

» Company Background

PPA established under the name of "Retirement Pension Directorate" on 1378 H corresponding to 1958 G under Article #8 of Pension Law issued at the same year.

The first Pension Law in KSA issued on 1364H. The Law issued on 1364H and 1378H covers military and civilian services while later Laws were specific for one service.

All schemes covers Saudi employees only who occupy a job in the state budget or public institutions budgets in which the employees are subject to pension scheme.

» Business Needs

Delivering the software with quality in short span of time and with greater visibility into project activities are the key principal in distributed development.

IBM Rational Team Concert provides all these features with greater ROI. Furthermore Arabic support and parallel development with two different teams were the essential requirement from the customer

» Business Problem Case

Public Pension Agency's development department consists of around 12 developers and 3 testers. They are mainly working on custom java applications and Websphere portal development. Majorly there are two types of applications being developed at PPA; pension applications and non-pension applications.

SBM development team is working on pension applications and for non-pension application they hired another development team of around 10 more developers

Pension Agency was already using the SCM solution Rational ClearCase LT v2003 for version controlling and other configuration management activities. They also had ClearQuest v2003 for change management activities, but they never used that due to non Arabic support. They have been using ClearCase LT for last 4 years but due discontinuation of ClearCase LT version they decided to move to Rational Team Concert. Another implementation issue was to isolate pension and non-pension team changes. The new team was bit inexperienced and existing SBM team had the fear that they might make some bad changes in existing code to break the whole application.

They wanted to use the same code base for the development of both type of applications. In the later stages of development once the newly introduced team get matured the code changes of both the teams need to be merged.

Furthermore they were using some bespoke applications for issue and defect management activities. These activities were not very much aligned with development tasks and they had to correlate both the activities manually.



Public Pension Agency

» Project Milestone

- Requirement gathering
- Overview session to all stakeholders
- Installation and Configuration of software
- Data migration from CC to RTC
- Hands On Training to end users
- Discussed DR/Backup procedures with system Admins

» Key Technologies and Tools used

- IBM Rational Team Concert
- IBM Websphere Application Server
- IBM Rational Application Developer v7.5.5.

» Solution

PPA had two options for new software introduction for their change and configuration management activities.

1. To replaced the old CCLT and ClearQuest with ClearCase V 7.1 and ClearQuest V 7.1
2. To implement the Rational Team Concert

After discussion with implementation team; they opted second option.

Due to

1. Easy and quick implementation of Rational Team Concert
2. Single platform for Change and Configuration management.
3. Rich Web interfaces
4. Strong integration of change and defect management activities with configuration management activities
5. Inbuilt capabilities of project management
6. Out of the box process template availability to easily implement industry standard best practices

The solution we implemented at PPA as follows

1. WebSphere Application Server version 7.0.0.7 64 bit was used to host Rational Team Concert
2. Oracle 10g 64 bit was used as database
3. MS Active Directory for user authentication

Two stream setup (one for pension applications and other non-pension). These two streams owned by two separate teams (pension and non-pension teams). Pension team consists of developer working on pension applications and other team is newly introduced team to work on non-pension services.

Public Pension Project (Rational Team Concert Project)

1. Pension Stream (owned by Pension Team)
2. Non-Pension Stream (owned by Non-Pension Team)

Using this mechanism both the teams are able to work in isolation.

Other than owner nobody can make the changes in stream and later stages they can merge the changes of both the stream by change the flow targets

After the setting up rational team concert for development, trainings were provided to development and quality assurance resources. User manuals and Usage model document was provided to users so that they can refer in case of any issue

Disaster/Recovery training provided to appropriate team so that they could take the regular backups and able to restore the application in case of any software/hardware failure.

» Business Benefits

Our valued customer has already witnessed remarkable improvements in overall software development cost in terms of efforts and time. Now the managers are able to see the project progress using rich web interfacing. They can create their own project dashboards based on their requirements; in case of any deviation they are now able to take appropriate actions to keep the project on track. Requirements are now managed and using Rational Team Concert work item management capabilities they can track the requirements with other work items like software tasks, defects and issues etc.

Using strong Change and Configuration Management capabilities in Rational Team Concert; development team can associate their defects and other change management work items with configuration management activities like check-in Checkouts and software code delivery.

Build creation process is now fully automated using Rational Team Concert build feature. Using Personal Build capabilities developer can make sure that the changes they are making won't break the application before delivering the code to others.

» Design Architecture

