

Developing AGILITY November 2020



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The 2020 Agile Business Suite User Conference saw AB Suite and EAE users from around the globe come together virtually to learn about the direction of the product, as well as some key new capabilities and integrations.

Info Center

We provide a wide array of materials to help you stay up to date on everything that's happening in the world of EAE and AB Suite.



A Seamless Cloud Experience with AB Suite for ClearPath MCP



By Thangathen Ponnusamy, Global Product Manager – Agile Business Suite and Enterprise Application Environment, Unisys

Hooray! Agile Business Suite (AB Suite®) for ClearPath® MCP is now supported in the Microsoft® Azure® public cloud.

In an industry that's no stranger to change, we've entered a period of rapid evolution driven by unprecedented disruption. It's a time that sees many clients – and maybe even your organization – accelerating their public cloud journeys.

Meanwhile, your organization continues to rely on core AB Suite for MCP applications that maintain your system-of-record data. And all the while, AB Suite transactional and batch applications keep evolving, reflecting the latest business needs and changing requirements.

AB Suite for MCP on the Azure public cloud represents another significant step in this evolution. And because it joins AB Suite Developer in the cloud, you're able to take advantage of a seamless cloud experience – one that allows you to host your AB Suite applications in Azure right alongside your other public cloud workloads.

Following this approach, you'll be able to release new and updated code faster, so you can respond to changing business needs in a timely fashion.

But that's not all. With a cloud-based, development-to-deployment experience, you'll be able to:

- **Further your organization's cloud vision:** CIOs need to accelerate organizational and technological innovation at a pace that meets employee and customer needs. >>

By running your AB Suite for MCP applications in Azure, you'll help to uphold "cloud first" directives – while empowering your organization to stay one step ahead of the latest expectations. You'll make it easier to comply with governance, monitoring, provisioning, and operations standards, too.

- **Smooth your cloud transition:** With AB Suite in Azure, you'll help your organization transition its historical, on-premise investments to the cloud with ease. And because you can do it with no required code changes, you'll greatly reduce risk along the way – and empower your projects to achieve the best possible outcomes.
- **Increase agility:** With a model-driven development environment and high-level language, you can minimize the amount of code you must write, test, and maintain, leading to faster, better releases. Setting up and replicating your AB Suite development environment in Azure builds on this inherent strength by giving your teams the agility to work in parallel, build a wider range of capabilities, and quickly respond to changing internal and external demands.
- **Embrace changing skill sets:** As members of the younger generation join your team, you can rest easy knowing it's simple to train new developers on AB Suite in Azure. That's because AB Suite utilizes the familiar Microsoft® Visual Studio® development environment, as well as Azure DevOps services. By providing tools your new hires already know, you'll reduce ramp-up time and help them make productive contributions to the organization sooner.
- **Revolutionize DevOps:** DevOps unites people, processes, and technology to automate software delivery and provide continuous value to your users. With AB Suite and Azure DevOps, you'll have a platform that drives operational improvement and continuous innovation, enabling your organization to rapidly innovate and scale new products. Plus, you'll lower failure rates through automated testing and deployment. It all adds up to a faster, more collaborative, more empowered, and more innovative development team.

To Get Started...

You can begin your AB Suite in Azure journey using [ClearPath MCP Developer Studio](#), a software-only version of the MCP operating environment that includes many of the familiar MCP development tools. Once you're ready to transition production over to Azure, you're free to run AB Suite on ClearPath MCP Bronze, Silver, or Gold, depending on the capacity needed.

In addition, you can leverage Unisys Assessment and Transition Services to Cloud. As part of this service engagement, we'll identify and gather your cloud infrastructure workloads and business requirements, develop an assessment scope, and provide a report that includes recommendations around how best to utilize our Advisory, Operational, and Optimization services. Once you complete the assessment, you can take advantage of such transition services as planning, installation, setup, implementation, deployment, and management.

And with Unisys Managed Services, you can offload many of your day-to-day operational requirements – including database administration – of your MCP and AB Suite environments to our expert staff. We can also help you maintain, develop, and test your AB Suite applications, either by adding staff to your existing team or taking over the full application development process.

The industry is deeply engaged in an era of accelerated innovation. To keep pace, you need to get the most out of AB Suite for MCP – and you need to start today. With AB Suite for MCP in Azure, you'll have the flexibility, power, and choice to drive your organization's next evolution. Should you need any help along the way, please feel to reach out to us at ABSuite@unisys.com.



Open for Remote Business

By Charles Bartholomew, Presales Architect, Unisys



The COVID-19 pandemic is a seismic disruptor changing how enterprises interact with their customers, suppliers, and staff.

And all of us at Unisys are certainly no exception. As a result, we've adapted our service delivery model in a way that enables us to continue providing the Agile Business Suite user community with valuable, high-quality professional services.

This change actually began well before the pandemic, when we became an early adopter and internal promoter of Zoom. This allowed us to familiarize ourselves with the platform, understand its inherent advantages and constraints, and determine how to better adapt to remote engagement. And, we learned that while video conferencing, digital whiteboards, and desktop control vastly improve the classic conference call, the dynamics will never truly resemble an in-person meeting. The approach to effective remote engagement is not necessarily harder – it's just different.

What follows are examples of how we've used these insights to reshape the way we deliver consultative and training engagements to make them as valuable in a remote setting as they once were in person.

Remote Consultative Services

This past June, we delivered a remote Innovation Workshop for a major client in South America. Traditionally held in person, an Innovation Workshop is an event facilitated by Unisys that's meant to surface ideas, goals, and challenges, and then turn this input into actionable strategies.

Many of these ideas are captured via a web-based collaboration tool, so the stage was already set to transition the entire event to a virtual setting. We complemented this with a deliberate effort to address many questions related to meeting connectivity and capability prior to the session beginning, which helped to keep participation, energy, and engagement at high levels.

Over 25 individuals attended the virtual Innovation Workshop, with 95% saying they were "satisfied" or "very satisfied" with the event. The client's CIO remarked, "I found it interesting, practical, and objective, in addition to the innovative model."

Remote Training

Historically delivered as in-person classes and workshops at our clients' sites, our AB Suite training services continue to adapt to accommodate remote learning. While this approach does eliminate many logistical and travel questions, maintaining engagement introduces different challenges than what you'd find in a traditional classroom environment.

We've altered the length and pace of our courses in response, leading to a shorter online day. Rearranging the agenda to free more time for practical student exercises emphasizes hands-on learning and interaction, helping to break up the session. When organizing remote learning, some additional upfront coordination is required to ensure students and instructors have secure and adequate access to the proper environments. >>

The decision to move ClearPath products into the public cloud, as well as to take advantage of tools from the public cloud, helps with this issue. Giving students access to resources in the public cloud means they can utilize secure, preconfigured test and education environments provided directly from Unisys.

In August, we successfully delivered multiple virtual sessions of the “Using Source Control with AB Suite 7.0” course. Not only were learners able to take advantage of the delivery changes noted above, they also had access to revised course content. With a focus on the two modes of Team Foundation Version Control – the on-premise Team Foundation Server 2018 and cloud-based Azure DevOps Services – attendees learned about source control concepts, how to set up each mode, source control operations, and strategies for driving adoption among their development teams.

It's an understatement to say the way we work has been completely rewritten. Even so, as our efforts to transition traditional, in-person events to a virtual setting illustrate, there is more than one way to reach a positive result. If you're wondering how to help your business adapt to – and flourish in – these challenging times, please contact your Unisys representative today or email us at ABSuite@unisys.com.



Agile Business Suite Standard Mode

By Grant McCauley, Lead Architect, APAC Engineering, Unisys



First introduced as one of the new Product Feature Modes in Agile Business Suite Release 7.0, Standard Mode provides a streamlined suite of new capabilities, making it a perfect upgrade path from Enterprise Application Environment (EAE).

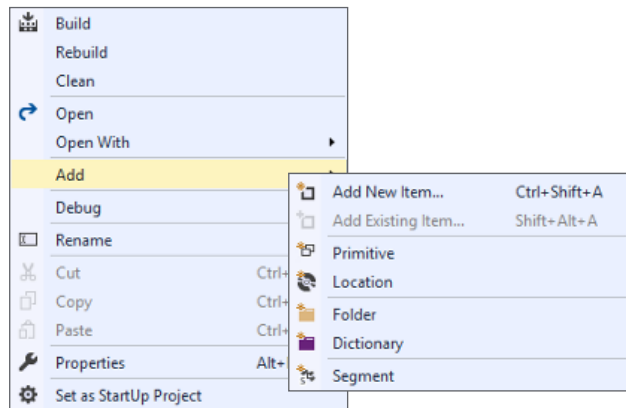
Below, we'll review how Standard Mode has changed the EAE to AB Suite upgrade experience – offering everything from cosmetic enhancements to fundamental architectural updates, all of which are designed to smooth the transition while enhancing the development experience.

User Experience Enhancements

When you open a new Standard Mode Model, the first thing you'll notice is that the icon for the Model node is now green, making it easy to differentiate between Standard, Advanced (a red icon), and UX (a blue icon) Modes.



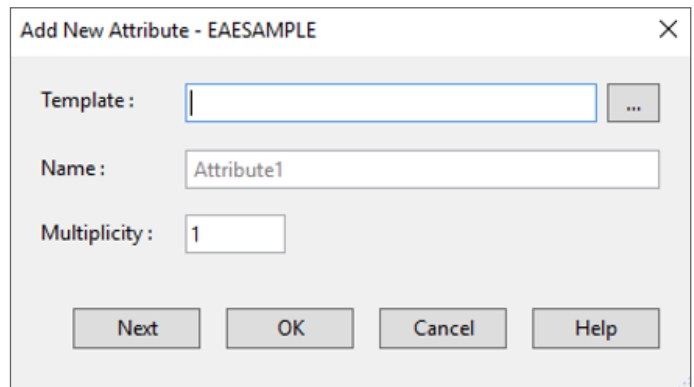
Adding a new member reveals another improvement to the “Add” popup menu: You'll see far fewer options, with only the most commonly used presented for quick selection.



If you wish to include any items not included in the popup, simply select the “Add New Item...” option to browse a comprehensive list.

Adding New Attributes

Using the “Add New Attribute” dialog will reveal the next enhancement we made to Standard Mode. Instead of starting with a String Length of 1, which you'll likely modify right away, you now have a convenient way to input some of the most important information about your Attribute. >>



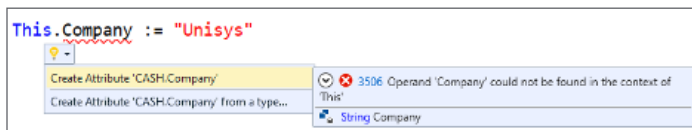
There are a multitude of ways to use this dialog. For instance, you can:

- Select “OK” to start with a String Length of 1 and a default Name
- Enter a Type (Class, Primitive, etc.) in the “Template” field
- Enter an appropriate Name
- Press “Next” to create multiple Attributes

If that wasn’t enough, you can also add Attributes with just a few clicks in the “Logic” window.

With Dynamic Validation – which you can activate in Tools/Options/Text Editor/LDL+/IntelliSense – any objects you aren’t able to find can now be created quickly via the lightbulb icon. Thanks to some clever AI in the processing, you’re able to specify a name for your created Attribute, as well as an appropriate type to make the logic valid.

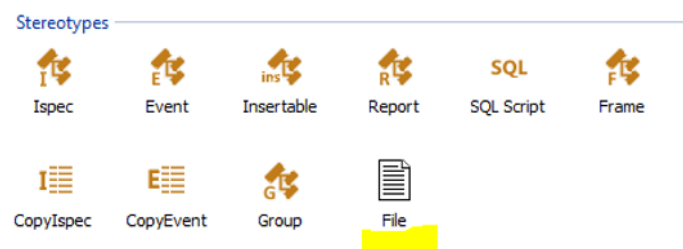
In the example below, “Company” will be created as a String Length of 6.



If you would prefer to set the template for the newly created Attribute, you’ll have the option to create from a type using the template picker in the “Add New Attribute” dialog.

Stereotypes

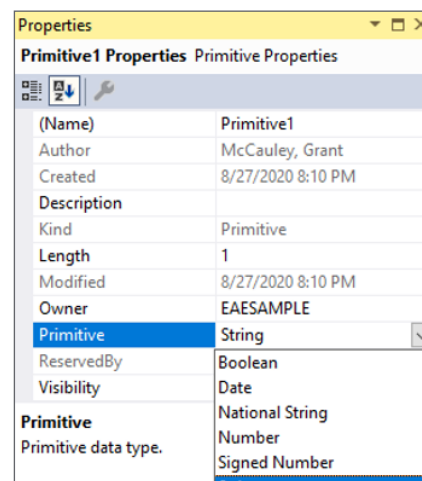
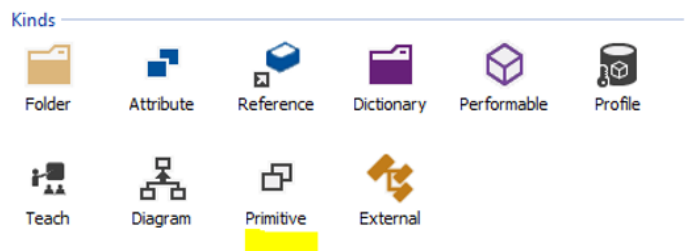
The “File” has been added to the list of major objects in Standard Mode. It’s a stereotyped object that defines a record layout for reading and writing data to the disk.



Whereas in previous versions you had to add an Attribute that inherited from the framework item GLB.File, you can now create a File with a single click in the “Add New Item” dialog. The Multiplicity is set to 1 by default, so all you need to do is add the Attributes that define the record layout and it will be ready to use in the logic.

Primitives

Reusable types make for faster, safer programming, with the most popular being Strings, Numbers, Dates, and Booleans. To make them even easier to create, Standard Mode introduces a new object called the “Primitive.”



With a clean new icon and short list of properties, the Primitive is intuitive by design and functional by nature. And because the Primitive is a commonly used object, it’s also available on the “Add” popup menu.

These are just a few of the many enhancements you can take advantage of in AB Suite Standard Mode. We encourage you download and upgrade to Standard Mode to discover all the latest improvements. If you need any assistance along the way, please reach out to us at ABSuite@unisys.com.



A Look Back at the Agile Business Suite Release 8.0 Tech Preview 2

The Agile Business Suite Release 8.0 tech preview program continues to build momentum.

In May, users took part in the second preview of AB Suite 8.0. Offering significantly expanded ClearPath OS 2200 functionality from the [initial tech preview](#), this event also included some great new features for the ClearPath MCP and Microsoft Windows® runtimes, as well as a sneak peek at our Modern Information Center.

Below, you'll find a summary of the exciting new features and functionality our users had the opportunity to explore.

AB Suite for ClearPath OS 2200

The AB Suite for ClearPath OS 2200 runtime as previewed was essentially identical to the EAE Runtime (IC 3700).

And, the AB Suite modelling and runtime functionality was extended from the first preview to include:

- Segment attributes (GSDs), including session persistence (part of Glb.Work)
- Segment methods (performable GLGs) with variables (local SDs)
- Profiles
- LDL commands to read database records, including “Lookup” and “Determine” (all variants)
- AutoEntry commands to store records from LDL logic
- Other miscellaneous LDL commands, such as:
 - Flag
 - Message
 - DoWhen with compound conditions
- Change Analysis in Builder

AB Suite for ClearPath MCP Runtime

The second tech preview allowed participants to explore the following features for the AB Suite on ClearPath MCP runtime:

- **Secure FTP to transfer code:** Uses TLS 1.2 to improve security between the Builder Client and the Host FTP server.
- **Support for DMSII structure level encryption:** Extends data encryption to complete datasets (tables) and all associated sets/subsets (indexes).
- **BigBuffer support:** Allows the AB Suite HUB to support data packets of up to 65KB, supporting larger data transfers between AB Suite 8.0 applications.
- **Allow big parameter strings:** Increases the non-persistent string limit from 262KB to 8MB, enabling larger data strings and method parameters to be managed.
- **Sumlog message length increase:** Displays a maximum string length of 250 bytes on the “SMG ODT” command and “ME ATTENTION” message.
- **Variable Sort Defaults:** Introduces two new segment configuration properties on the “General” page: default sort disk size and default sort memory size.
- **DMSII VSS-2-Internal Structures:** Allows VSS-2 Optimize to be selectively enabled on the Internal, ROC, and HDBA database structures.

AB Suite for Windows Runtime

Support for RATL over TLS 1.2 was extended to the AB Suite for Windows Runtime during this preview, allowing participants to explore how a secure connection will help to protect the data exchanged between the client and Windows Runtime. >>

Modern Information Center

The AB Suite 8.0 Modern Information Center is a web-based repository that delivers product information in a more dynamic, intelligent, and engaging way.

Participants were able to explore its attractive interface and many user-friendly features, such as:

- Powerful search functions
- Displays of related topics
- Analytics-based displays of frequently visited topics and downloaded PDFs
- Specific “Information Centers” for products with multiple flavors or user roles
- Displays of overview and how-to videos, paired with recommended video content

Tech Preview 3 – Now Underway!

The third tech preview for AB Suite 8.0 just started. It expands upon what was made available in the second preview by including support for Visual Studio 2019, Azure DevOps Services, Microsoft SQL Server® 2019, and Open JDK.

On the OS 2200 side, this preview adds:

- More online system functionality, including graphical forms, Component Enabler, and copy, persistent-only, “big buffer,” and multikey Ispecs
- General report functionality
- Additional LDL logic commands, such as “Attach,” “Loop,” “Initialize,” “Purge(),” and “Print()”

Meanwhile, MCP shops can test such new features as:

- The ability to capture all failed reorganization backup files in the “ERROR” file
- Support for the “Segment” and “Class” Data Exchange properties
- Support for additional MCP native data types

And the AB Suite for Windows runtime receives enhancements that help to encrypt the RATL connection between CT and the Windows runtime.

Please email us at ABSuite@unisys.com if you're interested in joining tech preview 3.

A resounding “thanks!” to everyone who participated in the second tech preview. It was great to watch you engage with and explore AB Suite 8.0. As always, your time, effort, and input will lead to a stronger release for the entire AB Suite user community.



How Interfaces Changed Inherits Forever

In the earliest Agile Business Suite releases, there was principally the AB Suite Class – an amazing object that could either be a model of reuse or container of data. You could transform a Class with only two properties: Multiplicity and Inherits.

Multiplicity

When an AB Suite Class is created, the Multiplicity property defaults to zero. This means the object cannot hold data and is a definition for reuse by other Classes. Any other value means the object can hold data and pass information around the application, either from a screen to a file or to a database for storage.

As you can see below, the two variations of the Class have a different icon based on the Multiplicity property. It's only when you start using them in the logic that you see their true behavior. Invoking a method on a Class requires it to be able to hold data for that action to succeed. That's why, in the example below, the "AClass" (with a Multiplicity property of 0) is in error and the "BClass" (with a Multiplicity property of 1) is valid.

Name	Multiplicity
 AClass	0
 BClass	1

```
1 AClass.Initialize()  
2 BClass.Initialize()
```

A Class with a Multiplicity property other than zero is typically referred to as an Attribute with a reusable definition.

Inherits

When an AB Suite Class has its Inherits property set to another Class, it typically means it's extending the definition and forming a subclass. However, in earlier AB Suite releases, if the Class had no members and a Multiplicity property other than zero, the Attribute would instantiate the Class it was inheriting and reuse the definition – but not extend it.

This proved confusing to developers steeped in Object-Oriented programming, as to them, "inheritance" only applies to a subclass. But with the transitional power of the AB Suite Class, this dual behavior persisted until Interfaces were introduced – "iGraphical" in AB Suite Release 5.0 and "iSerializable" in AB Suite Release 6.1.

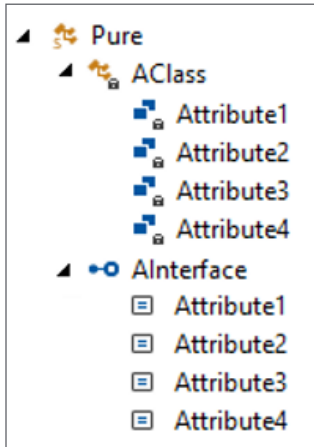
Interfaces

Interfaces are essentially a template for a Class to imitate. Many AB Suite shops use Interfaces to allow disparate Classes to be operated on collectively, leading to a massive reduction in coding.

That said, Interfaces do offer another benefit: introducing runtime behaviors. Specifically, the "iGraphical" Interface defines the Attributes to be interacted with via the Agile Business Suite Client Framework, while the "iSerializable" Interface defines the Attributes that can be converted to and from an XML string. >>

So, how did the Interface change Inherits forever?

The Interface is a relatively new AB Suite entity. But just like Classes, an Interface is composed of Attributes. These Attributes can be primitive in nature or a composition of other Interfaces, but they cannot be an instance of a Class.



To limit the proliferation of Attributes, Interfaces needed a way to reuse definitions – to basically function like Inherits without the subclass capability. So, we introduced a way to create Attributes without the need for a Class.


Created with the “Add Attribute” command, this new Attribute has no Inherits, a Multiplicity that can never be zero, and a Template property to specify the definition. Below is an example of how we create an Attribute that represents an instance of the “BInterface” object.

Attribute1 Properties	
(Name)	Attribute1
Author	McCauley, Grant
Created	8/24/2020 8:02 PM
Description	
Element Name	Attribute1
ExcludelfEmpty	True
IsRequired	False
Kind	Attribute
Modified	8/24/2020 8:10 PM
Owner	AInterface
ReservedBy	
Sequence	1
Template	BInterface

Template
Indicates the kind of data. It is one of NUMBER, DATE, etc

Note that the concept of instantiation was removed from the Inherits property in AB Suite Release 7.0. In AB Suite 7.0, all Inherits that act as instantiation were automatically converted to use the Template property.

With the new “Add Attribute” command and Template property in the latest AB Suite release, defining Classes and Interfaces could not be simpler. And that makes it easier to allow Inherits to get on with the job of defining subclasses. If you have any questions about these capabilities, or need help putting them to use in your organization, please email us at ABSuite@unisys.com.



Staying Connected at the Virtual AB Suite User Conference

Birthdays. Meetings. School. Happy hours. Nearly everything about our lives has become virtual in one way or another these days.

And it's in this spirit of staying connected – just by way of screens – that we recently completed the 2020 Agile Business Suite User Conference. Over 115 enthusiastic AB Suite clients from the UK, USA, and Latin America came together on October 13th-15th for an update on the direction of the product, a look at some key new features, and discussions about incorporating industry trends and best practices into their development environments.

Below, you'll find recaps of what we covered each day of the event.

Day 1: Product Roadmap

We opened the conference with a deep dive into the AB Suite product strategy and roadmap. Attendees learned how we're evolving the product to embrace such key areas cloud, DevOps, microservices, and security. We also previewed features we plan to include in upcoming releases, and shared how these and other capabilities will enable developers to do things in AB Suite they simply couldn't in EAE.

Day 2: Integration Capabilities

The second day focused exclusively on the ways AB Suite integrates with other tools and business-critical applications. Specifically, we looked at how this unparalleled interoperability enables users to drive lasting differentiation by sharing examples of AB Suite participating in a microservices architecture and calling external web services.

Day 3: DevOps and Application Lifecycle Management

We closed the conference with a look at DevOps and its ability to help enterprises bring higher-quality releases to market faster by improving communication, integration, and collaboration between development and operations teams. As a practical example of this promise, we showed attendees how to use Microsoft Azure DevOps Services for source control, as well as building and deploying applications. We also ran a session on the advanced capabilities in AB Suite Debugger and shared lessons learned from various real-world client engagements.

We thank all our attendees for taking the time to (virtually) connect with the AB Suite team and their peers the world over. It was a great event – we very much look forward to the next one. If you weren't able to attend, you can find recordings of each day's session on our [YouTube channel](#).



Info Center

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

- **How To:** Upgrade your AB Suite Environment with an AB Suite IC **(NEW)**
- **How To:** Set up AB Suite Distributed Environment on Amazon Web Services **(NEW)**
- **How To:** Use Registry Keys with Windows Runtime **(NEW)**
- **Whitepaper:** AB Suite Debugger Enhancements **(NEW)**
- **Whitepaper:** ClearPath Extension Kit for MCP **(NEW)**
- **Support Documentation:** AB Suite 7.0 Software Qualification and Support Matrix **(Updated)**

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.

In addition, there are several pieces of thought leadership available on the [AB Suite homepage](#):

- [Why Agile Business Suite Should Be Your Development Environment](#)
- [AB Suite in the Application Lifecycle](#)
- [Agile Development with Agile Business Suite](#)
- [Unisys Agile Business Suite: Capitalize on Change, Don't React to It](#)

We also encourage you to view the list of available [AB Suite training courses](#). A blend of instructor-led and computer-based trainings, these great educational resources include graphics, interactivities, simulations, and demonstrations with voice-over narration.

To stay up to date on the latest happenings in the ClearPath Forward world, please [subscribe](#) to the ClearPath Forward Connection newsletter.

And to learn about everything the ClearPath Forward Services portfolio has to offer, please visit [our web site](#) and check out our [brochure](#).