

Designing CRPs for a successful Upgrade to Oracle Apps 11i

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Introduction

How to design, build, and execute a CRP testing strategy for Oracle Applications release 11i. The objective of the testing strategy should be to minimize and expedite the tasks related to test script development, execution, documentation, and overall management of an Oracle Applications 11i upgrade.

BOSS Corporation overview

BOSS Corporation was founded in 1995 by Stephen Adams and Jim Crum. Stephen and Jim were responsible for Oracle consulting in the Southeastern United States, but left employment at Oracle Corporation to create a consulting practice to provide better service solutions to Oracle customers. The BOSS Corporation service line is sharply focused to provide expert Oracle Applications implementation and Oracle database administration services. Bill Dunham is the Vice President and Practice Director of ERP Applications for BOSS Corporation.

Executive Summary

To begin the CRP testing activities, assignments are made to each functional team member to identify specific business scenarios that required testing. Test scripts should be created for each application module and customization. Team members are given a template for use in developing their application test scenarios and subsequent test scripts. These testing scenarios and scripts will be retained for future application testing as well as basis for end user training material and final acceptance testing. There can be three complete CRP tests executed during this project. All three produced different test results and issues, but play an important role in making the project a success.

As the CRP progressed, logs should be used to capture all testing related issues. Information in the logs can include whose responsibility it is to resolve the issue, when it needs to be resolved; the impact to the organization, and assignment of any TAR related information or comments. All team members should be required to log their own issues and forward them to the management team on a weekly basis.

Overall, the creation and use of this CRP method can assist in your projects success. Testing needs to be taken seriously and should always be considered a critical step for all projects.

What is a CRP?

The definition of prototyping, or a conference room pilot (CRP) is “a product model constructed for testing and evaluation to see how the product performs before releasing the product to manufacture.” A conference room pilot is exactly that, a prototyping of the software functionality and customizations prior to releasing the product to the end user.

Each customization should be prototyped and executed during a series of detailed pilots or module walk-throughs. Each pilot should be designed to target a specific stage, event, or business process of the enterprise during an implementation and should determine success or failure as the outcome.

Some organizations may want to have separate module walk-through or prototyping sessions for departmental customizations. The entire project team should participate in the execution of the CRP, validating the interoperability of the business processes and customizations.

The objective of this paper is to walk through the steps required to design an effective CRP. The diagram (*Figure 1*) depicts the process, with subsequent pages providing additional supporting information for each stage.

Where to begin?

The best place to start is to describe the overall process of a CRP. Obviously this is only one approach, and there are many ways in which a CRP can be defined and executed. Here is an approach that we've used in the past that has been very successful. The diagram below (*Figure 1*) describes the steps of getting to a CRP.

To assist in documenting the future organization the creation of documents known as the future business models are created. These will become the "to be business model" documents for your organization. These will also become the driving force behind the creation of your new organization. These future models will be reorganized to fit the Oracle Applications, and another new document gets created, called business scenarios. These business scenarios are mapped to fit the terminology and functionality of the Oracle Application modules.

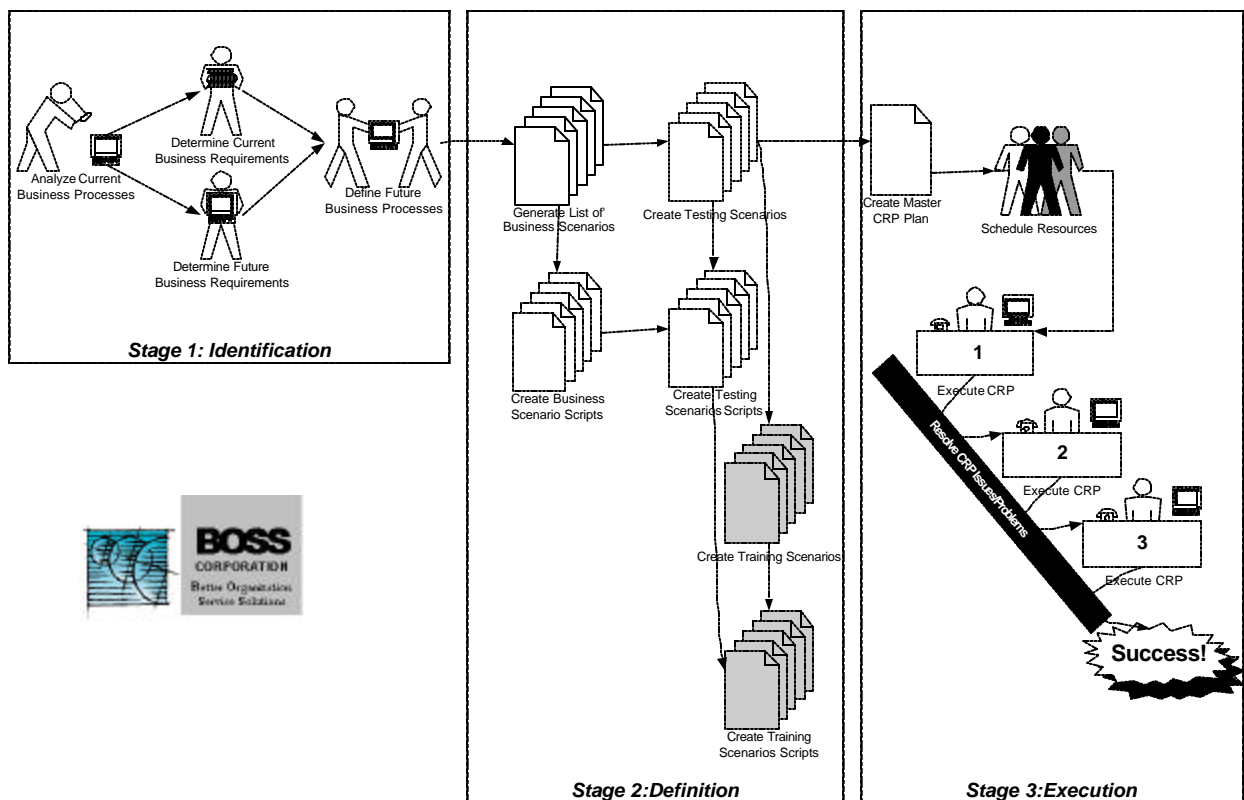


Figure 1

Getting Organized

To kickoff the CRP an initial planning and review session should be held with all participating team members. Members should be assigned specific roles and assignments on the project. The objective is to have at least one person from each area of the business participate in the CRP. Each person should be assigned a specific group of Oracle Application modules and customizations to test.

As part of the CRP, a project-working directory for all testing documentation should be created. This repository can be used to store CRP related documentation including; application tests, output files, TAR and patch information and CRP progress reports. The directory structure can be broken down so that each Oracle Application has its own working sub-directory. Within each directory, application testing scripts should be stored for easy retrieval and execution by the team.

This document makes some assumptions that a CRP instance of the Oracle Applications has been properly setup for your client, and that the audience is familiar with a basic implementation method and associated activities. A successful CRP can be divided into three stages, namely Identification, Definition, and Execution. A brief discussion of each of these stages follows:

Stage 1: *Identification*

During this stage of the project normal implementation activities of analyzing current business processes, determining current and future business requirements and defining the future business processes are executed.

The *Identification* stage defines the infrastructure for subsequent phases of the project, and stages of the CRP. There are several activities that must take place prior to planning and executing the CRP. The first step in most projects is to understand and document the current organization business processes, or the creation of the “as is business model”. Understanding the organizations business processes helps lay the foundation required for a successful implementation.

After documenting and understanding the current business process comes the challenge of determining the current and future requirements of the organization. Clearly there will be some carry-forward of current processes, but the objective of these two activities is to define your future organization, or define the future business processes.

Asking the question of “How does your organization want to use the Oracle Applications?” is a very broad statement, and will not provide enough information to create the future organization. There needs to be a focused approach to developing the future business model. The future business processes are generated to depict and present a step-by-step flow of how the business will operate. This document should become the focal point for developing the organization business scenarios for the remainder of the project.

Also, just because the future business model gets created and they support the definition of the business scenarios, doesn't mean you can't add new ones. You will find as the project progresses that new scenarios or processes will be discovered or changed. There should be a controlled approach to addressing these new requirements after the business scenarios have been defined. Two approaches to adding new scenarios or processes are through the use of document revision tracking or a change request. Taking this approach will allow prior versions to be archived as well as to retain a history of the changes via a change request. Project management and change requests go beyond the focus of this document. If you wish to read more about either of the subjects please refer to our book, “*Special Edition Using Oracle Applications*” or any project management guide.

Stage 2: Definition

During this stage of the project normal implementation activities of generating a list of business scenarios and scripts, creating testing scenarios and scripts, as well as leveraging these documents to create training materials are performed.

The *Definition* stage provides some of the keys to executing the CRP – one of them being the end user testing documentation. This stage consists primarily of documenting the testing scenarios and scripts for execution during the CRP. These scenarios will consist of real organization processes and data. Remember the CRP is a prototype of the production environment and all testing needs to be as realistic as possible.

What are business scenarios? Business scenarios are your organizations required future business process based on Oracle Application terminology and processes. There may be hundreds of business scenarios created within your organization. Each business scenario provides a step-by-step approach on how they will be executed. This “how to” approach becomes the basis for down stream documentation for the CRP, additional applications testing and training.

For each business scenario an associated detail script is created. This script is a step-by-step approach on “how to” execute the scenario, or business process. Remember these scenarios are mapped from the future business processes and requirements of your organization. As the scenario and scripts are defined, the project team confirms business requirements making any adjustments as needed.

Once the business scenarios and scripts are created and approved, these documents will be used to create the testing material required to support the CRP. For each business scenario and script associated testing documents should be created to support and validate the scenario as well as business requirements. These test documents should be developed in association with end users as much as possible.

These documentation activities are one of many “learning activities” for your project team. They can easily create testing documents by using the business scenarios as a guide. This activity gets them involved with the project, as well as using the Oracle Applications to validate the testing documentation. It may sound like a trivial task but there will be a great deal of learning taking place.

Upon testing scenarios and scripts being defined and validated the next step of preparing for the CRP should be taking place. These documents will become the basis for all CRP testing. Each document may be used a minimum of three times, once for each iteration of the CRP.

Stage 3: Execution

During this stage of the project normal implementation activities of creating the master testing plan, scheduling CRP resources and executing the CRP tasks place.

This stage is where the rubber meets the road. All testing documents have been approved, the CRP instance is ready and waiting, and all we need to do to get on with the CRP is to organize the testing documentation and assign testing resources.

To help guide the CRP, a “Master CRP Test Plan” should be created. This document will sequence the testing scenarios in an order that will provide a logical thread through the Oracle applications. As an example, one scenario thread could begin with a *Requisition in Oracle Purchasing*, and end with the *Payment in Oracle Accounts Payable*. We like to refer to this effort as an application “thread test”. These thread tests can be organized on one or more master CRP test plans.

There is also the need to test non-thread type transactions, such as adding a new employee to Oracle Human Resources. You can add an employee anytime, and there may be no subsequent activities awaiting the entry of data. Therefore a test can be written to specifically focus only on the entry of the new employee.

These tests can be organized on one master test plan and executed sequentially by one tester, or based on data dependencies, executed by several testers. The overall objective is to test all aspects of the application that effect your organization.

Figure 1 contains an icon that represents the scheduling of resources, “Schedule Resources.” There are many resources required prior to executing the CRPs, so organize them early. Resources may include people, places or things such as; end users, functional and technical project staff, OS system administrator, database administrator, PCs, printers, telephone, a conference room or testing area. Finding and scheduling an area to conduct the CRP may be the most challenging task during the testing phase of a project. Many organizations don’t have separate facilities to set aside for testing and ultimately run into problems coordinating activities or properly achieving desired CRP results.

Also, having remote CRP testers can also be a challenge. This will require additional coordination by your testing team, as there will be time considerations, as well as data dependencies and possible conversions to contend with. Think through remote testing carefully and don’t hesitate to bring remote personnel local during these critical testing activities. Ultimately you want to make sure testing is performed at all remote sites to ensure network speed, properly configured clients, and performance is at an acceptable level.

You’ll notice in **Figure 1** that the “Execute CRP” is represented three times. The CRP should be performed at least three times, or should simulate three business closings. During the execution of the CRPs you will find that problems and issues will arise, sometimes over and over again. Executing the CRP three times will help flush out application issues, train end users, and solidify customizations and data conversion.

Organizations may find that after the second CRP is executed, the third CRP is not necessary. Organizations may wish to substitute the third CRP with parallel testing of the applications. Three iterations of the CRP is not required, but is highly recommended, plan your testing appropriately.

The best way to deal with issues during a CRP is to keep track of them using an Issues Log. This issues log should capture information such as the Oracle Applications module, issue number (to uniquely identify issues), a brief description of the problem, who the issue is assigned to for resolution, when the issues is expected to be resolved. Other helpful information that should be included is the status (passed, failed), impact to the CRP or project, and assignment of TAR information.

All testing issues should be routed to the project team leads, or designee, to be summarized into the project issues log. Each week the project issues log should be reviewed during the project management or core team meetings to review outstanding TARs or other possible activities that may impact the successful completion of the CRP.

As issues during the first CRP are resolved its inevitable that some will remain open as you progress to the next CRP. Depending on the type of issue, and its impact, will determine if moving forward is possible. You may find that a certain patch needs to be applied which effects a test scenario that’s not executed until later in the master test plan. If this is the case, it’s quite possible that the second CRP can be executed depending on the severity of the problem. Investigate moving forward carefully, you may want to wait until the patch is applied or the problem has been thoroughly tested and resolved before taking the next step.

CRP Testing Summary

Using the Master CRP Test plans as a guide, a *Testing Summary* document should be created to identify successes and failures. The CRP testing summary document should include some of the following information such as; the *Test Description* to identify what test was executed, the *Responsibility*, to track who is responsible for documenting and

executing the test, the *Status* column should indicate whether the test passed or failed, if failed a plan of action should be identified or supporting information should be provided. There should also be an indicator to which CRP the documentation supports, such as CRP 1, CRP 2 or CRP 3.

Based on the results and interpretation of the results, there should be a “go or no-go” decision made. The definition of “go” depends on what CRP is being executed. If it is CRP 1 or CRP 2, then the decision would be to move onto the next CRP test, and if CRP 3 the decision would be to move forward into the **Transition** phase of the project. The Transition phase, consists of moving the organization forward to the next step of “going live” with the Oracle Applications.

CRP, where does it fit in the Upgrade?

Any upgrade, patching or implementation effort requires testing. The diagram below (**Figure 2**) presents a rough idea of where a CRP fits in during an Oracle Apps 11i Upgrade. This approach is one way that this can be accomplished, and it really doesn’t matter if it’s an upgrade to 11i, 12i, or 13i. The approach you take now to will change slightly over the years and you should be able to use this model over and over again. Automated tools will become available and perhaps the upgrade will be completed with little technical intervention from a DBA, technical and functional staff.

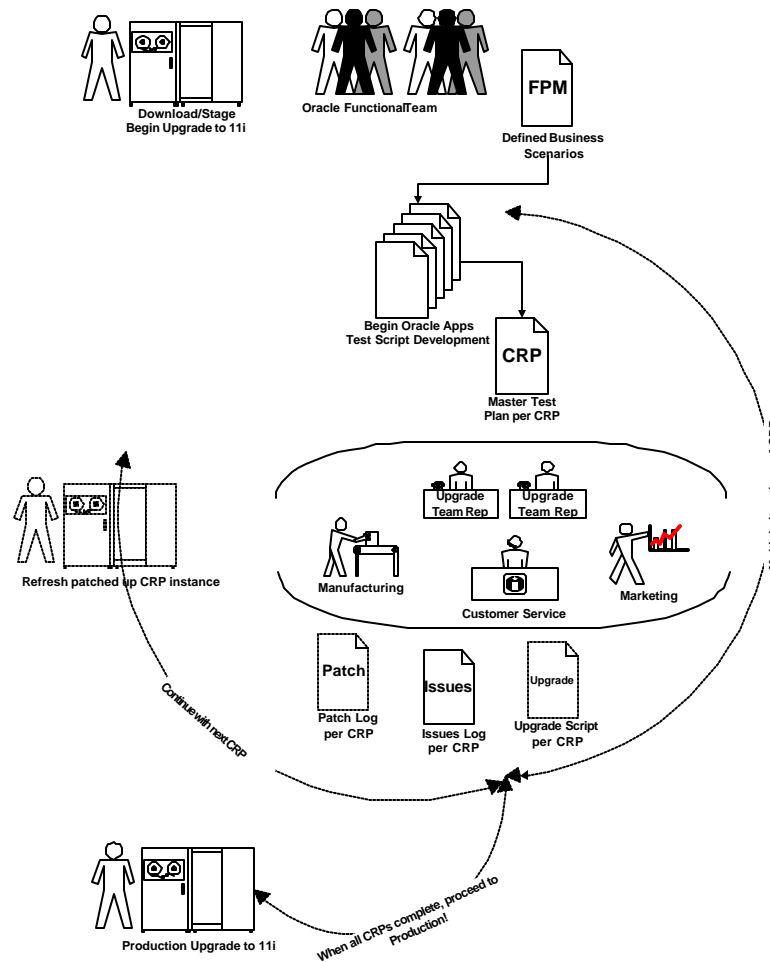


Figure 2

Conclusion

Designing CRPs for a successful Upgrade to Oracle Apps 11*i*. It's about being organized and coordinating CRP activities to minimize stress and maximize success. Many organizations find themselves designing and developing iterative project deliverables and wasting reams of paper. First, take advantage of downstream, or previously created project documentation, such as business scenarios and scripts – leverage them in developing your CRP testing documents. Second, get your user community involved with the creation of **their** testing documents. Mentor and work with your users while they create these documents. It will enhance your credibility as well as increase their involvement and knowledge of the project and Oracle applications.

CRP Documentation Samples

Note: Additional documents will be presented during the OAUG presentation.

General Ledger Test Scenarios

Business/Test Scenario #	General Ledger Test Name	Description	Date	Time	Tester	Results (Pass/fail)	Accepted by	Pilot
6.1	Open the new accounting period	Open the new accounting period	8/1/02	12:40PM	S.Cassale	Pass	WJS	CRP 1
6.2	Maintain the Chart of Accounts	Maintain the chart of accounts by using segment values, dynamic insertion, cross validation rules, parent accounts, roll up groups, summary accounts and security rules	8/2/02	12:45PM	S.Cassale	Fail – TAR# 123.456789	WJS	CRP 1

Test Script - Open the New Accounting Period

Scenario Step	Test Script Step	Role	Action or Navigation Path	Expected Results	Actual Results	Expected Time	Actual Time	Results (Pass/Fail)
6.1	1.1	Accounting Supervisor	Navigate to the Open and Close Periods form Setup: Open Close Period			1 minute		Pass
	1.2		Click on the Open Next Period button	A decision window will appear - "Are you sure you want to open the next period?"				
	1.3		Click on Yes	You will launch a concurrent request that when finished will open the next period				
	1.4		Click on OK					

Master Test Plan

Application Test Number	Application Test Name	Testing Resources	Test Location	Date	Start Time	Results (Pass/fail)	Pilot	Comments/TARs/Other supporting information
6	General Ledger	S.Cassale	Conference 1, Bldg 2	8/5/02	10:00AM	Pass	CRP 1	It worked fine after TAR # 987654321 was applied.
7								
8								
9								

CRP Project

CRP 1 Issues and Problem Log

8/1/02



Issue#	Description	Assigned (by initials)	Type (below)	Priority (below)	Expected Resolution By (date)	Impact on other Risks/ Issues	Current Status	Resolution/TAR/Patch/Tracking Number
1.								
2.								
3.								
4.								
5.								

Quantity of Issues and Problems submitted for CRP 1				
	<i>Outstanding (+)</i>	<i>New this Period (+)</i>	<i>Closed this Period (-)</i>	<i>Total (=)</i>
Quantity of Issues				
Quantity of Problems				
Totals				