

Diamond Sponsors



AUGI WORLD

The Official Publication of the AUGI Design Community

May 2025

Implementation

Also in this issue:

AutoCAD Architecture

BricsCAD

BIM

POWER YOUR PRODUCTIVITY

Engineered for your most demanding projects

Dell Precision 5860 and 7960 Workstations offer highly scalable performance in a PC, with up to 4 NVIDIA RTX 6000 Ada GPUs powering AI development, as well as GPU-accelerated simulation and visualization

7960 Workstation



Precision 5860



Enjoy exclusive savings for being a member of AUGI.
Learn more at www.Dell.com/AUGI.

CONTENTS

FEATURES

8 **AutoCAD Architecture 2025**

AutoCAD Architecture 2025
Sheet Sets

14 **Implementation**

The History of our Implementation
Process

18 **Software**

Selecting Effective Software

20 **BIM**

Empowering Change: The Role
of BIM Champions in Successful
Implementation

24 **BricsCAD**

BricsCAD® Drawing Health:
Implement a Workout Routine for
Your CAD Drawings

COLUMNS

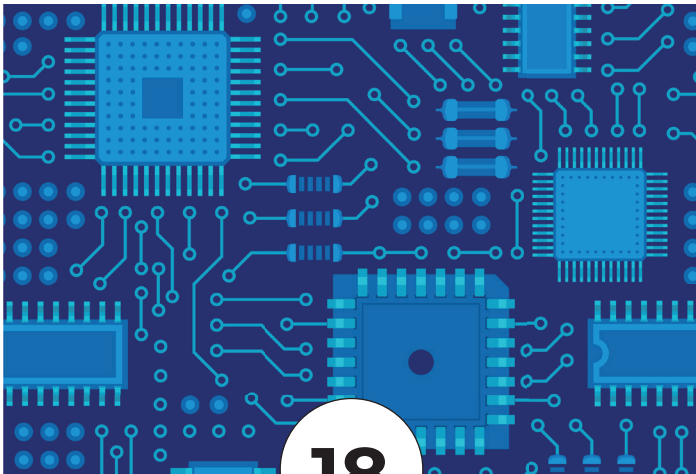
4 **Letter from the President**

6 **Tech Manager**

30 **Inside Track**



8



18



20



From the President



HELLO, AUGI MEMBERS!

Can you believe how fast 2025 is flying by? (Actually... I'm not surprised!) Welcome to the May issue of *AUGIWORLD Magazine*, which means another incredible AUGI CON is officially in the books.

AUGI CON 25 was held virtually on May 1st and 2nd, 2025, continuing our tradition of "Users Helping Users." Hosting the event online once again allowed us to connect with attendees from across the world. As a platform-agnostic conference, AUGI CON breaks down the barriers of what can be shared, providing a truly diverse experience for all.

A Huge Thank You to Our Speakers & Panelists! We simply couldn't have done it without you. Thank you to the following amazing experts who made AUGI CON 25 possible...

Andrell Laniewicz, Christian Fierro, Dzan Ta, Ericka Malone, Gil Cordle, Tiffany Hayden, R.K. McSwain, Donnia Tabor-Hanson, Curt Moreno, Jason Kunkel, Jason Peckovitch, Jason Peters, Jeff Thomas, John Mayo, Matt Brennan, Troy DeGroot, Shaun Bryant, Stephen Walz, Tom Richardson, Dakota Mohan, Jame Gant III, and James Waller.

A special shout-out to the incredible **AUGI team** working tirelessly behind the scenes to make this event a success... Frank Mayfield, Kristina Youngblut, Todd Rogers, Chris Lindner, Scott Wilcox, Shelby L. Smith, Gil Cordle, Rina Sahay, and David Harrington—thank you for your dedication and support!

To all our **AUGI members**—thank YOU! None of this is possible without your continued support.

Whether you're attending **AUGI CON**, contributing to the **AUGI Community**, reading or writing for **AUGIWORLD Magazine**, listening to **AUGIWORLD The Podcast**, or engaging with us on social media—we see you, we appreciate you, and we're grateful for everything you do. It truly takes a village to make this community thrive. We're also working behind the scenes to bring you **even more perks and experiences** as an AUGI member, so stay tuned in the coming weeks as we roll out exciting updates.

Missed AUGI CON 25? No worries! **All session and panel discussion replays** will be available soon within the **AUGI Community**, so keep an eye out for updates via email and social media.

Thank You, AUGIWORLD Magazine Contributors! A big thank you to all the **content authors** who contributed to this month's issue. Your insight, experience, and passion are what make this magazine possible. We appreciate your commitment to empowering the AUGI community.

Here's to challenging the status quo, being the leader, you wish you had and stepping confidently into your greatness.

Until next time, **Eric**

AUGIWORLD

www.augi.com

Editor

Editor-in-Chief

Todd Rogers - todd.rogers@augi.com

Copy Editor

Miranda Anderson - miranda.anderson@augi.com

Layout Editor

Debby Gwaltney - debby.gwaltney@augi.com

Content Managers

3ds Max - Brian Chapman
AutoCAD - KaDe King and Chris Lindner
Civil 3D - Shawn Herring
BIM/CIM - Stephen Walz
BricsCAD - Craig Swearingen
Electrical - Mark Behrens
Manufacturing - Kristina Youngblut
Revit Architecture - Jonathan Massaro
Revit MEP - Jason Peckovitch
Tech Manager - Mark Kiker
Inside Track - Rina Sahay

Advertising/Reprint Sales

Kevin Merritt - salesmanager@augi.com

AUGI Executive Team

President

Eric DeLeon

Vice-President

Frank Mayfield

Treasurer

Todd Rogers

Secretary

Kristina Youngblut

AUGI Board of Directors

Eric DeLeon	Shelby Smith
Chris Lindner	Scott Wilcox
Frank Mayfield	Kristina Youngblut
Todd Rogers	

AUGI Advisory Board of Directors

Gil Cordle
Rina Sahay

Publication Information

AUGIWORLD magazine is a benefit of specific AUGI membership plans. Direct magazine subscriptions are not available. Please visit www.augi.com/account/register to join or upgrade your membership to receive *AUGIWORLD* magazine in print. To manage your AUGI membership and address, please visit www.augi.com/account. For all other magazine inquiries please contact augiworld@augi.com

Published by:

AUGIWORLD is published by AUGI, Inc. AUGI makes no warranty for the use of its products and assumes no responsibility for any errors which may appear in this publication nor does it make a commitment to update the information contained herein.

AUGIWORLD is Copyright ©2025 AUGI. No information in this magazine may be reproduced without expressed written permission from AUGI.

All registered trademarks and trademarks included in this magazine are held by their respective companies. Every attempt was made to include all trademarks and registered trademarks where indicated by their companies.

AUGIWORLD (San Francisco, Calif.)
ISSN 2163-7547



**DIGITAL
BUILT
ENVIRONMENT
INSTITUTE**



**A Global
Community for
AEC Professionals to Learn,
Grow and Exchange Knowledge.**

Become a member: www.dbei.org/membership

View Control

One of the first commands that new CAD/BIM users learn are the View Controls. Knowing where you are in a file and how to move around is critical. Very quickly after they have drawn their first line, wall or circle, users need to know how to change the view angle/scale of the object they have just created. I am not going to talk about the view tools, but about controlling the view of people. Tech Managers need to know how to change views also, but the views they change are not objects on a screen, but perspectives in people's minds. Tech Managers need to know when and how to make big things smaller and small things bigger.

MAKING BIG THINGS SMALLER

There are times when you need to turn the big things into smaller things. Negative thought can start to enter the workplace environment. When things go awry, people get concerned. They can become overly focused on the downside, slide into being disheartened or even dabble with despair. But things are usually not that bad and you can help them retain the positive view when their view is cloudy.

Mistakes that people make

We all make mistakes and sometimes in the heat of a project deadline, a mistake can impact progress toward a deliverable. When mistakes are made by others, you need to help folks keep a proper perspective on the impact of the issue. This starts by making sure that the issue is framed at the correct scale. Most mistakes can be corrected easily and quickly, but folks that are in the midst of a derailment can lose sight of how to get back on track. Mistakes seldom cause long term problems.

They can be fixed, and folks can get back to work quickly. Remind people of that and reduce the scale of the impact in people's minds. Step in, offer solutions, remind them that it is not as bad as they might think and get people back to work.

Problems that Teams have

While most mistakes can be quickly resolved, some are very impactful to the entire team. The ones that are bigger need to be managed so that the impression of the scale does not expand beyond what is reasonable. Managers need to take control of the messages that circulate in the team when a mistake happens. If the concern level is getting bigger, they can seek to keep it smaller and bring calm to the conversation. They need to control the spread of exaggerations as well as addressing the actual mistake. Dive in and help the team get back to normal while reminding them that this problem can be alleviated.

Delays that Projects feel

Problems that spread to entire projects can generate concern with management. It is best for you to convey the message about larger impact delays directly up the leadership ladder as far as is appropriate. Keep the conversation direct and frame the issue as it relates to the short- and long-term repercussions. Convey what the possible disturbance to the project might be but remind them that it is not expected to get that bad. Keep management posted on the progress being made to "right the ship" and let them know that this is a top priority. While addressing the large-scale problem, your goal is to keep the concern level as small and appropriate in management's mind.

Catastrophes that affect the Bottom Line

When things are big enough to impact the bottom line, you need to help everyone. Bottomline consequences can relate to client relations, time, money or manpower. All of these can cause reductions in the company financials. This calls for helping everyone find a way to stop the bleeding and establish a recovery point. You may never get back to where you were, but minimizing the damage and pointing people toward other ways to cover the loss will help. This is where you address the large scope of impact with large scope responses. Remind people that they can get through this. Refer to other areas of business that are strong and can minimize the overall impact. Retain a positive attitude and desire to keep others focused on recovery and restoration.

MAKING SMALL THINGS BIGGER

There are also times when you need to turn the small things into bigger things. Many little things come and go without much notice. They get lost in the hustle to get the job done or the rush to get the next thing started. But the small things, when elevated, become bigger things to a person, team or company and can bring positive vibes to everyone.

Create Success Stories

Individual and team successes should be celebrated. Don't let them pass without some recognition. It might be a small personal success of completing a training class or sharing a great tip with others. It might be someone finishing a degree program, getting a promotion, or getting a professional license. These work-related achievements by staff can be enlarged and you should expand them. The successes or people may go beyond the walls of your office and be speaking engagements, presentations at User Group meetings, writing or posting articles for online tech groups (like AUGI). And they could be away from anything at work like a marriage, the birth of a baby, or buying a new house. Just listen to what is going on and make a bigger deal about it.

Teams can share in the completion of projects with a project lunch meal or a presentation from a reseller on the new tools. You could be as simple as an extended "here is what I saw you folks achieve" talk to your team. It could be a written note to each team member thanking them for their contribution to the win. Publish a quick report to upper management or the company internal newsletter/blog.

Appreciating Help

Saying "Thank You" to someone who has helped you and recognizing them in a group setting is making a small thing bigger. There are times when I get help from others, and I try to make it a habit to thank them personally (a conversation or handwritten note) and publicly after they have assisted. The public form may be informal at the water cooler to a group or formal at a meeting. This encourages the helpers to help others and have others see that helping is a good thing.

Acknowledge Personal Milestones

You should mention and celebrate employee for the personal things they achieve. Build a rapport with your team member and those outside your team by acknowledging things like anniversaries for the date of hire or their birthday. Has someone bought a new car? Take the team out to the parking lot and have the person show it off. Did someone's family come into the office? Invite them in and get to know them. Remembering that staff have personal lives outside of the office strengthens the bond of friendship and respect.

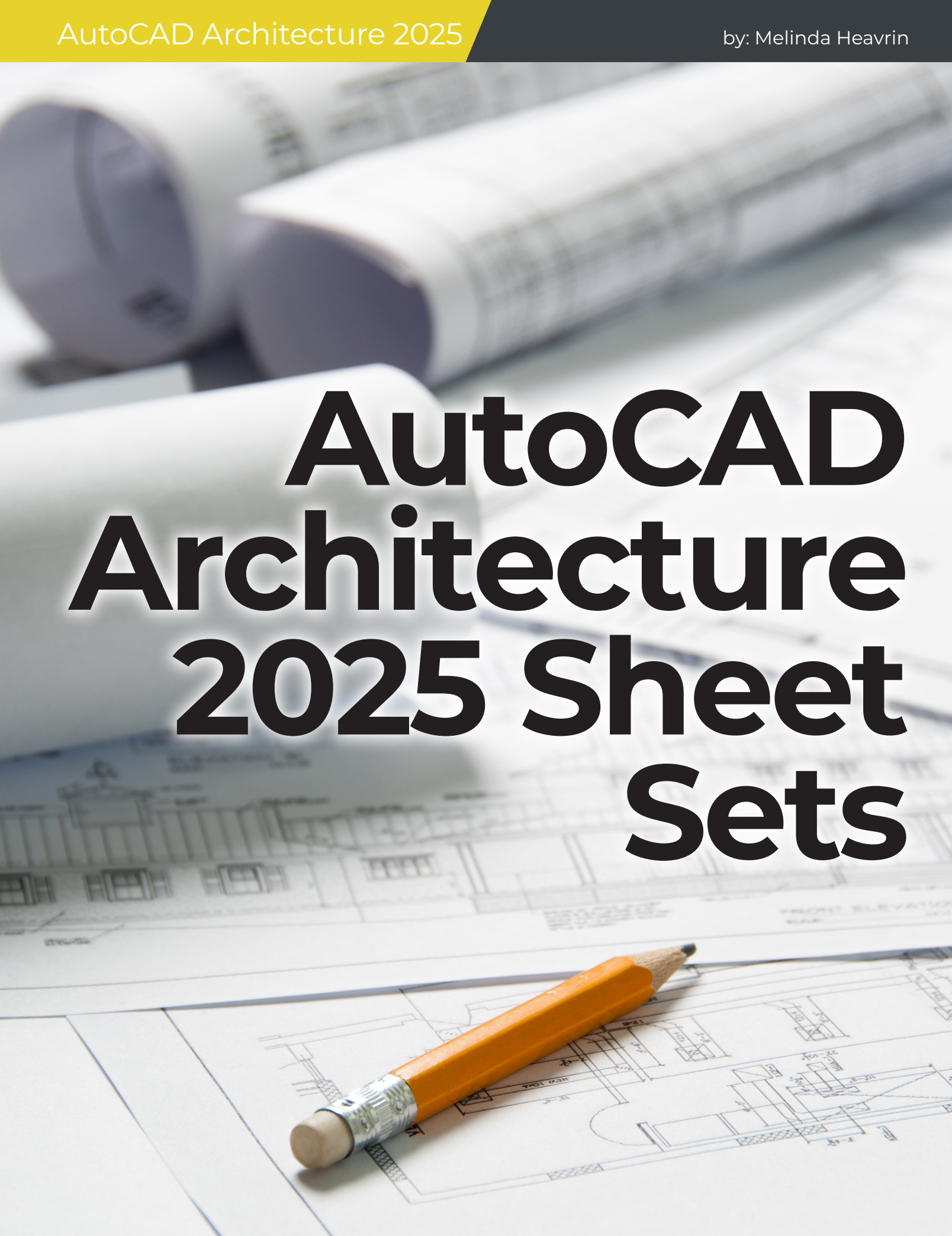
By making the small things bigger and the big things smaller, you help others celebrate life and work achievements and assist them in getting through tough times and help them celebrate. So go ahead, make a big deal about it, or remind people that things are not that bad. And when you are using the tech tools, don't forget that View Control extends to your co-workers also.



Mark Kiker has more than 30 years of hands-on experience with technology. He is fully versed in every area of management from deployment planning, installation, and configuration to training and strategic planning. As an internationally known speaker and writer, he is a returning speaker at

Autodesk University since 1996. Mark has served as Draftsman, Principal Designer, CAD/BIM Manager, CTO and CIO. He can be reached at mark.kiker@augi.com and would love to hear your questions, comments and perspectives.

AutoCAD Architecture 2025 Sheet Sets



Implementation of Sheet Sets in AutoCAD Architecture is quite easy once you get into it and is an excellent tool to use. A sheet set is an organized and named collection of sheets (basically selected layouts) from several drawing files. With the Sheet Set Manager, you can manage drawings as sheet sets.

A sheet set can be created with the Create Sheet Set wizard. In the wizard, you can either create a sheet set from scratch based on existing drawings or use an example sheet set as a template. Layouts from specified drawing files are imported into the sheet set. The associations and information that define a sheet set are stored in a sheet set data (DST) file. When you create a new sheet set using the Create Sheet Set wizard, a new folder is created as the default sheet set storage location. This new folder, which is named AutoCAD Sheet Sets, is located in the My Documents folder.

It is important to note that the DST file should be stored in a network location that is accessible to all sheets set users on the network and mapped using the same logical drive. It is strongly recommended that you store the DST and the sheet drawings in the same folder. If an entire sheet set needs to be moved, or a server or folder name changes, the DST file will still be able to locate the sheets using relative path information.

OVERVIEW

Before you begin creating a sheet set, several steps should be completed. First, drawing files need to be consolidated. Move the drawing files to be used in the sheet set into a small number of folders in order to simplify sheet set administration. Second, eliminate multiple layout tabs. Each drawing you plan to use in the sheet set should have only one layout to be used as a sheet in the sheet set. This is important for access to sheets by multiple users, as only one sheet in each drawing can be open at a time. Third, create a sheet creation template. Create a drawing template (DWT) file to be used by the sheet set for creating new sheets. You specify this template file in the Sheet Set Properties dialog box or the Subset Properties dialog box. Fourth, create a page setup overrides file. Create a DWT file to store page setups for

plotting and publishing. This file can be used to apply a single page setup to all sheets in a sheet set, overriding the individual page setups stored in each drawing. It is important to note here that although it is possible to use several layouts from the same drawing file as separate sheets in a sheet set, it is not recommended. This makes concurrent access to each layout by multiple users impossible. This practice can also reduce your management options and can complicate the organization of your sheet sets. To open the Create Sheet Set Wizard, click on the View tab, Palettes panel and select Sheet Set Manager. When the palette opens, click the drop down that says Open and select New Sheet Set.

In the Create Sheet Set wizard, when you choose to create a sheet set from an example, the example sheet set provides the organizational structure and default settings for the new sheet set. You can also specify that folders are created corresponding to the subset storage paths of the sheet set. After you create an empty sheet set with this option, you can import layouts or create sheets individually.

In the Create Sheet Set wizard, when you choose to create a sheet set from existing drawing files, you specify one or more folders that contain drawing files (see Figure 1). With this option, you can specify that the subset organization for the sheet set duplicates the folder structure of the drawing files. The layouts from these drawings can be imported into the sheet set automatically. You can easily add more folders containing drawings by clicking the Browse button for each additional folder.

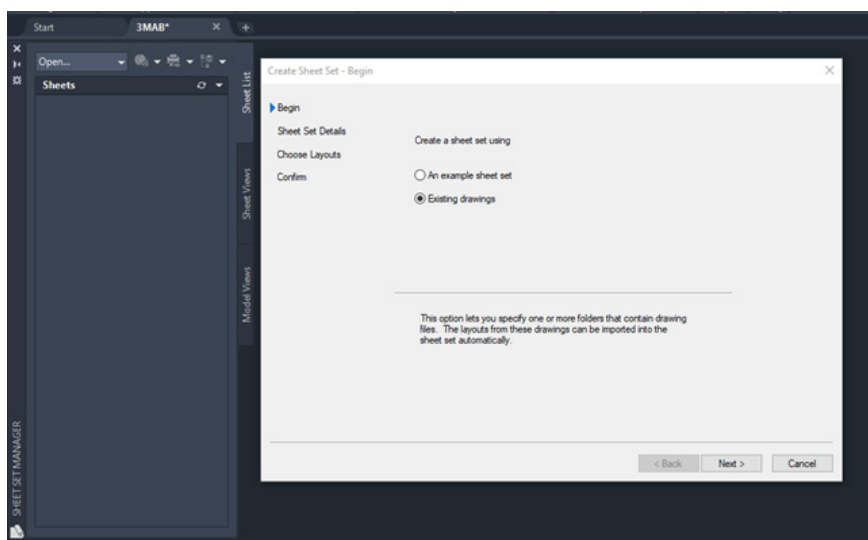


Figure 1 – Create Sheet Set Wizard

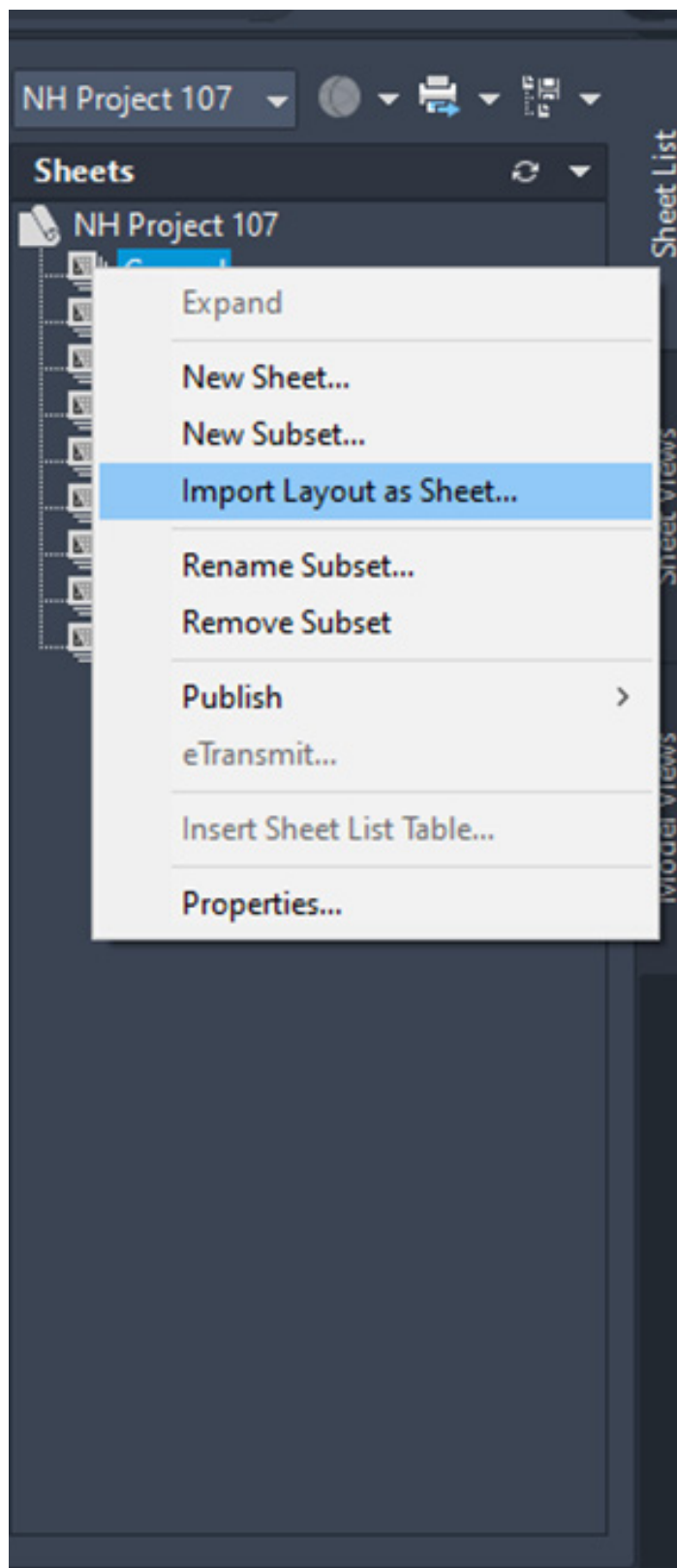


Figure 2 – Import Layout as Sheet

IMPORT A LAYOUT INTO A SHEET SET

After you create a sheet set, you can import one or more layouts from existing drawings. You can initialize a layout by clicking on its tab to activate the

previously unused layout. A layout does not contain any plot settings before initialization. Once initialized, layouts can be drawn upon, published and added to sheet sets as sheets after the drawing has been saved. This is a fast method for creating multiple sheets from layouts in several drawings. In the current drawing, you can drag a layout tab directly onto the Sheets area of the Sheet List tab in the Sheet Set Manager.

To import a layout into a sheet set, begin by clicking the View tab on the Palettes panel and select Sheet Set Manager. In the Sheet Set Manager, Sheet List tab, right-click the sheet set node, a subset node or a sheet node and then click Import Layout as Sheet (see Figure 2). In the Import Layouts as Sheets dialog box, click Browse for Drawings and then navigate to the drawing you want to use. If you wish to select several drawings, use SHIFT or CTRL when you click on the drawing files. Next, click the check boxes of the layouts to be imported as sheets in the current sheet set and click Import Checked.

CREATE A NEW SHEET IN A SHEET SET

As an alternative to importing existing layouts, you can create a new sheet. When you place views in this sheet, the drawing files associated with the views are attached as xrefs to the sheet drawing. To create a new sheet in a sheet set, begin by clicking the View tab on the Palettes panel and select Sheet Set Manager. In the Sheet Set Manager, Sheet List tab, right-click on the sheet set node and then click New Sheet. You can now select a drawing template and layout and then select OK.

CREATE A NEW SUBSET

Sheet subsets are often associated with discipline such as architectural, electrical and others. For example, in architecture, you might use a subset named Structural, and in Electrical, you might use a subset called Lighting. In some cases, you might also find it useful to create subsets associated with a review or completion status. Subsets can be nested into other subsets as needed. After you create or import sheets or subsets, you can reorder them by dragging them into the tree view.

To create a new subset, begin by clicking the View tab on the Palettes panel and select Sheet Set Manager. In the Sheet Set Manager, Sheet List tab, right-click the sheet set node or an existing subset and click New Subset. In the Subset Properties dialog box,

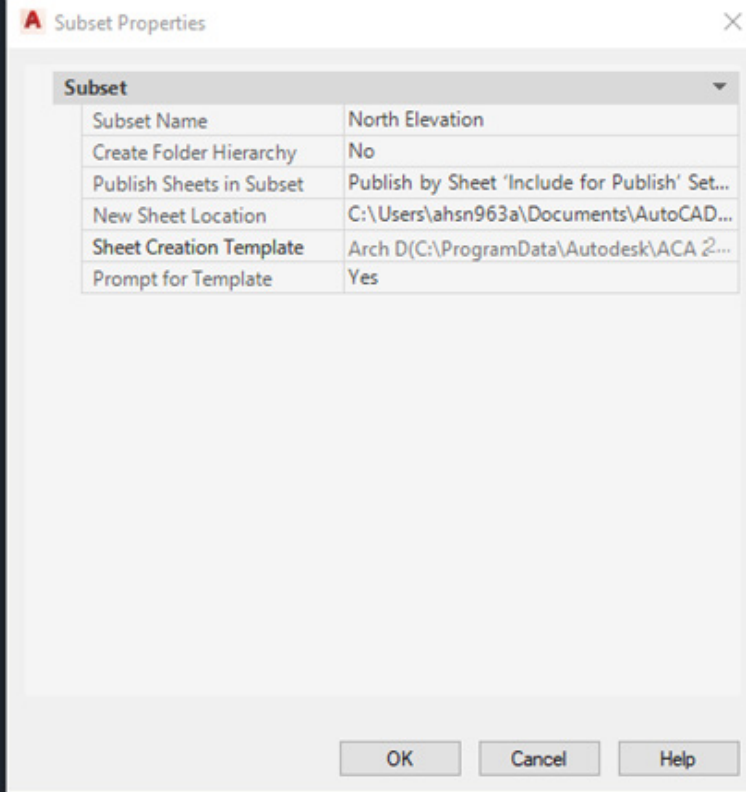


Figure 3 – Subset Properties

under Subset Name, enter the name of the new subset and click OK (see Figure 3). You can drag the new subset anywhere on the sheet list, even under other subsets. It is important to note that if you want to create a subset under an existing subset, you can right-click the existing subset. On the shortcut menu, click New Subset.

RE-ASSOCIATE A SHEET IN A SHEET SET

If you move a sheet to a different folder, you should re-associate the sheet to the sheet set with the Sheet Properties dialog box to correct the path. For any relocated sheet drawing, the paths for Expected Layout and Found Layout are displayed in the Sheet Properties dialog box. To re-associate the sheet, click the path in Expected Layout and then click to navigate to the new location of the sheet. It is important to note that you can quickly confirm whether a sheet is in the expected folder by looking at Details at the bottom of the Sheet List tab. If the selected sheet

is not in the expected location, path information for both Expected Location and Found Location is displayed in Details.

To re-associate a sheet in the sheet set, begin by clicking the View tab on the Palettes panel and select the Sheet Set Manager. In the Sheet Set Manager, open a sheet set. Now on the Sheet List tab, open the sheet that you want to re-associate. Next, in the Sheet Set Manager, right-click the sheet you wish to remove and then click Remove Sheet. Save the drawing. In the Sheet Set Manager, right-click the sheet set and click Import Layout as Sheet. In the Import Layout as Sheet dialog box, click Browse for Drawings and navigate to the drawing you wish to use. Click the check box of the layout to be re-associated as a sheet in the current sheet set and click Import Checked (see Figure 4).

ADD A VIEW TO A SHEET

From the Model Views tab, you can easily add a view to a sheet by placing

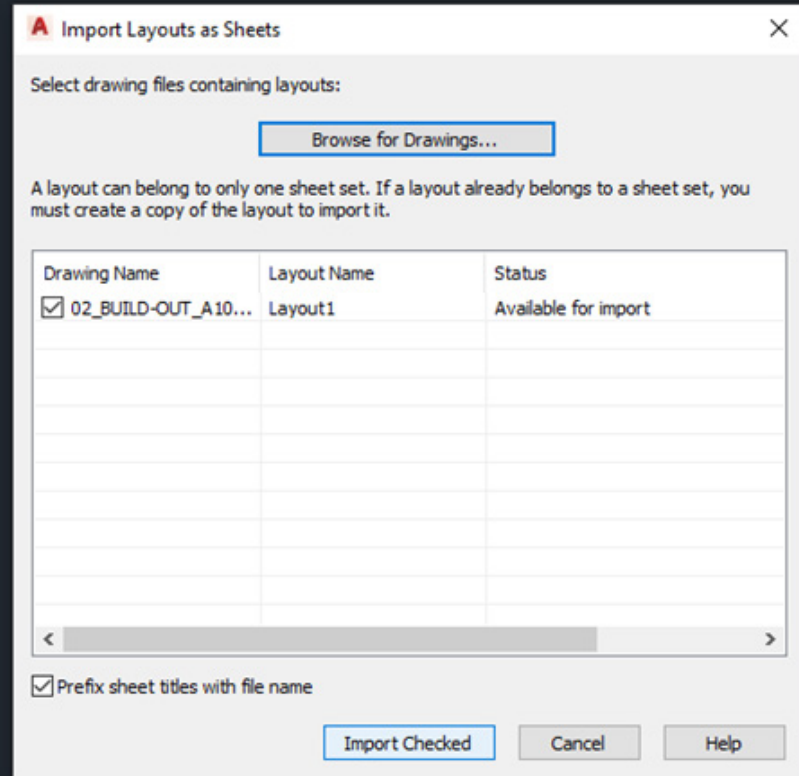


Figure 4 – Re-associate Sheet in a Sheet Set

Sheet List Table	
Sheet Number	Sheet Title
T-01	TITLE SHEET
AS-01	ARCH SITE PLAN
A-01	MAIN AND SECOND FLOOR PLAN
A-02	ELEVATIONS
A-03	DOORS WINDOWS AND ROOMS
A-04	REFLECTED CEILING PLANS
A-05	SECTIONS AND DETAILS
S-01	FOUNDATION PLAN
S-02	STRUCTURAL SECTIONS AND DETAILS
S-03	FLOOR FRAMING PLAN AND SECTIONS
S-04	STRUCTURAL SECTIONS

Figure 5 – Sheet List Table

a named model space view or the entire drawing onto the current sheet. It is important to note that after creating a named model space view, you must save the drawing to add the view to the Model Views tab. Click Refresh on the Model Views tab to update the Sheet Set Manager tree view.

To add a view to a sheet, begin by clicking the View tab on the Palettes panel and select Sheet Set Manager. In the Sheet Set Manager, open a sheet set. On the Sheet List tab, you can either double-click on a sheet to open it or create a new sheet and open it. On the Model Views tab, click the plus sign next to a folder to list the drawings in the folder.

From the list of drawing files, do one of the following:

- To add a model space view to a sheet, click the plus sign next to a drawing file to list its named model space views and then right-click a model space view
- To add an entire drawing as a view in a sheet, right-click a drawing file

Click Place on Sheet. As an alternative, you can also drag a model space view or a drawing from the Model Views tab to a sheet.

Now, right-click on the sheet and then click the scale you wish to use for the sheet view. Specify

the insertion point for the sheet view. The specified view is now added to the sheet. If a view label block is defined in the sheet set properties, a view label that displays view-specific information is automatically placed on the sheet.

ADD A SHEET LIST TABLE

The first sheet in a sheet set will usually be a title sheet that includes a description of the sheet set and a table that lists all the sheets in the sheet set (see Figure 5). You can create this table, called a sheet list table, on an open sheet. The table automatically includes all the sheets in the sheet set. Once a sheet list table is created, you also have options to edit, update or delete the cell content of the table.

To add a sheet list table, begin by clicking the View tab of the Palettes panel and select Sheet Set Manager. In the Sheet Set Manager, open a sheet set. Right-click a sheet set name, subset, or multiple sheet set names and subsets and then click Insert Sheet List Table. In the Insert Sheet List Table dialog box, set the Table Style in the Table Style Settings group. Next, on the Table Data tab, specify Title Text for the table and add, remove or change the order of the column entries. On the Subsets and Sheets tab, select the subsets and sheets to be included in the sheet list table. Please note that if you add a sheet to a subset later, you will automatically be prompted to update the sheet list table. Click OK.

PUBLISH A SHEET SET

From the Sheet Set Manager, you can easily publish an entire sheet set, a subset of a sheet set or a single sheet set. It is quicker to publish a sheet set in the Sheet Set Manager rather than using the Publish dialog box. When you publish from the Sheet Set Manager, you can publish an electronic sheet set by publishing to a DWF, DWFx or PDF file, or you can publish a paper set by publishing to the plotter named in the page setup that is associated with each drawing sheet (see Figure 6). You can also publish your sheets using a page setup that

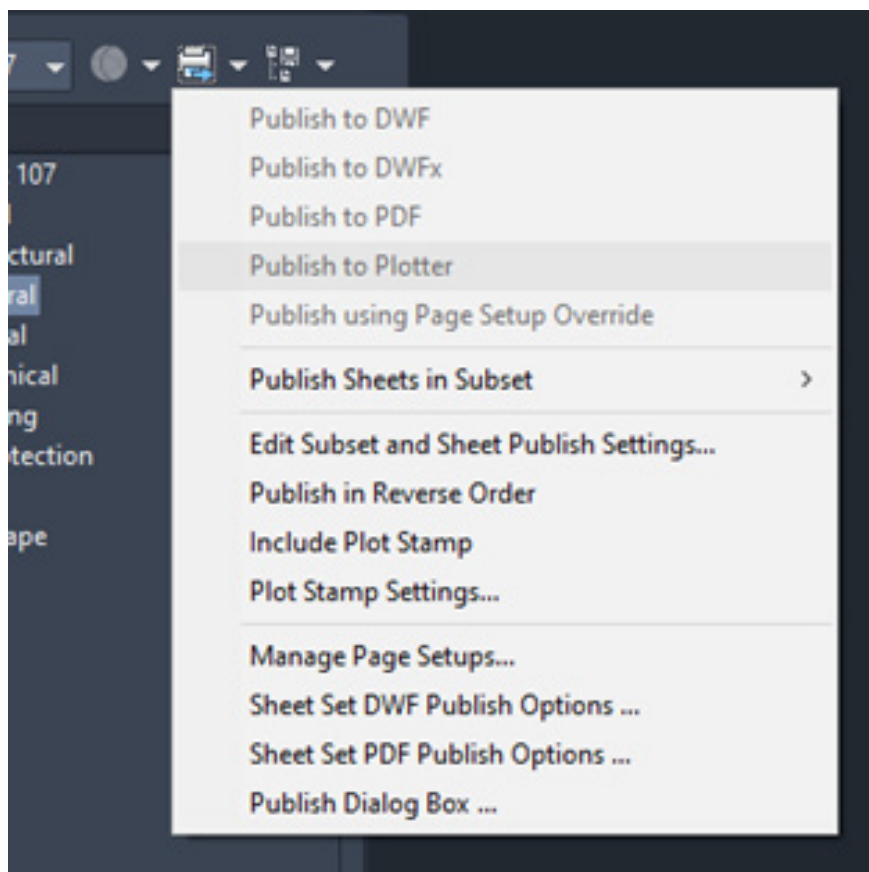


Figure 6 – Publish a Sheet Set

is saved in the page set up overrides DWT file associated with the sheet set. This page setup overrides the current page setup settings for the individual publish job.

When you open the Publish dialog box from the Sheet Set Manager, the Publish dialog box automatically lists the sheets you selected in the sheet set. You can then modify the sheet set for publishing. It is important to note that you can specify that sheets are sent to the plotter in reverse order. This option is available from the Publish dialog box and from the Sheet Set Manager.

SHEET SETS IN A NETWORKED ENVIRONMENT

This was touched on in the Overview section of this article, but I wanted to give some additional information, as many of us work in networked environments. Each team member should have network access to the DWT (drawing template file) and the DST (sheet set data file) that you created earlier in this article. Any changes that are made by any team member will open the DST file briefly and the information that is stored

in that file is updated accordingly. Any time the DST file is opened, you will see a lock icon displayed next to the sheet set name that is located at the top left corner of the Sheet Set Manager. There will be one of three color dots in the lock icon: green, red or yellow. The green dot indicates that the Sheet Set Manager on your computer has locked the DST file temporarily. The red dot indicates that the Sheet Set Manager on a team member's computer has locked the DST file temporarily. The yellow dot indicates that the sheet has a special state in the file properties, possibly read-only. All members of the team can see the changes to the sheet set in the Sheet Set Manager tree view automatically.

Team members in your networked environment can also see status data for sheets in the current sheet set. This data is displayed in the tree view and indicates whether the sheet is available for editing, the sheet is locked, or the sheet is missing or found in an unexpected folder location. It is important to note that a false lock icon may be displayed if a network problem exists. In this case, click the sheet to display more information in the Details area of the Sheet Set Manager. The Sheet Set Manager automatically polls the active sheets of team members for status changes and updates the tree view. You can force this polling cycle to occur faster by clicking on Refresh Sheet Status on the Sheet List tab. You can also update all sheets in a set automatically once all other users have closed their drawing files by clicking on the Resave All Sheets option in the sheet set shortcut menu.



Melinda Heavrin is a CAD Coordinator & Facility Planner in Louisville, Kentucky. She has been using AutoCAD Architecture since release 2000. Melinda can be reached for comments and questions at melinda.heavrin@nortonhealthcare.org.

The History of our Implementation Process

WHAT IS IMPLEMENTATION?

Implementation is the execution of an idea, the realization of a specification, algorithm, or vision into a tangible result—whether that be a software system, a workflow, or a process. In the world of design and engineering, it's more than just installing a program; it's about adopting new tools, transforming habits, and evolving how we work together to deliver great outcomes.

For Gresham Smith, the journey of implementation has run parallel with the evolution of technology in the AEC industry. Our transition from drafting on mylar sheets to collaborative modeling environments like BIM isn't just a story about software, it's a story about people.

THE EARLY DAYS: LIFE BEFORE COMPUTERS

It was the year 2 B.C.—not before Christ, but “Before Computers” at Gresham Smith—and I had just started as an intern, still in school but hungry to learn. Back then, our design process was tactile and analog. Teams were structured around an architect leading coordinators, detailers, and a few interns like myself, each playing an essential role in shaping the built environment through hand-drafted plans.

We worked with ink on mylar sheets, and a unique system of drafting called **Unigrafs**, developed by Edgar Powers Jr. Unigrafs wasn't just a technique, it was a philosophy of precision. It involved photographic processes, printing negatives, and producing finished drawings using plates and printing presses. It was

complex, but highly organized, and it left a lasting mark on how we approached documentation.

1983: ENTER CAD

In 1983, Gresham Smith began our first major implementation effort: moving from manual drafting to **Computer-Aided Design (CAD)**. Our established Unigrafs standards smoothed the transition, providing a structured method to organize layers, elements, and lineweights in the digital environment.

At the time, Gresham Smith had five offices, each one relatively autonomous, managing its own teams, projects, and software platforms. While this structure allowed for flexibility, it became a challenge as the firm grew and project demands shifted. A downturn in the economy around 2008 highlighted the issue most: some offices were overloaded with billable work, while others had staff charging overhead.

A CALL FOR CONSISTENCY

In response, leadership made a pivotal decision—to promote **workforce and project sharing across offices**. But teams were using different versions of CAD: multiple variations of MicroStation and AutoCAD, plus a smaller contingent on HOK Draw. This software fragmentation made collaboration difficult. Something had to change.

Given that much of our Department of Transportation work relied on MicroStation, and it already represented about 70% of the firm's CAD platform usage, Gresham Smith standardized on **MicroStation**. The rollout wasn't easy, training had to be provided at scale, and staff were asked to switch up familiar workflows. But it was a necessary step toward better integration across the firm.

THE RISE OF BIM: A NEW ERA

While we were refining our CAD standards, the industry wasn't standing still. A new paradigm was emerging known as **Building Information Modeling (BIM)**. Unlike CAD, which focused on 2D and 3D representation, BIM introduced data-rich models that supported lifecycle management, interdisciplinary collaboration, and a more holistic approach to design documentation.

Rather than dictate a solution from above, this time leadership took a different tack: *they empowered the practice*. Two leading platforms were placed

on the table—**Bentley Architecture** and **Autodesk Revit**—and our teams were invited to explore and evaluate both.

Participatory Evaluation: Giving the Practice a Voice

Two teams were formed and assigned similar project tasks using each platform, then asked to evaluate based on a scorecard of key criteria:

- Availability of training materials
- Quality and reusability of component parts
- Technical support and vendor engagement
- User-friendliness
- Third-party development support
- Analytics capabilities
- Ease of configuration
- Documentation efficiency

The project teams didn't just test the software—they lived with it, developed real work through it, and came together afterward to share their experiences. This open, participatory model of evaluation created a sense of ownership across the firm. Instead of being passive recipients of a top-down change, staff became active contributors to choosing the direction of our digital future.

IMPLEMENTATION BY ENGAGEMENT

Once Autodesk Revit was selected, we modeled our rollout on some of the strategies that had worked well in the CAD transition—but also introduced new methods tailored to our evolving needs.

- We created standardized “starter kits” of components and details to speed up modeling.
- We launched **“just-in-time” training**, scheduled the week before a team began using BIM in a live project.
- Our **Practice Technology staff** remained embedded and hands-on, supporting teams in the real-world problems of model complexity, remote workflows, and software quirks.

There were challenges—models grew large, networking between locations got complicated, and the learning curve was steep. But there was one game-changing difference: *attitude*. Our teams were no longer reluctant adopters, they were advocates. They had helped choose the platform, and were invested in making it work.

Something else clicked too. When surveyed about their biggest struggles, staff didn't complain about the software. Instead, they asked for **more structure and standards**. They wanted to streamline how we modeled, documented, and collaborated, not because they had to—but because they believed in the value of working more effectively together.

CULTURE SHIFT: KNOWLEDGE, NOT JUST TECHNOLOGY

In the very beginning, project delivery was a craft, a knowledge tradition passed down from architect to coordinator to detailer to draftsman. That spirit hasn't changed. What has changed are the tools and expectations.

Today, we're still learning and teaching the design craft, but we do so with a broader toolkit:

- Programming and automation
- Data and analytics
- Shared workflows and centralized libraries
- Knowledge management and best practice exchange

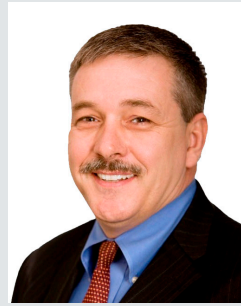
By involving people early, listening to their feedback, and giving them the support they need, we made two major implementations succeed—not just technically, but culturally. Staff approached the changes with enthusiasm because they were part of the solution. They researched, supported each other, and built a genuinely collaborative environment.

CONCLUSION: IMPLEMENTATION AS A TEAM SPORT

The partners, practice leaders, and staff at Gresham Smith didn't just adopt new platforms—we evolved how we work *together*. That has made all the difference.

We've proven that thoughtful implementation isn't a matter of plugging in software, it's about people, process, and partnership. The wisdom to engage teams, listen actively, and design change from the inside out has transformed the way we operate.

And that's what makes Gresham Smith not just a great place to work—but a resilient, innovative, and connected firm ready for whatever the next wave of change may bring.

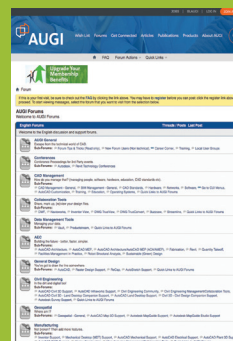
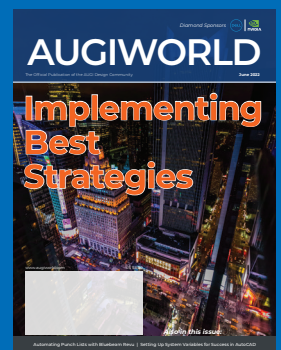
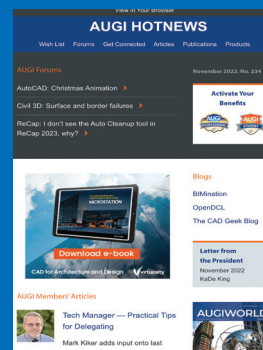


Rusty Jones is the Design Standards Coordinator in Gresham Smith's Project Delivery Excellence department, a leading multi-disciplinary design and consulting firm for the built environment. Starting as an intern architect after getting his architectural degree, he worked under many architects, coordinators and detailers giving him valuable one on one mentoring. He worked on many types of projects from Healthcare, Aviation, Corporate and Industrial architecture. Rusty developed a talent for systems drafting and organization. When Gresham Smith started using computers in 1983, He was then tasked with helping to start the firm's IT department as domain admin and start to develop a networking system together for project development and delivery. A few years later Rusty transitioned to Practice Technology specializing in professional software, training, workflows and analytical software. He also developed training material, content, workflows, and standards and trained new staff for onboarding. Around 2008 the firm started transitioning to modeling. Rusty led the transiting effort for the design professionals to Revit, Plant 3D, Civil 3D. Rusty's current role has him developing a SharePoint site to organize company production standards and how to instruction for developing a project to support the practice. Rusty lives in the Nashville area, enjoys fishing, hot air ballooning and is looking forward to retirement.

Connect with AUGI Members

Increase your revenue by advertising with AUGI and reaching its 400,000 Members.

AUGIWORLD Print
AUGI HotNews Digital



AUGI.com Website
Thousands of visits per month

Forum Advertising
Active membership participation

- Advertising Email Blasts
- Targeted Mailings
- Industry Leading Google Results Site

 **AUGI** Visit www.AUGI.com/advertise

Selecting Effective Software

Picking software can feel like a big deal, especially when you think about the cost and buy-in. But it doesn't have to be stressful. Just like with a new gadget, the flashy features might grab your attention, but you need something that works for you. A salesperson will probably rave about all the great features, but the real question is: does it fit your needs? After all, you don't want software that promises to cook you breakfast but ends up burning your toast. So, how do you make sure you're picking the right one? Let me share a couple of stories that might help— and then I'll walk you through a process that's worked for me.

Years ago, I was chatting with a superintendent who was frustrated with his daily grind. I asked him, "If you could have a piece of software do anything to make your job easier, what would it do?" He lit up, rattling off a detailed wish list of how it could simplify his tasks. I thanked him, stepped out for five minutes, and came back with something I'd

been testing on my personal iPad—an app I'd found by keeping up with industry trends (despite no R&D budget at my company). It matched his needs almost perfectly. He loaded it onto his device, and within a week, his team was using it. A month later, it was standard for all new projects. No PowerPoint, no ROI charts—just word-of-mouth from someone who lived the problem.

That experience taught me something: selecting software isn't just about features or specs. It's about solving real problems for real people—and that starts with understanding what you need. I recall an instance when I had lunch with a former colleague who'd joined a new company. She asked about issues at my job, listened to me vent, and said, 'I can solve that.'" She explained her product, aligning it with what I needed. I tried it that day, demoed it the next, and issued a purchase order by the week's end. She'd asked the right questions, listened, and delivered. It wasn't just a sale—it was a solution built on trust.

A PROCESS TO FIND THE PERFECT FIT

Here's how you can do it, step by step:

Identifying the Right Software

- **Assessing Your Process:** Start by evaluating your current process. Where are the pinch points? How do they impact your team or company? Ask the right questions to the right people, those living the issues daily. Capture their insights to build a list of needs and expectations.
- **Defining Essential Features:** Turn those insights into a requirements document—a blueprint for your software purchase. Spell out what the software must do to fix your problems, including key features, functionalities, and performance criteria.
- **Researching and Shortlisting Solutions:** Use your blueprint to find software that matches. Look for solutions that tackle your core issues, with bonuses like scalability, ease of use, and integration with existing systems. Stay curious, check industry trends and see where others are succeeding.
- **Financial Impact:** Savings, growth, or cost avoidance.
- **Timeline:** When they'll see results.
- **Change Management:** Your plan to train and support the team (because change is hard, but a map and flashlight help).
- **Case Studies:** Use cautiously—success elsewhere isn't a guarantee unless you've accounted for leadership and team buy-in.
- **For Day-to-Day Users:** Find a champion—someone respected, with real-world experience of the problems. Let them test the software and share their wins. Word of mouth still beats any pitch.

EVALUATING SOFTWARE SOLUTIONS

Once you've got a shortlist, test each option against your needs. Here's what to focus on:

- **Functionality:** Does it have the features to solve your problems? You don't want a Swiss Army knife missing the one tool you need.
- **Scalability:** Can it grow with you? No one wants software they'll outgrow like an uncomfortable pair of shoes.
- **Usability:** Is it easy to use and adopt? If it needs an advanced degree, it's not the fit.
- **Integration:** Does it play nice with your current systems?
- **Support and Training:** Does the vendor back you up with solid resources?

Gaining Buy-In

- **For Senior Managers:** Show them the value. A PowerPoint can work here—include:
 - **Cost-Benefit Analysis:** Costs vs. benefits.
 - **Efficiency Improvements:** How it turns to-do lists into ta-da lists.

CONCLUSION

Selecting the right software starts with solving a real, consistent problem—whether it's yours, your team's, or your company's. Pair that with buy-in from a trusted champion or senior managers, and you've got a recipe for success. Follow the steps, lean on the criteria, and you'll not only find the perfect solution, but you might also just end up the office hero. Capes optional.



Lana Gochenauer is the Director of Virtual Design and Construction (VDC) – Engineering at MacDonald-Miller Facility Solutions in Seattle, WA, USA. With a career dedicated to advancing technology for architects, engineers, and contractors, Lana brings a distinctive perspective to the commercial construction industry. At MacDonald-Miller, she leads the integration of innovative tools like Building Information Modeling (BIM) and Autodesk solutions to optimize mechanical system design and project delivery. Her work bridges the gap between cutting-edge software and practical application, driving efficiency and collaboration across complex building projects.

Empowering Change: The Role of BIM Champions in Successful Implementation

INTRODUCTION

Implementation of new tools and workflows in the AEC industry often fails not because the technology is lacking, but because of an absence of internal advocacy and ownership. This is where BIM Champions make the difference. Whether they are dedicated BIM staff like a BIM Manager (like myself), or just Architects or Engineers, these individuals are the catalysts for change who bridge the gap between firm leadership and project teams. They promote innovation, advocate for new processes, and serve as the connective tissue that turns implementation from a challenge into a success story.

WHAT IS A BIM CHAMPION?

A BIM Champion is not necessarily a job title, it's a mindset. While some firms may officially designate BIM Managers or Technology Leads, the role of a BIM Champion can be filled by anyone with the initiative and passion to drive change. Whether it's a senior architect championing model coordination, or a junior engineer automating workflows with Dynamo, C# or Python, BIM Champions help others see the value in adopting new tools and processes.

They advocate for standards, can act as in-house trainers, troubleshoot software issues, and evangelize the benefits of new technologies to their peers. Simply put, they are the frontline force in the successful rollout of BIM initiatives.

At my firm, we've seen the power of internal champions firsthand. From organizing Revit parameter deep-dives to troubleshooting ACC model coordination quirks, our champions aren't just tech-savvy, they're trusted peers. They help bridge the knowledge gap between leadership's vision and day-to-day project execution. Giving them a seat at the table has accelerated both adoption and innovation.

WHERE BIM CHAMPIONS FIT IN THE IMPLEMENTATION LIFECYCLE

BIM Champions are most effective when aligned with each stage of an implementation rollout. In early phases, they help evaluate tools and identify user needs. During rollout, they lead training, create custom quick-start content, and serve as the go-to resource for questions. Post-implementation, they gather feedback, refine workflows, and provide

continuous support. Recognizing and integrating champions throughout this lifecycle ensures consistent momentum and meaningful adoption.

TRAITS OF AN EFFECTIVE BIM CHAMPION

BIM Champions often share a few essential characteristics:

- **Passion for technology:** They stay curious about new tools, platforms, and workflows.
- **Strong communication skills:** They can explain complex concepts clearly to a wide range of staff.
- **Empathy:** They understand team frustrations and tailor solutions to actual user needs.
- **Influence without authority:** Even without formal leadership roles, they earn trust through expertise and consistency.
- **Lifelong learners:** Champions constantly seek better ways to solve problems and improve productivity.

RESPONSIBILITIES AND DAILY IMPACT

A BIM Champion's daily work is deeply embedded in the implementation process. Examples of what some of their responsibilities may include:

- Introducing and training staff on tools like Revit, ACC, or other cloud collaboration platforms.
- Troubleshooting real-time software issues to prevent productivity losses.
- Gathering feedback from users and refining implementation strategies accordingly.
- Piloting tools or workflows on smaller projects before recommending firmwide rollout.
- Maintaining BIM standards documentation, internal wikis, or best practices libraries.

Their daily impact is not always dramatic, but it's cumulative. They enable smoother adoption, reduce user frustration, and keep implementation efforts on track. Champions thrive when feedback flows in both directions. I would highly encourage open sharing, whether it's through informal coffee chats, a Teams channel, or monthly 'BIM Wins & Woes'

huddles. These touchpoints help champions surface what's working (and what's not) so implementation can stay nimble.

A BIM Champion might develop a Dynamo script to batch rename views based on a project naming convention. After testing it with a small team, they host a 15-minute lunch demo and share a PDF guide with examples, saving hours of manual renaming across multiple projects. Or they may use C# or Python to create a toolbar that gives users easier access to your developed standards, workflows and best practices.

BUILDING A BIM CHAMPION NETWORK

One BIM Champion can only go so far. To truly scale implementation success, firms should cultivate a network of champions across different disciplines and offices. This could take the form of:

- A dedicated "BIM Council" or "Technology Committee"
- A rotating group of staff who lead weekly or monthly tech sessions
- Shared folders, Teams channels, or knowledge hubs where champions share tips and resources

By building a network, knowledge and support are decentralized, making the entire organization more resilient and agile.

FROM REVIT STANDARDS TO CULTURAL SHIFTS

One lesson I've learned over the years: implementing new Revit standards isn't just a technical rollout, it's a cultural shift. Team members often have deeply ingrained workflows, and introducing changes requires not only explaining the technical benefits but also addressing hesitations and resistance. BIM Champions play a crucial role in bridging this gap by reinforcing not just how we model, but why these changes are necessary for improving collaboration, efficiency, and project outcomes. Through internal blogs, weekly tips, quick-win workflows, and fostering open communication, we make the standards approachable, relatable, and even exciting for project teams, ensuring smoother transitions and long-term adoption.

SUPPORTING AND EMPOWERING BIM CHAMPIONS

Leadership has a critical role to play in empowering champions. Too often, firms expect champions to lead change while juggling project deadlines, with no additional time or recognition. To truly enable them:

- Allocate protected time to focus on training, development, and support
- Offer recognition, bonuses, or career development opportunities
- Involve them in firmwide strategy decisions around BIM and technology
- Provide access to conferences, beta programs, and learning platforms

CHAMPION SUPPORT CHECKLIST SAMPLE

- Weekly 1:1 check-in with project teams
- Internal wiki updates every two weeks
- Attend or lead one lunch-and-learn per quarter
- Feedback summary reports to leadership

An empowered champion is not just more effective, they're more likely to stay and grow within the organization.

REAL-WORLD SUCCESS STORIES

My own journey as a contributor and advocate in the BIM space has highlighted how valuable champion-led implementation can be. Leading initiatives like Newforma Konekt, producing weekly BIM Mastery tips, publishing the monthly Buildings BIM Bulletin, and contributing to AUGI World content have all underscored a recurring theme: empowered, knowledgeable individuals make all the difference. These experiences have not only formed my perspective but also helped shape the strategies we use to support successful technological rollouts.

When I first joined Garver, I developed an ambitious timeline for implementing BIM within our MEPF team. It was a bold strategy, designed to push boundaries and accelerate our adoption of advanced workflows. Thanks to the dedicated efforts of our BIM Champions, not only did we rise

to the challenge, but most of the milestones were achieved ahead of schedule. These champions played a critical role in building workflows, mentoring their peers, and troubleshooting issues, ensuring the implementation was both efficient and impactful. As our group's BIM Manager, I helped a project team navigate tricky IFC coordination issues with an external architect using ArchiCAD, turning what could have been a coordination nightmare into a smooth exchange of models and data.

CONCLUSION

Technology alone doesn't drive implementation. People do. BIM Champions are the human engine behind successful change in the AEC industry. They translate firm vision into practical action, help teams navigate new tools, and turn innovation from aspiration into reality.

Every firm has potential champions, it's up to leadership to find them, support them, and build a culture where they can thrive. If you want your next implementation to succeed, don't just focus on the software. Focus on your champions.



Jason Peckovitch is an Autodesk Revit Certified Professional for Mechanical and Electrical Design located in SE Iowa. He is a BIM Manager for Garver's Buildings Business Line, specifically MEPF. Garver has more than 50 offices across the United States and more than 1200 employees. His CAD/BIM career spans over 25 years but he didn't switch to the AEC Industry until 2007 as a Mechanical HVAC Drafter and transitioned into BIM Management shortly after where he has been working since. Jason is also the father of three children; Shelby - 12, Blake - 10 and Logan - 7, a published photographer, gamer, and car/tech guy. He can be reached at jmpeckovitch@garverusa.com.



AUGI Members Reach Higher with Expanded Benefits

AUGI is introducing three new Membership levels that will bring you more benefits than ever before. Each level will bring you more content and expertise to share with fellow members, plus provide an expanded, more interactive website, publication access, and much more!



Basic members have access to:

- Forums
- *HotNews* (last 12 months)
- *AUGIWorld* (last 12 months)

DUES: Free



Premier members have access to:

- Forums
- *HotNews* (last 24 months)
- *AUGIWorld* (last 24 months)

DUES: \$25



Professional members have access to:

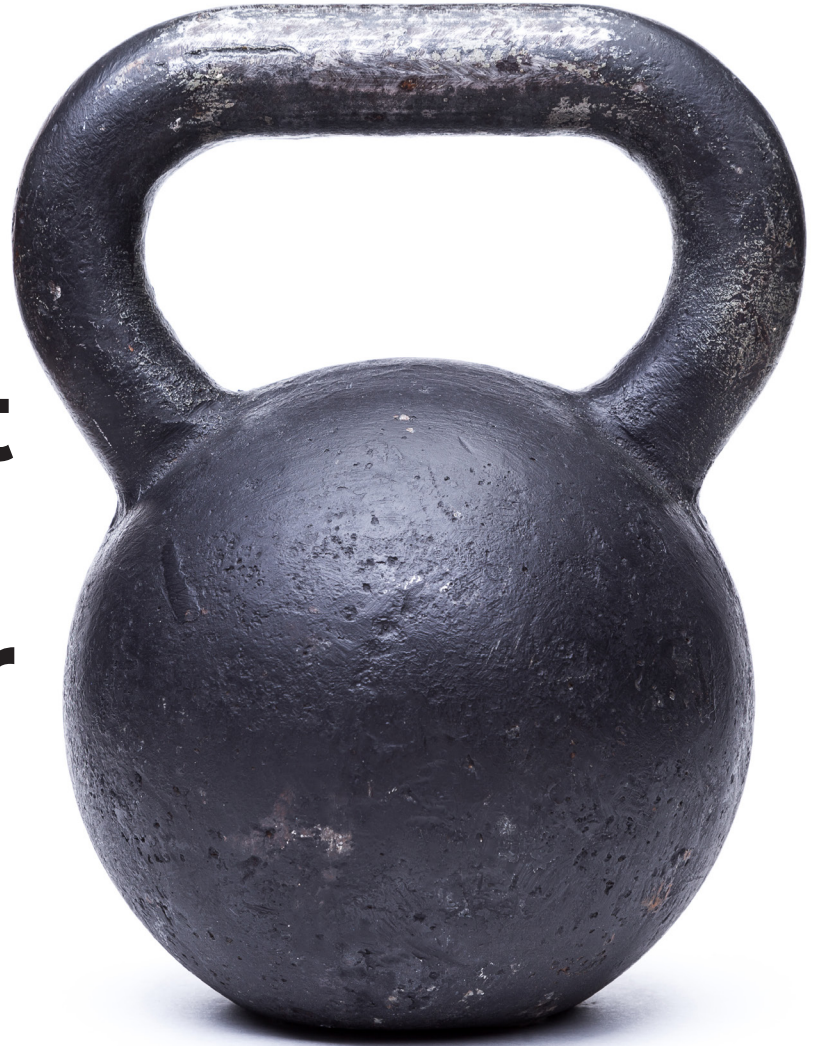
- Forums
- *HotNews* (full access)
- *AUGIWorld* (full access and in print)
- ADN 2013 Standard Membership Offer

DUES: \$100

**Are you ready to upgrade yourself and your membership?
Access additional benefits and upgrade at www.augi.com**



BricsCAD® Drawing Health: Implement a Workout Routine for Your CAD Drawings



Maintaining high-quality, standardized drawings can be as challenging as keeping a consistent workout routine. Just as a well-rounded fitness plan helps you build strength and endurance, implementing Drawing Health (DWGHEALTH) from BricsCAD® into your workflow can ensure that your drawings are clean, efficient, and meet the highest drafting standards. Some features are intuitive and easy to use, much like simple warm-up exercises, while others require more customization and practice, much like advanced training techniques.

WARMING UP: UNDERSTANDING DWGHEALTH

Before diving into a new workout routine, it is essential to understand the tools at your disposal. DWGHEALTH (See Fig. 1) in BricsCAD is designed to identify and correct common drawing issues, much like a fitness tracker helps you pinpoint areas

for improvement in your physical health. With a single command, DWGHEALTH scans your drawing for errors, inconsistencies, and inefficiencies and suggests fixes.

Some of the common issues that DWGHEALTH addresses include:

- **Duplicate and Overlapping Entities** – Just as excess body fat can slow you down, extra entities in a drawing make it sluggish and harder to work with.
- **Zero-Length or Non-Standard Linework** – Poor form in exercise leads to injury, just as poor linework leads to inaccurate drawings.
- **Layer Mismanagement** – Organizing layers is like structuring a workout routine; a well-structured layer system improves clarity and productivity.

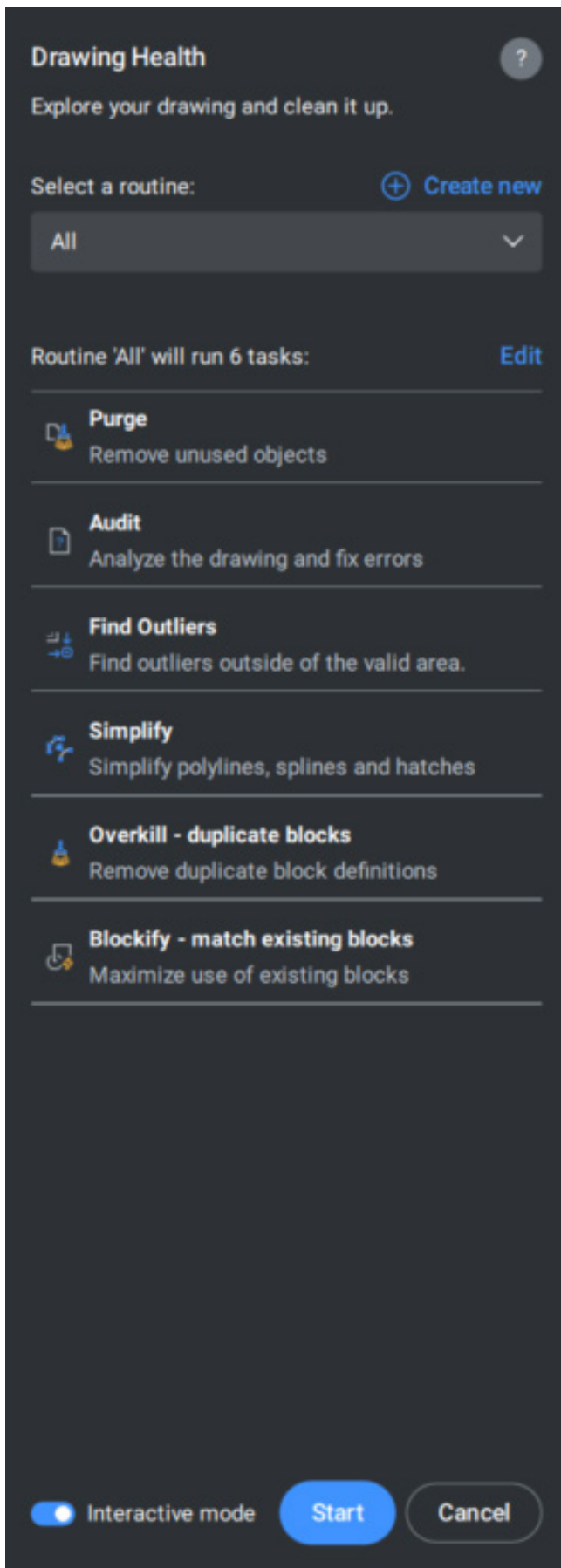


Figure 1

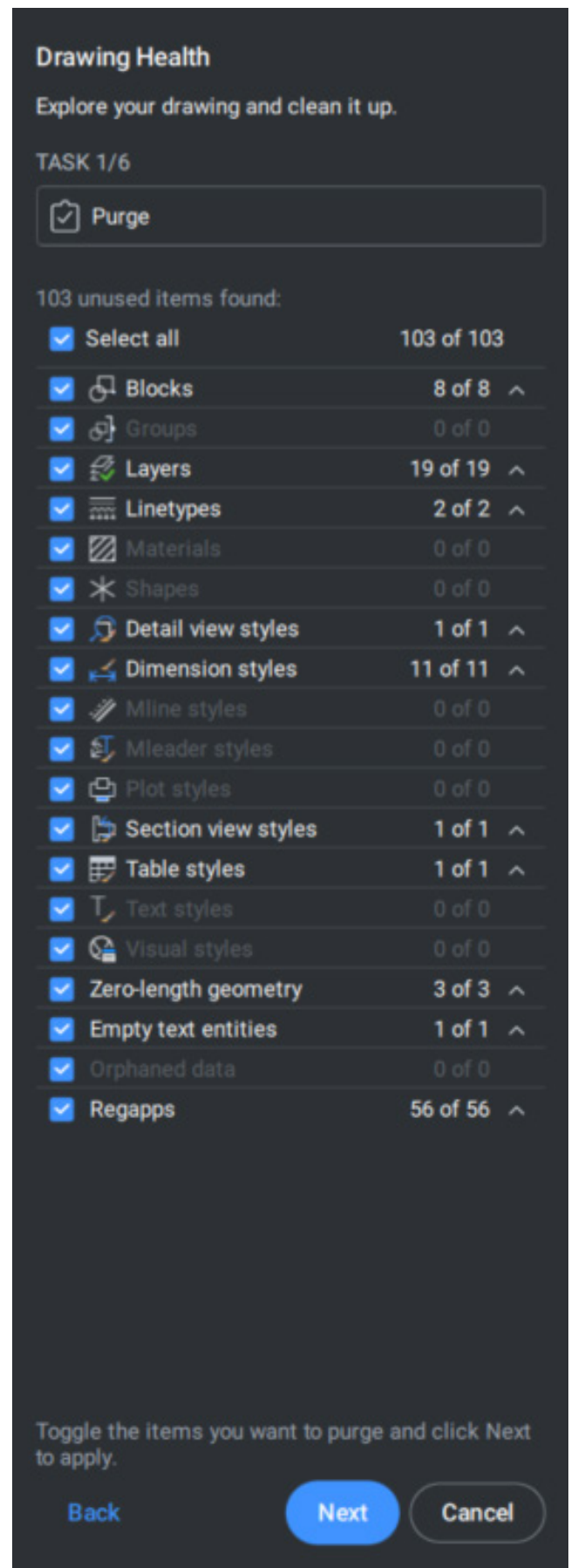


Figure 2

- **Excessive Annotation Styles and Blocks** – Redundant annotation styles and blocks make a drawing heavier and harder to navigate, much like carrying unnecessary weight in a workout.
- **Professional Quality Drawings** - Do you share drawing files with other companies and firms? Have you received drawings that are mismanaged and disorganized? This tool is perfect for cleaning up any dwg file when it comes in or before it goes out. Be the firm known for fit, professional dwg files.

THE EASY EXERCISES: BASIC DWGHEALTH FEATURES

For those new to BricsCAD's Drawing Health, starting with the basics ensures you build a solid foundation before advancing to more complex configurations. (See Fig. 2)

1. Running the DWGHEALTH Command

Just like stretching before a workout, your first step is to execute the **DWGHEALTH** command. This scans the drawing for issues and presents a report.

2. Cleaning Up Duplicate Entities

DWGHEALTH helps remove unnecessary duplicate lines, arcs, and polylines, improving efficiency and reducing drawing size. Think of this as trimming excess weight in a workout plan.

3. Layer Organization Check

A structured layer system ensures that drawings remain legible and easy to manage. DWGHEALTH identifies misplaced objects, and exploded blocks, and suggests consolidating them to the correct layers or entities—much like organizing your workout into muscle groups.

4. Text and Annotation Cleanup

Misplaced blocks and erroneous text in outer space can create confusion. These entities are often hard to detect and can make it difficult to manipulate the view because it depends on the total extent of the drawing. DWGHEALTH locates these entities positioned at extreme coordinates outside a specified area.

Users have the choice to run a predefined 2D cleanup or customize the cleanup efforts in interactive mode. (See Fig. 3). See more about BricsCAD's industry-leading DWGHEALTH workflow: Bricsys.com/DWGHealth

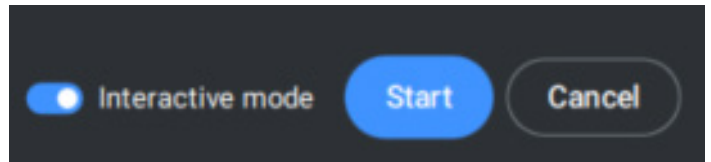


Figure 3

THE STRENGTH TRAINING: ADVANCED CUSTOMIZATION

Once you have mastered the basics, it's time to move into advanced DWGHEALTH features. Users can create, manage, and edit the tasks to be performed within a routine during the DWGHEALTH command. These require more setup but provide substantial long-term benefits.

1. Automating Health Checks with Custom Scripts -

Like setting up a personalized workout regimen, using DWGHEALTH command allows you to automate repetitive tasks. This can clean up layers, purge unnecessary data, and enforce company standards. (See Fig. 4)

2. Repair 3D Imports -

Clean and repair imported 3D models from non-DWG programs. This routine addresses issues such as geometry errors, converting meshes to solids, and simplifying 3D solids after conversion. More than likely, it will improve performance and reduce file size on large, imported 3D solid files. See the Bricsys blog: [DWGHealth & 3D Imports](#)

3. Block and External Reference Management -

Blocks and External References (or as we call them "Attachments") are essential but can become cumbersome when poorly managed. BLOCKIFY, within DWGHEALTH, searches the drawing for identical sets of entities (2D or 3D) and replaces them with block references. Just as compound exercises engage multiple muscle groups efficiently, optimizing your block and Xref usage streamlines your workflow. In BricsCAD V25, the BLOCKIFY workflow is now completely updated to include support for the Parametric Block features. (See Fig. 5)

4. Drawing Audits and Regular Maintenance -

A one-time workout won't keep you fit, regular exercise is necessary. Similarly, running DWGHEALTH as part of your CAD workflow ensures continued quality control.

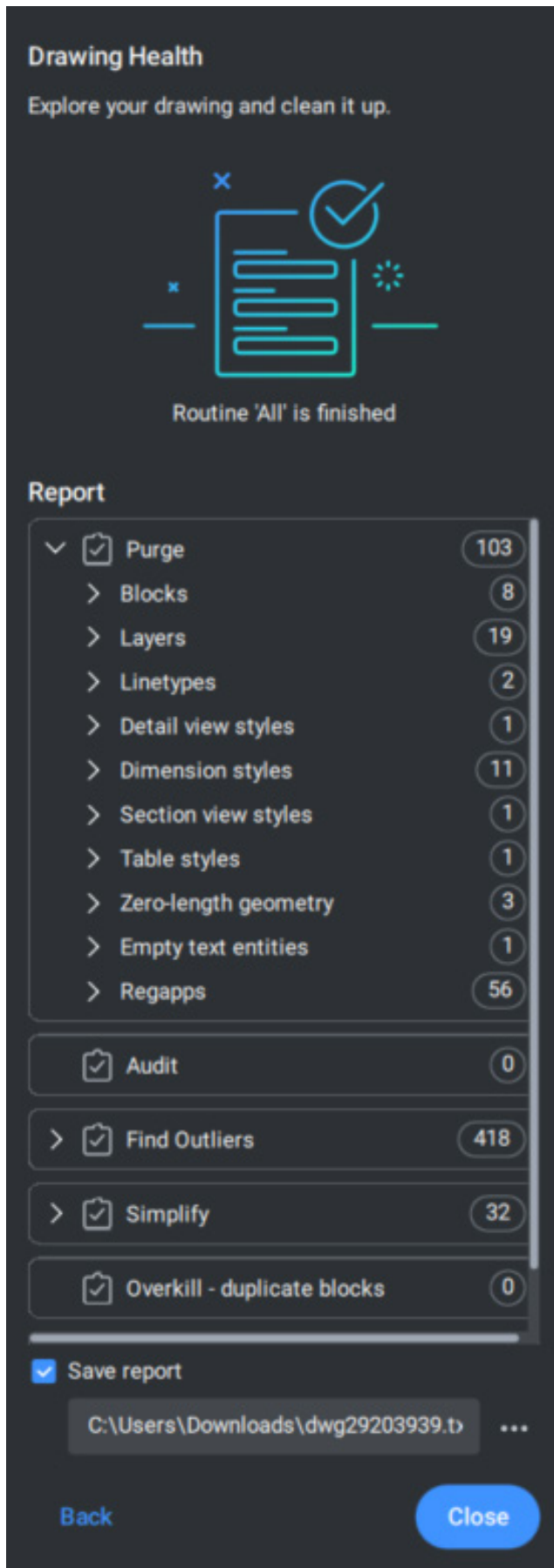


Figure 4

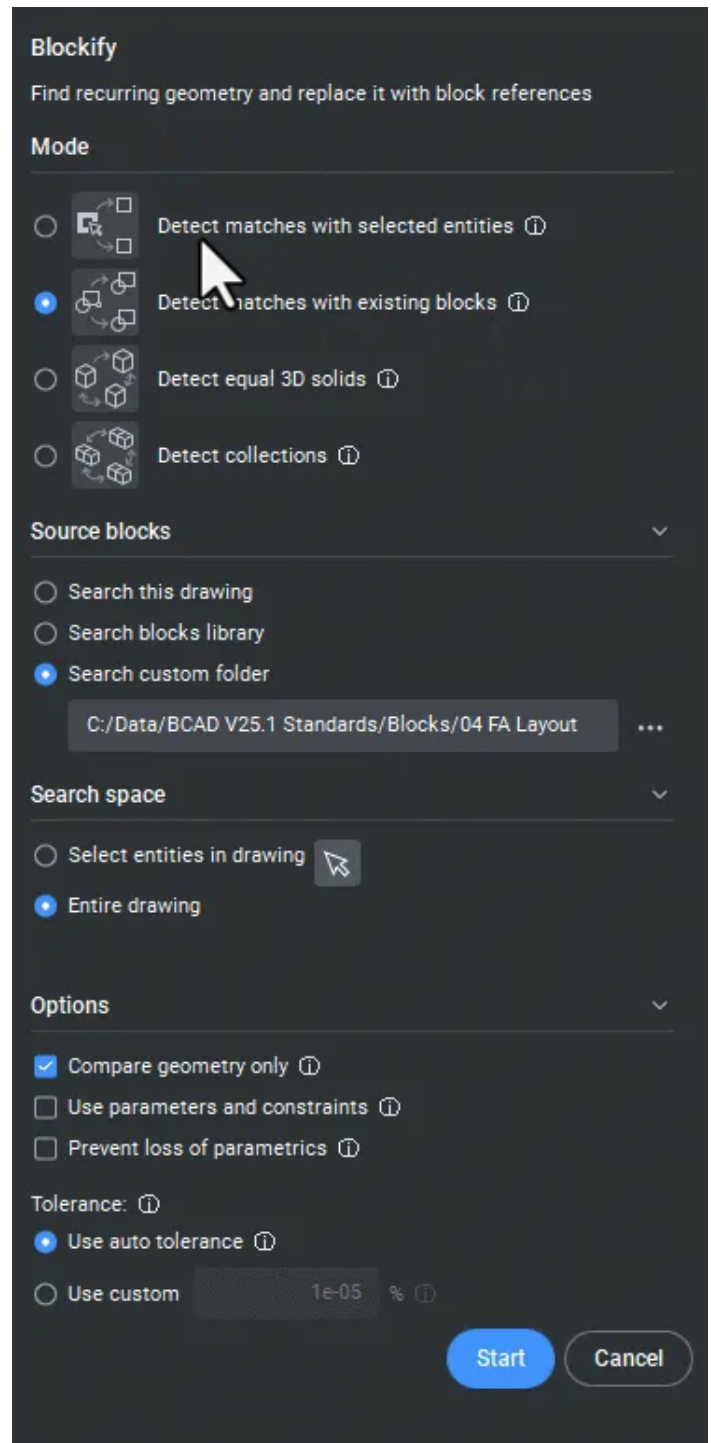


Figure 5

Bricsys® highly encourages companies to implement DWGHEALTH into their workflow. On average, the client's drawing file size is reduced from 25-50%. The average time to open the drawing has decreased 50-75%. In addition, drawings created with other CAD software are now able to open, function, and perform as expected after DWGHEALTH. Lastly, with the reduction in overall file sizes across the company, the client no longer

needs to think about the expansion of new server hardware or additional cloud storage.

BUILDING ENDURANCE: IMPLEMENTING DWGHEALTH INTO YOUR WORKFLOW

The key to success, whether in fitness or drafting, is consistency. Implementing DWGHEALTH into your standard workflow ensures sustained improvements in drawing quality.

- **Weekly Health Checks** – Just like a weekly fitness review, set up a routine where team members run DWGHEALTH on active projects.
- **Team Training and Standards Enforcement** – Conduct periodic training sessions to educate your team on best practices using DWGHEALTH, ensuring uniform standards.
- **Integration with Templates and Custom Profiles** – Configure DWGHEALTH settings within drawing templates, much like setting up a personalized workout plan tailored to your goals.
- **Feedback and Continuous Improvement** – Regularly review DWGHEALTH reports and adjust your workflow to address recurring issues, similar to refining a fitness routine based on progress.

See more DWGHEALTH in AUGIWORLD:
AUGIWORLD-May2023

CONCLUSION: ACHIEVING PEAK DRAFTING FITNESS

Using BricsCAD's DWGHEALTH is like adopting a structured fitness plan. It requires dedication, learning, and routine implementation. By starting with the basics, gradually incorporating advanced features, and maintaining consistency, you can ensure that your drawings remain efficient, professional, and free from errors. Whether you're working solo or collaborating with multiple sub-consultants, a well-maintained .DWG environment leads to faster loading, higher performance, improved productivity and fewer drafting headaches. Just like in fitness, the results are worth the effort!

Want to explore the latest CAD and BIM software and toolsets in action? Watch the V25 Breakout Sessions and learn how to get more from intelligent tools and familiar features with Bricsys' product experts. BricsCAD® V25 Launch

MORE ABOUT BRICSCAD®

Bricsys® BricsCAD® is professional CAD software without compromise. Accelerate your time to deliverable without compromise on performance, cost, licensing flexibility, and data security. Not ready to buy? Download the free, 30-day trial of BricsCAD® at Bricsys.com. Would you like free lessons? We have that available with Bricsys Learning. Ready to migrate to BricsCAD®? Download the Migration Guide. The latest version of BricsCAD® improves the tools and features users love, as well as new functionality and UI that supercharge productivity. Follow us today on LinkedIn and YouTube.

MORE ABOUT BRICSYS®

Bricsys®, part of Hexagon®, is the global technology company that creates the BricsCAD® family of computer aided design (CAD) products and the Bricsys® 24/7 project collaboration platform. We are relentlessly committed to the success of our customers by offering cost-effective, mission-critical CAD software with industry-leading product support. Learn more at www.Bricsys.com.

Hexagon is a global leader in digital reality solutions. Learn more about Hexagon (Nasdaq Stockholm: HEXA B) at hexagon.com and follow us @HexagonAB.



Mr. Craig Swearingen is a Global Implementation Specialist and Consultant at Bricsys. Currently, Craig provides migration and implementation guidance, management strategies, and technical assistance to companies which need an alternative, compatible CAD solution. Craig spent 19 years in the civil engineering world as a technician, Civil 3D & CAD power user, becoming a support-intensive CAD/IT manager in high-volume production environments. Craig is a longtime AUGI member (2009), a Certified Autodesk® AutoCAD® Professional, and he enjoys networking with other CAD users on social media.



**AUGIWorld brings you recent developments in
Autodesk and related software items**

Welcome to *AUGIWorld* Inside Track! Check out the latest opportunities to advance your skills, processes, and workflows in your firm with the most current AEC-related software and hardware updates available.

The Revit Issues Add-In

Hello Spring! Sunshine and May Flowers! All this brightness should have you ready to explore this exciting tool!

Before I dive into this Add-In, let's get formal introductions out of the way-

Gentle Reader - Revit Issues Add-In Revit Issues Add-In - Gentle Reader

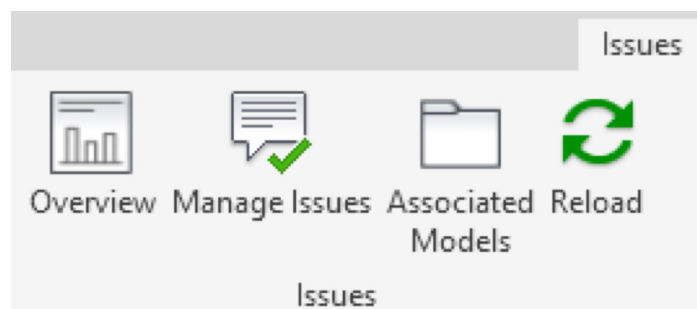
This is one of the newest, latest and greatest developments that is probably a couple of months old. Let's look at how this works.

We all know that ACC offers **Issues** as a tool for QA/QC. But the **Revit Issues Add-In** offers a **bidirectional connection between ACC and Revit** - *you can create issues right in the model and view them in ACC and vice versa*. Let's look at how this wondrous state of affairs comes about.

We'll start by installing. Go to your Autodesk account >> Products and Services. Honestly, I never really remember where exactly it's located - I just ran a search for Issues and got this -

Surprise! It's **compatible with Revit versions 2022 onwards!** Pick and choose the version you need - no redundancy there. A downloadable executable file just needs to be run to install for a quick and easy installation in a matter of minutes.





In Revit you will now see this shiny new Issues tab.



BUT....before we go any further - can we answer ALL these questions in the affirmative?

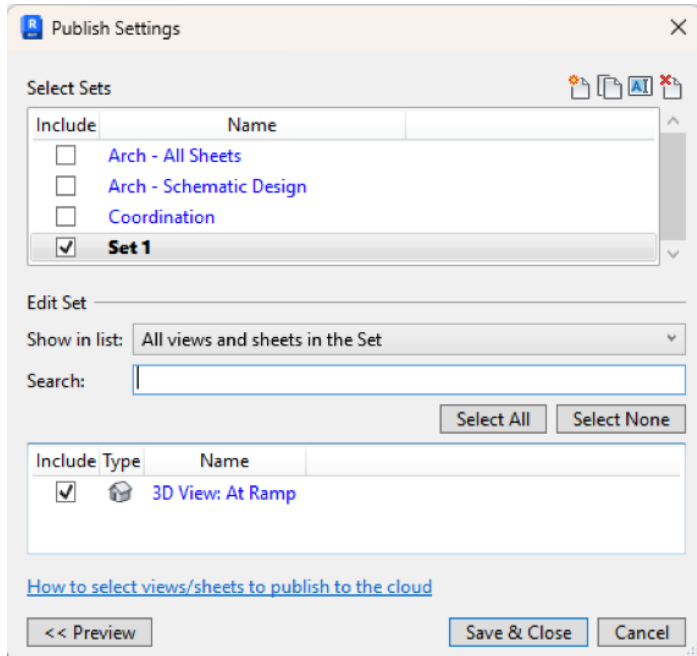
1. Has the project been added to the Autodesk Desktop Connector?

If not, you may get the error **"Associated models cannot be loaded"**

<input type="checkbox"/>	Name	Type	Size	Release date ↓	
<input type="checkbox"/>	 Issues Addin v7.0.1 for Revit 2022 Revit 2022	Extensions	5.2 MB	Feb 14, 2025	Download
<input type="checkbox"/>	 Issues Addin v7.0.1 for Revit 2023 Revit 2023	Extensions	4.92 MB	Feb 14, 2025	Download
<input type="checkbox"/>	 Issues Addin v7.0.1 for Revit 2024 Revit 2024	Extensions	4.89 MB	Feb 14, 2025	Download
<input type="checkbox"/>	 Issues Addin v7.0.1 for Revit 2025 Revit 2025	Extensions	4.71 MB	Feb 14, 2025	Download

- Do we have a **dedicated 3D view that has been published**?

If not, the **+Create Issue** button will be grayed out



Tips - Don't be afraid to create multiple published 3D views, for each room being reviewed. Give them a name that makes sense.

Create a **Publish Set** for views dedicated to creating issues. Add or remove views as needed.

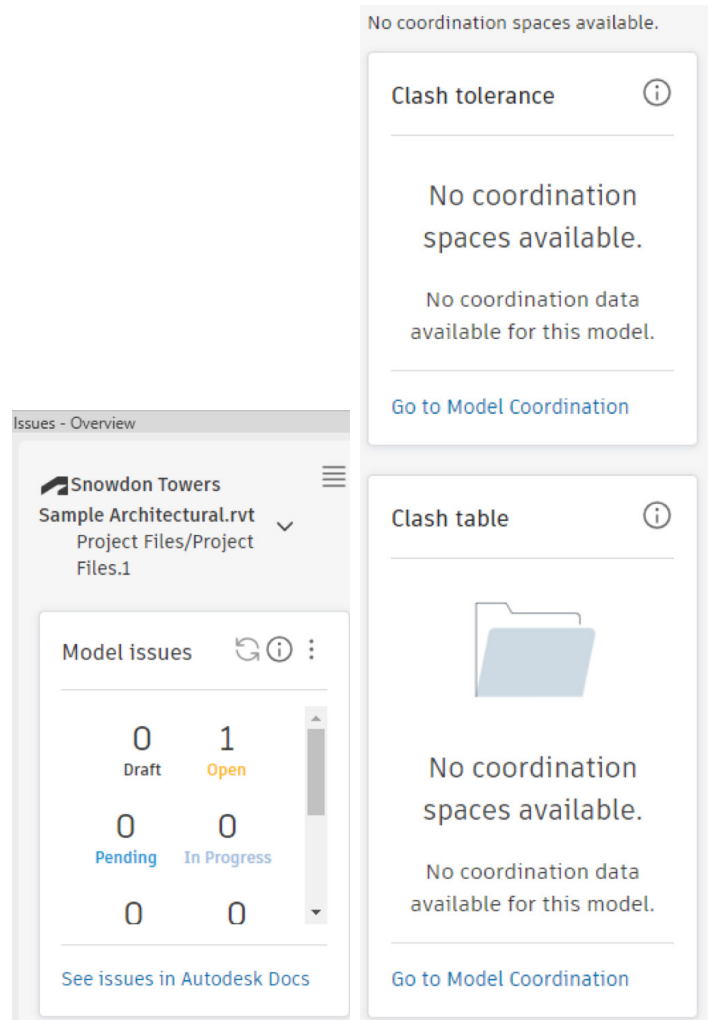
Make sure to **schedule Publishing in ACC!** That leaves you covered - most of the time, that is!

- If you've only just published the 3D view a minute or two ago, you **may need to close and reopen Revit**. Possibly a couple of times - it takes Revit a few minutes to realize that it has a dedicated view ready for issues.

So, let's get started with a look at the first two - and most important - tools available to us on the Issues toolbar. Before we click on each tool to see what we shall see, we must make sure to be in a 3D view that has been published.

THE OVERVIEW BUTTON

This shows us Model Issues that have been created as well as Clash tolerance and Clash tables that may be in the model. In this example we see that one issue has been created, and no action has been taken on the clash detection front.



Have you noticed the links **"See issues in Autodesk Docs"** and **"Go to Model Coordination"**? They help you to jump directly to ACC from Revit.

THE MANAGE ISSUES BUTTON

This brings up the Issues browser that shows


- The issues that have been created
- Whether Open or Closed
- Due dates
- Who the issue has been assigned to

If you click on the three dots (I heard someone, call it the Snowman icon - how cute!) you get the options to either **Export report** (to PDF)

Issue detail
#6: Design 03/21/2025

Status **Open**

Type **Design > Design**



Standard fields

Description	—
Assigned to	Rina Sahay (Abonmarche)
Created by	Rina Sahay (Abonmarche)
Created on	Mar 21, 2025
Location	—
Location details	—
Due date	—
Start date	—
Placement	Inc.rvt
Root cause	—

or **Export as BCF**.

(What's a BCF, you may ask, O Gentle Reader?

Bim Collaboration Format is an open standard file format used in the AEC industry to facilitate communication and collaboration on BIM models. Users can exchange model-based issues, comments, and markups between different BIM authoring tools)

All of this can be set up in Revit without opening ACC - all that you need to do is click the blue **+Create issue button** at the bottom of the browser.

This brings up a flyout with scrollable options that allow flexibility to tailor issues to specific situations -

Issues

Display pushpins ☒ ?

1 model

Go Online

Search

#4 - Break Room Equipment
Open • Design
Rina Sahay No due date

#3 - Design
Open • Design
Unassigned No due date

#2 - Design
Open • Design
Rina Sahay Due Mar 12, 2025

#1 - Design
Open • Design
Rina Sahay Due Mar 12, 2025

+ Create issue

Search types or templates

Types Templates

Commissioning

CM Commissioning

Coordination

CL Clash

COR Coordination

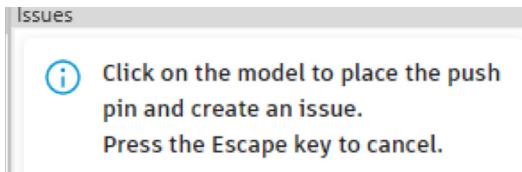
Design

+ Create issue

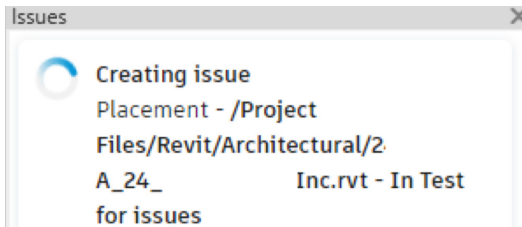
These options are what really superpower this add-in by bringing up the Issues browser that offers options like -

- Issue title
- Status
- Issue type
- Description
- Who it's assigned to
- Due date
- Root cause

When an option is selected, you are prompted to click on the model to place **"pushpins"** and create an issue.



Click on the desired element to place the pushpin - the element will light up. Since I'm fussy and I don't like dust collectors, I'm going to click on the open shelving to create a **Design Issue** to replace the open shelves with upper cabinets. Along with the infamous Spinning Wheel, you will see a progress message -



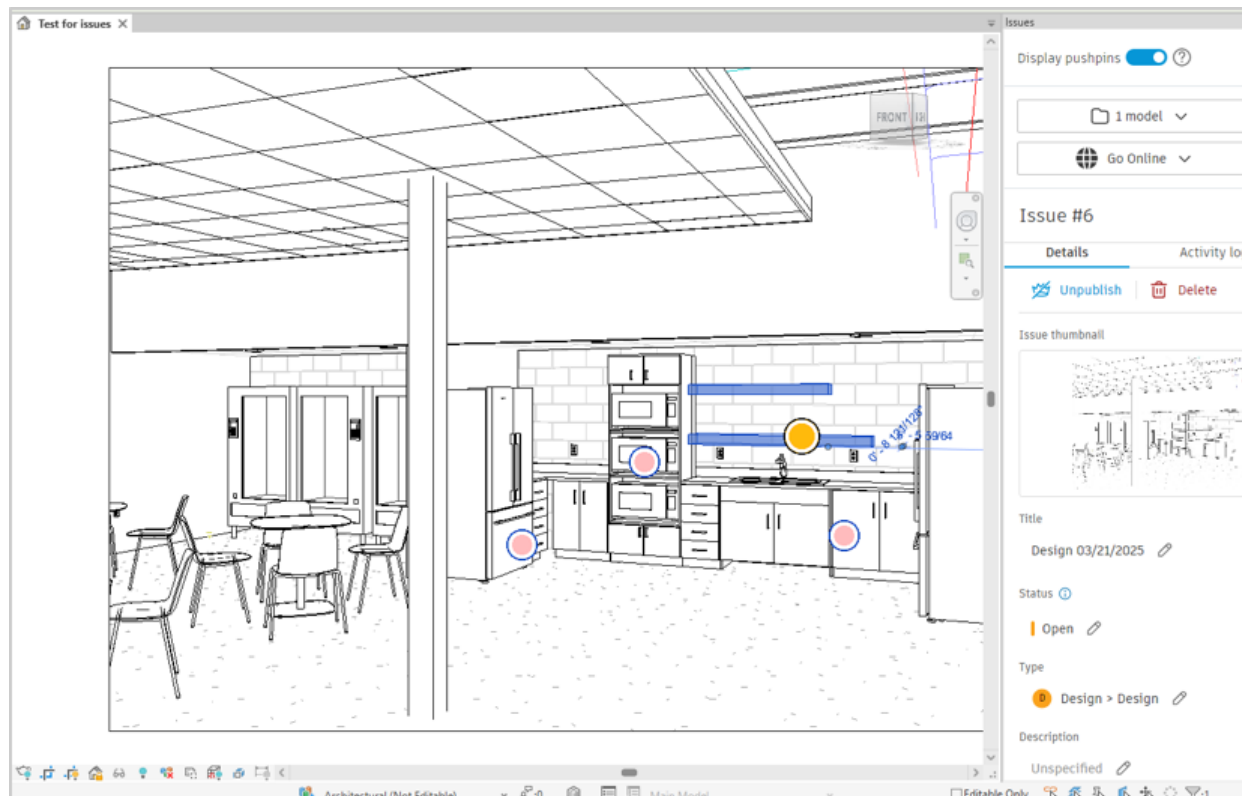
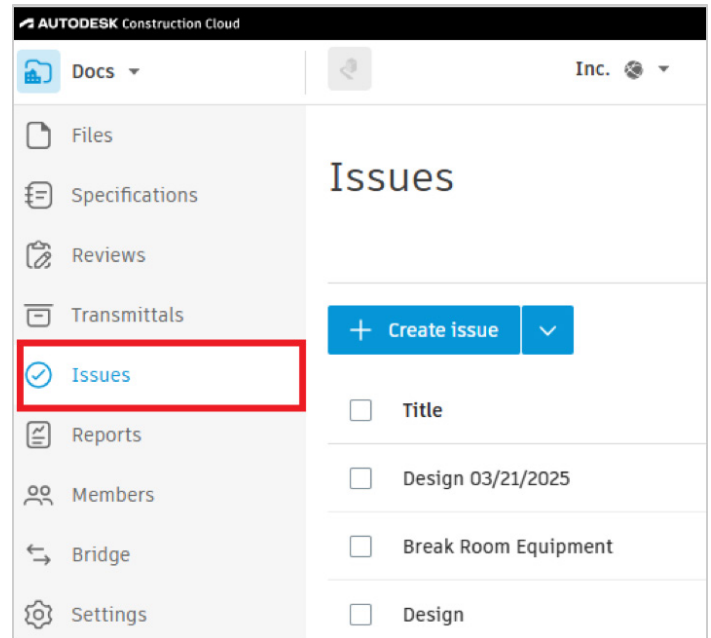
Look at the view - you will now see pushpins of any issues that have been created. Yellow is the active pushpin you're editing. Other pushpins are a very becoming shade of pastel pink (*great choice, Autodesk!*). You will now see a thumbnail of the issue location in the view, and options in the browser that you can edit to customize the issue. Just click on the little pencil Edit icon and you'll be rockin' and rollin'!

Once crested, navigating to desired issues is easy

- in the Issues browser just click on the Issue to go straight to the published view.

And here's the game changer - *by default all issues created are published to the cloud*. You can choose to **Unpublish** them if you want - but why on earth would you want to pull the teeth of this sterling innovation?

On that note, let's make a quick trip to the Cloud to verify the results of our prior attempts. Issues are found under Docs.





The lovely issue I'd just created shows up at the top of the list! Magical, isn't it?

We can click on the issue, and we are taken to a screen which looks very familiar - are we back in Revit? No, we aren't - we're still up in the cloud!!

This interface not only allows you to edit and monitor the issue, but you can navigate through the view - orbit, walk, zoom, pan - to manage them. In addition, you can create an Issue in ACC and view and address it in Revit. Slick, isn't it?

There's more to this ACC capability but that would be the subject for another entirely different discourse.

Now, O Gentle Reader. You may still be wondering about the reason for all this excitement. Some points I'd like to repeat and emphasize for your edification -

- The Revit Issues Add-In establishes a bi-directional link between Revit and ACC.
- Issues can be created and viewed in each - and in real time.
- You don't need Revit skills to view and review, create, assign, and track project issues.
- All of this without the need to step into additional tools (for instance, Bluebeam or Plangrid).
- Issues can be exported from both Revit and ACC as PDFs.

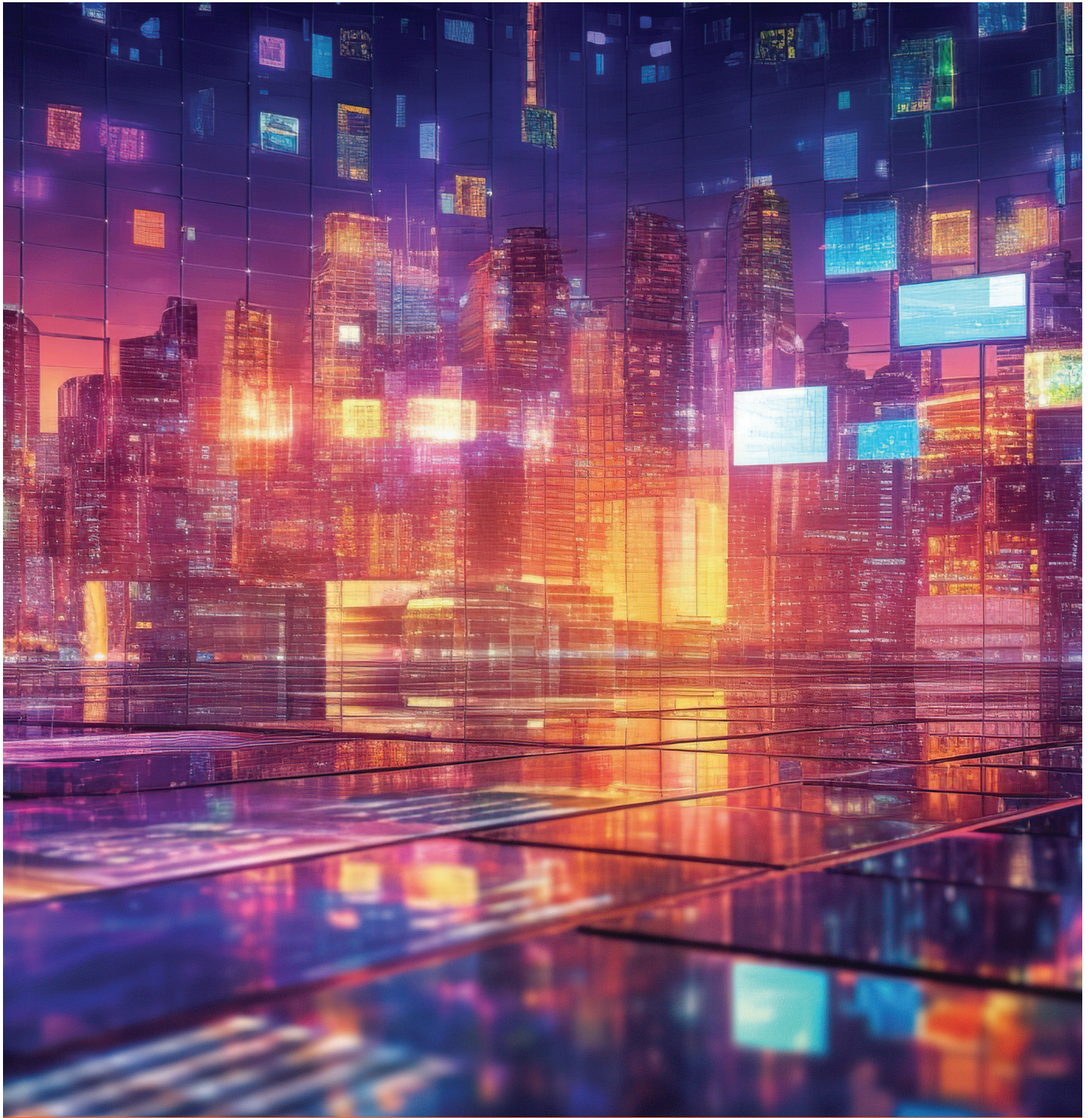
This makes things SO much easier for non-Revit using Project Managers, for instance, to keep tabs

on what's going on in the project with fewer tools - hence fewer loose ends and less clutter. And this tool comes to you along with the ACC you already know and love. So why not leverage it?

With that final question, I now bid thee farewell, O Gentle Reader! Till the next issue of Inside Track - KEEP REVIT-ING!



A bit about myself. I'm the BIM Manager at Abonmarche, based in glorious Grand Rapids, Michigan (Great Lakes, anyone?). Started my Autodesk journey with AutoCAD Release 10 (remember that dreary DOS interface - and the need for super-duper spelling skills?). Learned enough Revit to stay one chapter ahead of college students in the classroom. That changed in a hurry when I made a triumphantly painful return to industry as a BIM Specialist and had to use Revit in the worst way possible. I HATED it and grieved for my beloved AutoCAD Until I figured Revit out - the rest, as they say, is history. Autodesk Expert Elite in 2018, presenter at Autodesk University since AU2019 (and I have Best Speaker awards for 2021 and 2022 to show for it!). And now here I am, to educate, enlighten, and hopefully, entertain.



Please let us know if you have some news to share with us for future issues. Likewise, if you are a featured product or news item user and would like to write a review, we want to know. Drop me a line at: rinasahay@gmail.com. We'd love to hear from you!

[illegible]