

# **Test Automation**

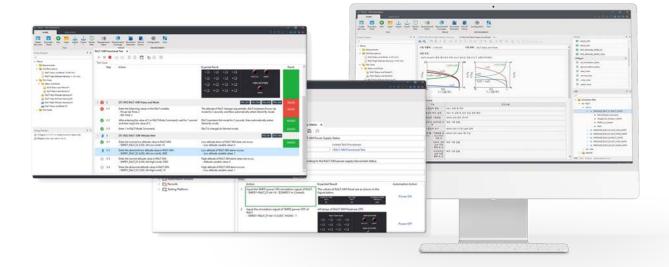
# **Test Automation**

**Test Automation** tool supports requirement-based automated testing in real-time HIL simulation environment.

The tool executes test actions according to the test procedure for requirements verification.

Tests can be executed synchronously with simulation model, without model modification.

It provides an integrated testing environment through traceability between requirements and test procedures, and requirements coverage/statistics.



#### "

# **Test Automation is**

### key software system for automation testing based on users requirement.

- Provide convenience to establish integration testing environment through various testing platform which meets the purpose and environment of test
- Available to measure the coverage of system which is subject for inspection through the test which is based on user's requirement
- Analyze system flaw easily through the function of report and statistics

# Highlights

#### Requirement definition and management

- Define detailed attributes and measure requirements coverage (Priority/Verification method/Type)
- Provides traceability between requirements and test procedures

#### Test procedure definition and management

- Define test actions and expected results through the test procedure editor
- Test procedure can be exported as Word file, Excel file

#### Test case definition and test procedure link

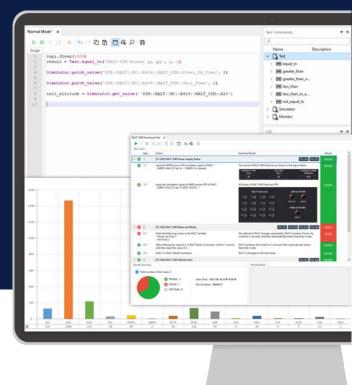
- Input/output parameter with pass/fail condition setting
- Support various actions necessary for determining pass/fail conditions (User input/Injection/Image/etc.)
- Test cases linked to the test procedure and tracked

#### Test execution

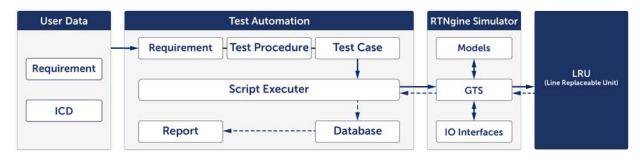
- Test procedures are automatically converted into test script(Python) and executed
- Monitoring progress in real-time and save results in database

#### Report and analysis

- Support for summary report of test results
- Provides requirement coverage and statistics
- Supports 3<sup>rd</sup> party testing platform



# System Architecture



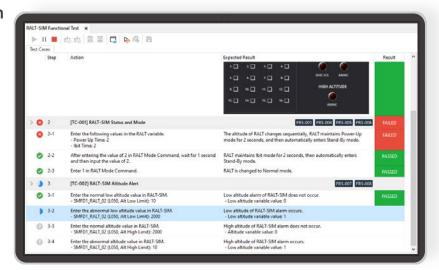
# [Screen] Requirement Edit

KTW_AirForce_v01 - Test Automation File(F) Tools(T) View(V) Window(W) Settings(S) ⊨     C     L     C     L     C     C     C	ielp(H)				
Project Explorer • ×	Requirements Editor ×				
<i>۹</i>	🕑 🕑 🌄 🖓 🎝 🖹				
✓ RTW_AirForce_v01	View: KAID	, p	ID: FRS-001	Ђре	Functional Requirement Speci
<ul> <li>Requirements</li> </ul>	ID Summary		Summary:		
Functional Requirement Specification	Functional Requirement Specification		RALT-SIM Status and Mode		
RALT-SIM Status and Mode [FRS-001]	FRS-001 RALT-SIM Status and Mode		Description:		
<ul> <li>RALT-SIM Status and Mode [TC-001]</li> </ul>	FRS-002 RALT-SIM Power Supply Status		It has ON/OFF status by RALT Mode Command.		
→ □ RALT-SIM Power Supply Status (FRS-002)	FRS-003 RALT-SIM Power Down State		Receive Normal'Standby Command from SMFD.     Power-up time is 30 seconds.     IBIT mode is automatically terminated after 30 seconds.		
RALT-SIM Power Supply Status [TC.003]	FRS-004 RALT-SIM Operating Status				
> RALT-SIM Power Down State (FRS-003)	FRS-005 RALT-SIM Standby Mode		Linked Test Cases		
RALT-SIM Operating Status (FRS-004)     RALT-SIM Standby Mode (FRS-005)	FRS-006 RALT-SIM Normal Mode		TC-001		
RALT-SIM Standby Mode (FRS-005)     D RALT-SIM Normal Mode (FRS-005)	FRS-007 RALT-SIM Low Altitude Warning		Property		
Car NACLOSIN Normal Node (FIG-000)     Car NACLOSIN Normal Node (FIG-000)     Car NACLOSIN Normal Node (FIG-000)	FRS-008 RALT-SIM High Altitude Warning				
RALT-SIM High Altitude Warning (FRS-008)			Verifications	Demo	
C2 Test Procedures			Property:	1	
) [] let Cases			-	High	
>  Automation Actions			Importance:	rogn	
> CR Records			Weight:	1	. v

# [Screen] Test Case Edit

$\begin{array}{llllllllllllllllllllllllllllllllllll$	Help(H)						
Project Explorer •	x Requi	Requirements Editor (TC-003) RALT-SIM Power Supply Status x					
Q	5	G = = = = = + + + + + + + + + + + + + +					
RTW_ArFance_x01     C_1 Represents     J Textchand Represents     C_1 Represents     C_1 Text Creas     RUT-SM Stenus and Mode (TC-001)     RUT-SM Attribute Aren (TC-001)	ID:	ID: TC-003 Summary: RALT-SIM Power Supply Status					
	Linke	Linked Requirements: Linked Test Procedures:					
	FRS	-002 / FRS-003	RALT-SIM Functional Test				
	Che	Objective. Check if the status of the RAIT-SIM panel changes according to the RAIT-SIM power supply/disconnect status. Pre-Condition:					
RALT-SIM Power Supply Status (7C-003)							
Constant Sectors     Constant Sectors     Constant Sectors     Constant Sectors     Constant Sectors	Steps	Steps					
	1	Action Input the SMFD power ON simulation signal of RALT, - SMFD1-RALT_OT bit 14 : 1(SMFD1 in Control)	Expected Result The values of PAIT-SIM Panel are as shown in the figure below.	Automation Action Power ON			
	2	Input the simulation signal of SMFD power OFF of RALT. - SMFD1-RALT_01 bit 13 (L007, WOW) : 1	All temps of RALT-SM Panel are OFF.	Power OFF			

### [Screen] Test Procedure and Run



if generalize - reserved - 
 address and end y - False
 address and and y - False
 address and end y - False
 deriver and end y - Free
 factorize the end and back the endeding
 terms should be to a set and back the endeding
 terms should be to a set a set

try content.come.cdpett.coller = multiler.pd print("Selected" = str(multiler\_ob)) = multiler = to is the mainway\_ch.stlect = 4 Name = Name.combet.coller.col.action.coll Name.coller.colle

# 

Tel. +82-31-698-2980E-mail. sales@realtimewave.com#710 7th Fl., 240 Pangyoyeok-ro, Seongnam-si, Gyeonggi-do, Korea 13493

Web. www.realtimewave.com/