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User Guide for Test Management

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1 Introduction

The Test Management apps allow you to plan, execute, monitor, and analyze the testing projects for your product prototype.

Depending on your roles in a testing project, the Test Management apps let you manage and reuse test artifacts to: optimize test efficiency; execute test plans in a flexible and simple-to-manage way; monitor test progress while running tests; and keep in touch with product development and other stakeholders.

The Test Management apps support the following activities in the testing process:

- Creating and editing **test cases** and linking them to the associated requirements for validation. You can also organize the related test cases into groups for collective management. The test cases are reusable in different test plans. For more information, see [Creating and Managing Test Cases \[page 5\]](#).
- Organizing test cases into a **test plan** to test against the associated requirements model. In a test plan, you can specify the test sequence, priority and other testing details for each of its test cases. For more information, see [Creating and Managing Test Plans \[page 10\]](#).
- Creating **test executions** for each test plan. After making a test plan, create test executions to carry it out. A test execution can be designed to include all or a subset of a test plan's test cases, which enables you to run a minimum amount of the required test cases in each execution round. During each test execution, you can keep track of the testing progress and the execution results. For more information, see [Creating Test Executions \[page 12\]](#).
- Entering the **test results** of test cases. To complete a test execution, you must record results for all its test cases in the system. You can pick up the test cases and maintain their test results, or drop the test cases that are currently under your name. For more information, see [Entering Test Case Results \[page 16\]](#).
- Reviewing a **test report** for each completed test execution. After each test execution, a test report is generated. You can check the test results generated from the test execution, and post comments under each report or test case to share them with development or other stakeholders. For more information, see [Test Reports \[page 19\]](#).

2 Launching Apps

To launch an app, choose the tile on the SAP Fiori launchpad.

For more information about the SAP Fiori launchpad, including using the header bar and search options, see [SAP Fiori Launchpad for SAP Cloud Platform](#).

The Test Management apps are listed as follows:

- With the [Manage Test Cases](#) app, you can view, create, and edit test cases, and you can link them to the associated product requirements for traceability.
- With the [Manage Test Plans](#) app, you can create and manage test plans.
- With the [Manage Test Executions](#) app, you can run the test cases in a flexible and iterative way, and you can monitor the testing progress and assign the test executions to a test object (such as a bill of materials (BOM)).
- With the [My Tests](#) app, you can pick up the unassigned test cases from test executions, and after completing the test, enter your results.
- With the [Report Center](#) app, you can view and analyze the test reports and share comments with the stakeholders.
- [Administration] With the [Test Management - Data Security](#) app, you can export all the data created before a certain date to your local system, and delete it completely in the Test Management apps. You can also anonymize the information of a certain user in all the associated test cases.

3 Creating and Managing Test Cases

Create test cases to test against the associated requirements for the prototype in your R&D projects. With the [Manage Test Cases](#) app, you can view, create, and edit test cases, and you can link them to the associated product requirements for traceability. You can also upload requirements attachments for reference.

In a testing project, test cases must be organized into a test plan (see [Creating and Managing Test Plans \[page 10\]](#)). You can reuse a test case in different test plans for related products.

In the [Manage Test Cases](#) app, the [Test Cases](#) table lists all the test cases that are available to you. Use the filters on the top of the page to set search criteria. Select the [Settings](#) button on the top right corner of the table to adjust the table display settings.

To open the detail page of a test case, select it in the table. The following properties are available in the header section of the test case:

Property	Description
Name	Specifies the name of the test case.
Phase	Specifies the testing stage of the test case. The phase of a test case can be Requirements , Early Design , or Detail Design .
Category	Specifies the aspect of your design that this test case is testing. The category can be Digital , Physical , Performance , Stability , or Compatibility .
Status	Specifies the authoring status of the test case. A test case has two statuses, Saved and Published . Saved test cases are only visible and editable to you before publication. Published test cases are no longer editable and are visible to all users.

Note

You can assign requirements to a test case regardless of its status.

The following properties are available in the [Test Case Information](#) tab:

Category	Property	Description
Test Information	Description	Specifies the steps of the test case or other descriptive information.

Category	Property	Description
	<i>Testing Details - Test Environment</i>	Specifies the environment where the test case will be performed. For example, 30x normal pressure in a stress test.
	<i>Testing Details - Expected Outcome</i>	Specifies the outcome that the test object must achieve to pass this test case.
	<i>Testing Details - Test Case Groups</i>	Specifies the test case group that the test case belongs to. For more information, see Creating and Managing Test Case Groups [page 8] .
	<i>Administration Information</i>	Specifies the creator, creation date, last modifier, and last modification date of the object.
<i>Test Steps</i>	-	Specifies a series of ordered actions that a tester must perform to complete the testing. In the edit mode of a test case, enter your description and expectation for each test step. Select + to create the next step. Select ✖ to delete a step. Drag and drop the steps to adjust the sequence order.
<i>Test Parameters</i>	-	Specifies the test parameters for the test case. For example, Minimum Air Pressure could be a parameter in a stress test. The texts can be formatted in a table.

If a test case has been assigned requirements from the Web application [Requirements Management and Systems Modeling](#), you can check the requirements in the [Assigned Requirements](#) tab. For more information, see [Assigning Requirements to a Test Case \[page 7\]](#).

If the test case has been added to test plans, you can view these test plans in the [Related Test Plans](#) tab. For more information about test plans, see [Creating and Managing Test Plans \[page 10\]](#).

To create a test case, follow these steps:

1. In the [Manage Test Cases](#) app, select the [Create Test Case](#) button above the [Test Cases](#) table.

i Note

To edit a saved test case, select it from the [Test Cases](#) table, and select [Edit](#).

To create a new test case from a published test case, select it from the [Test Cases](#) table, and select [Copy](#).

The Test Case detail page opens in Edit mode.

2. Enter properties for the test case.

i Note

Name is a mandatory field for saving or creating a test case. Enter a unique name for your test case.

3. Assign requirements to your test case to establish traceability. For more information, see [Assigning Requirements to a Test Case \[page 7\]](#).
4. Select [Save](#) to save a draft test case available only to you, or select [Publish](#) to submit it for publication.

3.1 Assigning Requirements to a Test Case

You can assign product requirements to the associated test cases for traceability.

Context

The product requirements are managed in the Web application [Requirements Management and Systems Modeling](#). You must open your test case in the Web application to select and assign the associated requirements to it.

After making the requirement assignments, while in [Requirements Management and Systems Modeling](#), you can launch a full impact analysis including the test cases, the associated requirements, and other model objects. For more information, see [Impact and Lineage Analysis](#) in the User Guide for [Requirements Management and Systems Modeling](#).

i Note

As of this release, [Manage Test Cases](#) supports only assigning a test case to requirements from the latest version of its model.

Procedure

1. In the [Manage Test Cases](#) app, navigate to the detail page of a test case.
2. In the [Assigned Requirements](#) tab, you can see the list of requirements that have been assigned to the test case. Select a requirement to view its properties in the Web application [Requirements Management and Systems Modeling](#).
3. To assign or revoke assigning requirements to the test case in the Web application, select the [Requirement Assignments](#) button in the header area. For more information, see [Assigning Model Objects to External Objects](#) in the User Guide for [Requirements Management and Systems Modeling](#).
4. **Optional:** Launch a full impact analysis including the test cases, the associated requirements, and other model objects. For more information, see [Impact and Lineage Analysis](#).

5. Back on the [Manage Test Cases](#) app test case detail page, select the [Refresh](#) icon above the [Assigned Requirements](#) table to view your newly assigned requirements.

3.2 Creating and Managing Test Case Groups

Test case groups are sets of test cases that share certain characteristics, or that are usually included in the same test plans. Create test case groups to search and manage your test cases more efficiently.

Context

For example, the test case group **Privacy Laws** may contain the test cases that are used to validate legal requirements about data protection and privacy.

In the [Manage Test Cases](#) app, the [Test Case Groups](#) table lists all the available test cases groups. To open the detail page of a test case group, select it in the table. The following properties are available in the header section of the test case group:

Property	Description
Name / Description	Specifies the name and description of the test case group.
Number of Test Cases	Specifies the number of test cases that have been added to this group.

The [Test Cases](#) tab lists all the test cases that have been added to this group.

Procedure

1. In the [Manage Test Cases](#) app, switch to the [Test Case Groups](#) table by selecting the corresponding tab above the table.
2. Select the [Create Test Case Group](#) button above the table.

i Note

To modify the name and description of a test case group, select it from the [Test Cases Groups](#) table, and select [Edit](#).

3. Enter the properties information for the test case group.
4. In the [Test Cases](#) tab, select [Add](#) to add test cases to this group.

i Note

- To remove test cases wrongly assigned, select them in the table and choose [Remove](#).
- To open the detail page of a listed test case, select it in the table.

5. Choose [Save](#) at the bottom of the page.

4 Creating and Managing Test Plans

A test plan includes all the test cases needed to validate the associated requirements model for your prototype, and organizes them by test sequence and priority. With the [Manage Test Plans](#) app, you can create and manage test plans.

In the [Manage Test Plans](#) app, the [Test Plans](#) table lists all the test plans that are available to you. Use the filters on the top of the page to set search criteria. Select the [Settings](#) button on the top right corner of the table to adjust table display settings.

To open the detail page of a test plan, select it in the table. The following properties are available in the header section of the test plan:

Property	Description
Name / Description	Specifies the name and description of the test plan.
Priority	Specifies the level of importance of the test plan - High , Medium , or Low .
Status	Specifies the authoring status of the test plan. A test plan has two statuses, Saved and Published . Saved test plans are visible and editable only by you, before publication. Published test plans are no longer editable and are visible to all users.

The following properties are available in the [Test Plan Information](#) tab:

Property	Description
Test Environment	Specifies the environment for the test plan, which applies to all the test cases in it.
Administration Information	Specifies the creator, creation date, last modifier, and last modification date of the object.

In the [Test Cases](#) tab, view a list of all the test cases that have been included in the test plan. The following properties are available for each test case in the table under the default settings:

Property	Description
Test Sequence	Specifies the sequence of the test case to be tested in its test plan.
Name	Specifies the name of the test case.

Property	Description
<i>Phase</i>	Specifies the testing stage of the test case. The phase of a test case can be Requirements , Early Design , or Detail Design .
<i>Category</i>	Specifies the aspect of your design that this test case is testing. The category can be Digital , Physical , Performance , Stability , or Compatibility .
<i>Priority</i>	Specifies the level of importance of the test case in this test plan: High , Medium , or Low .

Select the [Settings](#) button on the top right corner of the table to adjust table display settings. Select a list item to open the test case's detail page. For more information about test cases, see [Creating and Managing Test Cases \[page 5\]](#).

To create a test plan, follow these steps:

1. In the [Manage Test Plans](#) app, select the [Create Test Plan](#) button above the [Test Plans](#) table.

i Note

To edit a saved test plan, select it from the [Test Plans](#) table, and select [Edit](#).

To create a new test plan from a published test plan, select it from the [Test Plans](#) table, and select [Copy](#).

The test plan detail page opens in edit mode.

2. Enter the properties information for the test plan as appropriate.

i Note

[Name](#) is a mandatory field for saving or creating a test plan. Enter a unique name for your test plan.

3. In the [Test Cases](#) tab, add all the relevant test cases to your test plan:
 1. Select [Add](#) above the table. A dialog opens listing all the available test cases.
 2. Select all the test cases to add from the list.
For collective selection, use the dropdown list above the list to view the test cases by test case group, related test plan, or the associated requirements model. Use the search field to search for test cases.
 3. When your selection is complete, select [Add](#).

i Note

To remove model objects wrongly assigned, select them in the table and select [Remove](#).

4. Specify a [Test Sequence](#) and [Priority](#) for each added test case.
4. Select [Save](#) to save a draft of the test plan available only to you, or select [Publish](#) to submit it for publication.

5 Creating Test Executions

To carry out the test cases in a test plan, you must create test executions for it. With the [Manage Test Executions](#) app, you can run the test cases in a flexible and iterative way with your design files, and you can monitor the testing progress. You can also assign the test executions to a test object and assign test cases to quality engineers.

For each test plan, you can create as many test executions as needed. A test execution includes either all or a subset of the test cases in the associated test plan. For example, you can include only the test cases that fail during the last round of test execution, in order to control testing cost, or to quickly adapt to the iterations in the R&D process. In the [Manage Test Executions](#) app, you can create a new test execution from an existing test execution, and select only a few of its test cases for the next round of execution.

In the [Manage Test Executions](#) app, the [Test Executions](#) table lists all the test executions that are available to you. Use the filters on the top of the page to set search criteria. Select the [Settings](#) button on the top right corner of the table to adjust table display settings.

To open the detail page of a test execution, select it in the table. The following properties are available in the header section of the test execution:

Property	Description
Name / Description	Specifies the name and description of the test execution.
Execution Results	The bar chart visualizes the results of the test cases in the test execution. Red indicates the number of failed test cases, green indicates the number of passed test cases, and grey indicates the number of test case which haven't been run.
Test Progress	The bar chart visualizes the completion rate of the test execution. For example, 100% indicates that all of the test cases in the test execution have been run.

Property	Description
<i>Status</i>	Specifies the execution status of the test execution. A test execution has the following statuses: Saved – Saved test executions are visible and editable only by you before publication. Published – Specifies that the test execution has been published to everyone, but none of its test cases has been assigned to the Quality Engineers yet (see Entering Test Case Results [page 16]). In Progress – Specifies that at least one of the test cases has been assigned to a Quality Engineer, who will run the test case and enter the test results (see Entering Test Case Results [page 16]). Completed – Specifies that all test cases in the test execution have returned results.
<i>Due Date</i>	Specifies the date before which all the test cases of this test execution must have a result.

The following properties are available in the [Test Execution Information](#) tab:

Category	Property	Description
<i>Test Object</i>	<i>Bill of Materials</i>	Specifies the bill of materials (BOM) to be tested.
<i>Test Information</i>	<i>Testing Details - Test Plan</i>	Specifies the test plan that the current test execution is created for.
	<i>Testing Details - Test Environment</i>	Specifies the environment for the test plan, which applies to all the test cases in it.
	<i>Administration Information</i>	Specifies the creator, creation date, last modifier, and last modification date of the object.

In the [Test Cases](#) tab, view a list of all the test cases that have been included in this test execution. The following properties are available for each test case in the table under the default settings:

Property	Description
<i>Test Sequence</i>	Specifies the sequence of the test case to be tested in its test plan.
<i>Name</i>	Specifies the name of the test case.

Property	Description
Test Result	Specifies the test result of the test case in this test execution.
Quality Engineer	Specifies the Quality Engineer who is assigned to run the test case in this test execution.
Test Status	Specifies the status of the test case in this test execution. There are three statuses: Unassigned – None of the Quality Engineers has been assigned to run the test case in this test execution. Assigned – A Quality Engineer has been assigned to run the test case but hasn't entered the test results yet. Completed – The assigned Quality Engineer has entered the results of the test case in this test execution.
Tested On	Specifies when the test case is tested in this test execution.
Priority	Specifies the level of importance of the test case in this test plan: High , Medium , or Low .

Select the [Settings](#) button on the top right corner of the table to adjust table display settings. Select a list item to open the test case's detail page. For more information of test cases, see [Creating and Managing Test Cases \[page 5\]](#).

To create a test execution, follow these steps:

1. In the [Manage Test Executions](#) app, select the [Create Test Execution](#) button above the [Test Executions](#) table.

i Note

To edit a saved test execution, select it from the [Test Executions](#) table, and select [Edit](#).

2. In the new dialog, enter a name and select a test plan for this test execution and select [Create](#).

i Note

To create a new test execution based on an existing one, select it from the dropdown list following [Create from existing test execution?](#). Otherwise, leave the field empty.

The test execution detail page opens in edit mode.

3. Enter the properties information for the test execution.
4. In the [Test Execution Information](#) tab [Test Object](#) category, add the associated BOMs to your test execution:
 1. Select [Add](#) above the table. A dialog opens, listing all the available BOMs.
 2. Select a BOM to add from the list. Use the filters above the table to set the search criteria.
 3. When your selection is complete, select [Add](#).

i Note

To remove BOMs wrongly assigned, select them in the table and select [Remove](#).

5. In the Test Execution Information tab Design Files category, upload execution files for a reference.

6. In the [Test Cases](#) tab, add the test cases from the test plan to your test execution:
 1. Select [Add](#) above the table. A dialog opens, listing all the test cases in the test plan.

i Note

When creating from an existing test execution, use the tabs above the table to switch between lists of test cases that [Fail](#) or [Pass](#) the execution, or view [All](#).

2. Select the test cases to add to the test execution.
3. When your selection is complete, select [Add](#).

i Note

To remove test cases wrongly assigned, select them in the table and select [Remove](#).

7. Optional: if you want to reassign test cases, click [Reassign](#) and use the Mass Assign again.

i Note

If the test case is in the status of In-Progress or Completed, you can not reassign it.

8. Select [Save](#) to save a draft of the test execution available only to you, or select [Publish](#) to submit it for publication.

6 Entering Test Case Results

With the [My Tests](#) app, you can pick up the unassigned test cases from test executions, and after completing the test, enter your results.

Context

With the publication of each test execution, all its test cases appear in the [My Tests](#) app in the initial status [Unassigned](#). To complete the test execution, a Quality Engineer engage test cases, run them, and enter the test results in the system.

In the [My Tests](#) app, the [Unassigned Test Cases](#) tab lists all the unassigned test cases, which are grouped by the associated test executions.

The [My Test Cases](#) tab lists all the test cases that have been assigned to you. Each test case is either in the [In Progress](#) status, meaning it doesn't have test results yet, or the [Completed](#) status, meaning you have entered your test results for it. View your test cases by their status by switching between the corresponding tabs next to the table title.

Use the filters on the top of the page to set search criteria. Select the [Settings](#) button on the top right corner of the table to adjust the table display settings.

To open the detail page of a test case, select it in the table. The following properties are available in the [Header](#) section of the test case:

Property	Description
Name	Specifies the name of the test case.
Phase	Specifies the testing stage of the test case. The phase of a test case can be Requirements , Early Design , or Detail Design .
Category	Specifies the aspect of your design that this test case is testing. The category can be Digital , Physical , Performance , Stability , or Compatibility .
Due Date	Specifies the date before which all the test cases of this test execution must have a result.
Priority	Specifies the level of importance of the test case in this test plan: High , Medium , or Low .

The following properties are available in the [Test Case Information](#) tab:

Category	Property	Description
<i>Test Object</i>	<i>Bill of Materials</i>	Specifies the bill of materials (BOM) to be tested.
<i>Test Information</i>	<i>Description</i>	Specifies the steps of the test case or other descriptive information.
	<i>Testing Details - Test Sequence</i>	Specifies the sequence of the test case to be tested in its test plan.
	<i>Testing Details - Test Execution</i>	Specifies the test execution that this run of the test case belongs to.
	<i>Testing Details - Test Plan</i>	Specifies the test plan that the current test execution is created for.
	<i>Testing Details - Test Environment</i>	Specifies the environment for the test plan, which applies to all the test cases in it.
	<i>Testing Details - Quality Engineer</i>	Specifies the Quality Engineer who has engaged in running the test case in this test execution.
	<i>Testing Details - Test Case Groups</i>	Specifies the test case group that the test case belongs to. For more information, see Creating and Managing Test Case Groups [page 8].
	<i>Administration Information</i>	Specifies the creator, creation date, last modifier, and last modification date of the object.
<i>Test Steps</i>	-	Specifies a series of ordered actions that a tester must perform to complete the testing.
<i>Test Parameters</i>	-	Specifies the test parameters for the test case. For example, Minimum Air Pressure could be a parameter in a stress test. The texts can be formatted in a table.

The following properties are available in the *Test Results* tab:

Property	Description
<i>Expected Outcome</i>	Specifies the outcome that the test object must achieve to pass this test case.

Property	Description
<i>Actual Outcome</i>	Specifies the outcome that the test object generates in this test execution.
<i>Test Result</i>	• Pass, if the actual outcome meets the expected outcome. • Fail, if the actual outcome does not meet the expected outcome. • Not Applicable, if the test case cannot be executed.

To assign a test case to yourself and enter the test results, do the following:

Procedure

1. In the *My Tests* app, in the *Unassigned Test Cases* table, select the test cases as appropriate, and select *Assign to Me*.
2. In the *My Test Cases* table, check all the test cases that have been assigned to you.
The test cases that you just assigned to yourself are listed in the *In Progress* category.
3. In the *In Progress* category of the table, select the test case that you want to enter test results for.

i Note

To drop a test case that has been assigned to you, select it in the table and choose *Unassign*.

4. In the *Test Steps* area, select *Enter Result*. For each step, select *Pass*, *Fail* or *N/A* to record your testing in the *Result* column.
5. Select *Enter Results* in the header area.
6. Enter the *Actual Outcome* and *Test Result* in the dialog box, then choose *OK*.
This test case is now in status *Completed*.

7 Test Reports

A test report is generated with the completion of each test execution. With the [Report Center](#) app, you can view and analyze the test reports and share comments with the stakeholders.

In the [Report Center](#) app, the [Reports](#) table lists all the test reports that are available to you. Use the filters on the top of the page to set search criteria. Select the [Settings](#) button on the top right corner of the table to adjust the table display settings.

To open the detail page of a test report, select it in the table. The following properties are available in the [Header](#) section of the test plan:

Property	Description
Name	Specifies the name of this report.
Test Execution	Specifies the name and description of the test execution from which this report is generated. Test Execution Description Test Execution Description
Execution Results Overview	The bar chart visualizes the results of the test cases in the completed test execution. Red indicates the number of failed test cases, and green indicates the number of passed test cases.
Result	Specifies the result of this report. Pass , if all the test cases in the test execution have passed. Otherwise, the result is Fail .

The following properties are available in the [Report Information](#) tab:

Category	Property	Description
Test Object	Bill of Materials	Specifies the bill of materials (BOM) to be tested.
Test Information	Testing Details - Test Plan	Specifies the test plan that the current test execution is created for.
	Testing Details - Test Environment	Specifies the environment for the test plan, which applies to all the test cases in it.
	Administration Information	Specifies the creator, creation date, last modifier, and last modification date of the object.

In the [Test Cases](#) tab, view a list of all the test cases in the associated test execution. You can select a list item to open the test case's detail page. The following properties are available for each test case in the table under the default settings:

Property	Description
<i>Test Sequence</i>	Specifies the sequence of the test case to be tested in its test plan.
<i>Name</i>	Specifies the name of the test case.
<i>Quality Engineer</i>	Specifies the Quality Engineer who has engaged in running the test case in this test execution.
<i>Test Result</i>	Specifies the test result of the test case in this test execution.
<i>Tested On</i>	Specifies when the test case is tested in this test execution.
<i>Priority</i>	Specifies the level of importance of the test case in this test plan: High , Medium , or Low .

In the test case's detail page, the following tabs are available: [Result Files](#), [Test Case Information](#), [Assigned Requirements](#), [Related Test Plans](#), [Comments](#). For more information of test cases, see [Creating and Managing Test Cases \[page 5\]](#)

For the [Comments](#) tab in the report view page , you can view the comments posted by the stakeholders regarding the report. To leave your own comment, enter it in the input field and select the [Submit](#) icon.

i Note

You can view and submit your comments both in the report page and in the test case detail page.

Important Disclaimers and Legal Information

Hyperlinks

Some links are classified by an icon and/or a mouseover text. These links provide additional information.

About the icons:

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Gender-Related Language

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