



Developing Agility

A Quarterly Newsletter for Unisys EAE and Agile Business Suite Customers

March 2012

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EAE/AB Suite Engineering – A Truly Global Effort

*By Curt Leong, Engineering Director,
Global Technology Center, Unisys TCIS*



If there's one thing you can say about the engineers behind Enterprise Application Environment (EAE) and Agile Business Suite (AB Suite), it's that they certainly epitomize the word "global."

As a member of Unisys Global Technology Center (GTC) division, the EAE/AB Suite engineering organization works closely with the other engineering groups, such as those responsible for the ClearPath operating environments. This collaborative relationship enables us to bring the best of Unisys engineering expertise and resources to bear when making changes and updates to EAE and AB Suite.

Specifically, our group is divided into three geographic teams – Australia (GTCA), India (GTCI), and China (GTCC) – which, despite being separated by thousands of miles, work both individually and collectively to drive the products forward.

Our GTCA team, which is comprised of many of the longest-tenured EAE and AB Suite engineers, covers all aspects of the products, down to the most granular levels. The GTCI team is responsible for nearly half of AB Suite development, and focuses in particular on MCP Builder and Runtime, Windows Builder and Runtime, Client Tools, and all EAE related projects. Finally, the GTCC team covers AB Suite Modeler and Designer, as well as Automated Test Tool (ATT). Both GTCI and GTCC have System Test teams that perform the QA/test functions for the products. >>



Oversight and management of the GTCA, GTCC, and GTCI teams is the responsibility of myself and Mike Heggen, Engineering Director, Global Technology Center. Plus, we're supported by three lead architects, each of whom has authority over specific areas of the product:

- **Grant McCauley, AB Suite Developer Architect:** Responsible for Modeler, Designer, Import/Export, Language, ATT, Debugger, and Builder Core.
- **Andrew Lee, AB Suite Windows Runtime Architect:** Responsible for Windows Runtime, Windows Target Builder, Client Tools, and Microsoft® Windows® based installations (including Windows Runtime, Developer, and Client Tools).
- **Howard Bell, AB Suite MCP Runtime Architect:** Responsible for MCP Runtime, MCP Target Builder, and MCP Runtime Installation.

It is our belief that this structure enables engineering as a whole to focus closely on key areas of the products, while functioning with greater efficiency across the board.

2011 in Review

All in GTC are passionate about EAE and AB Suite, and are proud of our accomplishments last year. In 2011, we:

- Helped numerous customers migrate to AB Suite, including the [Unisys Urbis financial services solution](#) to AB Suite on Windows and MCP
- Shipped AB Suite ICs 2.0.1398, 2.0.1400, 2.0.1500, 2.0.1600, and 2.0.1700
- Shipped EAE IC 3.3.3280
- Completed the new Change Analysis feature, which significantly improves the AB Suite Build mechanism
- Reduced the project (UCF) backlog by 58%, with no negative impact on other deliverables
- Authored Engineering Corner articles for every issue of *Developing Agility*

2012: New Year, New Possibilities

Building off the success of 2011, the engineering team is poised to achieve some great things in 2012. Highlights of the many goals we have set for ourselves this year include:

- Enable easy migrations to AB Suite by using a structured approach to migration services and increasing our educational offerings
- Continue to reduce our UCF backlog
- Integrate EAE and AB Suite with ClearPath ePortal
- Align EAE and AB Suite with the Unisys ClearPath *Forward!* vision

In addition, the fourth quarter of 2012 will see the release of AB Suite 3.0, with the following key features planned:

- Integration with Microsoft Visual Studio® 2010
- Integration with Visual Studio Team Foundation Server 2010
- Integration between ATT and the Visual Studio IDE

I believe that the global EAE/AB Suite engineering organization is headed in a great direction both in the short term and in the years to come. We have some very exciting projects lined up, and we can't wait to share our advances with you.

If you have ideas about how to make AB Suite even better, please let us know by submitting a [New Feature Suggestion \(NFS\)](#) or sending an e-mail to ABSuite@unisys.com.



Urbis Application Migrates to AB Suite

By Diane McGonigle, Agile Business Suite Migration Manager; Jeremy Smeddle, Urbis Solution Manager; and Nidhi Gupta, Urbis Support and Development Manager, Unisys TCIS

A fully integrated international banking system, Unisys Urbis is designed to support the global scope of a financial institution's activities, including treasury, customer accounts, lending, and derivatives and securities. A sizeable mission-critical application, Urbis consists of over 3,000 objects, provides extensive risk monitoring and reporting capabilities, and contains its own fully integrated general ledger functionality. Today, 10 international banks rely on Urbis, including several of the world's 20 largest financial institutions.

Urbis' 27 modules were originally developed using EAE and deployed on the UNIX® operating environment. We recently migrated Urbis to AB Suite 2.0 with deployment options for Windows and MCP platforms. This comprehensive project tested and qualified the full breadth of the application's functionality, which is now available on Windows and MCP operating environments. It's important to note that the primary focus of the project was migration to Windows, but a test migration to MCP was also completed.

Making the Migration Happen

Due to the size and mission-critical, multi-faceted nature of Urbis, the Unisys team divided the migration project into a series of smaller, more manageable phases.

Urbis was initially built as a UNIX based application running an Oracle® database, and included several critical external interfaces and numerous scripts that were platform or database dependent. So, one phase involved converting existing scripts to versions that were compatible with the Windows and MCP environments.

Other areas requiring change were the external TIBCO and SWIFT custom interfaces, which were implemented in the EAE version as COBOL and C programs. These critical interfaces have been converted to C# for the Windows environment and ALGOL for the MCP platform.

As part of the migration project, the Urbis team took the opportunity to modernize the existing user interface (UI), which was originally developed using PowerBuilder. While the UI remains the same from an end-user perspective, the team changed the interface to use newer Component Enabler technology behind the scenes.

The final major step of the migration project was to test the AB Suite version of Urbis in various situations to confirm that it delivers the expected results and the appropriate levels of performance when functioning in real-world, transaction-intensive environments.

The Benefits of Urbis on AB Suite

Enhancing the application's UI and two key external interfaces to be compatible with AB Suite and the supported platforms will enable financial institutions to reduce the costs associated with migrating to AB Suite – while providing a modern environment and capabilities that will help to enable success for years to come.

Throughout the migration process, our team intentionally retained the look-and-feel and functionality of the Urbis application – so as to eliminate any end-user re-training while the hardware and software environments are transitioned. >>

Another significant benefit of the migration is that there's no longer a need for Urbis customers to license a costly third-party COBOL compiler after they migrate. They may also realize additional savings with using Microsoft SQL Server® instead of Oracle for the runtime database management system.

And because we migrated the base product and all of its external interfaces using a concrete, standardized, and documented process, Unisys can employ this same proven methodology to help Urbis users with the move to AB Suite.

Ready to Make the Move?

Urbis users have been notified about the migration of the product to AB Suite and asked to follow the Unisys roadmap at their earliest convenience. A few client-requested functional enhancements to Urbis (incorporated in the last EAE-based release) will be retrofitted into the AB Suite-based version of the application in a release targeted for the third quarter of 2012. All future Urbis enhancements will be developed using AB Suite.

Any organization with questions about the timeframe or what's required when making the move should e-mail Nidhi.Gupta@gb.unisys.com.



Going Social with Your EAE and AB Suite Apps

By John Papachristos, Client Tools Technical Lead, GTC Australia, Unisys TCIS

While texting and tweeting may once have been the realm of teenagers and movie stars, today they are embraced by business, government, and non-profits as simply the latest ways to interact with customers and constituents. And, your EAE and Agile Business Suite applications are now ready to help you capitalize on social media through Unisys Business Integrator.

How does social media integration happen? Let's begin by looking at a quick example of how integration in general is accomplished. Consider the Wine demo, which we developed to show how

integration could work between three fictitious companies:

- WineCo, a distributor of fine wines (and Unisys customer using AB Suite)
- Prestige Wines, a retailer
- Reliable Shipping, a shipping company

As Figure 1 shows, the business operations of the three companies are interdependent. Prestige Wines orders stock from the distributor, WineCo fulfills the order, and the shipment is delivered by Reliable Shipping. >>

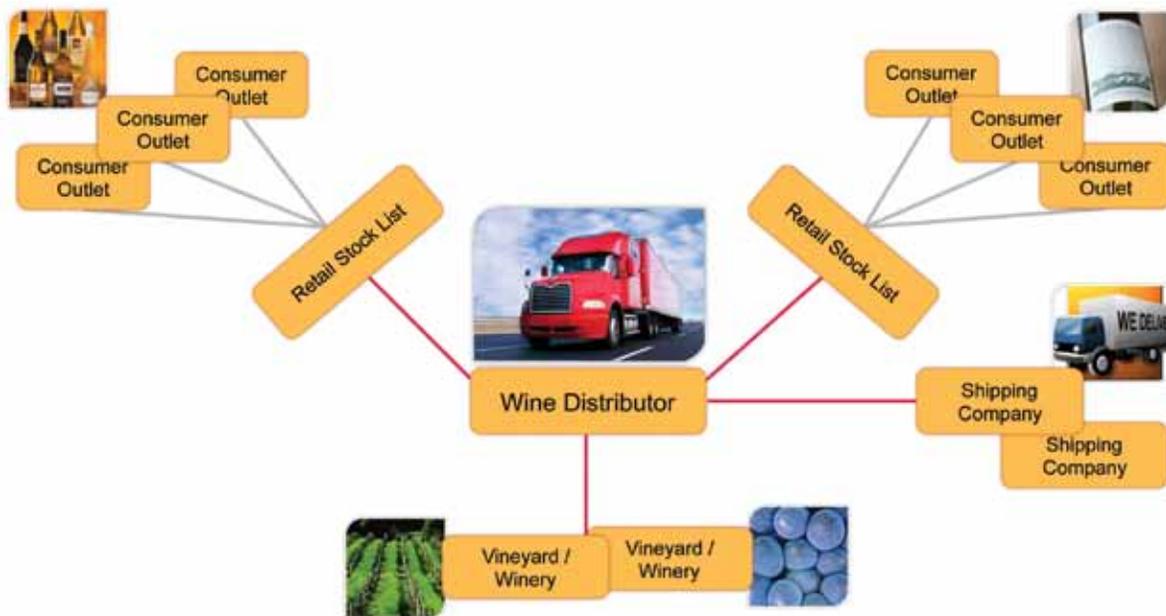


Figure 1: General Business Scenario

Behind the scenes, the companies exchange information so that customers receive the products they want when they want them. It's a fairly complex business-to-business relationship as illustrated in Figure 2.

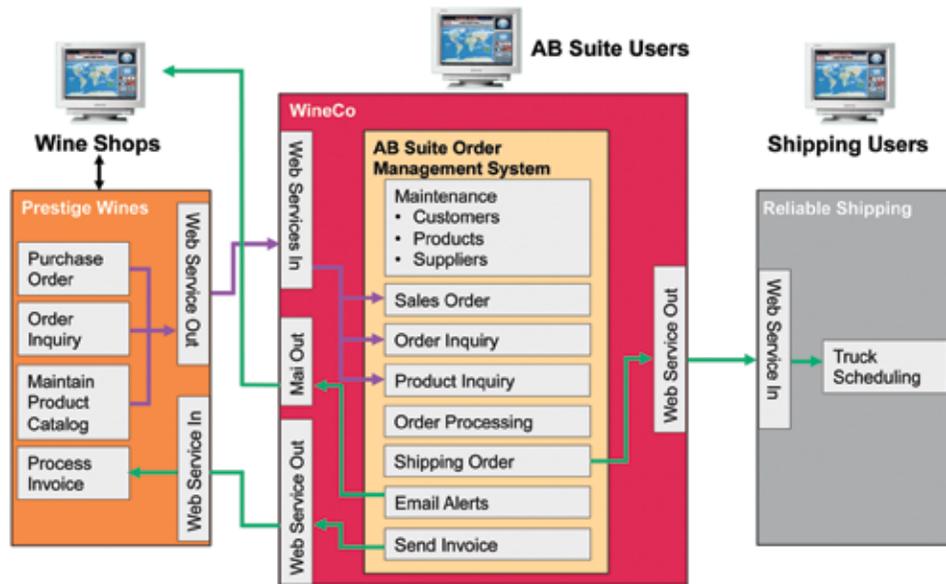


Figure 2: Application Model

Bringing the integration together is Unisys Business Integrator, which is a standard capability that comes with Client Tools. Using Business Integrator to build the integration points, WineCo's application receives orders, submits invoices, sends shipping manifests, and confirms delivery – over the Internet and without manual intervention. >>

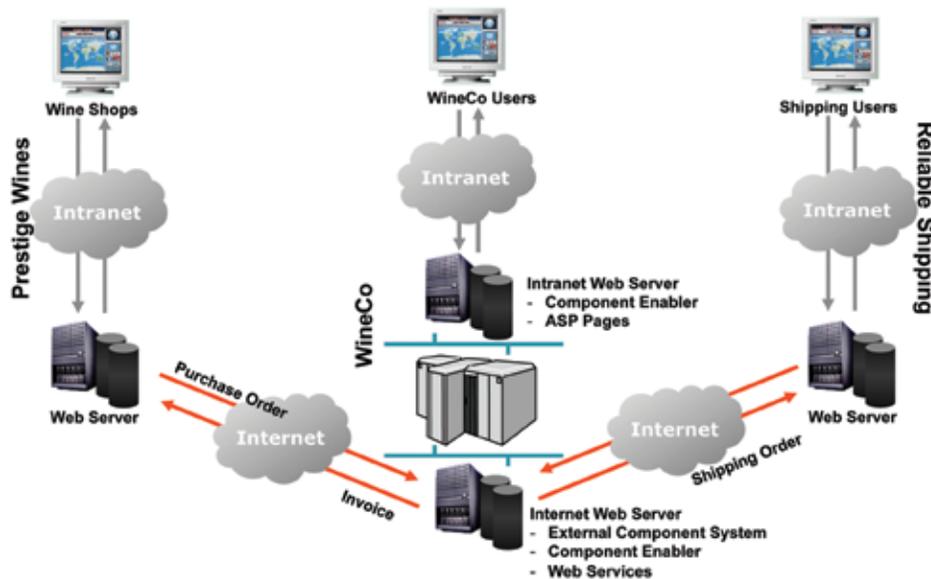


Figure 3: Runtime Architecture Using Unisys Business Integrator

If you know how to code a standard HUB call, you can use Business Integrator to call out of your EAE or AB Suite application. (For more about how Business Integrator works, see page seven of the [November 2010 issue of Developing Agility.](#))

So, now that you have the set up...**how does social media integration happen?** Business Integrator remains the keystone, even when it comes to texts and tweets. Consider an extension of the Wine demo, where WineCo offers a subscription service to alert customers to new products and specials. People can choose to follow WineCo on Twitter or give WineCo their phone number for texts.

The Wine demo was enhanced to integrate with Twitter and send a text to subscribers. Here's how we did it:

Twitter Integration

- Set up a Twitter account for WineCo.
- Obtained authentication keys for the account at Twitter.com. The keys are used to access the Twitter account from External Components and send tweets based on information received from the EAE or AB Suite application.
- Extended the existing External Components script "SndAlerts.js" to send price change alerts through Twitter, as well as e-mail.
- Added a new script file, "TweetWSH.wsf," to the collection of scripts for External Components. This is the file that needs to be updated with the keys and tokens received from the Twitter Development site. It performs the required authentication for the WineCo Twitter account using the "oAuth" authorization protocol.
- Watch what happens:
 - When a price change occurs for a specific wine, a tweet will be sent through External Components from the WineCo application.
 - At runtime, the information for the tweet is passed from HUB on the application server to HUB on the Windows server and out to Twitter.

SMS/Text Message Integration

- Evaluated SMS gateways for the SMS/text message integration and made a selection. We chose one that offered some free messages (for testing) and had international coverage. You'll have to decide which gateway makes sense for your organization – there are many.
- Once again, extended the "SndAlerts.js" script to send the price change notification from WineCo as an SMS to a registered mobile number.
- Watch what happens:
 - When a price change occurs for a specific wine, the information for the SMS is "AUTO.EXTERNAL-ed" to HUB and sent over to the SMS gateway.
- Note: Each SMS Gateway provider seems to offer its own style of interface. They are typically accessed via HTTP, but the interface parameters may vary. This means that you'll probably need to update our sample "sendSMSAlert()" function in the script "sndAlerts.js" with the account details for the SMS Gateway you select. And, you may also have to make logic changes to suit the chosen SMS Gateway provider.

To learn more about the Wine demo and see how its points of integration work, look for a webcast and/or how-to video coming soon. Or, send a note to ABSuite@unisys.com and we'll arrange for a one-to-one demo.

If you'd like to get a copy of the code for the Wine demo, it's available for download from support.unisys.com in the Agile Business Suite Demonstration section – expand "External Components" under the "View Documents by Category" to locate the zip file. Once you download the zip file, take a look at the help file (title: 38265898.chm) for more on the demo.

CSC Spotlight: Mike Hagerty



This article is the first in a series to showcase the Unisys analysts who support EAE and Agile Business Suite. Interested in seeing someone you work closely with featured? Send us your nomination: ABSuite@unisys.com.

A long-time Unisys veteran, Mike Hagerty began his career in Stockton, California, in 1978, where he supported the installation of LINC software on some of the earliest Burroughs mainframes. After five productive years on the West Coast, Mike transferred to the Unisys Application Support Center in Atlanta – the city he still calls home today – to serve as an analyst for the newly formed LINC Support Group.

Today, Mike remains an integral component of the Unisys customer support infrastructure, and is one of our most valued and trusted Customer Support Analysts. *Developing Agility* recently talked with Mike about his history with Unisys, what's changed in the last 30-plus years, and what excites him day-in and day-out.

Developing Agility: Run through a typical day in the life of Mike Hagerty.

Mike Hagerty: I start each day by checking on what support calls have come in overnight. I'll then work through each until I've helped the customer fix it or passed it over to engineering for further attention.

We have a system that documents every touch a support ticket receives and a knowledge database that catalogs all fixes. So, we now have a great store of information at our fingertips. Plus, the ability to connect remotely to our customers' systems really helps to streamline the process. When I compare this to how things worked 30 years ago, I'm amazed by how much more efficiently we can manage calls, coordinate resources, and get a fix out to the customer.

I still like to jump on the phone and talk things through. I may be old-school in that sense, but it often helps to more quickly clarify a question or issue.

DA: What gives you the most satisfaction in your role as CSC analyst?

MH: Many things have changed over the years, but what really hasn't are my day-to-day responsibilities. And this is a good thing, because I've always enjoyed digging into a customer's problem, isolating a bug, determining a workaround, and working with engineering to get a fix.

I can be a bit obsessive about finding the answer, too. If it doesn't come to me right away, I'll comb through our databases to look for similar issues and fixes or dig into the code. I like to make sure our engineers have all the information possible before I bring them into the mix. >>

DA: What were some highlights of the last year?

MH: I saw a tool I created called TrackerStats get adopted by engineering. It's always a great feeling when something like that happens.

I also helped TIES, a customer I've worked closely with for quite a while, complete the migration of its EAE applications to AB Suite on Windows. It's always rewarding to shepherd a customer through this process. The next step will be to work with TIES to move its development environment over to AB Suite.

DA: What would you think customers don't know about the CSC that they should?

MH: Most customers we talk to have been with us for a long time, so they've seen the changes and know the best way to contact us. So, my biggest focus is on making sure new customers, or a new hire at an existing customer, understand the process. When we're able to educate our customers, everything just moves much more smoothly.

DA: If there was one thing customers could do to make your response more effective and efficient, what would that be?

MH: Communication is key. I view my work with customers as a partnership, so the more involved they are in the process, the better. I want customers to feel open enough to come back to me with questions or concerns along the way. In the end, it always leads to a better result.

About the Unisys Customer Support Center

Staffed by analysts in over 20 countries, the Unisys Customer Support Center (CSC) is the front line of support for any customer experiencing a hardware or software issue. Although calls are typically handled within the customer's country or region, a support request can be picked up by any CSC analyst. Team members routinely engage fellow analysts across the globe, ensuring that problem resolution "follows the sun," and that the right resources are employed, regardless of location. Team members also continuously share knowledge, experiences, and best practices – all with the goal of getting the best answer to the customer in the shortest amount of time.

"Mike Hagerty is the most thorough and knowledgeable support analyst that I've ever worked with. His support of our efforts has been exceptional and was a major contributor to our successful implementation of Agile Business Suite 2.0."

– Helmut Porcher, Director of Systems Software and Operations, TIES



QR Codes Enable Cutting-Edge Output Capabilities

You've seen them on food packaging, concert tickets, promotional flyers, product labels, and seemingly everywhere else you turn today: Those little, square barcodes that you scan with a smartphone app to receive important news and offers. They're called Quick Response Codes, or QR codes, and they're a fresh, modern means of delivering important information to your customers, prospects, and partners.

So, we are excited to announce that [Unisys Enterprise Output Manager Release 9.1](#), the latest update to our comprehensive output management solution, includes the ability to create and print these small, versatile barcodes as standard functionality.

By using QR codes, you can capitalize on the growing smartphone trend by adopting an emerging communications medium that is optimized for today's fast-paced, consumer-centric IT landscape. In addition to the ability to create QR codes, Enterprise Output Manager 9.1 features advanced 2D barcoding capabilities that allow you to print barcodes on items and places that were once considered too small.

Support for QR codes is just another in the long line of reasons EAE and Agile Business Suite users are making Enterprise Output Manager an important component of their operations. But did you know that we have provided special development and runtime integration with EAE and AB Suite to make it even easier for you to use Enterprise Output Manager? To learn more, simply search for "DEPCON" or "Enterprise Output Manager" in your EAE and AB Suite Developer Reference Guides.

A license for Enterprise Output Manager is bundled in with all ClearPath platforms. But even if you aren't a ClearPath user, Enterprise Output Manager will work in all of the environments that are supported by EAE and AB Suite, so there's no reason not to benefit from all it has to offer.

Consider the possibilities for providing new, innovative business capabilities using Enterprise Output Manager 9.1. For example:

- Banks and financial institutions can generate QR codes for invoices, statements, and marketing collateral
- Hospitals and healthcare providers can print QR codes and small 2D barcodes on patients' wrist bands to ensure important information is readily available at the point of care
- Retail companies can print 2D barcodes to put information such as weight and expiration dates on small items like pharmaceuticals and cosmetics – and use QR codes in advertisements on buses, billboards, newspapers, and business cards



To learn more about Enterprise Output Manager capabilities, just scan the QR code generated using the functionality discussed in this article.



Info Center

UNITE 2012: May 13-16 in St. Louis, MO

Circle May 13-16 on your calendars today! The UNITE conference will be held at the Hyatt Regency St. Louis. Located in the heart of the city, the hotel is within walking distance of the Gateway Arch, Busch Stadium, the Anheuser Busch Brewery, the new City Garden, and much more.

As usual, UNITE 2012 will feature lots of great networking opportunities and EAE and Agile Business Suite sessions to attend. Watch your e-mail and check the [UNITE web site](#) for additional conference details, exhibition information, and the latest news about UNITE.

AB Suite 3.0 Field Test Starts in June

The field test for AB Suite 3.0 is slated to begin in June of 2012. We are currently looking for volunteers to help us test this important release. Ideally, we'd like to work with anyone currently using AB Suite 1.2 or 2.0. And because AB Suite Developer 3.0 is qualified for Visual Studio 2010 and integrates with Team Foundation Server (TFS), we would also like to encourage developers with Visual Studio 2010 and TFS experience to participate in this field test.

If you are interested in joining the field test, please contact us at ABSuite@unisys.com

Reference Materials Available from Unisys Support Site

Be sure to check out the Documentation Libraries available in the Public Information section of the Unisys Support Site. They hold a wealth of information for EAE and AB Suite users alike.

New additions to our libraries of How To documents, white papers, and other useful information include:

- **White Paper:** Change Analysis Improvements and Best Practices (**NEW**)
- **White Paper:** Migrating Changes Between Models (**NEW**)
- **White Paper:** AB Suite Usage Best Practices (**updated**)
- **How To:** Configure Windows Server 2008 for AB Suite 2.0 (**updated**)
- **How To:** Improve AB Suite Debugger Startup Time (**updated**)
- **How To:** Use Registry Keys with Windows Runtime (**updated**)

No special login is needed. Visit public.support.unisys.com, choose "Documentation" in the "Public Information" box located on the left-hand side of the screen, agree to the terms of service, and you're good to go.

Specifications are subject to change without notice.

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