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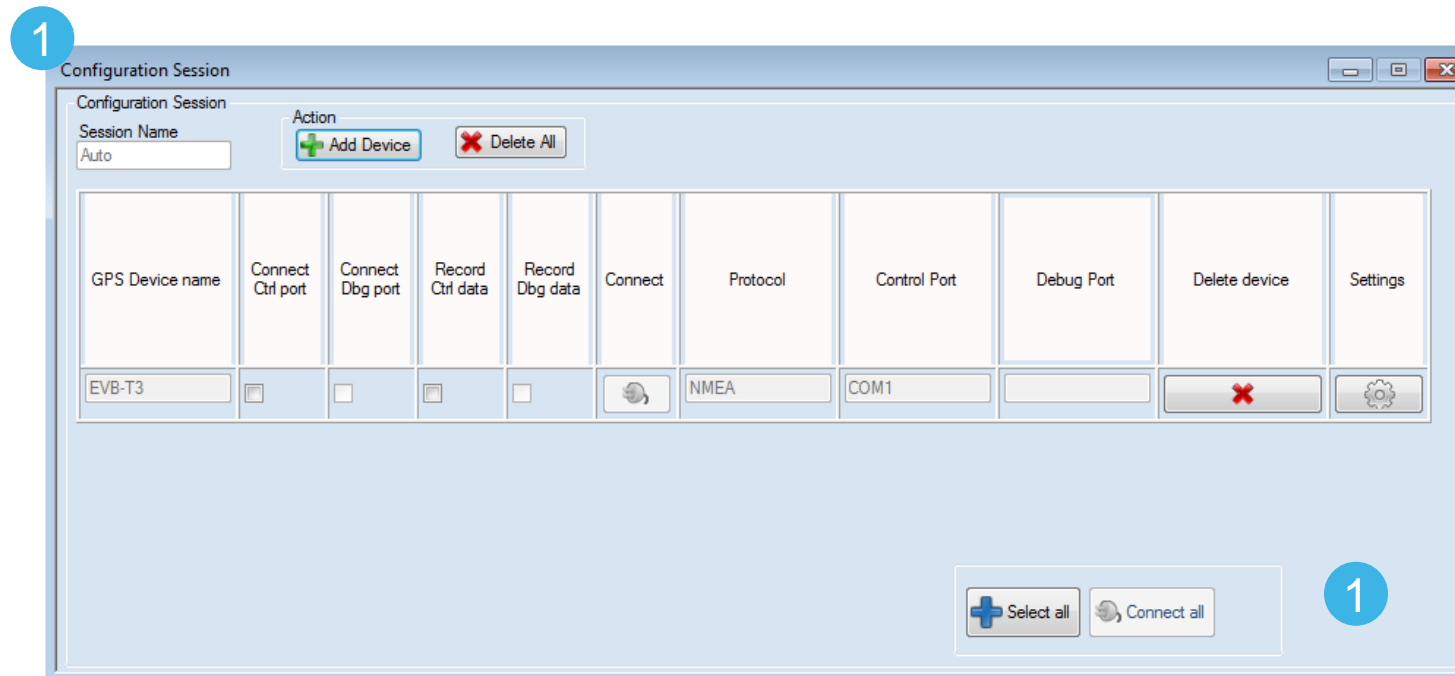
Teseo Suite as test program

- Teseo-Suite is a valuable tool to test and evaluate the features of Teseo GNSS modules
- It has an internal scripting language which allows automatizing test scripts for Teseo GNSS receivers
- Let's see how it can help evaluate Teseo GNSS solutions



Connects the Teseo platform

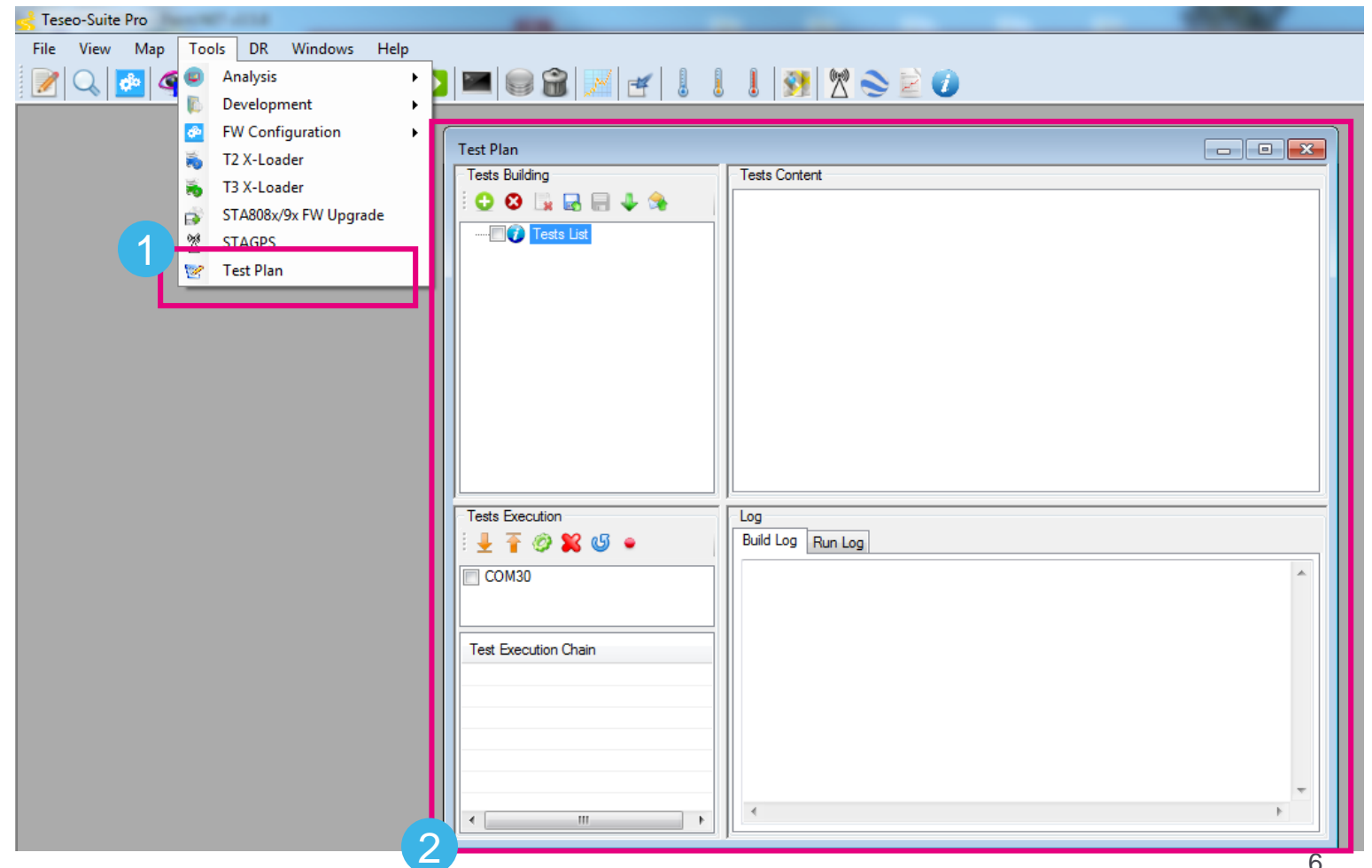
1 Connects your Teseo platform ([see more](#))





Open test plan panel

- 1 Open Test Plan from menu
- 2 Test Plan panel will appear





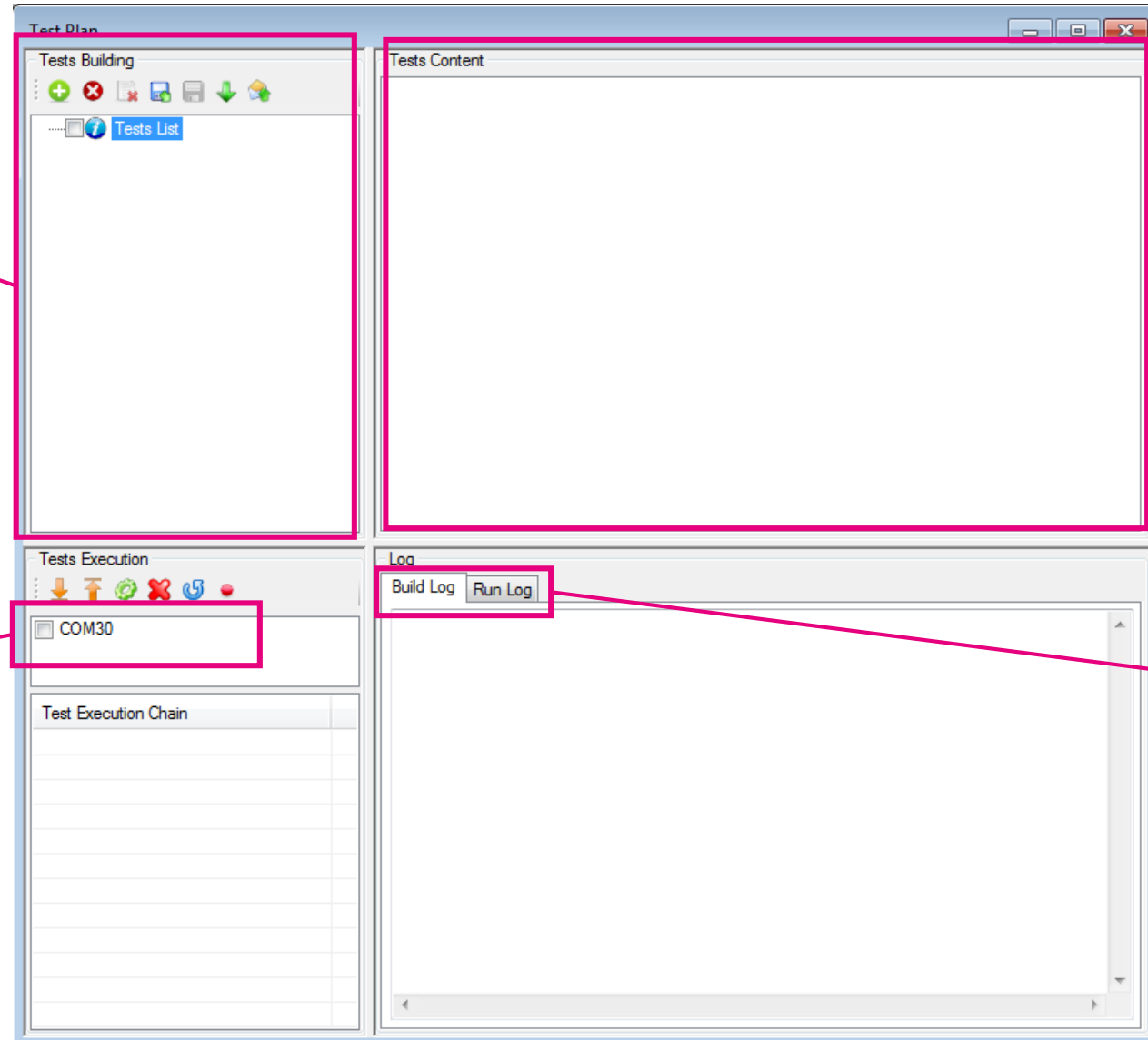
Test plan panel description

Test manager

Test script editor

Select the port on which the scripts will run

Build and result log views





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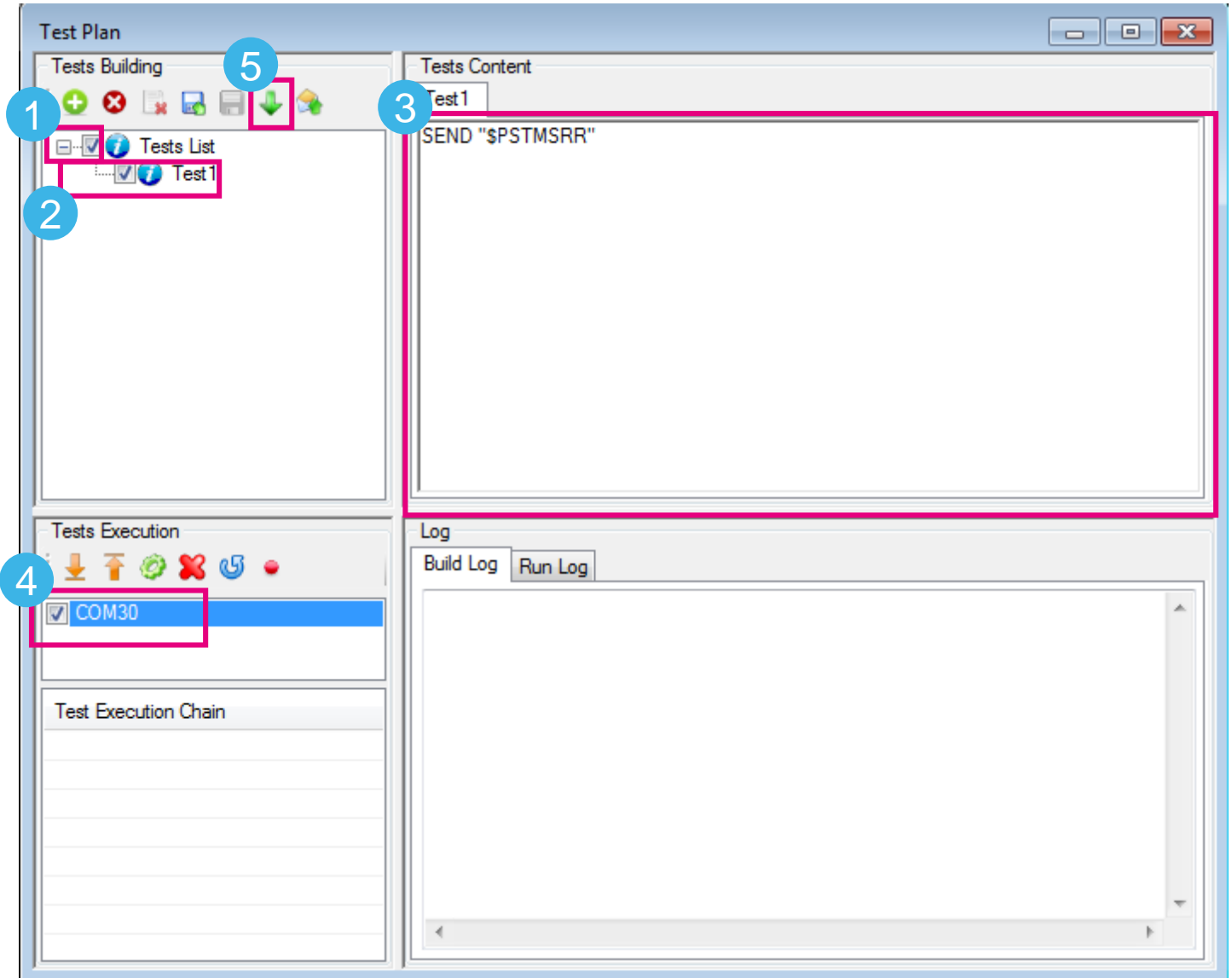


A quick test script – step by step

- 1 Add Test 1 script
- 2 Enable Tests List
- 3 Edit the Test 1 script:

SEND "\$PSTMSRR"

- 4 Enable the COM
- 5 Compile the test





A quick test script – step by step

- 1 Add the test in the Execution Chain
- 2 Run the test
- 3 Check the result

You wrote and executed your first test script

The screenshot displays the Test Plan application interface, divided into several panes. The 'Tests Building' pane shows a tree view with 'Tests List' and 'Test 1'. The 'Tests Content' pane shows the script content: 'SEND "\$PSTMSRR"'. The 'Tests Executing' pane shows 'COM30' selected. The 'Log' pane shows the execution log with the following entries:

```
[09_May_14_48_40] - [INFO] - Started the execution of the test [Test 1]
[09_May_14_48_40] - [INFO] - Creating Test Log File [C:\Users\virlinzi\Documents\ST_Teseo_
[09_May_14_48_40] - [INFO] - Executing command [SEND "$PSTMSRR"]
[09_May_14_48_40] - [INFO] - Execution of test [Test 1] terminated successfully
```

Red boxes and numbers 1, 2, and 3 highlight the 'Tests Executing' pane, the 'Log' pane, and the 'Run Log' tab, respectively.



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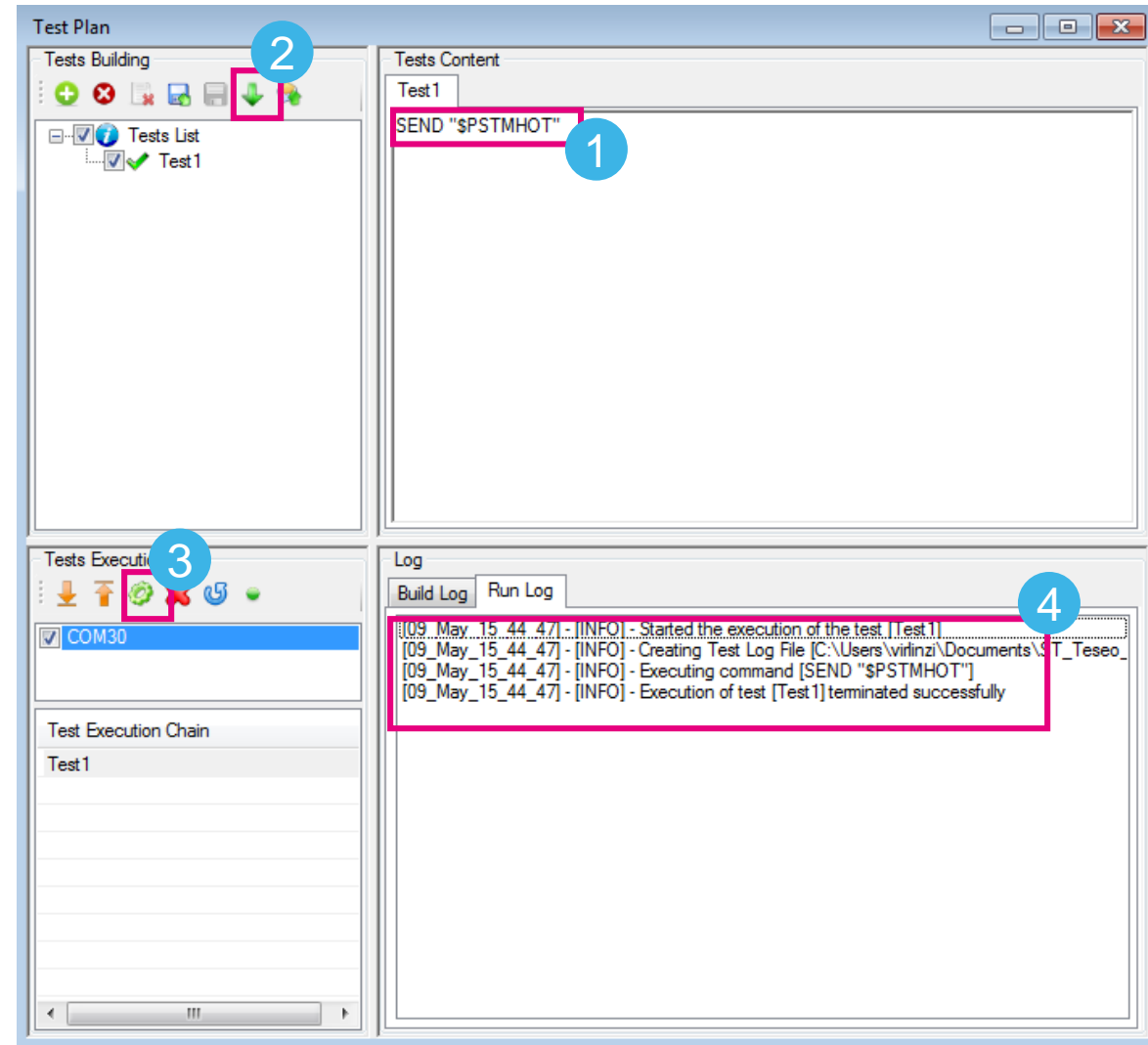


SEND keyword

Use the SEND keyword to send the NMEA command:

SEND "NMEA_cmd"

- 1 Add the command
- 2 Compile
- 3 Run
- 4 Check the result



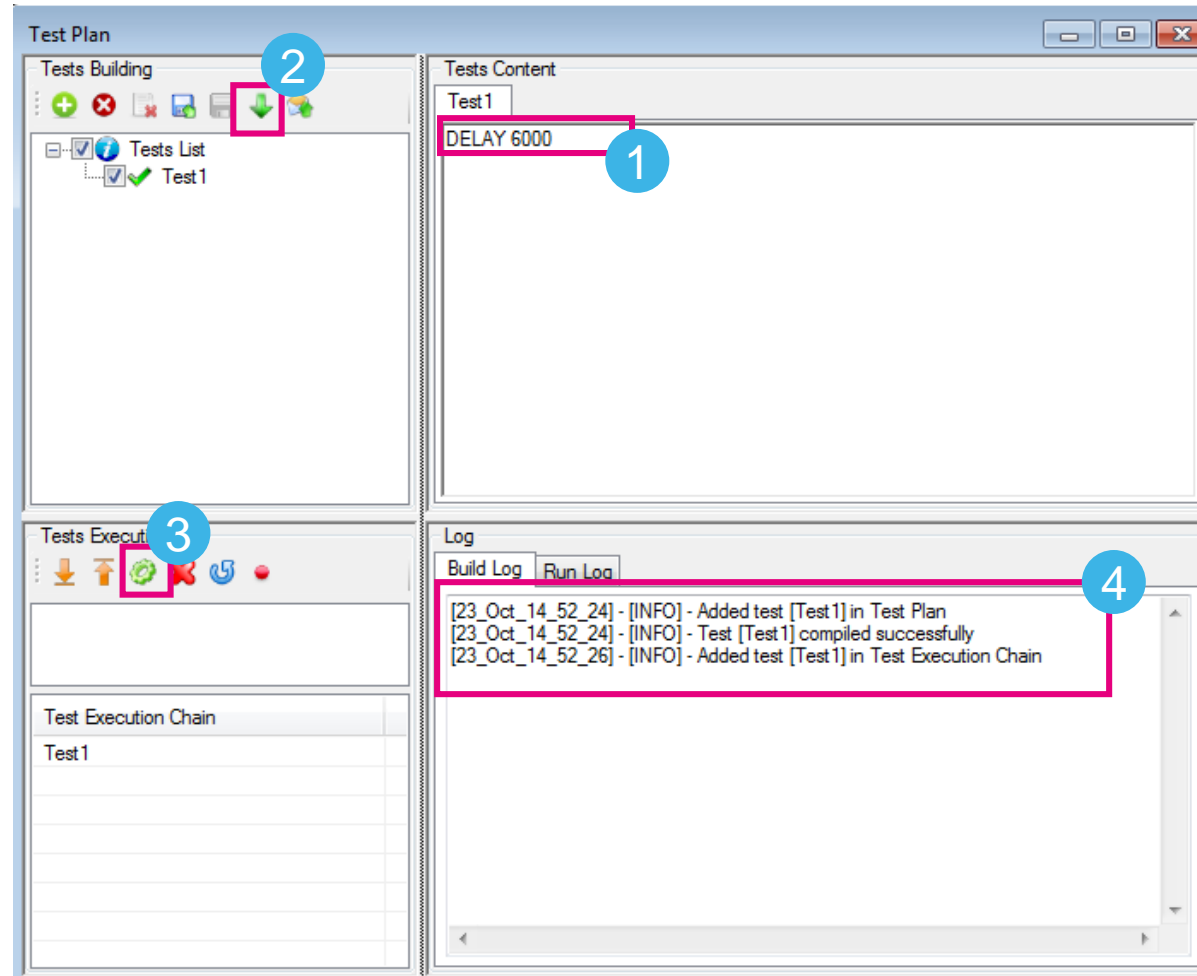


DELAY keyword

Test scripts can be delayed using the DELAY keyword (time in ms):

DELAY N

- 1 Add the command
- 2 Compile
- 3 Run
- 4 Check the result





WAITFIX keyword

Use the WAITFIX keyword to evaluate the TTFF (timeout in ms):\

WAITFIX timeout

- 1 Add the command
- 2 Compile
- 3 Run
- 4 Check the result

The screenshot displays the Test Plan software interface with four numbered callouts:

- 1**: Points to the `WAITFIX 60000` command in the `Test1` test content.
- 2**: Points to the `Compile` button in the `Tests Building` panel.
- 3**: Points to the `Run` button in the `Tests Executing` panel.
- 4**: Points to the execution log in the `Log` panel, which shows the following entries:

```
[09_May_15_13_23] - [INFO] - Started the execution of the test. [Test1]
[09_May_15_13_23] - [INFO] - Creating Test Log File [C:\Users\virlinzi\Documents\Teseo_...]
[09_May_15_13_23] - [INFO] - Executing command [SEND "SPSTMSRR"]
[09_May_15_13_23] - [INFO] - Executing command [WAITFIX 60000]
[09_May_15_13_31] - [INFO] - Fix Device [STA8090_v4.5.1_D1]: [4430] ms
[09_May_15_13_31] - [INFO] - Execution of test [Test1] terminated successfully
```



LOOP/ENDLOOP keywords

Use the LOOP/ENDLOOP keywords to iterate N-times over a block of instructions:

LOOP N
commands
ENDLOOP

- 1 Add begin-loop keyword
- 2 Add end-loop keyword
- 3 Compile
- 4 Run the test
- 5 Check the result

The screenshot displays the Test Plan software interface with the following components and annotations:

- Tests Building:** Shows a tree view with 'Test1' selected. A green arrow icon (3) is highlighted in the toolbar.
- Tests Content:** Shows the test script for 'Test1' with the following commands: 'LOOP 5', 'SEND "\$PSTMSRR"', 'WAITFIX 60000', and 'ENDLOOP'. The 'LOOP 5' and 'ENDLOOP' lines are highlighted with a pink box and numbered 1 and 2 respectively.
- Tests Executing:** Shows the test execution chain with 'COM30' selected. A green play button icon (4) is highlighted in the toolbar.
- Log:** Shows the execution log with the following entries:

```
[09_May_15_33_36] - [INFO] - Started the execution of the test [Test1]
[09_May_15_33_36] - [INFO] - Creating Test Log File [C:\Users\virinzi\Documents\es
[09_May_15_33_36] - [INFO] - Executing command [LOOP 5, (exec: 1)]
[09_May_15_33_36] - [INFO] - Executing command [SEND "$PSTMSRR"]
[09_May_15_33_36] - [INFO] - Executing command [WAITFIX 60000]
[09_May_15_33_44] - [INFO] - Fix Device [STA8090_v4.5.1_D1]: [3390] ms
[09_May_15_33_44] - [INFO] - Executing command [ENDLOOP 5, (exec: 1)]
[09_May_15_33_44] - [INFO] - Executing command [LOOP 5, (exec: 2)]
[09_May_15_33_44] - [INFO] - Executing command [SEND "$PSTMSRR"]
[09_May_15_33_44] - [INFO] - Executing command [WAITFIX 60000]
[09_May_15_33_51] - [INFO] - Fix Device [STA8090_v4.5.1_D1]: [3220] ms
[09_May_15_33_51] - [INFO] - Executing command [ENDLOOP 5, (exec: 2)]
[09_May_15_33_51] - [INFO] - Executing command [LOOP 5, (exec: 3)]
[09_May_15_33_51] - [INFO] - Executing command [SEND "$PSTMSRR"]
[09_May_15_33_51] - [INFO] - Executing command [WAITFIX 60000]
[09_May_15_33_58] - [INFO] - Fix Device [STA8090_v4.5.1_D1]: [3320] ms
[09_May_15_33_58] - [INFO] - Executing command [ENDLOOP 5, (exec: 3)]
[09_May_15_33_58] - [INFO] - Executing command [LOOP 5, (exec: 4)]
[09_May_15_33_58] - [INFO] - Executing command [SEND "$PSTMSRR"]
```

The log entries for the first iteration are highlighted with a pink box and numbered 5.



WAITFOR_CONTROL keyword

Use the WAITFOR_CONTROL keyword to wait for a NMEA message

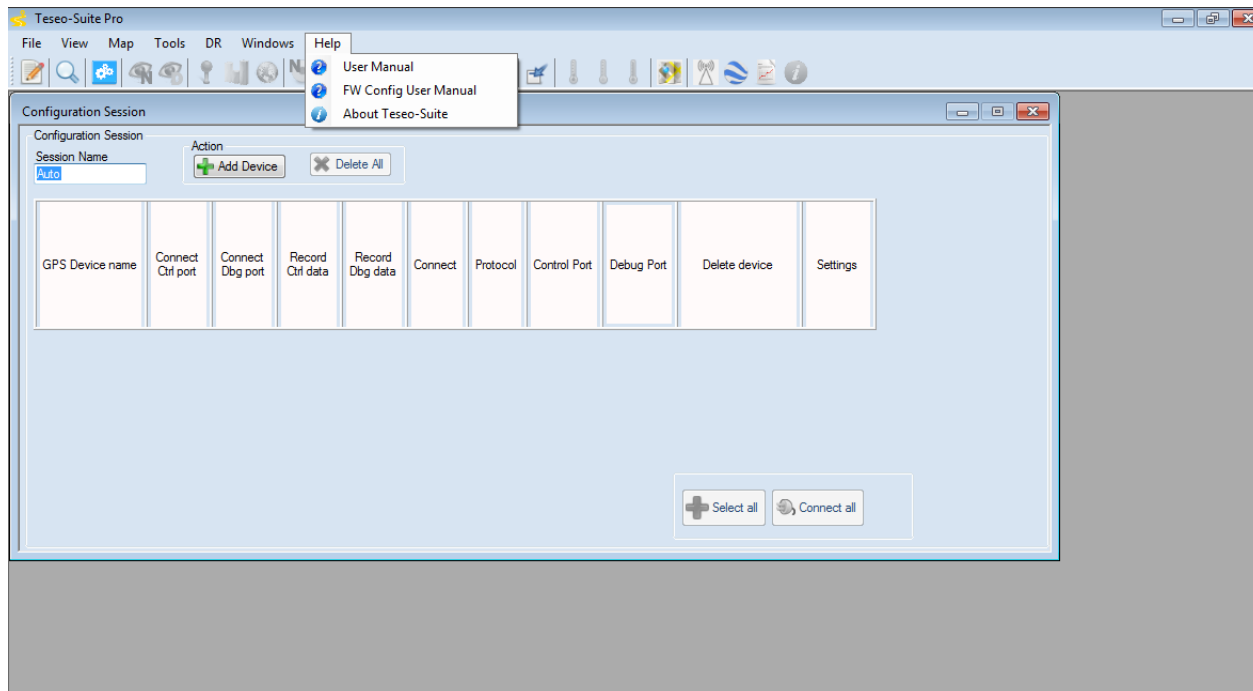
WAITFOR_CONTROL NMEA_msg, timeout

- 1 Add WAITFOR_CONTROL keyword
- 2 Compile
- 3 Run the test
- 4 Check the result



Teseo suite – extra features

Select Help menu or access the online [Teseo-Suite User Manual](#) for the complete list of commands supported in the Test-Panel





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Documents & related resources

All documents are available on:
www.st.com

- Teseo III: [Webpage](#)
 - Data-sheet of all PNs;
- Teseo modules: [Webpage](#)
 - Data-sheet of all PNs;
- Teseo Suite: [Webpage](#)
 - Datasheet
 - Install program

GNSS ICs

ST's Teseo family of Global Navigation Satellite System ICs combines high positioning accuracy and indoor sensitivity with powerful processing capabilities, to simultaneously support multiple global navigation systems (BeiDou, Galileo, GLONASS, GPS, and QZSS).

Teseo III is the latest generation of GNSS ICs, and compared to Teseo II offers reduced power consumption, carrier-phase tracking for higher accuracy, and support for Ready-only Memory (ROM).

Our product offering includes standalone positioning chips (SAL) and configurable system-on-chips (SOCs). The standalone devices are offered with GNSS firmware embedded, to perform all positioning operations including tracking, acquisition, navigation and data output. The SoCs offer power processing and spare memory to enable customers and partners to easily and efficiently merge their code or specific IPs with ST's GNSS library to create a highly optimized platform.

Both solutions come with different package options and memory size, and are compatible with the TESEO-DRAIV sensor fusion firmware for dead-reckoning and assisted navigation.

Teseo devices address e-call and telematics systems, personal navigation in PNDs and handheld devices, as well as marine and in-car navigation systems.

Package	STANDBY	STANDBY	STANDBY
WLCP77 444 mm	STANDBY	STANDBY	STANDBY
QR06 747 mm	STANDBY	STANDBY	STANDBY
QR06 648 mm	STANDBY	STANDBY	STANDBY
BGA99 645 mm	STANDBY	STANDBY	STANDBY
BGA189 949 mm	STANDBY	STANDBY	STANDBY

TESEO-SUITE **ACTIV**

PC software tool to manage, configure and evaluate the performance of ST Teseo GNSS solutions.

Download Databrief

QUICK VIEW **RESOURCES**

ST TESEO-SUITE is a powerful PC Tool able to manage all the capabilities of ST Teseo GNSS solution. It is able to manage all the capabilities of ST Teseo GNSS solution in parallel.

On each ST TESEO GNSS solution the Teseo Suite is able to read, modify and save the configuration.

NMEA sentences logging and analysis supported. NMEA message-list configurable per port.

Key Features

- Multiple GNSS tracer
- Multiple protocol support
- GNSS firmware configuration tool
- GNSS flashing tool
- Dead reckoning panel
- NMEA diagnostic tool
- Satellites signal monitoring viewer
- Map viewer
- Log viewer

RESOURCES

Quick Links

Technical Documentation

Product Specifications	
Description	Version
DB3124 PC GUI software to control, configure and performance analyze of Teseo GNSS family	1.0

Legal

License Agreement		
Description	Version	Size
SLA0056 Software license agreement	1.0	59 KB

EVB-T3 **ACTIV**

TESEO III evaluation board

Download Databrief

QUICK VIEW **RESOURCES** **TOOLS AND SOFTWARE** **SAMPLE & BUY** **QUALITY & RELIABILITY**

Teseo EVB board is a complete standalone evaluation platform for Teseo III GNSS ST solution.

Teseo III embeds the high performance ARMv46 microprocessor with dedicated SRAM and several serial communication interfaces, including USB, SPI, I2C, UART and CAN.

Performance and configuration can be analyzed using the ST TESEO-SUITE PC Tool.

Key Features

- ST Teseo III GNSS platform:
- Multiconstellation GNSS: GPS, Galileo, Glonass, BeiDou, QZSS are supported.
- USB Power Supply and battery charge.
- Internal battery for standalone usage.
- ON/OFF and Reset buttons available.
- NMEA over.

RESOURCES

Technical Documentation

Product Specifications			
Description	Version	Size	
DB3223 Teseo III GNSS evaluation board	1.0	137 KB	



Enjoy developing your GNSS solution using Teseo-Suite

- Now you can develop your GNSS solution with ST Teseo II, ST Teseo III and ST Teseo Modules using the Teseo-Suite PC software tool to explore all the available features.

