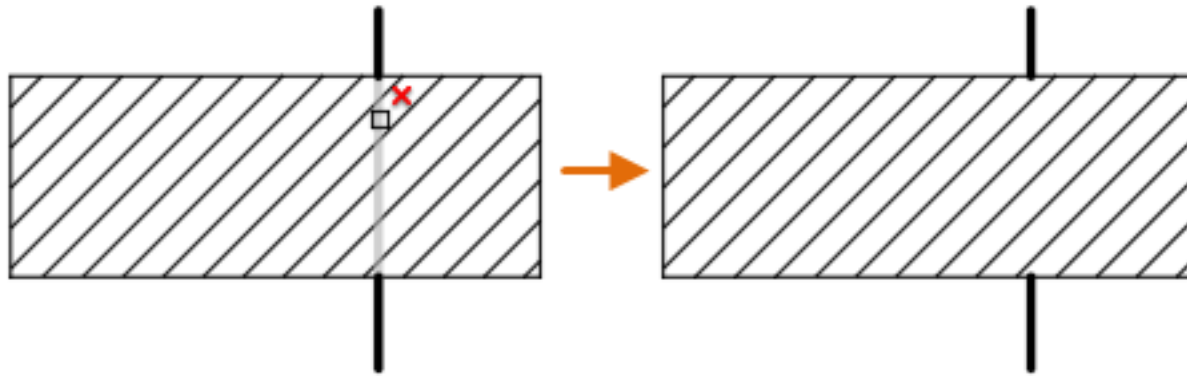
Streamlined Trim and Extend Option

- Trim and Extend enhanced with Quick Mode option (Default Setting)
 - Quick Mode selects all potential boundaries by default
- While executing the Trim or Extend Commands:
 - Simply select the objects to be Trimmed or Extended
 - Individual Selection – Mouse pick
 - Freehand Selection – Press and drag across objects
 - Two-Point Fence Selection – Pick start and end point
 - Selected objects that cannot be Trimmed are deleted instead



Streamlined Trim and Extend Option

- Using Trim (Quick Mode) with boundaries that include hatches
 - Internal hatch geometry is excluded from the Trim operation
 - Change TRIMEDGES to 0 if you would like hatches to be a cutting edge

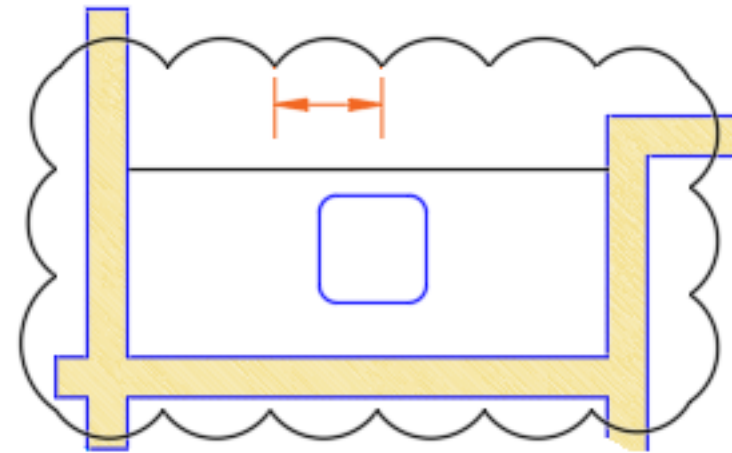


Commands

- [TRIMEDGES](#) - Controls whether internal geometry of Hatches are considered during Trim & Extend
- [TRIMEXTENDMODE](#) – Switch to 0 for standard mode (legacy Trim & Extend)

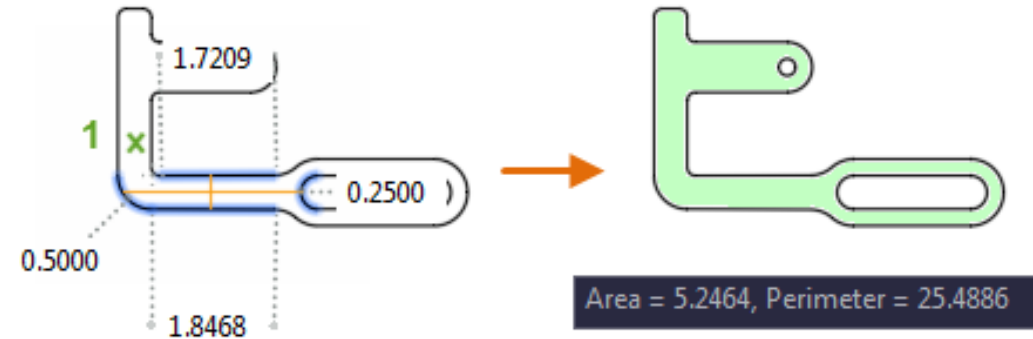
Revision Cloud Enhancements

- A single value for their approximate Arc Chord Lengths
- Initial size of the arcs are determined based on percentage of the diagonal length of the current view to ensure that the revision cloud starts at a reasonable size.
- Arc Chord Length can be changed from:
 - Properties Palette
 - Short-cut menu
 - New [REVCLLOUDPROPERTIES](#) Command
- The Properties Palette displays
 - 'Revcloud' as the Object Type
 - Additional 'Arc Length' property



Measure Geometry Option: Quick Measure

- Now supports measuring Area and Perimeter
- Clicking within a closed area
 - Highlights the area in green
 - Displays the calculated values
 - In the command window
 - In a dynamic tooltip
- Use SHIFT+click to select or deselect several areas
 - Cumulative area and perimeters are calculated
 - Perimeters of enclosed islands are also included



Changed Commands

- [MEASUREGEOM](#) - Adds the Quick option for real-time measurements of dimensions, distances, angles, and areas.

Drawing History

The screenshot displays the Autodesk AutoCAD 2021 interface for a drawing titled "Oceanside Floorplan.dwg". The ribbon is set to the "View" tab, with the "DWG History" panel active. The main drawing area shows a floor plan with rooms labeled: LAUNDRY (TILE FLOOR), HALL (HRWD FLOOR), B/R (TILE FLOOR), LIVING ROOM (HRWD FLOOR), and BED (HRWD). A "GENERAL NOTES" section is visible on the left, listing six construction requirements. On the right, the "Version History" panel is open, showing a list of saved versions with their timestamps and authors.

GENERAL NOTES

1. FOUNDATION VENTILATION EQUAL TO 1 SF. OF NET OPENING FOR EACH 150 S.F. OF UNDER FLOOR AREA.
2. VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE STARTING CONSTRUCTION OR BUILDING.
3. VERIFY ROUGH OPENINGS AND FRAMING REQUIREMENTS PRIOR TO FRAMING.
4. ALL EXTERIOR WALL ARE TO BE 2"x6" FRAMING. INTERIOR WALLS ARE TO BE 2"x4" FRAMING.
5. ROOFING SYSTEM IS TO BE ENGINEERED TRUSSES. OVERHANG IS 2'6" AT ALL EAVES.
6. ALL DECKS USE 2X4 WESTERN REDWOOD

Version History

Date	Time	Author
Today	9:37 AM	jerry
Today	9:34 AM	bradford
Wednesday, November 6	10:22 PM	jerry
Wednesday, November 6	10:22 PM	jerry
Wednesday, November 6	10:09 PM	bradford
Wednesday, November 6	10:09 PM	bradford
Tuesday, November 5	12:44 PM	bradford
Wednesday, November 6	9:55 PM	bradford
Friday, November 1	8:16 AM	bradford
Friday, November 1	8:14 AM	bradford

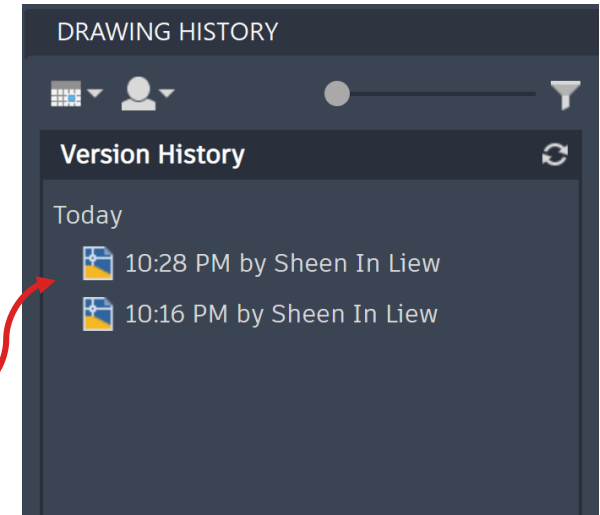
See changes made to your drawing over time. Get instant insights by comparing previous versions right within the context of your current drawing.

DRAWING HISTORY

Drawing History Support (Subscription Benefit)

- Files saved to a cloud storage location will have a version history created
- Previous versions are listed in the new Drawing History Palette
- Previous versions can be compared with the current drawing
- Supported on AutoCAD Toolsets as well

Drawing versions shown in palette

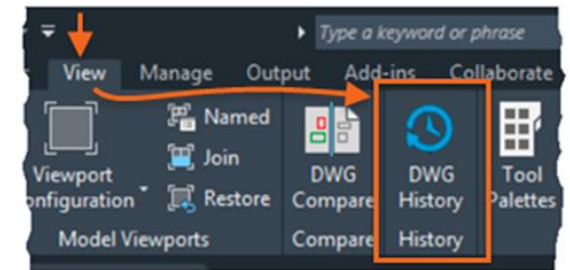


To access Drawing History:

- (Ribbon Access) View tab > History panel > DWG History.
- [DWGHISTORY](#) command - Opens the Drawing History palette

Other Commands/System Variables:

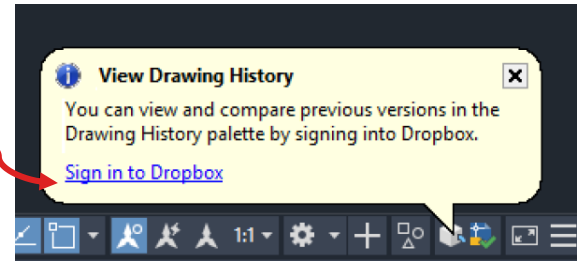
- [DWGHISTORYCLOSE](#) - Closes the Drawing History palette.
- [DWGHISTORYSTATE](#) - Reports whether the Drawing History palette is open or closed.



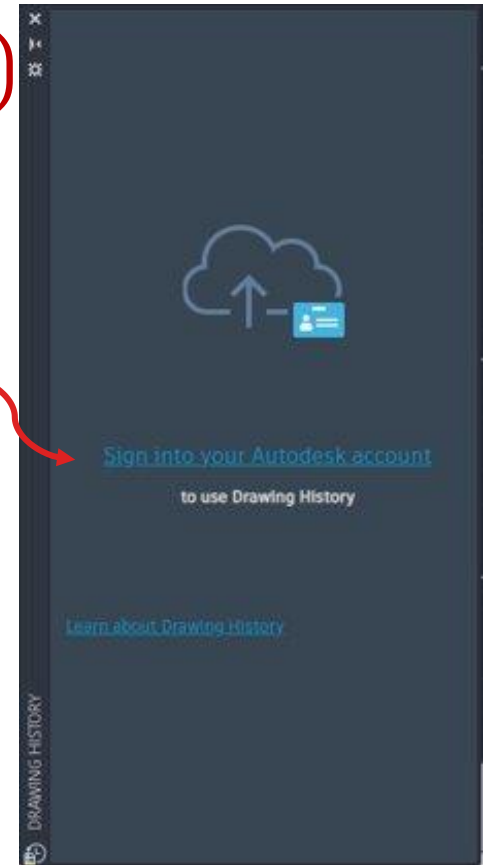
Drawing History Support (Subscription Benefit)

- Users need to be signed in into their Autodesk Accounts to use this feature
- Supported Cloud Accounts
 - OneDrive
 - Dropbox
 - Box
 - Google Drive
- Version History capability defers depending on the storage providers.
- Cloud storage providers:
 - Sets the number of versions stored
 - Some providers create a version with every save
 - Some providers may tweak timing to reduce number of versions with frequent saves
 - Manages expiration dates
 - Most providers maintain versions for 30 Days
 - Some providers offer options for longer periods (e.g. 120 Days)

Sign in into your cloud storage provider

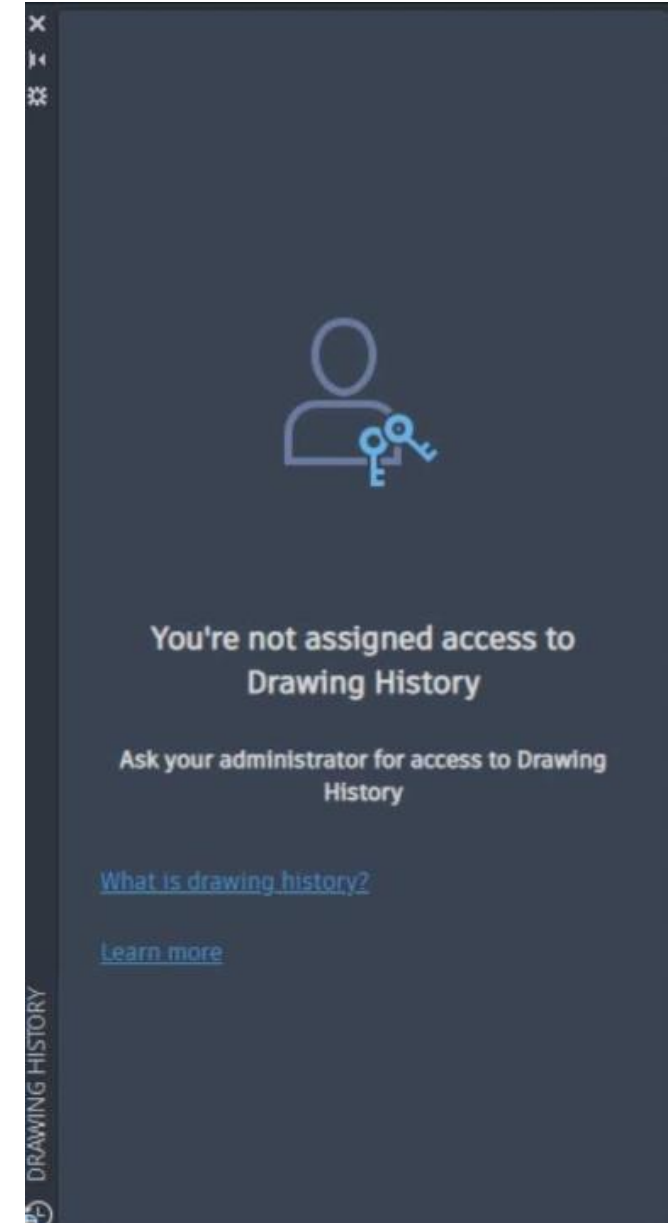
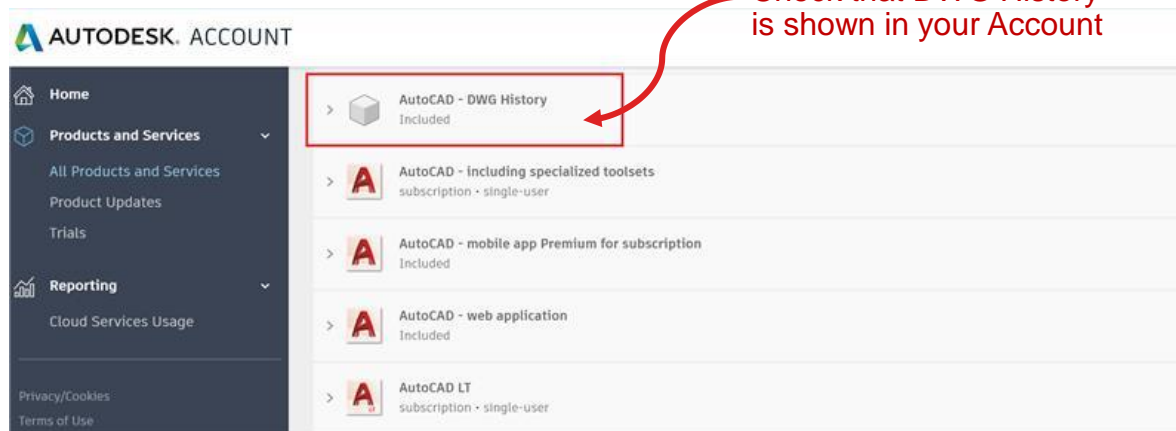


Sign in into your Autodesk Account

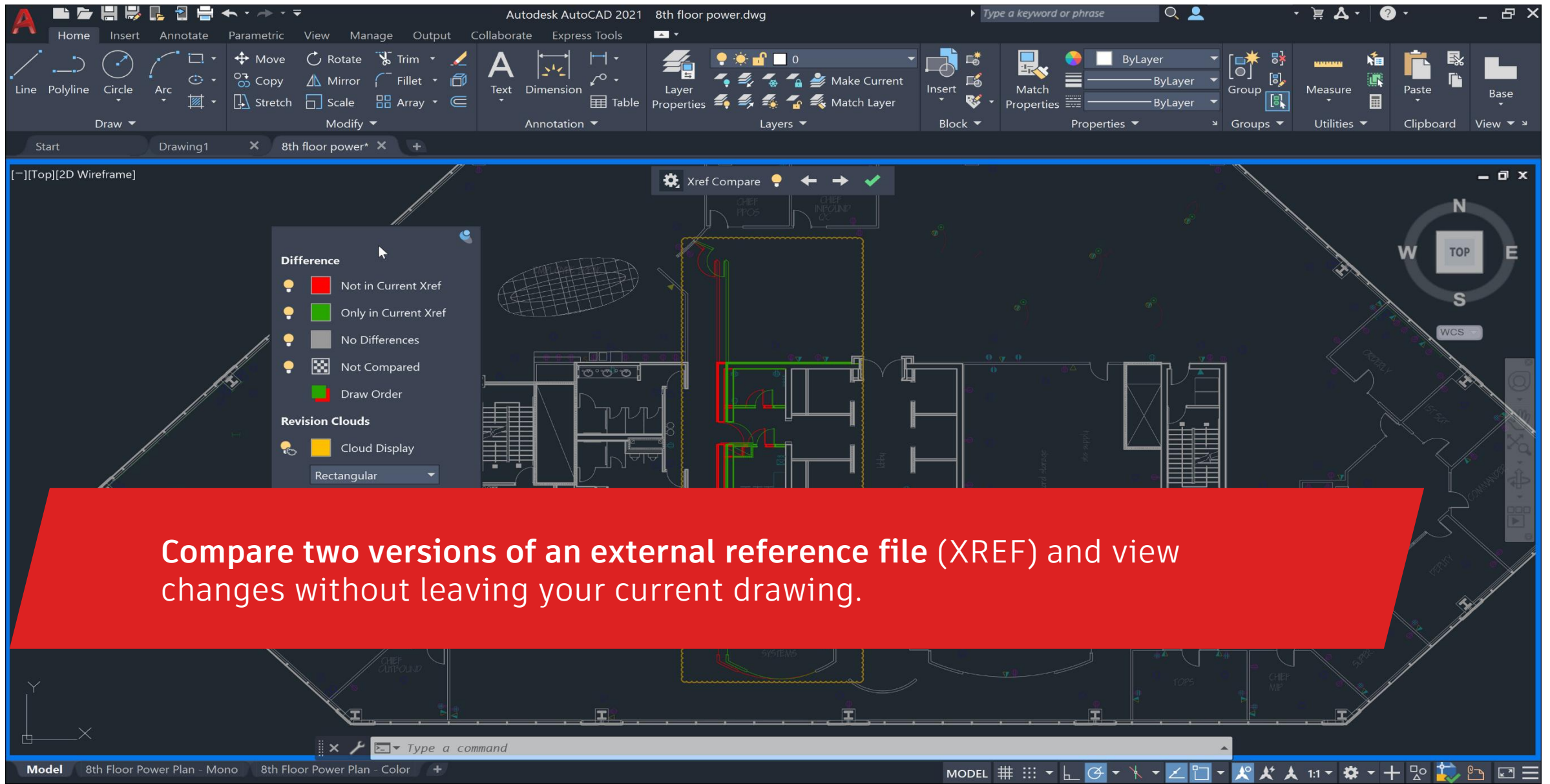


Known limitations in Drawing History

- Maintenance users and users using AutoCAD from Suites family do not get support for DWG history.
- Dropbox support on DWG history - not available professional accounts. (Paid personal accounts).
- Each Cloud Storage Provider has specific differences. Documented in [About Using Cloud Storage for Drawings](#)
- DWG history entitlement has to be assigned in Autodesk Account.



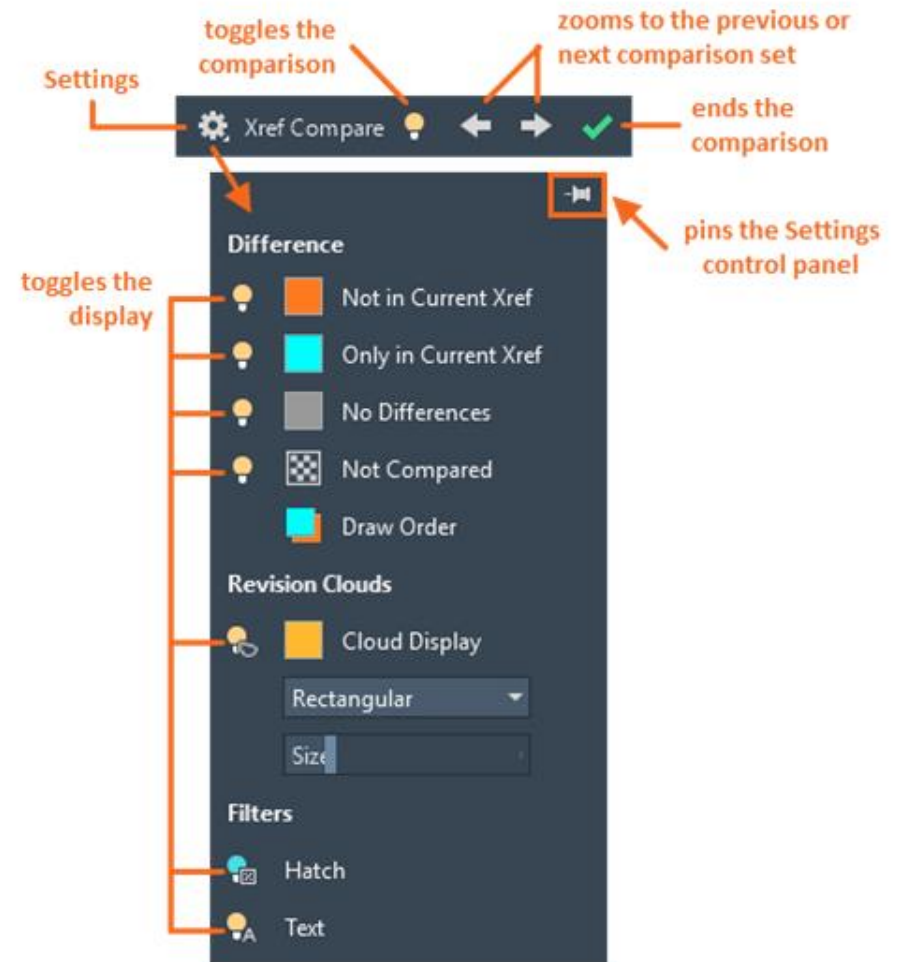
XREF Compare



Compare two versions of an external reference file (XREF) and view changes without leaving your current drawing.

XREF Compare

- Compare XREFs Attached to Current DWG
- Changes Are Highlighted Using Revision Cl
- XREF Changes Can Be Compared
 - Clicking Notification Balloon
 - External References Palette



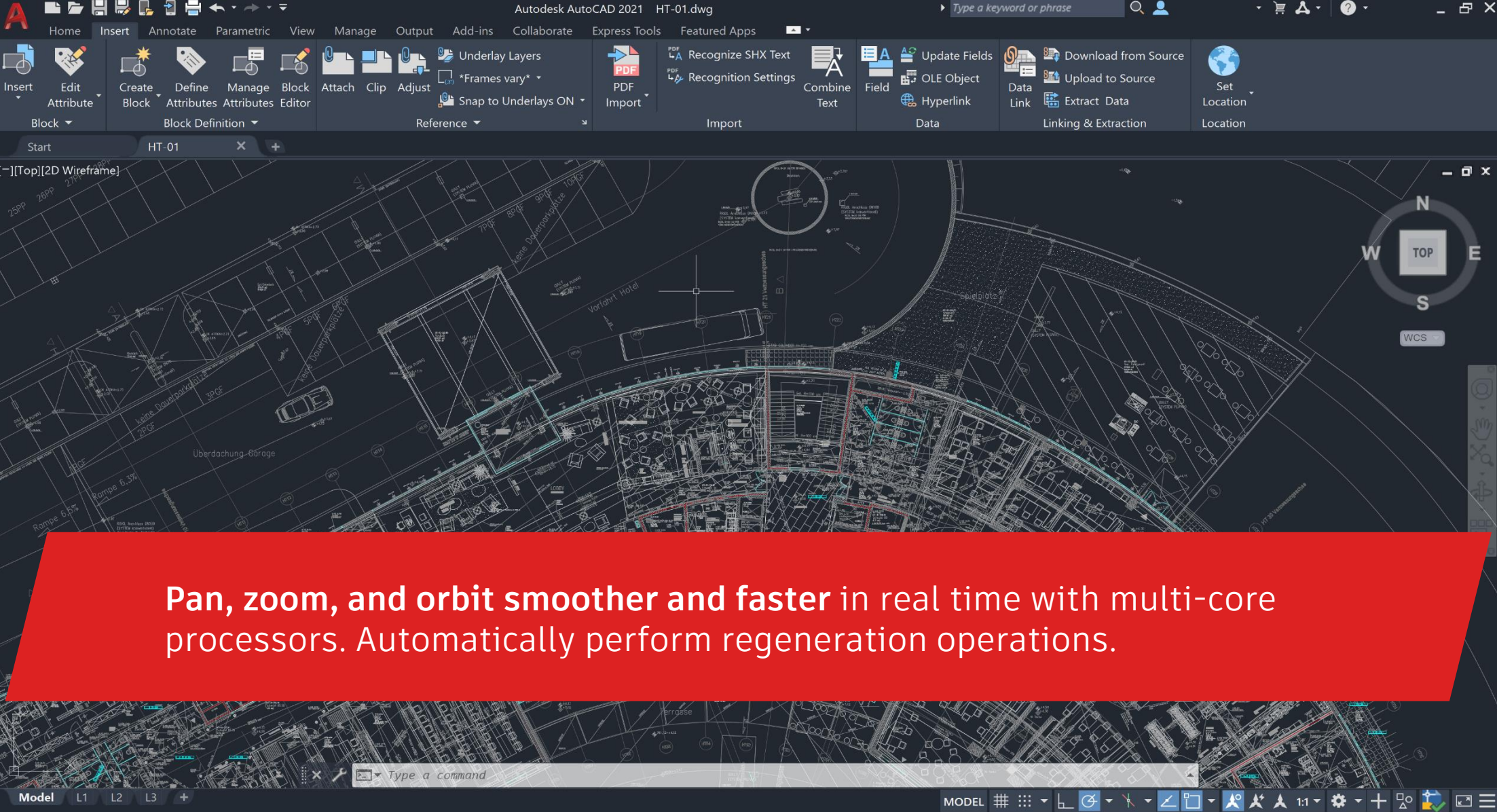
AutoLISP Improvements

- Improvements To AutoLISP And DCL. These Improvements Include:
 - Cross-Platform Development With Microsoft Visual Studio (VS) Code
 - Unicode Support
 - DCL Is Now Supported On Windows And Mac
- **New Commands**
 - [MAKELISPAPP](#) - Compiles one or more AutoLISP (LSP) source files into an application (VLX) file that can be distributed to users and protect your code.
- **Changed Commands**
 - [VLISP](#) - Displays the AutoLISP development environment.
- **New System Variables**
 - [LISPYSYS](#) - Controls the default AutoLISP development environment started with the VLISP command.

AutoLISP Improvements

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Graphics Performance Improvements

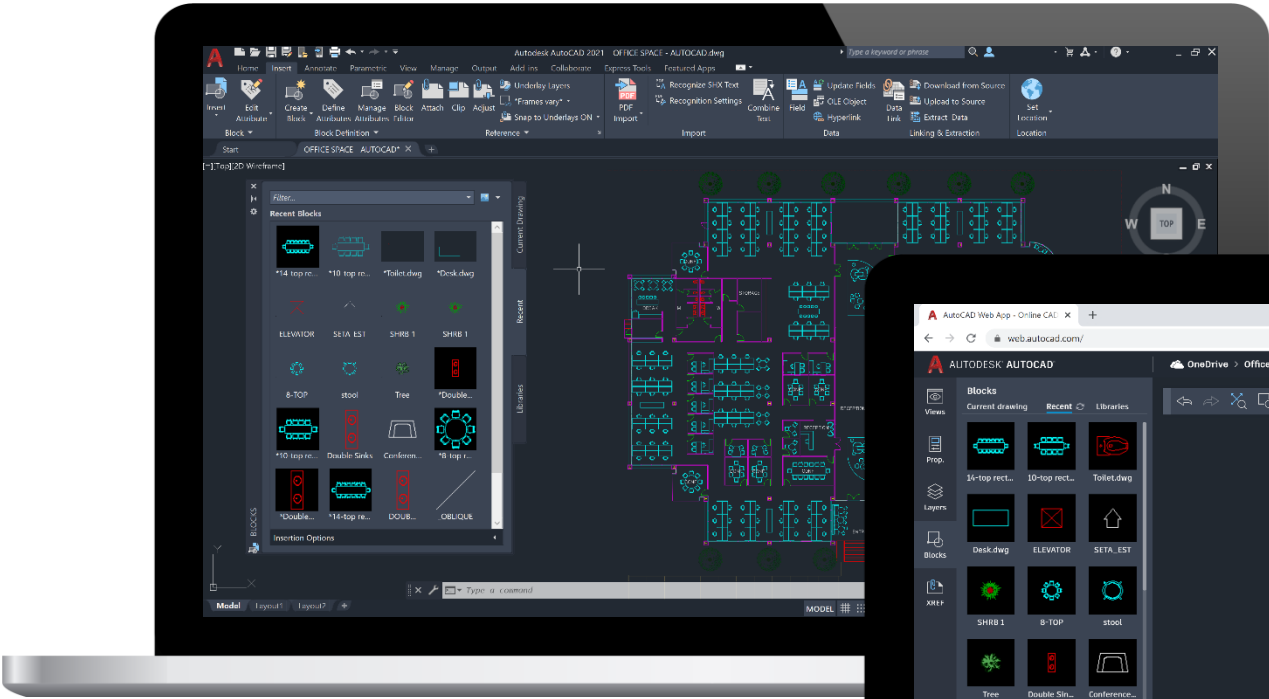


Graphic Performance Enhancements

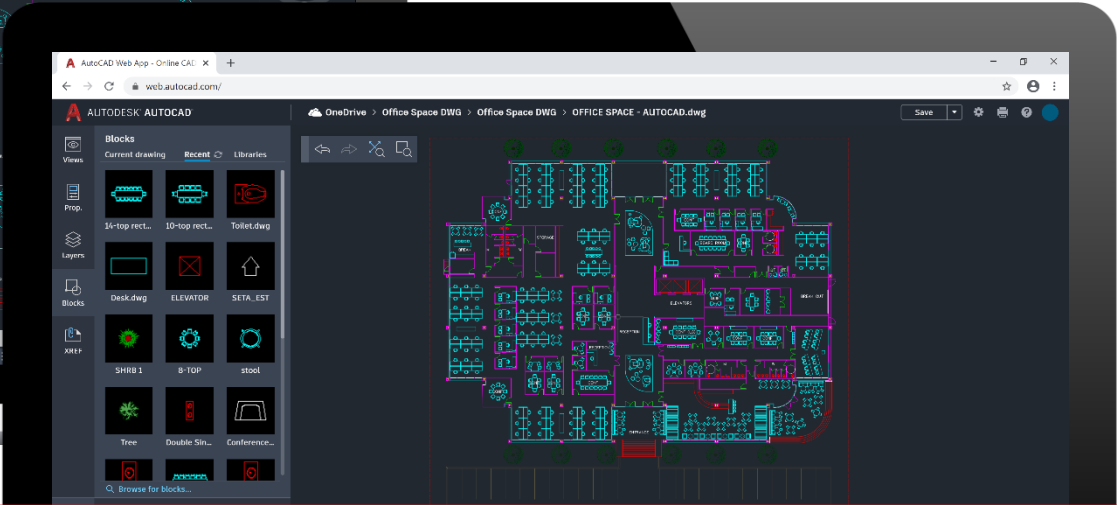
- Speed of panning and zooming in 2D has been enhanced
 - Takes advantage of objects with similar properties
 - Displays appropriate levels of detail at different levels of magnification.
- When panning and zooming in real time in 2D
 - AutoCAD-based products automatically perform regeneration operations as needed
 - Turn off the RTREGENAUTO system variable to prevent automatic regeneration
- Working with 3D models
 - Makes use of Multi-Core Processors
 - Significant improvement when using 3D Orbit, PAN, and ZOOM operations

Block Palette Enhancements

AutoCAD on desktop



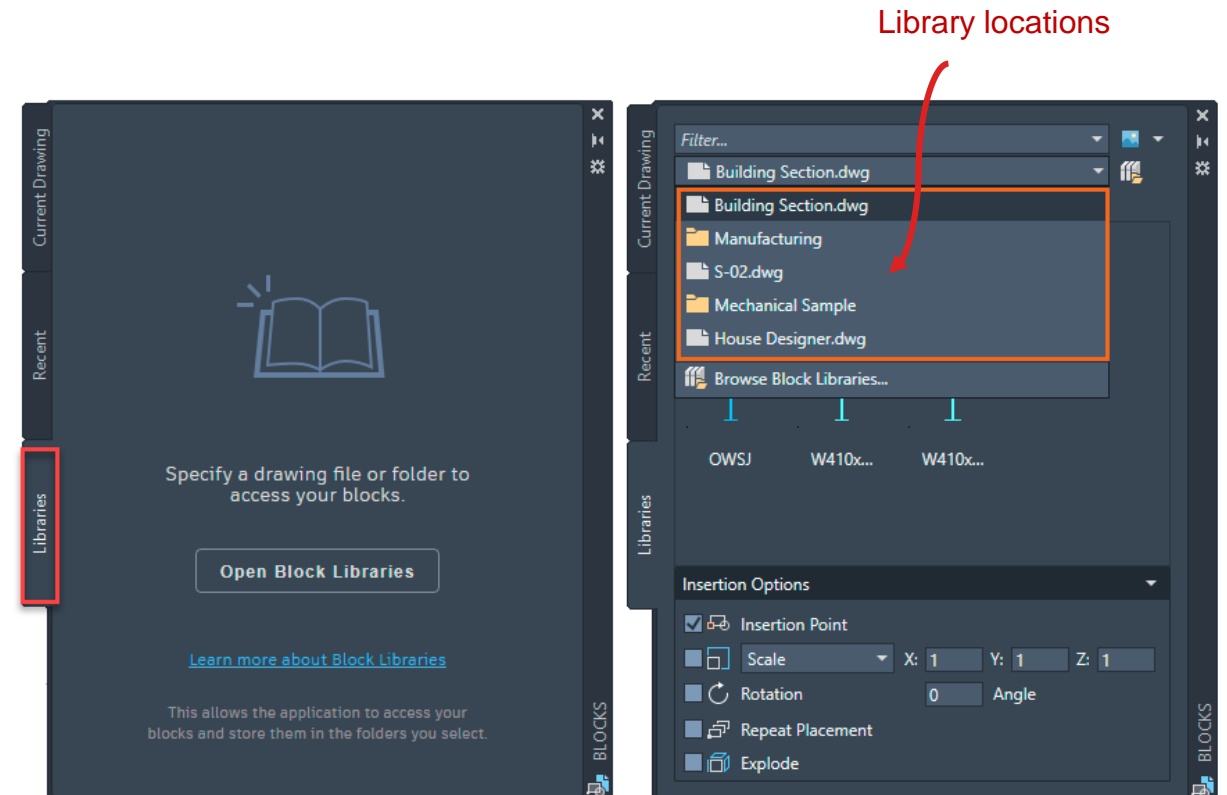
AutoCAD web app



Stay connected to your block content – anytime, anywhere. Insert blocks efficiently from the Libraries tab on desktop or in the AutoCAD web app.

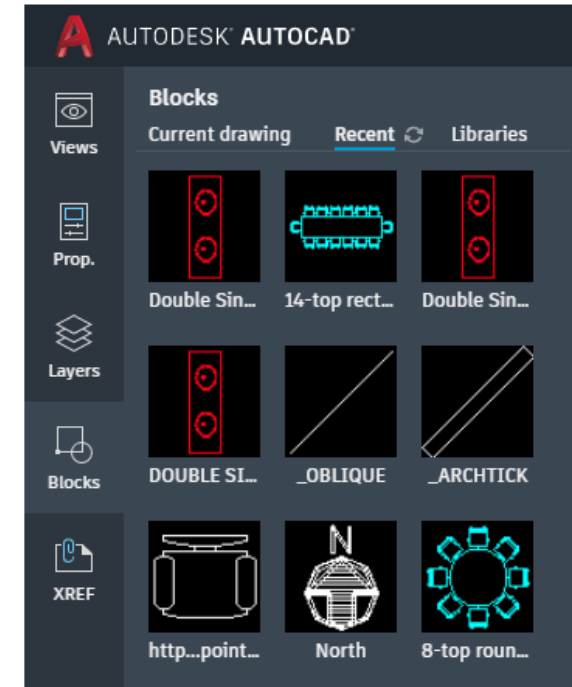
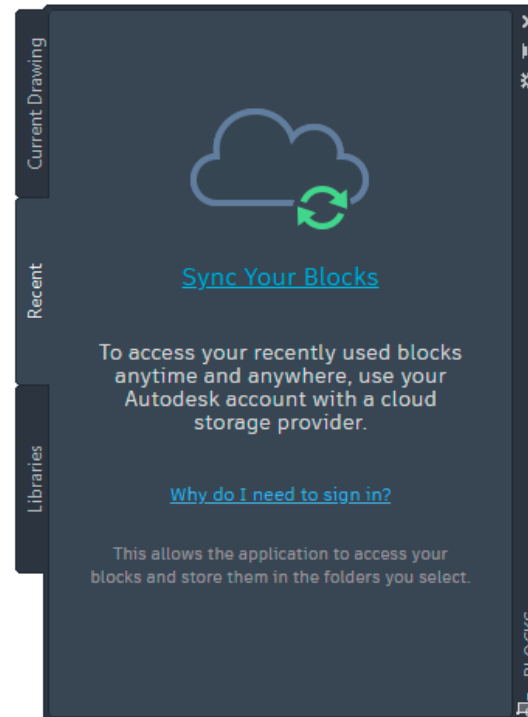
Block Palette Enhancements

- "Other Drawings" renamed to "Libraries"
 - Drop-down list displays 5 most recently used libraries
- Libraries can be specified from
 - Specific folder
 - Drawing file
 - Block defined in a library drawing



Block Palette Enhancements

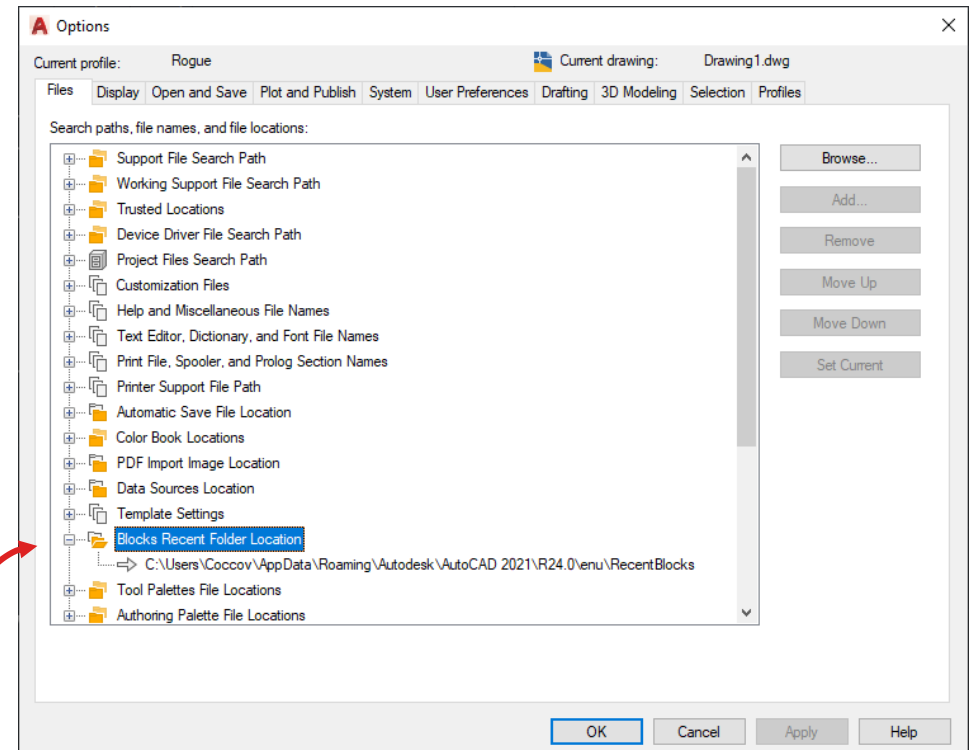
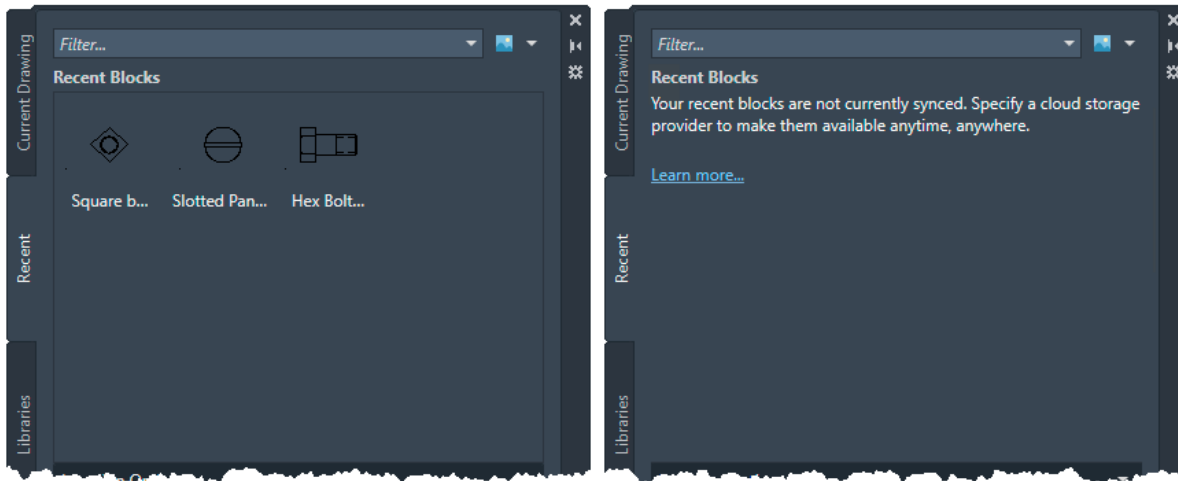
- Access to recent blocks and block library drawings from cloud storage
 - Access synchronized files from AutoCAD Desktop or AutoCAD Web App
- Users need to be signed in into their Autodesk Accounts
- Storage Providers:
 - Microsoft OneDrive
 - Dropbox
 - Box
 - Google Drive



Blocks panel in the AutoCAD web app

Block Palette Enhancements

- Specify a default location to synchronize Recent Blocks
 - Options → Files → Blocks Recent Folder Location
 - Cloud storage provider location is **recommended**



Recent Blocks Folder location is specified here

Block Palette Enhancements

- **New Commands**

- [-INSERTCONTENT](#) - Inserts a drawing or block into the current drawing. This is similar to the -INSERT command.

- **Changed Commands**

- [BLOCKSPALETTE](#) - Displays the Blocks palette, which you can use to insert blocks and drawings into the current drawing.
- [-INSERT](#) - Inserts a drawing or block into the current drawing.

- **New System Variables**

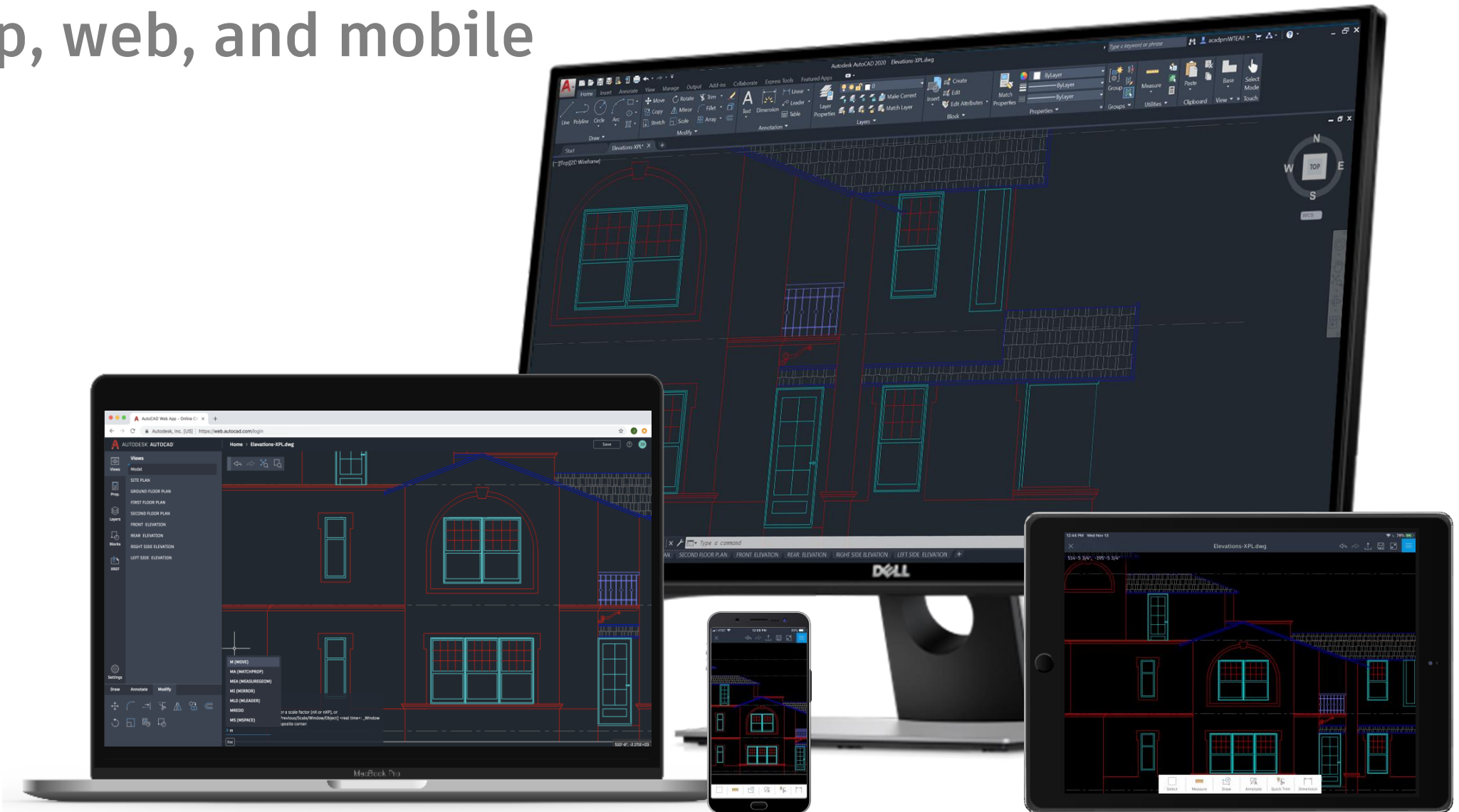
- [BLOCKSRECENTFOLDER](#) - Sets the path where the recently inserted or created blocks are stored.

- **Changed System Variables**

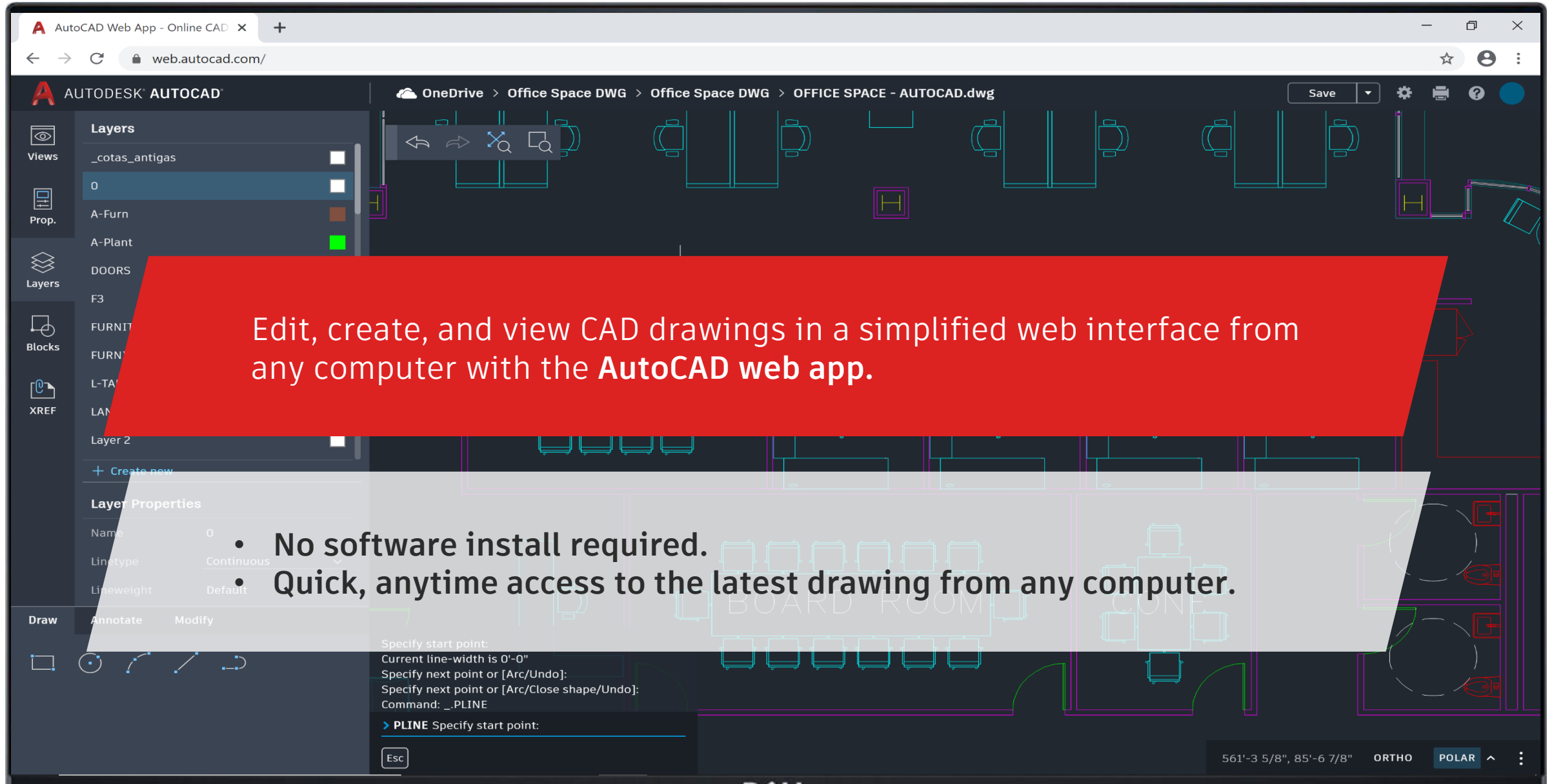
- [BLOCKNAVIGATE](#) - Controls the folder, file, and blocks that are displayed in the Libraries tab of the Blocks palette.

AutoCAD on any device

Desktop, web, and mobile



The AutoCAD web app



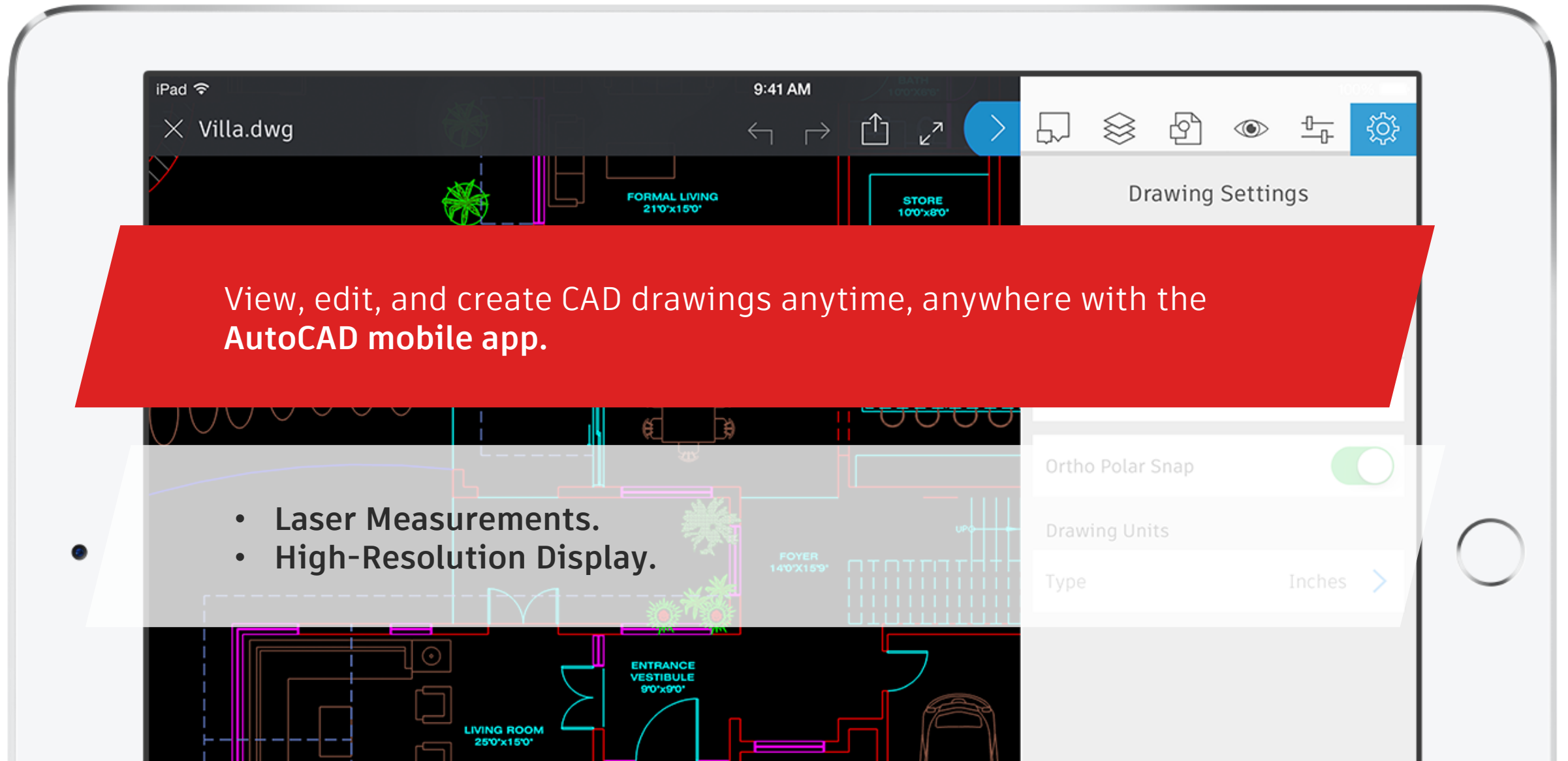
The screenshot displays the AutoCAD web app interface in a browser window. The browser tab is titled "AutoCAD Web App - Online CAD" and the address bar shows "web.autocad.com/". The interface includes a top navigation bar with "OneDrive > Office Space DWG > Office Space DWG > OFFICE SPACE - AUTOCAD.dwg" and a "Save" button. On the left, there is a "Layers" panel with a list of layers including "_cotas_antigas", "0", "A-Furn", "A-Plant", "DOORS", "F3", "FURNIT", "FURN", "L-TA", "LAN", and "Layer 2". Below the layers panel is the "Layer Properties" section. The main workspace shows a CAD drawing of an office space with various furniture and architectural elements. A red banner is overlaid on the drawing, and a white box contains a list of features. The bottom of the interface shows a command line with the text "Specify start point: Current line-width is 0'-0\"

Edit, create, and view CAD drawings in a simplified web interface from any computer with the **AutoCAD web app**.

- No software install required.
- Quick, anytime access to the latest drawing from any computer.

Specify start point:
Current line-width is 0'-0"
Specify next point or [Arc/Undo]:
Specify next point or [Arc/Close shape/Undo]:
Command: _PLINE
> PLINE Specify start point:

The AutoCAD mobile app

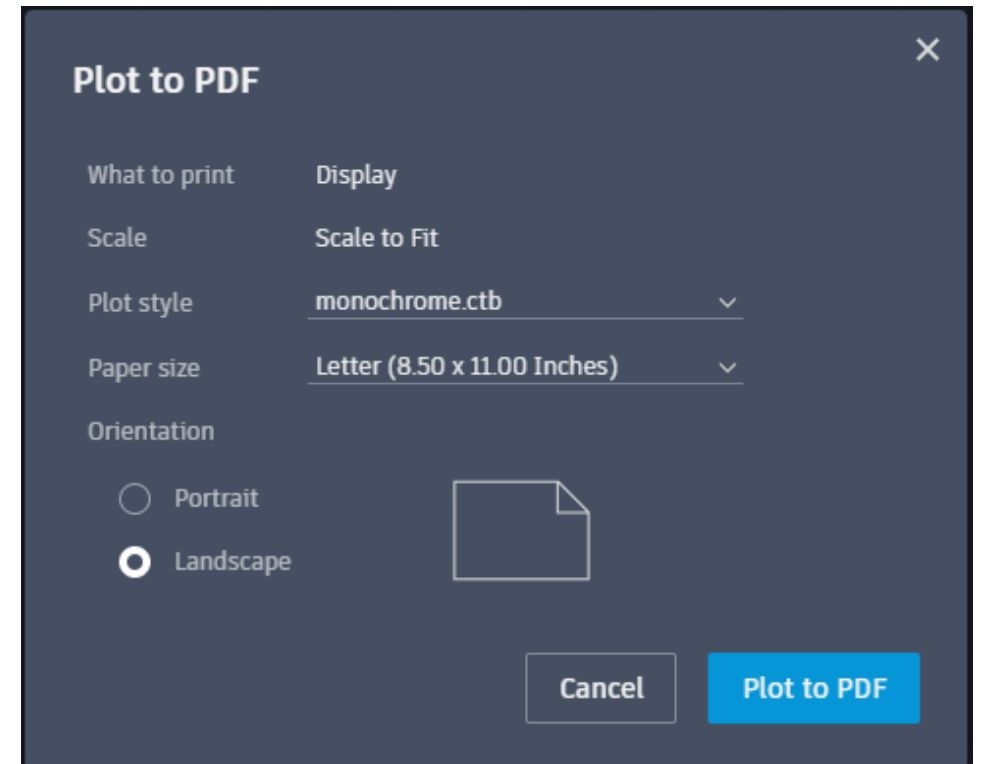


XREFs in Multiple path

- Support XREFs in Multiple path in AutoCAD web and mobile. If the files are in the same storage provider, XREFs will be loaded.

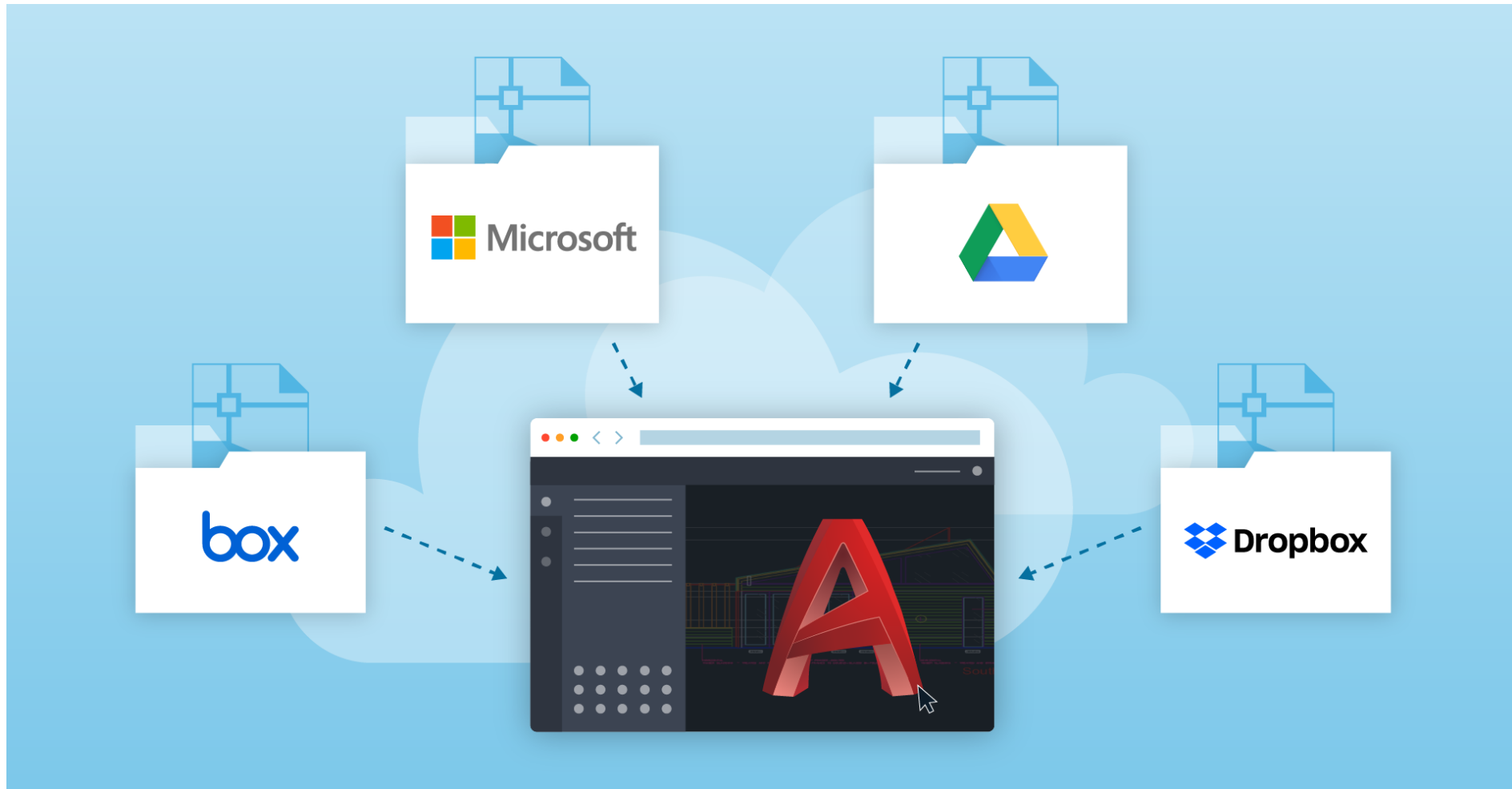
Plot to PDF

- Plot to PDF is now available in Web & Mobile.



Google Drive

Now you access and easily open your DWG files stored in Google Drive using the AutoCAD web app.





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