

# Quality Assurance System Test Strategy/Test Plan

**Program Name - Project Name**

The *Quality Assurance System Test Strategy* documents the high-level testing strategy that will be used to create the more detailed Test Plan/Cases. It allows all parties involved in the testing process to proactively decide what the important issues are in testing and how to best deal with these issues. This document defines the testing strategy, resource utilization, responsibilities, schedules, risks, and priorities for this testing effort.

Role	Typical Purpose for Using Document	Name	Purpose
QA Systems Lead	Creates and distributes the Testing Strategy Document including all documents referenced within it (i.e., Entrance Criteria, Test Plan, and Exit Criteria). Executes the System Test and obtains signoff at completion of testing effort.		Create
QA Test Managers	To review for compliancy to the QA standards. To review main data inputs, setup, etc. for general awareness and to help in determining schedule impacts and/or possible control issues.		Review
AD Management	Signs off on this document to verify that the requirements have been identified and a satisfactory testing approach are being proposed.		Sign-off
Business Analyst	Reviews this document with the Systems Analyst and the QA Systems Lead to define test criteria, develop test cases, and review results.		Review
Business Requirements Management	Reviews it to verify that all requirements will be met and that a satisfactory testing approach is being proposed.		Review
Business User	Signs off on this document to ensure that the proper functionality will be tested.		Sign-off
PMO Librarian	Receives copy of test documents from creator. Reviews for completeness and publishes documents (via Share Drive) for distribution to relevant parties if a signoff and/or review are required.		Review
Systems Analyst/Designer	Reviews this document to ensure that all the parts of the design are tested and work properly.		Review

## Document History

Version	Date	Author	QA System Test Strategy Version History
			Initial Version

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## 1 Document Overview

This document outlines the steps that will be taken to verify the <Project Name> Project by the QA Systems Test Team. The purpose of the QA System Test Strategy is to document the high-level test strategy as a guideline for the detailed Test Cases and to relate it to the Requirements Document, the Design Specification Document and other project documents.

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## 2 Project Overview

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## 3 References

The following documents have been used in the preparation of this document:

Document Name	Document Link

## 4 Teams and Responsibilities

The matrix below shows major responsibilities such as establishment of the test environment, configuration management, unit testing, etc.

Role	Responsibility	Name
QA Manager/Lead	<ul style="list-style-type: none"><li>• Develops System Test Strategy</li><li>• Request Builds &amp; Maintain Test Environment</li><li>• Reviews Test Cases and Test Results</li></ul>	
QA Team Analysts	<ul style="list-style-type: none"><li>• Decompose Requirements</li><li>• Decompose Design Document</li><li>• Writes Test Plan/Test Cases</li><li>• Executes Test Cases and publishes Test Results</li><li>• Obtain signoff at completion of testing effort</li></ul>	
Business User	<ul style="list-style-type: none"><li>• Reviews test documents to verify that the requirements will be addressed during testing and that the proposed testing strategy is satisfactory</li><li>• Reviews Test Cases and Test Results</li></ul>	
Designer	<ul style="list-style-type: none"><li>• Updates Design Documents</li><li>• Writes and executes Unit Test Plans</li><li>• Reviews Test Cases and Test Results</li></ul>	
Development Manager	Manages Development Effort	
Development Team	<ul style="list-style-type: none"><li>• Develops and Modifies Code</li><li>• Writes Unit Test Plans</li><li>• Executes Unit Test Plans</li><li>• Fixes Defects</li></ul>	
Configuration Management Group	Create/Build testing environment	
Project Management Office	<ul style="list-style-type: none"><li>• Receives copy of test documents from creator</li><li>• Reviews for completeness and publishes documents (via Shared Drive) for distribution to relevant parties if a signoff is required</li></ul>	

## 5 Test Overview and Objectives

This System Test Strategy includes the following testing levels:

- **Unit & Integration Testing:** Design and Development Teams will perform these levels. This document will not cover these levels of testing.
- **Functional Test:** This test is designed to verify the functions at each level work as designed. GUI Standards, Validations and Business Rules will be tested at this level and that the data will be verified to be in the correct state and updated to the appropriate database. Positive and negative testing to test valid and invalid input is also part of this test level.
- **Regression Testing:** The purpose of regression testing is to validate the master builds, typically done for a major point release of a product after system test cycles have completed to ensure the same build of the product that was tested reaches the user.

Test Levels	Entrance Criteria	Exit Criteria	Test Team
Unit & Integration Testing	Component/Module for Unit Test is 100% complete: <ul style="list-style-type: none"><li>• Items to test are outlined with expected results.</li><li>• All programs in unit test compile cleanly.</li><li>• A listing of all unit-tested programs exists.</li></ul>	<ul style="list-style-type: none"><li>• Integration test cases are documented in accordance with corporate standards.</li><li>• All test cases are run, 90% must pass.</li><li>• No Showstopper or High Severity defects.</li></ul>	Design & Development Team
Functional Testing	Component/Module for Functional Test is 100% complete: <ul style="list-style-type: none"><li>• Unit Tests are executed and all open high or critical severity level defects are closed.</li><li>• High-level integration Test Plan is complete and reviewed.</li><li>• All programs in Integration Test compile cleanly.</li><li>• Turnover Document is completed and reviewed.</li><li>• All necessary components have been installed in Test Environment.</li><li>• Databases restored as necessary.</li><li>• Data Conversion completed as necessary.</li><li>• DB10s and TS35s applied against Test Environment(s).</li><li>• Sanity Tests executed and passed.</li><li>• Test Plan/Cases completed and reviewed.</li></ul>	<ul style="list-style-type: none"><li>• System Test cases are documented in accordance with corporate standards.</li><li>• All test cases are run, 90% must pass.</li><li>• No Showstopper or High Severity defects.</li><li>• 100% requirements coverage.</li><li>• Results reviewed by User and Requirements Validation teams.</li></ul>	QA Systems Test Team
Regression & Defect Testing	Component/Module for Regression Test are 100% complete: <ul style="list-style-type: none"><li>• Regression Tests are complete.</li><li>• All open high or critical severity level defects are closed.</li></ul>	<ul style="list-style-type: none"><li>• No Showstopper defects.</li><li>• All High &amp; Medium defects must be approved by Project Team.</li></ul>	QA Systems Test Team

## 6 Features and Functions to Test

SRS # / TD Placeholder #	Module & Description	Details	Test Coverage

## 7 Features Not to Test

SRS#	Reason for Not Testing

## 8 Test Assumptions

The following assumptions are relevant to the test strategy:

- Requirements and Approach documents have signoffs by the required members.
- Test Data will be based on the conversion of full volume production data for the processed batch only.
- Data selection has been selected and data tables have been updated.
- Existing prerequisite data have to be active in the database and will be defined in the data tables.
- After the QA Team validates test results, the Design, and Business Users teams will review for verification and signoff.



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## **9 Approach**

### **Defect Tracking**

- Testing issues and defects will be reported in Quality Center. Severity level and fix priority of software defects will be set. The Defect Lifecycle for Corporate projects should follow the Standard Status, Priority and Severity Levels will be used.
- The QA Team will request deployment of the new version to the test environment.

### **Test Case Management**

- HP Quality Center will be utilized for archiving the final version of all test cases and for posting final test results.
- Test Cases will be available at following location:

### **Metrics**

Metrics will be kept for test effort, defects and test cases executed for each test cycle.

## 10 Test Deliverables

Date Due	Description Of Deliverable	Team Member(s) Involved
	QA Project Plan <link to project plan>	QA Manager
	QA System Test Strategy to PMO for signoff (this document)	QA and PMO Teams
	Test Cases <u>HP Quality Center</u>	QA, BA, Design, Development, and Business User
	<ul style="list-style-type: none"><li>Defect Reports/Metrics</li><li>Test Execution Metrics</li></ul> <u>HP Quality Center</u>	QA Team
	<ul style="list-style-type: none"><li>Final User Review</li><li>Test Summary Report</li></ul>	QA, BA, Design, Development, and Business User

## 11 Test Environment

- The QA Team will utilize a single Test Environment for this project as listed below.
- The QA Team will be responsible for requesting the deployment of any subsequent builds, versions and system changes to the Testing Environment during the QA Testing Lifecycle.

### Environment Summary:

- Testing Environment <list environment (e.g. testing 8)> will be used

## 12 Schedule

The following lists all the testing cycles and testing estimates for this project. The timeline and milestones listed below will also be used in weekly status reporting and tracking of progress.

Testing Cycle	Event / Test Scope	Resources	Duration	Timeline	Milestone
Unit & Integration Testing	• Integration Testing	Development/ Design Teams			
	• Code Build / Environmental Set-up / Shake-out	CMG / DBA / QA Lead / Test Team			
Build Turnover	QA Test Team Review	DEV / CMG / EO / DBA			



Build: Functional Testing	Details of Features and Functions to be tested.	QA Test Team			
Builds for Defect Fixes	Validate Defect Fixes	QA Test Team			
Review	Functional Test Review	QA , Design, Development, Business Users			
Regression Testing	<ul style="list-style-type: none"> <li>• Full Cycle Testing</li> <li>• Defect Testing</li> </ul>	QA Test Team			
Go Live Date					

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## 13 Planning Risks and Contingencies

RISK	MITIGATION
	•
	•
	•

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## 14 Team Communication

While the steps listed below apply to specific interactions, all team members are encouraged to inform the entire team of any factors that could affect the testing outcome or completion date.

- Weekly team meetings will be held and attendance will be mandatory by the team members as indicated in the Teams and Responsibilities section.
- Tester will log defects to appropriate Quality Center Project and immediately send email notifications to team members as indicated Teams and Responsibilities section - Team, Notify of All Defects.
- All Team members should review Quality Center Open defects daily to review new defects, new assignments or update the status of existing defects.
- All issues deemed critical to the completion of the project will be communicated to the Project Manager/PMO. They will ensure that all team members are kept abreast of any Management decisions that affect the project.

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## 15 Critical Success Factors

Please see at the Entrance / Exit Criteria of the Test Overview & Objectives

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## 16 Appendix: