**Software Integration Test Plan**

**and Summary Report**

# Test Outline

## Scope

*<**Clarify which function, which mechanism of the test base, document (requirement specification and architecture design) and verification object are the object of integration test (which one is not the object of integration test.) and make clear the outline of the way to advance the test.>*

|  |  |  |  |
| --- | --- | --- | --- |
| **Software** **requirement specifications** | **Software  a****rchitecture design** | **Test item and function** | **Test** **content** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## Test Strategy

*<The Test Strategy presents the recommended approach to the testing of the target-of-test. State clearly the type of test being implemented, the test objectives and how you will conduct the test. If a type of test will not be implemented and executed, state this explicitly, such as “This test will not be implemented or executed. This test is not appropriate.”*

*The main considerations for the test strategy are the techniques to be used and the criterion for knowing when the testing is completed. For each type of test, it should explain technique, completion criteria, and special considerations.*

*Technique: The technique should describe how testing will be executed. Include what will be tested, the major actions to be taken during test execution, and the method(s) used to evaluate the results.*

Completion Criteria: *A clear statement of completion criteria should include the following items: Function, behavior, or condition being measured; Method of measurement; Criteria or degree of conformance to measurement.*

*Special considerations: This section should identify any influences or dependencies, which may impact or influence the test effort described in the test strategy. Influences might include: Human resources (such as availability or need for non-test resources to support / participate in test). Special requirements, such as test scheduling or access to systems.>*

## Quality Target

*< At the time of plan/schedule: t**he quality target of integration test which is decided at the development plan (detected defect target, test density, performance, timing and so on...) is described.>*

*< Result (Enter when summary the integration test): r**ecord the integration test result, the quality metrics finally realized>*

|  |  |  |  |
| --- | --- | --- | --- |
| **Metrics** | **Target** | **Actual** | **Remark** |
| Code Coverage |  |  |  |
| Test Density |  |  |  |
| Defect Density |  |  |  |

## Exit Criteria

*< This section should decide whether integration test is completed or not.*

* *Identify acceptance criteria for product quality.*
* *Identify when the testing is successfully executed >*

# Test Equipment and Environment

## System Configuration

*<**Make diagram of system configuration that execute the tests.>*

## Test Environment and Equipment

*<**Indicate the information of environment and tool used at configuration test. >*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Equipment** | **Maker** | **Model** **number** | **Serial number** | **Number** | **Use** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

# Test Management

## Software Release for Test and Change Management Method

*<**Indicate how to obtain the software for a test after the unit test ends, and how to manage, to execute the change generated after unit test verification.>*

## Test Tracking Process

*<Manage how to report the execution status of test and the digestion number of test case from tester to test leader. For example, record the method and frequency of report.>*

## Bug Tracking

*<**Record the bug tracking method such as how to manage the test result, the discovered bug using PRISMY or to what kind of timing the check after correction by a developer is performed by developer.>*

## Test Product Management

*<**Record the kind of test product and the method to manage the configuration.* *The products of a integration test are things, such as test implementation result record documents, such as test design documents, such as test programs, such as the input data, test driver and stub, a test script, a test plan document, and test specifications, a test results document, and a test report.>*

|  |  |  |
| --- | --- | --- |
| **ID** | **Product name** | **Creation time** |
|  |  |  |
|  |  |  |
|  |  |  |

## Organization

*<**Record the rank of project’s system, test team and record the role allotment (team leader, tester) and charge scope at the organization figure.* *Specify matching of a real name and a role.>*

# Test Configuration

## Outline Configuration of a Test Case

*<**Write the details of the configuration (the classification method) of a test case in test specifications.* *Here, the outline of the configuration of a test case is indicated.* *For example, the test of big kind and test of medium kind are recorded the test item is recorded as small kind to be the structure.* *The details of a classification of a test case are indicated to test specifications, and a statement here is taken as the link information (document ID of test specifications, etc.) to test specifications.* *The comprehensibility (is there any omission?) of the viewpoint of a test is examined.>*

## Test Execution Result

*<**Write the execution result of test case in a test results document.* *Here, the link information (document ID of a test results document, etc.) to a test results document is indicated.>*

## Bug curve

*<**Draw the correct information and discovery of defect and test execution using PRISMY and record as bug curve.* *Here, you may limit only for indicating the link information to PRISMY.>*

## Others

*<**In addition, indicate information required for a integration test>*

# Product Integration Sequence

*Describe the Product Integration sequence with its rationale.*

*For example:*

* *<Big Bang : All coding precedes all integration*
* *Bottom Up: Code and integrate starting at low-level utility modules*
* *Top Down : Code and integrate starting at high-level control modules*
* *Sandwich Plan : A combination of Top Down and Bottom up approach*
* *Incremental Build Plan : Based on critical path analysis >*

*List the components which will be integrated in the order of the defined Integration sequence. If available, refer to other document that depicted the integration strategy of the project.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***No*** | ***Component ID*** | ***Description*** | ***Integrated with Components*** | ***Integration order*** |
|  |  |  |  |  |

# Product Integration Procedure

*Procedures include the following:*

* *Preparing test cases and test data: A brief explanation (less than one page) of how test cases and test data are prepared.*
* *Conducting tests and verifying test results: A brief explanation (less than one page) of how the tests will be conducted and the results verified. Document backup and restore procedures for the environment.*
* *Documenting test results: A brief explanation (one to two pages) of how faults found through integration testing will be documented and distributed to the development team for correction.*

# Product Integration Criteria

*Criteria are defined to:*

* *How to verify if a product component is ready for integration. For example: integration team reviews or checks unit test result of the component to be sure that it is ready for integration.*
* *How to constrain the degree of simulation permitted for a product component to pass a test, or constrain the environment to be used for the integration test. E.g: what stubs or proxies or simulated systems are accepted in integration.*
* *How to validate the assembled product components and final integrated product. The such criteria typically stated in expected result of integration test cases.*