AUTODESK. UNIVERSITY

AutoCAD Tips, Tricks, and Dazzling Drafting Techniques

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About the speaker

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Design Technology Manager at Timmons Group, an ENR top 500 civil engineering firm, author of six Autodesk Official Press books, Autodesk University Speaker since 2007, Autodesk Certified Instructor, and Autodesk Expert Elite member with more than two-decades of experience in the AEC industry.

Today

Learn how to maximize your use of AutoCAD by stretching the limits of common commands.

Discover how recently added features can supercharge your use of AutoCAD.

Advance your use of AutoCAD with simple techniques proven to improve productivity.

Learn how to razzle dazzle your colleagues with secret tips that AutoCAD veterans and gurus know.

Class Expectations

NOT EVERY TIP WILL APPLY TO YOU

From architecture, to civil engineering, facilities management, and more, we have a diverse audience from many different industry backgrounds. Although many tips will cross industry lines, not every tip is one size fits all.

NOT EVERY TIP WILL BE NEW TO YOU

You've found many ways to be more productive in your job. Some of those ways will undoubtably overlap with the material of this class. While not every tip will be new-to-you, my hope is to share a new perspective that helps you further refine your approach, or at least validate your approach.

YOU HAVE EXPERIENCES DIFFERENT FROM MY OWN

My primary purpose is to share some of the ways I've learned to more efficiently use AutoCAD. In that time, I've learned a lot about AutoCAD, but I also have plenty to learn.

Focus Areas

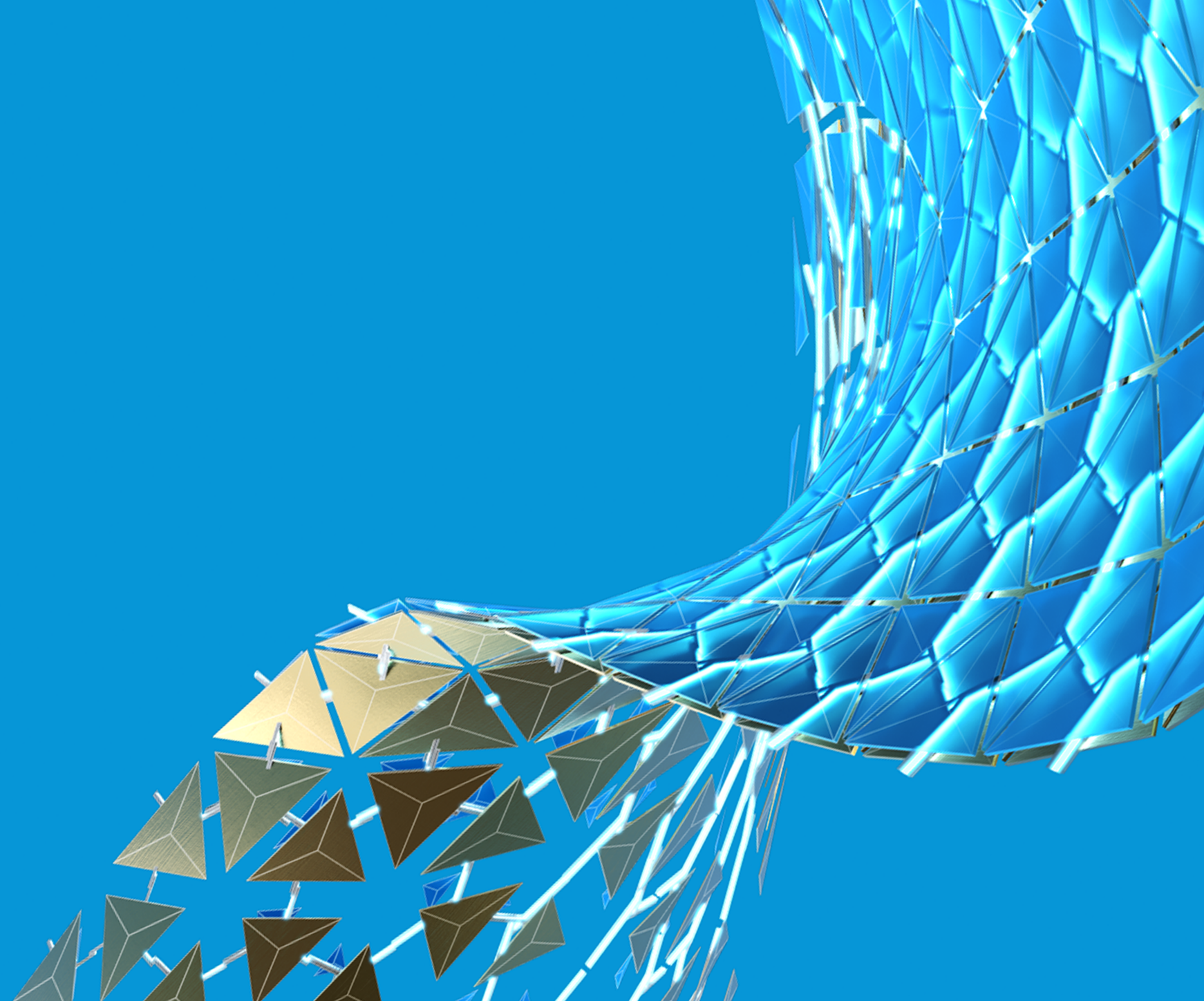
ANNOTATION

DRAWING SHEET MANAGEMENT

CUSTOMIZATION

QUANTITY TAKEOFF

Annotation



Edit Attributes without the Attributes Editor using Ctrl

Need to change the value of a block attribute, but don’t want to open up the Block Attribute (BATTMAN) command?

You don’t have to. Just press-and-hold the Ctrl key while you double-click the attribute you wish to edit.

Maintain Attribute Values with Exploding with BURST

Need to explode a block with attributes and want to maintain the attribute values of the block?

While you can use the EXPLODE command on blocks with attributes, doing so displays the Attribute Names, not their values. The BURST, or Explode Attributes command fixes all of that, and lets you explode blocks with attributes as you might expect.

Edit Block Attribute Values in Excel with ATTIN and ATTOUT

Ever need to update a batch of Block Attributes en masse?

We commonly use block attributes for elements such as room tags. While updating individual attributes isn't too difficult, tasks requiring every block attribute be updated quickly becomes tedious and time consuming.

Place Text Above and Below Dimensions with /X

Ever need text to display both above and below a dimension line?

Dimension styles let you choose one or the other, but not both, so how do you overcome this limitation?

The secret rests with the \X line break.

Fix overridden Dimensions with DIMREASSOC

What do you do when you inherit a drawing where the last drafter “fixed” all of the dimensions by manually entering values for each dimension?

Despite the urges, violence is not the answer, but the Dimension Reassociate (DIMREASSOC) can be. With it you can quickly reset dimension values to their true measurement, not overridden value.

Make Linetype Text Plan Readable

Are you constantly using the REVERSE command to make Linetype text plan readable?

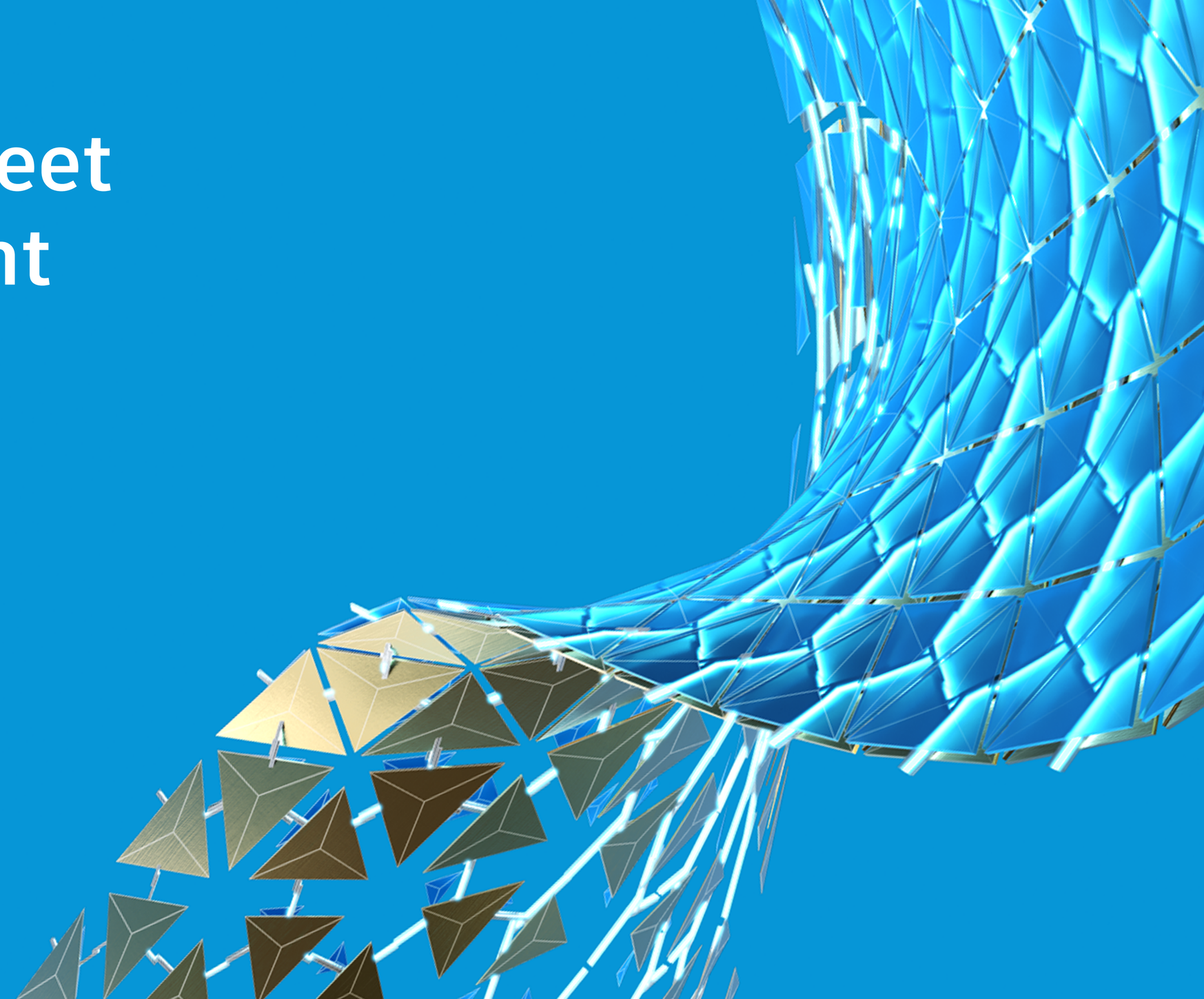
A simple update to your Linetype file (LIN) will automatically rotate your linetype text. Just add the Upright parameter (U=0) to the Linetype definition.

Create Linetypes the Super Simple Way

Need a custom linetype to display a string of text?

Linetype definition (LIN) files are ASCII based. This means you could write them from scratch in Notepad, but who has time for that? Use the Make Linetype Express Tool instead.

Drawing Sheet Management



Put Linetype Scale (LTSCALE) on Autopilot

Managing an assortment of full-scale and enlarged-scale viewports in a drawing and want your linetypes to appear the same in all views?

Set all three LTSCALE variables to 1. LTSCALE, PSLTSCALE, and MSLTSCALE.

Use Fields to Create a Plot Stamp

Ever need to track down the original DWG for a plot you're looking at, or better yet, ask the person who plotted it a question?

A plot stamp can answer these questions and more. While the PLOT command includes a Plot Stamp feature, Fields are far more versatile with modern versions of AutoCAD. Just place a MTEXT block along the edge of your sheet and add the desired fields.

Quickly Copy Layout Tabs with Ctrl

Need to duplicate an existing Layout in your drawing?

Instead of the (Layout) Move and Copy function, press-and-hold the Ctrl key as you click-and-drag on the existing Layout.

Set Draw Order The Easy Way

Use Send Hatch To Back, Annotations to Front commands to quickly balance Draw Order.

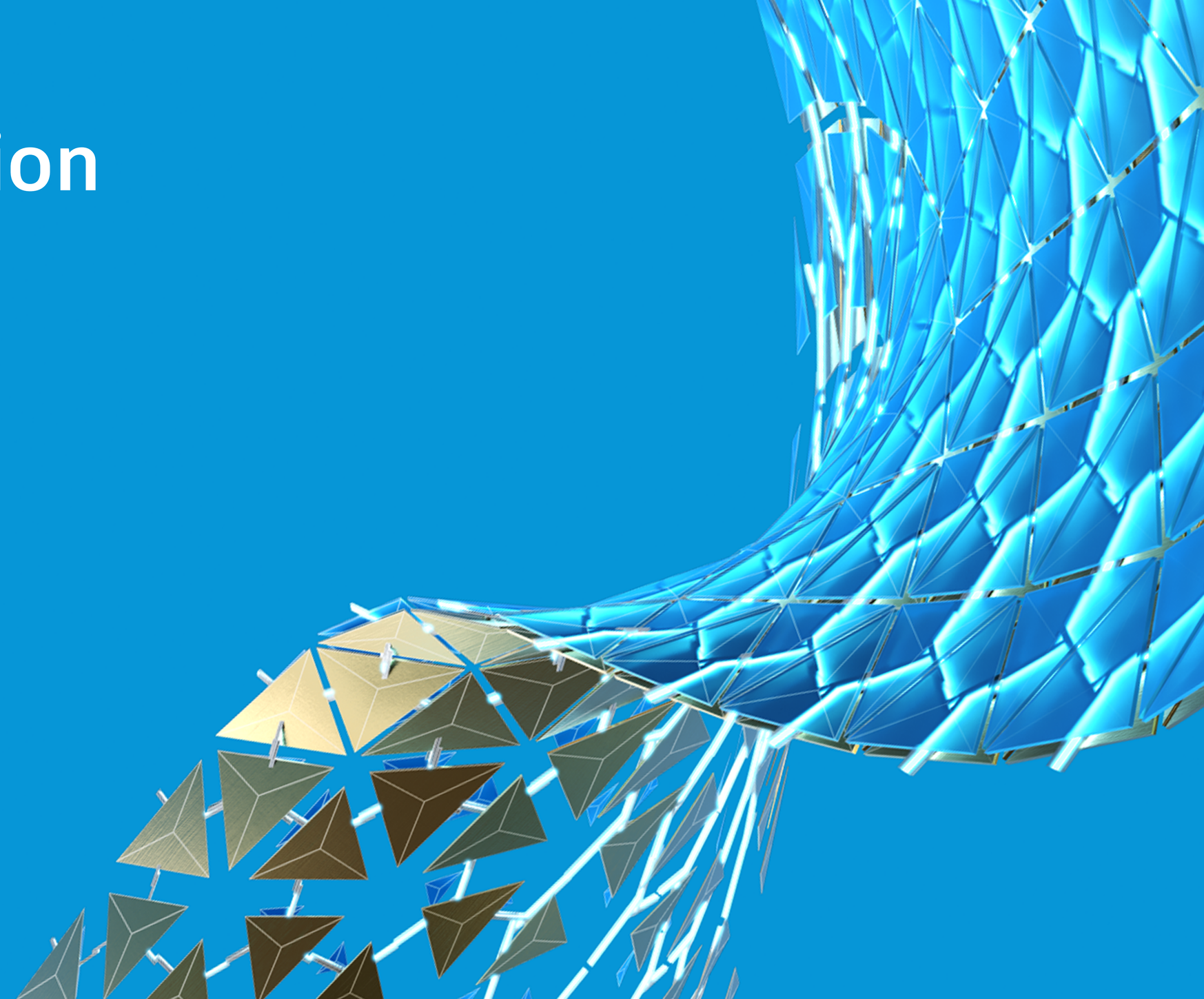
Use Change Space to Quickly Determine Viewable Area of Sheets and Align Space to Set Viewport Alignment

Draw Rectangle over viewable area of sheet, use CHSPACE to send to Model Space.

Use the viewable area outlines to layout sheets in Model space.

Finally, use Align Space to line up viewable area rectangles in Model Space with your Layout Tab Viewports.

Customization



Add the Coordinate Readout to the Status Bar

Need to quickly query the X (Easting), Y (Northing), and/or Z coordinate of geometry in your drawing?

Enable the Coordinate readout on the Status bar.

Easily Select Overlapping Objects with Selection Cycling

Ever have trouble selecting the object you want verses the object AutoCAD thinks you want in busy areas of our drawing?

Enable Selection Cycling in the AutoCAD Status Bar to make selecting overlapping objects easier.

Modify Rollover Tip Data

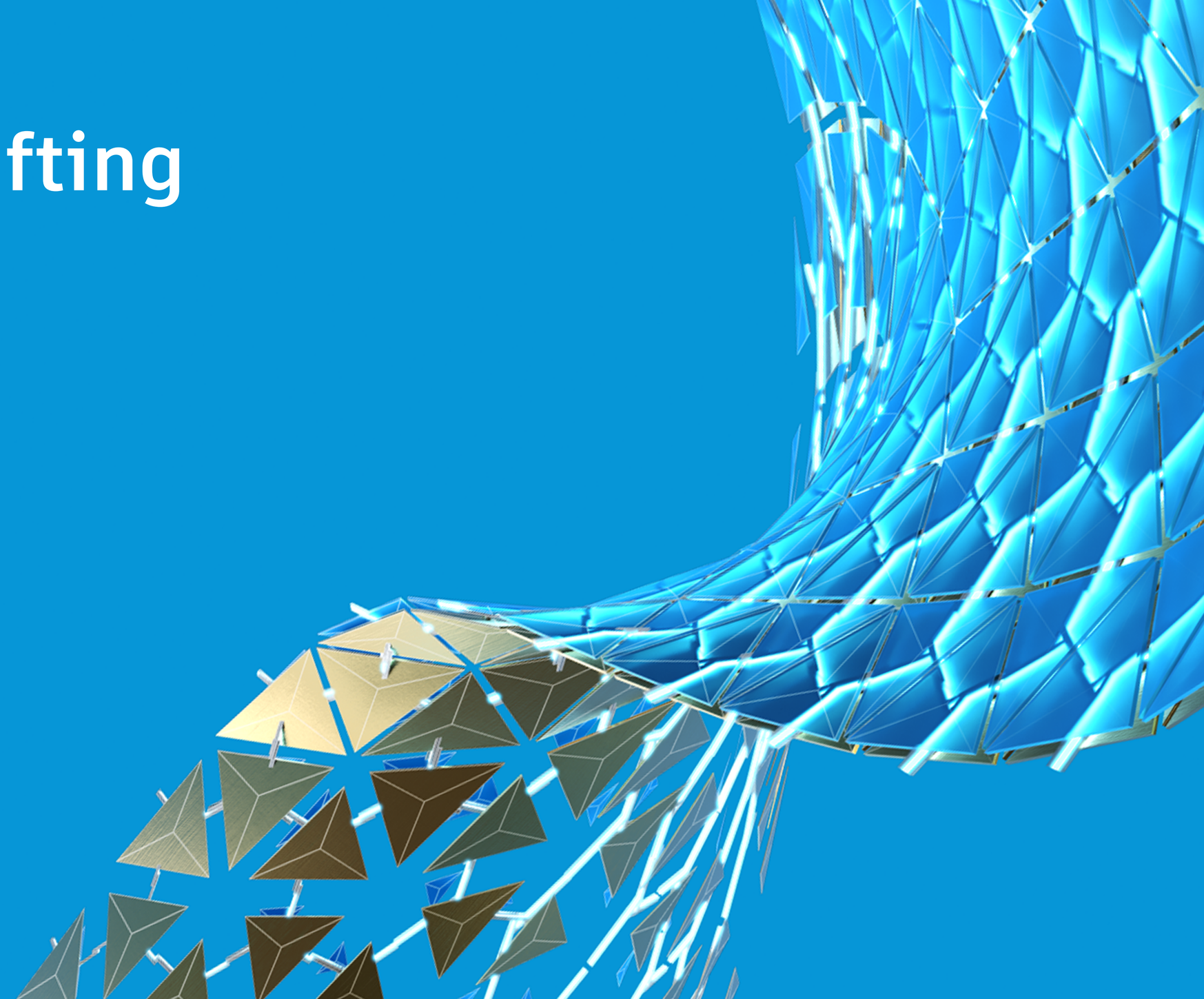
Wish the rollover tips displayed information more useful to you?

Use the CUI editor to specify the object properties you would like to see when hovering over objects in your drawing.

Double-Click to Add Multileader

Customize the double-click action for Multileaders to add a new leader with a click.

General Drafting



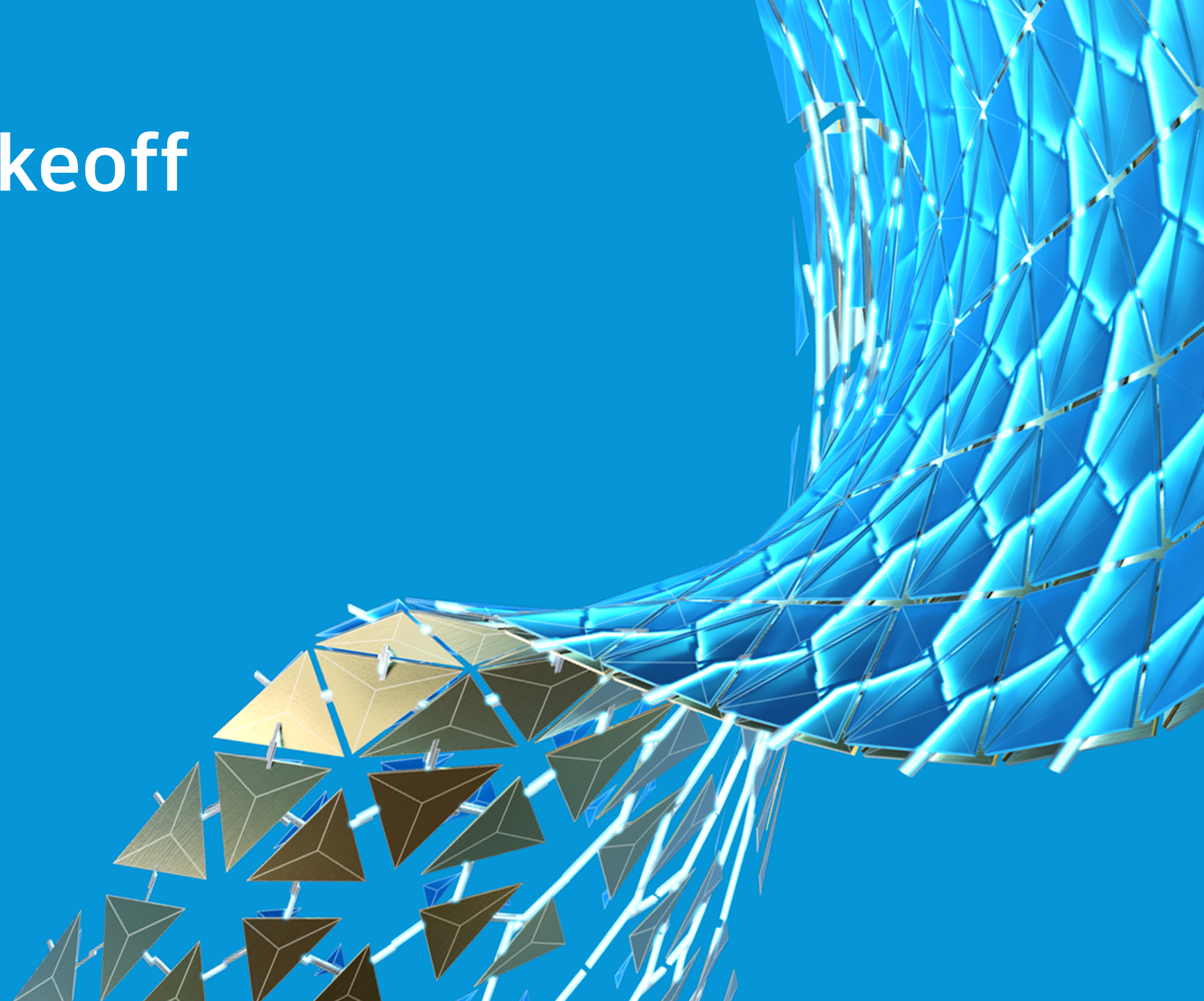
Automatically Repeat a Command with the MULTIPLE Command

DESCRIPTION NEEDED

Temporarily Reduce Chaos with Object Isolation

DESCRIPTION NEEDED

Quantity Takeoff



Quick Measure Command

DESCRIPTION NEEDED

Perform Linear Quantity Calculations with Fields

Do you have to count typical-width objects, like parking stalls, across your drawing?

Not only is such a task tedious and time consuming, it’s also one where the tedium will drive you to lose count halfway through. Cast those inefficiencies aside using Fields with a Conversion Factor applied.

Dynamically Count Blocks with Data Extraction Tables

How can you make sure your block quantities are always up-to-date with the current version of your design?

Block insertions are constantly added and removed throughout the lifecycle of a project and often represent a feature you need to maintain up-to-date quantities for. Data Extraction tables let you do just that by creating a dynamic table of the number of block insertions in your drawing.

Combine Data Extraction Tables with Excel Tables

DESCRIPTION NEEDED

Let’s Stay in Touch

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