

## » Company Background

The Riyadh Armed Forces Hospital (RMH) is located in Riyadh City, The capital of Saudi Arabia. It's the flagship of the RMH Program. RMH is the Medical Services Department (MSD) of the Ministry of Defense and Aviation (MODA). RMH was officially opened December 1978. The hospital now includes the main hospital, Southwest Corner and the new Southwest Corner Extension. Additional facilities are being built to accommodate the growing population and to further enhance the quality of patient care.

## » Business Needs

Building the software applications with quality and greater visibility into project activities so that management can take appropriate decision based on the project progress. They also wanted to integrate the other Rational tools like Requirement Composer, Rational Software Modeler and Rational Software architect with Rational Team Concert so that end to end traceability of development artifact could be achieved. Moreover automation of their RFP (Request for Proposal) process through seamless Requirement Composer and Rational Team Concert bidirectional synchronization was also the major customer requirement.

## » Business Problem Case

Riyadh Military Hospital's Application Development Department plays a key role in the continuous success of Information and Communication Department of Riyadh Military Hospital. Mature Legacy Applications deployed at Riyadh Military Hospital were somehow fulfilling the business needs of the organization; but still there was a great need of new custom applications to satisfy the emerging business needs.

Custom Application Development and Support for the existing Legacy Applications were holding great business values for the organization. Core responsibilities of the Application Development Department were to give continuous technical/business support for these highly business critical applications to make them constantly up and running.

Application Developers/Architect/Manager were using a very commonly used Configuration Management System named "CVS" for code versioning; but this configuration management system was not flexible enough to fulfill the modern technical needs of Riyadh Military Hospital.

- They were not able to do effective project planning due to lack of appropriate tools.
- Change management was done by email and other poor communication means.
- In the absence of any requirement management tool; requirements were not being communicated and elaborated properly.
- No clear project roles were defined for project team members.
- Communication overhead/gap between business, functional and technical team members.
- There were no such traceability and impact analysis mechanisms were not defined in the existing software development framework.

Due to all these deficiencies in software development they were seriously facing the consequences like delayed project timelines, poor quality, higher cost to maintain the project stability etc



Riyadh Military Hospital

## » Project Milestones

- Overview session to RMH Management
- Installation and Configuration of tools
- Rational Tools Technical Enablement sessions
- Implementation of live business scenarios
- System Administration sessions

## » Key Technologies and Tools used

- Rational Team Concert
- IBM Rational Application Developer v7.5.5.
- Rational Requirement Composer
- Rational Software Modeler
- Rational Software Architect

## » Solution

To overcome all these shortcomings in their existing software development infrastructure RMH management decided to take the aid of modern tools. After the deep analysis with other competitive products in market they decided to go with IBM Rational Suite.

They asked Royal Cyber Inc to provide training and consultancy services so that they could get the maximum value of their investment on rational tools. Royal Cyber Inc deployed the team of experienced consultant at client side for smooth implementation of the rational suite

Our consultants deployed the following suite at RMH

1. Rational Requirement Composer for effective requirement management activities
2. Rational Team Concert 2.0.0.2 Standard Edition for collaborative development, Source control system, change management solution and for advance project planning activities
3. RAD 7.5 for custom java development
4. Rational Software Modeler 7.5 for UML modeling
5. Rational Software Architect 7.5 for code generation using the UML models
6. .Net Extension to generate code for .Net projects

These products were integrated in RAD environment so that developer and other stakeholders could use single interface for all their activities.

Furthermore RMH Request for Proposal process was also automated using Rational Requirement Composer. Requirement Composer connector used to import these requirements in Rational Team Concert after finalizing. These imported requirements are then tracked in Rational Team Concert through out the Software Development Cycle.

## » Business Benefits

Our valued customer has already witnessed remarkable improvements in overall software development cost in terms of efforts and time. Model driven approach has enabled the forward and backward traceability in the overall architecture of enterprise custom applications. 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 Checkin 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

