



Promoting IT Efficiency

**ABC COMPANY
Extended Accounting System (EAS)
Testing Strategy
Sample**



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1. CONTEXT

This section provides a basis for why the document has been prepared - it gives the reader an understanding of what they should expect to see in the remainder of the document.

The **Testing Strategy** deliverable defines how all of the testing activities are to be executed prior to the application/product being put into the production environment. It identifies the testing tasks to be completed in each of the testing environments (unit, integration, user acceptance) the testing standards to be applied through with all testing environments, the testing tools to be used, the testing deliverables to be completed, and the acceptance criteria used for testing.

2. TESTING STRATEGY OVERVIEW

This section identifies the overall testing approach the project team will use throughout the life of the project. It defines the testing objectives and the testing deliverables audience. The strategy looks at the characteristics of the system to be built, the project time line and budget, and plans the breadth and depth of the testing effort. The Testing Strategy will influence tasks related to test planning, test types, test script development, and test execution.

2.1 Objectives

The key objective for completing the testing on the EAS project is to ensure the ABC Company has the capability to obtain and oversee contractor resources to complete operational activities.

The testing will include user acceptance testing, system integration testing and unit testing. This User-Acceptance testing will ensure the EAS application satisfies all of the user requirements and the end user is trained to perform the task and activities of the EAS application. The System Integration Testing will ensure the EAS application interfaces with other ABC Company applications and within itself. The Unit Testing will ensure each and every business function will be tested to ensure it satisfies the documented requirements.

The testing effort will be completed when the EAS application has satisfied all the business requirements and has received acceptance from the Project Owner, Steering Committee members, Project Manager and System Manager.

2.2 Deliverable Audience

The Testing Strategy deliverable is intended for the following audience

System Owner - to ensure the appropriate level of rigor has been applied to testing the EAS application

Project Manager - to ensure all team members are familiar with the testing to be completed on the EAS application

Project Team (Business Analysts, Developers, Testers) - to identify the various levels of testing to be completed on the EAS application

3. SCOPE

This section defines the various types of testing that will occur on the project, the level of details to be performed by each type of testing to be completed, and a description of the rigor that will be applied to each type of testing.

To define the testing scope of EAS application, the following areas were examined:

3.1 Testing Tasks

This project includes the following testing tasks:

3.1.1 Unit Test

Unit tests will be completed on all functions and programs/modules developed for the EAS project. Use cases will be defined for each Programming Specification deliverable and each Detail Design Deliverable. These use cases will be used as the criteria to complete the Unit Tests.

3.1.2 Systems Integration Test

System Integration Tests will be completed to ensure the integration of EAS application functions and sub-systems. Use cases will be completed in the Detailed Solution Design deliverable and used as the criteria to complete the System Integration Tests.

3.1.3 User Acceptance Test

User Acceptance Tests will be completed to ensure the business requirements have been incorporated into the EAS application. Use cases will be completed in the High Level Solution Design deliverable and the Detailed Solution Design deliverable and used as the criteria to complete the Systems (User Acceptance) Tests.

3.2 Test Types by Task

The following list identifies, by testing task, the types of testing that will be conducted:

3.2.1 Unit Test

Unit Tests will consist of (per program)

- system process step
- validation
- calculation
- error handling
- database auditing
- security
- volume data
- help text
- checkpoint restart
- user interface
- report layout
- screen layout

3.2.2 Systems Integration Test

System Integration Tests will consist of

- systems integration process sequence using converted data
- network stress
- security
- locking
- batch response time
- online response time
- system process script
- security
- volume data

3.2.3 System/User Acceptance Test

System/User Acceptance Tests will consist of

- manual data load
- system process sequence using scripted data
- interface using scripted data
- converted data load
- converted data inspection
- system process sequence using converted data
- interface using converted data
- parallel legacy reconciliation
- job stream
- backup and recovery
- database auditing
- data archival
- security
- locking
- batch response time
- online response time
- batch response time
- online response time
- parallel running
- live data
- live environment
- final system documentation sign-off

3.3 Converted Data Sources

The following table identifies legacy or other sources of converted data that will be used for testing:

Legacy System or Source Name	Description of Converted Data
N/A	N/A

Legacy System or Source Name	Description of Converted Data

3.4 System Interfaces

The following table identifies key system interfaces that will be required to complete the testing of the EAS application:

System Interface Name	Type (input, output, two-way)
Procurement (Contract Validation)	Input
Human Resources (Positions)	Two Way
Finance (Accounting - Payable)	Two Way

3.5 Testing Environments

The following table documents the testing environment criteria for each testing task:

Testing Task	Platform	Database Name
Unit Test	Client Server	See "Entities" (High Level Solution Design deliverable)
Systems Integration Test	Client Server	See "Topics" (High Level Solution Design deliverable)
System/User Acceptance Test	Client Server	See "Subject" (High Level Solution Design deliverable)

3.6 Testing Tools

The following testing tools will be used:

Testing Tool	Purpose
ABC Company Standard testing tool suite	

4. KEY INPUTS

This section identifies the various project deliverables that will be utilized through the various types of testing on the project. More specifically, the project deliverables to be used to benchmark the user requirements and criteria to perform the project testing.

Key inputs/deliverables to EAS application testing include:

Detailed Business Requirements - providing a conceptual view of the business need.

High Level Solution Design - provides high level data (Subject, Topics) and process flow (System, Sub-System) diagrams and information.

Detailed Solution Design - provides detailed data (Entity) and process (Functions) deliverable information

Programming Specifications - provides program/module definition

Requirements Traceability Matrix - repository of all business requirements identified for the EAS application.

Training & Support - provides a description of how the application will be utilized in the production environment.

5. TASK OVERVIEW

This section identifies the key tasks that will have to be performed on the project to ensure the appropriate level of rigor has been applied to the project.

The key testing tasks for the EAS application are

- Develop & Execute a User Acceptance Test Plan
- Develop & Execute System Integration Test Plan (s)
- Develop & Execute Unit Test Plan (s)
- Maintain and cross reference Requirements Traceability through all levels of testing

6. KEY DELIVERABLES

This section identifies the key deliverables that will have to be performed on the project to ensure the appropriate level of rigor has been applied to testing the functionality of the project.

The key testing deliverables for the EAS application include:

Testing Strategy

User Acceptance Test Plan

User Acceptance Evaluation

User Acceptance Defect Log

System Integration Test Plan (s)

System Integration Test Evaluation (s)

System Integration Defect Log

Unit Test Plan (s)

Unit Test Evaluation (s)

Unit Test Defect Log

7. ACCEPTANCE CRITERIA

This section identifies the key deliverables that will be assessed prior to the application/system being placed in the production environment.

The acceptance criteria for the testing task deliverables will be measured by the completion and sign-off of the Unit Test Evaluation, System Integration Test Evaluation, and User Acceptance Test Evaluation deliverables. Test cases and test scripts (for all testing environments) will be subject to quality reviews.

8. PROBLEM MANAGEMENT

This section describes how the project team will address any errors and/or anomalies discovered during any of the testing of the application/system.

The assessment and prioritization of defects found during all forms (unit, integration, user acceptance) of testing will be strictly controlled using the Problem Management process described in the Project Procedures deliverable.

9. CRITICAL SUCCESS FACTORS

This section identifies the key factors that must be addressed during the testing (unit, integration, user acceptance) of the application/system.

The following critical success factors for testing the EAS application include:

- Testing considerations must begin in the early phases of the project.
- Test script development must be based on key project deliverables.
- Testing must be objective and must be performed by an independent test team (other than the programmers responsible for the application software).
- The problem management process must be functional as soon as testing begins, and must ensure that only valid and non-duplicated defects are processed.
- Multiple iterations for each testing task should be planned to allow for a higher density of testing for the current test iteration and scheduled fixes for the next iteration.
- Planning for the systems integration test should start early, as it will involve multiple projects, systems, and organizations.
- Modules should be categorized by their relative importance to the business for defect prioritization and performance testing.