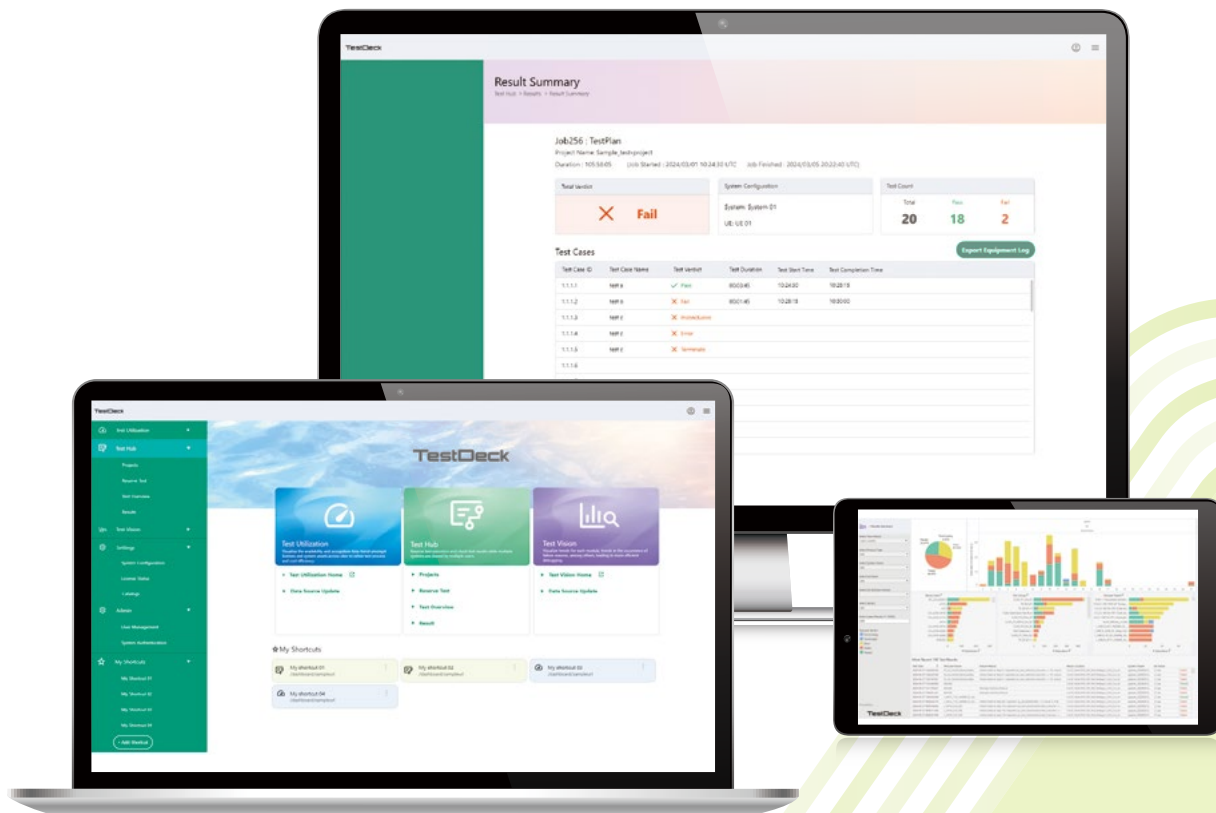


TestDeck™



Directors



Test equipments



A web service that brings
efficiency and cost benefits to
complex and cumbersome tests





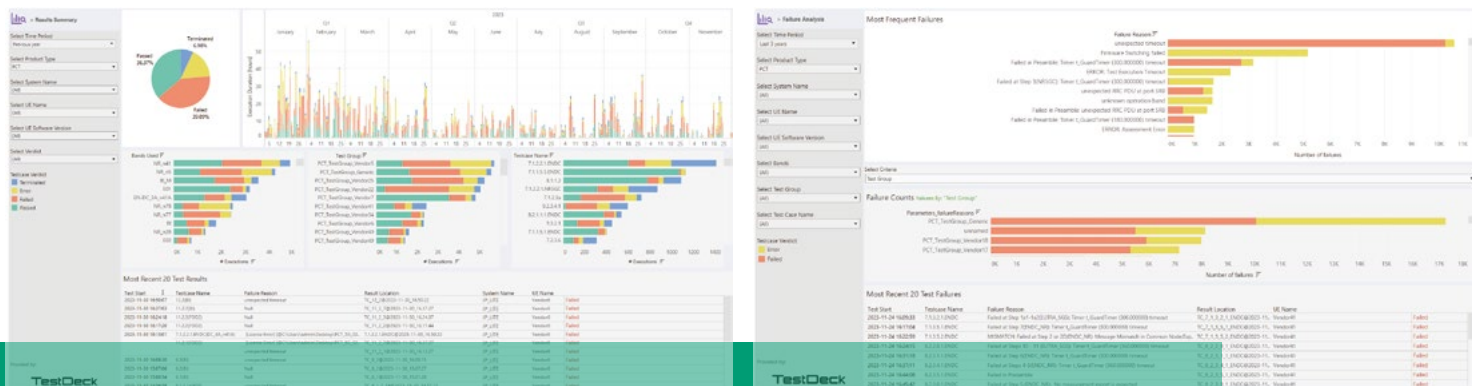
Project members

**Improve Testing
Efficiency and
Reduce Costs**

Managers

TestDeck™

A wide range of benefits – from the remote utilization



Subscription Service

Flexible selection of services according to customer needs

TestDeck offers a Basic service as standard and Advanced options that provide advanced functionality. Options can be selected according to the customer's requirements.



Test Setup

Remote sharing of test equipment

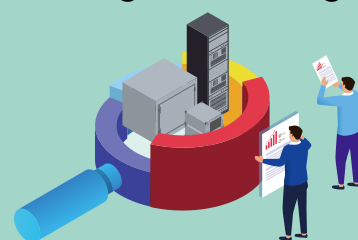


Reduces the workload associated with selecting test conditions, referring to complex test specifications, and the cumbersome process of setting parameters, as well as human error. Operational overhead is minimized.

► Related page: P8

Test Planning and Progress Monitoring

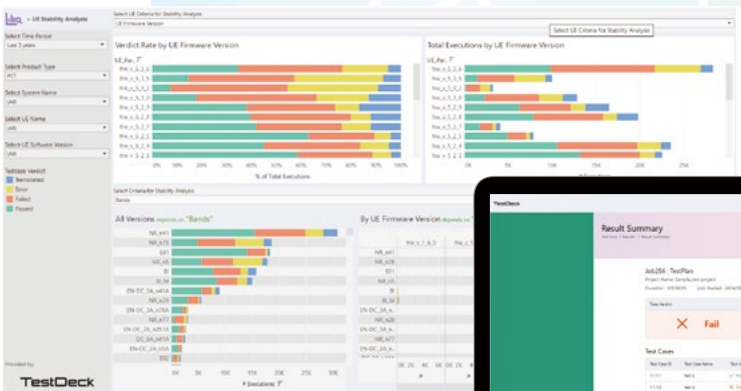
Visualization of plans and progress through equipment usage monitoring



Checks when equipment is not being used, reserves execution, and remotely monitors the test progress. Minimizes the amount of time to wait before executing a test.

► Related page: P8

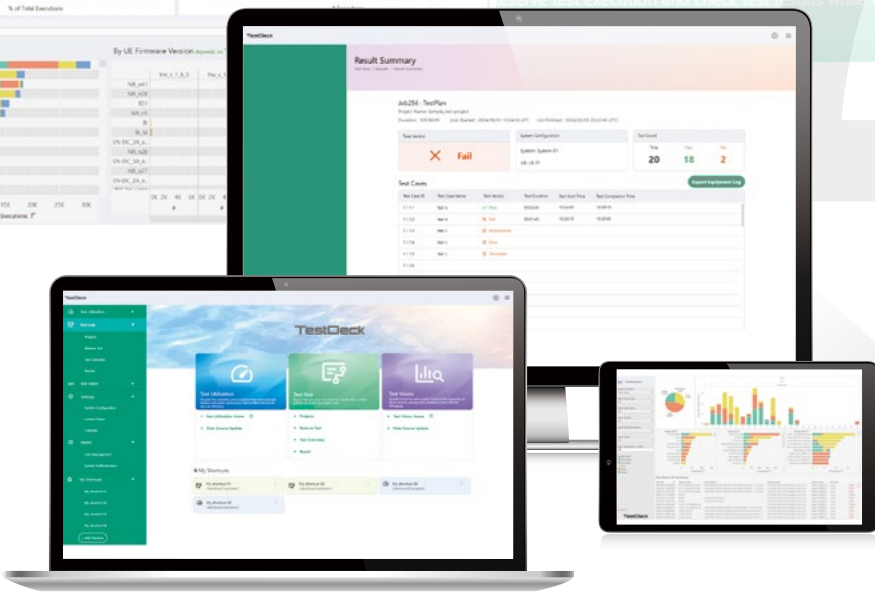
of test equipment to global-scale test optimization.



TestDeck

Test Deck

Visualize trends for each module, to failure reasons, among others, leading debugging.



Test Report

Easy creation and sharing of test result reports



Converts test results of the Test Plan into a consolidated report. Reduces the effort required to summarize test data.

Cumulative Result Visualization

Improving development efficiency by leveraging test results as assets



Accumulates and visualizes "test results" that have previously been overlooked, allowing them to be leveraged as data assets to improve design, evaluation, and reporting quality.

Advanced Option

Streamlining of measurement work through improved testing work efficiency

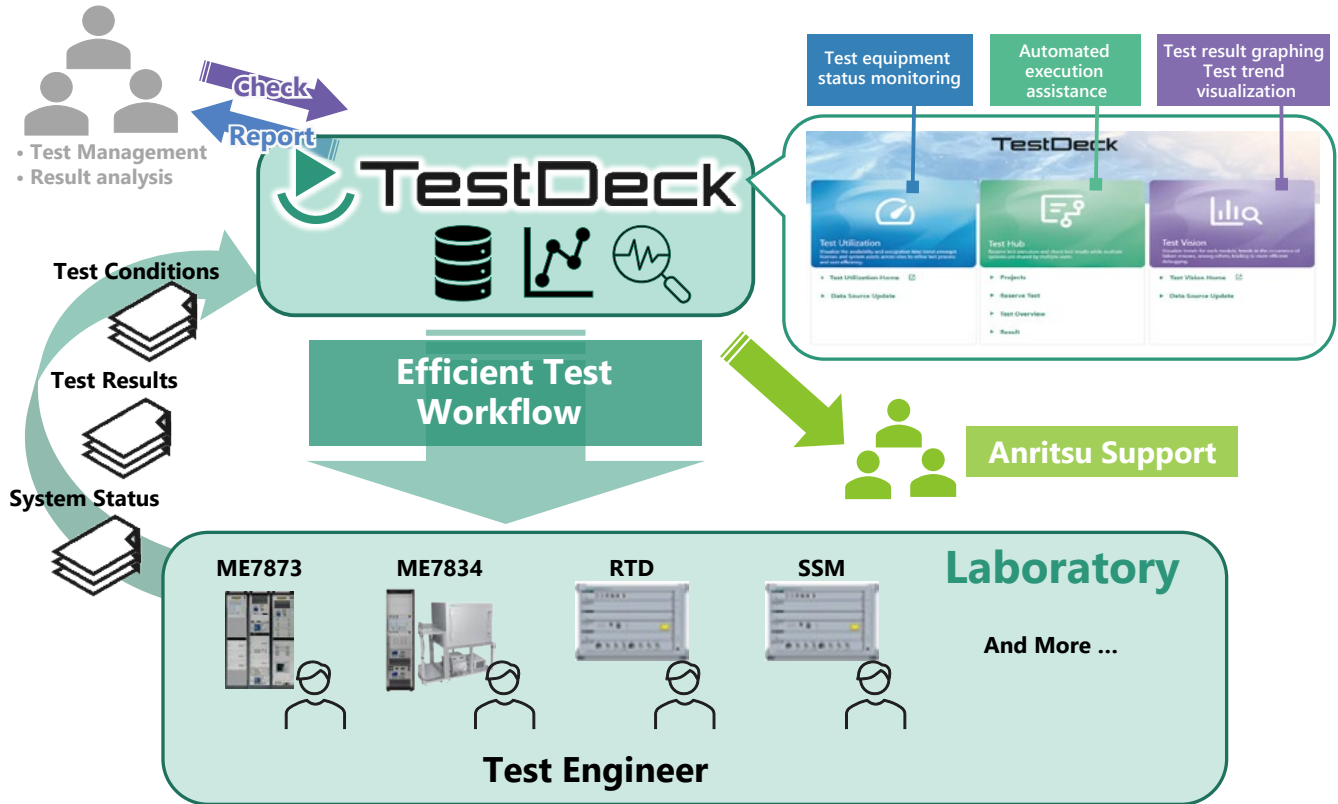


Efficiency requirements differ across R&D, Conformance, and Regulatory tests. By providing Advanced options directed at each test, TestDeck provides a test environment that supports even the most specific needs.

What Is TestDeck?

Product Description

A Web Service that Integrates the Test Result Analysis Service (Test Vision) with Automated Execution (Test Hub) to Improve Testing Efficiency



Mobile devices are becoming increasingly sophisticated as mobile technology matures and have become essential tools in everyday life. Their convenience is ensured through extensive performance evaluations involving numerous functional tests and complex combinations of test conditions, thereby guaranteeing the quality of communication with radio base stations. These tests are applied not only during product development but also as part of the updating of software after products are initially launched. As a result, reducing the preparation and execution time for tests that are performed repeatedly and managing the accumulated test results have become challenges on development sites.

TestDeck is a web-based application that treats test information and results which are stored and accumulated by measuring instruments as development assets, contributing to improved development efficiency.

Overview of Basic Functions

Test Utilization
Visualize the availability and occupation time trend amongst licenses and system assets across sites to refine test process and cost efficiency.

<Test Utilization>

Visualizes the usage status of licenses and system assets to optimize test processes across the entire site and improve cost efficiency.

Test Hub
Reserve test execution and check test results while multiple systems are shared by multiple users.

<Test Hub>

Reserves test execution and checks test results while allowing multiple users to share multiple systems.

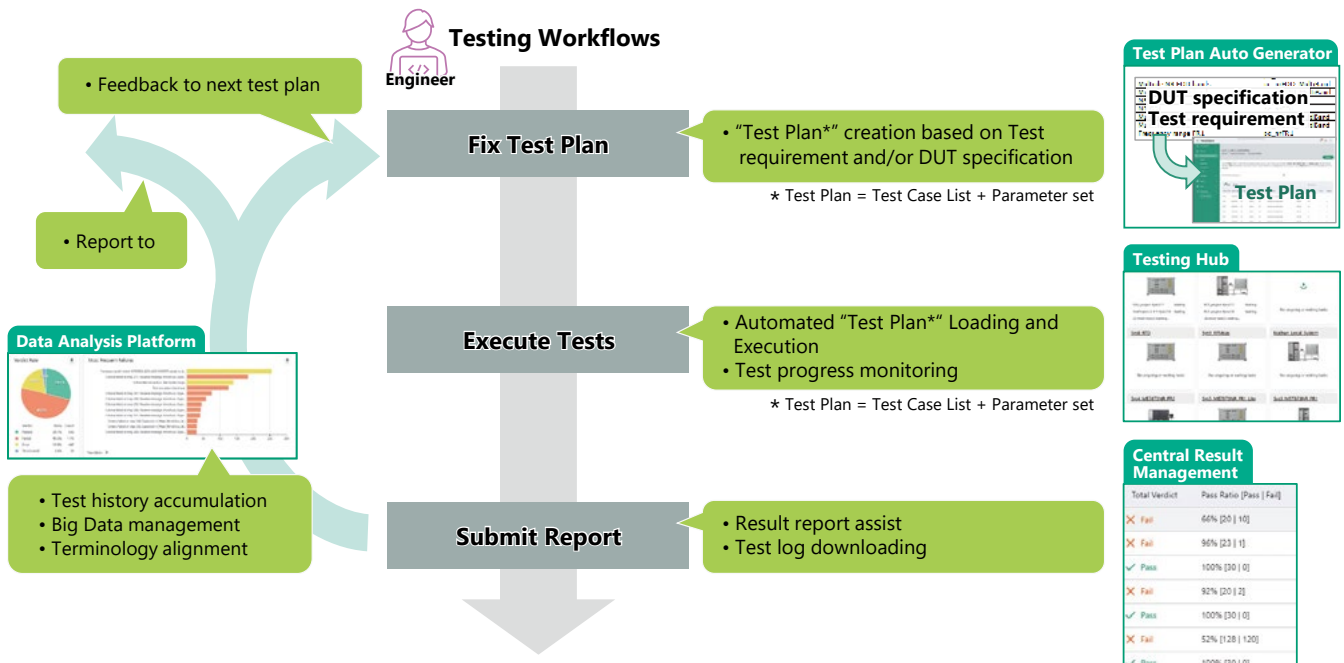
Test Vision
Visualize trends for each module, trends in the occurrence of failure reasons, among others, leading to more efficient debugging.

<Test Vision>

Accumulates test items and results by model and software version of the device and visualizes trends in failure reasons, among others, allowing for more efficient debugging.

What Is TestDeck?

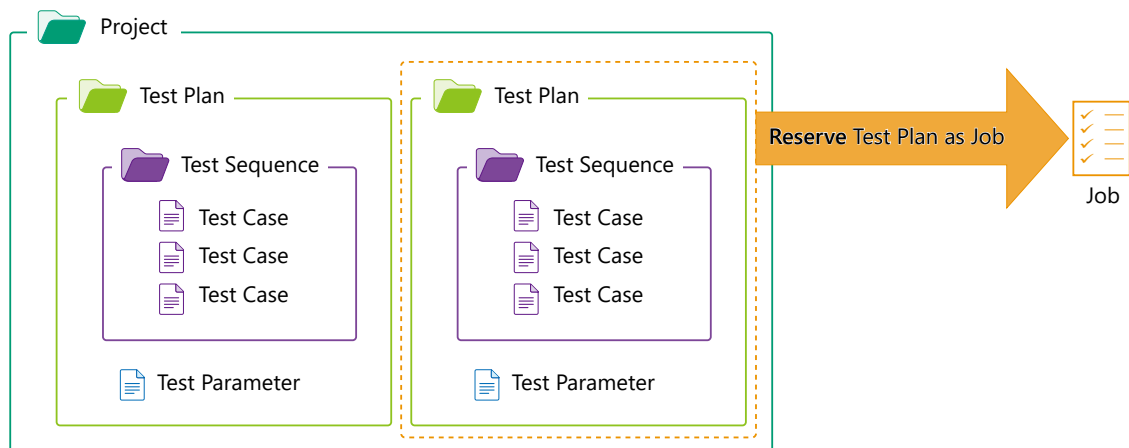
Testing Workflows with TestDeck



Based on the device implementation specifications, standard test information, and information on tests supported by the test equipment, TestDeck simplifies the procedures for selecting target Test Cases and creating Test Sequences. By reducing the workload on individual engineers, it helps prevent human error and the issues that could occur as a result, contributing to the improved performance of the testing operation.

In addition, managing both current and past test results on the dashboard makes it easier to identify Pass/Fail trends. Test trend information that was previously seldom reviewed can be leveraged as an information asset for planning the testing of the next software upgrade and the next model development.

TestDeck manages test configurations on a Project basis. Each Project consists of multiple Test Plans, and test progress is tracked for each Test Plan.

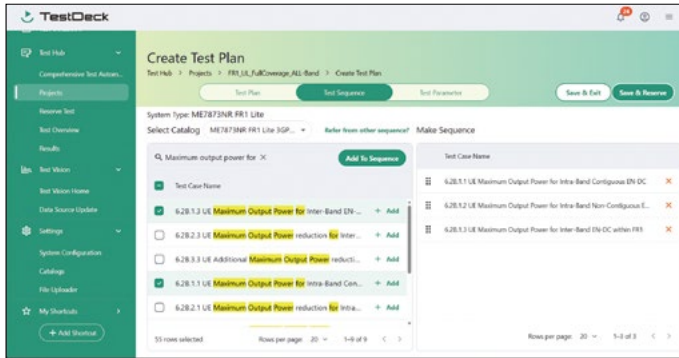


Terms	Mean
Project	A summary of the Test Plan, the systems used, and the UEs. Projects can be created like folders.
Test Plan	A combination of one Test Sequence and one Test Parameter. Multiple instances can be created within a single Project. Test execution and progress managed by TestDeck are handled on a Test Plan basis.
Test Sequence	A collection of Test Cases for remote execution. It manages the order of the Test Cases.
Test Case	The smallest unit of test executed by each measuring instrument.
Test Parameter	A set of parameters dependent on the type of measuring instrument specified during test execution.
Job	A Job refers to a reserved Test Plan that executes tests or sets sequences on any system.

Use Case: Test Setup



Remote Sharing of Test Equipment



Selecting the required test items for a device under evaluation from the vast number of test specifications defined by 3GPP requires a knowledge of standards, device implementation specifications, and test equipment.

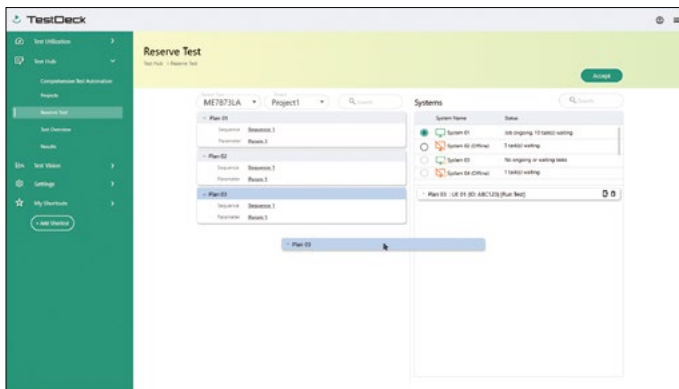
TestDeck provides a GUI that makes it easy to select the necessary test items for the device under test, based on Test Package and Test Case information supplied by the test equipment.

By combining the test items with parameter sets tailored to the test items, TestDeck also enables more efficient regression testing.

Use Case: Test Planning and Progress Monitoring

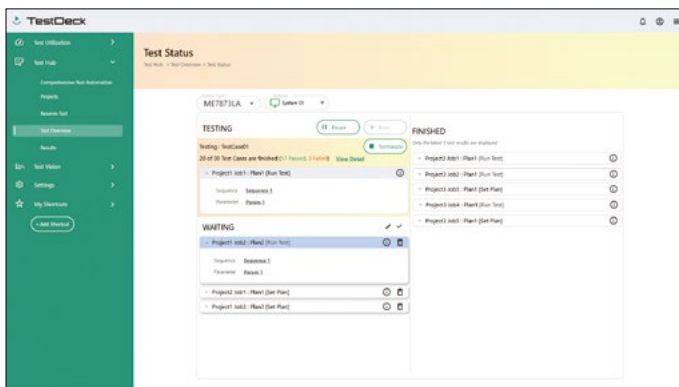


Visualization of Plans and Progress Through Equipment Usage Monitoring



In certification testing that involves executing a large number of test items, a single test may take several hours to several days to complete, during which the test engineers are required to remain in front of the test equipment.

With TestDeck, reserving the execution of created Test Plans and managing progress can be performed via a web browser. By minimizing the amount of work that the engineers have to perform in front of the test equipment, time efficiency is improved.



Use Case: Test Report



Easy Creation and Sharing of Test Result Reports

Result Summary

job72: PCTTest-3_3_2_1_3A_n41A (Run Test)
Project Name: PCT_project
Duration: 00:00:19 Job Started: 2023/05/12 09:42 UTC Job Finished: 2023/05/12 09:50 UTC

Total Verdict: X Fail

System Configuration:
System: Syst_M87854NAR_PCT
UE: UUT 1

Test Count:

Total	Pass	Fail
4	2	2

Test Cases:

Test Case Name	Band	Reference	Sub-Reference	Result	Status Message	Test Duration	Test Start Time (UTC)	Tx
7.1.1.2.1.ENC	EN-DC_3A...	38.523-1	S03	X Failed	Failed at Step 38.523-1...	00:01:47	2023-05-12 09:43:11	00
7.1.1.2.1.ENC	EN-DC_3A...	38.523-1	S03	✓ Passed		00:01:43	2023-05-12 09:44:58	00
7.1.1.3.1.ENC	EN-DC_3A...	38.523-1	S03	X Failed	MDMATHC: Failed in Pres...	00:01:43	2023-05-12 09:46:41	00
7.1.1.3.4.ENC	EN-DC_3A...	38.523-1	S03	✓ Passed		00:01:43	2023-05-12 09:48:24	00

By displaying a Pass/Fail list for each Job along with the fail reasons, less effort is required to check the result and log files for each test. It also makes it easy to compare results with those of previous executions of the same Job.

The test result list can be exported as a report. This contributes to more efficient routine reporting tasks. Supported output formats include PDF, HTML, and CSV commonly used for the tasks.

Result Summary

job72: PCTTest-3_3_2_1_3A_n41A (Run Test)
Project Name: PCT_project
Duration: 00:00:19 Job Started: 2023/05/12 09:42 UTC Job Finished: 2023/05/12 09:50 UTC

Total Verdict: X Fail

System Configuration:
System: Syst_M87854NAR_PCT
UE: UUT 1

Test Count:

Total	Pass	Fail
4	2	2

Test Cases:

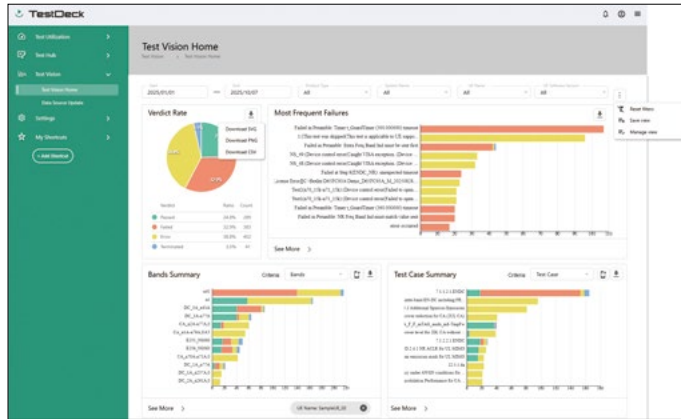
Test Case Name	Band	Reference	Sub-Reference	Result	Status Message	Test Duration	Test Start Time (UTC)	Tx
7.1.1.2.1.ENC	EN-DC_3A...	38.523-1	S03	X Failed	Failed at Step 38.523-1...	00:01:47	2023-05-12 09:43:11	00
7.1.1.2.1.ENC	EN-DC_3A...	38.523-1	S03	✓ Passed		00:01:43	2023-05-12 09:44:58	00
7.1.1.3.1.ENC	EN-DC_3A...	38.523-1	S03	X Failed	MDMATHC: Failed in Pres...	00:01:43	2023-05-12 09:46:41	00
7.1.1.3.4.ENC	EN-DC_3A...	38.523-1	S03	✓ Passed		00:01:43	2023-05-12 09:48:24	00

Use Case: Cumulative Result Visualization

Cumulative Result Visualization



Improving Development Efficiency by Leveraging Test Results as Assets



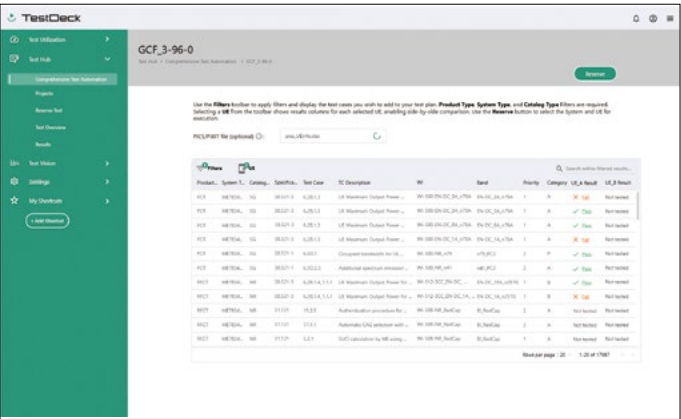
By accumulating the test results, it becomes possible to identify key test items and high-priority verification items, as well as understand the differences between past and recent test trends.

Thus, by checking test items of concern at an early stage, the risk of rework being required in later phases is reduced.

Advanced Option



Streamlining of Measurement Work Through Improved Testing Work Efficiency



Comprehensive Test Automation

3GPP standards are updated every three months, and the validation status is updated on a daily basis. As a result, the effort and time required to manually build the latest test settings have become a factor that constrains development time in mobile device development departments.

Comprehensive Test Automation consists of the following functions for the ME7834 (PCT) and ME7873 (RFCT): listing Test Cases supported by the test equipment based on the validation status of the test standards (GCF and PTCRB) and easily configuring the relevant test items in the Test Sequences.

These functions not only shorten the time required to update the test settings but also contribute to improved development efficiency by reducing human error when selecting Test Cases and setting parameters.



Specifications are subject to change without notice.

• **United States**

Anritsu Americas Sales Company

490 Jarvis Drive, Morgan Hill, CA 95037-2809, U.S.A.
Phone: (408)-778-2000

• **Canada**

Anritsu Electronics Ltd.

Americas Sales and Support

490 Jarvis Drive, Morgan Hill, CA 95037-2809, U.S.A.
Phone: +1-800-Anritsu (1-800-267-4878)

• **Brazil**

Anritsu Eletrônica Ltda.

Praça Amadeu Amaral, 27 - 1 Andar
01327-010 - Bela Vista - São Paulo - SP, Brazil
Phone: +55-11-3283-2511

• **Mexico**

Anritsu Company, S.A. de C.V.

Blvd Miguel de Cervantes Saavedra #169 Piso 1, Col. Granada
Mexico, Ciudad de Mexico, 11520, MEXICO
Phone: +52-55-4169-7104

• **United Kingdom**

Anritsu EMEA Limited

900 Capability Green, Luton, Bedfordshire, LU1 3LU, U.K.
Phone: +44-1582-433200

• **France**

Anritsu SA

12 avenue du Québec, Immeuble Goyave,
91140 VILLEBON SUR YVETTE, France
Phone: +33-1-60-92-15-50

• **Germany**

Anritsu GmbH

Nemetschek Haus, Konrad-Zuse-Platz 1,
81829 München, Germany
Phone: +49-89-442308-0

• **Italy**

Anritsu S.R.L.

Spaces Eur Arte, Viale dell'Arte 25, 00144 Roma, Italy
Phone: +39-6-509-9711

• **Sweden**

Anritsu AB

Kistagången 20 B, 2 tr, 164 40 Kista, Sweden
Phone: +46-8-534-707-00

• **Finland**

Anritsu AB

Technopolis Aviapolis, Teknobulevardi 3-5 (D208.5.),
FI-01530 Vantaa, Finland
Phone: +358-20-741-8100

• **Denmark**

Anritsu A/S

c/o Regus Winghouse, Ørestads Boulevard 73, 4th floor,
2300 Copenhagen S, Denmark
Phone: +45-7211-2200

• **Spain**

Anritsu EMEA GmbH

Representation Office in Spain

Calle Manzanares 4, Primera planta, 28005 Madrid, Spain
Phone: +34-91-572-6761

• **Austria**

Anritsu EMEA GmbH

Am Belvedere 10, A-1100 Vienna, Austria
Phone: +43-(0)1-717-28-710

• **United Arab Emirates**

Anritsu A/S

Office No. 164, Building 17, Dubai Internet City
P. O. Box – 501901, Dubai, United Arab Emirates
Phone: +971 (0) 4-2424919

• **India**

ANRITSU INDIA PRIVATE LIMITED

6th Floor, Indique ETA, No.38/4, Adjacent to EMC2,
Doddanekundi, Outer Ring Road, Bengaluru – 560048, India
Phone: +91-80-6728-1300
Fax: +91-80-6728-1301

• **Singapore**

ANRITSU PTE LTD

1 Jalan Kilang Timor, #07-04/06 Pacific Tech Centre
Singapore 159303
Phone: +65-6282-2400

• **Vietnam**

ANRITSU COMPANY LIMITED

16th Floor, Peakview Tower, 36 Hoang Cau Street, O Cho Dua Ward,
Hanoi, Vietnam
Phone: +84-24-3201-2730
Fax: +84-24-3201-2740

• **P.R. China (Shanghai)**

Anritsu (China) Co., Ltd.

Room 2301-2303, Tower A, New Caohejing International Business
Center No. 391 Gui Ping Road, Shanghai, 200233, P.R. China
Phone: +86-21-6237-0898

• **P.R. China (Hong Kong)**

ANRITSU COMPANY LIMITED

Unit 1302, 13th Floor, New East Ocean Center,
No.9 Science Museum Road, TsimShaTsui East,
Kowloon, Hong Kong
Phone: +852-2301-4980

• **Japan**

ANRITSU CORPORATION

8-5, Tamura-cho, Atsugi-shi, Kanagawa, 243-0016 Japan
Phone: +81-46-296-1244
Fax: +81-46-296-1239

• **Korea**

Anritsu Corporation Limited

8F, A TOWER, 20, Gwacheondaero 7-gil, Gwacheon-si,
Gyeonggi-do, 13840, Republic of Korea
Phone: +82-2-6259-7300

• **Australia**

Anritsu Pty Ltd

Unit 20, 21-35 Ricketts Road, Mount Waverley, Victoria 3149, Australia
Phone: +61-3-9558-8177

• **Taiwan**

ANRITSU COMPANY, INC.

7F, No. 316, Sec. 1, NeiHu Rd., Taipei 114, Taiwan
Phone: +886-2-8751-1816