



Developing Agility

A Quarterly Newsletter for Unisys EAE and Agile Business Suite Customers

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Contents

- 1 Why AB Suite for New Applications?
- 3 Agile Business Suite 3.0 Preview
- 4 Windows Migration Snapshot
- 5 Engineering Corner: JSP Client Generator Now Available in Client Tools
- 6 Integration Stories: EAE, AB Suite, and ClearPath Servers
- 9 Partner Spotlight: Baltic Technology Group (BTG)
- 10 Info Center

We've refreshed the look and feel of Developing Agility – New design, same great content!

Why AB Suite for New Applications?

By Maarten Schneider, Worldwide Marketing Manager, Enterprise Application Environment and Agile Business Suite

Although *migration* from Enterprise Application Environment (EAE) to Agile Business Suite (AB Suite) is the dominant subject of our communications to you as an EAE user, I want to focus this article on the reasons *why AB Suite is the ideal development environment for the next generation of ClearPath MCP and Microsoft® Windows® applications.*

First, building a new application in AB Suite offers a great opportunity for your EAE and C# developers to learn how to use AB Suite's object-oriented (OO) capabilities and, of course, the underlying Microsoft Visual Studio® framework.

But to really see why AB Suite is the go-to environment for your new development projects, you should first consider the following key questions:

1. How many years do you want to use this new application? Just a couple? Five? Or maybe 10 to 20?
2. How critical is developer productivity in the design/build phase AND throughout the lifecycle of the application?
3. How important is it for you to have the freedom to create the best user interfaces (UIs) for your application – both now and throughout its lifecycle?

Let's look at these three questions and illustrate the specific benefits of AB Suite. >>



Question #1: Application Longevity

Rather than treating all development projects the same – regardless of the type or importance of the application – I think it is important to split your activities into two distinct groups:

1. The “quick and dirty” efforts that focus on fixing a current problem or creating a web application needed to capitalize on a quick, upcoming opportunity.
2. The “back office” project, which creates the foundation for a mission-critical solution you will use for the next 5, 10, or even 20 years.

In the past, I have seen many situations where solutions were needed for a short time, but ended up in use for a decade or longer. So, it is important to get a clear understanding of the characteristics of the application beforehand: How mission critical is it? How important is performance? How crucial is fast recovery?

Today, you could say that only the smallest, self-contained, web-based applications can be developed with any tool. But serious projects demand a tool like AB Suite, which features the built-in facilities needed to create mission-critical, high-performance, and easily recoverable applications – without requiring countless hours to complete.

Question #2: Total IT Productivity, Not Just Developers

There are many OO environments available today that enable developers to build quality applications using fewer code lines than in the past, which is great for their productivity. But at the same time, these environments also require highly qualified developers and other specialists to perform such critical tasks as ensuring that the application performs as expected when taken into production.

In contrast, AB Suite combines the advantages of OO development with a less-technical means of transferring end-user requirements into the AB Suite code – just like you are used to in EAE.

AB Suite also has the ability to hide many of the technical details from the developers. For example, during the automatic Build process, the platform-independent code will be translated into platform-specific code that is then compiled in an efficient, optimal way to the target platform.

In addition, combining OO capabilities with AB Suite enables new development techniques without complexity, leading to higher developer productivity throughout the life of the solution. When you plan to use an app for a decade or more, you will be faced with many OS and framework upgrades during that period. And while this can be a time-consuming and costly exercise, it simply requires a new Build in AB Suite, and that’s all.

Question #3: Modern User Interfaces

Due to the continuously changing requirements for modern UIs, it’s become increasingly important to have a complete split between the presentation and business rules layers in an application. In most development environments, such a split is difficult to achieve. Often, developers are forced to decide about the UI before they start to build the application. And in many situations, it is not possible to build more than one UI on top of one business rule.

In AB Suite, the separation of the presentation and business rules layers is a fundamental part of the architecture. Complementing the Build process for the business logic are numerous generators for different UIs, like WinForms, VB.NET Client, ASP .NET, JSP, and Web Services. Moreover, AB Suite has the ability to *create multiple UIs for a single business rule*, such as one for experienced users and one for users who are less familiar with the application. Because UI technology and end-user devices change very quickly, it is important to select a development environment that can handle change and work with multiple UI generators. >>

AB Suite: A Big Step Forward for New Application Development

As an EAE user, you already understand and appreciate the benefits of a high-level development language. AB Suite provides a major step forward, helping you leverage OO capabilities and a model-driven architecture (MDA), while keeping the strong points of EAE alive – so you can benefit from the best of both worlds.

I encourage you to launch a pilot project to explore AB Suite and learn how it can become the tool of choice for your future application development projects.

Agile Business Suite 3.0 Preview

By Maarten Schneider, Worldwide Marketing Manager, Enterprise Application Environment and Agile Business Suite

There's a new version of Agile Business Suite in the works – AB Suite 3.0 – and it's coming in the fourth quarter of 2012. And because it will be based on Microsoft Visual Studio 2010, the changes required to support this new release will be significant, so we plan to deliver it as a feature release.

What's Planned for 3.0?

Today, we are in the process of defining the content for AB Suite 3.0. The major areas of focus are:

- Integration and qualification of AB Suite with Visual Studio 2010
- Integration with Team Foundation Server (TFS)
- Integration of Automated Test Tool (ATT) into Visual Studio 2010

The **integration with Visual Studio 2010** will bring AB Suite developers the same easy-to-use framework as C# developers and others have today. When combined with the unique benefits of AB Suite, this release will improve the speed and effectiveness of your development efforts.

The **integration with Team Foundation Server** will deliver many important development process capabilities, such as version control, user requirement management, project management, and test management. Existing TFS users will certainly appreciate the integration with AB Suite

3.0, and we're sure that anyone unfamiliar with the product will see the value of the combination soon after the release. Please note that depending on your Microsoft license agreement, TFS could require an additional product license. It is treated as an optional product in AB Suite.

As a part of the AB Suite 3.0 release, we also plan to **integrate ATT within Visual Studio 2010**. With ATT, developers can easily create and re-run test scripts. With this additional level of integration, users will be able to test AB Suite applications in much the same way they test C# applications. And because the project management is handled via TFS, the management reporting should also look very similar.

Ready to plan your move to AB Suite 3.0? The best place to start – if you haven't done so already – is to complete your migration to AB Suite 2.0 in 2012. You can kick off your project by filling in a migration checklist, which you can [request](#) from Diane McGonigle, AB Suite Migration Manager.



Windows Migration Snapshot

By Diane McGonigle, Agile Business Suite Migration Manager, Unisys TCIS

With the announcement of end of Phase 1 support for EAE release 3.3 on the Microsoft Windows operating environment, there's been a great deal of focus on migrating EAE on Windows customers to Agile Business Suite.

Many companies are making excellent progress with the migration of their business-critical applications – in every geography, including the following major installations:

- **TIES**, a consortium of kindergarten through 12th grade school districts in Minnesota, has migrated 150 districts (and should complete all 160 migrations by the time this newsletter is published). TIES customers report sub-second response times in the new AB Suite environment.
- **The Unisys Financial Services System (UFSS) team** has completed the migration of the first two UK building societies/banks running UFSS in a Windows environment to AB Suite – and one has been in production since July 2011. UFSS represents the culmination of more than 20 years of on-going development, and the migration to AB Suite preserves every bit of that domain expertise.

- **The Public Trustee of Queensland**, a major trustee organization in Australia, successfully migrated its Windows based Trustee and Estate Management solution from EAE to AB Suite in February 2011.
- **A large utility company** in Latin America deployed a brand-new AB Suite application on Windows.

Are you an EAE on Windows shop? Is your AB Suite migration plan in place? The clock is ticking...

If your organization's business plans don't allow you to migrate by the end of 2011, there is an option for extended support up to the end of 2012. Please contact your Unisys account executive or Unisys reseller for details on this extended support option.

Please don't hesitate to [get in touch with me](#) for help moving forward with your migration from EAE on Windows to AB Suite on Windows.

December 31, 2011: End of Phase 1 Support for EAE 3.3 on Windows, Linux, and UNIX

December 31, 2011 also marks the start of Phase 2 support for EAE 3.3 on the Windows, Linux®, and UNIX® operating environments. During Phase 2 support, customers with valid maintenance contracts will continue to:

- Receive telephone and online assistance from Unisys Customer Support
- Obtain fixes to known problems
- Receive workarounds to errors they report that don't have a fix available, if possible



Engineering Corner: JSP Client Generator Now Available in Client Tools

By Nagendra Purushotham, Team Lead, GTC India, Unisys TCIS; and Alan Hood, Consulting Engineer, Unisys TCIS, Roseville, US

When it comes to the user interfaces (UIs) you design using EAE and Agile Business Suite, one size does not always fit all. That's why Client Tools in EAE and AB Suite offers automatic client generators for applications created using the Java based Presentation Client, Visual Basic .NET, ASP .NET WebForms, and ASP .NET WinForms.

And now the JavaServer Page (JSP) Client Generator has joined the group.

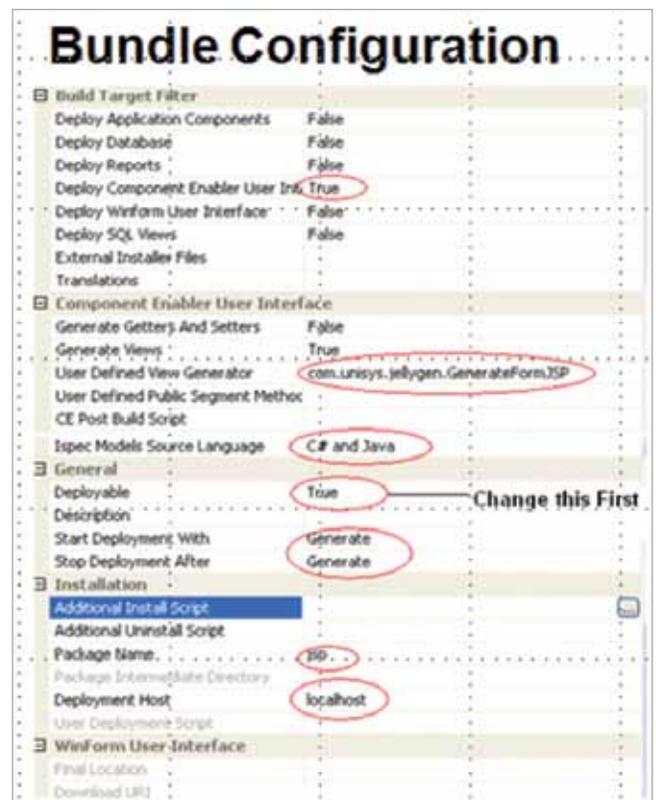
Why offer another option? Simple – because EAE and AB Suite users asked for it. Some shops want to (or are mandated to) create UIs using an open source, Java based web solution – as was the case with several customers in Latin America that wanted to use Java Web Servers running on Linux machines.

The JSP Client Generator functions very much like Active Server Page (ASP) Generator, except that the JSP web pages are written in Java, and work with an Apache Web Server. And since the JSP Client Generator is delivered as part of the Client Tools offering, its set up and use is very similar to that of our other client generators.

And like the ASP .NET Client Generator, some customization of JSP pages is possible after they have been generated. If you've purchased the Client Tools Customization Kit, you'll have access to the source of this new JSP Client Generator, as well. In addition, the JSP Client Generator is included as a new option on the AB Suite Client Tools product CD.

More information about the JSP Client Generator can be found in the Agile Business Suite Component Enabler User Guide, section 12 (document number 38265872), and the Agile Business Suite Installation and Configuration Guide, section 5 (document number 38265815).

This screen capture shows the bundle configuration properties for an AB Suite client folder. Setting the "Deployable" property to "True" as a first step will enable you to update entries in the Component Enabler User Interface section and the other properties circled in this menu.





Integration Stories: EAE, AB Suite, and ClearPath Servers

Contributors: Mark Eveleigh, Alan Hood, Wayne Oakley, Nigel Tunnicliffe, Unisys

Incorporating other applications, data resources, and access methods into an EAE or Agile Business Suite application is easier than you think. We recently polled a group of Unisys technical consultants to find out what customers are doing in the area of integration – and we had a tremendous response.

The following examples feature many applications that have been in production for years – and have been extended and refreshed using the integration capabilities of EAE/AB Suite and the ClearPath platform.

BizTalk, Web Services, and More

According to Unisys Senior Consultant Mark Eveleigh, there's a strong demand for Microsoft BizTalk® Server integration in the financial services industry. As a result, the Unisys Technical Consultancy team developed a custom BizTalk Adapter (based on Component Enabler) to make the job of interfacing easier. It exposes the traditional Ispec interfaces as XML message formats that can be consumed by BizTalk and also uses connection pooling through Component Enabler. Some transactions include calls to multiple Ispecs, and can involve complex XML maps implemented in BizTalk. But the BizTalk Adapter simplifies the job, which, in many cases, requires no change to core EAE applications running on ClearPath mainframes. Following are two examples:

- A **bank in Latin America** provides services integration using Microsoft BizTalk Server 2006, accessing EAE transactions running on its ClearPath MCP operating environment through the custom BizTalk Adapter and connection pooling with Component Enabler.
- An **insurance company in Puerto Rico** interfaces its custom EAE insurance application to front-office and web-based insurance quoting applications using the BizTalk Adapter and connection pooling through Component Enabler.

The Technical Consultancy team has also replaced “ClearPath to Microsoft Windows” interfaces, which were running on unsupported software, and extended them to include new functionality – while making minimal changes to back-end EAE applications. For example:

- For **an insurer** using the Unisys Unisure application, the team replaced a PowerClient GUI with a more modern custom .NET web application using Component Enabler ASP .NET WinForm Renderer. This project included updating interfaces to existing Windows applications by replicating the interface so that the existing application did not need to be changed or even recompiled.
- The team helped **a bank** develop a service that allows mobile phone users to “top up” their service (add funds) from its ATMs using Unisys Business Integrator with its existing EAE application running on ClearPath MCP, making it easy for the EAE application to call out to external services.
- With the help of Unisys Technical Consultancy staff, **Heal and Son Ltd.**, a furniture retailer in the UK, introduced a point-of-sale system interfacing with its EAE back-office application using BizTalk. They also provided an interface to a web-based wedding gift registry. Further information on this project is available on Unisys.com. >>



Programmatic Interfaces

Unisys Solutions Architect Wayne Oakley has worked extensively with **Hertz New Zealand Limited**, a subsidiary of U.S.-based Hertz Corporation, which uses EAE to support its entire business – from front-counter operations to financials and reporting. Here are just a few of the interfaces the company has developed:

- To receive reservations from Hertz Corporation, they defined a custom ALGOL program that opens a Telnet port to a Windows server in the U.S. and writes incoming reservations to a dataset in the EAE application's DMS II database running on their ClearPath mainframe. These updates are then processed by a sleeping report.
- Another interface handles real-time credit card authorizations. A transaction from the front counter triggers a HUB request. The request is sent to a program running on a separate Windows server operated by Hertz New Zealand Limited, which forwards the transaction via VPN for authorization by an outside service.
- A third interface automates updates to Hertz New Zealand's data warehouse with information from its EAE application. EAE reports extract the changes and a WFL job copies the files to an IBM AS/400 server using secure FTP (FTPS in implicit mode).

- CSV files can be forwarded to selected Head Office staff via a disk share. For an approved user, Hertz New Zealand defines an MCP user code and an RU of his/her Windows login with a LOCALALIAS of the MCP user code. EAE reports produce the data in the correct format and a WFL job runs a privileged DCALGOL program, which copies or renames the data file from the user code of the EAE application to the user's MCP user code. The user then maps his Z drive to the `_HOME_` share of the ClearPath Libra 400 mainframe.
- Hertz New Zealand Limited also uses several FTP transfers, both GET and PUT, between PCs at its Head Office in Christchurch and the ClearPath Libra 400 server.
- Finally, the company uses *OBJECT/EMAIL (an MCP system library) to send CSV and TXT files as email attachments.

SharePoint, Email, and Enterprise Output Manager

Nigel Tunnicliffe, Unisys architect, describes a variety of interfaces implemented at the **Isle of Man Government (IoMG)** that provide electronic notification (e-Notices) of tax documents.

The e-Notice system is based on integration between IoMG's EAE Tax system, Microsoft SharePoint®, and a custom web interface. The result is an electronic data store of all tax documents associated with a particular taxpayer. (The online returns part of the system that incorporates this interface won an [award for excellence](#).) The process is as follows:

- As part of the overnight batch run, the Tax system generates taxpayer documents via standard EAE reports and Unisys Enterprise Output Manager. Each document is saved to disk and includes associated metadata, such as tax period and lists of other taxpayers who can legally view the document. The Tax system also generates an XML file defining the emails that inform taxpayers when there are new documents to view in their document libraries. >>



What About Your Environment?

The interfaces we've described in this article go well beyond typical client and GUI modernization activities – but they just scratch the surface when it comes to the number and type of external interfaces being used with EAE and AB Suite applications in production environments. For example, we also have customers who:

- Use third-party data access tools to extract data from their DMS II databases to populate data warehouses
- Use FTP and “flat file” interfaces to share volumes of data with applications on other platforms
- Develop custom interfaces to provide transaction-based access to non-traditional devices, such as weight scales and grain analysis stations

So what about your organization? Do you have a unique interface you'd like to tell us about? Or do you have a business problem that requires you to connect to some unique application or device, and you'd like some help or guidance in that area?

Either way, we would love to hear from you. Please email us at ABSuite@unisys.com.

- A custom process loads the documents and associated metadata into a SharePoint repository and emails taxpayers, who can log in and view their documents.
- An IoMG tax officer can log into the Tax system and access the same list of electronic documents via a custom button on the Presentation Client screen. This button invokes a “LINCHOOK” process that calls SharePoint to display the tax documents associated with a particular taxpayer.
- Online users can also submit documents to be saved in their electronic document store as part of an online tax return. The name and SharePoint location of each document is held in the EAE database, which allows a tax officer to view any documents associated with a tax return.

The interfaces we've described in this article go well beyond typical client and GUI modernization activities – but they just scratch the surface when it comes to the number and type of external interfaces being used with EAE and AB Suite applications in production environments.



Partner Spotlight: Baltic Technology Group (BTG)

By Astra Kikute, Director of Human Resources and Contract Operations,
Baltic Technology Group

For 20 years, Baltic Technology Group (BTG), a Unisys Preferred Services Provider, has been an important resource for organizations looking for help managing EAE and Agile Business Suite development projects, or planning and executing a successful EAE to AB Suite migration.



To support our growth, we've sponsored university-level courses that are designed to help students develop skills and proficiency with model-driven development environments – using the AB Suite toolset in the classroom. In fact, we recently opened a new development office in Ventspils, Latvia – our third, in addition to existing centers in the cities of Riga and Daugavpils.

And, we are in the process of securing an agreement with Ventspils University to include an AB Suite development course in the institution's 2012 curriculum. When this arrangement is finalized, it will make Ventspils University the third higher education institution in Latvia to feature a course that teaches AB Suite. And, if the presentation of AB Suite Unisys recently delivered to 50 eager, young developers at the university is any indication, it will certainly be a course that's in high demand.

BTG's EAE to AB Suite migration services began in 2008, following the migration of our proprietary retail banking system to AB Suite. Since this time, our team has helped many organizations move to the new development environment. Most notably, we recently worked with Harris School Systems – a leading provider of information systems for K-12 school districts across North America – migrate its SchoolMax administrative management solution to AB Suite running on a Microsoft Windows platform. In addition, Unisys recently contracted our services for the first phase of a pilot project designed to help the Swedish Transportation Agency move one of its core EAE applications to AB Suite on Windows.

An Extensive Partnership

BTG's partnership with Unisys goes beyond educating developers and aiding organizations' migration efforts. In fact, our company is working closely with Unisys on key applications like the Unisys Financial Services System (UFSS), which we have collaborated on since 2004. And, we provide level-one, -two, and -three customer support services that include requirement analysis, impact assessment, design, development, testing, fault analysis and fixes, and product support.

This level of commitment is nothing unusual for BTG. We pride ourselves on building and fostering long-term relationships with clients – such as our eight-year partnership with Harris School Systems – that emphasize collaboration and a deep understanding of their key business and IT goals.

And as part of this ongoing commitment, BTG plans to launch an internal development initiative in 2012 aimed at creating an AB Suite application from the ground up. This project will leverage the newest features of AB Suite, including its object-oriented (OO) capabilities, enabling our organization to stay at the forefront of AB Suite development and gain the knowledge needed to effectively serve our customers well into the future.

To learn more about how BTG can help your organization perform an AB Suite migration or increase development resources, please download our [corporate overview presentation](#), or contact me at astra.kikute@btg.org.lv.



Info Center

IC Recap

As part of Unisys ongoing investment in Agile Business Suite, we've enhanced AB Suite 2.0 in several areas and have delivered a number of new features in recent Interim Correction releases, or ICs:

- In May, we provided a new look and feel for the Class View, which greatly aids usability and boosts developer productivity (IC 2.0.1400).
- In July, we simplified the way graphical controls are grouped and managed in the Graphical Painter (IC 2.0.1500).
- In September, we upgraded the runtime infrastructure for a Windows .NET deployment platform, resulting in better memory utilization and faster performance (IC 2.0.1600).

And coming this December, we will release IC 2.0.1700, which will deliver an optimized change analysis mechanism for the partial build process – a benefit to all users.

Reference Materials Available from Unisys Support Site

The Documentation Libraries available in the [Public Information](#) section of the Unisys Support Site 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:

- How To: Deploy Reports using AB Suite Runtime for Windows
- How To: Migrate from AB Suite 1.2 to 2.0 (updated)
- White Paper: Optimizing Transaction Throughput on AB Suite MCP Applications
- White Paper: Agile Business Suite – Best Practices
- Utility: ABSLogAnalysis – utility to analyze the performance of online transactions in runtime systems

And, you don't need a special login to access these materials. Simply 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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