

Developing Agility

*A Quarterly Newsletter for
Unisys EAE and AB Suite Customers*

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Announcing Agile Business Suite Release 2.0!

We are proud and excited to announce a major new release for Agile Business Suite (AB Suite) – 2.0. With this release, we are not only bringing the toolset up to the latest levels of the underlying Microsoft® software, we're also offering important new capabilities to help improve productivity and enhance application quality.

2.0 at a Glance

The 2.0 release content falls into several broad categories of enhancements, including:

- **Test automation:** Automated Test Tool (ATT), which is a standalone application used to develop, edit, and execute test suites for AB Suite applications
- **User interface development:** Client tool enhancements that add support for AJAX and mobile device-based browsing
- **Developer productivity:** Simplified name qualifications (per the request of AB Suite early adopters) make it easier to understand data names in migrated Enterprise Application Environment (EAE) models
- **Housekeeping:** Qualification with Microsoft Visual Studio® 2008, SQL Server 2008, Windows® 2008, and WOW64 operating environment and streamlined, automated installation functionality

For all the details about how ATT can improve your ability to perform unit and regression testing, take a look at this month's [Engineering Corner article](#).

Client Tools 2.0

Making applications easier to use is a continuing challenge for developers. This is particularly true in today's Web-enabled world where end users expect – demand, really – that systems can be learned in a matter of seconds. Fortunately, AB Suite offers plenty of options to built GUIs that are extremely easy to use. With AB Suite Client Tools 2.0, the list of tools just got longer.

With [AJAX](#) (asynchronous JavaScript and XML) support in 2.0, developers can achieve better response times for generated ASP.NET Web pages, as well as leverage richer controls, such as calendar and hover functions. Asynchronous communication is particularly helpful in situations where much of the content on an end user's screen remains unchanged from “click to click.” Unlike traditional methods where all that content is reloaded with every request, an AJAX-enabled client requests only the content that needs to be updated. This approach reduces traffic across the network and load time.

New support for mobile device-based browser access to AB Suite applications is being provided in a phased approach, starting with the 2.0 release. We have enhanced the ASP.NET client environment to support high-end mobile devices, such as PDAs, and updated the AB Suite Developer to support user interface design for these platforms. For example, the release includes improvements to ensure that data is displayed in the proper order on small mobile device screens. Check the [eCommunity](#) for a white paper that provides best-practice tips for designing applications to support mobile platforms. And, stay tuned for more features in future AB Suite releases.

Qualification with Microsoft Products

While not a particularly glamorous job, the qualification of AB Suite with Microsoft Visual Studio 2008, SQL Server 2008, and Windows 2008 is a significant undertaking. Not only was it necessary to make changes to Developer to run with these new software levels, Builder must also be modified to properly target the updated Microsoft Runtime environment. Just take a moment to consider the work that would be involved in migrating a non-AB Suite application to a new level of SQL Server. That's the power of AB Suite, which generates the complete working application, user interfaces, and database structure for you. It takes engineering resources to make that happen, but the benefits to developers and your IT organization are well worth the effort. >>

AB Suite 2.0 also provides support for 64-bit operating environments via WOW64. So while Visual Studio 2008 remains a 32-bit application, with WOW64 you have the option of running AB Suite Developer on 64-bit platforms. In addition, the Windows .NET Runtime can execute in a 64-bit operating environment via WOW64.

Runtime and Database Support Highlights

There's much more information about each of the Runtime environments in the AB Suite 2.0 section of the eCommunity. Following is a brief recap of Runtime support:

- ClearPath MCP Runtime Release 2.0
 - Qualified on MCP system software release 53.1 (MCP 12)
- Windows .NET Framework Runtime Release 2.0
 - Executes in a 64-bit operating environment via WOW64
 - Qualified on .NET Framework 3.5
 - Runs under Windows Server 2008 (32-bit and 64-bit)
 - Supports Microsoft IIS 7 Web Server
- Java Enterprise Edition (Java EE) Runtime Release 2.0
 - Executes in a native 64-bit operating environment
 - Invokes external components using wrappers (ECI)
 - Supports the latest version of Java EE application servers, including
 - JBoss 4.2.2
 - Web Logic 10
 - WebSphere 6.1

The 2.0 release provides database support as follows:

- Unisys Enterprise Database Server (DMS II) 53.1 (optionally DMS II XE)
- Microsoft SQL Server 2008 (32-bit)
 - AB Suite Developer
 - AB Suite Windows .NET Runtime
- Oracle 11g (32-bit)
 - AB Suite Windows .NET Runtime
 - AB Suite Java EE Runtime
- Oracle 11g (64-bit)
 - AB Suite Java EE Runtime

Don't Forget the ICs!

In the last issue of *Developing Agility*, we noted a few of the significant new features released in 1.x ICs for AB Suite, such as an EBCDIC Debugger tool and OLTP support. More than a dozen new features and performance enhancements have been delivered in the various 1.x ICs – and all of them are part of the 2.0 release.

For more about these 1.x IC features, read [the article in the eCommunity](#).

Move Up to 2.0

If you're planning a migration to AB Suite in the next few months, 2.0 is the way to go. Be sure to review the system requirements so that you establish the proper environment for this powerful new release.

For more information about 2.0, the [eCommunity](#) has datasheets for [Developer](#) and the [ClearPath MCP](#), [Windows .NET Framework](#), and [Java EE](#) Runtime environments.

Engineering Corner: Regression and Unit Testing Made Easy with ATT

By Charlie Gu, Automated Test Tool Technical Lead, and John Papachristos, Client Tools Technical Lead, Unisys AB Suite Engineering

Nearly 40 percent of organizations have suffered financial loss as a result of poor or no software testing.¹ That's a pretty stunning figure. Yet despite the potential for real harm to the business, software testing – particularly the development of robust test cases and data – remains one of the least favorite activities for developers.

Testing isn't just about finding and fixing bugs – although that's certainly part of the package and something that AB Suite's built-in Debugger is designed to do. There's more to the equation, such as ensuring a change in one area doesn't have unintended – and negative – consequences in another. That's where unit and regression testing comes into play. And now, with the 2.0 release, AB Suite includes a new test automation capability – Automated Test Tool or ATT.

According to an informal poll taken at the 2008 UNITE conference, the vast majority of EAE and AB Suite developers perform unit and regression testing manually. Once a change is implemented, the developer or a knowledgeable end user runs through a series of manual tests to make sure the modification is functioning properly. While effective to a point, this approach falls short of the rigor and consistency that many development organizations would like to bring to testing.

ATT changes the game by providing developers with the ability to record, edit, and play back test cases comprised of actual transactions captured behind-the-scenes as an end user or tester uses the application. With ATT, development organizations can:

- Improve quality by identifying unintended software regressions *before they hit production* through the use of a standard test case
- Reduce costs by more effectively delegating test execution to less experienced personnel
- Enforce quality processes by making unit and regression testing a part of the standard check-in and build workflow >>

The AB Suite Debugger

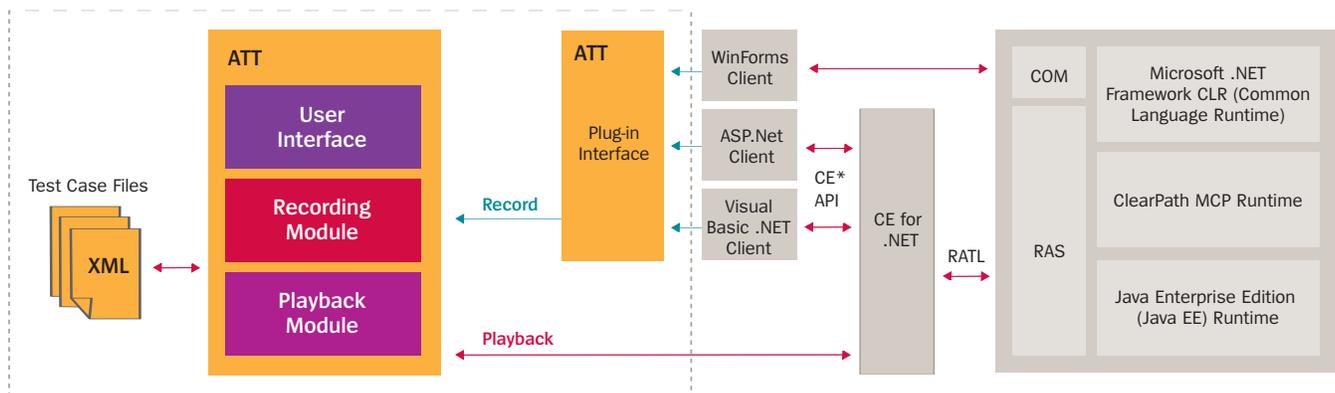
Find out more about AB Suite's integrated debugging capabilities in a [March 2007 Engineering Corner article](#) from the Developing *Agility* archives in our eCommunity.

¹ Maxwell Cooter. "Poor Software Testing Hits Companies in the Pocket." *InfoWorld*. 11 April 2008.

How ATT Works

Step 1: Capture/Create Test Cases

As illustrated in the figure below, developers start building a test case by running ATT in record mode. In this phase, ATT gathers transaction data from an individual client session accessing the AB Suite application. It stores the transaction details (request-and-result pairs) for each send/receive during the recording session into an XML file for later edit and playback. Currently, three client environments are supported: Visual Basic .NET, ASP.NET, and WinForms.



* Component Enabler (CE)

Each client session creates an individual test case (or you can append an existing case.) Multiple test cases can be grouped into test suites. Note that test cases can also be gathered in disconnected or unattended mode, where the ATT User Interface is not running and the end user isn't aware of the data collection process happening in the background.

Step 2: Edit, Enhance, and Organize Test Cases

Today, ATT is a standalone application running under Microsoft Windows. It provides an easy-to-use graphical interface that allows developers to edit and manage test cases. Key capabilities include the ability to:

- Change the order of test steps (ATT makes sure this reordering hasn't caused a problem)
- Group test steps into folders that represent logical groups, such as the multiple transactions needed to "add a customer"
- Cut, copy, and paste test steps within a test case
- Change recorded values
- Define specific validation rules for field data
- Mark certain items to be ignored or skipped during playback, which is particularly helpful for data items where the value changes with every test run (e.g. ACTMTH)
- Group multiple test cases into a test suite
- Define pre- and post-playback scripts, which are user-defined scripts that can perform such activities as loading and rolling back a test database or running a report >>

Step 3: Playback

Once you've created your test cases, ATT includes a module that manages the playback process. Depending on the situation, you can play back all or a portion of the steps within a test case. You can even run through the test step-by-step, if appropriate. In addition, we offer the ability to initiate ATT playback via the command line, which allows the use of Windows Scheduler to run tests in batch mode.

At any step along the way, the playback module displays the status of each test element – a green check mark for success and red "X" for failure – along with a message that describes the nature of the fault. Developers can drill down for more details with a simple double-click on the failed item. In situations where a robust, complex test suite has been built from multiple test cases, the drill down is a powerful tool to quickly navigate to the problem area.

Skip	Field Name	Condition	Expected Value
<input type="checkbox"/>	PRODUCT	=	ABC
<input type="checkbox"/>	NAM	=	ABC WIDGET
<input type="checkbox"/>	SELLPRICE	=	1.00
<input checked="" type="checkbox"/>	REORDLEV	=	10
<input type="checkbox"/>	UNITSALE	=	EA
<input type="checkbox"/>	ADISPLAY	=	

Status	Step	Execution	Message
✓	1 - Submit Form - MENU	1	
✗	2 - Submit Form - PROD	1	Field REORDLEV does not match: Expect "10" but get "15";
✓	3 - Submit Form - PROD	1	

ATT Server Port: 8888

Getting Started with ATT

If you're looking for new ways to improve the effectiveness of unit and regression testing, then ATT is the ideal tool for you. And, best of all, it comes at no additional charge on the AB Suite 2.0 Developer CD.

Getting started with ATT is simple. It has just two pre-requisites: AB Suite Runtime and AB Suite 2.0 Client Tools. As noted earlier, ATT supports the Visual Basic .NET, ASP.NET, and WinForms client environments. And, ATT playback requires Component Enabler for the .NET Runtime which is included with AB Suite Developer.

To learn more about other new features coming in the AB Suite 2.0 release, [read our companion article](#) in this issue of *Developing Agility*.

Annual User Conferences In Review

September and October were busy months for AB Suite and EAE customers with two AB Suite Seminars in St. Paul de Vence, France and the UNITE conference taking place in sunny Orlando, FL.

When was the last time YOU made it to a user conference? These events provide an excellent and cost-effective venue to learn from and network with your peers; Unisys engineers, consultants, and product managers; industry experts; and partners. Keep an eye on the Calendar section of *Developing Agility* for information about upcoming events in your area.

AB Suite Seminars in St. Paul de Vence

In what has now become a highly anticipated annual event, 66 people from 49 different organizations attended Unisys AB Suite Seminars in St. Paul de Vence, France. Every year we strive to inspire and motivate our attendees – and 2008 continued that tradition.

For many, the highlight of the meeting was two customer presentations:

- Jan Piet Slot from [Post & Co.](#) spoke about the benefits his organization is seeing since its migration to AB Suite more than 15 months ago. In particular, he highlighted the ability to reduce lines of code by using the OO constructs available in AB Suite.
- Jac Noojens from [CZ](#), which has been in production with AB Suite since the beginning of the summer, shared his organization's migration experience and confirmed the stability of the production environment (no stops in three months!)

The meeting also featured Diego Lo Giudice from Forrester Research, who spoke about model-driven development (MDD) and highlighted the results of a recent study commissioned by Unisys entitled [Modernizing Software Development Through Model-Driven Development](#). This topic fit perfectly with another session conducted by Grant McCauley (Unisys ACUS) about AB Suite's UML-based modeling capabilities.

Thanks so much to everyone – our community of EAE/AB Suite customers and partners, industry speakers, and Unisys experts – who invested their time and talents to make the sessions a resounding success. Special appreciation to Curt Leong and the four members of the Unisys ACUS engineering team, who made the long trip from Australia to lead sessions and meet one-on-one with attendees.

The 2009 AB Suite Seminars are tentatively scheduled for the week of September 21st. We encourage all European customers to join us at the [Unisys International Management Centre](#) in gorgeous St. Paul de Vence! And, don't forget the European [Future Matters](#) programs, which typically feature an EAE/AB Suite track.

UNITE 2008

Maybe it was the Orlando location. Perhaps it was the special new-attendee pricing. Quite possibly it was the opportunity to learn more about AB Suite. Or maybe it was the fact that the UNITE chair is EAE and AB Suite champion, George McGowan. Whatever the reason, the EAE/AB Suite conference track had an impressive average attendance of 25.5 people per session!

This year's conference line-up included eight lab sessions for a total of 11 hours of hands-on training. Many thanks to George McGowan (McGowan Computer Associates), Grant McCauley and Andrew Lee (ACUS), Jim Nichols (Unisys Atlanta), and Alan Hood (Unisys Roseville) for working so hard to develop the lab materials and conduct these in-depth sessions, which covered a broad range of topics from a guided tour of Visual Studio and AB Suite to report writing with AB Suite.

Diane McGonigle and Alan Hood updated delegates on the current status of the AB Suite and EAE products and provided an early look at the 2.0 release. (Check out this issue's [Engineering Corner](#) and [2.0 release](#) articles for more details.) >>

In the final EAE/AB Suite track session, Michael Easter from MDV/Nash Finch presented *EAE and SOX 404 Compliance: One User's Experience in a World of Confusion*, which generated quite a bit of discussion within the group.

Attendees were impressed with the depth and variety of presentations this year. You can access the materials from some of the sessions by visiting the [eCommunity](#).

In summary, we hope you will plan to participate in all the EAE/AB Suite sessions by attending the 2009 [UNITE Annual Technology Conference](#), which is scheduled for November 8-11, 2009 in Minneapolis, MN. And, why not be inspired by Michael Easter and submit a proposal to do a presentation about how your organization is using EAE or AB Suite!

IT Embraces MDD

Unisys recently commissioned Forrester Research to study the adoption of model-driven development (MDD) on a worldwide basis and examine the value derived by application development professionals and enterprise architects as their use of modeling techniques becomes increasingly sophisticated.

Forrester reports that 57 percent of those surveyed are using modeling and/or MDD to some extent. What's more, 22 percent say they are using MDD to drive development through some level of code generation. Three-quarters of the organizations using modeling and MDD are using the Object Management Group's (OMG's) Unified Modeling Language (UML) as their modeling language (making UML a solid standard). Forrester also found that modeling and MDD are used as key design aids in service-oriented architecture (SOA) and business process management (BPM) programs.

To learn more about this important research, [download](#) the white paper entitled *Modernizing Software Development Through Model-Driven Development*, which is available on the Unisys website.

ClearPath Connection – Have You Read it Yet?

[Visit the eCommunity to view a recent issue and subscribe to this quarterly electronic newsletter](#) for the latest news about Unisys ClearPath products, services, and events.

AB Suite IC Schedule Available Online

As noted in a [recent article about migration planning](#), it's important to consider the schedule for AB Suite Interim Correction (IC) releases as you make preparations. The Unisys engineering team recommends that you time your go-live date to take advantage of the most current or planned release, so you have access to all the latest enhancements and corrections.

The best resource for the current IC schedule for AB Suite is always the [Unisys Support website](#). As an easy reference, following is a snapshot of the schedule for the next few months:

Agile Business Suite Release 1.2 IC Schedule (as of November 1, 2008 and through July 2009)

IC Number	Planned Release Date
1.2.1750	20 November 2008
1.2.1800	11 February 2009
1.2.1850	20 March 2009
1.2.1900	29 April 2009
1.2.1950	8 June 2009
More planned...	

Agile Business Suite Release 2.0 IC Schedule (as of November 1, 2008 and through July 2009)

IC Number	Planned Release Date
2.0.1050	25 February 2009
2.0.1100	6 April 2009
2.0.1150	14 May 2009
2.0.1200	6 July 2009
More planned...	

And remember; please check the [Support website](#) for the current status on any IC. We try our best to meet the schedule but we will not release an IC until quality standards are met.

Calendar

2009 is just around the corner. Renew your commitment to keeping up-to-date on the latest information about Agile Business Suite and Enterprise Application Environment. Here's what's on the calendar so far.

What	Where	When
Agile Business Suite Update	Online	December 3, 2008
Agile Business Suite and EAE User Meetings (Choice of two dates)	Unisys International Management Centre , St. Paul de Vence, France	September 21-23, 2009 September 23-25, 2009
UNITE Annual Technology Conference	Minneapolis, MN	November 8-11, 2009

Specifications are subject to change without notice.

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