J2EE Conversion

Planning for Phase II

Phase I Background

- Kumaran converts GM and UA
- Two on-site Kumaran staff
- Preliminary code deliveries have been successful. Code has been reviewed by developers and architecture and found to be maintainable, scalable and consistent with eRA framework
- Complete code delivery for Integration testing July 8, 2004
- Deployment to production pilot expected August 16, 2004.

Phase I Background

- March 18 August 16, 2004
- 68 files converted
- Cost
 - \$221K Conversion
 - \$ 76K Testing/Implementation
 - \$ 95K Architecture support
 - \$392K Total

Considerations for Phase II Planning

- Allow more time for analysis and design phases
- Include testers and documentation staff during design phase
- Post-deployment transition support is needed
- Plan for resources required to support the conversion
- Control (minimize...eliminate) changes to modules being converted. Communicate this restriction to all (project team, analysts, CCB, etc.)
- Ask Kumaran to provide test plans and test cases

Phase II

- Convert remaining client server applications (12 applications, approximately 180 files)
- 42-week schedule including 8 weeks of Transition support. Three on-site Kumaran staff.
- Start mid-September 2004 and complete mid-July 2005
- Logically group applications to be converted and delivered together (6 Code deliveries over a 17-week period)
- Approximate Projected Cost \$1.4M
- Fixed Price Contract

Phase II – Conversion Order

- 1. GUM, Subprojects, ICO
- 2. TA
- 3. CM*, Review
- 4. RR
- 5. Crisp Plus, Pop Tracking
- 6. IQR, SITS, ICSTORe

^{*}some CM functionality is already available in CM Web.
Instead of doing a redesign and pulling CM Web features
out of CM before conversion it will be converted as is.

| Sub Phase I | ase I | | | | | | | | | | | | | | | | | | | | |
|---|-------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|
| week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Analysis | | | | | | | | | | | | | | | | | | | | | |
| Design | | | | | | | | | | | | | | | | | | | | | |
| Environment Setup | | | | | | | | | | | | | | | | | | | | | |
| Conversion | | | | | | | | | | | | | | | | | | | | | |
| Unit and Module Testing (by Kumaran off-site) | | | | | | | | | | | | | | | | | | | | | |
| eRA Integration and Acceptance testing | | | | | | | | | | | | | | | | | | | | | |

| Code Delivery to NIH | Week Delivered In |
|-----------------------|-----------------------|
| GUM, Subprojects, ICO | 12 th week |
| ТА | 15 th week |
| CM and Rev | 18 th week |

| Sub I | Phase | e II | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------|------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| week | | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 |
| Analysis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Design | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conversi | on | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unit and Module Testing (I Kumaran site) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| eRA Integration and Acceptar testing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Transition Support | n | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Code Delivery to NIH | Week Delivered In |
|------------------------|-----------------------|
| RR | 23 nd week |
| CP/SIR and POP | 26 th week |
| IQR, SITS, and ICStore | 29 th week |

Challenges

- Must have adequate resources on our side (Business & Requirements Analysts, Testing, Ops, CM/Integration, Architecture, Documentation, Maintenance Developer)
- Timeline is aggressive and cannot happen without buy-in and commitment to the schedule from all participants
- Fixed price contract requires us to be on schedule especially when providing feedback from design reviews, code reviews and testing.

Architecture

- Coordinate the conversion task
- Produce and maintain Migration Technical Architecture document (identifies technical issues and solutions, capacity planning, defines target architecture for test, staging and production)
- Provide first level technical support to Kumaran
- Code review
- Design review
- Deploy code to Development environment

Business Analysts

- Must participate in Analysis and Design Phases (up to 35% of time during 10 week period x 2 phases)
 - Demonstrating application to Kumaran, answering related questions
 - Reviewing design/UI and providing feedback (iterative)
 - Recommend Showing UI to users/advocate for feedback before design is finalized
- Must be available to answer some questions during Conversion phase
- Must participate in Integration Testing Phase
 - As a resource to testers for test plan and test case development
 - After code is delivered, business analyst will conduct functionality verification of the application, executing the major scenarios (50% of time during 2-week period).
 - Report defects.
 - Once reviewed and validated by Business analyst, he/she will give approval for application to go into typical Integration testing
 - Must participate during normal testing cycle and be available to answer questions (15% of time during Integration and Acceptance testing 10-week period)
- If appropriate will coordinate to include key users for participation during Acceptance testing phase.
- Must devise rollout plan (pilot implementation) for deployment of application to users and shutdown of client server equivalent, briefing appropriate user group and advocate.
- Reviewing documentation (release notes, user guide and help files)

Requirements Analysts

- Must participate in Analysis and Design Phase (up to 35% of time during 10 week period x 2 phases)
 - Assist in showing application to Kumaran, answering related questions
 - Reviewing design/UI and providing feedback (iterative)
- Must be available to answer questions during Conversion phase
- Must participate in Integration Testing Phase
 - As a resource to testers for test plan and test case development
 - After code is delivered, requirements analyst will work with Business Analyst to verify correct functionality of major scenarios (50% of time during 2-week period).
 - Report defects
 - Must participate during normal testing cycle and be available to answer questions (15% of time during Integration and Acceptance testing 10week period)
- Reviewing documentation (release notes, user guide and help files)

CM/Integration

- Provide build support
- Provide training on the tools (CVS, CQ, Clearcase)
- Provide release and integration support

Operations

- Provide infrastructure support
- Provide DBA support
- Perform deployments to test, staging
- Build environment (if necessary, procure hardware)

- Testers Current testing resources may not be sufficient
 - To more evenly distribute the workload, code deliveries and deployments to test will be staggered with three weeks between each of the first 3 deliveries, a 5-week break and then 3 weeks between each of the last three deliveries.
 - Testing will start 12 weeks into Phase II (approximately mid-December 2004) and go through June 2005.
 - Kumaran will be providing test plans and test cases.
 - Instead of test plan and test case development.....could an alternative be using user manuals, training materials, release notes, supporting user documentation to exercise all functionality?
 - Could current testing team be supplemented by adding testers for this task?

- Maintenance Developer
 - Code Reviews
 - Answer questions during Conversion
 - Transition, Knowledge Transfer
 - Post-deployment support
 - Integration of Common modules
- Documentation
 - Release Notes
 - Update User Guide
 - Update Help Files
- Blueprint Reverse Engineering
 - concentrating on documentation of business rules

Analysts/Key Staff/Expert Commitments

- GUM MMartin, MSiegert
- Subprojects IFaenson, MGoodman
- ICO Mmartin, MSiegert
- TA Lkatzper, MCox
- CM Ssimms, MMartin, Sgibb
- Review Dfox, Msiegert, Tsoto, SGibb
- RR Ddixon, LDiggs
- Crisp Plus Tmilner, Pgaines
- Pop Tracking Mkoshy, Dhall
- IQR Pgaines, Tmilner
- SITS Ssilver, MMartin
- ICSTORe Pgaines, Tmilner

Next Steps.....

- Is this proposal feasible?
- How does it fit into our FY05 plan?
- Can the necessary resources be committed?
- Timeline? Start date of September 15, 2004?
- Funding options? FY04, FY 05