

VIVID TOOL SYSTEM 3RD PARTY PROJECT

By Arifin Zaimuddin

SOFTWARE UTILIZATION

To start, please prepare following items inside the laptop:

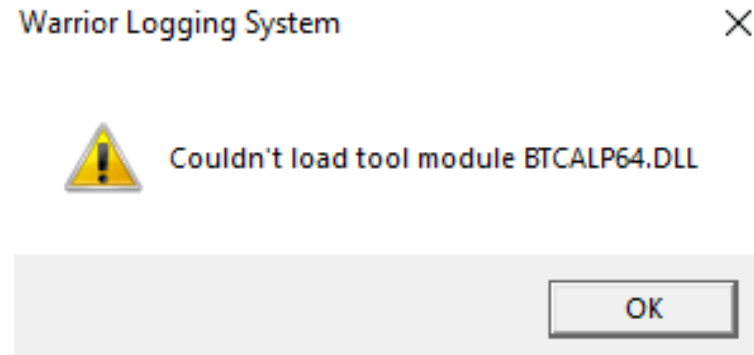
- 1 ea Warrior 8 Version P10V4
- 1 ea Backup Config Archer.config.wbu
- 1 ea “Bin” Folder
- 1 ea “Format” Folder

SOFTWARE UTILIZATION

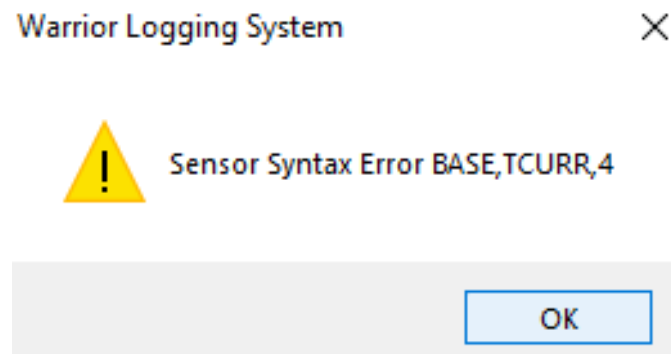
- The Archer Warrior 8 software, has different setup and directory compared to the common software package.
- It has a “Bin” folder located inside the Warrior folder package.
- The “Bin” folder is where the “acquisition.exe” and similar execution file is shortcut from, thus, when the backup was installed, the shortcut of .exe from the common warrior folder is unusable.
- The exe could be found and run inside the “Bin” folder, for all .exe except for Interactive Plot.

SOFTWARE UTILIZATION

- The following error will be initiated, if the wrong exe file is run.



- The other error could also include,



SOFTWARE UTILIZATION

- However, the error does not related to memory service, in which it is an error related for the load cell data acquisition system.
- In our package, we use “AUX” setup inside Warrior “Database Utilities>Edit Service Details” instead of BASE.
- Thus, by simply changing this, the error would not be popped up anymore.

SOFTWARE UTILIZATION

- If there is a need to run VIVID with common warrior service, it is recommended to;
 1. Create backup the original config of warrior from DB
 2. Install Archer.conf.wbu backup to run the VIVID
 3. Copy the “Bin”, “Format” folder onto C://Program Data/Warrior/
 4. Change the address setups inside the “Archer Ultrawire Memory SCT POINT” service details (will be explained later).
 5. Create shortcut of “.exe” inside “Bin” to the desktop.
 6. Run VIVID. Complete operation.
 7. Reinstall the original backup of the config
 8. Run the common service
- Remark: Originally, it was recommended by the Archer to copy manually, the config, bin, and format folder, while keeping the original file and renaming it instead. However, this is inconvenient to interchange run between Archer and Common Service. Utilize the Warrior Backup prepared instead.

SOFTWARE UTILIZATION

- If there is a need to run VIVID with common warrior service, it is recommended to;
 1. Create backup the original config of warrior from DB
 2. Install Archer.conf.wbu backup to run the VIVID
 3. Copy the “Bin”, “Format” folder onto C://Program Data/Warrior/
 4. Change the address setups inside the “Archer Ultrawire Memory SCT POINT” service details (will be explained later).
 5. Create shortcut of “.exe” inside “Bin” to the desktop.
 6. Run VIVID. Complete operation.
 7. Reinstall the original backup of the config
 8. Run the common service
- Remark: Originally, it was recommended by the Archer to copy manually, the config, bin, and format folder, while keeping the original file and renaming it instead. However, this is inconvenient to interchange run between Archer and Common Service. Utilize the Warrior Backup prepared instead.

SOFTWARE UTILIZATION

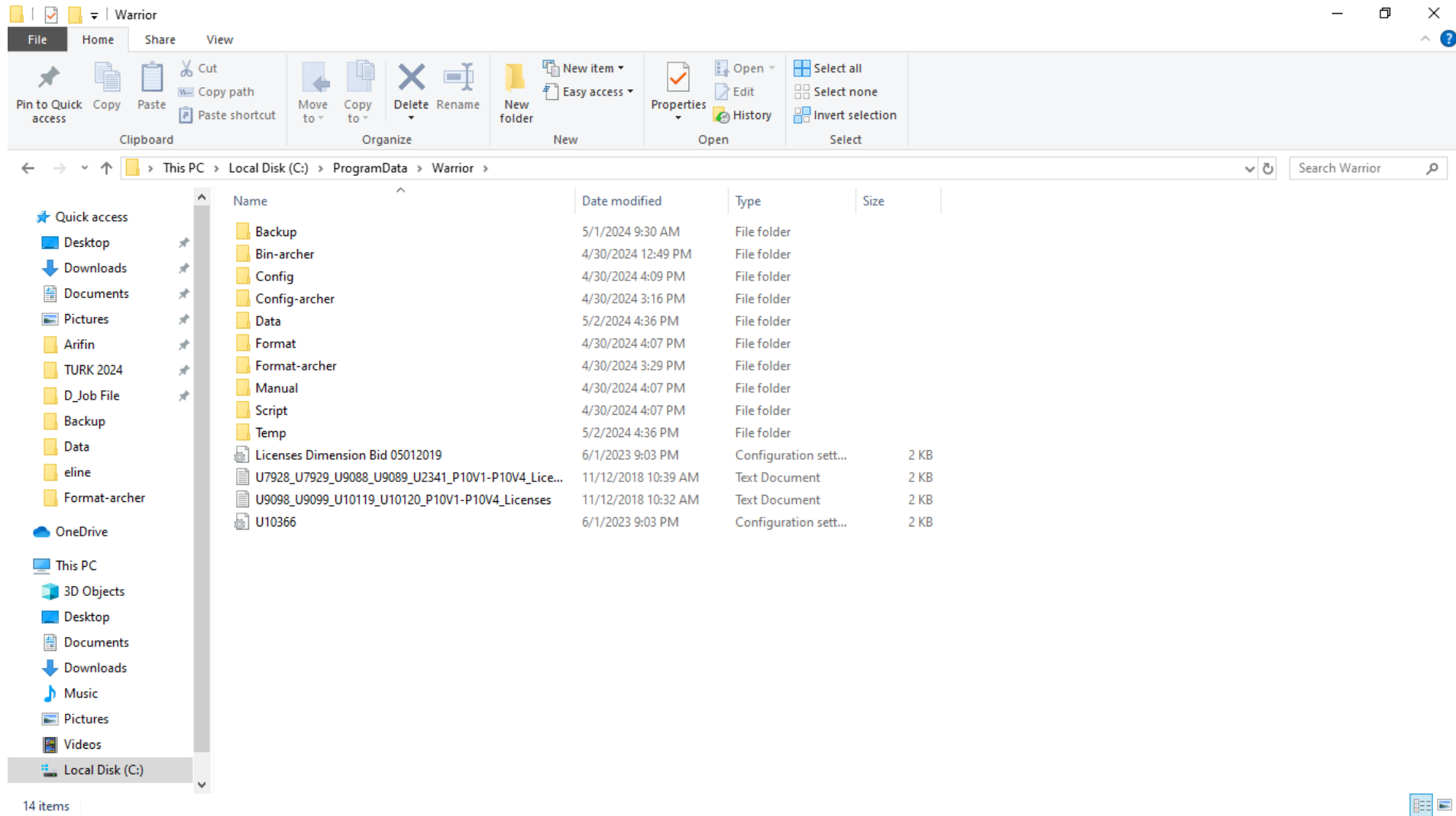


Fig: The “Bin”, “Config”, and “Format” folder to be stored at the folder location

SOFTWARE UTILIZATION

- If there is a need to run VIVID with common warrior service, it is recommended to;
 1. Create backup the original config of warrior from DB
 2. Install Archer.conf.wbu backup to run the VIVID
 3. Copy the “Bin”, “Format” folder onto C://Program Data/Warrior/
 4. Change the address setups inside the “Archer Ultrawire Memory SCT POINT” service details (will be explained later).
 5. Create shortcut of “.exe” inside “Bin” to the desktop.
 6. Run VIVID. Complete operation.
 7. Reinstall the original backup of the config
 8. Run the common service
- Remark: Originally, it was recommended by the Archer to copy manually, the config, bin, and format folder, while keeping the original file and renaming it instead. However, this is inconvenient to interchange run between Archer and Common Service. Utilize the Warrior Backup prepared instead.

SOFTWARE UTILIZATION

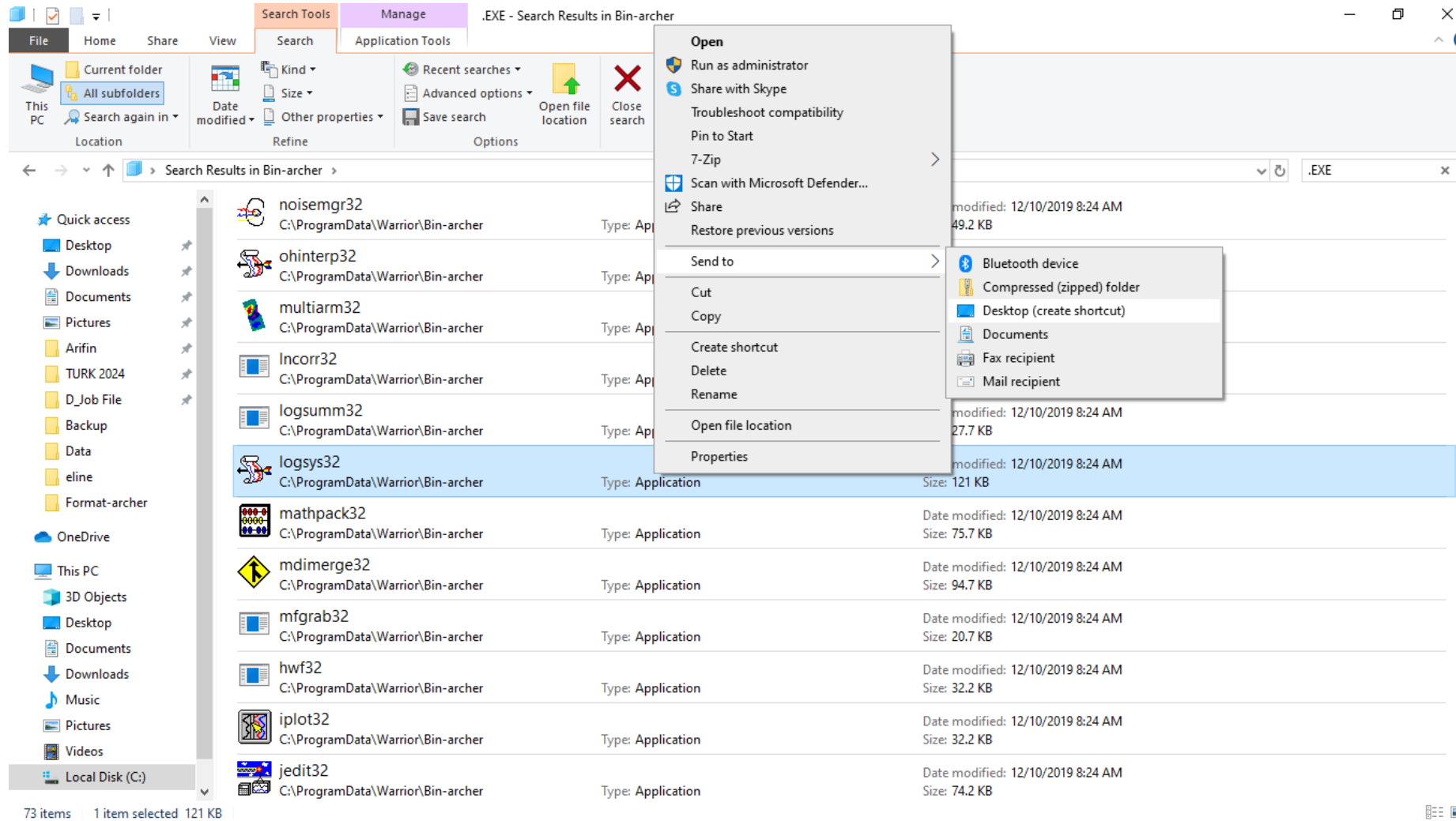


Fig: Creating the “Acquisition” shortcut from the “logsys32.exe”

SOFTWARE UTILIZATION

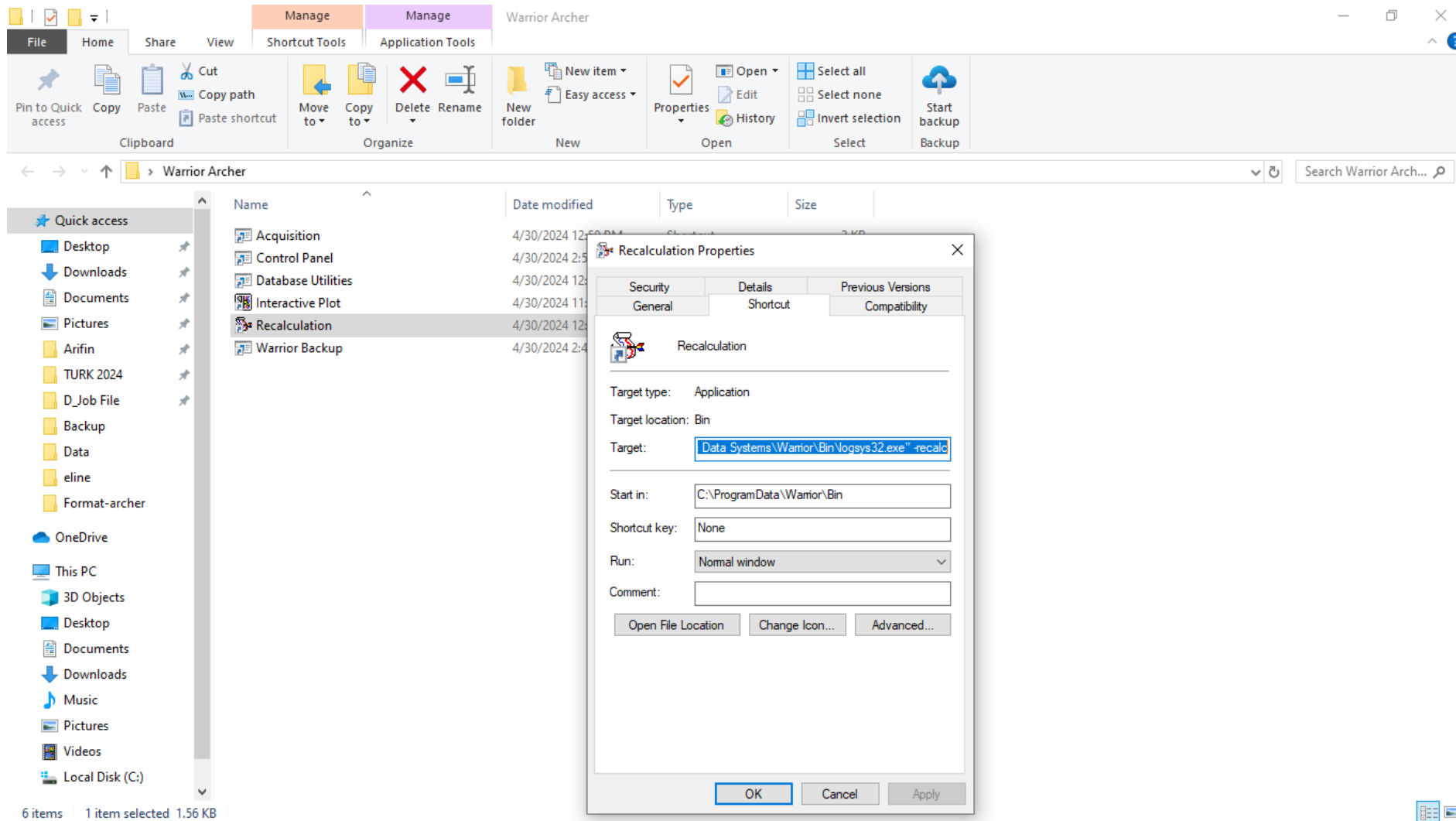


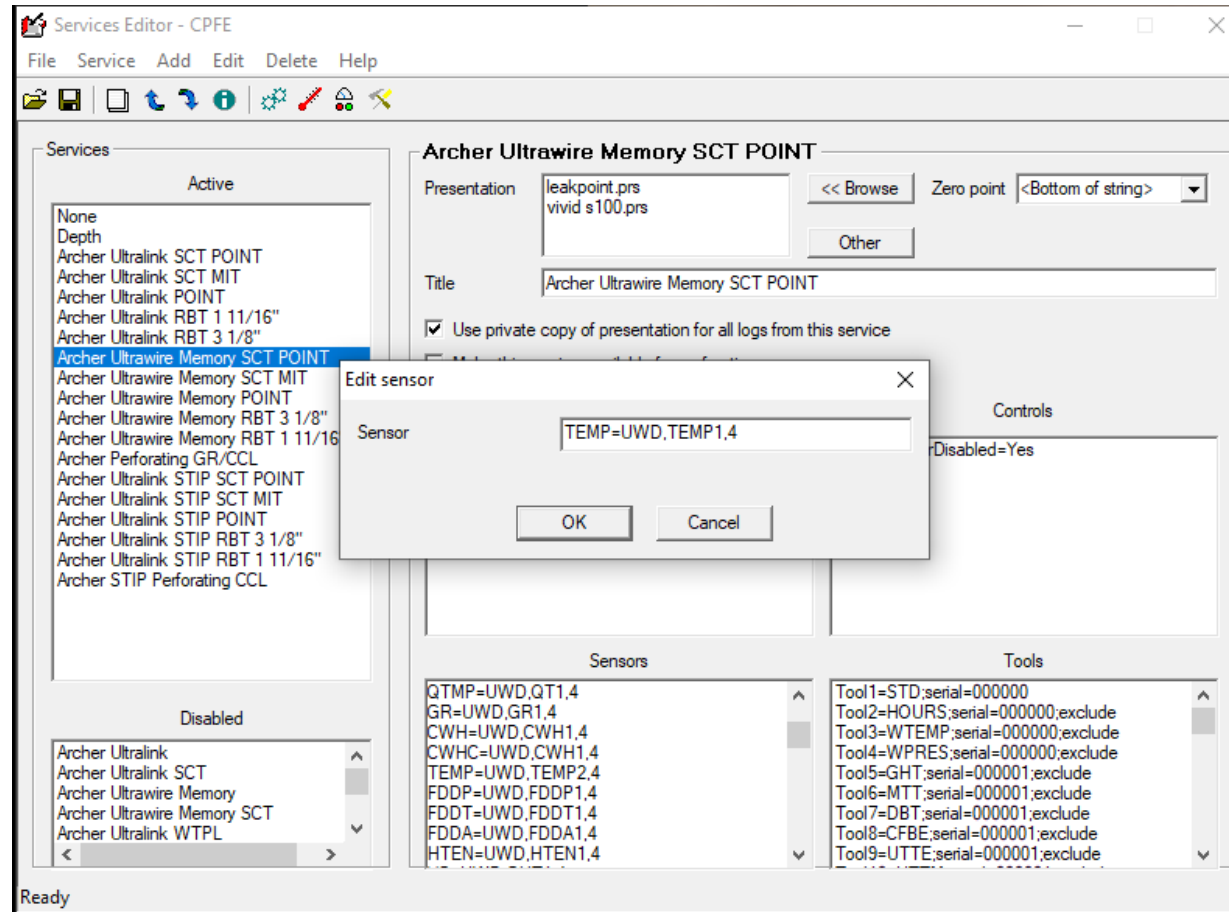
Fig: Creating the “Recalculation” shortcut from the “logsys32.exe”. This needs to be done manually, because recalculation is a sub-shortcut from the “logsys32.exe”.

SOFTWARE UTILIZATION

- If there is a need to run VIVID with common warrior service, it is recommended to;
 1. Create backup the original config of warrior from DB
 2. Install Archer.conf.wbu backup to run the VIVID
 3. Copy the “Bin”, “Format” folder onto C://Program Data/Warrior/
 4. Change the address setups inside the “Archer Ultrawire Memory SCT POINT” service details (will be explained later).
 5. Create shortcut of “.exe” inside “Bin” to the desktop.
 6. Run VIVID. Complete operation.
 7. Reinstall the original backup of the config
 8. Run the common service
- Remark: Originally, it was recommended by the Archer to copy manually, the config, bin, and format folder, while keeping the original file and renaming it instead. However, this is inconvenient to interchange run between Archer and Common Service. Utilize the Warrior Backup prepared instead.

SOFTWARE UTILIZATION

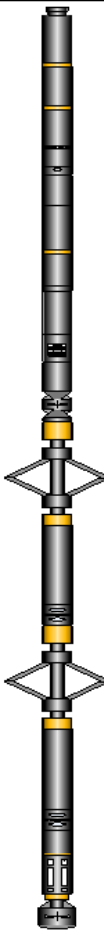
- The SCT service tools needs to use address 1 instead of the normal service, whereby is uses address 2 for TEMP and PRESS.
- Thus, change the following address to the correct value.



PROGRAMMING THE VIVID

- VIVID setup, is as below:

Tool String Editor

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)	
			MBH-030 (10006430) Memory Battery Housing (5C)	1.47	1.69	9.00	
			UMT-007 (10012565) Ultrawire Memory Tool (1GB)	1.04	1.69	6.60	
CCL	19.00			QPC-003 (10005506) Quartz Pressure/Collar Locator	1.59	1.69	9.00
QP	18.60						
QTMP	18.60			PGR-020 (10009582) Production Gamma Ray, 1 11/16"	1.93	1.69	9.48
GR	16.87						
ACCE	15.98			PIA-004 (10022528) Production Inclinometer/Accelerometer	0.89	1.69	5.00
				FDI-001 (10007569) Fluid Density Inertial, 1 11/16"	1.71	1.69	7.05
FDIB	14.02						
FDIT	14.02			ILS-021 (10010044) Inline Spinner 1 11/16"	1.44	1.69	6.00
FDIF	14.02						
ILSDIR	12.68						
ILSRATE	12.68			HAC-001 (000032) Helical 4 Arm Centraliser 1 11/16"	2.53	1.69	13.40
ALP	7.54			VIVID-Sand (053001) VIVID Sand	2.44	1.69	11.02
				HAC-001 (000023) Helical 4 Arm Centraliser 1 11/16"	2.53	1.69	13.40
ALP#3	2.57			VIVID #3 -Leak (052004) VIVID Leak	2.44	0.00	
TEMP	1.44						
CWH	1.28						
CWHC	1.28		CTF-004 (AJH 00051) Capacitance Temperature Flow, 1 11/16"	1.54	1.69	5.51	
CFSDIR	0.13						
CFSRATE	0.13		CFSM-32 (10000022) Continuous Flowmeter Spinner Mechanicals 2 1/8" CTF	0.84	2.13	3.53	

Archer Ultrawire Memory SCT POINT: String length: 22.39 ft Weight: 99.00 lb Max. O.D.: 2.13 in

Logging Tools
Accessory Tools

Options >> Add Remove
Help Print Save Exit

PROGRAMMING THE VIVID

- VIVID has different range of frequency setups, for different objective, ie “VIVID Sand” and “VIVID Leak”. Both differences are self-explanatory.
- To program the tools, the “address” declared at the “Memlog” also needs to be changed.
- Run Memlog. Go to “View>Project Directory Files”. Click on “Project.ini”. Search for the original number, and change accordingly to the table.
- Next, go to “File>New Profile”. And then only, start to programme the tools as per needed.

PROGRAMMING THE VIVID

No	Tool Type	Serial #	Address	Tool code	Current 25 C	Current 180 C
VIVID LEAK						
1	LEAK	51003	59	ALP1-0-03	73 mA	92 mA
2	LEAK	41003	57	ALP1-0-02	120 mA	200 mA
3	LEAK	41008	59	ALP1-0-02	110 mA	180 mA
4	LEAK	51004	59	ALP1-0-03	74 mA	95 mA
5	LEAK	41005	59	ALP1-0-03	120mA	190mA
6	LEAK	51010	59	ALP1-0-03	80 mA	99 mA
7	LEAK	41004	59	ALP1-0-02	120 mA	200 mA
8	LEAK	41009	59	ALP1-0-02	120 mA	210 mA
9	LEAK	51004	56	ALP3-0-04	75 mA	100 mA
10	LEAK	52005	59	ALP1-0-04	75 mA	100 mA
VIVID SEAL						
1	SEAL	54001	56	SEL3-0-01	74 mA	99 mA
2	SEAL	54002	57	SEL2-0-01	75 mA	97 mA
3	SEAL	54008	57	SEL2-0-01	75 mA	100 mA
4	SEAL	54009	56	SEL3-0-01	75 mA	96 mA
5	SEAL	54005	56	SEL3-0-01	75 mA	95 mA
6	SEAL	54007	56	SEL3-0-01 (No H2S)	75 mA	100 mA
VIVID SEAL						
1	SAND	53001	57	SND2-0-01	75 mA	96 mA
2	SAND	53002	57	SND2-0-01	75 mA	96 mA

Fig: Different Tools with different addresses

PROGRAMMING THE VIVID

The screenshot shows the 'Profile Editor: bt.pfl' window. It features a menu bar with 'File' and 'Profile', a toolbar with icons for file operations, and a main table for profile data. A green box highlights the 'FDI', 'ALP', and 'ALP' columns in the table. Below the table is a 'Setup Profile Parameters' section with memory usage information and 'Save' and 'Exit' buttons.

	CTF	PGR	QPC	ILS	PIA	PRT	FDI	ALP	ALP
	1	2	3	7	10	18	29	56	57
	0.50	0.50	0.10	0.50	0.50	0.50	0.50	0.40	0.40
Start Time (DD:HH:MM:SS)	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
00:00:00:00	0.50	0.50	0.10	0.50	0.50	0.50	0.50	0.40	0.40
00:00:00:30									
00:00:01:00									
00:00:02:00	0.50	0.50	0.10	0.50	0.50	0.50	0.50	0.40	0.40

Setup Profile Parameters

Memory Size: 512 MB
Memory Used: 4 MB

Save
Exit

Fig: Check the ALP address if needed to be changed

PROGRAMMING THE VIVID

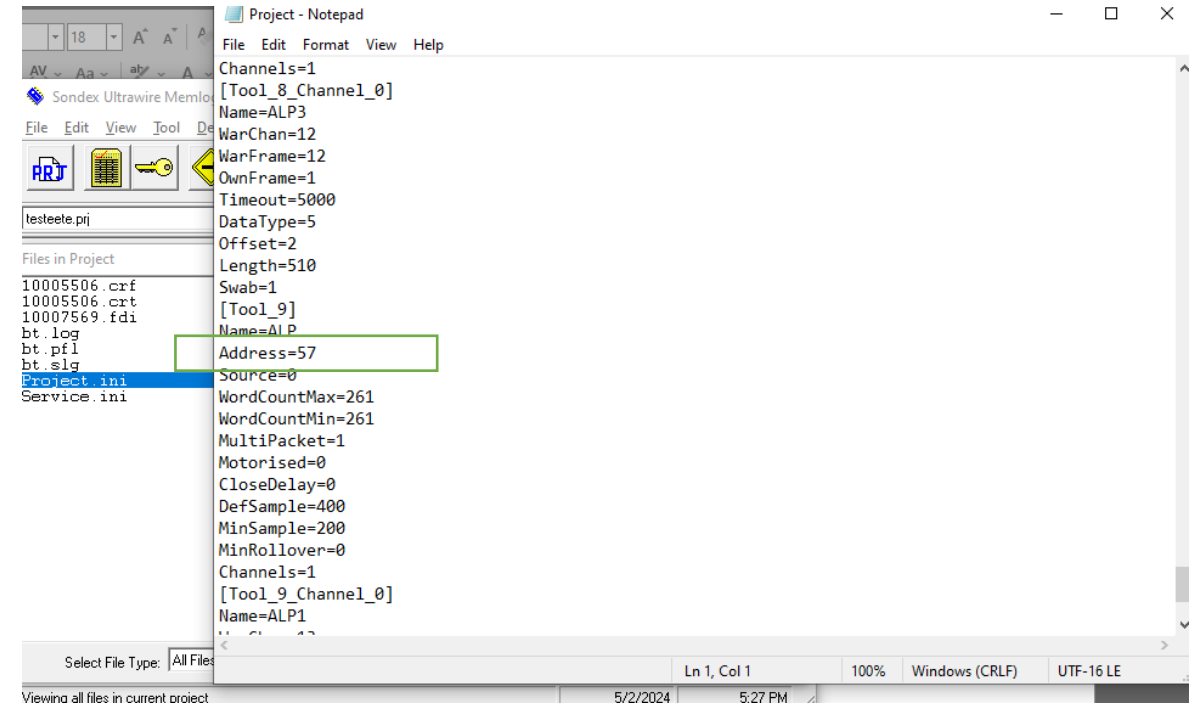
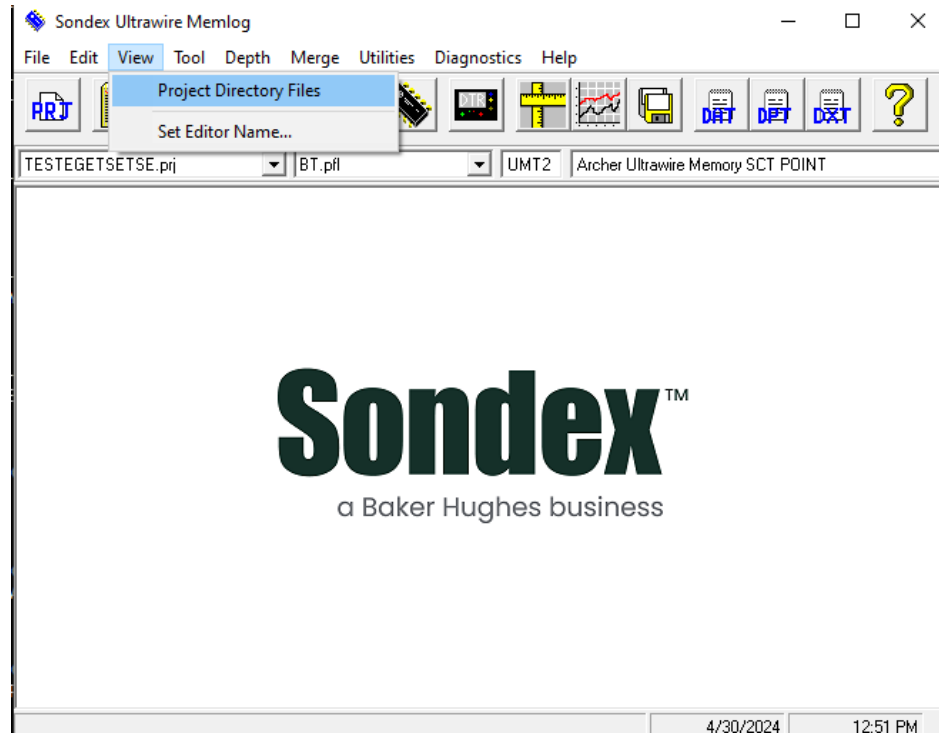


Fig: Changing the address inside Project.ini

PROGRAMMING THE VIVID

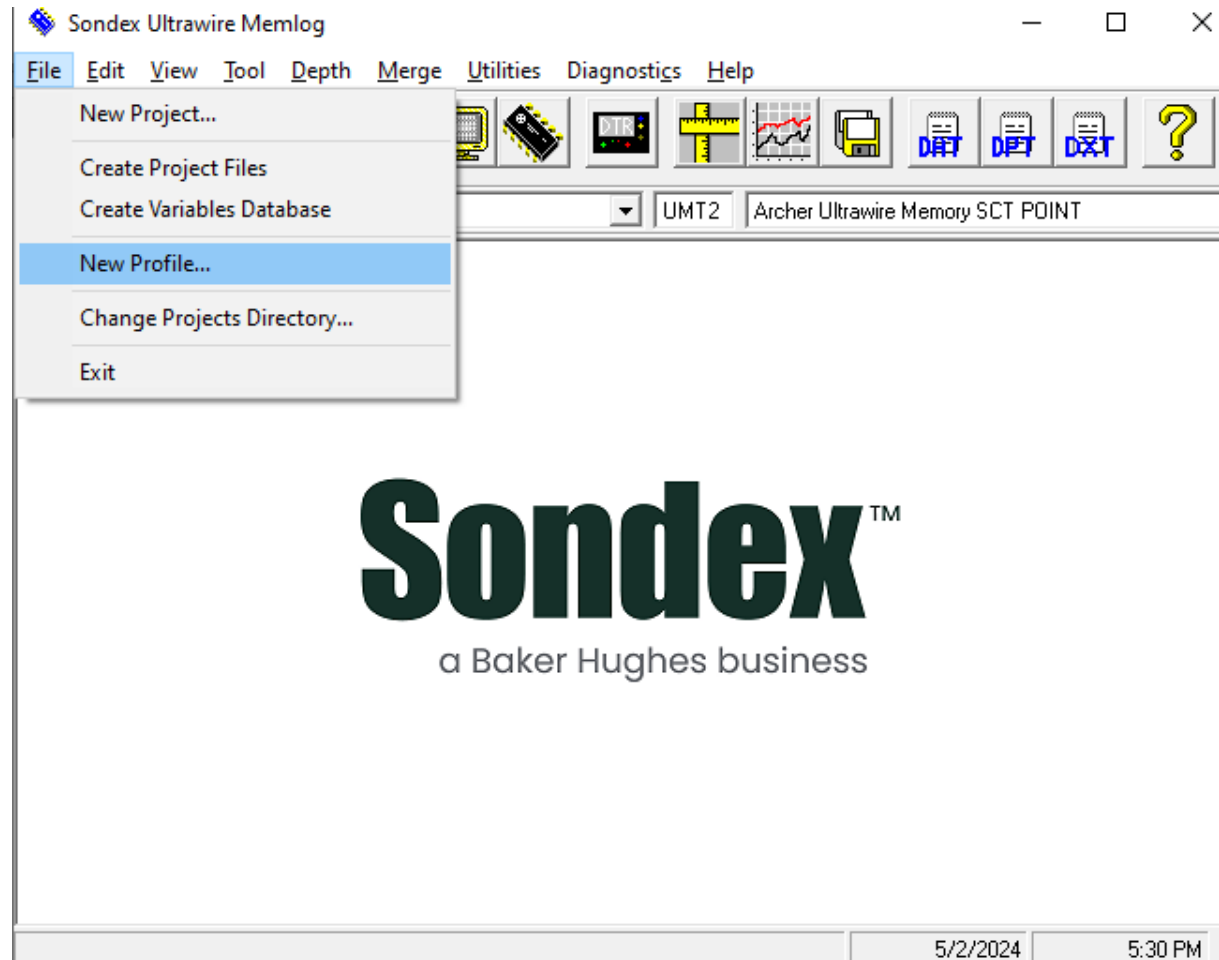


Fig: Creating New Profile with new address

PROGRAMMING THE VIVID

- The setup of profile is as below, BEEP OFF is needed to avoid VIVID picking up the UMT beeper:

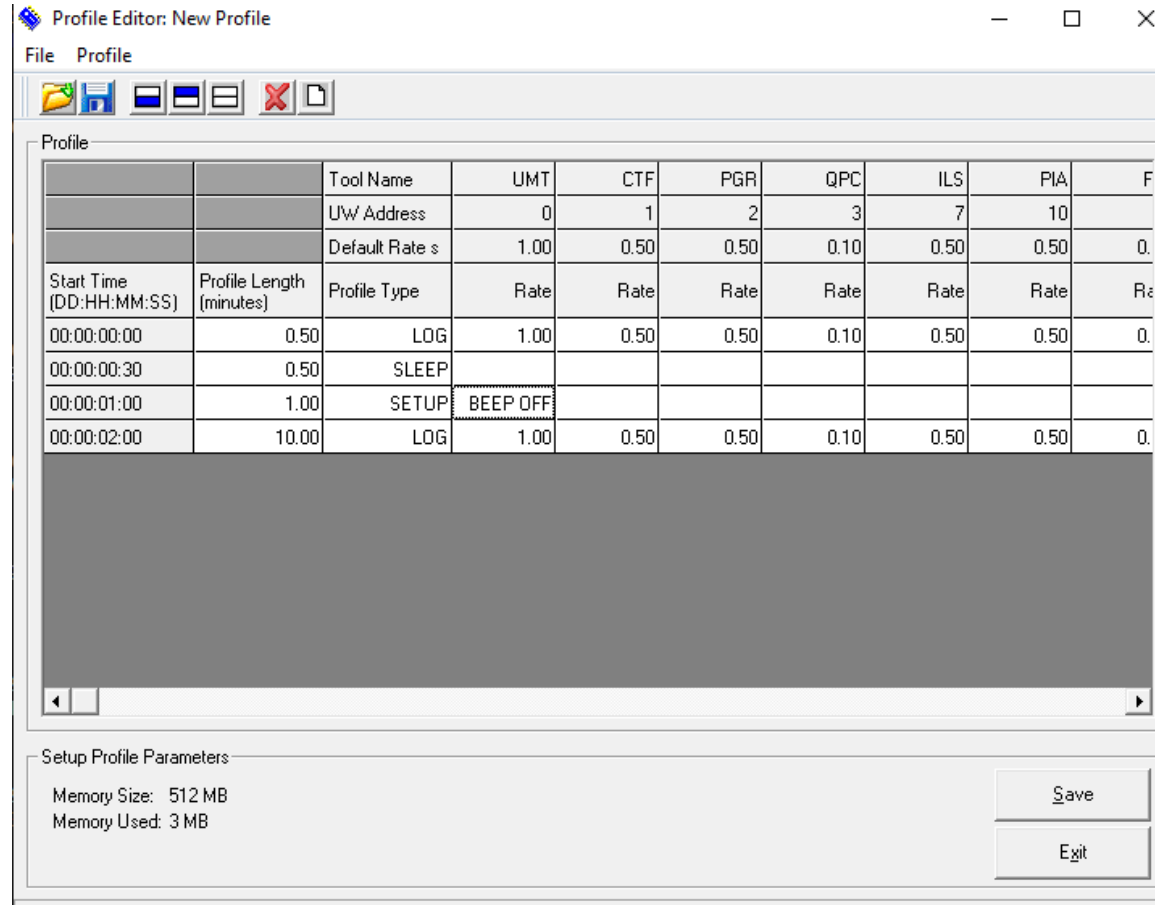


Fig: Creating New Profile with new address

RUNNING THE TOOL

- To perform bench test, spray CRC across the VIVID sensor.
- After downloading the data, it could be seen that the lower bottom VIVID will pickup small signal from upper VIVID when it was sprayed and vice versa.
- Only service the 211 oring if needed.

RUNNING THE TOOL



Fig: Bench test the VIVID



RUNNING THE TOOL

The screenshot displays a Windows desktop environment with several application windows open. The primary window is 'Sondex Ultrawire Memlog', which shows a table of statistics for various tools. To its left, a 'Telemetry' window displays error counts. Below it, a 'Uwstats - Notepad' window shows a detailed log file with columns for Tool, Packets Received, Config Max/Min Size, Actual Size, and Command/Ack/Error status. Other windows include 'Outputs' with a small data table, 'Warrior Logging Sys...', and 'Depth'.

Item	Value
Byte Count	150650
Tool Errors	0
Configuration Errors	0
Other Errors	0

Name	Source	Value	Units
LSND	(STD)	0.0000	ft/min

Tool	Packets Received	Config Max Size	Config Min Size	Actual Size	Not Ready	Not Recognized	Command Failed	Ack Error Or Timeout
0 UMT	171	4	4	4	0	0	0	0
1 CTF	218	7	7	7	0	0	0	0
2 PGR	218	3	3	3	0	0	0	0
3 QPC	1086	9	9	9	0	0	0	0
4	0	-1	-1	-1	0	0	0	0
5	0	-1	-1	-1	0	0	0	0
6	0	-1	-1	-1	0	0	0	0
7 ILS	218	3	3	3	0	0	0	0
8	0	-1	-1	-1	0	0	0	0
9	0	-1	-1	-1	0	0	0	0
10 PIA	218	3	3	3	0	0	0	0
11	0	-1	-1	-1	0	0	0	0
12	0	-1	-1	-1	0	0	0	0
13	0	-1	-1	-1	0	0	0	0
14	0	-1	-1	-1	0	0	0	0
15	0	-1	-1	-1	0	0	0	0
16	0	-1	-1	-1	0	0	0	0
17	0	-1	-1	-1	0	0	0	0

Fig: Check for errors

RUNNING THE TOOL

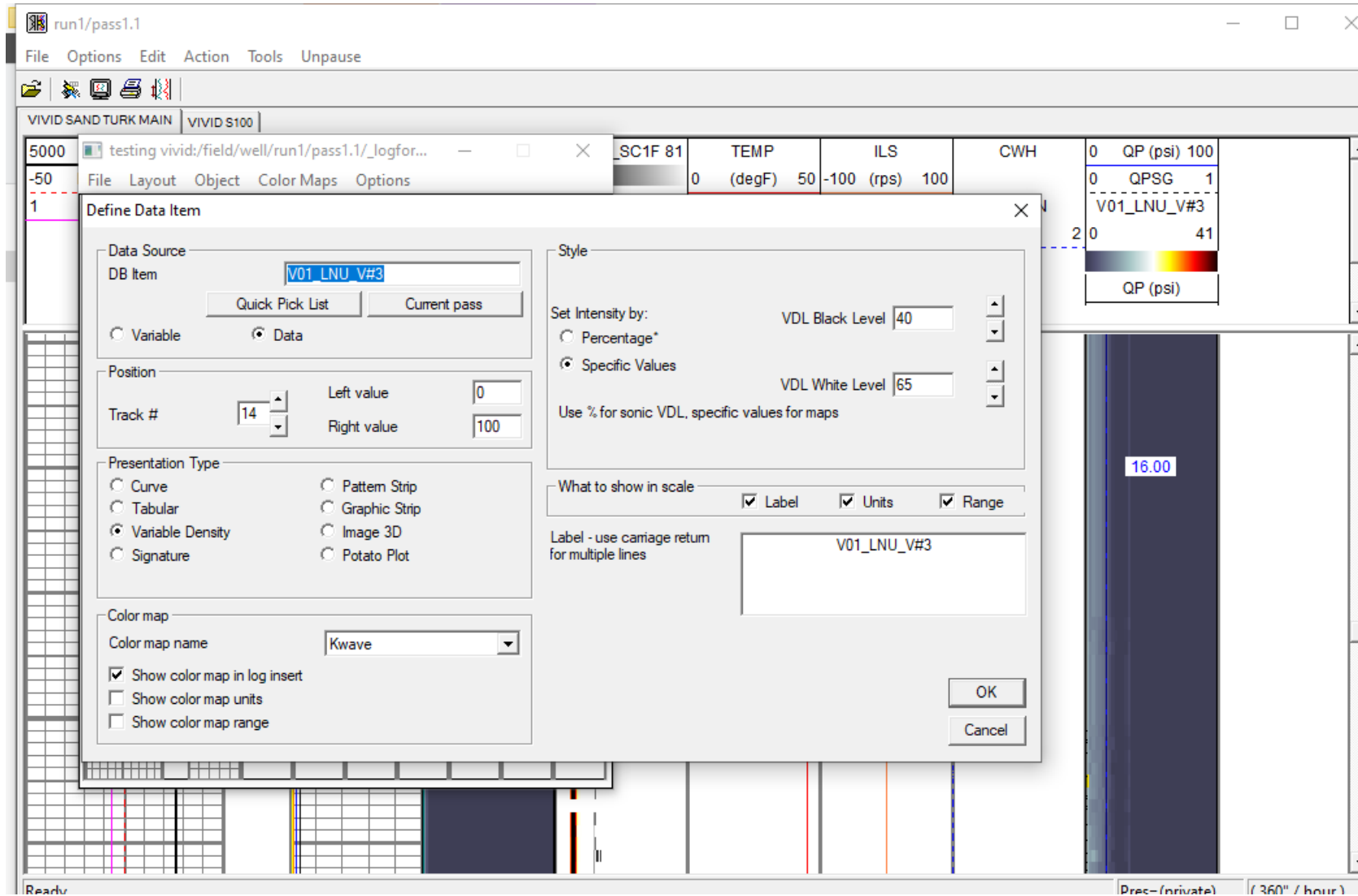


Fig: Interactive Plot setup