DELEUM

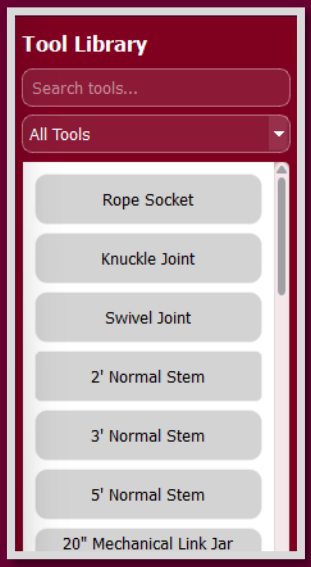
Tool String Editor

User Guide

Contents

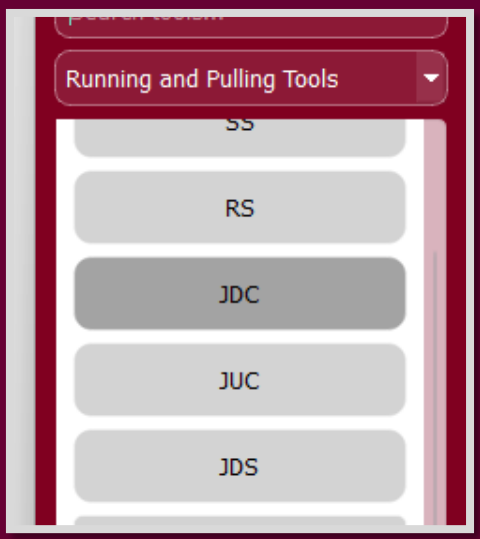
How to use the Deleum Tool String Editor?

1. Select the desired tool from the tool library on the left.

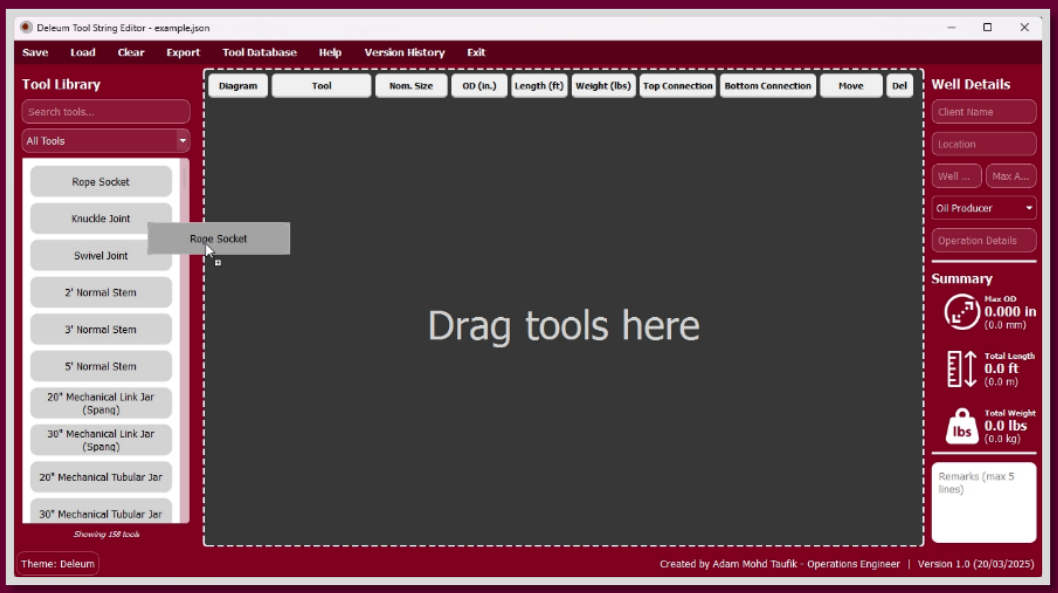


a. You may search for a specific tool using the search bar.

b. Alternatively, search by category by using the filter.

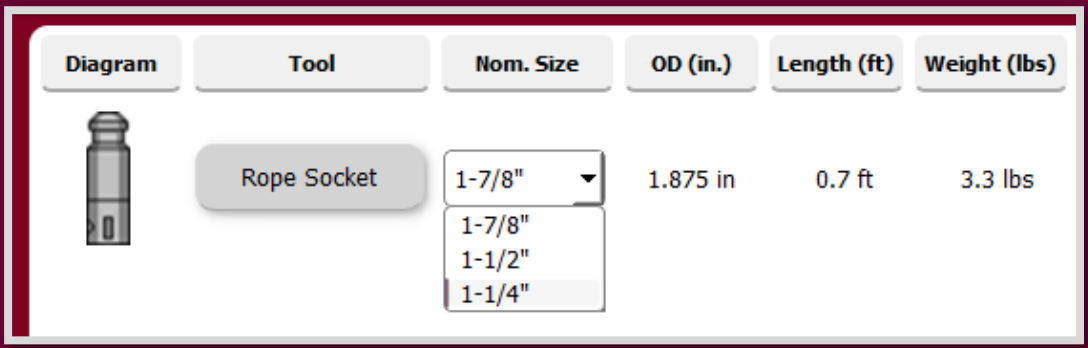


2. Click and drag the tool towards the “drop zone”.



Note: Tools added will append at the bottom of the current lowest tool. The order can be rearranged later.

3. Select the nominal size.

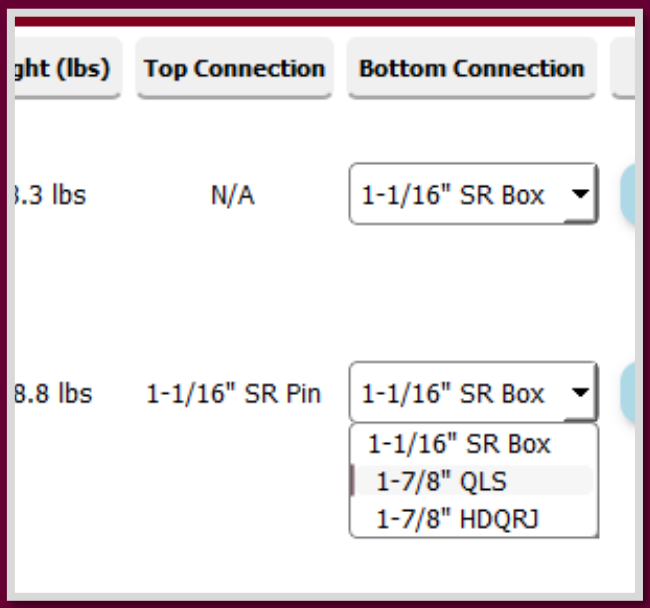


a. The corresponding OD, length, weight, and available connections will appear automatically.

Note: Nominal sizes of wireline tools may not match the actual OD of the tool (Example: 2” Nominal SB Pulling Tool has an actual OD of 1.776”). In these cases, the nominal sizes are based on manufacturer’s naming scheme.

Note: Certain tools follow the Tubing OD as the nominal size (Example: VariBall has sizes 2-3/8”, 2-7/8”, etc).

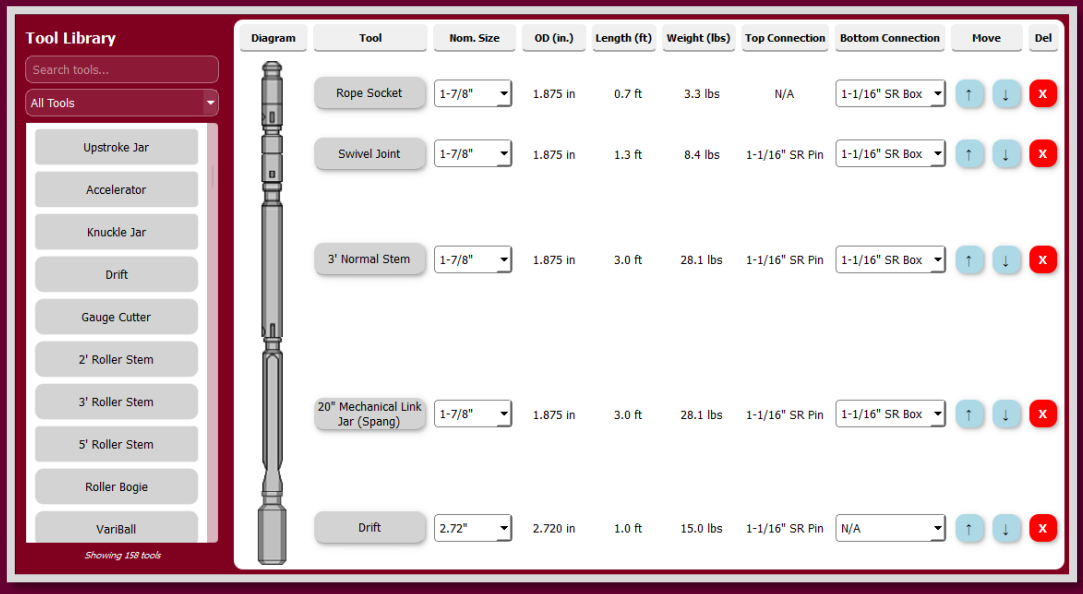
4. Select the bottom connection type desired (if more than one type of connection is available).



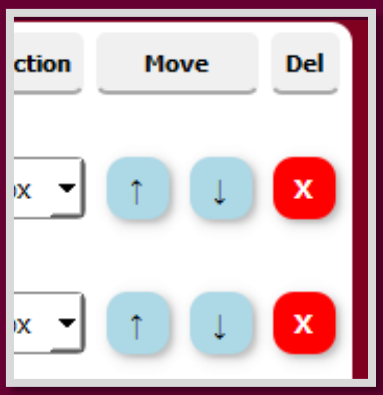
a. The top connection will update automatically to match the bottom connection.

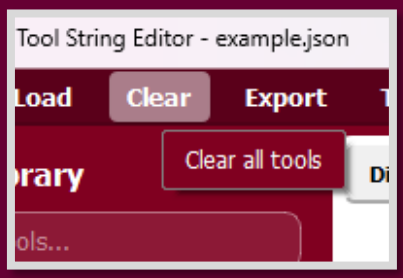
Note: For a proper wireline tool string configuration, ensure that the bottom connection of one tool matches the top connection of the next tool (Example: 1-1/16" SR Box and 1-1/16" SR Pin).

5. Add more tools to complete the tool string configuration.



6. Rearrange tool positions/delete tools as desired.

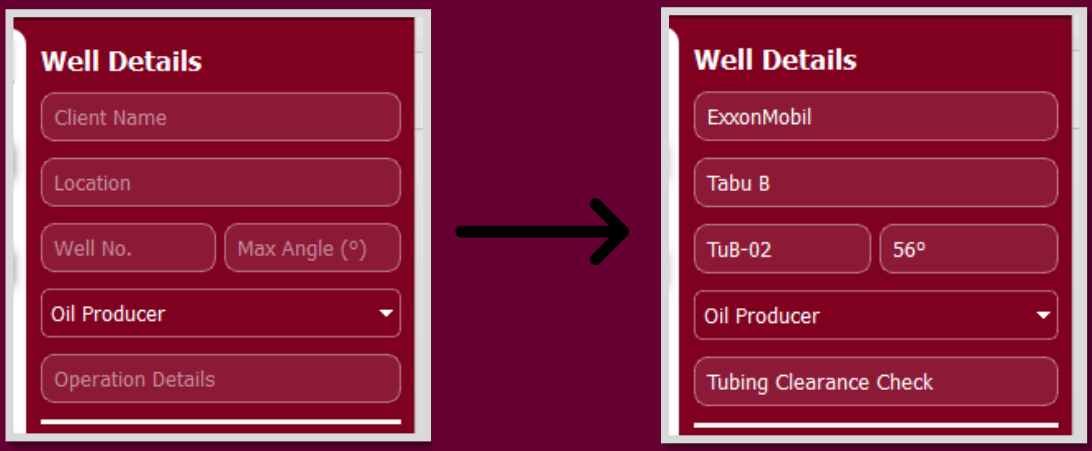




a. Click on the arrow keys on the right of each tool to shift their positions above or below adjacent tools.
b. Click ‘X’ to delete a tool from the current configuration.
c. Click “Clear” in the tool bar to delete all tools at once.

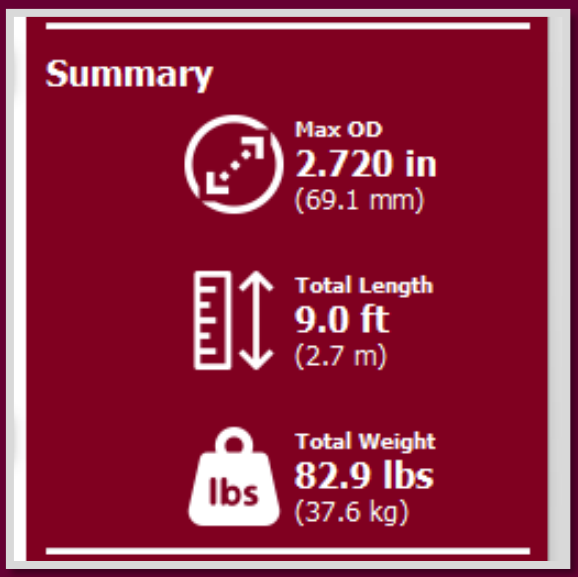
Note: Deleting/Clearing tools cannot be undone.

7. Enter the job details: Client, Location, Well No., Maximum Angle, Well Type, and Operation Details.



a. These details will appear in the generated tool string schematic diagram.

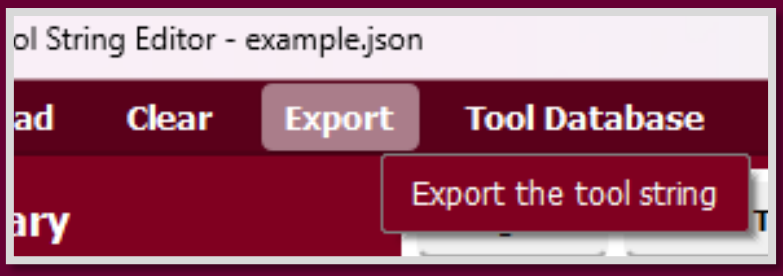
8. Take note of the maximum OD, total length, and total weight.



   a. While the values are shown primarily in English units (inches, feet and pounds), Metric units (mm, m and kg) are also displayed in case necessary.

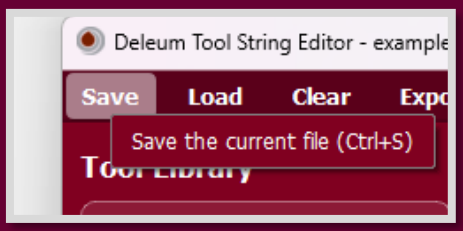
   Note: Use this info to carefully plan the job. Maximum OD must not exceed the minimum ID in the well (typically the seal bore, not the tubing ID). The PCE stack up must fit the entire tool string length. Ensure weight is sufficient to run in hole.

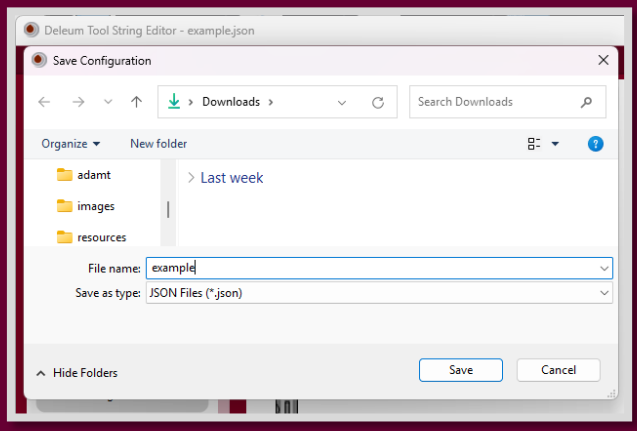
9. Export to Excel and PDF.



   a. The tool string report is generated in both Excel and PDF format at the same time. A PNG of the tool string is also created in case necessary.
   b. A prompt will ask whether you would like to view the directory in which the files have been saved.

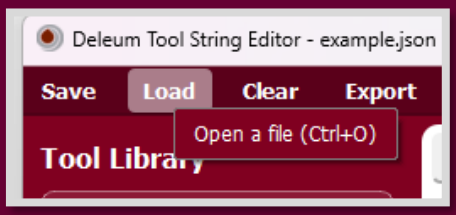
10. Save current tool configuration for future edits.

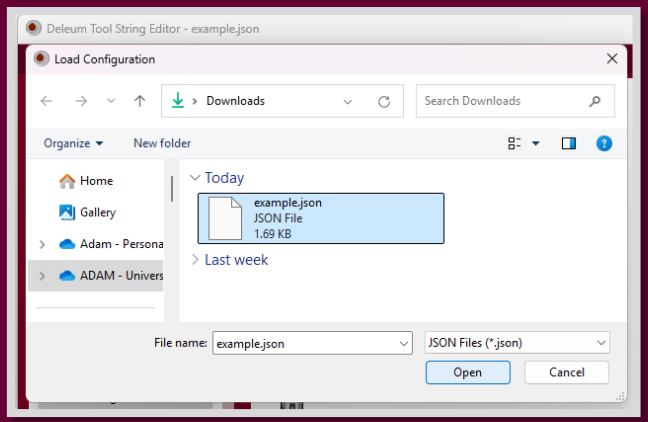




a. Rename the save file. The project is saved in a ".json" format.

11. Load from previously saved tool configurations when needed.





Note: Use the save/load feature to your advantage when a common tool string can be used for multiple jobs.

Frequently Asked Questions

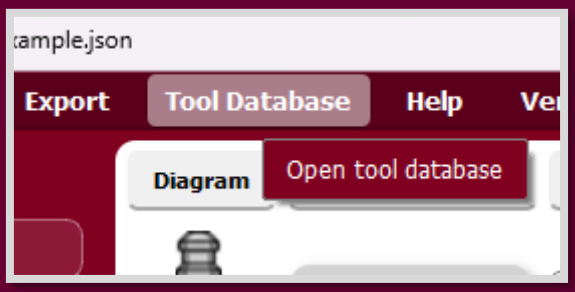
1. What is the maximum number of tools that can be added?

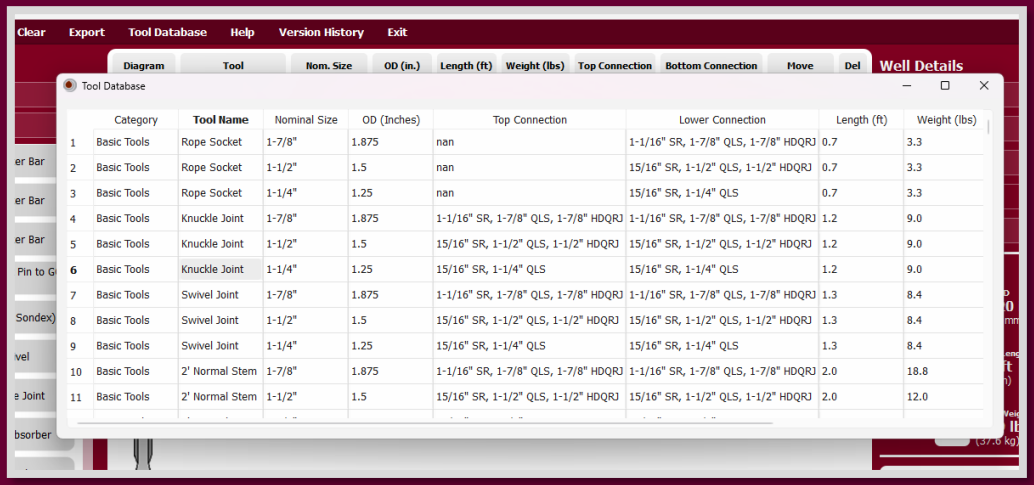
   The maximum number of tools that can be added is 38.

   However, you may notice the images of tools start to compress within the app after adding too many. Don't worry when this happens, as the tool string diagram will appear in proper scale after exporting.

2. Where are the values from? Are they correct?

   All values used in the app can be viewed by clicking on *Tool Database*.





	Category	Tool Name	Nominal Size	OD (Inches)	Top Connection	Lower Connection	Length (ft)	Weight (lbs)
1	Basic Tools	Rope Socket	1-7/8"	1.875	nan	1-1/16" SR, 1-7/8" QLS, 1-7/8" HDQRJ	0.7	3.3
2	Basic Tools	Rope Socket	1-1/2"	1.5	nan	15/16" SR, 1-1/2" QLS, 1-1/2" HDQRJ	0.7	3.3
3	Basic Tools	Rope Socket	1-1/4"	1.25	nan	15/16" SR, 1-1/4" QLS	0.7	3.3
4	Basic Tools	Knuckle Joint	1-7/8"	1.875	1-1/16" SR, 1-7/8" QLS, 1-7/8" HDQRJ	1-1/16" SR, 1-7/8" QLS, 1-7/8" HDQRJ	1.2	9.0
5	Basic Tools	Knuckle Joint	1-1/2"	1.5	15/16" SR, 1-1/2" QLS, 1-1/2" HDQRJ	15/16" SR, 1-1/2" QLS, 1-1/2" HDQRJ	1.2	9.0
6	Basic Tools	Knuckle Joint	1-1/4"	1.25	15/16" SR, 1-1/4" QLS	15/16" SR, 1-1/4" QLS	1.2	9.0
7	Basic Tools	Swivel Joint	1-7/8"	1.875	1-1/16" SR, 1-7/8" QLS, 1-7/8" HDQRJ	1-1/16" SR, 1-7/8" QLS, 1-7/8" HDQRJ	1.3	8.4
8	Basic Tools	Swivel Joint	1-1/2"	1.5	15/16" SR, 1-1/2" QLS, 1-1/2" HDQRJ	15/16" SR, 1-1/2" QLS, 1-1/2" HDQRJ	1.3	8.4
9	Basic Tools	Swivel Joint	1-1/4"	1.25	15/16" SR, 1-1/4" QLS	15/16" SR, 1-1/4" QLS	1.3	8.4
10	Basic Tools	2' Normal Stem	1-7/8"	1.875	1-1/16" SR, 1-7/8" QLS, 1-7/8" HDQRJ	1-1/16" SR, 1-7/8" QLS, 1-7/8" HDQRJ	2.0	18.8
11	Basic Tools	2' Normal Stem	1-1/2"	1.5	15/16" SR, 1-1/2" QLS, 1-1/2" HDQRJ	15/16" SR, 1-1/2" QLS, 1-1/2" HDQRJ	2.0	12.0

For now, Adam has created the *Tool Database* with values obtained from various manuals and datasheets for each and every

tool. While the best effort has been made in finding accurate information, incorrect data may be noticeable.

If you dispute any existing values (Example: wrong weight is given for the X-Line Running Tool), you are welcome to submit your feedback for the correction to be made.

It is hoped that experts from Slickline and AIS departments can contribute in updating the *Tool Database* with complete and accurate information for the app to benefit everyone.

3. Can I adjust the information of the tools myself?

   Not within the app. However, you may freely edit values/naming in the Excel file after exporting.

   To modify incorrect information in the app's *Tool Database*, please reach out to Adam.MohdTaufik@deleum.com

4. I got an error message when trying to export.

   It is likely that you have Microsoft Excel open. Close any Excel windows and try again.

5. Are there any other tool string schematic templates that can be generated? For example, breaking up the long tool string into a few sections?

   Only one generated template is available for now. If you prefer a different layout, send your feedback with your preferences.

6. Can I import a tool string from a PDF or Excel file?

   No, only from .json files.

7. If I share a saved .json file with another person, can it be opened on their computer?

   Yes, as long as the other person also has the Deleum Tool String Editor installed on their computer.

8. What are the minimum spec requirements to run this application?

   Only 100 MB of free storage is needed. All Deleum laptops should be able to run the .exe without any trouble.

For any further inquiries or suggestions, send an email to Adam.MohdTaufik@deleum.com

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