

Test Environment for OrangeHRM Application

Here's the

Table of Contents

1. Introduction
2. Purpose
3. Hardware Requirements
4. Software Requirements
5. Tools and Utilities
6. Test Data
7. Test Environment Setup
8. Risks and Mitigations
9. Maintenance

1. Introduction

The test environment is a critical aspect of the testing process, providing the infrastructure and setup required to execute test cases effectively. This document outlines the hardware, software, tools, and configurations needed for testing the OrangeHRM application.

2. Purpose

The purpose of this document is to define the test environment for validating the functionalities of the OrangeHRM application. This ensures a consistent and reliable setup for all testing activities.

3. Hardware Requirements

Client Machines:

- **Processor:** Intel i5 or higher.
- **RAM:** 8 GB or more.
- **Storage:** 256 GB SSD or higher.
- **Network:** Stable internet connection with 10 Mbps or higher.

Server:

- **Processor:** Intel Xeon or equivalent.
 - **RAM:** 16 GB or more.
 - **Storage:** 1 TB HDD/SSD.
 - **Database Server:** MySQL or an equivalent database backend.
-

4. Software Requirements

Operating Systems:

- Windows 10/11.
- macOS (for compatibility testing).

Browsers:

- Google Chrome (latest version).
- Mozilla Firefox (latest version).
- Microsoft Edge (latest version).

Database:

- MySQL for backend database operations.

Frameworks:

- PHP (used for OrangeHRM application).
 - Apache Web Server or equivalent.
-

5. Tools and Utilities

- **Defect Tracking:** Jira for defect management.
 - **API Testing:** Postman for validating API responses.
 - **Database Testing:** SQL queries and MySQL Workbench.
 - **Cross-Browser Testing:** BrowserStack for compatibility testing.
-

6. Test Data

- **Input Test Data:**
 - Employee profiles for testing CRUD operations (Create, Read, Update, Delete).
 - Valid and invalid login credentials.
 - Sample contact, emergency, and dependent information.
 - **Output Test Data:**
 - Verifying expected results such as error messages, profile updates, and successful transactions.
-

7. Test Environment Setup

1. **Server Configuration:**
 - Install the OrangeHRM application on a test server.
 - Configure the MySQL database with test data.
 - Deploy the PHP-based application and connect to the database.
 2. **Access Credentials:**
 - **Admin User:**
 - Username: admin
 - Password: admin123
 - **Employee User:**
 - Username: employee1
 - Password: emp123
 3. **Test Execution Platforms:**
 - Desktop browsers (Chrome, Firefox, Edge).
 - Mobile browsers for responsive testing.
-

8. Risks and Mitigations

- **Risk:** Environment downtime during testing.
 - **Mitigation:** Set up redundant environments to ensure uninterrupted testing.
 - **Risk:** Incorrect configuration of the test server.
 - **Mitigation:** Maintain a checklist for server setup validation.
-

9. Maintenance

The test environment will be monitored regularly to ensure stability. All updates or changes will be documented to avoid disruptions in the testing process.