

**CMA Redesign**

Test Strategy

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# Objective

The objective of the test is to verify that the functionality of CMA application works as per redesign specified under BRD specification.

The test will execute and verify the test scripts, identify, fix and retest all high and medium severity defects per the entrance criteria, prioritize lower severity defects for future fixing via CR.

# Testing Scope and Levels of Testing

## Unit Testing

PURPOSE: The purpose of this test is to ensure the application modules are working as expected.

SCOPE: To be defined by Development team.

TESTERS: Development team.

METHOD: To be defined by Development team.

## Sanity Testing

PURPOSE: The purpose of this test is to ensure the application is ready for testing or critical defects are removed before the next levels of testing can start.

SCOPE: First level navigation to all the modules.

TESTERS: Testing team.

METHOD: This exploratory testing is carried out in the application without any test scripts

and documentation.

## Functional Testing (SIT)

PURPOSE: Functional testing will be performed to check the functions of CMA application as per the requirement specification document.

SCOPE: Functionality tests will focus on the behavior of the TEIS system. User scenarios will be executed against the system as well as screen mapping. Overall, the system tests will verify that the system meets the requirements defined in the requirements document.

The Redesign of the CMA application, Analyzer application, APEX application, and TED to support the redesigned process as outlined in the FDD which includes:

* Improved usability with an updated UI
* Rule specific requirements such as
* Common repository for storing all rules for all Business Unit - Additional rules
* Common logic and repository to create Indirect Sales Allocation data and store this data in TED
* Timely reporting
* Booking and Backlog data included
* Ability to restate current & previous fiscal years
* Option for Administrator only update via Excel or existing on-line Sales update
* Allowing OEM Sales Engineer to add rules
* Creating the ability to allocate outside your own profit center
* DTO – historical data conversion

|  |  |
| --- | --- |
| ***Functional Testing*** | |
| Work Stream | Functional Testing details |
| User Access | * CMA data update/delete access * User Approval * User excel incremental Upload |
| CMA Upload Allocation Rules | * User Access Validations * Mandatory fields Validation of all Data Items.   Validation of allocation. Details are mentioned in FDD in Section “ Allocation Rules Upload Process” |
| Allocate CM Sales to OEM’s | * User Access Validations * Validation of all Data Items * Allocation Rule validation for below new global rules. * CUSTOMERXREF * PART * WWAC+PN * PN * PRODCODE * PRODLINE * PRODFAM * ALL |
| Allocation Rules and Conflicts Download Process | * User Access Validations * Download * Conflicts |
| Contract Manufacturer Deletion Process | * User Access Validations * Business Process Flows validation. * New Screen for deleting rules and CM. |
| APEX Application Testing | * Direct Reports   + Product Report * Indirect Reports   + Customer Indirect Pivot * Agreement Performance   + Ad Hoc Performance |
| Analyzer Application Testing |  Daily/Weekly/Monthly   * Check the data accuracy of Billing/Booking/Backlog with dimensions :Region/Sub-region/KAM/Product Group/Global-Local-Account * Check OEM mapping rules and subset OEM rules in the Analyzer reports |
| TED DB Testing | * Need inputs from TED team to update this section. |

TESTERS: Testing Team.

METHOD: The test will be performed according to Functional scripts, which are stored in **Test tool**.

TIMING: After Sanity test is completed

## User Acceptance Test (UAT)

PURPOSE: This test focuses on validating the business logic. It allows the end users to

complete one final review of the system prior to deployment.

TESTERS: UAT Testing will be performed by the TE end users. Capgemini will provide support for the Test Execution and verification of defects

METHOD: Business users will create and execute the test cases validating against business logic.

TIMING: After all other levels of testing (Sanity and Functional) are done. Only after this

test is completed the product can be released to UAT.

# Areas NOT being tested

Following are the areas which are out of scope of testing

* SFDC
* JDA
* TED testing
* Medical and GATD business units
* Automation testing

# Execution Strategy

* The entry criteria refer to the desirable conditions in order to start test execution
* The exit criteria are the desirable conditions that need to be met in order proceed with the

implementation.

## Entry and Exit criteria

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Testing Level | Responsibility | Entry Criteria | Exit Criteria | Deliverables |
| Unit Testing | * Programmer | * Code is reviewed * Unit test cases are reviewed | * All defects found in unit testing are fixed. * Defect log updated | * Unit Test Case – Defect Log.xls |
| Functional Testing | * Team Lead/ /Testers | * System test cases are ready | * All planned system test cases have been executed. * Defect log updated | * System Test Case – Defect Log.xls |
| User Acceptance Testing | * Client with help from Onsite coordinator. | * Code has been delivered to the client | * Mail from client stating the results of testing | * Update the above logs as applicable. |

## Test Cycles

Functional Testing

* There will be two cycles for functional testing.
* The objective of the first cycle is to identify any blocking, critical defects, and most of the

high defects.

* The objective of the second cycle is to identify remaining high and medium defects.

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UAT Testing

* UAT test will consist of one cycle.

## Defect Management

* Log defects identified during testing on the Defect Management Tool/Excel
* Submit test status on regular basis
* Maintain defect tracking sheet and track defects on daily basis.
* Coordinate with development team for all clarifications required by them to understand defects and reduce turnaround time
* Track all the defects until they are closed
* Re-test fixed defects and update Defect Management Tool/Excel &defect report.
* Defects found during the Testing will be categorized according to the bug-reporting tool

and the categories are:

|  |  |
| --- | --- |
| Severity | Impact |
| 1 (Critical) | * This bug is critical enough to crash the system, cause file corruption, or   cause potential data loss   * It causes an abnormal return to the operating system (crash or a   system failure message appears).   * It causes the application to hang and requires re-booting the system. |
| 2 (High) | * It causes a lack of vital program functionality with workaroundCode has been delivered. |
| 3 (Medium) | * This Bug will degrade the quality of the System. However there is an   intelligent workaround for achieving the desired functionality - for  example through another screen.   * This bug prevents other areas of the product from being tested. * However other areas can be independently tested. |
| 4 (Low) | * There is an insufficient or unclear error message, which has minimum   impact on product use. |
| 5(Cosmetic) | * There is an insufficient or unclear error message that has no impact on   product use. |

## Test Data (To be discussed)

The test data needs to be identified, prepared and baselined before the start of the test execution. The Capgemini will identify the required Test Data and creates the data or submits requests to the XXXXintegration team to provide and/or create test data for testing.

Activities during this stage are:

• Identify test data requirement for the agreed Test Cases and external dependencies.

• Obtain Test Data for the identified requirement, access control, and input-output files of jobs/batches

# Test Environment

|  |  |  |
| --- | --- | --- |
| Testing Type | Environment | Description |
| Unit Testing | Dev | Analyser: <http://twe67wb50.tycoelectronics.net/analyzer/devp> |
| Functional Testing | QA | 1.CMA URL: [http://cma-qa](http://cma-qa/) or <http://cma-qa.us.tycoelectronics.com/>  2.Analyzer URL: <http://twe67wb50.tycoelectronics.net/analyzer/>  3.APEX URL:  <http://pex-dev/PPSS/PPSS>  <http://pex-qa/PPSS/PPSS> |
| UAT Testing | QA | APEX URL:  <http://pex-qa/PPSS/PPSS> |

# Test Management

## Test Management Tool

* TBD is the tool used for Test Management. All testing artifacts such as Test cases, test results are updated in the tool
* Project specific folder structure will be created in the tool to manage the status of CMA Redesign project
* Each resource in the Testing team will be provided with Read/Write access to add/modify test cases in the tool.

During the Test Design phase, all test cases are written directly into the tool. Any change to

the test case will be directly updated in the tool.

Each Tester will directly access their respective assigned test cases and update the status of

each executed step in the tool directly.

Any defect encountered will be raised in the tool linking to the particular Test case/test

step.

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## Test Design Process

The tester will understand each requirement and prepare corresponding test case to

ensure all requirements are covered.

Each Test case will be mapped to Use cases to Requirements as part of Traceability

matrix.

Each of the Test cases will undergo review by the BUSINESS ANALYST and the review

defects are captured and shared to the Test team. The testers will rework on the review

defects and finally obtain approval and sign-off.

During the preparation phase, tester will use the functional specification to write step by step test cases.

Sign-off for the test cases would be communicates through mail by Business Analyst’s.

Any subsequent changes to the test case if any will be directly updated in the tool.

## Test Execution Process

Once all Test cases are approved and the test environment is ready for testing, tester

will start a sanity test of the application to ensure the application is stable for testing.

Each Tester is assigned Test cases directly in tool.

Testers to ensure necessary access to the testing environment, testing tool for updating

test status and raise defects. If any issues, will be escalated to the Test Lead and in turn

to the Project Manager as escalation.

If any showstopper during exploratory testing will be escalated to the respective

development SPOCs for fixes.

Each tester performs step by step execution and updates the executions status. The

tester enters Pass or Fail Status for each of the step directly in the tool.

If any failures, defect will be raised as per severity guidelines in the tool detailing

steps to simulate along with screenshots if appropriate.

Daily Test execution status as well as Defect status will be reported to all stakeholders.

Testing team will participate in defect triage meetings in order to ensure all test cases

are executed with either pass/fail category.

If there are any defects that are not part of steps but could be outside the test steps,

such defects need to be captured in the tool and map it against the test case level or at

the specific step that issue was encountered after confirming with Test Lead.

This process is repeated until all test cases are executed fully with Pass/Fail status.

During the subsequent cycle, any defects fixed applied will be tested and results will be

updated in the tool during the cycle.

# Risk and Mitigation

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| --- | --- | --- | --- | --- |
| # | Risks | Prob. of Occurrence | Severity of Impact | Contingency Plan |
| 1 | Lack of finalized specifications | High | High | Testing team will perform Exploratory Testing with the assistance of Subject Matter Experts from TE. |

# Roles and Responsibilities

The following list defines in general terms the expectations related to the roles directly involved in

the management, planning or execution of the test for the project.

**Name Contact Info**

1. Project Manager- Rajesh Menon

2. Test Lead-Sadique Shaikh

3. Testing Team-

4. Business Analyst-Sanjeev Grover and Julie Clouser

**1. Project Management**

Project Manager: reviews the content of the Test Plan, Test Strategy and Test Estimates

signs off on it.

**2. Test Planning (Test Lead)**

Ensure entrance criteria are used as input before start the execution.

Develop test strategy and the guidelines to create test conditions and test cases.

Provide guidelines on how to manage defects.

Attend status meetings in person or via the conference call line.

Communicate to the test team any changes that need to be made to the test

deliverables or application and when they will be completed.

Acknowledge the completion of a section within a cycle.

Give the OK to start next level of testing.

Facilitate defect communications between testing team and technical / development

team.

**3. Test Team**

Develop test conditions, test cases and expected results

Perform execution and validation.

Identify, document and prioritize defects according to the guidance provided by the Test

Lead.

Re-test after software modifications have been made according to the schedule.

Prepare testing metrics and provide regular status.

# Test Deliverables

|  |  |  |  |
| --- | --- | --- | --- |
| # | Deliverable Name | Author | Reviewer |
| 1 | Test Strategy | Test Lead | Project Manager. |
| 2 | Functional Test cases | Test Team | BA signoff/Project Manager |
| 3 | Defect Report | Test Lead | Project Manager |
| 4 | Daily/Weekly Status report | Test Lead | Project Manager |
| 5 | Test Closure report | Test Lead | Project Manager |
| 6 | UAT Test cases | End User | BA signoff |

# Document Control

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| --- | --- |
| DOCUMENT NAME | Test Strategy – CMA Redesign |
| ABSTRACT | This is a draft version of CMA Redesign test Strategy document. This need to be discussed with other downstream application teams and Users for final version. |
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| LOCATION |  |

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