

## Software Test Report (STR)

A **Software Test Report (STR)** is a **comprehensive document** that records the **test execution details, results, and observations**.

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### 1. Test Identification, Site, Schedule, and Participation

This section documents the **fundamental details** of the test, including the **software, location, team, and effort** involved.

**Example:**

- **1.1 Tested Software Identification** – Software: **XYZ Application v2.0 (Build 1021)**
  - **1.2 Documents Providing Test Basis** – Test Plan, Requirement Specification Document
  - **1.3 Test Site** – Testing conducted in **Lab Environment – Server 192.168.1.10**
  - **1.4 Test Duration** – Start: **March 10, 2025, 9:00 AM** | End: **March 12, 2025, 5:00 PM**
  - **1.5 Test Team Members** – John (Lead Tester), Alice (Automation Engineer), Bob (Manual Tester)
  - **1.6 Other Participants** – Developers and Product Managers
  - **1.7 Hours Invested in Testing** – **15 hours total**
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### 2. Test Environment

This section describes the **hardware, software, and preparation** needed before testing.

**Example:**

- **2.1 Hardware & Firmware Configuration**
    - Server: **Intel Xeon 8-core, 32GB RAM, 1TB SSD**
    - Database: **PostgreSQL v13**
    - Operating System: **Windows Server 2019**
  - **2.2 Preparations & Training Prior to Testing**
    - Installed **latest software build** on test server.
    - Set up **test accounts and access credentials**.
    - Conducted **training session** for new testers.
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### 3. Test Results

This section provides **test execution details** including **test case outcomes** and failures.

**Example:**

### 3.1 Test Identification

- Test Name: **Login Functionality Test**
- Test ID: **TC-001**

### 3.2 Test Case Results

Test Case ID	Tester	Expected Result	Actual Result	Status
TC-001	Alice	User logs in successfully	Login successful	✓ Pass
TC-002	Bob	Incorrect password shows error	Error displayed	✓ Pass
TC-003	John	Forgot Password link redirects	Page not found error	✗ Fail

- **Failed Test Case Details (TC-003):**
  - **Issue:** Clicking the "Forgot Password" link shows a **404 Page Not Found** error.
  - **Logs/Error Code:** Error: HTTP 404 - Page Not Found
  - **Recommendation:** Fix the **broken link to Forgot Password page** in the next release.

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## 4. Summary Tables for Errors & Regression Testing

This section **summarizes errors found** and compares results with previous test cycles.

### Example:

- **4.1 Summary of Current Test Execution**
  - **Total Test Cases Executed: 50**
  - **Passed: 45**
  - **Failed: 5**
  - **Skipped: 0**
- **4.2 Comparison with Previous Results (Regression Testing)**
  - Previous Cycle Failures: **7**
  - Current Cycle Failures: **5 (✓ Improvement)**
  - **Issues Resolved from Last Test:** Login page responsiveness fixed.

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## 5. Special Events & Testers' Proposals

Records **unexpected behaviours, problems, and improvement suggestions**.

### Example:

- **5.1 Special Events & Unexpected Software Responses**
    - **During peak load testing**, the application **crashed** when handling 10,000 concurrent users.
    - The **API failed** when too many requests were sent in a short time, causing **timeouts**.
  - **5.2 Problems Encountered During Testing**
    - **Database response time was slow** for queries returning more than **100,000** records.
    - **Some UI elements did not load correctly** in Safari browser.
  - **5.3 Test Environment & Process Improvement Suggestions**
    - **Upgrade the test servers** to handle **high-load scenarios**.
    - Implement **automated test scripts** for **repetitive functional testing**.
  - **5.4 Suggested Changes in Test Cases & Procedures**
    - Add **stress testing scenarios** to check how the system performs under high load.
    - Improve test documentation for **new team members**.
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