

CS500041

## Best Practices for Autodesk's Fabrication Software

Darren Young

### Learning Objectives

- Discover the common issues that most databases have within them
- Learn why these issues are important
- Better understand why what's working now may be a problem in the future
- Learn how to fix issues without breaking your existing models

### Description

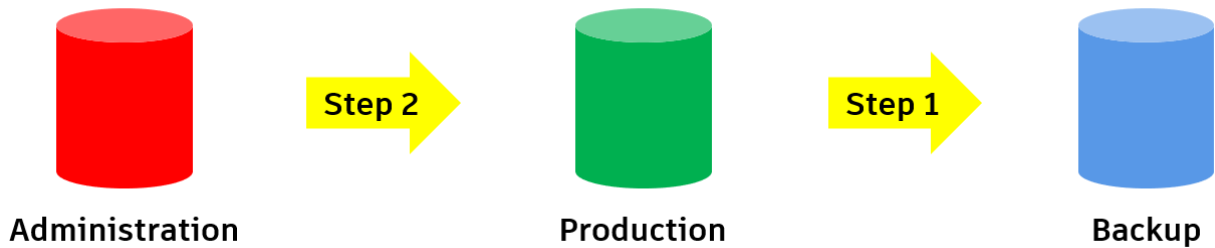
Autodesk's family of Fabrication software is robust, flexible and . . . fragile. It's also changed over time. There are things you may be doing that work well now but won't in the future. There are things you have configured which will make it hard to continue advancing your usage. Over the years, the speaker has developed a list of best practices—things you should and shouldn't do. Want to learn what you should start doing or stop doing and how to find out if they apply to you? This session is for you.

### Speaker(s)

Based in Washington state, Darren Young has been a veteran Autodesk University speaker for well over a decade. His unique ability to leverage multiple every day technologies in interesting ways to solve complicated and laborious tasks has been valued by users around the world. Down to earth and approachable, he's always willing to help his peers anytime of the year even outside of Autodesk University. Darren's background includes a wide variety of disciplines such as Construction, Engineering, Manufacturing, LEAN, Information Technology, Computer Programming, Author and Technical Editor. His lectures and labs are not just a training opportunity for others but a venue which connects him personally with users helping him learn as well.

## Separate Production and Development

Users reference a different database than where you do your administration

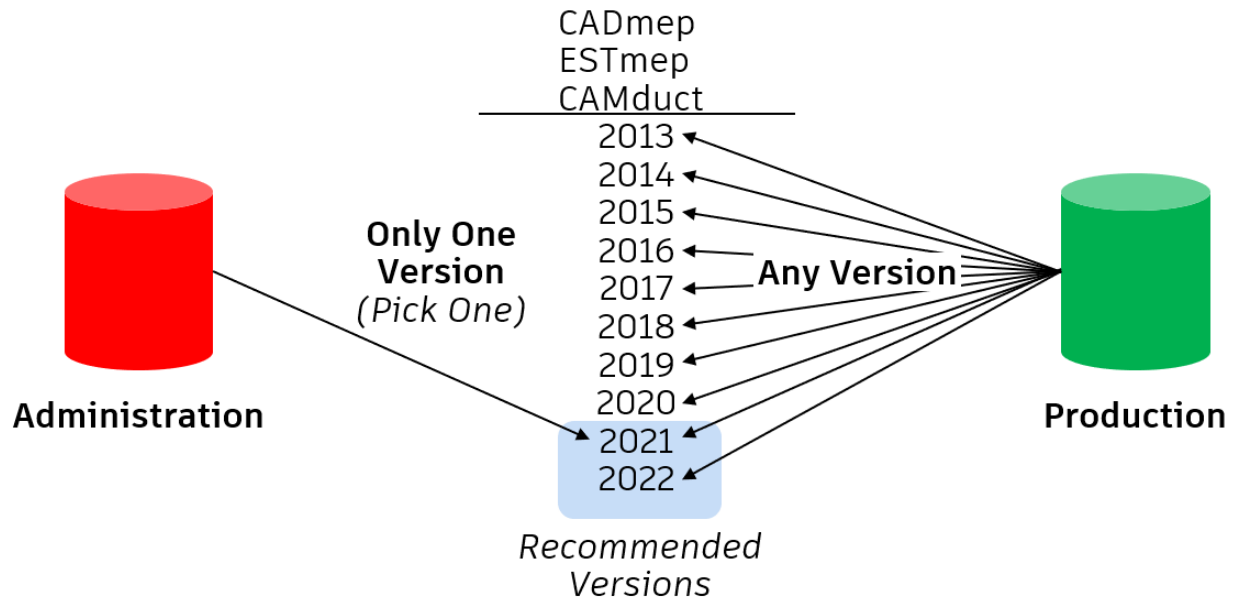


### Options:

- *Manual*
- *Robocopy*
- *Applied Software* ([www.asti.com](http://www.asti.com))

## Single Version for Administration

Always use the same version to Admin your Database



## Single Administrator at a Time

No Concurrent Database Administrators (not including Reports or ITM's)

User Details - "Administrator" (1)

Login Name

Password

Password Verification

☒ Enforce Single Login

☒ User Is Administrator

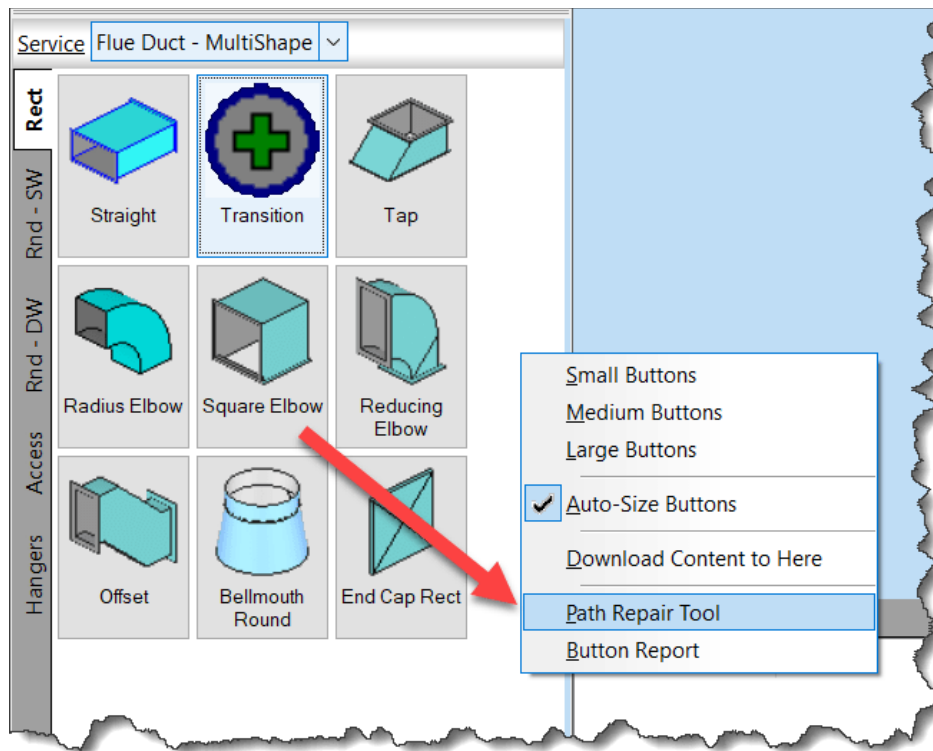
Access

User Can't		User Can:
Break File Locks	>>	Automatically Login
Change Connector&Seam		Change Password
Delete Item Files		Change Pattern Defaults
Edit CADmep Settings		Edit Address Book
Edit Database	<<	Edit Cad Reports
Edit Reports		Edit Data Exports

OK Cancel

## Fix Broken Services

Make sure all Services have valid buttons



**Don't Use Non-Standard Characters**

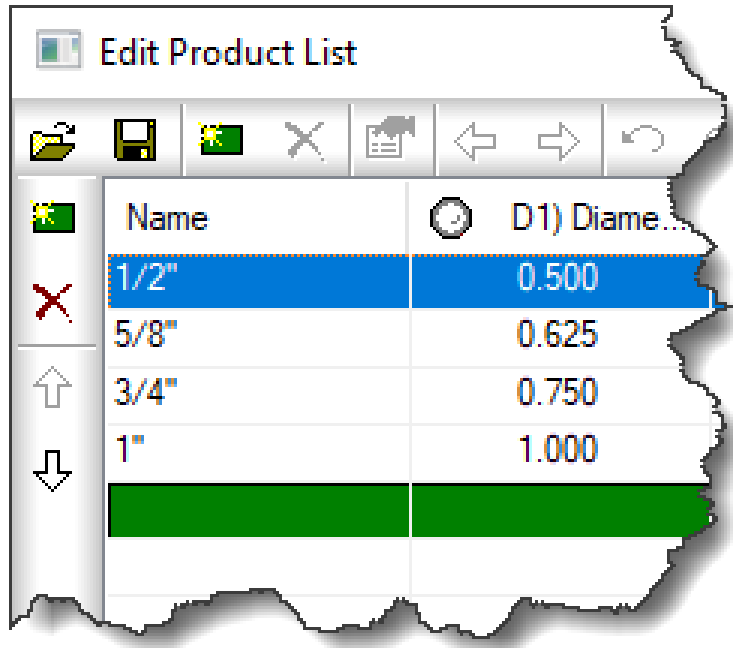
Using characters can cause unpredictable results.

!@#\$%^&\*

{ } ~ | ` \ / : ; < > ?

## Don't Use Double Quotes

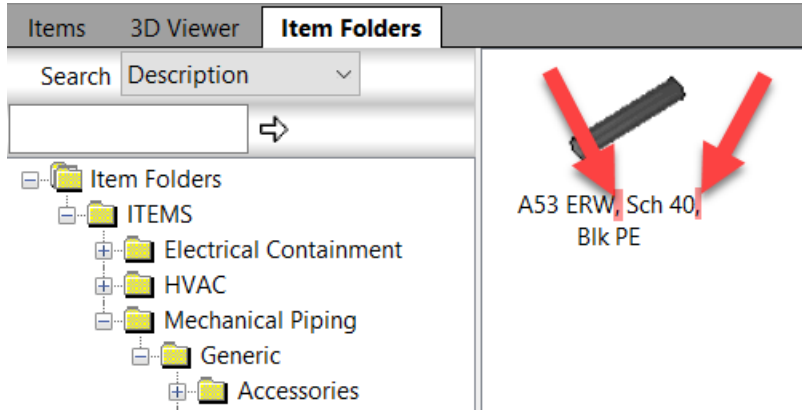
Using Double Quotes for Inch Marks or Other Purposes Cause Export Issues



- 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 to Excel
  - Specifications (Sheetmetal)
  - ITM File names
  - Product List Names
  - Material names, etc.

## Don't Use Commas

Using Commas in Files, Paths or Names Corrupts Data Exports



- 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.




## Use PNG (not BMP) for Images

BMP Image Slow Performance and Take Up Extra Space

Catalogue Item File "A53 ERW, Sch 40, Blik PE" ? X

Item Manufacturing Costing Ancillaries Other  
General Options Information Development Design Flow

 Default: A53 ERW, Sch 40, Blik PE.png  
Change... Default..

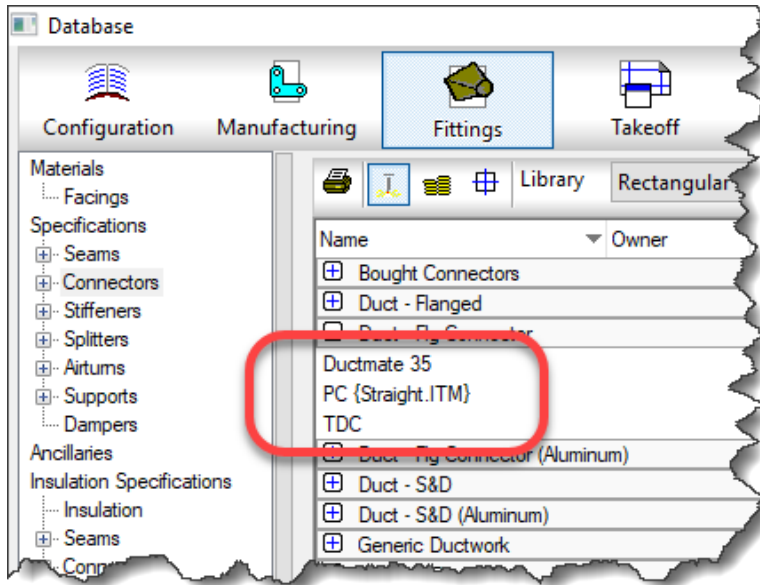
Source  
Path C:\Users\Public\Documents\Autodesk\Fabric:  
Filename A53 ERW, Sch 40, Blik PE

CID 2041 (Based on Pattern 2041)  
Description A53 ERW, Sch 40, Blik PE  
Alias P01  
User Unknown  
Type Pipework  
Extra Over Off  
Notes

OK Cancel

## Clean Up Proxy Items

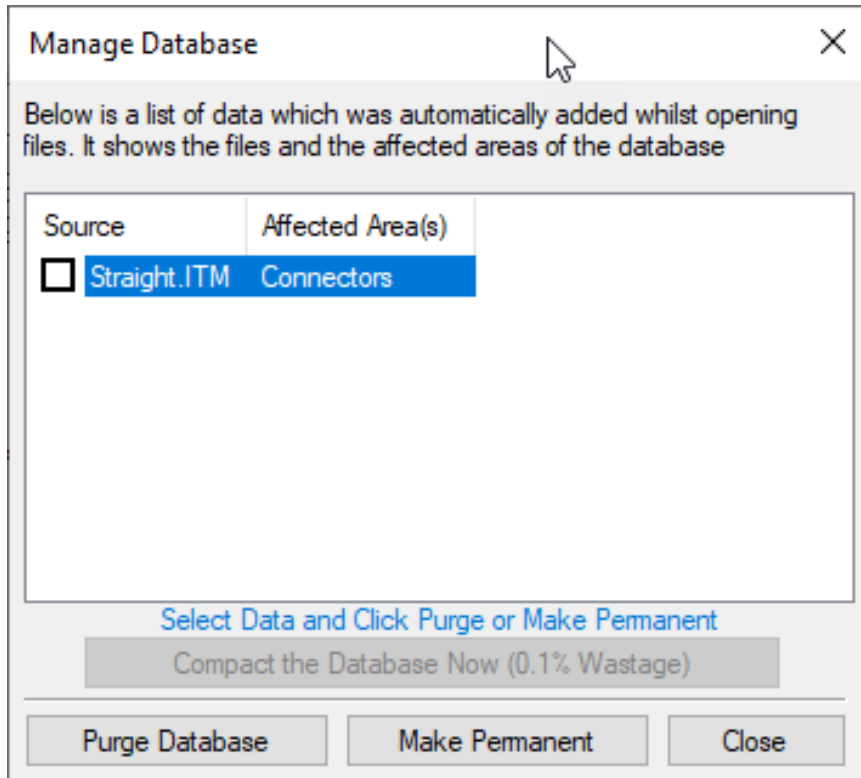
Proxy Items are typically added unintentionally



- Use Export Scripts to review data in Excel.  
<https://tinyurl.com/COD-Script-Library>
- Remove or Make Permanent
- Use PURGEDB to Clean/Remove

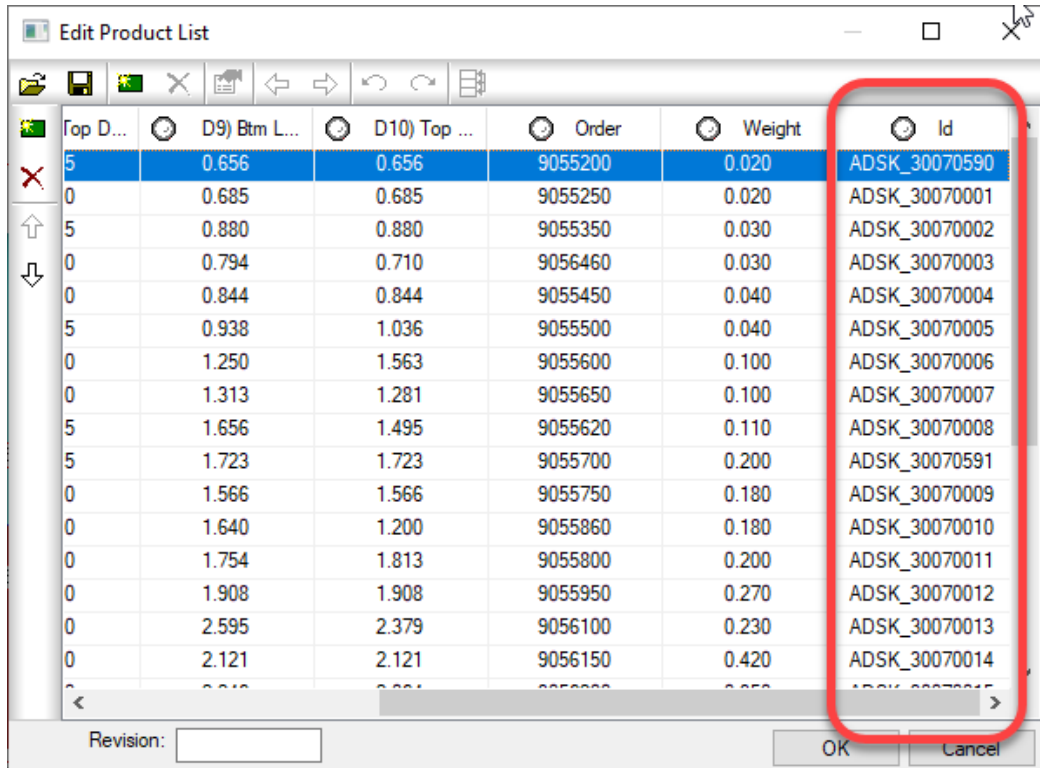
## Don't Purge/Compact Database While In Use

Ensure No Users are in the Database Before Purging/Compacting



## All ITM's Should Have Database ID's

Create Database ID's for all ITM's and Product Lists



The screenshot shows the 'Edit Product List' dialog box with a table of product data. The 'Id' column is highlighted with a red rectangle. The table has the following columns: Top D..., D9) Btm L..., D10) Top ..., Order, Weight, and Id. The first row is highlighted in blue.

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

## Add Content Should Have ProdInfo Entries Ensure Product Information is Filled Out For All Content

Product Info Editor (C:/Users/Public/Documents/Autodesk/Fabrication 2022/Fabrication Imperial Content/V3.07/database/prodinfo.map)

File Edit Help

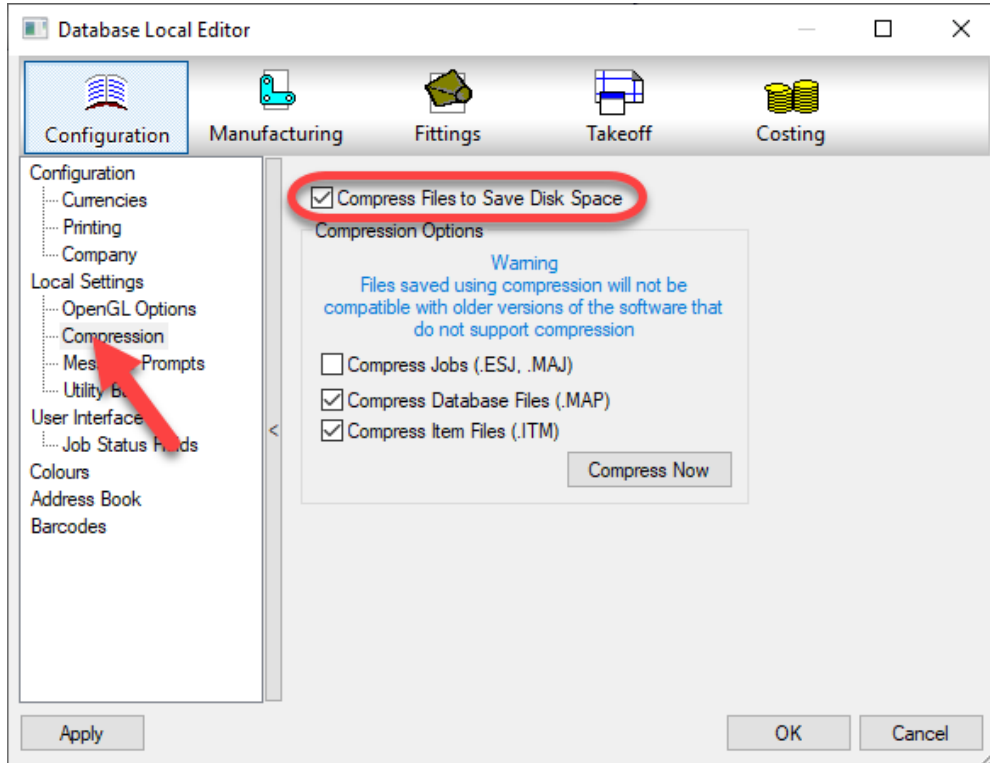
Edit Groups Show All Show All Show All Show All Show All Show All Show All Show All Show All Show All Show All Show All

Translation English

Id	Group	Manufacturer	Product	Description	Size	Material	Specification	Install Type	Source Des...	Range	Finish
ADSK_1000...	Electrical	Generic	TBC	Bend	2" (1" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	4" (1" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	6" (1" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	8" (1" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	12" (1" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	18" (1" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	20" (1" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	24" (1" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	2" (2" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	4" (2" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	6" (2" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
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ADSK_1000...	Electrical	Generic	TBC	Bend	24" (2" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	2" (4" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	4" (4" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	6" (4" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	8" (4" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	12" (4" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	18" (4" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated
ADSK_1000...	Electrical	Generic	TBC	Bend	20" (4" deep)	Alu-Zinc	Electrical	Coupled	Bend	Basket	Zinc Plated

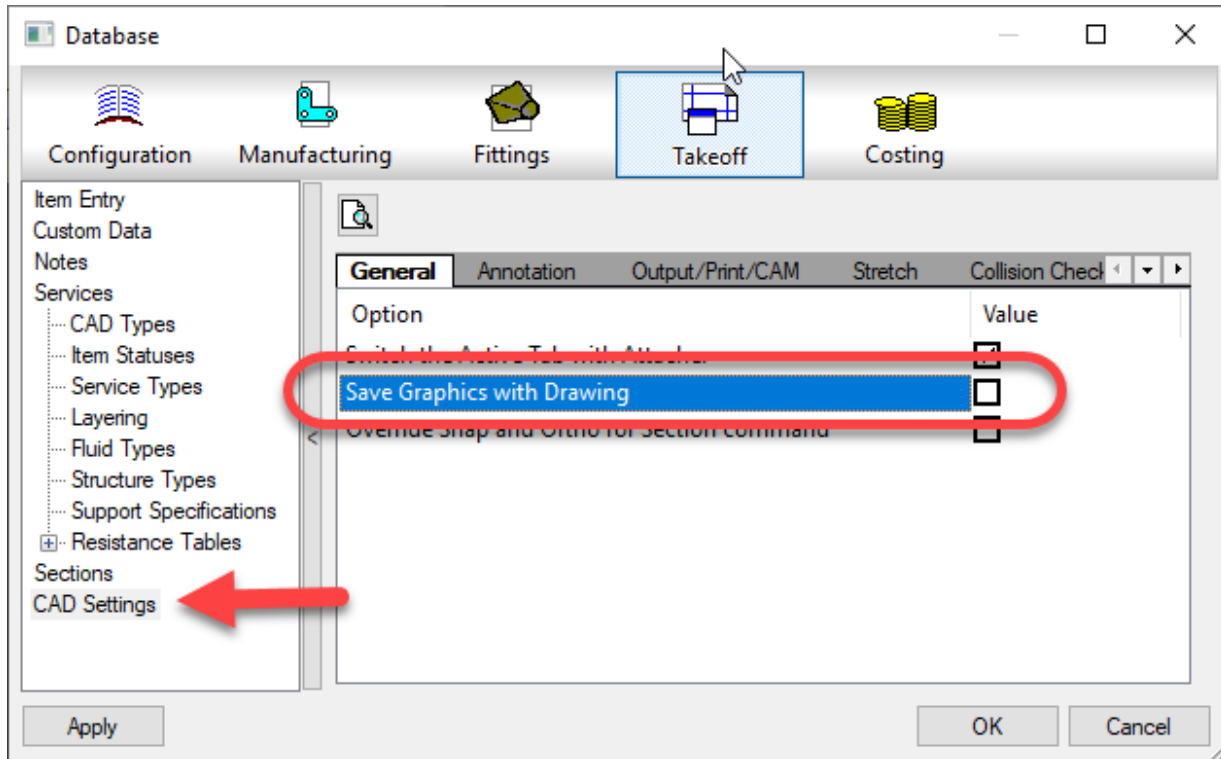
## Compress Data Files

Ensure Database Compression is Turned On



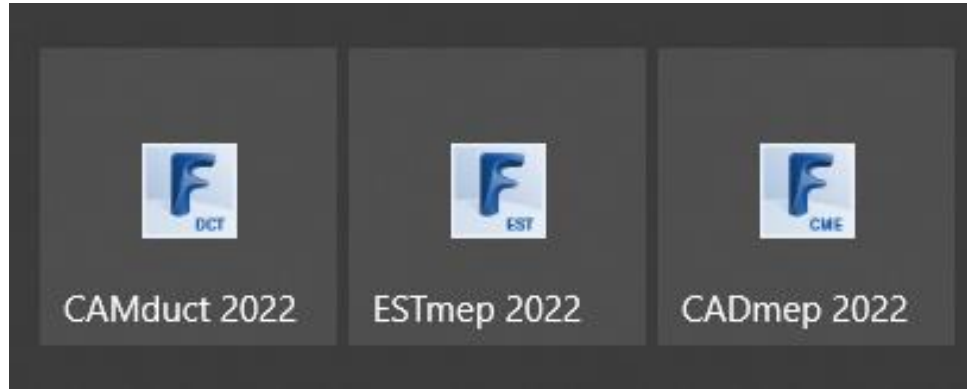
## Disable Save with Graphics

Will Increase AutoCAD DWG File Size Significantly



## **Administer Database from NEW Launch**

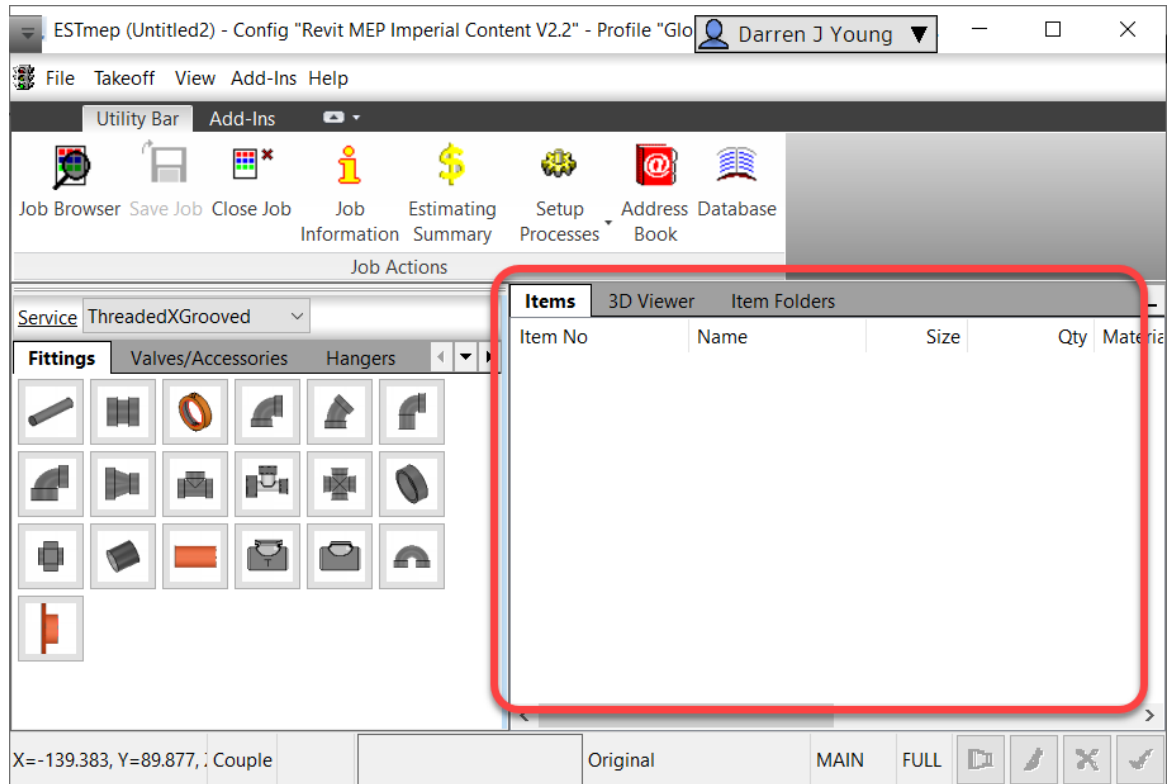
Load CADmep/ESTmep/CAMduct Fresh Before Administering Database





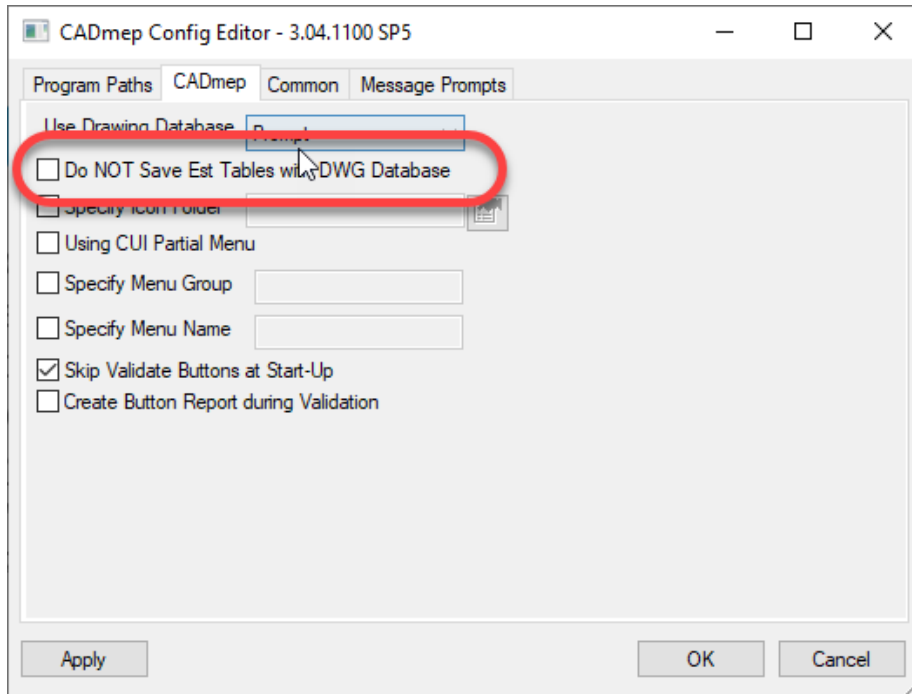
## Don't Open Data While Using Administer

Opening DWG, MAJ or ESJ's Can Create Proxy Items



## Don't Store EST Data in DWGs

Estimating Data is Stored in DWG's By Default



- Setting is Specific to Each Logged In User
- Setting is Specific to Each CADmep Version
- IT can push settings in Registry

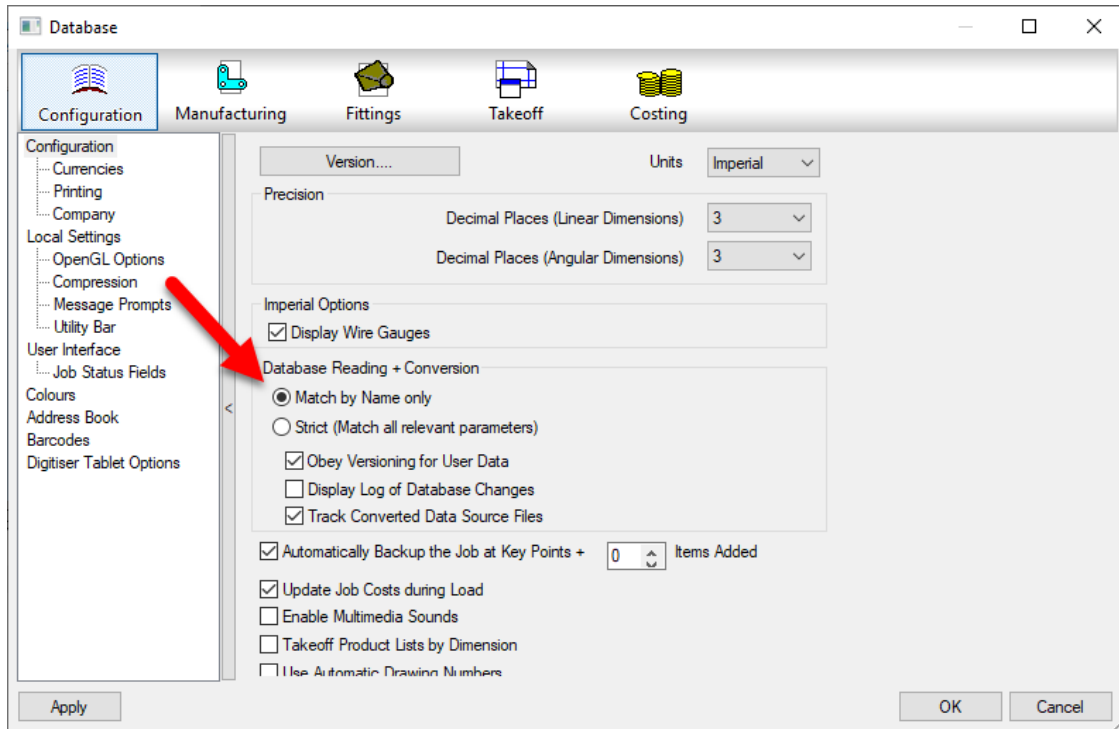
Key: **HKEY\_CURRENT\_USER\Software\Autodesk\Fabrication ####\CADmep**

Value: **StoreEstDatabase**

Data: **False**

## Match By Name Only

Database Should NOT Use Strict Matching



## **Naming / Organization Standards for Everything**

Everything Should have a Naming Standard

- ITM's
- Services
- Connectors
- Materials
- Ancillaries
- Cost Tables
- Database ID's
- ProdInfo Data
- Specificstions
- Folders
- ...etc...

# AUTODESK UNIVERSITY

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