

RUNEL: Welcome to another edition of Getting the Most Out of IBM U2. This is Kenny Brunel, and I'm your host for today's episode, which introduces SystemBuilder Extensible Architecture, or SB/XA, and highlights how to get the most out of it.

First of all, what is SB/XA? And with me in the studio today, I've got three guests to help us understand more. First of all, [Vinnie Smith]. Vinnie is the product manager for the U2 tools, including SB/XA. And [John Zagnoli]. John is the development manager for the U2 tools. And, [Stuart Mackenzie], senior support analyst and a long time SB enthusiast.

So, Vinnie, I think I'll start with you. You've been working with SB in both technical and non-technical roles for over 22 years. And with all the people I've been involved with, I'd have to say you're probably the most passionate about SystemBuilder. And I know SB has been around for a long time. So why don't you give us a brief...an introduction or description of all the buzz around SB/XA.

SMITH: Thanks, Kenny. Looking back over the years since SystemBuilder was first introduced in the early eighties, when we had the traditional character type application interfaces and as we moved and evolved that

through the nineties with SB client creator a GUI interface to extend the life of the existing applications our multi value community had built up over the years...

We then looked around and looked at the new tools coming out and were trying to figure out, how do we actually get a ramp up and a head start ahead of the crowd as we move into the new evolutionary phase of application development?

And so SB/XA SystemBuilder extensible architecture I think as the name implies is where we can take the product and move it in many directions without locking ourselves or painting ourselves into a corner as we did with previous design elements.

So SB/XA introduces a complete rearchitecture of all of the SB+ layers and also provides new presentation clients for which our developers can now take things through into the next decade and through exciting new development.

BRUNEL: Okay. Thank you, Vinnie. John, you're no stranger to SB. You've been with IBM for a number of years now as the development manager for SB and prior to that involved with hundreds of installs for SystemBuilder. So run through for us, if you will, the salient points with this new release.

ZAGNOLI: Thanks, Kenny. Yes. First of all, we have put a lot of thought into this redesign of SB and one of the things we decided was to leverage the amazing capabilities in .NET 3.5, Windows Presentation Foundation and Windows Communication Foundation.

But before we go into that, I want to make sure you understand that this is both a revolutionary release and an evolutionary release. What I mean is, our number one consideration in this release was to preserve the investment our partners and end users had already invested in their SB+ development. Most of that work will move directly into the new SB/XA presentation user interface without a significant amount of work.

Now, what is in that Windows presentation foundation? It is an entirely new graphics presentation that is built upon the vector graphic engine that's in all of the PCs that are being shipped today. This enables resizable forms, animation. It allows the...we're also allowing the developer through this new [XAML] based interface to extend the visual elements within the UI.

We also have new deployment options that are enabled by .NET. We have a click once deployment that allows both rich client and a browser client to simply be installed by the user clicking on a link. My personal experience with the

previous SB client deployment was very, it was difficult to navigate and often was an obstacle to deploying SB applications. I think we've solved that problem.

Another issue which will make administrators happy is our single sign-on capability that also saves the user time. Every time they connect to an application, they had to present credentials before or it had to be scripted, which was often very difficult to maintain. Now they'll be able to securely store their credentials and connect to the application.

So we preserved your legacy investment, we've improved connectivity, we've improved administration and security through our middle tier. The middle tier is going to allow modern protocols to be supported by the client. We're going away from Telnet and SSL Telnet to the latest protocols. And with all these innovations I think you really need to take another look at SB if you haven't looked at it recently.

BRUNEL: Thank you, John. Stuart, you've been working with SB for over 15 years, you have a lot of experience. And as a senior support analyst you probably have a good feel for what the customers face every day and what their need are. So can you expand for us on what the, tell us more about the new look and feel of SB/XA.

MACKENZIE: Well, Kenny, for the users, the biggest thing they're going to notice are the two new clients, the completely new user interface which is much more modern, has much more of a Vista look and feel to it.

And talking about the clients, we have two new clients. We have a rich client and we also have a browser client, which is entirely new to SB users. We've never been able to run an SB application in a browser without having to do a lot of work to port the application to the Web.

Another thing about the two new clients is, as John mentioned, they're written using Windows Presentation Foundation, WPF. And what this has allowed us to do is to completely separate the user interface and the business logic. And this is done by use of lookless controls, which is one of the more powerful features of WPF.

And, give you an example of lookless control, if you take, let's say the time, we can display the time in an SB/XA application, say 11:30 and you'd get 11.30. Now, if we wanted to change that in an SB/XA application, we can change the front-end appearance so that one user could see that as a digital display of the time, and another user we could modify the user interface that it actually displays a clock face and shows the time on the clock face.

And we don't need to change any of the business logic at the application; we're just changing the presentation layer and two different users could run in two and see two entirely different user interfaces.

And within SystemBuilder itself or part of the changes to the SB/XA application server involve styles and themes which is how we take the changes that we're making to the user interface and incorporate them into SystemBuilder.

So we'll write our [XAML] code which changes the user interface and then we add that to control records and SystemBuilder and a user would just be able to say I want to use this theme or I want to use that theme, or the developer and control what theme they're using so that they see ...they can see entirely different user interfaces for an application.

BRUNEL: Okay. Thank you, Stuart. Vinnie, I'm going to ask you a direct question now, and with all of this development effort you guys have put into this, how do you know that what you've done is what the customers really need and want?

SMITH: That's a good question, Kenny. With this being a very significant investment in SystemBuilder, very early

on, about 18 months ago we got a large part of the U2 developer community involved in an early adopter program to start with the first of our validation cycles. You know, we first of all needed to validate the technology we were trying to employ was correct and would be suitable for the new presentation clients.

We also then moved on to do some validation of customers' actual applications and have them take early versions of SB/XA and attempt to convert their existing applications with minimal to no change and then to extend them with the new [XAML] capability Stuart described through stars and themes...

And to get a validation back into engineering, back in through support, back in through marketing, and take all of that feedback and use that to then take the product that we're about to come out with the first GA to make it suitable so that developers could really take this and start working on their first releases.

So I would say, you know, in terms of validation, we asked the community, we got significant feedback, we had a very long validation cycle, and we believe we're truly, truly at the right phase now.

ZAGNOLI: I want to add a few things to that. Right from

the start, we knew that there was going to be an education required for our partners, so we put together an early adopter class to introduce our partners to the new technology. And we had partners come here from literally all over the world to learn about this over a year ago. We also invested the time in putting that class together for them.

I think it was a real eye-opener for the partners and it also got them very, very excited about the product. We also had monthly calls starting over 16 months ago to discuss the progress we're making on SB/XA. And we've always had very, very high participation in those calls. And a lot of interesting feedback and helpful feedback on where you're going.

BRUNEL: One question that I think customers often or something that they're often fearful of with upgrading is the impact that's going to have on their application and the workload. So with, you know, SB/XA has got some radical changes in it. Is this going to require partners and customers to rewrite their code?

SMITH: I think that that's a very good question. I'm going to actually ask Stuart to chime in here because he's had the most experience directly with customers over the last 18 months as we went through this heavy market cycle.

BRUNEL: Stuart, will they have to rewrite their code?

MACKENZIE: No, there's absolutely no need to rewrite any of your SB code. Your application should run as they are today within the new SB/XA clients. And an example of this, the SB demo application which most people are familiar with, we've taken that application and with no changes it will run in the new clients.

ZAGNOLI: Okay. However, if you wanted to restyle your application, you would have to make an investment in learning [XAML] and applying those new styles to your application. But out of the box you'll have a working application. But to make it really exciting you're going to want to get creative and apply some graphic design to your user interface.

BRUNEL: Well, now we get to the real point of this podcast, which is to tell listeners how they can make the most or get the most out of SB/XA. So Vinnie, first of all, tell us when is SB/XA available?

SMITH: So SB/XA is being released in three phases. Phase 1, GA 1 aimed at developers, came out on August 22nd. And that has all of the components that John and Stuart and myself have discussed during this broadcast, how the n-Tier

rearchitecture, the lookless controls, the new presentation clients, all of the administration and consumability benefits have been described.

GA 2, which will be aimed more for production, will be coming out at the end of the year. And that will enhance the product and includes some capabilities for national language support on the UniVerse platform, and also introduce some .NET controls for report writer and query report printing. And that's actually going to take advantage of another Windows components, the XML paper specification, XPS.

And then the next year, engineering are looking at what they need to incorporate for the third phase, and I'm going to hand over to John and let him describe more detail as to what they're thinking about for 2009.

ZAGNOLI: Thanks, Vinnie. GA 3 we're calling it, is going to allow the last step in extensibility, which is an integration of custom controls, custom .NET controls, so at that point our developers can literally integrate anything you can do in .NET into the new presentation clients.

The other thing we're going to be doing is continuing to extend our lookless controls and lay the groundwork for a Visual Studio based developer, which will greatly enhance

capabilities of developing entirely new and exciting visual elements within your user interface.

BRUNEL: Stuart, I'm going to send it over to you now to give your two cents on how one can get the most out of SB/XA 6.0.

MACKENZIE: Well, Kenny, I think the most important thing is just to get involved, to actually get hold of the developer release and load it up and start looking at your applications and start to think about what you can do with your applications because we really moved into a whole new paradigm.

In the past, one of SystemBuilder's marketing slogans was a system built for your imagination. Well, with the new user interface and the new development environment, your imagination can really go wild.

Something that's been mentioned earlier was that one of the challenges is learning the new technologies, learning about [XAML]. So that's something I would really encourage people to start looking at.

And to that end, within the 6.0 release of SB/XA, we've included a new system ID in the SB demo account that has numerous examples of including [XAML] code to modify your

user interface for all of the different controls. So that's a good place to start because it will actually show people exactly what they need to do to plug the things in to SystemBuilder and to modify their applications.

And the final thing I wanted to mention was, we're also doing U2U tutorial sessions on SB/XA, and those will be of great benefit to new users as well. Thanks.

BRUNEL: Vinnie, any final points that you'd like to add?

SMITH: I think, Kenny, the main thing to point out here is this is the most major significant rewrite and investment SystemBuilder for probably more than 15 years, probably approaching 20 years. You know, I think this is going to breathe new life into existing partners' applications.

I think it's going to present new opportunities to partners to go and explore new horizons and take advantage of the new features have been introduced. Basically this is just a launch pad. You know, we can go anywhere from here.

ZAGNOLI: The new technology we're using here is really cool. The emphasis on consumability is going to make it much easier to deploy real life applications. And with the

features we're coming out with in GA 2 and GA 3, I think it's really going to blow our SB developers away.

BRUNEL: Okay. Well, I think that wraps up today's podcast. I'd like to thank each of my guests for joining me today. And for our listeners, transcripts of today's podcast, which include all the relevant links are available on our Web site by following the U2 podcast link from the main package at www.ibm.com/software/u2.

e-mail us with your feedback, comments, and any suggestions you may have for future episodes. And, be sure to tune in for future episodes of how to Get the Most Out of IBM U2.

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