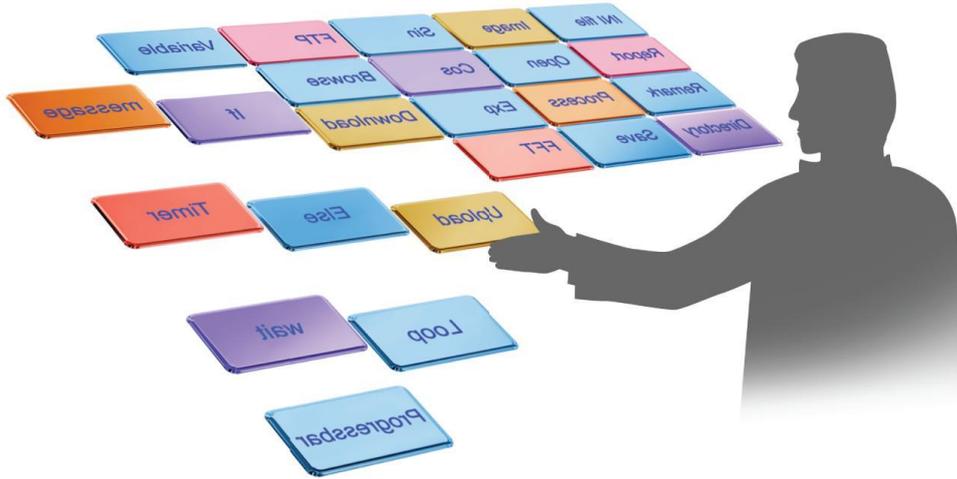2023

OTM Quick Guide

OTM Version 2.106.0.0

January 2023

Doc Version: 2.0.1

Support: +972-9-7454172, +972-50-6870011

Contents

1 Introduction

OTM is a codeless application software that allows non-developer users to develop, execute and archiving tests.

1.1. Preface

The OTM is a codeless Test Manager.

Each test consists of test steps that represent the individual actions a user must take to complete the test. These steps are written in the OTM.

Each step invokes a C# DLL function.

The OTM has built-in frequently-used steps such as delay, message boxes, mathematical functions, and string functions.

The OTM also has built-in flow control structures like IF and WHILE.

Each execution is automatically inserted into the database as raw data and can be located using one or more filters.

The OTM generates a report of the execution in **PDF** format.

The highlighted features of the OTM are as follows:

- Write tests in minutes – no compilation required.
- Execute and debug tests with just a few clicks.
- Database logging.
- Built-in Report Generator.
- Concurrent UUT execution.
- User-Friendly interface.

1.2. General Terms

- UUT - Unit Under Test
- Test – A set of individual actions that the user must take.
- Step – An action performed within a test.
- Sequence – A specific order of tests that comprise a UUT procedure or run.
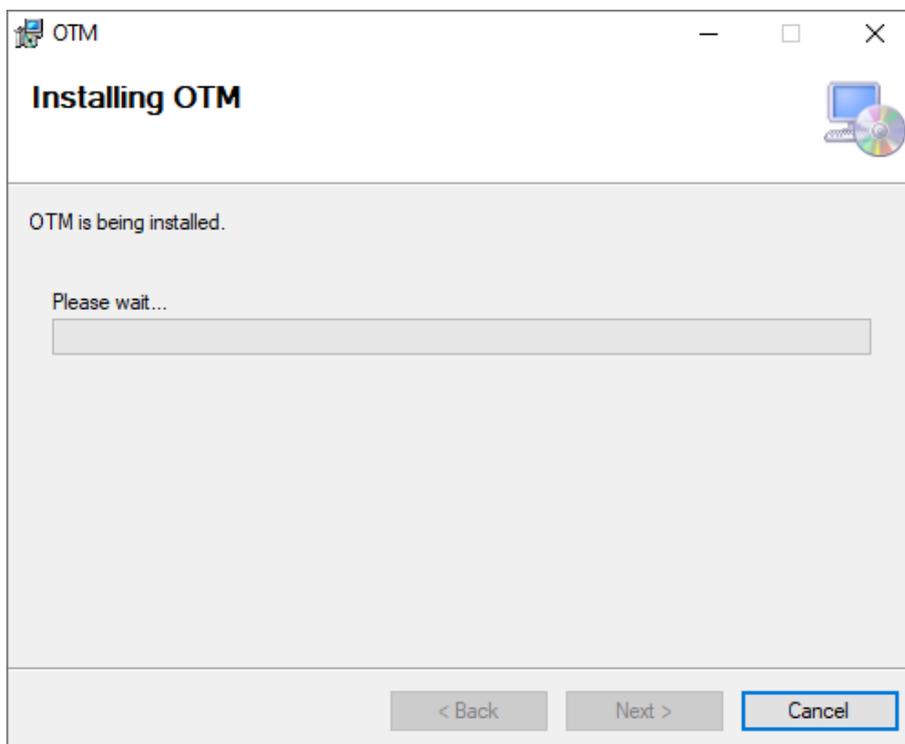
2 OTM Installation
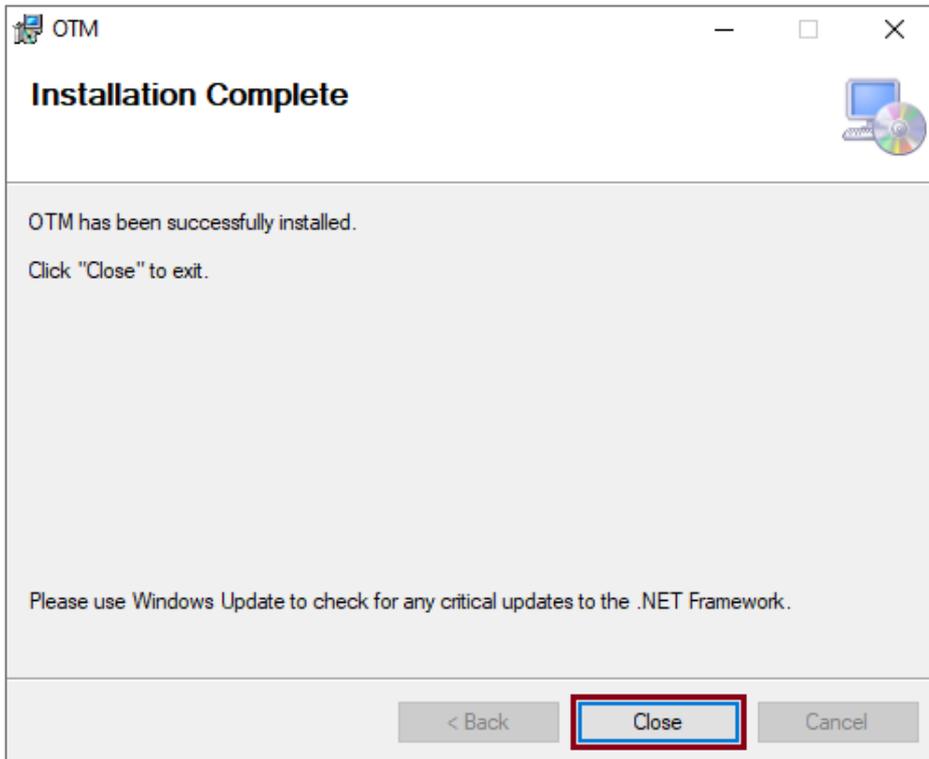
1. Open the OTM package.

2. Go to the **Setup** folder and click on the **setup.exe** file**.**

3. *The* OTM Setup Wizard will *open.* Follow the setup instructions to install the OTM:
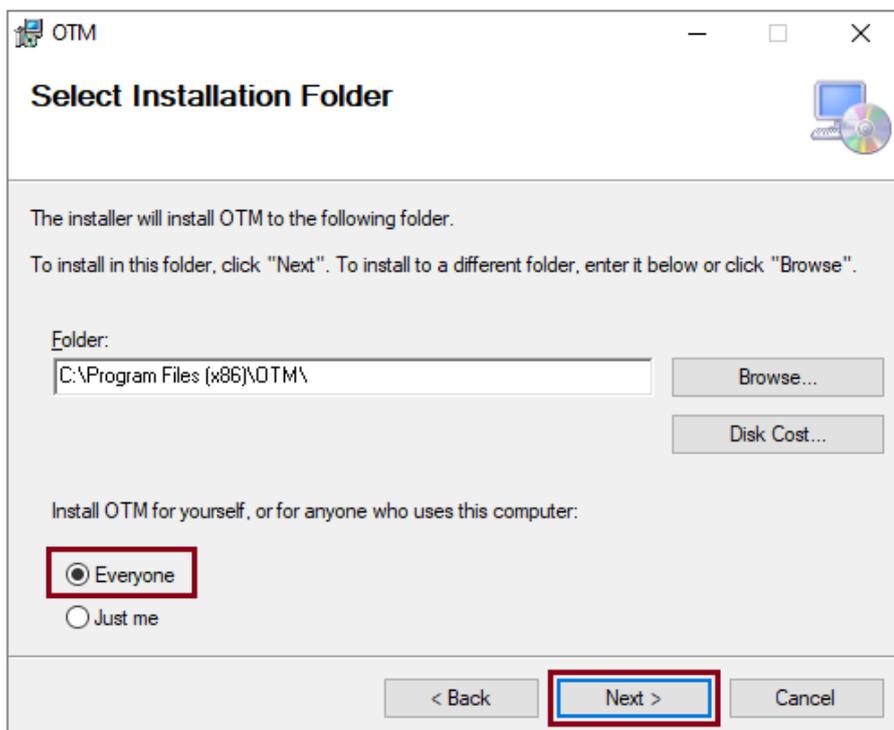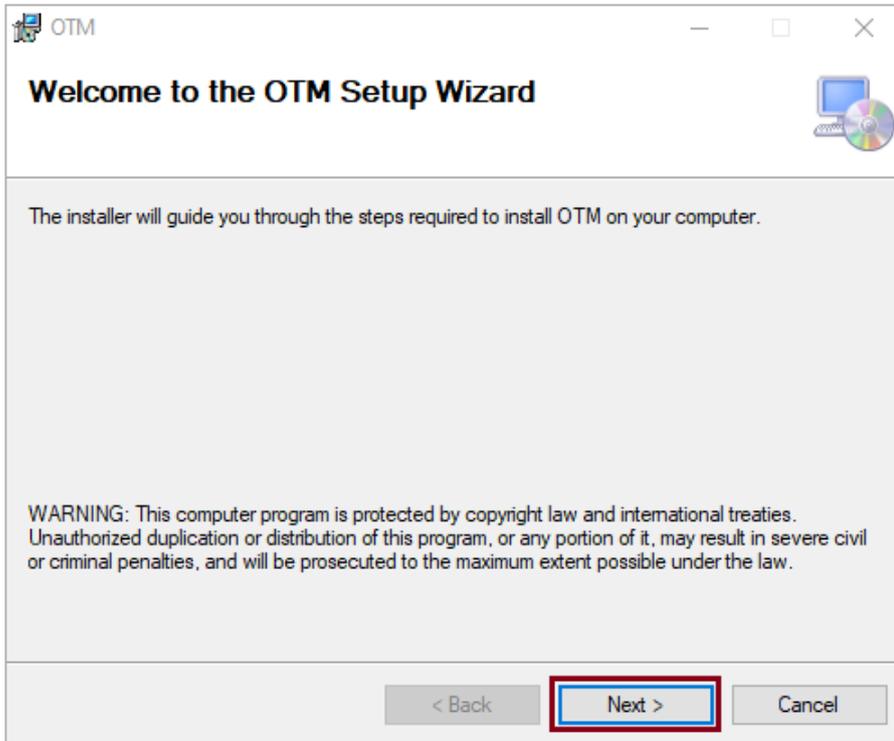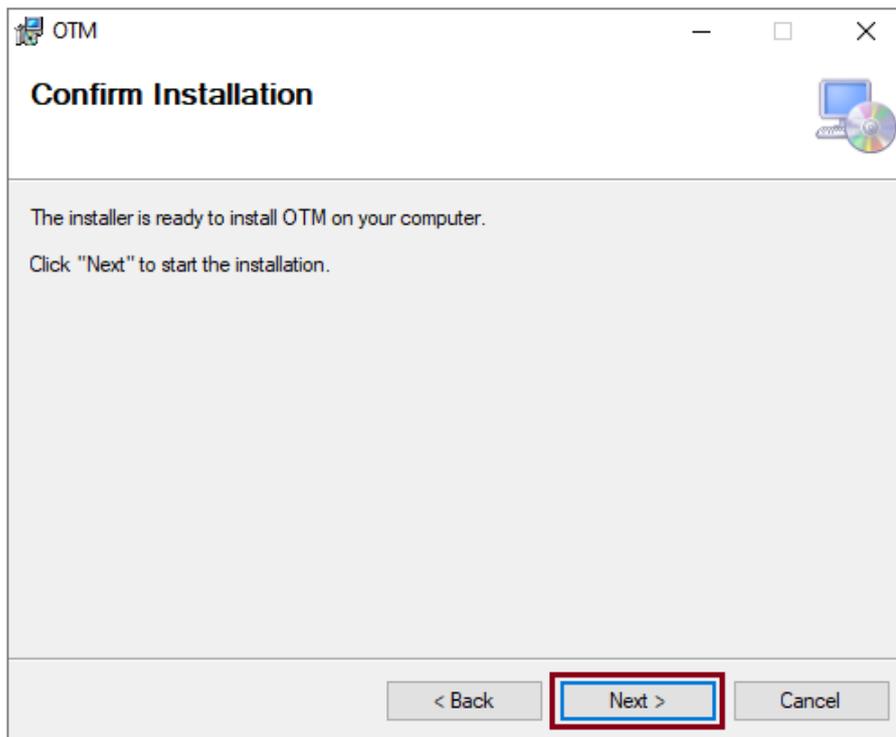
Wait for the installation process to complete.

4. Copy the DLL files used by the OTM drivers to the following locations:

   - For **Windows XP & windows 7 32**-bit: C:\Program Files\OTM\Programs.

   - For **Windows 7 & Windows 10 64**-bit: C:\Program Files(X86)\OTM\Programs.

   For example, if the OTM drivers are using the NI drivers, you should copy the files:

   NationalInstruments.Common.dll and NationalInstruments.DAQmx.dll to the 'Programs'

   folder mentioned above.

5. Install Adobe Reader.

6. Activate your OTM license.

   6.1 Launch the OTM application .

   The Registration dialog will open and the OTM will generate a machine code (Fig 2-1 **A**).
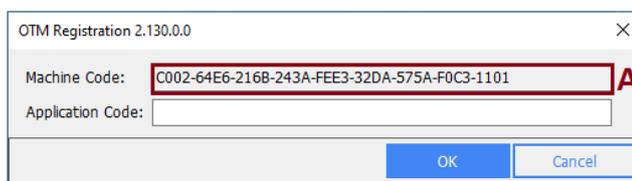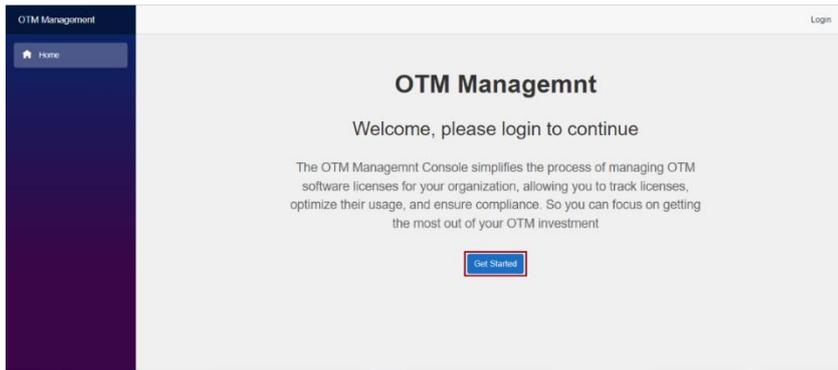

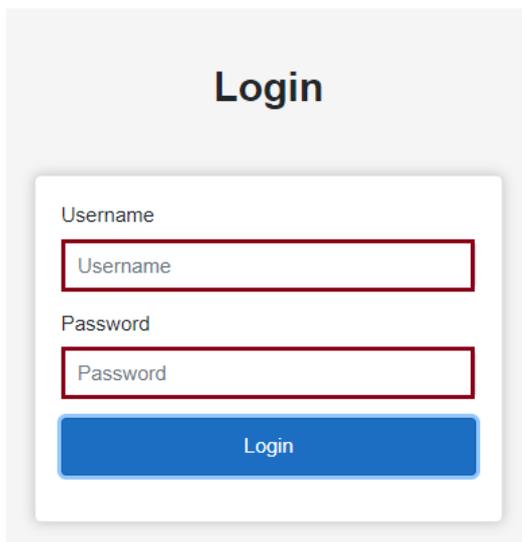   Fig 2-1 **OTM Registration** dialog

   6.2 Click on the following link to enter your license details:

   /https://otm-management.azurewebsites.net
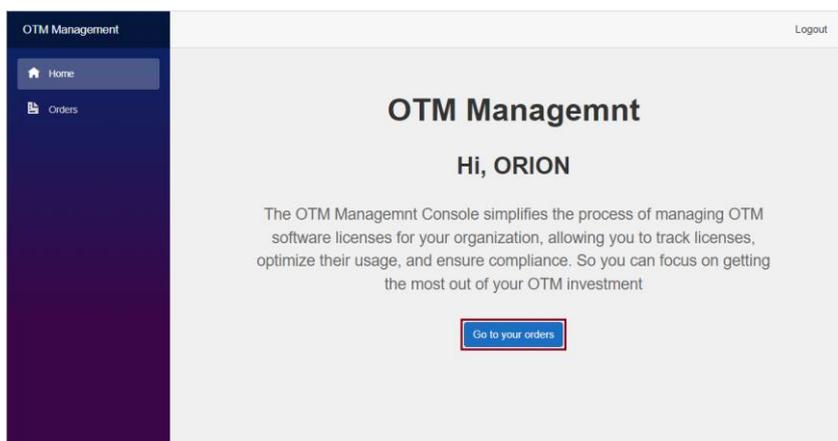
   The OTM management page will open.

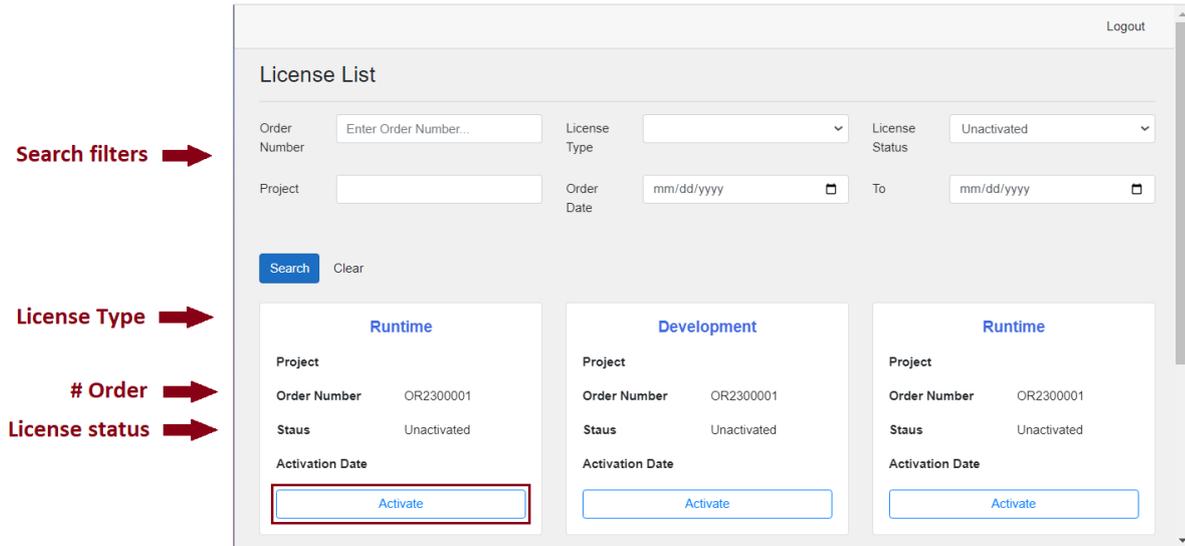6.3 Select 'Get Started' or 'Login'.

Login screen will be displayed.

6.4 Enter your username and password (you will receive them by e*mail) and click **Login**.*

If you haven't receive your username & password, send a request to email address:

ronen@orion-software.co.il .

Welcome page will open.

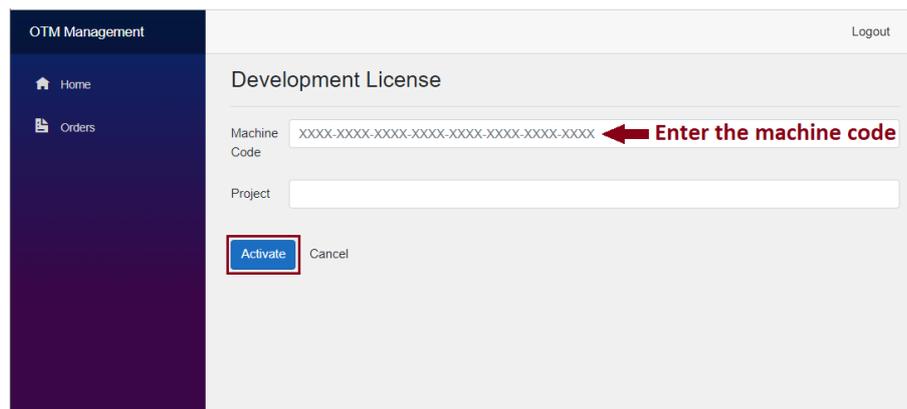6.5 Click on 'Go to your orders' or 'Orders'.
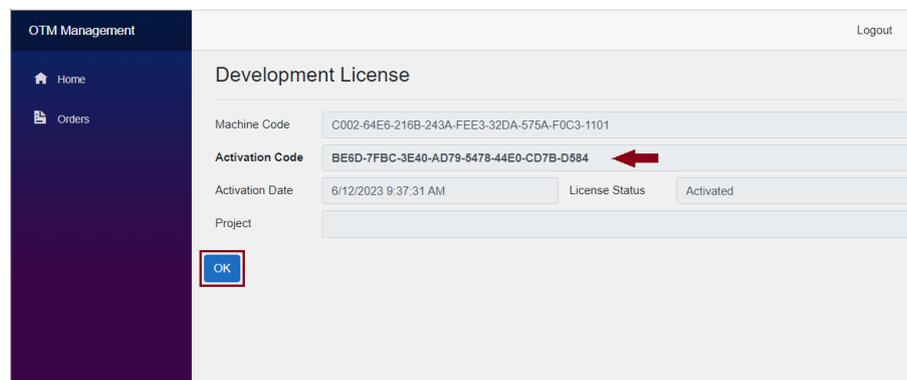
The License List screen will open.

6.6   Find the license you want to activate and click the 'Activate' button.

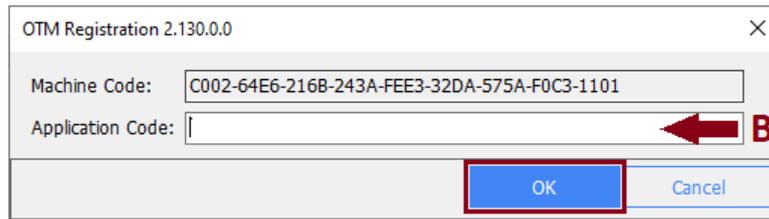The following screen will open:

6.7   Enter the machine code from the OTM Registration dialog (Fig 2-1 **A**) – refer to
paragraph 6.1 above, and click **Activate**.

The following screen will open:

An 'Activation code' license is returned.

6.8   Copy the activation code and return to OTM Registration dialog.

Paste the code in the 'Application code' field (**B**) and click OK.

The following message is displayed:
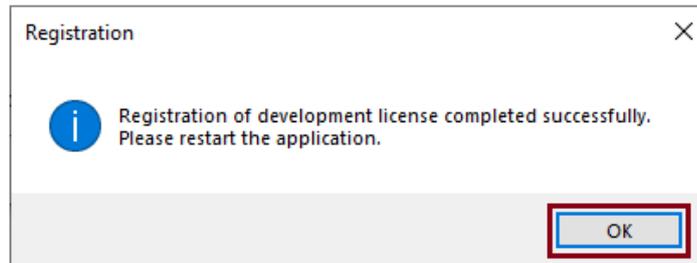
6.9   Click OK to complete the registration.

Click Logout to exit from OTM management.

Before logging in, please check the security.

7. Security check.

7.1.   Go to C:\ProgramData\Orion\OTM.

7.2.   Highlight the OTM folder and right-click the mouse.

From the popup menu, select **Properties**.
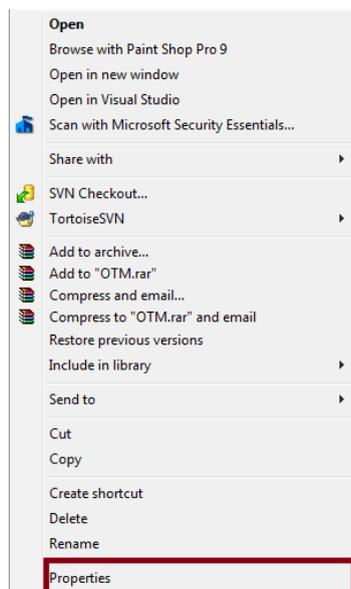
7.3.   **OTM Properties** will open.

- Click on the **Security** tab (1).

- Select the login user from **Users** (2).

- Click on **Edit** (3).
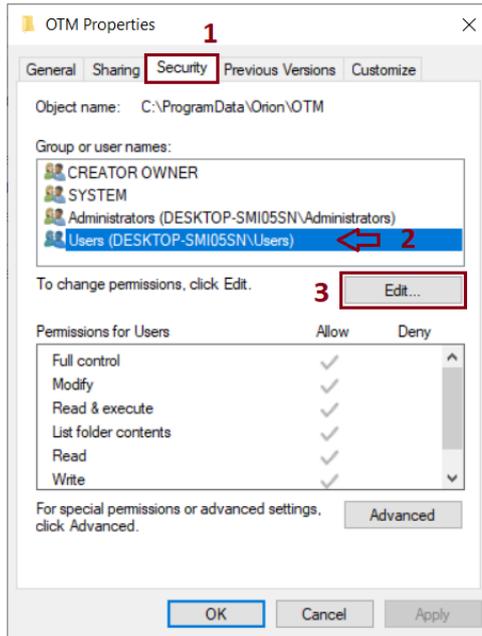
7.4.   The **Security** page will open.

- Select the login user from **Users** (1).
- Check that the user permission "Full control" is enabled (2).
- Click **OK** (3).

- Click **OK** (3).

To Login to the OTM, please refer to the detailed login process provided in the next chapter.

3 Login

After the installation is finished, launch the OTM.

1. Select the OTM icon ⬛ from the desktop.

   The OTM login window will open.
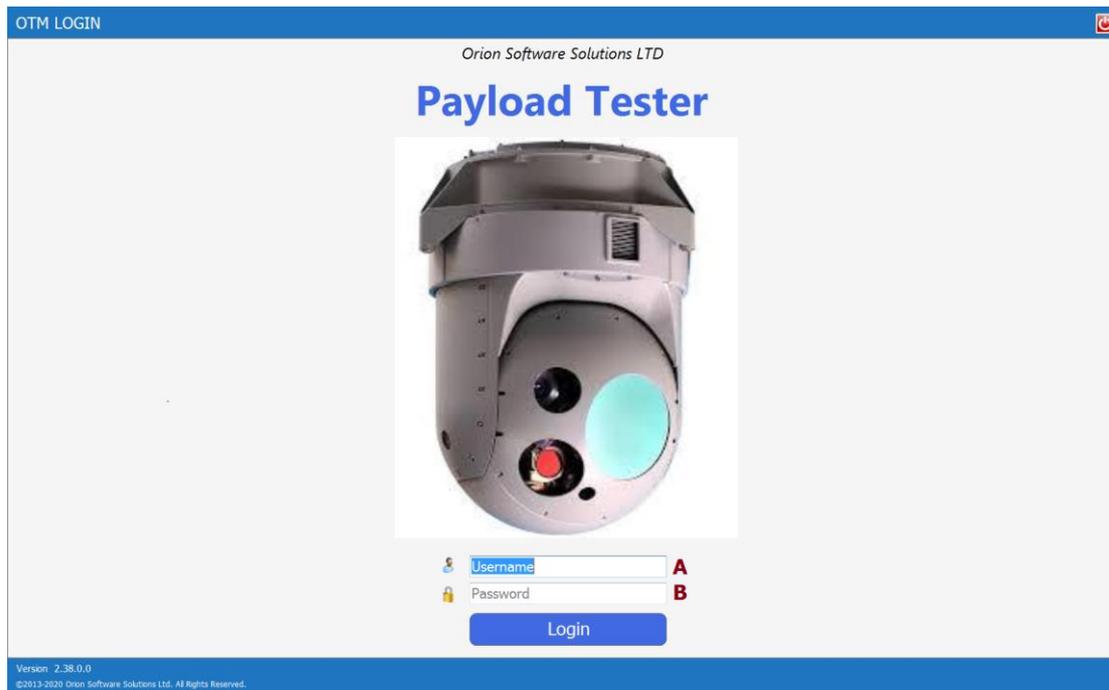
2. Enter your login credentials: username (A) and password (B), then choose one of

   the following options:

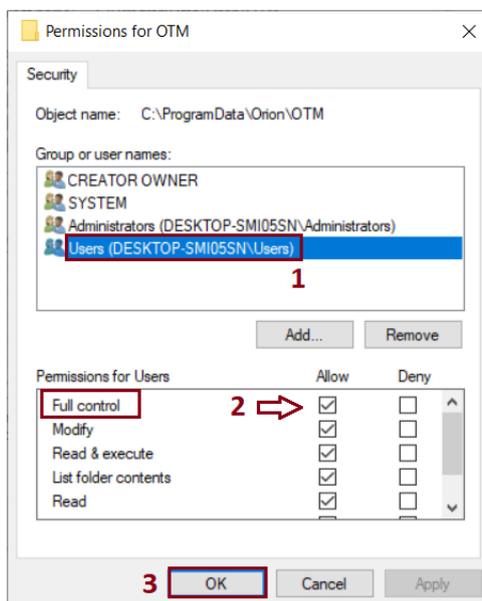   2.1. Enter the username and password provided by your your administrator.

   2.2. Alternatively, you can use the default values:

   ▪ Username: ORION

   ▪ Password: 1234

3. Click on the '**Login**' button.

4. Once you have logged into OTM, you will see the main window.

4 UUT

Unit Under Test (UUT) refers to the object that is being tested. It is a collection of tests designed to validate the functionality of the unit being developed.

OTM provides the option to create a new UUT or restore an existing one.

You can choose between these two methods.

4.1. First UUT

If no-UUT is defined.

- The main screen displays as shown in the screenshot below.
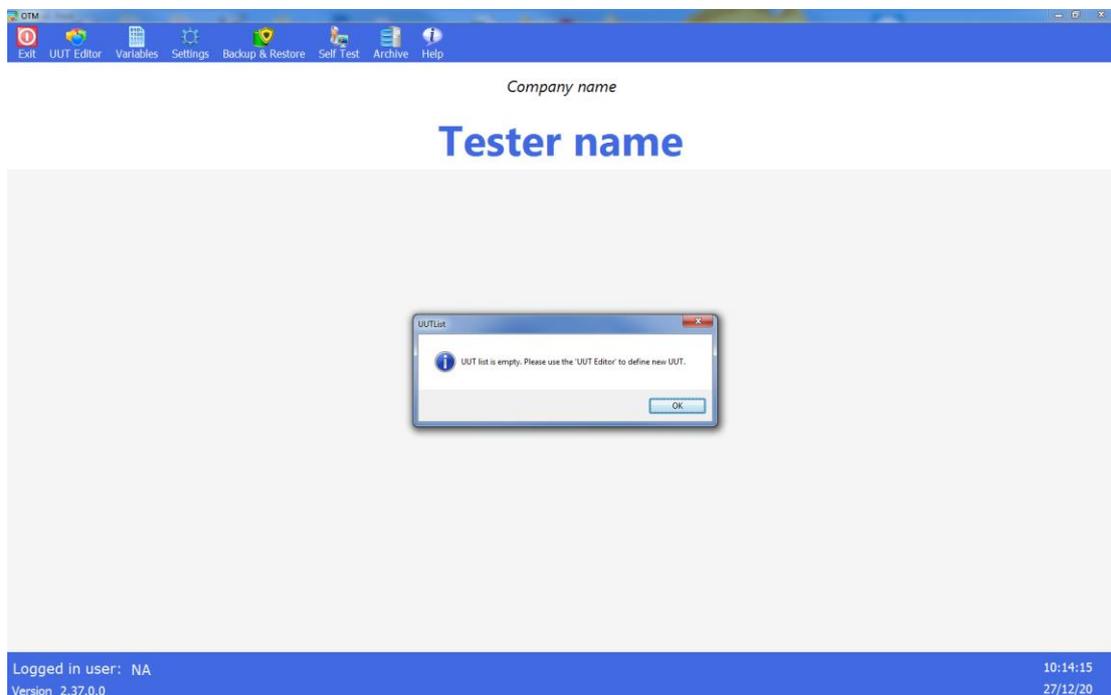
- The main screen displays the following message:
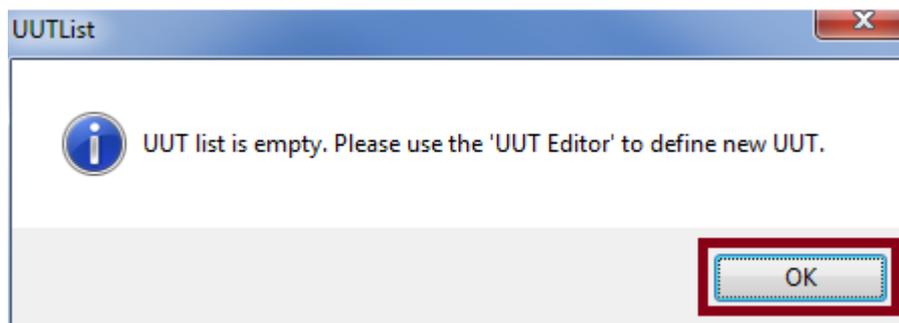
- Click **OK**.

4.2. Adding UUT

1. Go to the **Main** window and select **UUT Editor.**

The **UUT Editor** window will open**.**
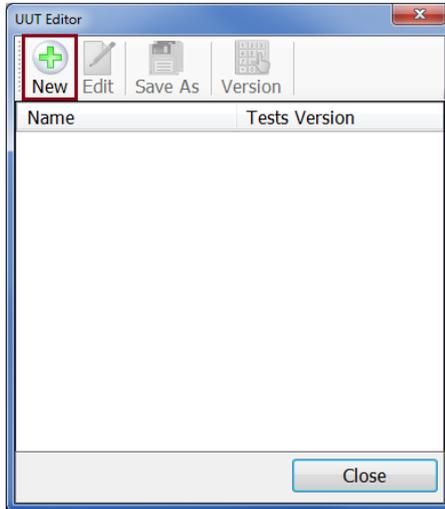
2. Click the New button.

The **UUT Settings** screen is shown.

3. This screen has the following options:

   ▪ Provide the necessary details in the UUT Settings window.

   Enter the UUT Name – B (required).

   ▪ All other fields are optional:

      ▪ General tab → Self-test checkbox.

      Check the 'Self Test' checkbox to designate the UUT as a self-test.

- General tab → add a remark or picture for the UUT or select the option for running multiple UUTs.

- Properties tab → add or remove properties for the UUT.

- Cycles tab – execute multiple executions of a UUT.

■ Click **OK**

The new UUT is now visible on the main window.

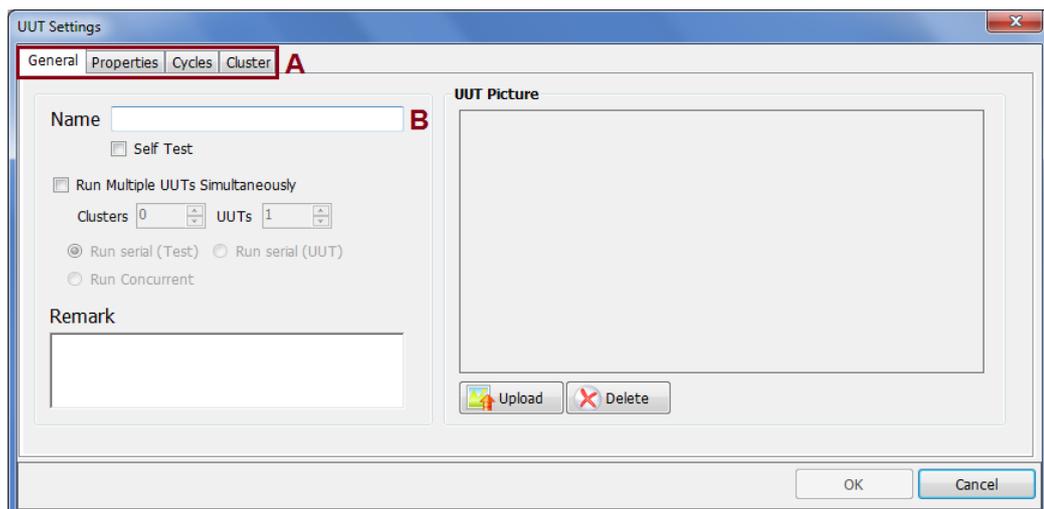To complete the UUT definition, it's necessary to create a test, as explained in section 6.

4.3. Restoring UUT

OTM provides the option to load a previously saved OTM database file.

1. Go to the **Main window** > click on **Backup & Restore** in the toolbar.
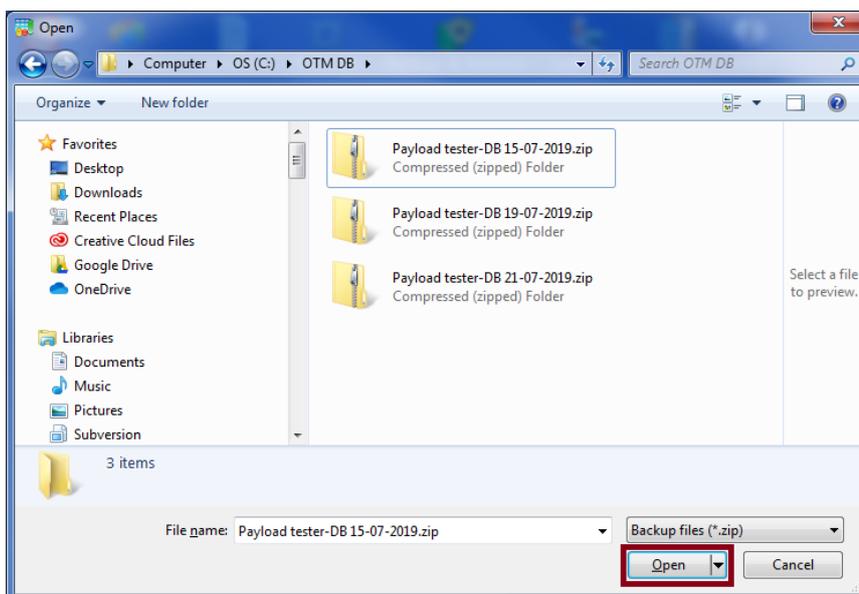

2. Select **Restore** from the dropdown menu.

The **Open** window will open.

3. Navigate to the location where the database backup is stored.

💡 Make sure that the database version you are restoring is the correct backup.

4. Select the file you want to restore and either double-click it or click the 'Open' button.

The **Restore Manager** screen will open.

5. The **Restore Manager** screen will display the content of the backup file.

5.1. Use the checkboxes to select the items (UUT/OTM drivers) you want to restore.
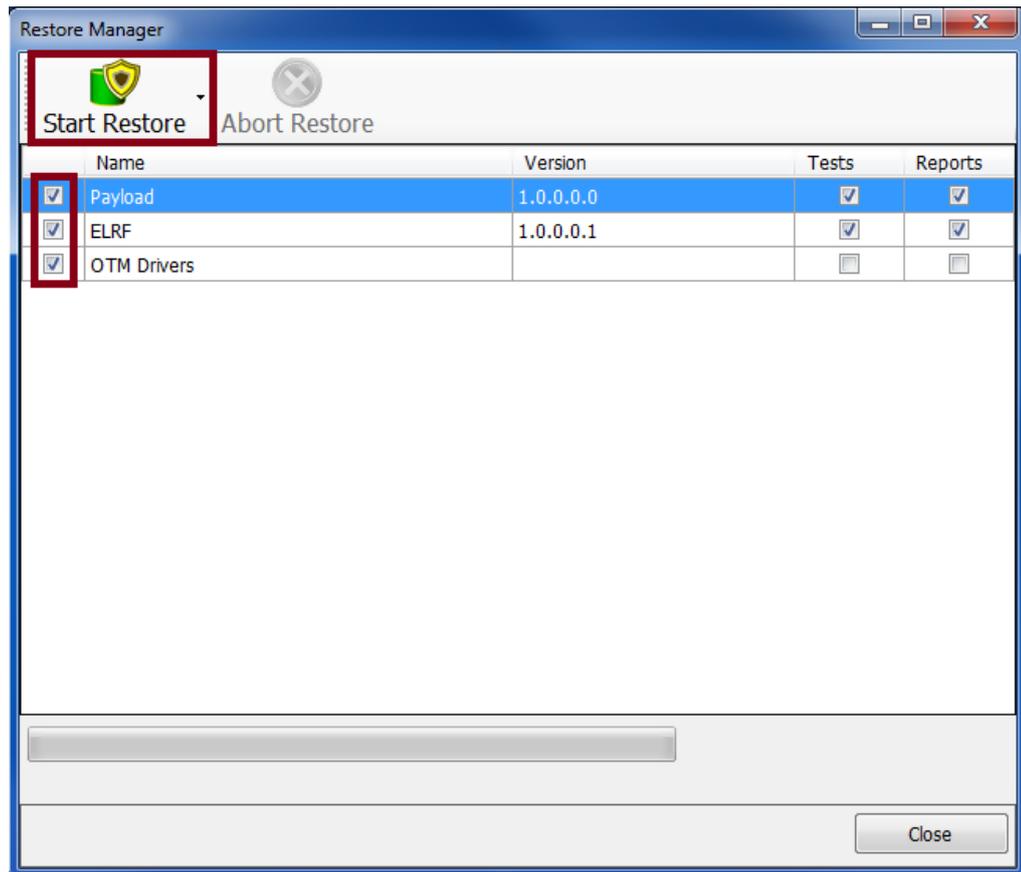
5.2. Click the **Start Restore** button.

A warning dialog box will be displayed indicating that the restoration process will overwrite the current OTM management data with the restored backup.

6. The first OTM warning message:

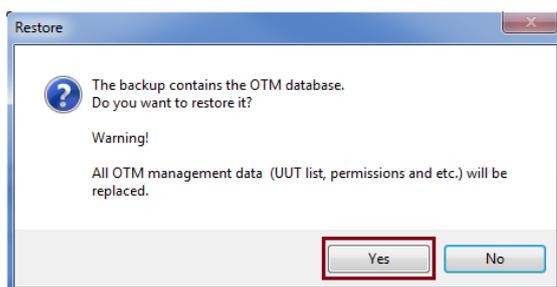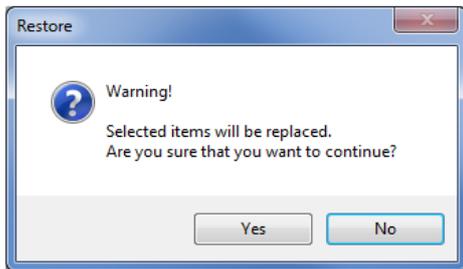| Button	Description
Yes	▪ Click it if this is the first database. ▪ To to perform the restore process and overwrite the OTM database (OTM.mdb) and the OTM management data.
No	To continue the restore process without replacing the OTM database (OTM.mdb) and the OTM management data.

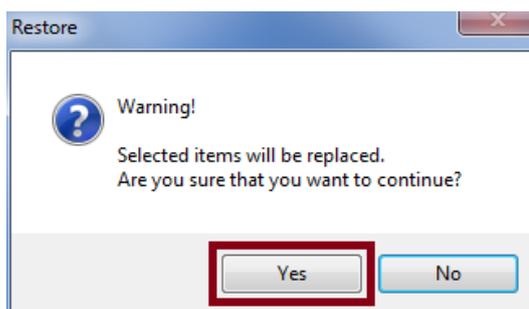A second warning dialog box will be displayed to emphasize that the restoration process will overwrite the current OTM database.

7. The second OTM warning message:

Button	Description
Yes	▪ Click it if this is the first database. ▪ To Start the restore process.
No	To cancel the restore process.

▪ In case of first database click **Yes**.

OTM Quick Start

> 💡 Click the '**Abort Restore**' button to stop the restore process.

Once the restore process is completed, a confirmation message will be displayed

8. Once the restore process is completed, a confirmation message will be displayed:
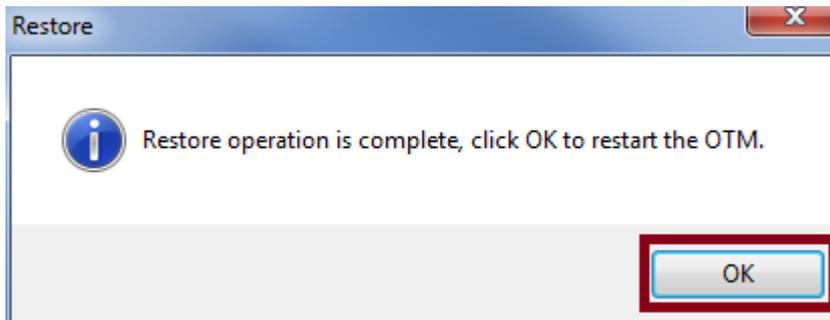
8.1. Click **OK**

The OTM application restarts automatically.

Once logged in, the OTM's Main Screen opens and displays the restored database.

4.4. UUT Selection

The UUTs are shown on the Main screen.

Select a UUT by clicking on its corresponding button.

In the example screenshot below, the **Payload** UUT is selected.

After selecting the UUT, the **Execution** window will open.

5 UUT Execution

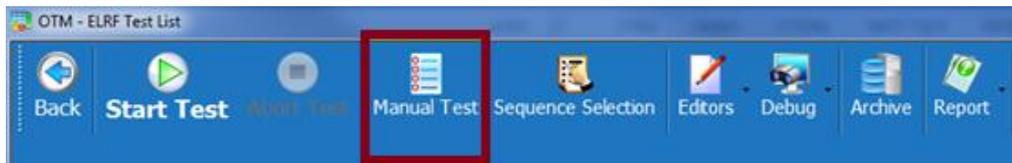This section enables you to execute the UUT's tests by manually selecting them or by choosing a predefined sequence.

5.1. Manual selection

This option allows you to create an execution list by directly choosing individual tests.

1. Go to the **Main** window > select the desired **UUT** (this will open the **Execution** window), and choose the *Manual Test*.

The **Test Selection** window will open, displaying the list of available tests.

2. Test execution list:
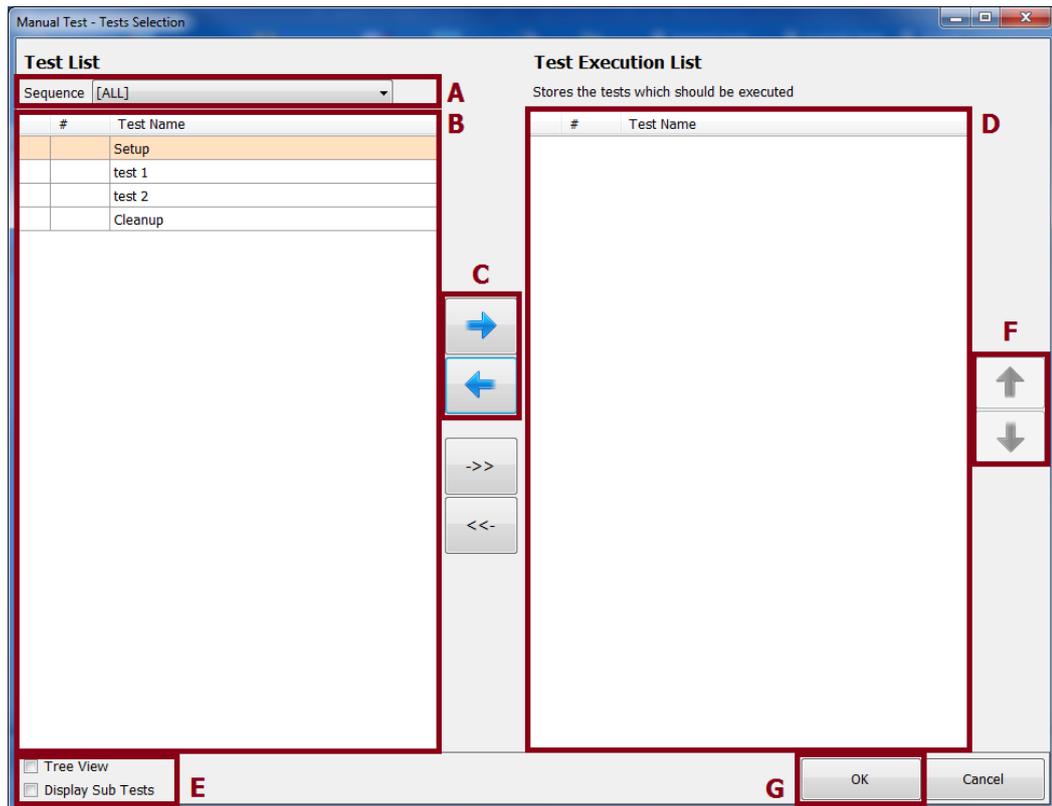
2.1. Select the tests you want to include in the Test Execution -from section B.

You can check the checkbox (**E**):

☑ Tree View - to view the tests and their references in hierarchical format.

☑ Display Sub Tests - to include sub-tests in the test list.

2.2. Move them to the Test Execution List area (D) using the arrow ➡ / ➡➡ (C).

2.3. You can modify the tests order, in the test execution list, ⬆⬇ using the button (F).
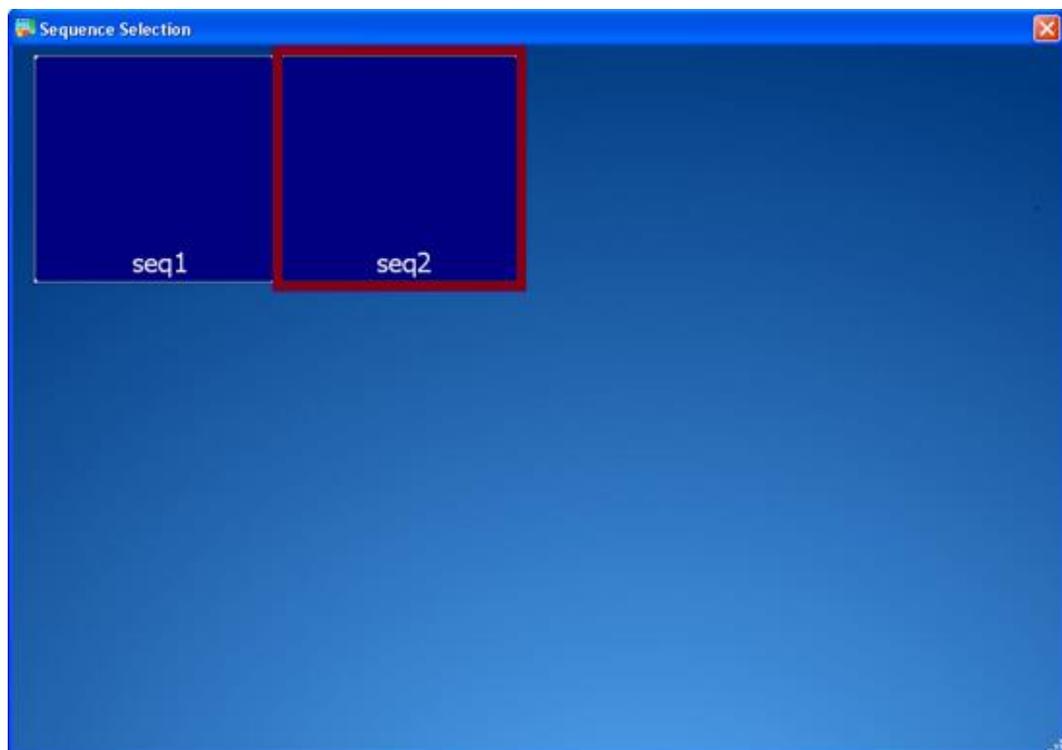
2.4. Click **OK** (G).

The Test Execution List is shown on the Execution screen.

5.2. Sequence Selection

1. Sequence options:

    1.1. Defined startup sequence – the sequence content appears automatically when the **Execution screen** opens.

    1.2. Defined sequences (no startup sequence) – **sequence selection** screen pops-up when the **Execution screen** opens.
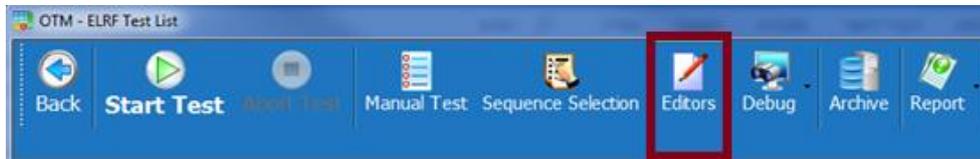

- Select sequence from the sequence selection screen.

    In the example above **seq2** is the selected sequence.

- The sequence content displays in the execution screen.
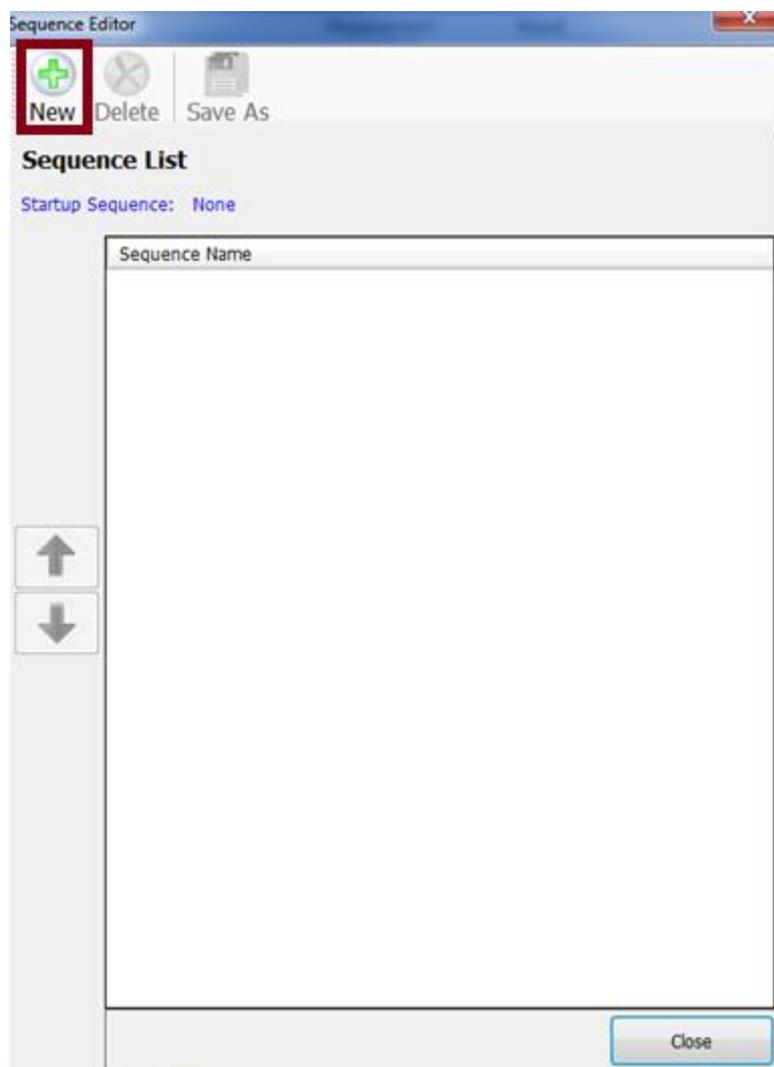
1.3. Create sequence:

1. Select **Editors** from the upper menu

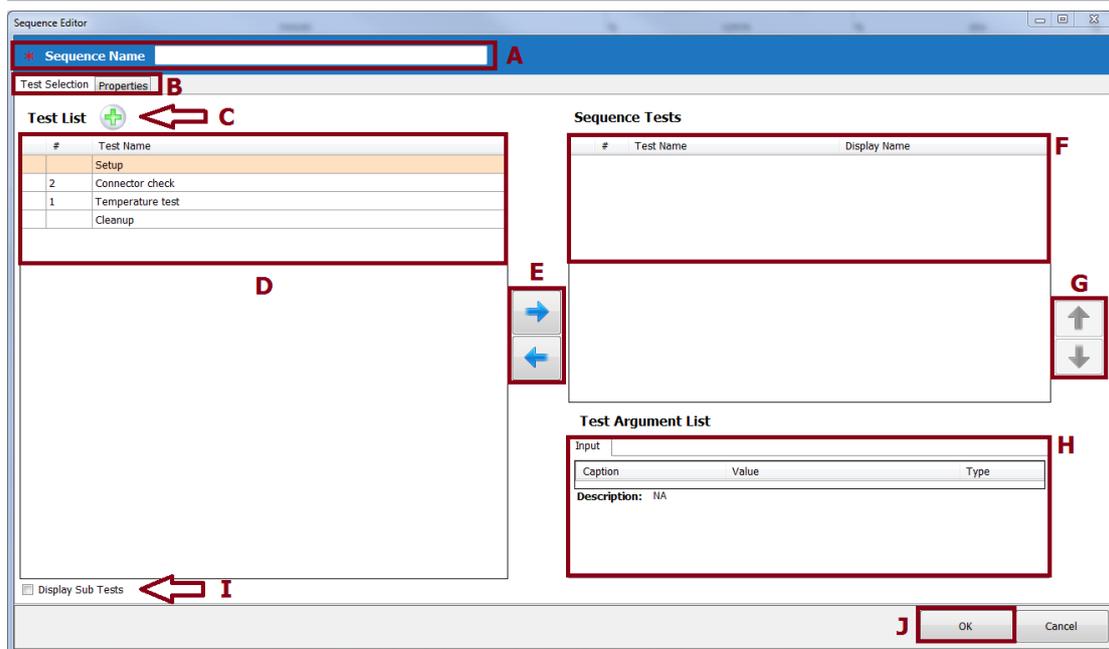2. Select **Sequence Editor** from the sub menu or press F8.

   The **Sequence List** screen opens.

 2.1. Click **New**.

   The **Sequence Editor** screen opens.

2.2. Fill Sequence screen as follows.

1. Required details - Sequence Name – A.

2. In the **Test Selection** tab (from B section):

   Step 1: Select the tests you want to include in the sequence -from section D.

   You can display sub tests, by selecting the checkbox in section (I) below.

   Step 2: Move the tests to the Sequence tests area (F) using the arrow (E).

   Step 3: You can change the tests order, in the sequence, using arrows button (G).

   You can add new test using button (C) – optional.

3. For other sequence optional details, click the **Properties** tab (from B section):
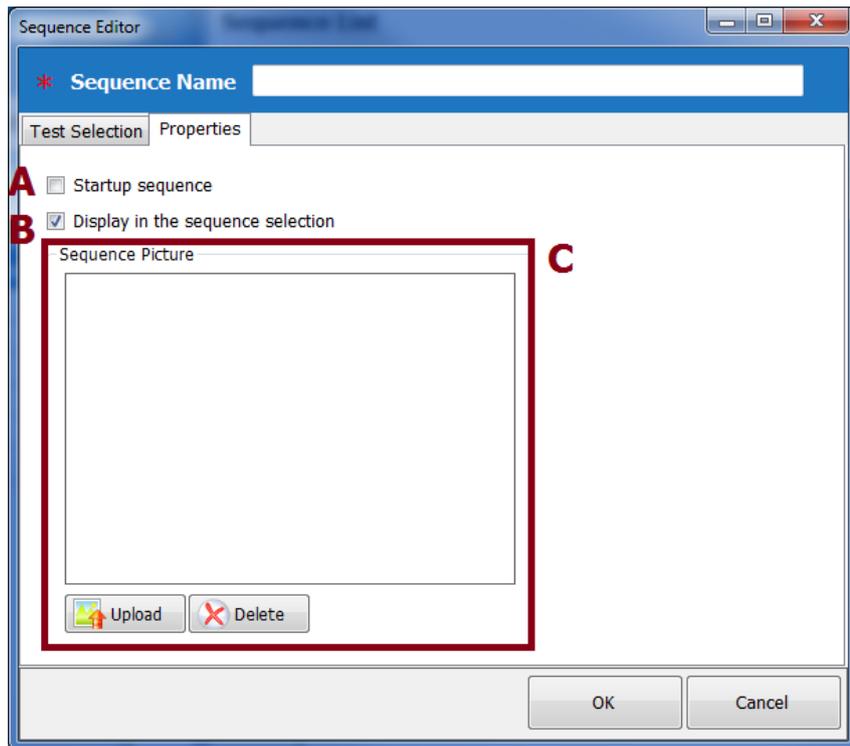
- Define startup sequence – A

- Display the sequence in the sequence selection screen – B

- Define sequence picture – C
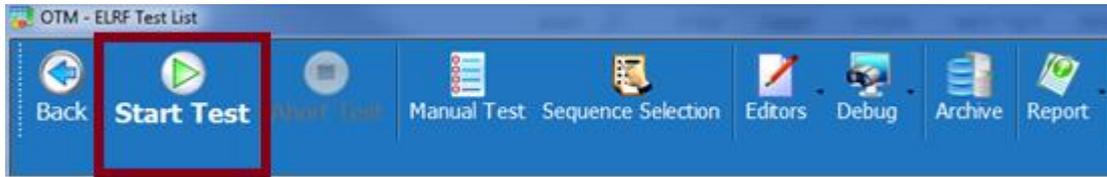
2.3. Click **OK** (J).

The sequence is defined, you can select it from the **sequence selection** screen.

The sequence content test Execution List is displayed in the Execution screen.

After sequence selection, the sequence content is displayed in the Execution screen.
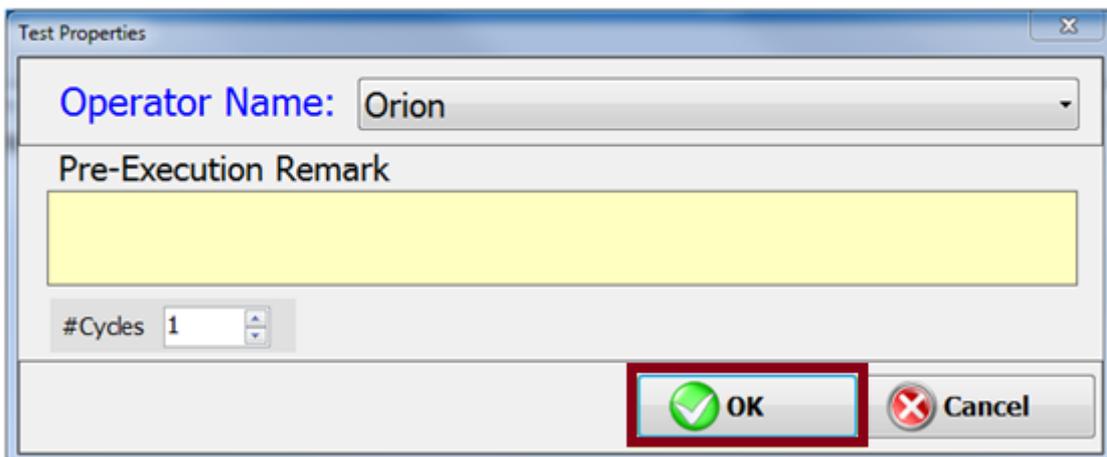
5.3. Run Execution

1. Click **Start Test** from the top menu to start the execution.
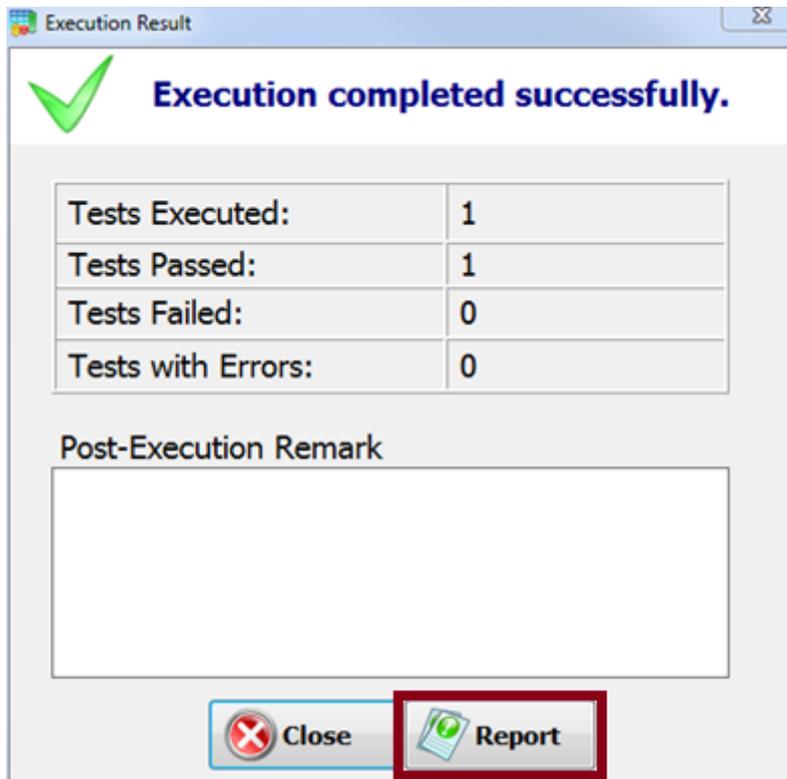

Test Properties screen opens.

2. Click **OK** to run the execution.

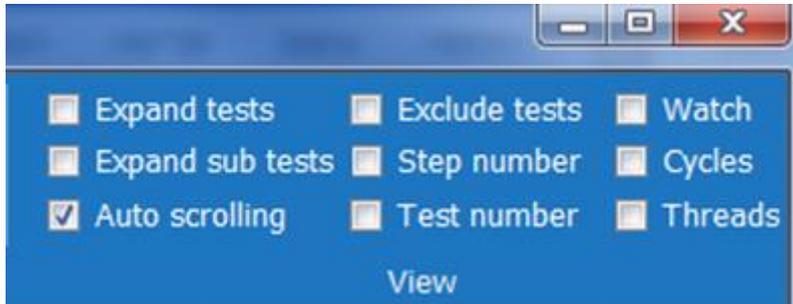Once the execution is complete, the Execution Result screen displays.

3. Click **Report** to generate a report, for the current execution.

The report is created in PDF format.

4. Execution optional features:

4.1. Execution screen configuration

You can define the execution screen configuration by selecting/clearing the checkboxes above.

4.2. Debug
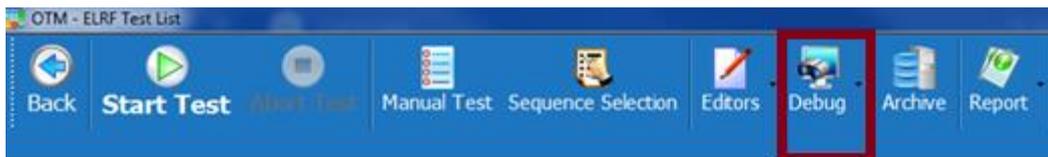
Click **Debug** from the top menu.

The debug sub menu opens, with the debugging options:

- Run the execution→ step by step.

- Set breakpoints.

- Pause on test failure.

- Show step time.

5.4. Abort Execution

The OTM allows the user to terminate UUT's execution.

1. Click **Abort Test** from the top menu to stop the execution.

Abort Test dialog displays.

2. Click **Yes** to abort the execution.

Execution Result dialog displays.

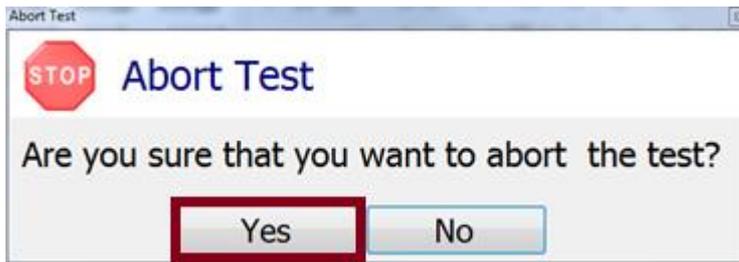3. Click **Close** to abort without generating a report.

Click **Report** to generate a report for the current execution.
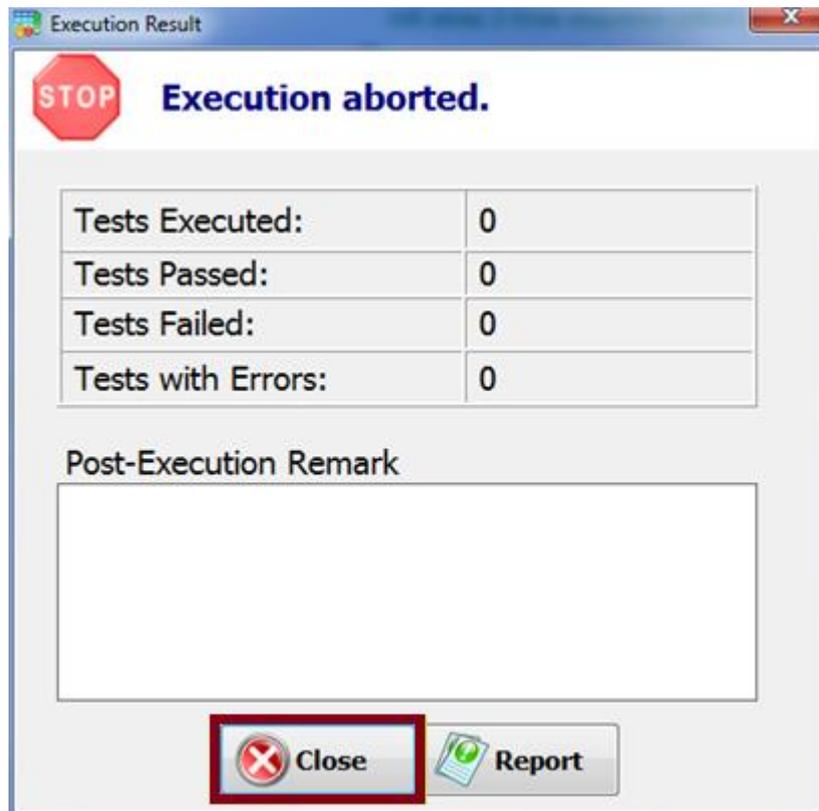
6 Tests & Steps

A test is a set of actions and measurements.

6.1. Create Test

To create test:

1. After the UUT selection, in the Execution screen, select one or the other:

   1.1. Click the keyboard shortcut F7.

   1.2. Select **Editors** from menu.
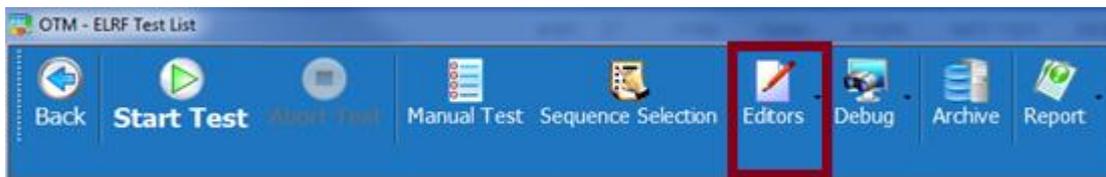
The Editors sub menu displays

- Select **Test Editor.**

Test List screen opens.

2. Click **New**.

Test Editor screen opens.

3. Fill in this screen the following options:

3.1. Test name – required – see A.
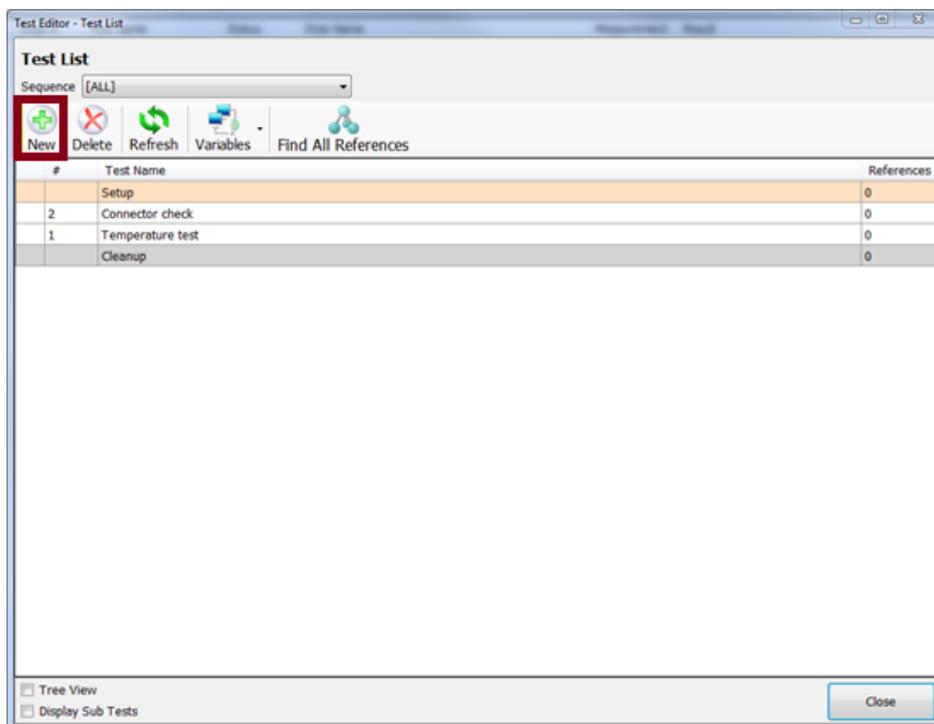
3.2. All other fields are optional:

- Test number - B.

- Define the test as sub test and test properties – C.

- Define variables: local, global, maintenance, criteria, arguments and station global.

3.3. Add Step

You can add step based on user's DLL or built-in step.

1. To add a Step based on DLL:

- Click icon – from the left menu bar - D.

- Set the DLL and then the Class and afterwards the Function – G.

- Fill in input/output/properties – if applicable - J.

- Click Save – I.

2. To add built-in DLL:

- Click one of the step types icons – from the left menu bar - D.

Built-In steps, which include among others: Flow control – if, while, etc/ Mathematical function/Timer/Delays/Threads/Graphs/User messages/String functions.

- Fill in input/output/properties – if applicable - J.
- Click Save – I.

After the test definition is completed.

3.4. Click **Save & Close** – I.

The OTM returns you to the **Execution** screen.

In this screen, you may:

- Add the test to the execution list see Para 5.1 or 5.2.
- Run the execution – Para 5.3