

ClearPath Forward® CONNECTION May 2020

Contents

A Sustainable Plan for Managing Change Across Your Organization

With the help of our newest Managed Services offerings, you'll be able to absorb the changes impacting your people, data center, and applications.

The Newest Dorado Systems Are Here!

We're thrilled to announce the availability of the newest members of the ClearPath Forward Dorado family – the Dorado 4580, 4590, 6590, and 8590 systems.

OS
2200

New Services Ease the Digital Transformation Journey

Using these new digital transformation services, you'll make ClearPath Forward ePortal and the Application Integration Services product central figures in microservices, web, and mobile environments.

What's New in ClearPath AIS 5.0?

With the new capabilities in Application Integration Services 5.0, you'll find it even easier to integrate with microservices and cloud environments, simplify development, and get more from your existing assets.

Thirty Years and Counting: A Unisys Services Success

Our new Application Managed Services and Infrastructure Managed Services helped a long-time ClearPath Forward client reimagine how it deploys and supports a critical application.

Tech Preview: ClearPath MCP Extension Kit

We encourage you to join the ongoing technical preview for the ClearPath MCP Extension Kit.

MCP

Resources

We provide a wide array of materials to help you stay up to date on everything that's happening in the ClearPath Forward world.



A Sustainable Plan for Managing Change Across Your Organization

By Michael Riggs, Engagement Manager, Unisys



Over the years, your ClearPath Forward® system has been a constant amidst a sea of change.

And while you've trusted it to provide stable, secure, reliable core business processing, there comes a time when change can impact even the most insulated of environments.

That's what we're hearing from many ClearPath Forward clients as we move into 2020. Specifically, they point to changes in three key areas that, collectively, are pushing them to rethink the ways they support the environment, where its deployed, and how they manage the critical applications that reside within it.

Consider how your staff has changed over the years. Given the maturity of most ClearPath Forward deployments, it's common to see many of the people who have supported the environment reach retirement. Finding replacements for this level of insight and expertise is never easy. And it's compounded by the fact that newer skillsets are required to support the environment as it looks today.

At the same time, many clients tell us they're eager to stop dedicating time and resources to their data centers. Whether it's because they've already moved the majority of their infrastructure to the cloud – and wish to do the same with the ClearPath Forward environment – are looking to minimize their administrative burden, or don't want to manage complex security and recovery requirements, the message is clear: they'd rather transfer these obligations to a third party.

This same mindset applies to many clients' applications, too. Because these apps were written years ago, they've become time-consuming and costly to manage – particularly as the skills that helped build them become increasingly scarce. Despite this, many clients tell us they're hesitant to migrate their apps to new platforms or buy off-the-shelf replacements, as that can up the risk for disruption and security lapses – and require costly, time-consuming customization effort. >>

Still, though, they find themselves in a bind when it comes to determining how best to support these critical resources in the future.

We understand these situations – as well as the questions, concerns, and uncertainties they can raise in our clients' minds – and have updated our Managed Services portfolio to reflect them. This response takes shape in three specific Managed Services offerings: Staff Augmentation Services, Infrastructure Managed Services, and Application Managed Services.

Staff Augmentation Services

To help supplement your team – without requiring you to spend time and resources searching for qualified replacements – our Staff Augmentation Services give you access to Unisys supplied ClearPath Forward experts you can utilize as your needs dictate.

For instance, it could be for a short-term project, like integrating systems during a merger or implementing and rolling out ClearPath Forward ePortal. Or, you could work with our experts on an ongoing basis. Adopting this model means you get a resource who functions like an extension of your in-house team. No matter which approach you choose, you'll be better equipped to address shifting business goals and the resource requirements that come with them.

Infrastructure Managed Services

With our Infrastructure Managed Services, you'll be able to reimagine how you deploy and manage your data center. In simple terms, you'll be taking your ClearPath Forward system out of your data center and putting it elsewhere. But how you go about that is entirely up to you.

You could move the system and all of its related peripherals to one of our global data centers. Or, we could help you move some or all of the environment to the cloud. You could even keep your data center where it is today, but just offload all of the day-to-day monitoring and management to our team. Regardless, the goal is the same: keeping your energy focused on the business of your business, not the business of IT.

Application Managed Services

Your apps are the beating heart of your organization. And with our Application Managed Services, you'll have access to support, resources, and expertise that can keep them relevant and ready to drive your business for years to come.

It can be something as simple as a bug fix or a more complex development project. It could even be ongoing enhancements that reflect changing business or IT requirements. And our team is just as comfortable working on apps in support mode as those that are being actively enhanced. Flexibility is the key here – whatever your requirement might be, we'll be able to fit ourselves to it.

To Get Started...

Whether it's improved SLAs, rock-solid DR measures, sharper security, or something else entirely, you can trust these Managed Services offerings to help your ClearPath Forward environment support the needs you're pursuing today – and drive the strategies you want to bring to life tomorrow.

To get started, we recommend an Innovation Workshop as a first step. These collaborative sessions will help you and your team surface key goals, identify roadblocks standing in the way of those objectives, and develop the appropriate short- and long-term plans.

Please contact your Unisys sales representative to plan your workshop. And if you have any questions about these services – what they entail, how an engagement might look in your organization, etc. – please email ClearPathServices@unisys.com.



The Newest Dorado Systems Are Here!

Please join us in welcoming the newest members of the ClearPath Forward Dorado family!

As part of our ongoing commitment to enhancing and evolving the integrated Systems of Record that sit at the core of so many clients' businesses, we're always working to bring new levels of power, security, availability, and scalability to the Dorado family. And we aim to do so in a way that matches a variety of business and IT requirements.

You can see the fruits of this effort in the form of the new Dorado 4580, 4590, 6590, and 8590 systems.

Beyond Mid-Range

The **Dorado 4580 and 4590** systems deliver full featured mid-range performance that's ideal for many organizations.

Both Dorado 4500 models offer single-thread and single-image performance of 450 and 2,000 MIPS, respectively, enabling them to strike a strong balance between processing power and cost. With a dual-partition design – which effectively doubles the systems' processing capability – you're free to provide independent processing resources to specific workload types without concerns that one may affect the other.

The Dorado 4580 system delivers these capabilities via a traditional licensing model with capacity-on-demand options you can tap into to manage changing workloads or fluctuating seasonal demand. Meanwhile, the Dorado 4590 system utilizes Unisys unique metering technology to create a pay-for-use business model, helping you make costs predictable while offering the flexibility to access additional processing power as business and IT needs dictate.

Taking High-End to New Heights

A perfect fit for many large ClearPath® OS 2200 installations, the new **Dorado 6590** system delivers single-thread performance of 550 MIPS and single-image performance of up to 5,000 MIPS. The single-image performance figure represents a 25% increase in performance potential when compared to the current Dorado 6490 system.

The dual-partition design extends to this system, as well, enabling it to offer peak processing performance of up to 10,000 MIPS. And the Dorado 6590 system makes it all available through a metered business model.

The New Powerhouse

When it comes to supporting the world's most demanding OS 2200 workloads, look no further than the premium **Dorado 8590** system.

Redefining what's possible from a top-of-the-line model, the Dorado 8590 system provides single-thread performance of 925 MIPS and a maximum of 12,000 MIPS per partition image. This represents a 36% improvement in single-thread performance and a 50% increase in single-image capacity when compared the Dorado 8400 systems.

The dual-partition configuration of the Dorado 8590 system can support up to an astounding 24,000 MIPS in a single, standard cabinet. >>

Innovation Behind the Scenes

No matter which new Dorado system you choose, you'll benefit from numerous innovations that help you operate with greater flexibility, efficiency, and resiliency.

For instance, the systems' Processing and Memory Modules (PMMs) include a standard 24GW of OS 2200 accessible memory, giving the Dorado 4580, 4590, and 6590 systems a 50% memory boost over their predecessors. Meanwhile, the Dorado 8590 system gains the flexibility to be configured with an additional 24GW of memory, enabling it to support UDS applications that demand the highest levels of performance.

The systems' I/O Storage Modules (ISMs) have been enhanced, as well. Partitions within these systems can have either two or four ISMs, providing a maximum of 594,000 I/Os per second in a four-ISM configuration.

A new ClearPath OS 2200 QProcessor based platform has been designed to allow OS 2200 applications to interact with a wide variety of other systems via IBM® MQ message queueing.

And through the use of redundant PMMs, ISMs, and Operations Servers – as well as the ability to participate in eXtended Processing Complex Lock processor Release 5.0 (XPC-L-5) clusters – you'll increase resiliency and limit interruptions to your operations.

Eager to learn more about the newest Dorado systems? Visit the [ClearPath Forward Dorado homepage](#) for more details about these new models and the value they can help bring to your business, contact your Unisys representative, or email us at ClearPathForward@unisys.com.



New Services Ease the Digital Transformation Journey

As the System of Record powering your business and IT operations, the ClearPath Forward environment sits at the center of a vast network of systems, databases, and points of interaction. With the pressure rising to bring everything together into a cohesive whole, we're seeing many clients sharpen their focus on digital transformation initiatives.

The good news is, the environment is already well equipped to drive your digital transformation journey.

For instance, using ClearPath Forward ePortal, you're able to generate new solutions that leverage microservices, web, and mobile environments. Plus, you can use the Application Integration Services (AIS) product to develop cross-platform applications that blend ClearPath Forward attributes with the Microsoft® Windows® environment.

We've built three new service offerings to help you make the best use of ePortal and AIS throughout your digital transformation journey. Part of the broader ClearPath Forward Services portfolio, these services follow a holistic approach that encompasses applications, infrastructure, tools, and skills.

They're focused around key features in each solution:

- **ePortal outbound web services:** You'll learn how to create or enhance COBOL applications so they can call web services in a microservices architecture.
- **ePortal inbound web services:** You'll become familiar with the steps required to expose your ClearPath Forward transactions in a microservices architecture.

- **AIS call out services:** You'll learn how to leverage REST APIs, web services, and Apache Kafka® message queues in a microservices architecture, so you can integrate your ClearPath Forward applications with heterogeneous applications.

The Process

No matter which service you choose, you'll begin with a collaborative session between your team and ours aimed at defining the scope of the engagement.

From there, we'll work with your team to:

- Create a preliminary solution architecture for any applications included in the scope
- Define a project plan with timelines, milestones, and exit criteria
- Determine key success factors for the engagement
- Validate all required resources, including staffing, hardware, and software
- Agree on the deliverables that will span the engagement

Once these steps are done, we'll take specific actions that reflect the overarching goal of each service:

- In an **ePortal outbound web services engagement**, you'll identify the web services to call from your ClearPath Forward application, create and enhance COBOL applications as needed, and test the web services and integrated applications
- In an **ePortal inbound web services engagement**, you'll create the web services that will expose your selected ClearPath Forward transactions and then test the web services and integrated applications >>

- In an **AIS call out services engagement**, you'll apply inbound and outbound web services, REST APIs, and Kafka message queues to the identified applications, then test everything as needed

Each service will close with a final summary meeting where your team and the Unisys services personnel will review the results of the engagement, identify open items, and answer any questions you might have.

At the end of these engagements, you'll be better positioned to execute such key digital transformation initiatives as:

- Creating new digital business processes that leverage the ClearPath Forward environment's proven security, reliability, and performance
- Integrating your assets with internal and external resources, so they're free to participate in new environments and reach new channels
- Transforming your existing applications and data in innovative ways – without excessive cost and risk
- Delivering experiences that capitalize on rapidly changing user expectations

Plus, because you'll be taking advantage of our digital expertise at every step from strategy through execution, you'll minimize business disruption while shortening the digital transformation lifecycle.

To learn more about these services – or to start an engagement in your organization – please contact your Unisys sales representative or email ClearPathServices@unisys.com.



What's New in ClearPath AIS 5.0?

Big news, ClearPath Forward developers: A brand new release of the ClearPath Application Integration Services (AIS) product is here!

With AIS, you can accelerate your digital business transformation by integrating with microservices and cloud environments, making development simpler and more accessible, and leveraging existing assets to new ends.

AIS 5.0 supports these objectives by offering you new and innovative ways to build cross-platform applications that blend proven ClearPath Forward attributes with the familiarity of the Windows environment. And you'll make it even easier for developers who typically work in .NET and Microsoft Visual Studio® to freely build ClearPath Forward applications.

Plus, as a special promotional offer, you can order AIS Enterprise Edition 5.0 without any additional license cost! This zero-dollar license offers a great opportunity to see how AIS 5.0 can drive your microservices and digital transformation initiatives.

Here's what's new and noteworthy in AIS 5.0:

- **Accesscode support:** When connecting to a ClearPath MCP system, AIS will now require any user with an "accesscode" flag to provide those credentials alongside their usercode and password.
- **File access restriction:** With this feature, your system administrators have the flexibility to enable or disable file access on MCP systems, while still offering all other call-in and call-out capabilities.
- **Error handling and reporting:** Enhancements in the areas of error handling and reporting enable you to:
 - Write AIS service logs to the application event log
 - Support roll log files or log rotate
 - Generate AIS service and AISCLR Host logs for specific user profiles
 - Categorize logs based on message severity and priority
 - Display time zones on the AIS Server Service log timestamps
- **LibGen tool:** Updates to the LibGen tool allow you to generate three files – "include," "copylib," and a common type for the ALGOL and COBOL85 languages – from a single option, simplifying the process of generating proxy files, as well as the output directory path for those files.
- **Dynamic IP configuration:** The server IP is now set by default during installation, eliminating the requirement that you manually update registry keys with the server IP address in order to establish a connection between AIS and your ClearPath Forward system.
- **Support for Visual Studio 2017:** AIS 5.0 includes standard support for Visual Studio 2017.

To learn more about the features included in AIS, as well as the features included in the 5.0 release, please [visit our web site](#). And if you need assistance putting any of these new features to use in your organization, please contact your Unisys sales representative.



Thirty Years and Counting: A Unisys Services Success

For well over three decades, a large US state treasury department has relied on Unisys to provide the foundation for its critical payment processing system.

A custom COBOL application that's developed, tested, hosted, and DR-supported in the ClearPath MCP environment, the system disburses payments for payroll, pension, local aid, and vendors across the state's 150-plus agencies and departments.

But after more than thirty years, the department considered whether the time for change had come.

So it set out to examine an alternative means of supporting the payment processing system. Specifically, it wanted a commercially available payment system that could reduce maintenance, operational, and DR costs, cater to contemporary skillsets, and provide an improved user experience.

Reverting the “Rip and Replace” Mindset

With these objectives in mind, the department sent an RFI to vendors and evaluated their potential solutions.

After meeting with Unisys, the department realized that a “rip and replace” approach was not the most viable solution. In fact, its risks might outweigh any potential benefits.

Migrating away from such an entrenched system would surely take time and consume resources. The department's operations could be substantially disrupted during the transition, delaying the delivery of critical payments. And the change would impact the department's people, too, by requiring that they learn a new solution, lose the customized functionality they were accustomed to, and cope with new vendor support structures and SLAs.

With Unisys guidance, the department began to understand that avoiding risk meant following a much more measured approach – one that took advantage of the groundwork laid over the past three decades, while adopting a more streamlined means of managing and maintaining the system. They also realized the deep investment in their ClearPath Forward environment was captured in the logic and customization the current application uses to satisfy complex business requirements – and just how much it relies on the environment's world-class security and performance.

A commercial off-the-shelf (COTS) replacement could undoubtedly jeopardize all those advantages and the investments behind them.

Building a New Foundation

As the Unisys team worked to outline a vision and scope that would bring this new approach to life, it quickly became clear the department wanted to shift its attention away from the day-to-day business of running IT.

With a desire to focus on more important matters guiding the effort, the Unisys team put together a solution that utilized two key offerings from our Managed Services portfolio: Infrastructure Managed Services and Application Managed Services.

The Infrastructure Managed Services portion of the solution provides full, Unisys hosted, maintained, and operated environments for the payment processing system's production, development and test, and DR environments. All three run on ClearPath MCP Bronze – a software-only version of the MCP operating environment that's compatible with industry-standard hardware and hypervisor platforms – giving the department proven performance, resiliency, and security in a much more flexible package. >>

Meanwhile, with the help of our Application Managed Services, the department has a dedicated, six-person team providing support, maintenance, and new feature development for the payment processing system. This area of the solution also included a four-week learning and knowledge transfer component, during which two senior members of Unisys application team worked with the department's IT staff to understand and document all critical aspects of the application. This helped to ensure all Unisys resources were effectively educated and well equipped to begin supporting the system from day one.

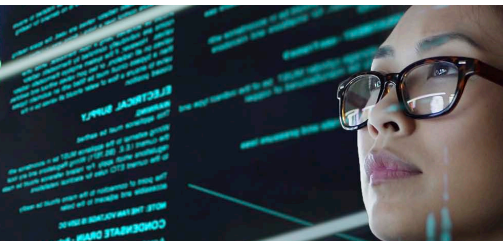
Finding New Value

With this new model in place, the department achieved its goal of implementing a more modern, easy-to-manage payment processing system that's viable over the long term – and offers minimal risk.

Trusting this effort to Unisys empowered the department to bring a decades-long partnership into a new era. It also meant the department was able to avoid the operational and financial risks, delays, confusion, and rework that so often accompany large-scale migration projects.

And because it's a fully hosted solution that takes advantage of our Managed Services portfolio, the department sits well equipped to absorb the impact of demographic changes, reduce the burden on IT, and free more resources to support innovative projects.

We thank our partners at the state treasury for their continued commitment to Unisys and the ClearPath Forward environment. Here's to thirty more years! If you're curious to learn how our Managed Services offerings can help your organization, please contact your Unisys sales representative or email us at ClearPathServices@unisys.com.



Tech Preview: ClearPath MCP Extension Kit

MCP

We have an exciting opportunity for all the ClearPath MCP developers out there!

We recently launched a technical preview for a new MCP offering called the ClearPath MCP Extension Kit – a technology that allows you to program within your MCP system using the popular Python language. This makes it easy to adopt Python as an alternative to COBOL and ALGOL when extending MCP applications.

Because the kit integrates Python into the MCP environment, you can use widely available Python skills to access, process, and create standalone MCP data and applications. Or, you can build them in tandem with your existing applications. It's the best of both worlds!

The tech preview is currently underway, and is planned to run into 2021. We encourage anyone who's curious to participate. It's a great way to experience an exciting new feature well before its actual release, provide valuable feedback, and help us shape the future of the MCP environment.

Interested in participating? Then reach out to us at ClearPathForward@unisys.com to get started.



Resources

The list below contains quick links that will help you stay up to date on all things ClearPath Forward.

- [ClearPath Forward homepage](#)
- [ClearPath Forward Services homepage](#)
- [Agile Business Suite homepage](#)
- [Business Information Server \(BIS\) homepage](#)
- [ClearPath Forward & Innovation Blog](#)
- [ClearPath Forward How-To Videos on YouTube](#)
- [ClearPath Forward Dorado/OS 2200 webinars](#)
- [ClearPath Forward Libra/MCP webinars](#)
- [Video Playlist: ClearPath OS 2200 Software Release 17.0 Technical Update \(29 Videos\)](#)
- [Video playlist: ClearPath OS 2200 Release 18.0 Technical Update \(30 Videos\)](#)
- [Video Playlist: ClearPath MCP Software Release 18.0 Technical Update \(21 Videos\)](#)
- [Newsletter: ClearPath Forward Connection December 2019](#)
- [Newsletter: Developing Agility January 2020](#)
- [Product Information Sheet: ClearPath Application Integration Services \(OS 2200\)](#)
- [Executive Brief: ClearPath Application Integration Services: Simplifying Cross-Platform Development and Digital Integration](#)
- [Product Information Sheet: ClearPath Forward ePortal](#)
- [Executive Brief: Integrate, Automate, Simplify: ClearPath Forward ePortal](#)
- [Software Release Announcement: ClearPath Forward ePortal 10.0](#)

Freedom of Choice – Reaching New Heights:

- [Webinar Recording: Freedom of Choice – Reaching New Heights \(Dorado 4500/6500/8500 systems\)](#)
- [Product Specification Sheet: ClearPath Forward Dorado 4580/4590 systems](#)
- [Product Specification Sheet: ClearPath Forward Dorado 6590 systems](#)
- [Product Specification Sheet: ClearPath Forward Dorado 8590 systems](#)

[Interactive Infographic: Four Goals, One ClearPath Forward Environment](#)

The latest:

Embracing Digital Transformation:

- [Brochure: Setting the Pace: Accelerating Digital Transformation with the ClearPath Forward Environment](#)
- [Product Information Sheet: ClearPath Application Integration Services \(MCP\)](#)

Specifications are subject to change without notice. No warranties of any nature are extended by this document. Unisys cannot accept any financial or other responsibility that may be the result of recipient's use of the information in this document or, including direct, indirect, special, or consequential damages.

© 2020 Unisys Corporation. All rights reserved.

Unisys and other Unisys product and service names mentioned herein, as well as their respective logos, are trademarks or registered trademarks of Unisys Corporation. All other trademarks referenced herein are the property of their respective owners.