The Inside Track – Insights Into e-Government Software Solutions

On October 29, 2002, I attended the above symposium at the Ronald Reagan Building in Washington, DC. The event was sponsored by IBM and therefore was peppered with very strong sales messages around their software products; however, it also provided valuable insight into their strategic direction for their products and validation of our architecture strategy at FSA. The following is a summary of the sessions I attended, I've also included links to the conference web-site for the full presentation materials.

Opening – Charlie Ill, Vice President, Worldwide Geography Sales, Software Group, IBM. Charlie was the host and sponsor of the conference. After outlining the agenda, he highlighted the work at FSA as a "Leading implementation of WebSphere and web enabled government applications." The only other example he used was the Department of Treasury.

IBM Software Group Update – Steve Mills, Senior Vice President and Group Executive, Software Group, IBM. Steve is one of the very top executives in IBM and has overall responsibility for all of IBM's software activities. His primary theme was "Infrastructure for Integration". Key points were:

- Standards where the driving force behind the success of the world-wide web. The same will be true in web-services.
- The software layers of the architecture will become the insulating layer between applications and the hardware and OS environments in which they operate.
- The market trend is towards a model where all IT components operate in a Federated environment.
- XML, web services etc. are all about allowing for integration between applications, both within and across enterprises.
- For the biggest value, focus on horizontal integration across the entire value chain from Customer demand through delivery.
- IBM software will retain the four brands: DB2, Lotus, Tivoli and WebSphere. However, they will all be "bootstrapped" on a common environment where they share components of the other brands to provide common services, eg., if Tivoli needs database services, they will use a kernel of the DB2 engine to provide it.
- They are also committed to interoperability with other products that provide capabilities within the stack.

The key take-away for me was the integration point across their software. While not forcing lock-in to their product suite, significant advantages will accrue to users of their products through ease of development, operation and management. I also believe that IBM's track record of building infrastructure at scale will greatly reduce the risk of moving into web services for integration both within and outside of FSA.

From e-Government to Collaborative Government – Joe Sanchez, Principal, Federal Strategic Consulting, IBM. Joe is an IGS strategy consultant. I thought his presentation

was very unfocused and extremely detailed, however, there were a few points worth mentioning:

- Most e-Government efforts focused on one-way communications: Govt. to Citizen or Govt. to business.
- Collaborative government is about two-way communications between Govt., partners and Citizens to deliver products and services. I believe that FSA is an excellent example of this approach where we work with operating partners, Financial Partners and Schools in an integrated delivery chain of Student Loan services.
- The key benefits of integrating throughout the value chain are cycle time reduction and speed to market for new products and services.

e-Gov Live! – Bud Hartley, Senior Consultant, IBM Software. This session was a tour de force run through 62 of IBM's software products. A few of the highlights:

- MQ Series enjoys a 65% market share for messaging software.
- He listed key principles for e-Gov applications: [insert here]

The key take-away for me was that IBM has developed a very tightly integrated suite of products across their brands which can provide a very robust infrastructure for integration, both within the enterprise and beyond.

Managing a Secure e-Government Infrastructure – Jeff Crume, IT Security Architect, IBM Software Group. While Jeff's presentation was overly focused on individual products and their capabilities, he provided some interesting insights into the challenges of providing security in an integrated environment. Key points:

- Security is like brakes on a car. They aren't there to let you stop, but rather, to allow you drive fast. We should look at security the same way, as an enabler to integration and collaboration rather than an evil to be endured.
- Like all other complex components of a technical architecture, security capabilities should be externalized from the applications and developed once, used by all. Allowing applications to develop and implement their own security capabilities increases the risk for those applications and lengthens the development cycle.
- 22% of all security spending is on the 3A's: Administration, Authentication, and Authorization.
- The easiest and cheapest solution is Single sign-on for web based applications, because standards exist. The most difficult, and therefore lowest ROI, is to implement SSO for legacy applications.
- Fully 25% of all users who leave an organization do not have all of their access accounts removed unless there is a common and comprehensive access management infrastructure in place.

Web Services for e-Government – Mark Colan, e-business Evangelist, IBM Software Group. Mark is on assignment from the WebSphere development team "evangelizing" web services. He gave a good overview of the present and future state of web services focusing on the business value they enable and the challenges of implementation. Some of his key messages:

- Web services will solve the problems of integration, or said another way, integration is the 'killer app' that will drive the market for web services.
- Traditional interfaces are tightly coupled – 'glass interfaces'. Web services allows loose coupling 'rubber interfaces'.
- Reiterated Mill's point from earlier, standards is absolutely key to successful take-up of web services in the industry. IBM is committed to supporting the various standards organizations and helping to drive out the development and uptake of these standards. They have assigned some of their best people from the labs to this effort.
- IBM begins writing software to specifications from the standards groups well before the standards are finalized. They make this software available in an open environment through their Alphaworks website. This allows the specs to be proven out in working software before finalization and it also gives IBM early experience in development of software to the specs.

Summary

I believe there were several key themes in this symposium that have relevance to FSA:

- Integration across all the players involved in the life-cycle, from demand to delivery is where the value is. The focus of modernization to date has been on integration within the walls of FSA, we now need to start looking outward to drive out the remaining benefits.
- Web Services will be a key enabler to making this level of integration economically and practically feasible.
- It is still early days, and we should continue with our plan to implement web services internally.
- XML is the common language that enables integration across heterogeneous environments.
- Standards around XML, SOAP, WSDL and UDDI will be critical to success, we should continue our active involvement in PESC and other standards bodies.

All presentation materials can be found on IBM's conference website:
http://www.ibm.com/events/insidetrack/federal