

Good Fabrication MEP Database Management - Inside and Out CCS323124

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CONNECT & CONSTRUCT SUMMIT





Mechanical Contractor

HVAC Sheet Metal & Piping
and Plumbing Fabrication &
Construction

Design-Build Engineering

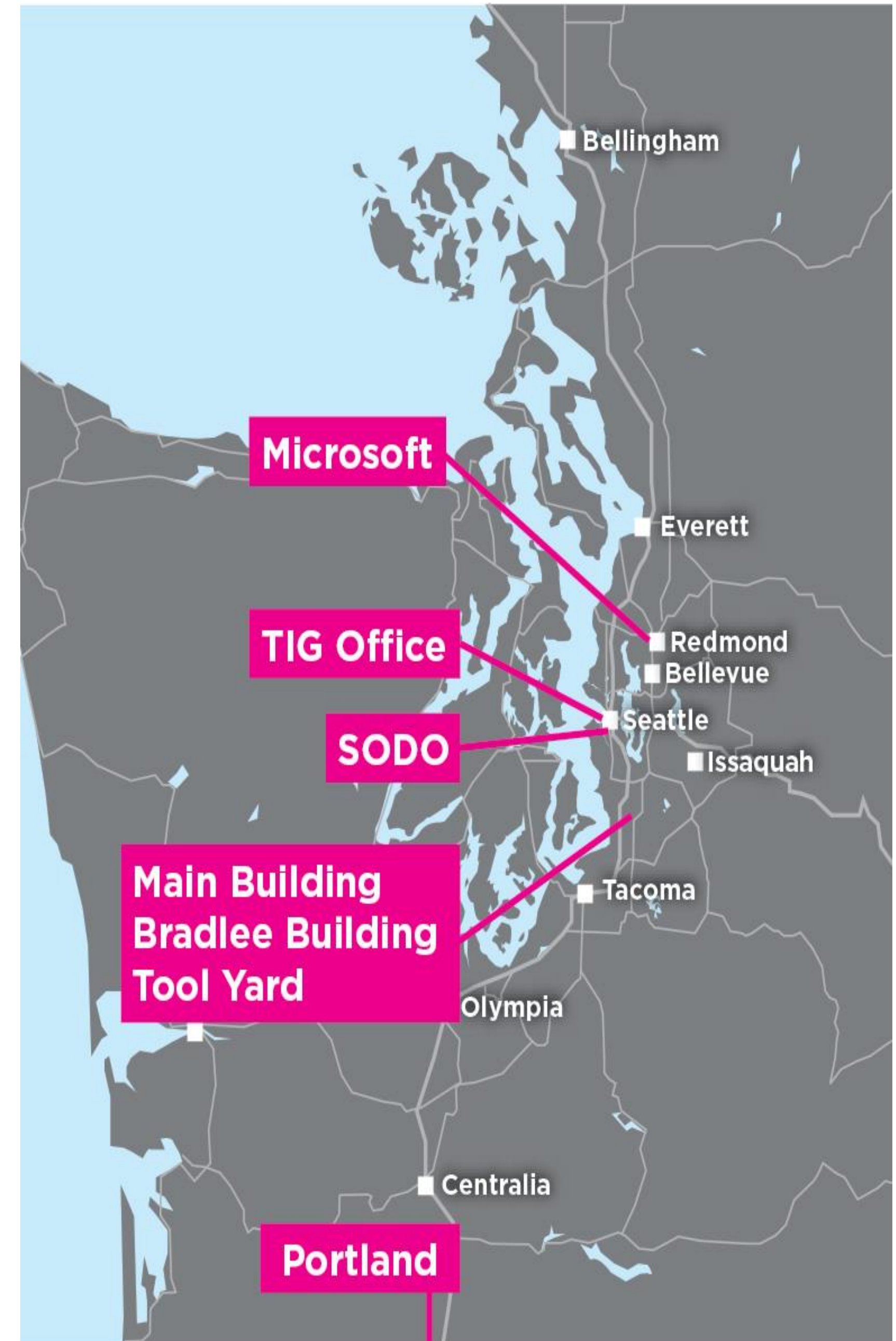
Service & Maintenance

Hermanson Statistics

\$250 Million Annual Revenue

550 Employees

Eight Locations including
office, fabrication shops, &
warehouse / distribution
centers





Hermanson

Darren Young / Seattle, Washington

Husband/Father (1 Wife / 2 Boys / 1 Girl)

Pet Owner (2 Dogs / 1 Cat / 3 Fish)

YMCA Swim Official

Technology Enthusiast / Skeptic

Hockey Fan / Do-It-Yourselfer / Outdoorsman

Lean / Coding / Manufacturing

Learning Objectives

✓ Learn how to perform QA/QC on your database

✓ Learn about identifying and fixing issues

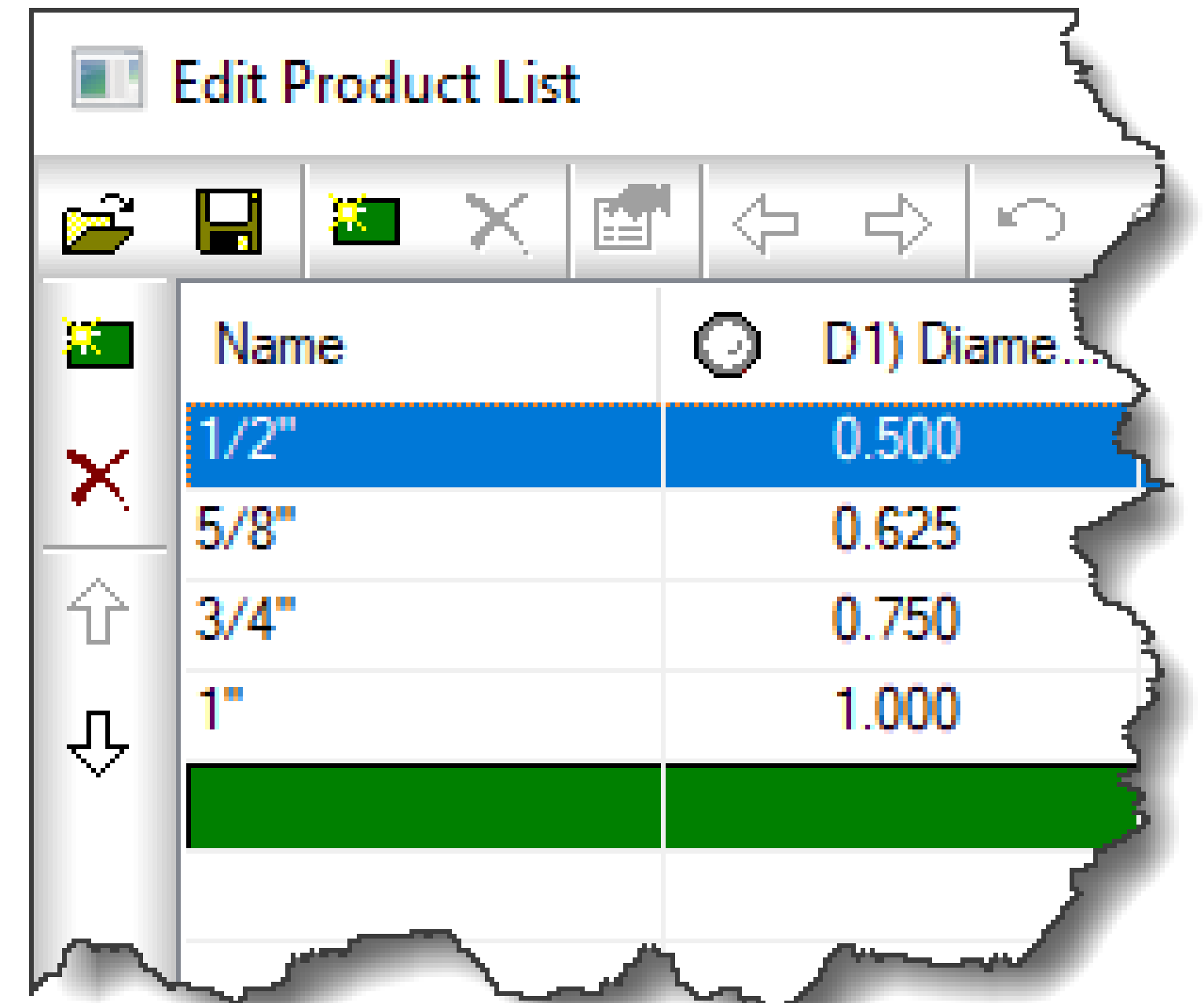
✓ Learn about proper routine maintenance

✓ Learn things not to do

Best Practices

Don't use Double Quotes (")....Ever.

- Use Export Scripts to review data in Excel.
<https://tinyurl.com/COD-Script-Library>
- Bulk Export Product Lists and use Notepad++ to search files in folders to replace double quotes
- Double Quotes can corrupt data exported from Excel
 - Specifications (Sheetmetal)
 - ITM File names
 - Product List Names
 - Material names, etc.



Name	D1) Diame...
1/2"	0.500
5/8"	0.625
3/4"	0.750
1"	1.000

Best Practices

Don't use Commas (,)....Ever.

- Use Export Scripts to review data in Excel.
<https://tinyurl.com/COD-Script-Library>
- Bulk Export Product Lists and use Notepad++ to search files in folders to replace commas
- Commas can corrupt data exported from Excel
 - Specifications (Sheetmetal)
 - ITM File/Folder names
 - Product List Names
 - Material names, etc.

Best Practices

Don't use BMP files for ITM Images

- Use Export Scripts to review Image properties
- BMP Images slow performance when using Services
- Use any Image processing software to convert BMP file to PNG

Item File "Straight"

Custom Data Links Ancillaries Design Flow
Pattern Template Options Item Costing

Default: Straight.png
Change... Default...

Source
Path C:\Users\Public\Documents\Autodesk\Fa
Filename Straight

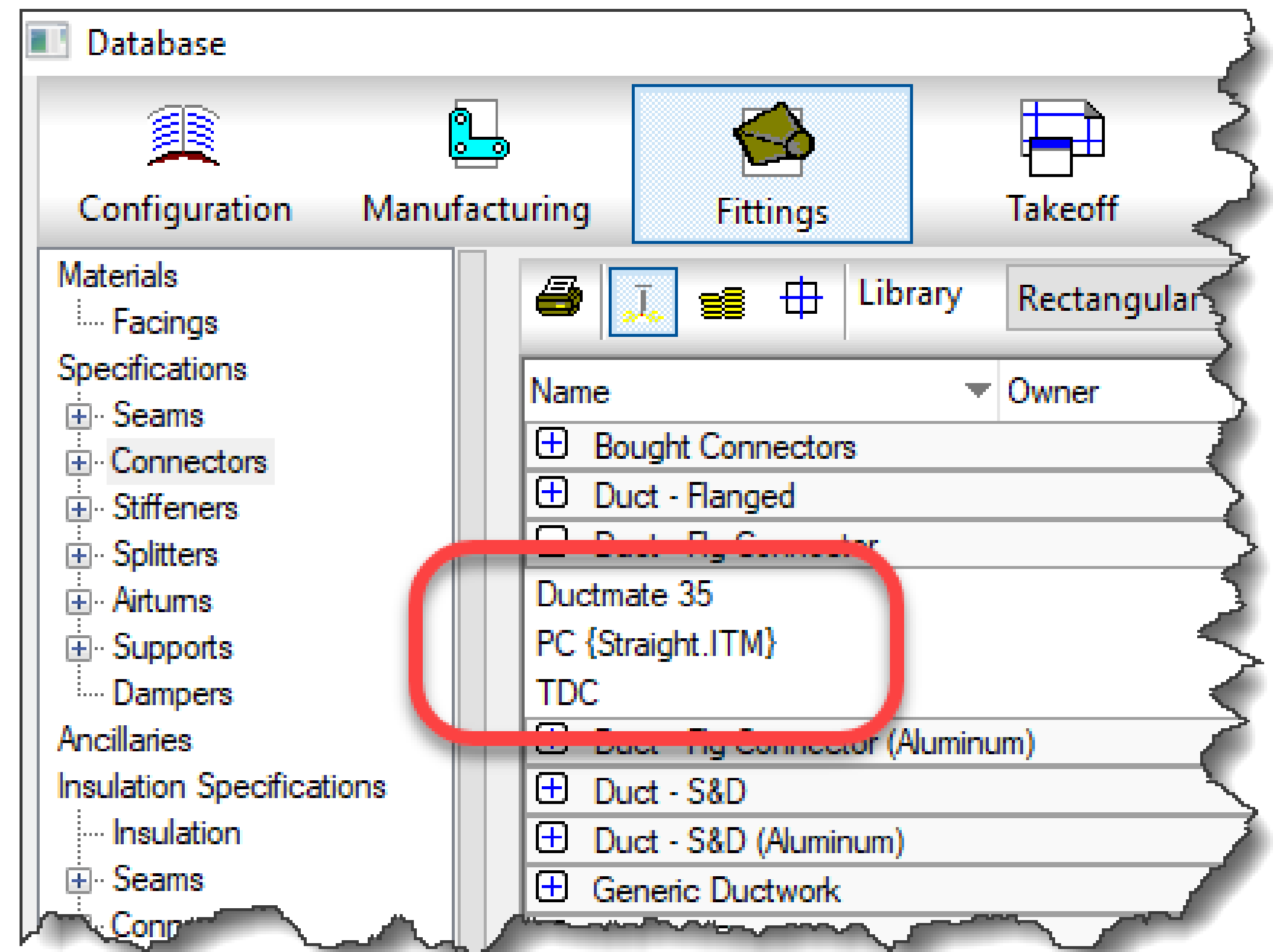
CID 866 (Based on Pattern 866)
Description Straight
Alias 3
User Unknown
Type Rectangular
Extra Over Off
Notes

OK Cancel

Best Practices

Don't leave proxy items in your fabrication database.

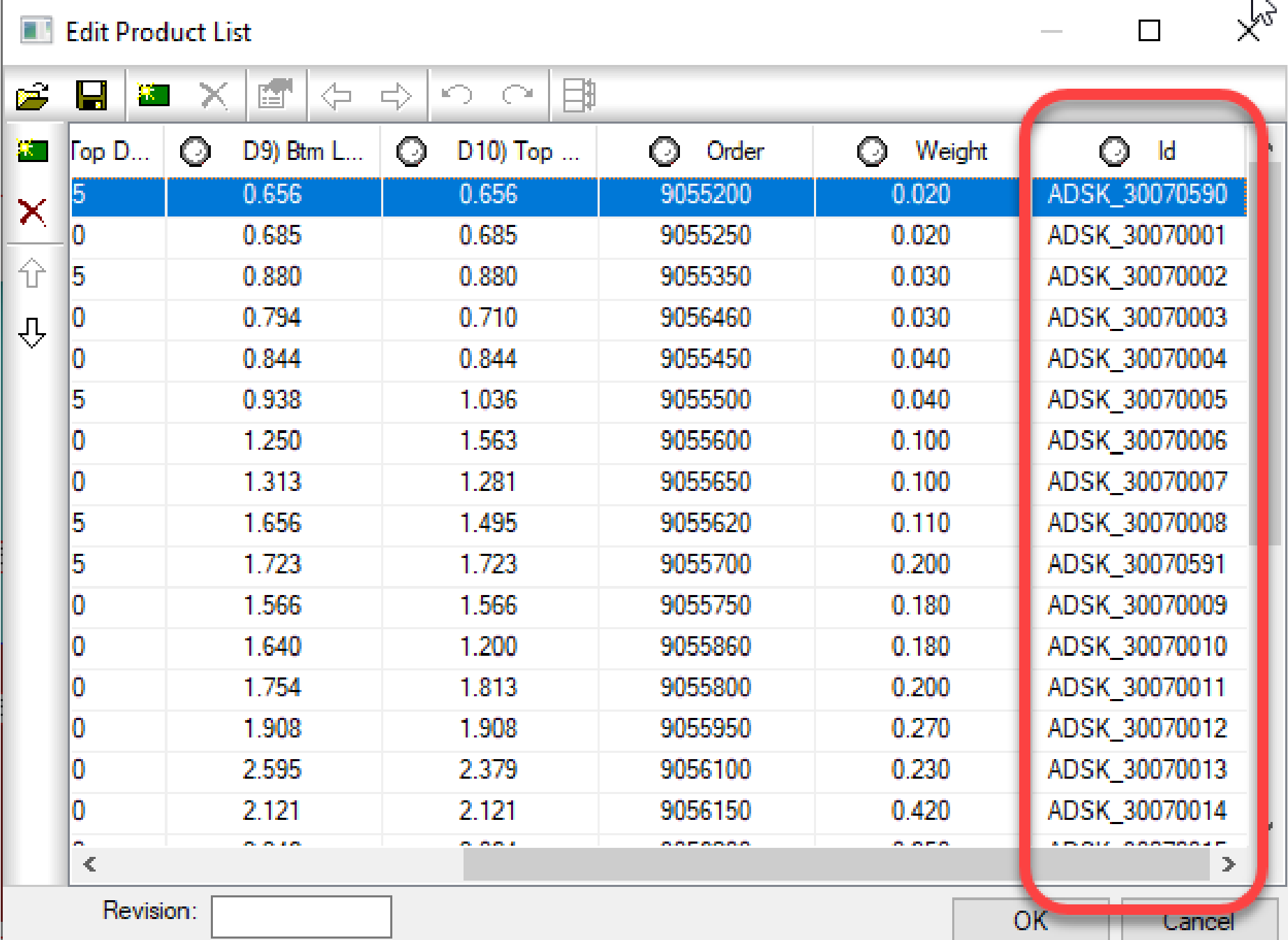
- Review Database Entries for {proxy} items
- Use PRUGEDB to find/remove proxy items
- Use Export scripts to find where problematic proxy items are used



Best Practices

Make sure ALL of your ITM content has a Database ID assigned to it.

- Use Export Scripts to review ITM content for database ID's
- When adding Database ID's, make sure to create entries in ProdInfo
- Add entries for Price/Labor tables if you're an ESTmep user
- Develop your own "ID Naming" scheme for your company and use consistently



The screenshot shows a software window titled "Edit Product List". It contains a table with the following columns: "Top D...", "D9) Btm L...", "D10) Top ...", "Order", "Weight", and "Id". The "Id" column is highlighted with a red rectangular box. The table lists 15 rows of data, each with a unique ID in the "Id" column. At the bottom of the window, there is a "Revision:" field and "OK" and "Cancel" buttons.

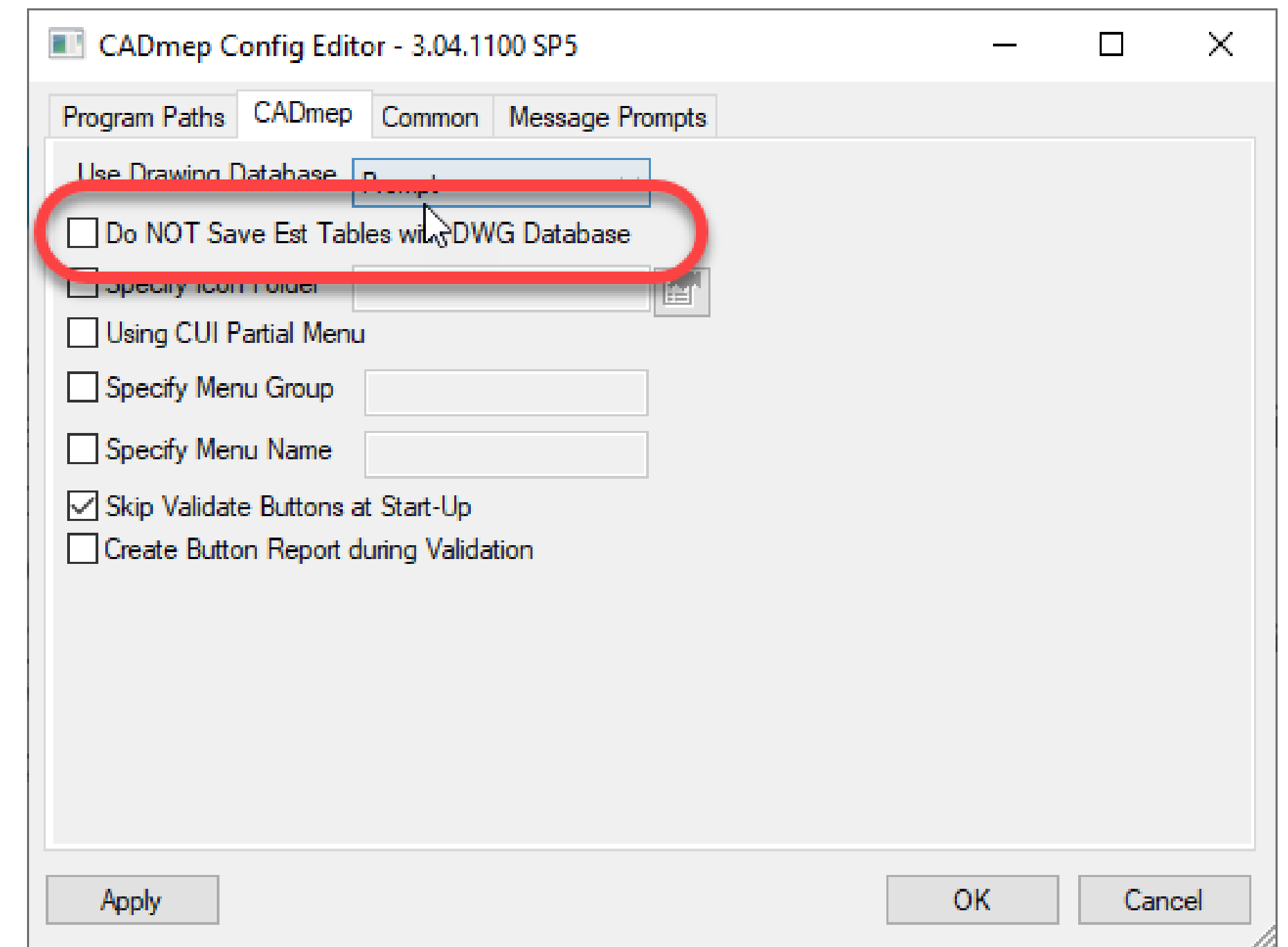
Top D...	D9) Btm L...	D10) Top ...	Order	Weight	Id
5	0.656	0.656	9055200	0.020	ADSK_30070590
0	0.685	0.685	9055250	0.020	ADSK_30070001
5	0.880	0.880	9055350	0.030	ADSK_30070002
0	0.794	0.710	9056460	0.030	ADSK_30070003
0	0.844	0.844	9055450	0.040	ADSK_30070004
5	0.938	1.036	9055500	0.040	ADSK_30070005
0	1.250	1.563	9055600	0.100	ADSK_30070006
0	1.313	1.281	9055650	0.100	ADSK_30070007
5	1.656	1.495	9055620	0.110	ADSK_30070008
5	1.723	1.723	9055700	0.200	ADSK_30070591
0	1.566	1.566	9055750	0.180	ADSK_30070009
0	1.640	1.200	9055860	0.180	ADSK_30070010
0	1.754	1.813	9055800	0.200	ADSK_30070011
0	1.908	1.908	9055950	0.270	ADSK_30070012
0	2.595	2.379	9056100	0.230	ADSK_30070013
0	2.121	2.121	9056150	0.420	ADSK_30070014

Best Practices

Don't Store Estimating Tables in Your CADmep Drawing

- Use ***Edit Config*** to disallow EST tables from saving in your DWG
- Setting is "Windows Logon" specific, each user of a system needs the change
- Have IT push the change via Policy to the registry...

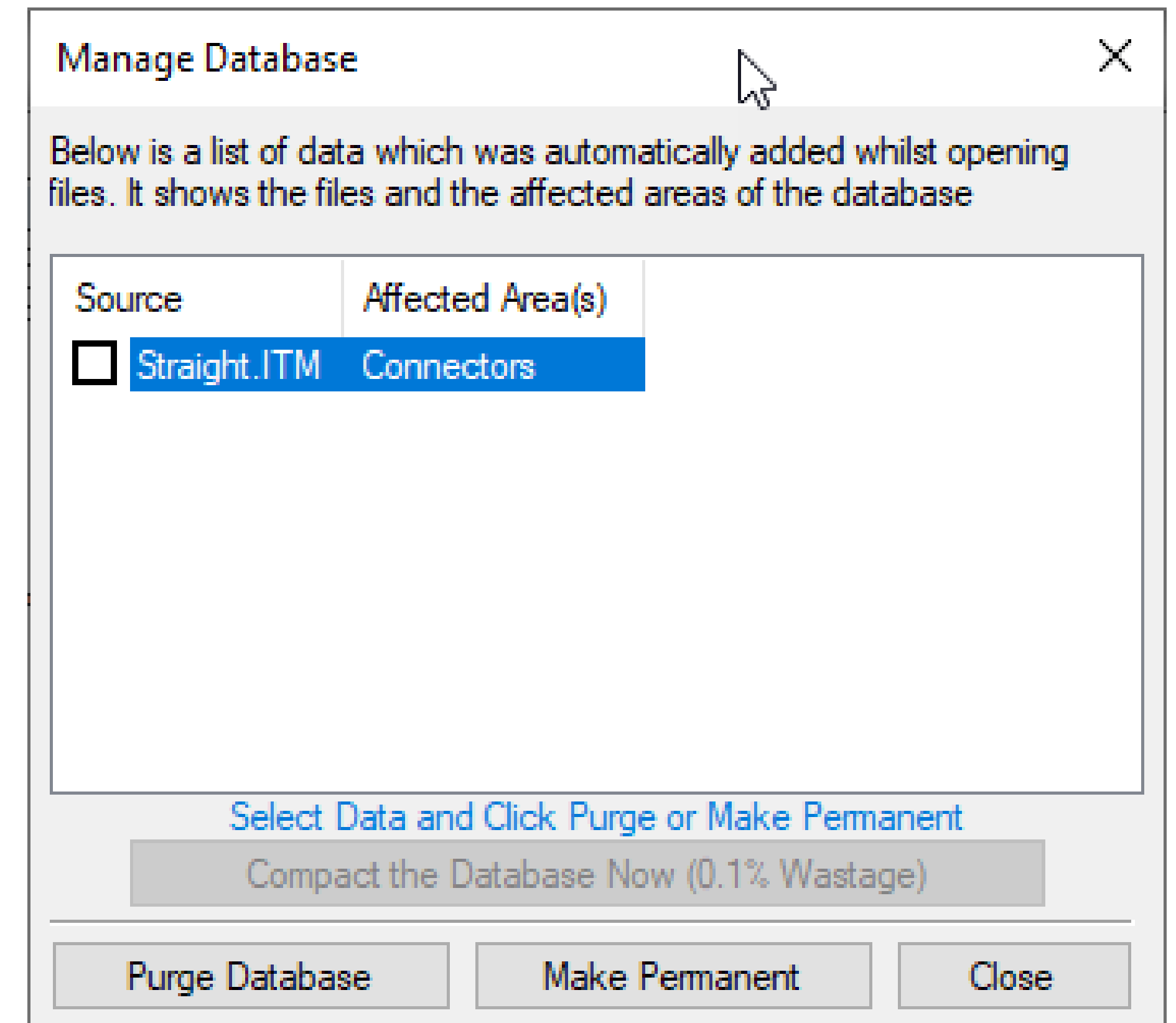
Key: **HKEY_CURRENT_USER\Software\Autodesk\Fabrication ####\CADmep**
Value: **StoreEstDatabase**
Data: **False**



Best Practices

Don't PURGE or COMPACT Your Database When In Use

- PURGE & COMPACTING is Good....if done properly
- Do NOT perform when others are using the Database



Best Practices

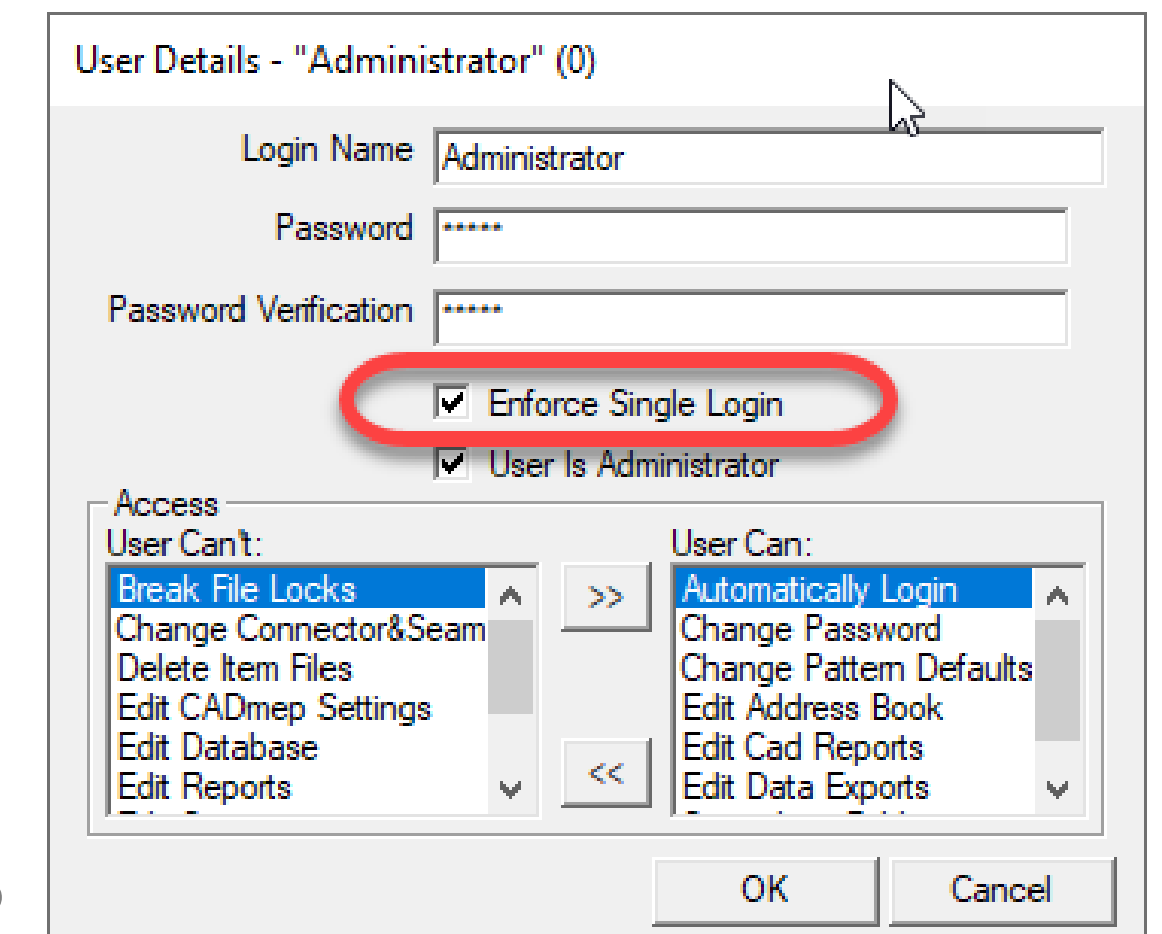
Don't work in a Live Sync'd Database

- It can be extremely risky to work in a Database that's sync'ing Live to other systems or the cloud
- Most syncing applications don't control the order of files when they are copied. If a file changes while it's being used, database indices may get out of sync causing anomalies

Best Practices

Only ONE concurrent Database Administrator at a time

- Use ***Configure Users*** to limit DB Admin to a single user and concurrent login
- When multiple people Admin, “Last One In Wins” with changes
- ITM and Report Editing as exceptions if needed as each is a single file, not a database table
- If you need multiple Admins, consider separate “Development” databases for each Admin who then import their work into a “Master”. ***RoboCopy*** utility works well for this purpose.



Best Practices

Use the Same Version of software to Admin your Database

- Never use multiple product year software versions for Administration.
- As tables are updated with new data, older versions will strip those changes

Best Practices

Don't use Ancillaries with Breakpoints inside an Ancillary Kit

- When setting up ancillaries, don't use nested breakpoints
- Kits with Ancillary's using breakpoints are ok.
- Kits with Breakpoints using non-breakpoint ancillaries are ok.
- Breakpointed Kits using Breakpointed Ancillaries are NOT ok.

Best Practices

Don't nest Ancillary Kits (Kits within Kits)

- Can cause issues with reports
- Confusing to understand your database structure

Best Practices

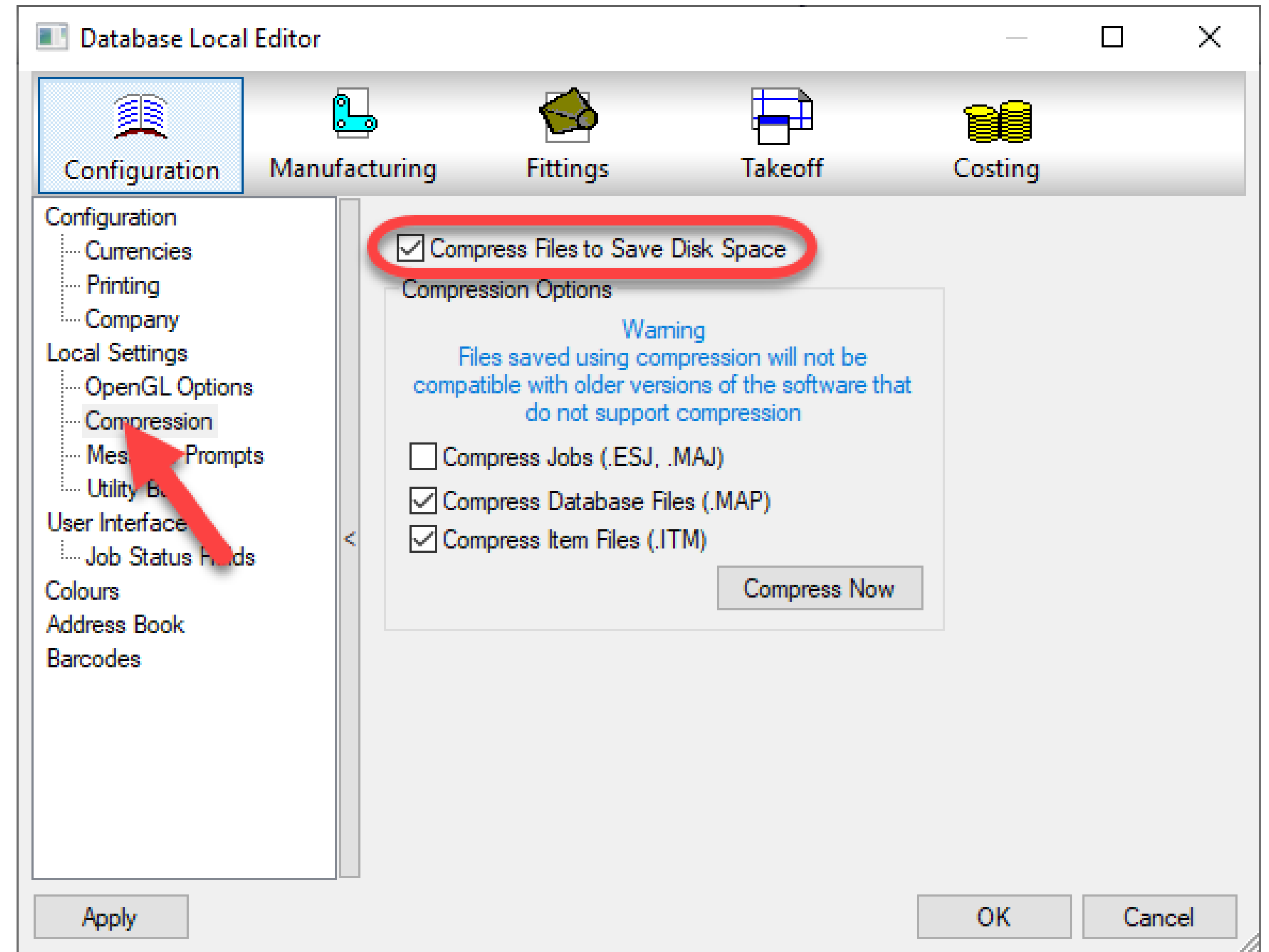
Eliminate all broken Service ITM's

- Use ***Path Repair Tool*** find broken button links
- Use ***SYSSCRREPORT*** command in CADmep to export Service data

Best Practices

Compress MAP Files

- Smaller footprint
- Faster loading/reading
- Defaults to not-compressed with each new version of software



Best Practices

Use a naming convention for everything in your database.

- Keeps your database organized
- Helps you think through future scenarios

Best Practices

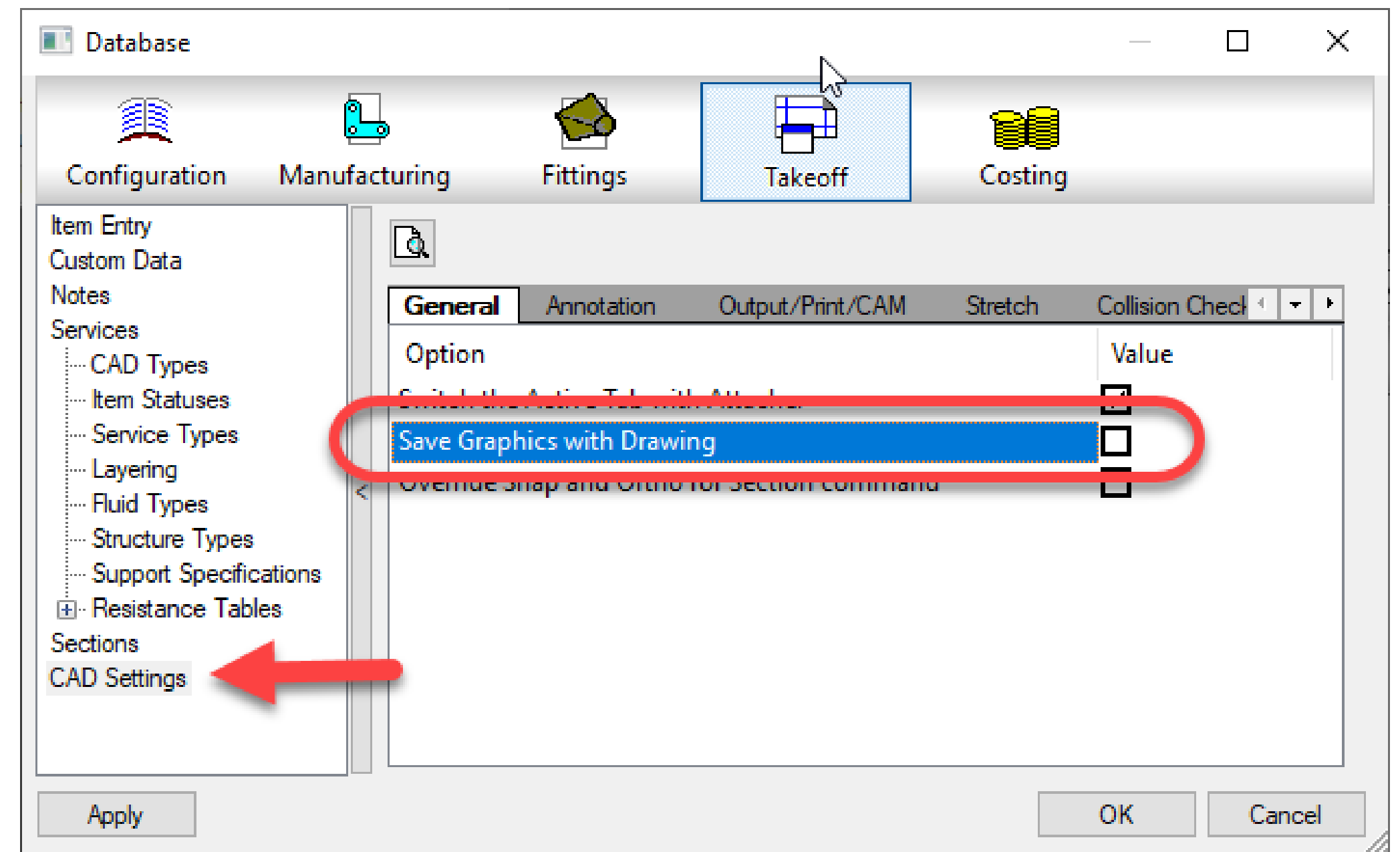
Use a Fresh load of CADmep, for Administration

- Proxy items can get "Stuck" in your database
- Ensures no erroneous data from other drawings get added

Best Practices

Disable “Save With Graphics” in CADmep unless needed

- Make DWG files MUCH smaller
- Use only for DXF/DWG exchange with others using Non-Autodesk products.
- Set in separate database copy or when others are not using the database.



Learning Objectives - Review

✓ Learn how to perform QA/QC on your database

✓ Learn about identifying and fixing issues

✓ Learn about proper routine maintenance

✓ Learn things not to do

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