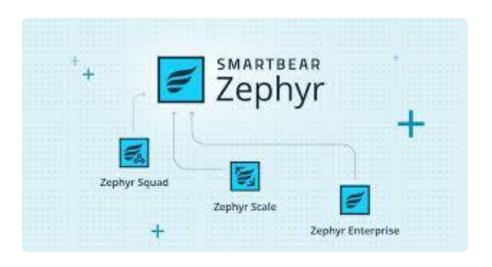
RTM Jira + Zephyr





Introduction to Zephyr for Jira

Zephyr is an add-on that enhances Jira by providing dedicated test management capabilities, making it easy for teams to manage and execute tests directly within Jira. Zephyr integrates seamlessly with Jira, enabling testers to manage the testing lifecycle efficiently. Key features of Zephyr for Jira include:

- **Test Cases**: Detailed descriptions of tests, including the testing steps, preconditions, and expected outcomes. These represent individual testing scenarios.
- **Test Cycles**: Groups of test cases that are planned to be executed together in a specific testing phase (e.g., Sprint Testing, Regression Testing).



- **Test Executions**: Tracking the actual performance of a test case, showing its status (e.g., Pass, Fail, Work in Progress) after execution.
- **Metrics and Reporting**: Provides detailed insights into the testing process, such as progress, test coverage, and defect status, helping the team evaluate the application's quality.



Setting Up a Manual Testing Process in Jira with Zephyr

Here's a step-by-step process for setting up manual testing in Jira, especially with Zephyr integration:

Step 1: Configuring Jira

- Create a Project: Start by setting up a project dedicated to testing or integrating testing into an existing software development project. Projects in Jira help organize issues (like test cases, bugs, or tasks).
- **Define Issue Types**: Jira supports various issue types (e.g., Bug, Task, Story). When using Zephyr, you'll have access to "Test Case" as a predefined issue type. If Zephyr is not installed, you can create a custom issue type for test cases.

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Step 2: Creating Test Cases

- Add Test Cases: Using the "Test Case" issue type in Zephyr, you can create detailed test cases with fields for test steps, expected results, and any preconditions.
- Organize in Test Cycles: Group related test cases into test cycles to plan which tests to run in different phases (e.g., during development sprints or in a dedicated regression testing cycle).



Step 3: Test Execution

- Run Test Cases: Execute your test cases by changing their status (e.g., Pass, Fail, WIP). Zephyr allows you to track the test execution status within Jira.
- **Defect Reporting**: If any issues arise during test execution, they can be reported as bugs within Jira. These defects can be linked directly to the test cases that caused the failure, allowing traceability between test cases and issues.



Step 4: Monitoring and Reporting

- **Use Dashboards**: Create Jira dashboards to monitor the status of test cycles, track progress, and review any defects found.
- **Generate Reports**: Zephyr's built-in reporting tools allow teams to assess the overall quality of the software, test coverage, and testing progress, providing real-time insights into testing activities.



Step 2: Integrating Zephyr with Jira

- **Install Zephyr:** Zephyr can be installed from the **Atlassian Marketplace**. Once installed, Zephyr test management features will become accessible within Jira, enhancing its capabilities for manual testing.
- Configure Zephyr: Set up key configurations such as:
- Test statuses (e.g., Pass, Fail, Blocked).
- Test step fields for defining the details of test cases.
- Tailor Zephyr settings based on your project's needs, such as adding custom fields or statuses relevant to your testing process.



Step 3: Creating Test Cases

- Create Test Cases in Zephyr: With Zephyr installed, create new test cases by:
- Defining test steps, expected results, and any necessary preconditions.
- Attaching relevant documentation, screenshots, or additional reference materials to provide context for the test cases.
- Organize Test Cases: Use folders, components, or labels to categorize test cases for better management. This helps testers quickly find and execute relevant test cases based on different testing phases or modules.



Step 4: Planning Test Cycles

- Create Test Cycles: A test cycle defines a specific testing phase (e.g., Sprint Testing, Regression Testing):
- Assign test cases to the cycle based on what needs to be tested in that phase.
- Set timelines for executing these test cases and designate testers responsible for each case.

Execute Tests:

- Testers manually execute test cases.
- Record the test results in Zephyr (e.g., Pass, Fail).
- Log any defects directly from Zephyr and link them to the relevant test steps for traceability.



Step 5: Tracking Progress and Reporting

- Monitor Test Execution:
- Utilize Zephyr's **dashboards** and built-in reports to get real-time insights into the status of test executions.
- View overall progress, track defect counts, and identify test cases that are incomplete or failed.
- Generate Reports:
- Generate detailed reports on test coverage, defect density, and progress.
- Share these reports with stakeholders to provide an overview of the testing phase and guide decision-making.



Best Practices for Manual Testing with Jira and Zephyr

- Regularly Review and Update Test Cases: Ensure that test cases are always up to date to reflect changes in the application, preventing test cases from becoming outdated or irrelevant.
- **Use Labels and Components Wisely**: Properly organize test cases using labels or components, making it easier to filter and manage large numbers of cases.
- Leverage Integration Features: Link defects directly to test cases, making it easier to trace bugs back to their origin and to determine their impact.



Types of RTM

- Forward Traceability Matrix
- **Purpose**: Tracks requirements from their origin to the final deliverables (test cases). This ensures that each requirement is verified by a corresponding test case and that development activities align with the project requirements.
- Example:
- A requirement to create a login feature is documented in the matrix and traced forward to see if there is a corresponding test case that validates it and if that feature was implemented in the final product.



Backward Traceability Matrix

 Purpose: Tracks each deliverable or test case back to its original requirement. This ensures that only necessary functionality, as defined by requirements, has been implemented, preventing scope creep.

• Example:

• If there is a new test case or feature, it is traced back to verify if there is a requirement for it. For instance, a "Remember Me" feature in the login module is checked to ensure it was a specified requirement.



Bidirectional Traceability Matrix

- **Purpose**: Combines forward and backward traceability, providing a full traceability view of the project. It allows tracking both forward (from requirements to test cases) and backward (from test cases back to requirements), ensuring complete coverage and validating that all work aligns with the requirements.
- Example:
- A requirement for a search functionality is traced forward to see if it was
 developed and tested. Additionally, every test case for search functionality is
 checked backward to ensure it is linked to an initial requirement.

RTM for Meesho app:



Requirem ent ID	Requirement Description	Test Case ID	Test Case Description	Status	Remarks
REQ-001	Signup functionality	TC_001	To verify whether user are able to signup with valid number Valid OTP	PASS	User are able to login with valid number
REQ-002	Signup functionality	TC_002	To verify whether user are able to sign up with invalid number	PASS	User are not able to login with invalid number
REQ-003	Signup functionality	TC_003	To verify whether user are able to signup with valid number and invalid OTP	PASS	User are not able to login with valid number and invalid OTP

Activity

Doubt clarification session

