UniQuE

Technology And Infrastructure Test Plan

(Engagement Name and Id)

(Client)

**Document History**

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| Version | Date | Author | Changes |
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# Purpose Of The Document

<Overall objectives of the test process are described. >.

# Testing Scope

<A description of the scope of software testing is developed. Functionality/features/behaviour to be tested is noted. Provide a brief description on exclusions from the scope of testing. Identify the key schedule milestones that set the context for the Testing effort >

# Test Strategy

<<The driving principle for the testing strategy is to ensure that maximum defects are detected early enough in the development effort so that these can be fixed before delivery of the builds to [&&&customer name]. The strategy also aims to achieve the delivery of a fully functional robust product, addressing high risk areas early in the life cycle and applying learning’s from each phase/iteration to the next.>>

## Test priorities

<< Understand the risks the project, namely technical, architectural and functional. Special focus will be given to create test cases that will uncover defects for the identified risks. These test cases will be given higher priority during the test execution.>>

## Test Environment needs

## Test Environment - Hardware

| **System Resources** | | |
| --- | --- | --- |
| **Resource** | **Quantity** | **Name and Type** |
|  |  |  |
|  |  |  |

## Test Environment - Software

The following base software elements are required in the test environment for this Master Test Plan.

| **Software Element Name** | **Version** | **Type and Other Notes** |
| --- | --- | --- |
|  |  |  |
|  |  |  |

## Productivity and Support Tools

The following tools will be employed to support the test process for this Master Test Plan.

| **Tool Category or Type** | **Tool Brand Name** | **Vendor or In-house** | **Version** |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |

## Test Environment Configurations

The following Test Environment Configurations needs to be provided and supported for this project.

| **Configuration Name** | **Description** | **Implemented in Physical Configuration** |
| --- | --- | --- |
|  |  |  |
|  |  |  |

## Test Data

The following details of Test data needs to be provided for each phase of testing that for the project.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Input Data <Files, databases etc.>** | **Path** | **Generated/ Cust:Supp** | **Test Phase** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |

## Levels of testing

<Mention levels of testing applicable for the project. For each type of testing define Entry and exit criteria. Provide links to documents whenever separate test plans are laid out for specific testing type.>

## Unit Testing

## Integration testing

## System testing

## Regression testing approach

## Test Deliverables

<

1. Test results : Test case report with actual results logged
2. Defects logged into QC Data Entry screen in PMS for management and resolution.
3. Test execution report – Daily/weekly
4. Test assets (test cases and test data) that will be delivered to allow ongoing regression testing of subsequent product builds to help detect regressions in the product quality
5. Test assets (test cases and test data) that should get added to smoke test case set
6. Lessons/best practices learned during the test process
7. Traceability matrix
8. Automated scripts
9. Test stubs and drivers>

## Test Schedule

<<This section will contain the finalized test schedule >>

## 

## Resource Requirement

<<This section will contain the resource requirement for the testing>>

# Test Tools and Automation Strategy

<This section should list the use of automated test tools for the project if applicable.

* The suitability of automated test tools
* The level(s) they will be used in
* How they will fit into the testing strategy
* Identify reusable test scripts.>

# Performance Test Plan

[&&&This section should list the use of performance testing strategy for the project if applicable

* Scope
* Is Separate Performance Testing activity would carried out
* Performance Testing Environment and Tools
* Which testing would be conducted?
* Way of publishing performance testing results.]

# Security Test Plan

[&&&This section should list the use of security testing strategy for the project if applicable

* Scope
* Is Separate security Testing activity needed?
* Security Testing Environment and Tools
* The following points to be considered
  + Authentication -
    - Default or guessable account name tests ,
    - Brute Force tests
    - Bypassing authentication Schema tests
    - Directory transversal tests
    - Forgot Password \ Password reset  tests
    - Logout and browser cache management  tests
  + Data Validation Checks
  + Error Handling Checks
  + Logging
  + Sessioin Management
  + Session Token Manipulation
  + Exposed Session Variables
  + Cross Site Scripting
  + SQL Injection

# Iteration Test Plan (as applicable)

Iteration scope is as defined in the project plan. Iteration test plan is specified in the attached document.



# System Test Plan

## Entry Criteria

It is assumed that unit testing is already completed thorough black box testing through extensive coverage of source code and testing of all module interfaces using integration test cases.

This Test Plan applies to testing all requirements of the <<Application Name>> as defined in the Vision Document, System Requirement Specifications (Use Case Specifications)

## Test Requirements

The listing below identifies those items (use cases, functional requirements, non-functional requirements) that have been identified as targets for system integration testing. This list represents what will be tested. Details on each test will be determined later as Test Cases are identified and Test Scripts developed.

**Functional testing**

* <<Testing done using business scenario test cases>>

**Data and Database Integrity Testing**

* <<Specify access, retrieval related requirements which should be tested across systems>>

**Business Cycle Testing**

* <<Test cases to check month end, quarter end, year end functionality>>

**User Interface Testing**

* << Verify ease of navigation through a sample set of screens. Verify sample screens conform to GUI standards>>

**Performance Testing**

* <<Verify response time to access external system, as per other service levels agreed in the contract>>

**Load Testing**

* <<Verify system response when loaded with maximum number of users >>

**Stress Testing**

* <<Verify system response during prime time use of the Server>>

**Security and Access Control Testing**

* << e.g check that required infrastructural security is taken care of like firewall, SSL , roles are setup properly and no default functionality or user ids are active for attackers>>

**Configuration Testing**

* <<e.g. Compatibility on different browsers, systems-Windows 95, Windows 98, and Microsoft Windows NT.">>

## Test Completion criteria

|  |  |
| --- | --- |
| **#** | **Criteria** |
| 1 | <All the test cases that verify interfacing of modules have passed> |
| 2 | <Product/application conforms to all the baselined Requirement Specifications> |
| 3 | <Product/application conforms to all the pre-defined functionality of the application> |
| 4 | <Test coverage for all the applicable FDA regulatory requirements> |
| 5 | <All the test cases that verify application security related requirements> |
| 6 | <any other criteria> |
|  |  |

## Test Stop criteria

<Test stop criteria are used by testing team to stop the testing when product quality is not satisfactory. It is expected that development team works on the defects reported and ensure application functionality before handing it over to test team>

|  |  |
| --- | --- |
| **#** | **Criteria** |
| 1 | <X number of S1 category Defects were identified > |
| 2 | < 80% of test cases applied so far have failed > |
| 3 | < X number of test cases failed while testing applicable FDA regulatory requirements> |
| 4 | <any other criteria> |
|  |  |

## Test Setup

< Describe the test setup. If needed, add a diagram for better clarity >

## Test Equipment Required

<List all the test equipment(s) required for executing the tests >

## Test Location

< Describe the test location where testing should take place >

# Integration Test Plan

## Entry Criteria

It is assumed that unit testing is already completed thorough black box testing through extensive coverage of source code.

This Test Plan applies to testing all requirements of the <<Application Name>> as defined in the High Level Design.

## Test Requirements

The listing below identifies those items (use cases, functional requirements, non-functional requirements) that have been identified as targets for integration testing. This list represents what will be tested. Details on each test will be determined later as Test Cases are identified and Test Scripts developed.

## Test Completion criteria

|  |  |
| --- | --- |
| **#** | **Criteria** |
| 1 | <All the test cases that verify interfacing of modules have passed> |
| 2 | <Product/application conforms to all the baselined User Requirement Specifications> |
| 3 | <Product/application conforms to all the pre-defined functionality of the application> |
| 4 | <Test coverage for all the applicable FDA regulatory requirements> |
| 5 | <Test Coverage for the application security > |
| 6 | <any other criteria> |
|  |  |

## Test Stop criteria

<Test stop criteria are used by testing team to stop the testing when product quality is not satisfactory. It is expected that development team works on the defects reported and ensure application functionality before handing it over to test team>

|  |  |
| --- | --- |
| **#** | **Criteria** |
| 1 | <X number of S1 category Defects were identified > |
| 2 | < 80% of test cases applied so far have failed > |
| 3 | < X number of test cases failed while testing applicable FDA regulatory requirements> |
| 4 | <any other criteria> |
|  |  |

## Test Setup

< Describe the test setup. If needed, add a diagram for better clarity >

## Test Equipment Required

<List all the test equipment(s) required for executing the tests >

## Test Location

< Describe the test location where testing should take place >

# Unit Test Plan

## Strategy and Approach

<SQL’s will be tested separately.>

< Code Coverage test will be done using Eclipse IDE/ Expeditor / etc…>

< Joint testing framework will be used as applicable to create Stubs & Drivers >

## Entry Criteria

It is assumed that code review is completed.

This Test Plan applies to testing all requirements of the <<Application Name>> as defined in the Low Level Design

## Test Requirements

The listing below identifies those items (program specifications, pseudo code units etc.) that have been identified as targets for user testing. This list represents what will be tested.

## Test Completion criteria

|  |  |
| --- | --- |
| **#** | **Criteria** |
| 1 | <Module conforms to all the baselined design Specifications> |
| 2 | <100% Statement Coverage achieved > |
| 3 | <Test coverage for all the applicable FDA regulatory requirements> |
|  |  |

## Test Stop criteria

<Test stop criteria are used to stop the testing when product quality is not satisfactory.>

|  |  |
| --- | --- |
| **#** | **Criteria** |
| 1 | <X number of S1 category Defects were identified > |
| 2 | < 80% of test cases applied so far have failed > |
| 3 | < X number of test cases failed while testing applicable FDA regulatory requirements> |
| 4 | <any other criteria> |
|  |  |

## Test Setup

< Describe the test setup. If needed, add a diagram for better clarity >

## Test Equipment Required

<List all the test equipment(s) required for executing the tests >

## Test Location

< Describe the test location where testing should take place >

# Risks and Assumptions

[&&&Document the risks and assumptions identified.]

| **Risk** | **Mitigation Strategy** |
| --- | --- |
|  |  |
|  |  |
|  |  |

| **Assumption to be proven** | **Impact of Assumption being incorrect** | **Owners** |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

# Defect Management

## Defect Classification

The defects identified will be classified as follows:

|  |  |
| --- | --- |
| **Type of Error** | **Description** |
| P0 – Fatal | System hangs or crashes, program aborts, Licensed program is shut down |
| P1 – High | Program does not work as intended as per requirement specification/Severe loss of functionality prevents users from doing productive work. This would include navigational errors. |
| P2 – Medium | Some functionality imperfect but workaround possible |
| P3 – Cosmetic | Cosmetic errors like object positioning on the screen, font size etc. |

## Defect Reporting

<Describe the defect reporting and tracking system when customer specified defect tracking tool is used. Provide details on what type of tests will be conducted if client / customer fixes the defect>