Software Programmers Manual

BLRT Editor

Version 1.000

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MODIFICATIONS

Issue	Date	Modified by	Modified Pages	Observations
1.000	14/Oct/2016	JP	All	First revision

Table of Contents

1 Before You Begin

1.1 Familiarisation

Before using the BLRT test system it is strongly advised that you read all of the manuals provided and ensure that you are familiar with the concepts in operating this form of test equipment

1.2 About This Manual

This manual is designed in such a way that a first time user of the BLRT system will, by following this manual be taken through the BLRT software in a logical manner. Those users more familiar with the BLRT may wish only to use this manual for reference.

2 Software User Interface

BLRT software has been written with the primary intention of being simple to use, the aim being that familiarisation is quick and consistent in its use. As such the software is split in to two major parts the BLRT/MK AT Editor and the BLRT Runner. The **Editor** is a desktop application that allows an operator to create test programs not only for BLRT but any MK test products. The **Runner** is designed more with the shop floor operation of connecting to and testing the UUT. Refer to the BLRT Runner Software Manual for information about running a test.

2.1 BLRT/MK AT Editor

On start-up you can select from the front screen what items you wish to edit / create. On the right hand side will be a list of items that you have recently edited.

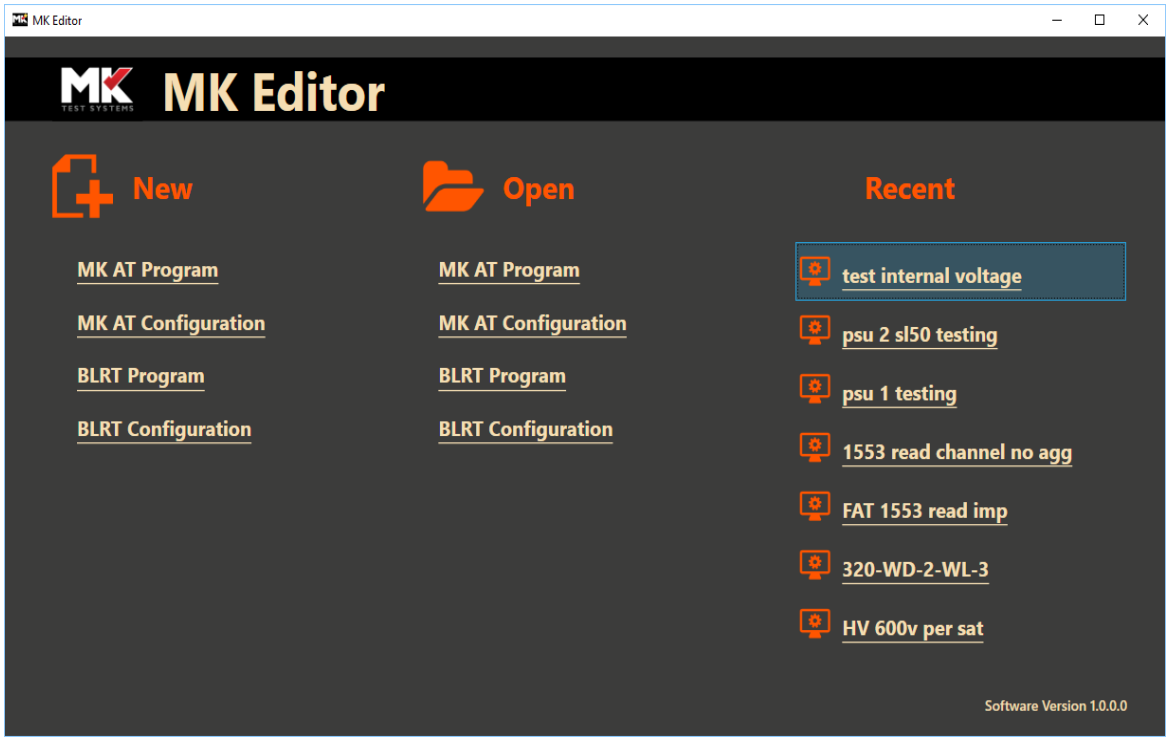

Figure 1: BLRT/MK AT editor main start up screen.

Within the “New” section of the screen you are able to create the various types of MK Software items – for BLRT you will be primarily interested in creating a “BLRT Program”.

2.1.1 Creating a program

When you select the “BLRT program” under the “New” column from the front screen you are presented with the following screen:

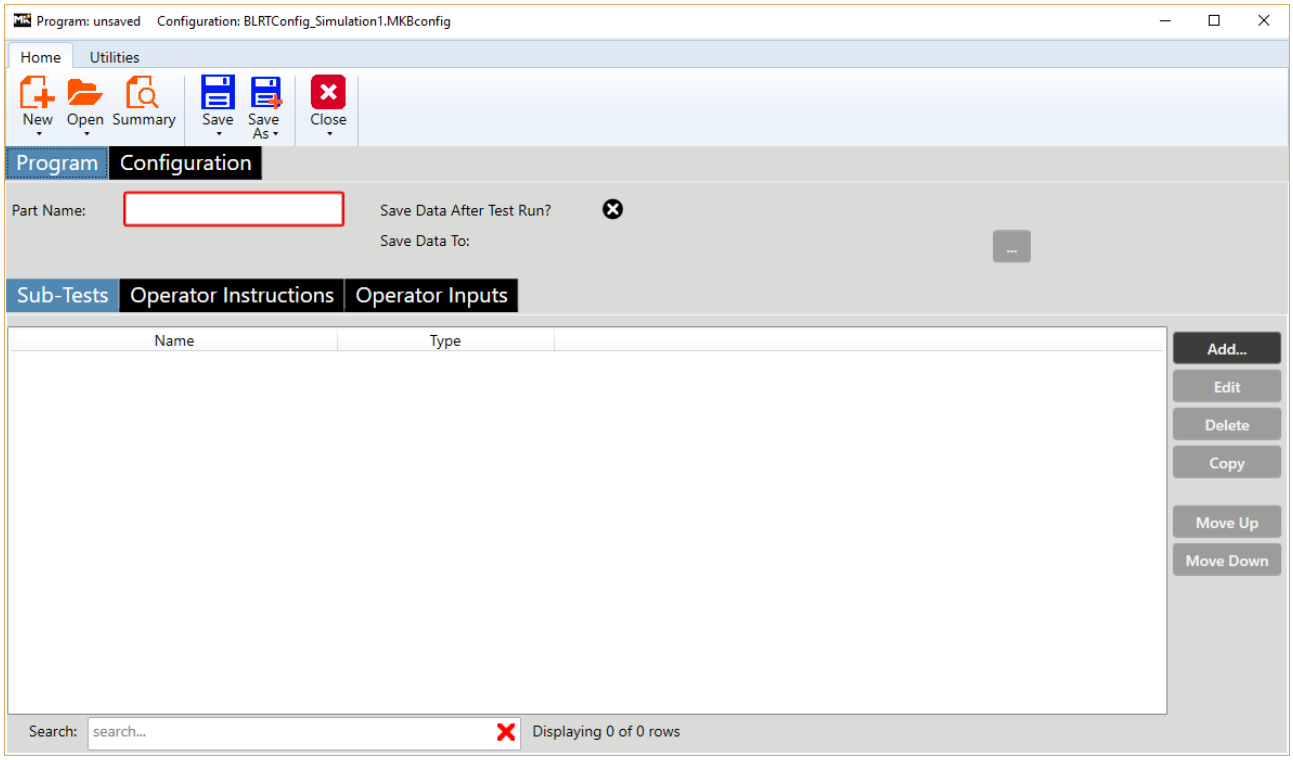

Figure 2: Main BLRT program creation screen.

On this main BLRT program creation screen you can set up a name for the test program and select options for automatically saving the results of a test after it has run.

The lower section of the screen contains multiple tabs for setting up the test parameters.

2.1.1.1 Sub-Tests

The first tab is the sub-test tab, this is where you can create and define the running order of subtests to be run against the UUT.

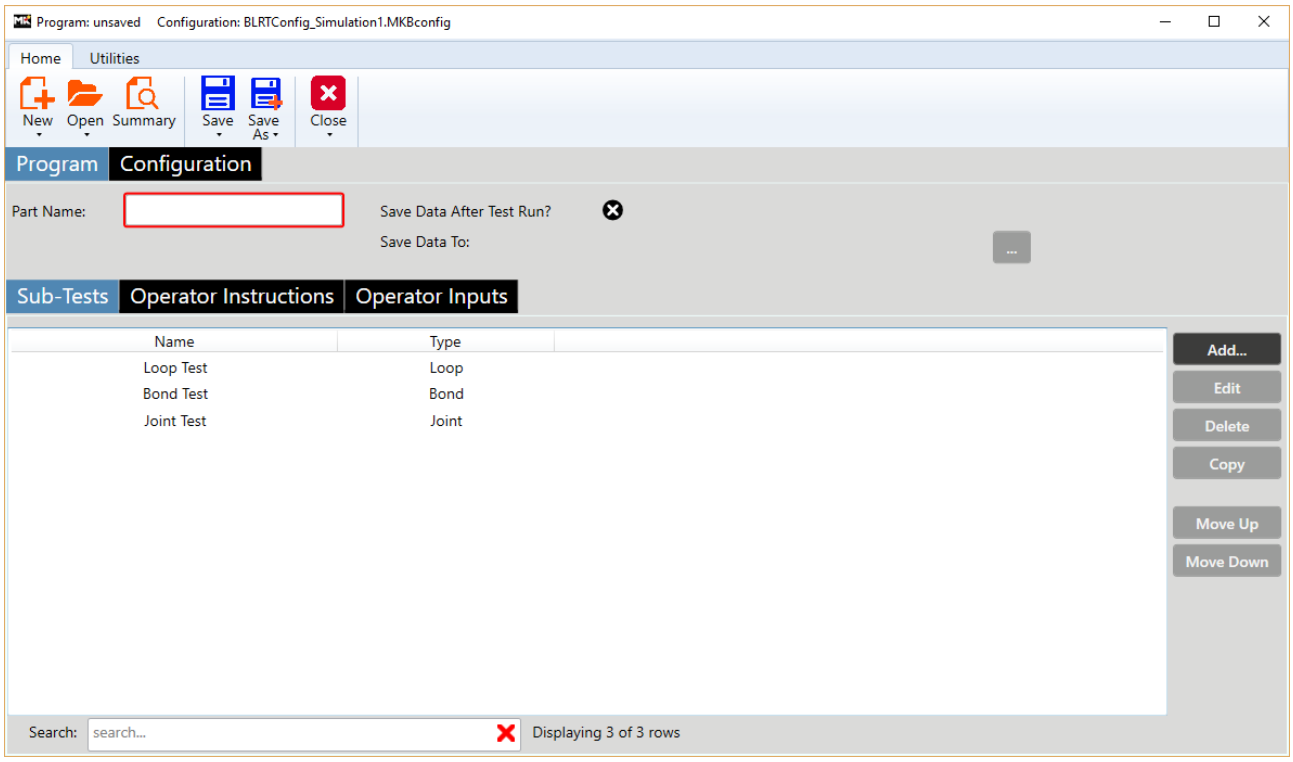

Figure 3: List of sub-tests created for this program, in the order they are to be run.

In the sub test selection screen you add, edit and delete a sub-test. You can also change the order in which they run (the order is from the top of the screen down in sequence).

2.1.1.2 Add/Edit Sub Test

When you “Add…” a new Sub-Test you will be presented with the Sub-Test Type screen, which allows you to specify a name for the sub-test as well as choosing the type of sub-test. To progress through the Sub-Test wizard you can either click “Next” in the bottom right-hand corner of the screen, or select the page to go to using the list selection on the left.

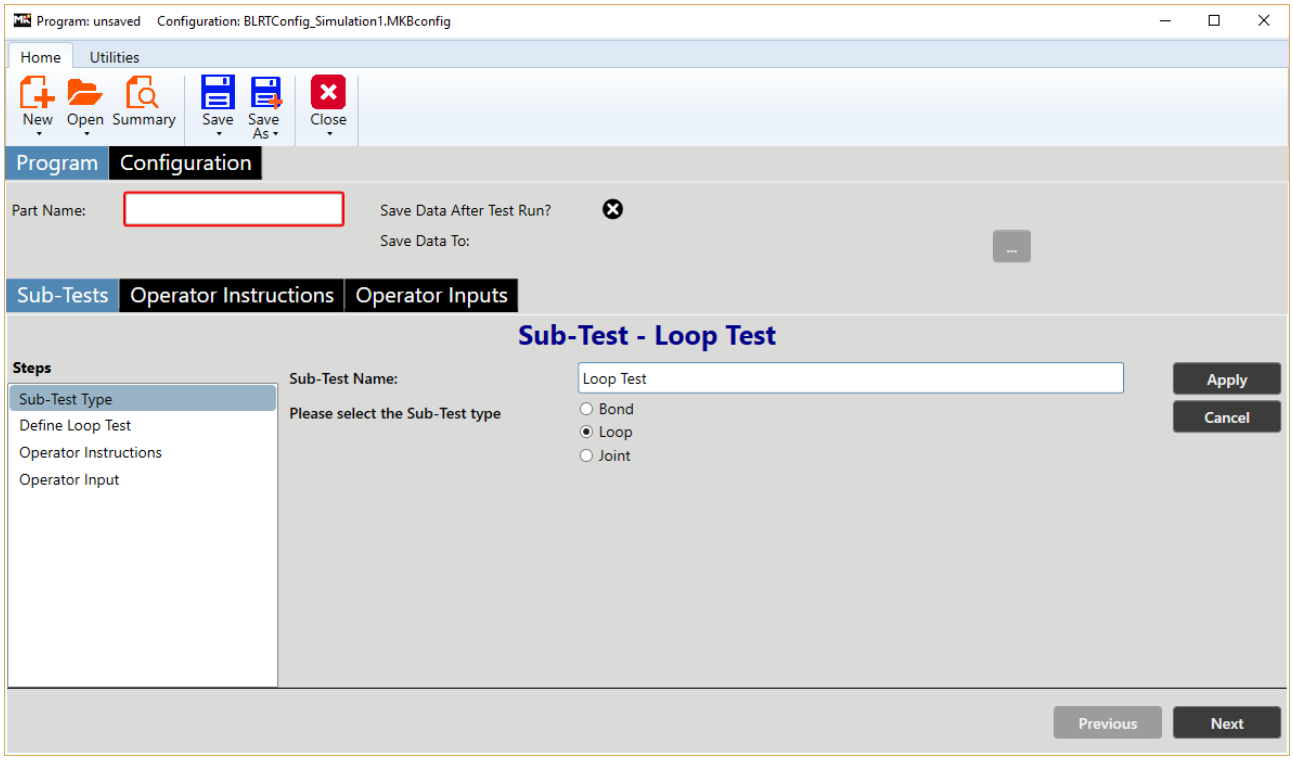

Figure 4: Add/Edit sub-test initial page

2.1.1.2.1 Define Loop Test

Within this page you can define a name for the loop you are measuring, as well as set lower/upper limits of the resistance you are expecting to measure. A measurement outside of these limits will record a failed sub-test when the test is run.

2.1.1.2.2 Define Joint Test

Within this page you can define a name for the joint you are measuring, as well as set lower/upper limits of resistance. A measurement outside of these limits will record a failed sub-test when the test is run.

2.1.1.2.3 Define Bond Test

Within this page you can define a name for the bond you are measuring, as well as set lower/upper limits of resistance. A measurement outside of these limits will record a failed sub-test when the test is run. Additionally, you will need to specify a current that the Bond test should operate at.

2.1.1.2.4 Operator Instructions – Assigning to Sub-Tests

This screen allows you to add operator instruction to the sub test. There can be more than one operator instruction attached to a sub-test. The operator instructions you can select here must have been previously defined in the Operator Instructions tab. Each instruction can be shown at the start of the sub test (Pre sub-test), when the sub test fails, when the sub-test passed or always when the sub-test ends.

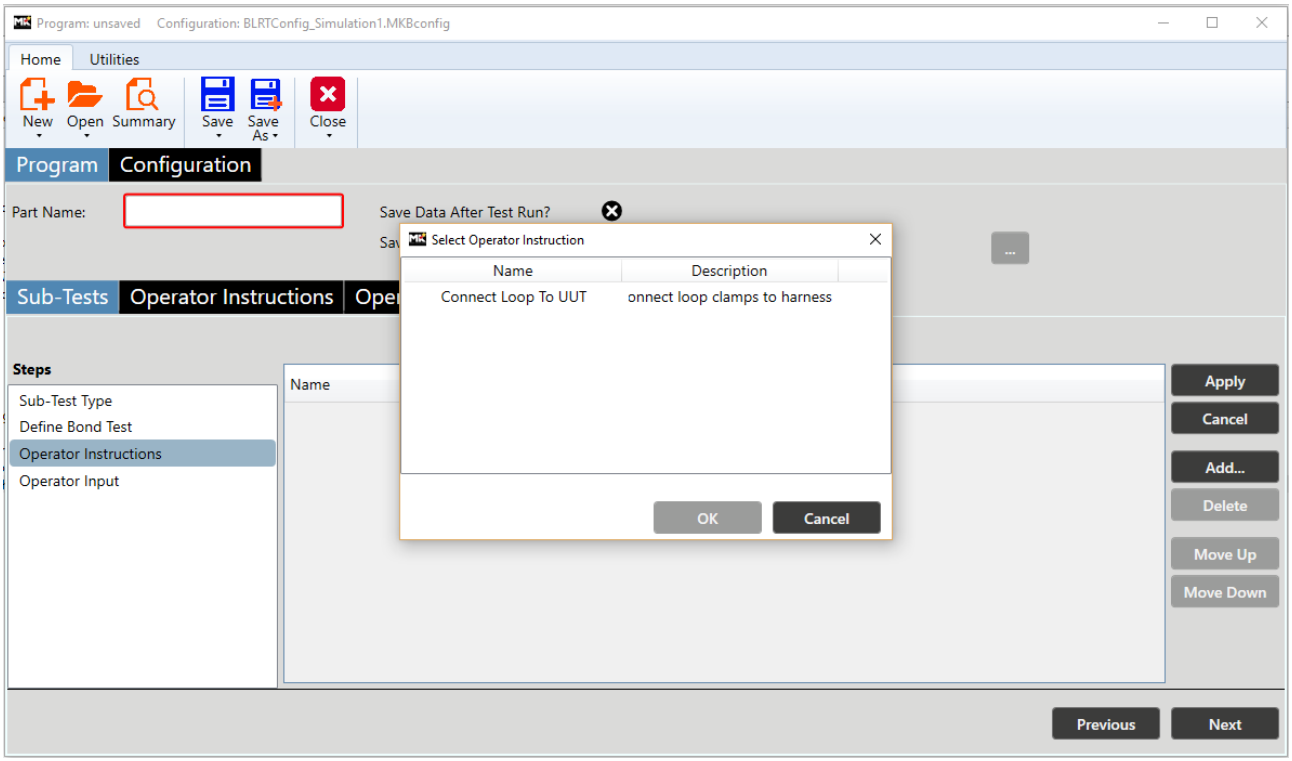

Figure 5: Selection of the operator instruction to be added to the sub test.

2.1.1.2.5 Operator Input – Assigning to Sub-Tests

This screen allows you to do the same as the operator instruction screen but this time for operator inputs.

2.1.1.2.6 Sub-Test complete

Once you have finished defining the sub-test you must click the “Apply” button, or “Finish” if you are on the last wizard page.

2.1.1.3 Adding operator instructions

Operator instructions are embedded rich text documents; the initial screen shows you a list of operator instructions that you have defined within this test program. Each operator instruction can be used any number of times across the subtests. When adding instructions to a subtest you can define when they are shown (pre-subtest, post-subtest, post-subtest when failed, post-subtest when passed).

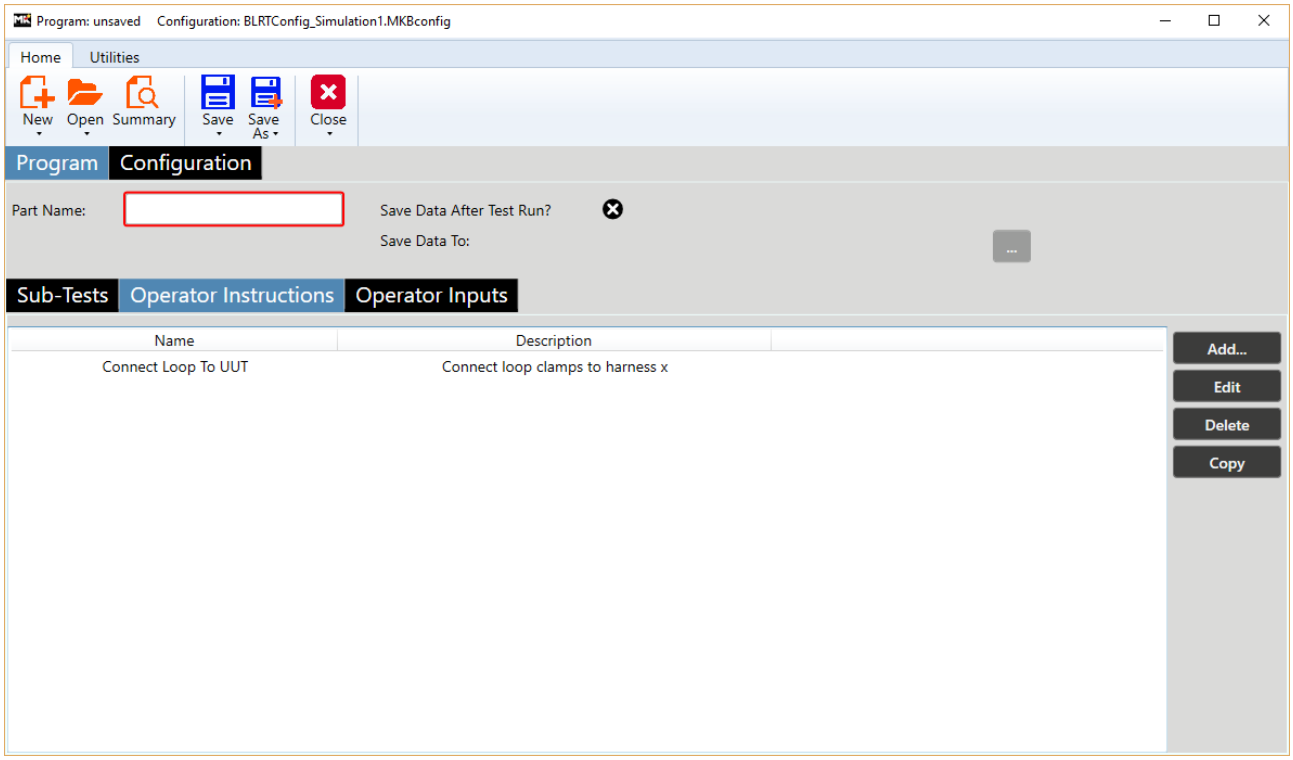

Figure 6: List of operator instructions available to program.

2.1.1.4 Adding operator inputs

There are 3 types of operator input, and for each type you enter the question / message that the operator will be presented with along with the data entry field appropriate to the type of data required. The detail of the inputs types follow:

- Text input. This is a simple non-validated data entry.

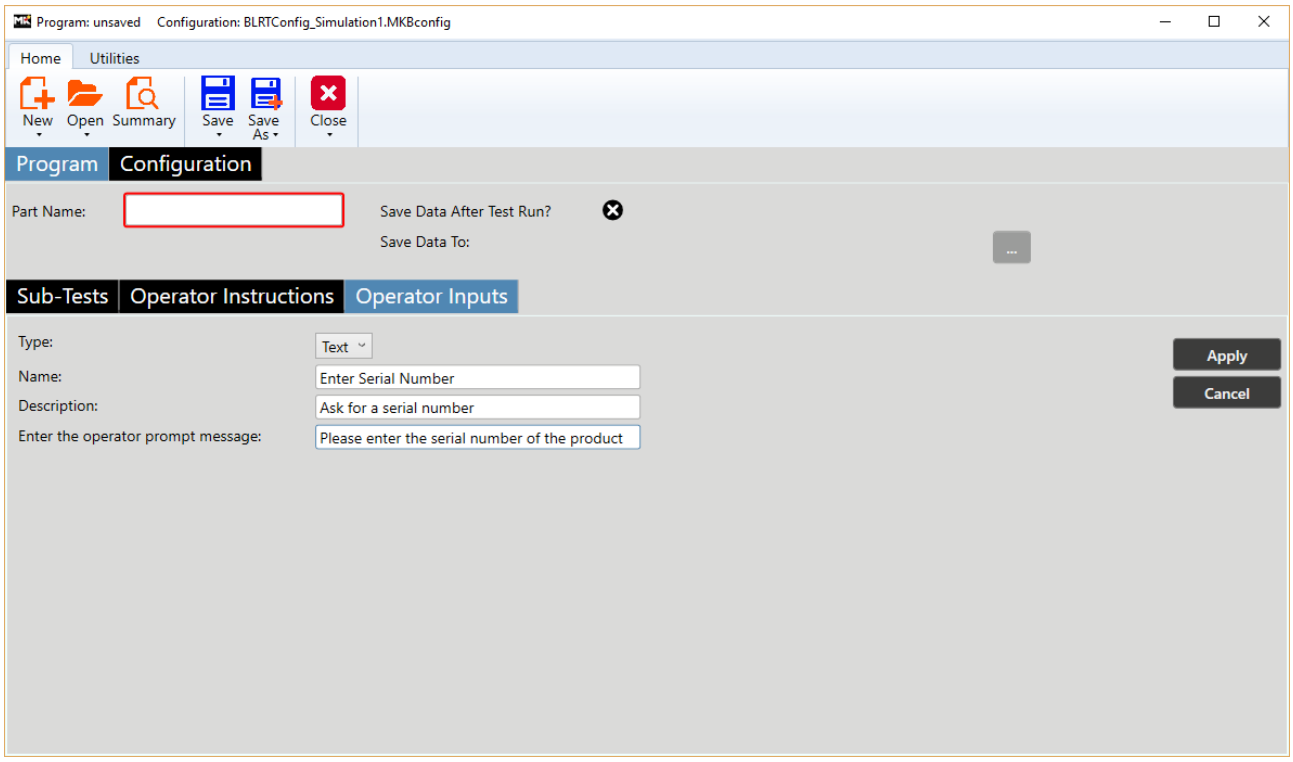

Figure 7: Setup for asking a simple text based operator input.

- Value input. This allows a subtest to pass / fail if the value it outside the limits specified. You can specify the type of limit to be applied as shown in the following screen shot.

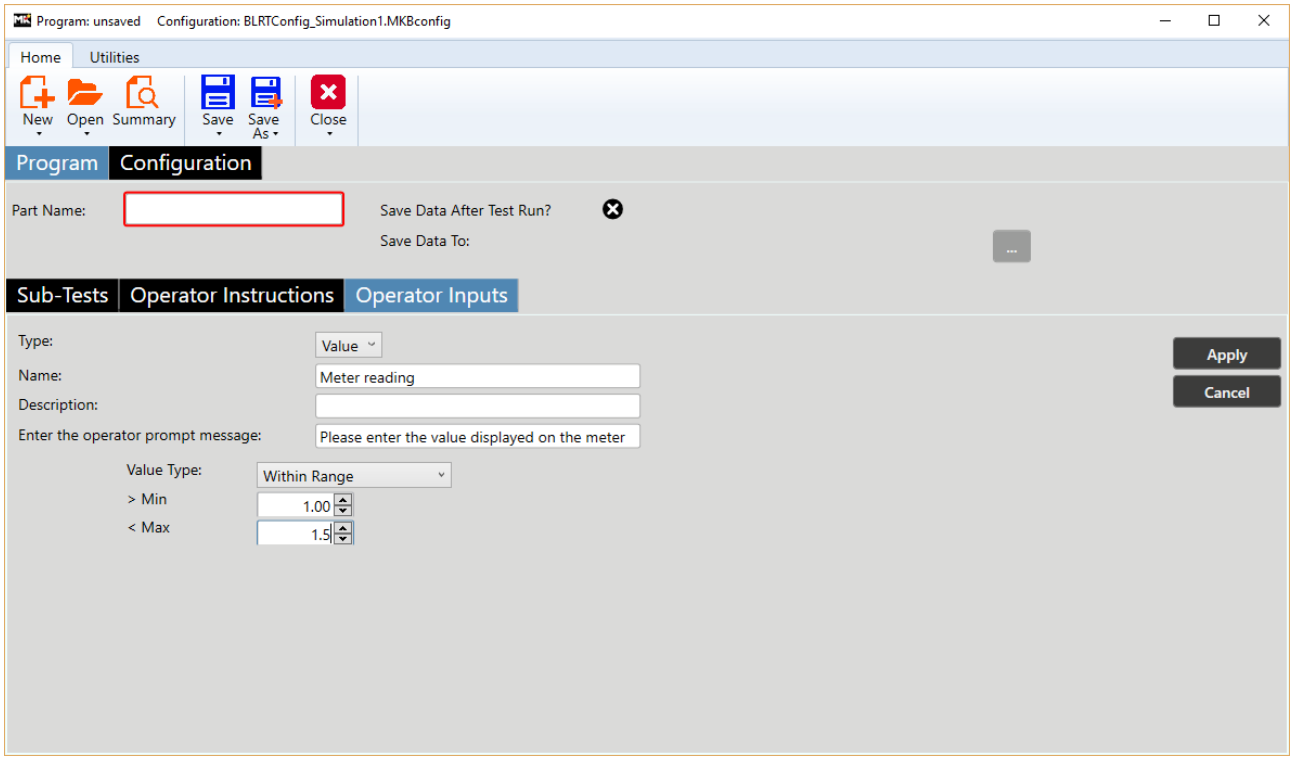

Figure 8: Value input setup. Values can be tested within limits, > Value, or < Value

- Question and Answer: The operator can select from the answers provided, each answer can be a test pass or a test fail. You can have as many pass or fail answers as you require.

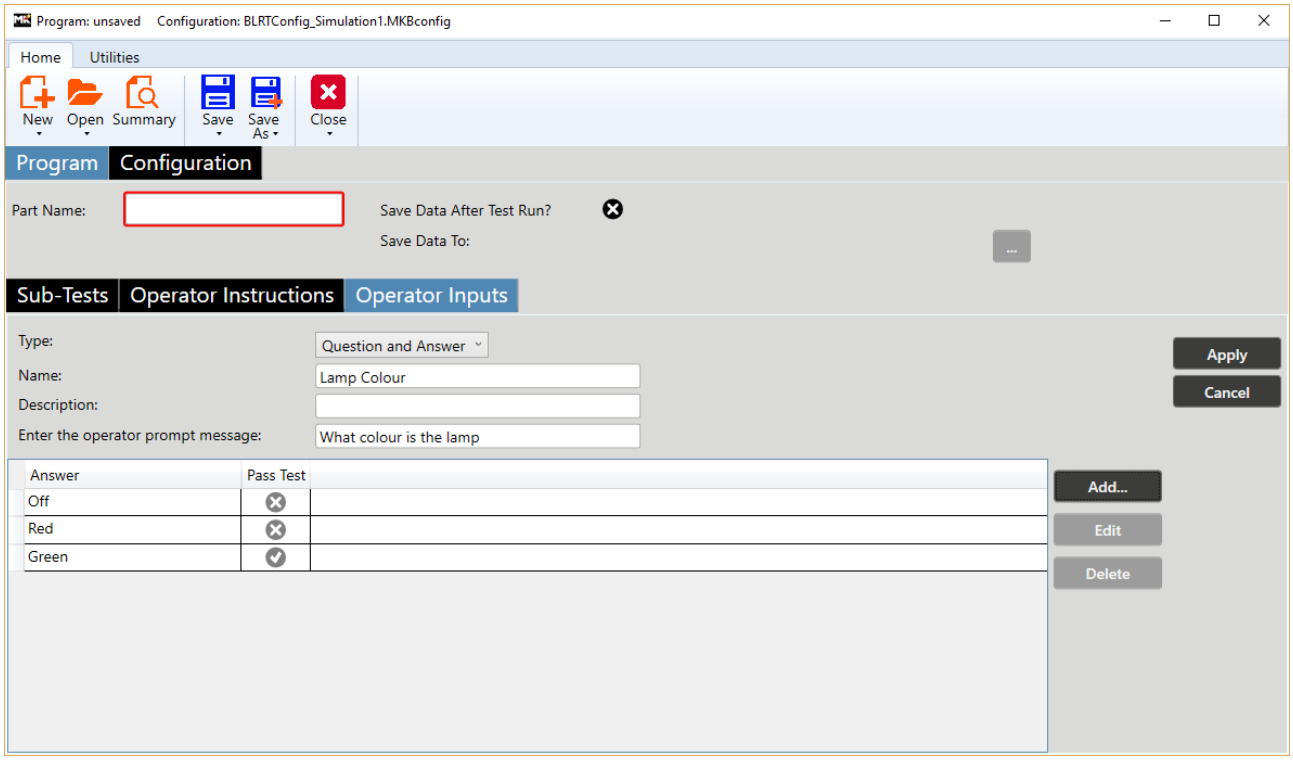

Figure 9: Question with many answers, each can be used to determine sub-test pass / fail state.

2.1.2 Saving your changes

After making any changes you will need to save the test program. You can do this by choosing Save->Program from the ribbon menu. For changes to be saved correctly you must ensure that you have clicked “Apply” on each of the sub-sections (Sub-tests, Operator Instructions and Operator Inputs)