ProCal V4x Release Notes

ProCal V4x incorporates new functions to further enhance the complete suite of calibration tools.

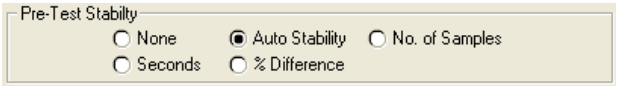
Windows Vista – Site Licence Support

ProCal has provided support for Windows Vista using 'dongles' USB security keys from V3x. V4x now enhances Vista support by providing support for site licensing.

Enhanced Measurement Capabilities

ProCal now incorporates a measurement averaging system with user configurable stability checking.

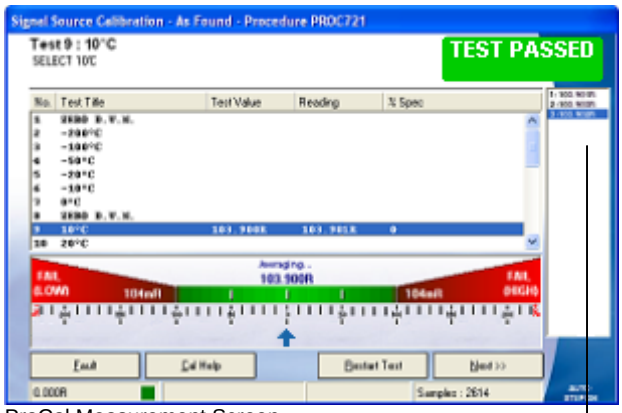
Pre-Test Stability



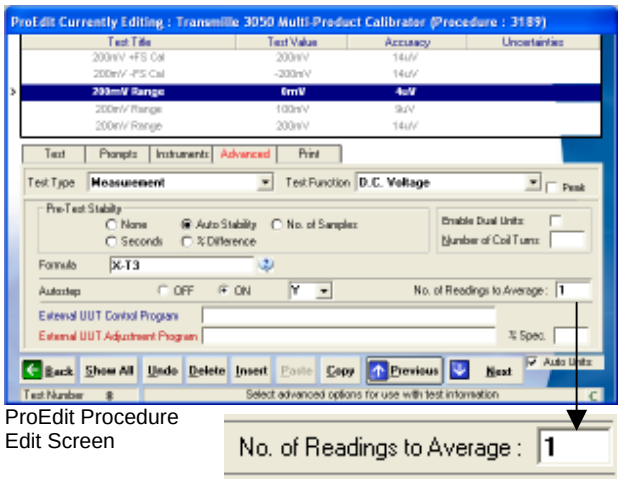
The pre-test stability function allows the user to set a predetermined stability phase for a measurement base on the following different parameters :

None	:	Turns of measurement stability
Auto Stability	:	Automatic analysis of readings to determine when readings have stabilised
No. of Samples	:	Specific number of samples before proceeding
Seconds	:	Specific number of seconds before proceeding
%Difference	:	Specific percentage of specification between readings

Measurement Averaging



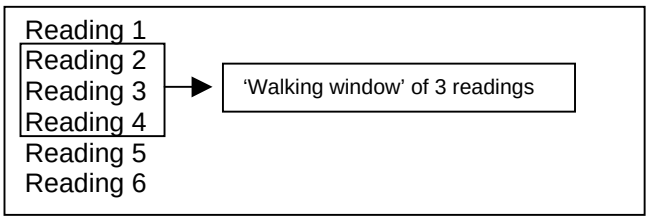
ProCal Measurement Screen



ProEdit Procedure Edit Screen

The measurement averaging function provides the ability to take a set number of samples and average them together.

This function operates a 'walking window' method of averaging, ie. A set of x consecutive readings as defined by the user.



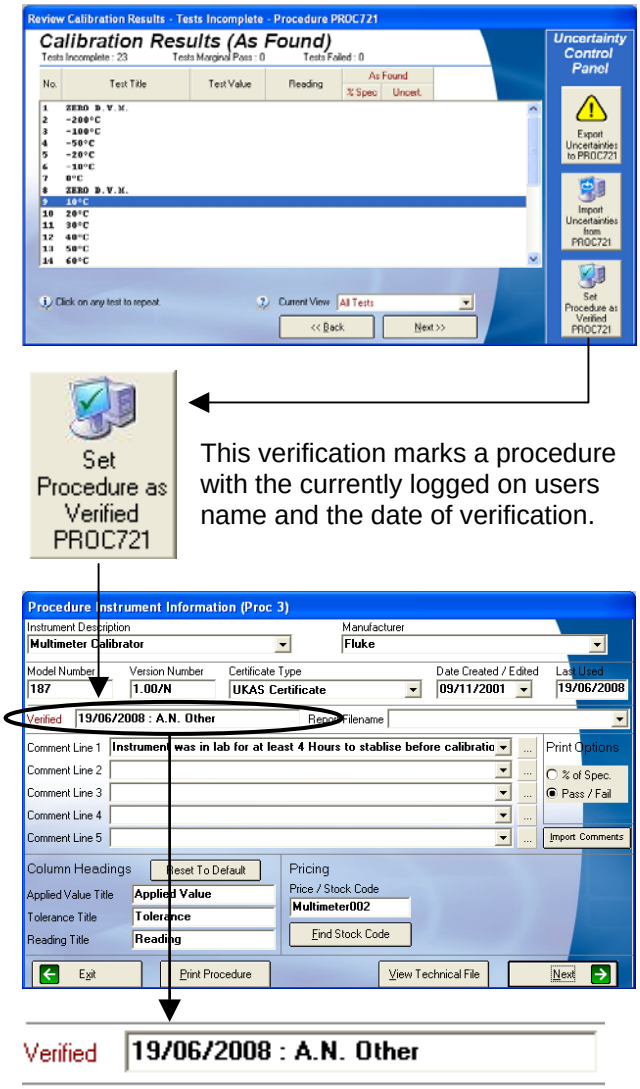
ProEdit :: Export Function Enhanced

ProEdit export procedure function now packages all supporting help files included within the procedure in a folder along with the compressed procedure file.

Text, Images & Video copied to export folder along with compressed procedure file.

ProEdit / ProCal :: Procedure Verification Function

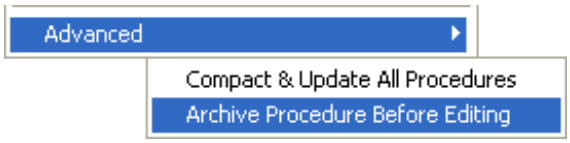
Procedures can now set marked as verified from within ProCal using a dedicated function.



This verification marks a procedure with the currently logged on users name and the date of verification.

ProEdit :: Archive Procedure Function

ProEdit incorporates an auto archive function to ensure a procedure is backup up to an archive folder prior to editing. This is a global option which can be selected / de-selected as required in the utilities -> advanced menu.



ProCal :: Auto Connection Prompts

ProCal includes a new function to display a connection diagram for METER type tests. The connection prompts display 3000 Series Multi Product Calibrators / 32000 Electrical Test Equipment Calibrators with the connections required for the test type being performed.

This helps in de-skilling this type of testing by providing clear graphical diagrams of the lead configurations for a wide set of tests.


2 Wire Resistance.jpg


4 Wire Resistance.jpg


High AC Current.jpg

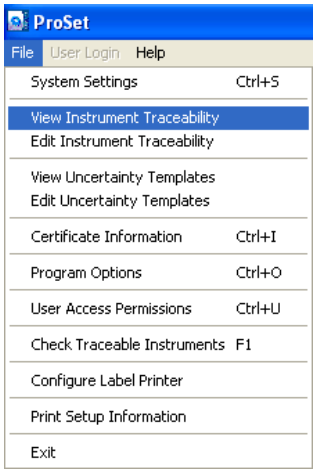

High DC Current.jpg


Low DC Current.jpg


RCD Time.jpg

A sample of connection diagram types available.

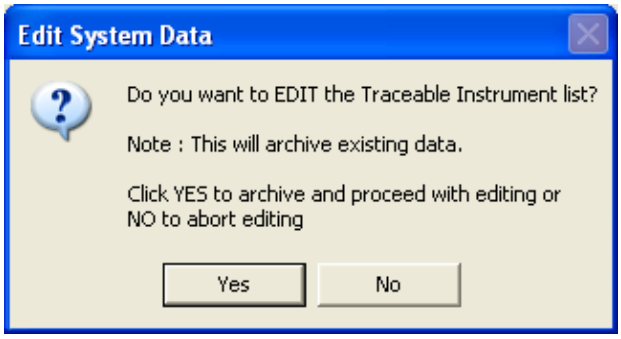
ProSet :: View / Edit Modes
Traceability & Uncertainty Templates



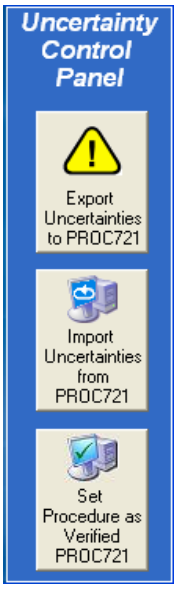
ProSet now includes two modes for Traceability editing and uncertainty template editing.

View mode only allows users to display information on-screen for view only – no changes can be made.

Edit mode will archive a complete copy of these data before allowing the user to edit the data. The user will be queried prior to performing this archive, but the archive must be made before editing is permitted.



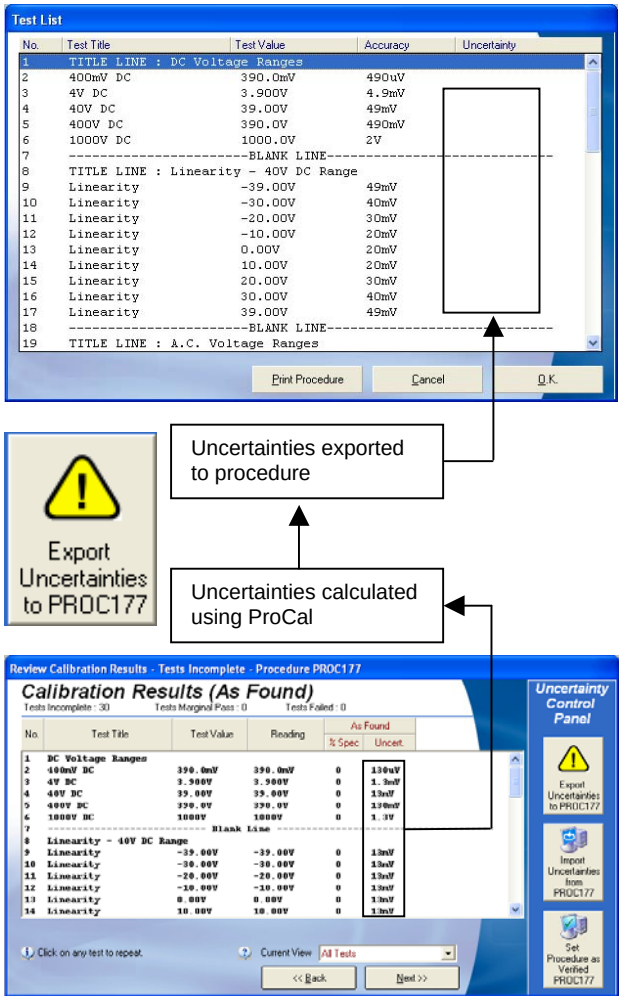
ProCal :: Uncertainties Export / Import



The export uncertainties function allows ProCal to 'lock' pre-calculated uncertainties as performed during a calibration to the specific procedure for the calibration.

This allows procedures to be pre-programmed with a 'typical' set of uncertainties.

The import function allows the uncertainties from a specific procedure to be loaded back from a procedure if required.



ProEdit :: Enhanced Instrument Control Command Set

A comprehensive set of commands are now available for advanced communication to and from instrumentation :

SHOWMSG <message>
Display a messagebox during command execution

HIDEMSG
Force message to hide
(else message is hidden after all commands run)

SOUND <path+filename>
Play a .WAV sound file

NOM=READ
Assign value read from interface (RS232/GPIB) to the test NOMINAL value

MEAS=READ
Assign value read from interface (RS232/GPIB) to the test READING value

CF=READ
Assign value read from interface (RS232/GPIB) to the CAL FACTOR variable

CALCREAD <formula>
Use a formula to modify the READING variable

CALCCF <formula>
Use a formula to modify the CAL FACTOR variable

TRIMREAD <leading,trailing>
Remove user defined leading and trailing characters from READING variable

TRIMCF <leading,trailing>
Remove user defined leading and trailing characters from CAL FACTOR variable

EXTRACTREAD <Start, No. of Chars> :
Extract a user defined string of characters from READING variable

EXTRACTCF <Start, No. of Chars>
Extract a user defined string of characters from CAL FACTOR variable

FORMATCF <image>
Format the CAL FACTOR variable with a user defined image

FORMATREAD <image>
Format the READING variable with a user defined image

RESTART
Restart the current test

GOTO <test No.>
Goto a specific test

Examples

@11 R1/O15/S0
Sends command R1/O15/S0 to instrument 11 in the traceability list

11 R1/O15/S0
Sends command R1/O15/S0 to GPIB address 11

COM2 R1/O15/S0>CR
Sends command R1/O15/S0 to COM 2

UUT R1/O15/S0
Sends command R1/O15/S0 to the UUT address

ProCal / ProCal-Track :: DYMO Label Template Folder Moved

The DYMO label default folder for ProCal and ProCal-Track has now been moved to a dedicated Label folder :

e.g. C:\ProCal\Labels (a local computer) or \\Server\ProCal\Labels (a network drive)