UNISYS

Developing Agility

A Quarterly Newsletter for Unisys EAE and Agile Business Suite Customers

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Contents

AB Suite 4.0 is Coming!

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

Set to make its debut in the fourth quarter of 2013, Agile Business Suite (AB Suite) release 4.0 will deliver a host of new features, updates, and enhancements.

Noteworthy capabilities planned for the release include (features are subject to change):

- **Integration with Microsoft® Visual Studio® 2012:** Supports the latest version of the Visual Studio environment – as well as Microsoft Team Foundation Server (TFS) 2012.
- **The ability to synchronize class view in System Modeler:** Improves productivity by enabling the focus of the class view pane to be on the attribute that was just dragged onto the painter palette.
- **Persistent external classes:** Provides low-volume, read-only access to Enterprise Application Environment (EAE) databases on OS 2200 platforms from an AB Suite on Microsoft Windows® system.
- **Increased DMS II database limits:** Supports the increases in database limits introduced in MCP Release 14.0, enabling your applications to process a significantly larger amount of information.
- **Windows Runtime API:** Makes it easier to deploy applications into production by enabling you to programmatically define logging parameters.

Want to see these – and other – new features in action? Then sign up to participate in the AB Suite 4.0 field test. Currently scheduled for the entire month of July 2013, the field test will give you a sneak peek at all the good stuff we've packed into AB Suite 4.0.

If you sign up for this field test, you will have the opportunity to communicate directly with Unisys engineers. And, your CSC analyst will provide the same high level of support you receive for released products during the field test activities. If you're interested, please contact Maarten Schneider or David Bonillo.

Developing Agility

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Announcing the EAE/AB Suite Symposium

By Diane McGonigle, AB Suite Migration Manager, Unisys TCIS

We are happy to announce that the inaugural EAE/AB Suite Symposium will be held September 10-12, 2013, in Chicago, IL. Scheduled to coincide with the all-new Universe conference (hosted by Unisys and UNITE), the EAE/AB Suite Symposium provides an agenda dedicated exclusively to EAE and Agile Business Suite topics. Additionally, attending the symposium will give you access to several Universe sessions, including keynote speeches from Unisys Chairman and CEO Ed Coleman and Apple® co-founder Steve Wozniak.

The EAE/AB Suite Symposium is valued at $425, but this cost is waived for you thanks to funding from Unisys and our Universe and Galaxy Alliance Partners. The presentations, demonstrations, and keynote speeches – along with meals and transportation to and from the airport – are all included. Plus, you'll also get to participate in an evening of exceptional dining and networking at the renowned Museum of Science and Industry. All you need to do is cover your travel and hotel accommodations.

A complete agenda is available, but here's a snapshot of some of the topics that are planned:

• An EAE and AB Suite program update

• Tips for using Microsoft Team Foundation Server with AB Suite

• A discussion of best practices in application design, development, and maintenance

• An overview of new EAE version control functionality

• Ways to connect external interfaces to your EAE and AB Suite applications

• A preview of the upcoming AB Suite 4.0 release

In addition to these and other sessions, you'll have plenty of opportunities to interact and network with your peers.

While you are welcome to join us solely for the EAE/AB Suite Symposium at no cost, Universe 2013 holds additional opportunities for you. An investment of $375 will let you take advantage of over 50 sessions designed to give you a deeper understanding of the Unisys solutions, technologies, and best practices that will strengthen your business. Plus, you'll receive a one-year membership to UNITE to keep you in touch with Unisys users around the globe.

What: EAE/AB Suite Symposium
When: September 10-12, 2013
Where: Marriott Oak Brook Hills Resort, Chicago, IL
Who: Developers, Application Development Managers, Architects

The symposium is open to EAE and AB Suite users the world over. Invitations with the registration link are being sent via email. If you have yet to receive yours, please contact ABSuite@Unisys.com.

Top 10 Reasons to Use ClearPath ePortal

By Alan Hood, Consulting Engineer, Unisys TCIS

In June 2012, Unisys released changes that made the use of ClearPath ePortal even easier – and more powerful – when it comes to EAE and Agile Business Suite. And, it's sparked interest in many EAE and AB Suite shops… there are quite a few ClearPath ePortal proofs of concept (PoCs) happening around the world.

ClearPath ePortal is an end-to-end solution for extending new or existing ClearPath applications to the Web, smart mobile devices (Android™, Apple iOS, BlackBerry® OS), or SOA environments using web services.

So, why should EAE and AB Suite developers take a look at ClearPath ePortal? For many reasons – and here are my top 10:

1. **Orchestration.** With orchestration, a developer can create brand-new application functionality by "altering" the flow of existing transactions. Point-and-click capabilities in the ClearPath ePortal Developer allow for fast prototyping that can be shared with your end users. Once you have something that works and users like, you can decide to make it more efficient or add the new functionality by modifying existing AB Suite or EAE transactions (Ispecs) – or even writing new ones for the new functionality.

2. **Support for JSON, REST, and WCF.** ClearPath ePortal provides the ability to use the newest standard communication methods with your AB Suite and EAE applications. Java Script Object Notation (JSON) is a text-based open standard for defining messages that are more human readable, and easier to use than SOAP and XML. Many client developers are using these technologies for web-based applications.

3. **Host and maintain your web server environment on the ClearPath ePortal platform.** If you and your organization don't have much experience with web servers – or if you want to maintain your production web servers within the ClearPath server environment, using the same operations and support staff – ClearPath ePortal keeps things simple by providing automatic scaling (up and down), backup, and SSL security using a web-based admin client.

4. **Rapid, fool-proof support for a variety of mobile clients.** Web-based clients from ClearPath ePortal automatically take on the look and feel of native apps for whatever mobile device is accessing your form. This provides a great end-user experience – without requiring you to code using special languages or development tools. (For example, creating a native Apple iPhone® app requires the use of a Mac® and knowledge of Objective C.)

5. **Deploy "apps" without the store.** You can quickly deploy custom clients that have the look and feel of native iOS and Android apps through a web browser – eliminating the need to build an app that's only available through the vendor's app store.

6. **Start with what you have.** If you already have GUI forms defined in EAE or AB Suite, they will be imported as your starting point in ClearPath ePortal. This preserves the work you've already done on the GUI, while setting you up to take advantage of new technology.

7. **The security that is ClearPath.** ClearPath ePortal is "inside" of the ClearPath environment. Not only is it inside the cabinet, it is inside the firewall and DMZ. File updates to the ClearPath ePortal platform only come through your ClearPath system, and administrative access is only available to authorized personnel,

using the web-based administration tool. In addition, even the "automatic" updates that Microsoft issues for Windows are tested and consolidated by Unisys, issued as an IC or hot patch, and installed from the ClearPath system. This should give you the extra measure of confidence that comes from knowing your web server delivers the high levels of security and reliability that are synonymous with ClearPath applications – and a requirement for any mission-critical application.

8. **It's backed up.** The entire ClearPath ePortal environment, including end-user client applications, can be backed up with the standard ClearPath backup and archive process.

9. **One tool for all your ClearPath web-based client interfaces.** If your team happens to use other languages besides EAE or AB Suite, like COBOL, ALGOL, Fortran, or C, they can use one tool – ClearPath ePortal – to develop and maintain sophisticated web-based client interfaces for all of these environments.

10. **ClearPath ePortal can also be used to deploy Component Enabler based web clients.** This is a bonus feature that has been in the product for the past several releases. ClearPath ePortal uses the same Component Enabler runtime interface to communicate with the EAE/AB Suite host, and you can use ClearPath ePortal as the runtime deployment server for the *existing* ASP .NET Web Forms and ASP .NET Web Services clients that you've developed using Client Tools.

ClearPath ePortal does not replace the existing AB Suite Client Tools environment. It enhances the offering by giving you even more ways to continue to improve and expand how end users interact with your applications. In the end, it's about providing access to an increasingly mobile workforce and customer base – wherever they want, whenever they want, and with the leading-edge technologies they are already using.

If you want to learn more, view my webinar: Strengthening the Link between EAE/AB Suite and ClearPath ePortal.

How can UGSI Help You?

By Vittal Gundurao, Senior Engagement Manager, TCIS Services India Global Delivery Center at UGSI

The March 2013 issue of Developing *Agility* briefly covered the EAE and Agile Business Suite competency at Unisys Global Services India (UGSI). For this article, I'd like to take a deep dive into our capabilities and the benefits we can offer.

The UGSI EAE/AB Suite competency is chartered with building a critical mass of experienced personnel with development, technical, and solution design skills for both EAE and AB Suite. Today, we have a large and continuously growing staff – all of whom have gained hands-on experience by supporting various EAE and AB Suite engagements.

Our EAE/AB Suite team has experience in maintenance, support, and migration activities. In addition, we have expertise training in-house staff on EAE and AB Suite, providing input on modernization proposals, and building PoCs to validate the business benefits of a new solution.

Specifically, our EAE/AB Suite team offers expertise in the following areas:

Supporting or Performing EAE to AB Suite Migrations

Our team has the ability to deliver an end-to-end EAE to AB Suite migration that includes estimates, migration of the database and EAE code, updates (as needed) to external libraries, installation, and regression, performance, and deployment testing.

How much we do to support your migration is up to you. You can run the project and use our services for specific, well-defined tasks. Or we can handle the bulk of the work, including overall project management, leaving you to concentrate on just the exceptions and user-acceptance testing.

Our expertise with Unisys EAE code migration and testing tools significantly increases the efficiency and reliability of the migration process.

Why Should You let UGSI Support Your Migration?

Migrating to a new environment is something you may do a handful of times at most. But it's something we do day in, day out. So when you let us support your migration efforts, you'll be able to benefit from our experience, expertise, and familiarity with the process.

For example, we frequently use the Business Application Test Manager (BATMan) service to validate online transaction test results following a migration to AB Suite. In addition, we often employ the toolsets available for database migration and batch output matches – as well as those that minimize business impact during migration by allowing development to continue in EAE while the project is in progress.

And, our close proximity to the EAE/AB Suite engineering team provides quick access to the knowledge, tools, and techniques needed to facilitate an efficient migration.

We've supplemented this experience by supporting numerous successful, large-scale migrations, such as moving the Unisys Urbis wholesale banking application from EAE 3R3 on UNIX® to AB Suite 2.0 on Windows. This was a particularly complex effort, as it involved migrating to completely different database, middleware, and operating system environments, as well as a new hardware platform.   >>

Managing Application Development, Support, and Maintenance

Since 2005, we've worked on a variety of projects spanning both geographies and industry domains. Each of these leverages our flexible engagement model, which is designed to cater to your needs throughout a project, and can include on-site support from UGSI team members as required.

We are quite familiar with all aspects of support and maintenance, including fault management, configuration control, technical qualifications, regulatory change qualifications, emergency support, change request management, and design and development of new feature enhancements.

Our team also uses testing tools like Quick Test Professional (QTP) and Automated Test Tool (ATT). QTP has been used to automate regression testing, resulting in reduced manual effort and higher-quality testing. Likewise, ATT has helped us record and play back test steps to verify changes in AB Suite applications. Plus, our adoption of CMMi Level 5 processes and Unisys Solution Delivery Framework further improves the quality and cost efficiency of deliverables.

In addition, while we offer resources that will work on your Model file on your behalf and under your project management framework, you can also make us solely responsible for the delivery of new capabilities in your application.

Engaging TCIS Services India Global Delivery Center at UGSI means you'll enjoy these key benefits:

1. You can focus more energy on gaining a competitive edge in the marketplace by letting us help you migrate your EAE application to AB Suite.

2. You can leverage our highly focused and skilled workforce to supplement your existing staff as needed – giving you the best-in-class service you need to achieve your goals, all at an optimum price.

If you have any questions about how TCIS Services India Global Delivery Center at UGSI can help your organization, please email me or reach out to your Unisys representative for further details.

Regression Testing Made Easy with the BATMan Service

By Gary Taylor, System Architect, Unisys UK Ltd.

While it's certainly good practice for any organization currently upgrading or migrating software, regression testing has a reputation as a burdensome, time-consuming process – especially if you want to be as thorough as possible.

And while there are tools on the market that help facilitate these activities, many offer limited automation, are expensive to implement, and can only test simulated, synthetic transactions – not the actual production workload. Plus, they often do not completely understand the EAE and Agile Business Suite environments.

That's why we created a service with specialized tooling that does all of this – and more: the Business Application Test Management (BATMan) service. With the BATMan service, your organization can adopt a different approach to testing your online application – one that makes real-world testing possible at a lower total cost.

How Does BATMan Work?

BATMan is delivered as a service, with components you can employ in whichever combination satisfies your testing needs. Implementing the toolset and understanding the process of testing your transactions follows a simple, 5-10 day process:

- Install the Business Application Test Capture And Verification Engine (BATCAVE), an EAE application used to store and compare transactions
- Tune the environment to accommodate your unique application environment and testing needs
- Capture live, multi-session, online data using standard EAE and AB Suite transaction logs
- Clean up data to eliminate "problem" sections – such as the point between sessions when a user logs off for lunch
- Prep the target environment, such as an AB Suite system

- Replay the transactions using Realistic Online Batch Input (ROBIN), the service's transaction replay driver
- Load the replay results in the BATCAVE and perform the analysis and comparisons

We'll typically run through the capture-replay-analyze process with you a few times to ensure you have a good handle on how everything works. And, it's not unusual for us to find something new and different in your system or data. If that's the case, we'll adjust the BATCAVE application to reflect it. The BATCAVE and ROBIN tools are yours to use after the service is complete. Note: this service and the tools support testing of your online system, not reports.

How will BATMan Help Me Migrate?

Testing is one of the most time-consuming tasks in an EAE to AB Suite migration project. However, conducting a full acceptance test can help you prove to business leaders that the migrated application functions exactly the same as the EAE application.

What makes the BATMan service so useful is that it automatically replays and compares all online transactions – so you can focus more of your time on just the transactions that failed.

For example, say you test 10,000 transactions captured from your online system over an extended period of time – and the toolset confirms that 9,000 work fine. This means you'll only need to spend time resolving the 1,000 that failed. Let's say half of these exceptions are caused by easily identifiable issues, such as discrepancies in >>

date and timestamps. That means you're left with just 500 or so to really drill into. As a result, you'll be able to shorten what would have been months of intensive testing into just a few days of work.

How does this come together in the real world? Consider the following example:

A leading financial services organization wanted to quickly confirm that its EAE application was working as planned in AB Suite. The company used the BATMan service to capture a morning's worth of transactions, replay them against both the EAE and AB Suite copies of the system, and compare the results. BATMan enabled the organization to capture, replay, and compare the transactions – four times over – in just three hours.

How does BATMan Differ from ATT?

BATMan can be an invaluable service for making your EAE to AB Suite migration faster and easier. It is designed to conduct large-scale regression and performance testing for online systems, including the simulation of multiple, concurrent user sessions. Automated Test Tool (ATT) is focused more on unit testing and is not designed to simulate loads. In short, BATMan is a complementary service to ATT – not an alternative.

Can I Use BATMan if I'm not Migrating to AB Suite?

The BATMan service does have other useful applications outside of supporting your migration efforts. For example, you can use it to help load test your application during a hardware upgrade. Or, you can use it to confirm that transactions function as intended after you update to a new interim correction of either EAE or AB Suite.

However, we recommend that you use the BATMan service to simplify the testing and validation of your online application after it moves from EAE to AB Suite.

For more information about how the BATMan service can help you, please contact me: gary.j.taylor@gb.unisys.com.

Engineering Corner: Reusing Frames in AB Suite

By Russell Pederick, Senior Software Engineer, Unisys

In EAE parlance, a "frame" is a standard piece of page layout that corresponds to a logical section of output on a report. Essentially, frames serve as the building blocks of a report – stacking end on end to create the completed output.

Since many frames – such as a footer containing company contact information or a field listing customer account details – are repeated on a wide array of report outputs, defining them once and reusing them many times over is a smart way to reduce the time and effort involved in building reports.

EAE developers know there's a way to define these frames and reuse them whenever necessary. Simply create a "dummy" or "skeleton" report containing the frame(s) you want to reuse, insert this report into your target report using the Insert; <report> logic command, and the frame(s) is there – with no other programming necessary.

But what happens when you migrate to Agile Business Suite? How can you build your frames once, and reuse them many times, after you move to the new development environment?

Reusing Frames in AB Suite

When you migrate your model from EAE to AB Suite, any frames that you have reused via the Insert; <report> logic command will be automatically converted to classes and included as an attribute of a new frame using the Object-Oriented (OO) technique of "composition." The example below shows an EAE model after being migrated to AB Suite – the report COMMONREP was originally inserted into SALES.

Frame composition closely resembles how you identified frames for reuse in EAE, in that it also starts with the creation of a skeleton report containing the layouts you want to reuse. The only slight change is that once you've built your skeleton frame, you'll need to create an attribute that inherits from it, creating an instance of it in the target report.   >>
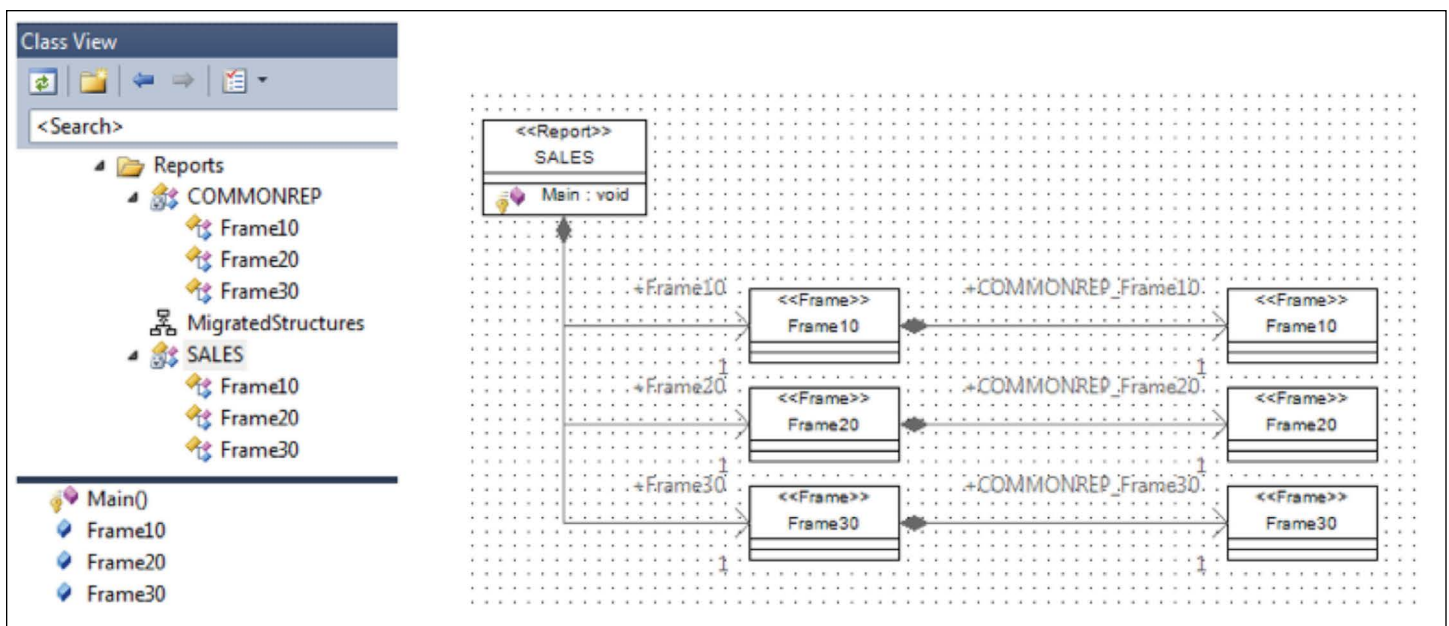
While this is a perfectly serviceable way to reuse common frames in AB Suite, we suggest that you employ a different technique when you're developing new reports or have time to do a bit of refactoring on your migrated application. The approach is simple: Define your frame as a class within the segment. Not only is it clearer which frames are being implemented for reuse, it will also assist in eliminating duplicates through categorization using folders and dictionaries.

The image below shows the previous example refactored such that COMMONREP.Frame30 has been moved to the segment class and renamed Common_Frame30. SALES has been refactored to instantiate and use this frame instead of its own Frame30, which has been deleted. The same could be done with Frame10 and Frame20 in COMMONREP.

Reuse the OO Way

One of the reasons we recommend that you define a frame class within the segment is that it gives you greater flexibility for how you reuse your most common frames. With this approach, the code implementing the frame is generated and compiled into the segment as part of the online system build, enabling the frame to be directly invoked from any report. What's more, this approach allows you to directly use the frame layout you've painted in the report and execute any logic you've placed behind it.

In EAE you could only reuse a whole report, which indirectly reused all the frames. In AB Suite you reuse discrete frames. The granularity is much finer, which means you can pick and choose only the frames you require. Frame composition in EAE is by name, so Frame20 can only be composed into another Frame20. However, in AB Suite, frames can be composed into any other frame or report. AB Suite provides reuse at the frame level, which is why you can promote frames to the segment for reuse. The preferred technique is to define your frame as a class in the segment and instantiate it using an attribute in the report and/or frame where required.   >>
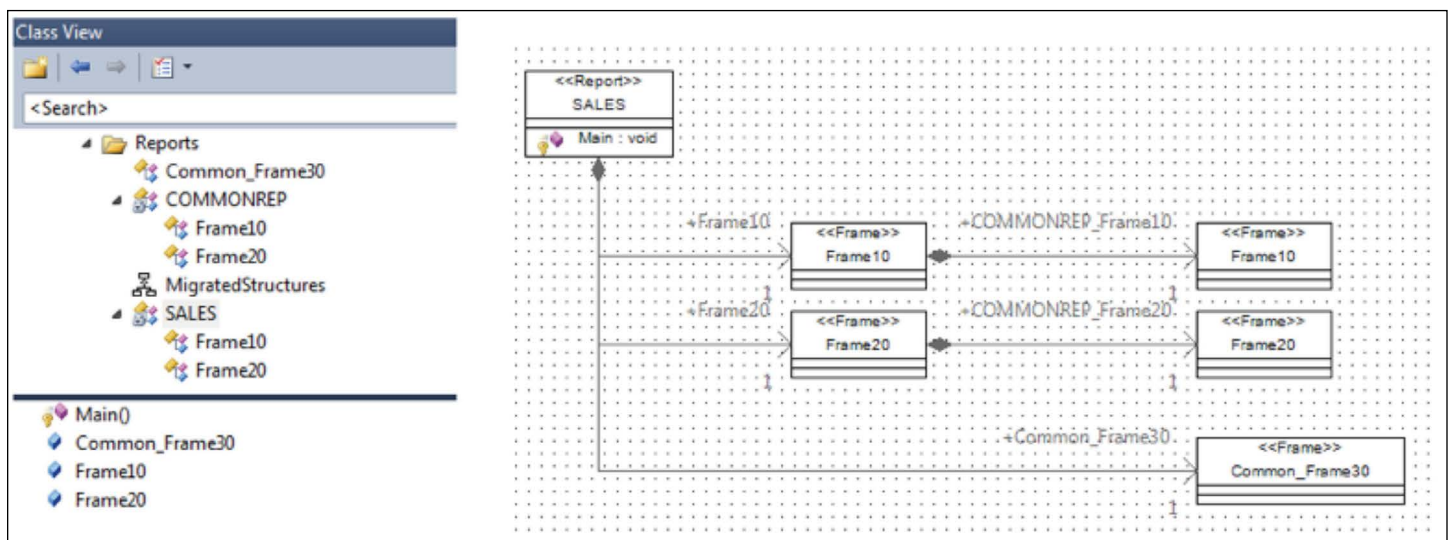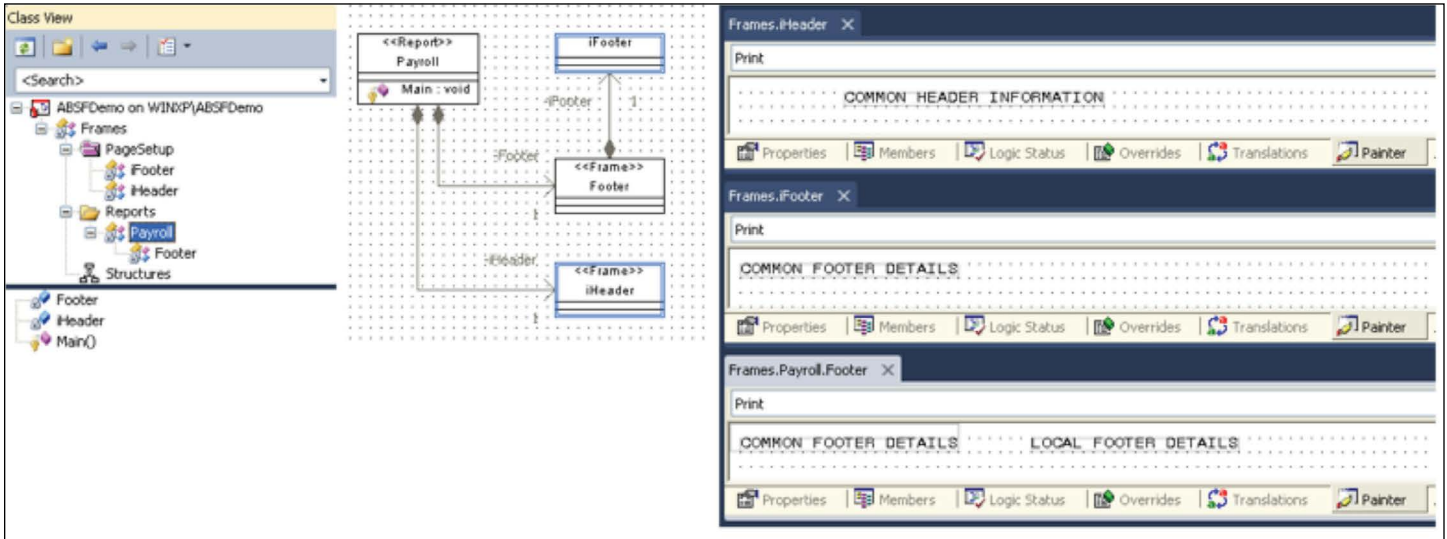
An example of this is shown above. The iFooter frame is defined as a class in the segment (residing in the PageSetup dictionary), and is instantiated by the Footer attribute in the Payroll report.

One caveat: The code that implements the frame is generated and compiled in an object that is part of your online system. So, if you ever need to make a change to a frame class, you must build and deploy the online system before the change takes effect. However, since frame reuse is a technique for replicating common header/footer content – like your company's contact information – you probably won't be changing these frames very often and, therefore, won't run into many situations where a generate is required. That said, we encourage you to be mindful of what you're defining at the segment level.

Want to Learn More?

For additional information about techniques for reusing frames in AB Suite, please read "How To: Reuse Frame Definitions." It provides a helpful overview of the methods discussed in this article, and includes examples of each in action.

CSC Analyst Spotlight: Pascal Ragot

This article is part of a series showcasing the Unisys Customer Support Center (CSC) Analysts who support EAE and Agile Business Suite. Interested in seeing a support analyst featured? Send us your nomination: ABSuite@unisys.com.

Pascal Ragot began his career with Unisys in April of 1987. Over his tenure, Pascal has worked with CTOS products, UNIX servers, and Microsoft Windows and Linux® platforms. Since 2005, Pascal has been focused on supporting EAE and AB Suite users out of the CSC office in Paris, France.

Developing *Agility* recently talked with Pascal about his role as a CSC analyst and what he likes best about his job.

Developing *Agility*: You actively support customers and CSC analysts in other countries and different time zones. How does that work and why do you like to do it?

Pascal Ragot: As a CSC analyst, you are really a member of a "global" team. This of course includes my French colleagues, as well as the other members of the EAE/AB Suite team around the world. And on top of this group, we find that engineering is very responsive and supportive in resolving issues that have a serious impact for customers.

Each morning, I can see worldwide calls raised by customers, or requests for assistance from my colleagues. I treat everyone like one of my local French customers. All of my fellow CSC analysts have the same dedication, which is why this process works so well.

DA: What do you like best about being a CSC analyst? What gives you the most satisfaction?

PR: What I like most about this job is how the stress that I feel when an issue is first raised by a customer – no matter if it's a simple question or a significant problem – is replaced by satisfaction when I find a solution or a workaround. Helping engineering diagnose a complex issue by creating a small "test case" is a great feeling, too.

It's also nice to know that when the situation is really critical, you are never truly alone, as you can turn to your colleagues for help. They're always willing to work on an issue overnight or other times when you may not be available.

DA: What have been some of the highlights in the last year?

PR: I'm very proud to help customers and colleagues all around the world. I remember a particular issue in Sweden where I was able to help engineering uncover the root cause of an issue stemming from an error in the local settings of a Windows platform.

DA: How do you help Unisys field personnel and customers who are migrating to AB Suite?

PR: While I'm not directly involved in performing these tasks, I do assist my colleagues by running tests on my own servers and helping them proactively find issues and workarounds. One of the interesting things I've learned during this work is that AB Suite uses all recent technologies released by Microsoft and is perpetually evolving. This means there are more tools, from Unisys and other vendors, available to diagnose the AB Suite environment compared to the number available in the EAE environment.

In addition, I'm pleased to say that six EAE customers in France have now migrated to AB Suite. >>

DA: What do you think customers don't know about the CSC and customer support that they should?

PR: Generally, customers may only know the members of their local team. But what they may not realize is that we function as a global team and that there are a lot of advantages to working with the whole group. So while a customer may send an issue to a particular analyst via email, it's better to enter a support request into the Unisys support system, as that ensures it comes to everyone and enables the fastest, most effective response.

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

PR: If every customer could enter a support request using our web site, write a clear description of the issue – in English, if possible – and provide any log files using our FTP server, it will give the entire global team the elements necessary to investigate the issue, collaborate with one another around the clock, and provide a quick fix.

DA: Is there anything else you'd like to tell our readers?

PR: Our team is focused on delivering on the promise of the Customer Support Center. We are extremely customer oriented and focused on solving any issues that come up, even if they aren't our direct responsibility or happen during times when we aren't in the office.

Info Center and Calendar

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

- **How To:** Install SQL Server for AB Suite 3.0 **(NEW)**
- **How To:** Install Visual Studio 2010 for AB Suite 3.0 **(NEW)**
- **How To:** Reuse Frame Definitions **(NEW)**
- **Utility:** ABSLoganalysis **(updated)**
- **White Paper:** AB Suite Windows Runtime 3.0 with Microsoft Clustering **(NEW)**

To view these and other resources, simply go to public.support.unisys.com and choose "Documentation" in the "Public Information" box located on the left-hand side of the screen. No special login is needed.

Be sure to check out these upcoming events.

WHAT	WHERE	WHEN
ClearPath Briefing	Maison de la Recherche, Paris, France	June 12, 2013
Universe Conference (formerly UNITE)	Marriott Oak Brook Hills Resort, Chicago, IL	September 9-12, 2013
EAE/AB Suite Symposium	Marriott Oak Brook Hills Resort, Chicago, IL	September 10-12, 2013