UNISYS | Securing Your Tomorrow®

ClearPath Forward®
CONNECTION
March 2021

Contents

Cloud Without Compromise

By the ClearPath Forward Product Management team

In the simplest – and perhaps most ideal – terms, a public cloud migration is a series of sequential steps, performed in a well-planned and well-orchestrated manner, that delivers a seamless experience to end users and the business alike.

But, as we've learned in many recent conversations with our clients, the migration process rarely resembles this ideal. Rather, it's marked by concerns about business continuity, costs, security exposure, success, and the like. And in addition, while many ClearPath Forward® clients certainly see the value in making this shift, they tell us they're not sure they have the appropriate expertise in-house to execute it in a controlled manner.

Fortunately, the ClearPath Forward environment stands well equipped to help you make a smooth journey to the public cloud.

With the help of a solution that simplifies your ClearPath Forward environment's journey to the cloud – making it more transition than migration – and a suite of services aimed at providing deep expertise throughout the process, you'll follow the fastest, most secure, cost-effective, and risk-free path into the public cloud.

Powering the Transition

Simplifying the transition to the public cloud takes a deployment approach that matches your specific strategic cloud initiatives. That's precisely what we're delivering in the ClearPath® Software Series for Microsoft® Azure®.

With your ClearPath Forward applications running on Azure, you'll be able to capitalize on the advantages you expect from public cloud implementations – reduced risk, cost, and time, as well as the ability to deploy dedicated development, testing, training, QA, and production environments. >>

And you can rest easy knowing security remains a focal point, even as your applications transition out of the physical realm. The same high levels of ClearPath Forward security – spanning architecture, hardware, firmware, software, middleware, and databases – you've long relied on to protect your organization will remain in place in the public cloud. Plus, you'll take advantage of the cloud-centric security measures inherent to Azure, including physical, infrastructure, and operational controls.

You'll even be able to add an extra layer of protection in the form of the Unisys Stealth® security suite. With Stealth, you'll use identity-based, zero-trust network security to take precise control over access, permissions, and which users can interact with which people, devices, and data. You'll isolate affected systems at the first sign of malicious activity, limiting the scope, duration, and damage of breaches. And a layer of yet-unbroken encryption makes the rest of the network invisible, disrupting unauthorized searches.

Guiding Your Efforts

A viable, low-risk path into the public cloud is certainly important. The guidance you receive along the way is just as critical.

With the help of our ClearPath Cloud Services offerings, you'll have the expert support you need to make sure your transition to the public cloud progresses efficiently, avoids common pitfalls, and delivers the outcomes you expect.

Our engagements follow a proven lifecycle model that encompasses three distinct offerings: Advisory Services, Transition Services, and Managed Services.

The approach begins with our **Advisory Services**. During this phase, we'll work with you to understand your existing on-premise system, define the appropriate Azure infrastructure components, and build an Azure landing zone. As part of this, we'll take special care to size an Azure infrastructure that reflects your unique workload requirements – and accounts for the capacity needs of the apps you'll move into the public cloud. You'll receive a comprehensive cloud transition roadmap at the end of the Advisory Services engagement – detailing your organization's overall cloud readiness, as well as any pertinent cost, skill, security, and DR considerations – to help guide the remainder of your move.

With key questions answered and an agreed-upon roadmap in place, you'll be set to begin the **Transition Services** portion of the engagement. The main focus of this phase will be to implement your instance of the ClearPath Software Series for Microsoft Azure on an Azure virtual machine. As we manage this implementation, we'll migrate both your application and database files to Azure – without any refactoring or recompiling required. We'll also set up backup and disaster recovery measures in line with your business continuity and regulatory requirements.

Once the transition is complete, you can rely on our **Managed Services** to support your ClearPath Forward environment in Azure. Spanning infrastructure, operations, and application monitoring and management, you can rely on these services to make sure your environment maintains peak performance and delivers the efficient, cost-effective IT services internal and external users expect – all while you free up resources to support your organization's key innovation initiatives.

You'll be able to complement these core Managed Service offerings with a number of value-added extras, including those focused around evolving your core apps to ensure they continue delivering maximum value, keeping system software current, updating security measures to reflect the latest best practices, and adopting DevOps and new automation tools.

Making a Clean Transition

With the combination of the ClearPath Software Series for Microsoft Azure and the ClearPath Cloud Services portfolio, you'll make a fast, secure, cost-effective, and risk-free transition to the public cloud.

But more importantly, you'll transition on your own terms – with no compromises required. You'll transition without impacting your workloads or making code changes. You'll eliminate the need to coordinate with and manage third-party providers. And you won't have to recompile, refactor, or rearchitect any of your critical apps to make the transition possible.

Instead, you'll reach your end point poised to immediately benefit from the flexibility and promise the public cloud offers.

Empowering Your ClearPath Forward: ClearPath OS 2200 Release 19.0

ClearPath OS 2200 Release 19.0 is here!

The latest major release of the operating environment for ClearPath Forward Dorado systems, OS 2200 19.0 delivers updates to a number of products — and includes 35 new features suggested by clients. And because all of the release's 50-plus enhancements have been designed, developed, and qualified together, you can trust they'll deliver the business-critical scalability, availability, recovery, security, agility, and interoperability your applications demand.

While there are exciting capabilities packed into every corner of OS 2200 19.0, perhaps the most noteworthy is the introduction of the all-new **ClearPath Extension Kit for OS 2200**.

With the help of the Extension Kit, you're now able to use Python and Java as standard supported languages within the OS 2200 environment. Not only does this give you greater flexibility in terms of how you extend existing applications — or create new ones — it also empowers you to cater to a wider pool of programming talent. By offering programmers access to the languages they favor, you'll make it easier to supplement your team and support your organization's workforce renewal efforts.

In addition to bringing Python and Java into the OS 2200 environment, you're also able to use such standard Linux® tools as Bash, grep, and Make within OS 2200 batch and demand runs. And you'll also have access to processors that bring industry-standard source control and repository systems — like Git and Subversion — into the environment, giving you new ways to augment your workflows.

But That's Not All...

While certainly exciting, the Extension Kit is just one part of a much larger whole. To that end, OS 2200 19.0 also introduces:

- The flexibility to set and change the status of NIC interfaces — bringing them on and offline — without the need to cycle CPComm OS

- Performance improvements to Catalogued File Recovery, which can accelerate the process by up to 90% in some cases

- The ability to fine-tune which certificates are trusted on which applications

- A SOLAR selection verification window that shows after "F5 commit" is entered when installing or uninstalling products, registering keys and packages, and packaging installed products

- Support for DTPRA in a containerized environment

- Encrypted RSS file transfer

- Support for Microsoft Windows Server® 2019

- Digital signing for code files

- EXPLAIN in stored procedures and triggers

- CIFS SMBv2 support

Ready to Get Started?

Be sure to visit the OS 2200 homepage to learn about all of the enhancements and updated capabilities we've packed into OS 2200 Release 19.0. And for even more information about this release, please give the OS 2200 19.0 Software Release Announcement, Migration Guide, and Software Product Catalog a read.

Enterprise Output Manager 14.2 is Here!

The latest version of our comprehensive output-management solution has arrived!

With Enterprise Output Manager 14.2, you'll have new ways to distribute output where, when, and to whom you want. You'll utilize capabilities that make it even easier to modernize your documents and automate workflows. And you'll sharpen your ability to secure and monitor your output from a single point of control.

A minor update over Enterprise Output Manager 14.0, this release includes many new features suggested by our clients, including:

- **PDF resolution:** Using the PDF writer integrated into Enterprise Output Manager, you can now set the resolution of your PDF documents up to a maximum of 2,400 dpi.

- **Create black-and-white and grayscale TIFF files:** With the new "color settings" property in the "Print" attribute, you're free to select the file color format when creating TIFF files.

- **Carriage control modifications:** You now have the option to choose whether or not to skip certain lines when printing to continuous feed forms.

- **Backup Attribute name in Enterprise Output Manager logs:** With the Backup Attribute now part of the Enterprise Output Manager logs, it's much easier to check which attribute was used for which backup job.

- **Support for Windows Server 2019:** With the addition of support for Windows Server 2019, you can run Enterprise Output Manager on more flavors of Windows than ever before.

Check out our web site to learn more about everything Enterprise Output Manger can do for your business. And if you'd like more information about the new features included in release 14.2, please take a look at this overview video.

Innovation Workshops Go Virtual

There's no pause button for progress. Pandemic or no, your organization has to keep pressing forward — defining new offerings, rethinking strategies, and fending off emerging competitive threats.

To help you build and sustain your momentum — despite the restrictions imposed by our remote-work world — we're happy to announce our all-new virtual Innovation Workshops.

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 that create value for our clients. During this meeting of the minds, you'll brainstorm initiatives large and small in equal measure — spanning business, process, and technology areas — and evaluate each concept on its feasibility, cost, timeframe, and expected ROI.

Though it's transitioning to a virtual setting, the intent of the workshop remains unchanged.

To that end, this collaborative session will progress according to the following process flow:

- You'll start by identifying pain points and opportunities, then capture ideas that can address these needs
- Then, you'll categorize these ideas into key functional areas, with participants providing "elevator pitches" for each concept

- After that, you'll prioritize concepts based on factors like organizational impact, ease of implementation, and technical maturity
- You'll then build opportunity profiles aimed at helping you better understand each idea's potential ROI and implementation timeframes
- Finally, you'll create a roadmap that details how you'll turn these ideas from concept into a tangible reality

Of course, you're free to customize this flow to fit your organization's particular needs, timelines, and business and IT demands.

At the end of the session, you'll receive a written report detailing the full list of brainstormed ideas, as well as a graphical display of the voting results. In addition, you'll be sent a post-workshop executive brief that reviews Unisys observations and recommendations, and identifies opportunities for further investigation or investment.

Ready to see what strategies your organization can uncover? Then register for your virtual Innovation Workshop today!

Three New BIS Releases Have Arrived

Exciting news, BIS shops!

There's new functionality for the scalable, multimode, rapid application development and information access tool you use to create, organize, and manage your business logic, information, and web assets. And it's available for both the ClearPath OS 2200, Microsoft Windows®, and Linux environments.

BIS 50R1 for ClearPath OS 2200

With BIS 50R1, ClearPath OS 2200 users can take advantage of:

- **2028 date (TDATE$) remediation:** With this update, BIS is now fully compliant with the requirements described in the 2028 TDATE$ remediation program, which is aimed at eliminating product references to "ER TDATE$."

- **Faster SECURE and PRESTR:** The Secure process now writes MAPDAT tapes in the revised FURPUR format using eight tracks per block, while the PRESTR program will read tapes written in both the revised and original formats.

- **FAS tape creation for PRESTR file restore:** With the new "FASTIM" configuration parameter, you'll be able to specify the latest backup tape creation time to be used by PRESTR when restoring files from FAS tapes.

- **Same-screen support for next "Find" command:** Using the new "U" option for the "Find" command, you're now able to display matches on successive screens, starting from the first match.

- **New "@DIAG" command option:** With the new "L" option we added to the "@DIAG" command, you can display the first and last lines of a renamed report result.

- **Date format 22:** Any function that can process dates – such as DC, CAL, SRH, and so on – can use date format 22, which accepts dates in the DD MMM YY or DDMMMYYYY formats as an input and uses the same output format as the Date-Line report.

BIS 14.1 for Windows and BIS 14R1 for Linux

- **BIS diagnostic utility:** Using the BIS diagnostic utility, you can generate a system-wide report that collects all logs and information BIS generates while in operation, as well as point-in-time, system-level information.

- **TCP "keepalives:"** When you enable TCP "keepalives" on your inbound and outbound network connections, you'll prevent BIS to BIS networking runs from hanging in the event the remote server goes down or the Router Security setting for inactivity is exceeded.

- **Enhanced logging functions and run statements:** With the new "ELOGL" and "ELOGS" enhanced log functions, and "@ELL" and "@ELS" run statements, you can extract enhanced accounting log information based on the run name and department number.

- **Changes to maximum number of background runs:** Your coordinators can use a new BRQ function to set or display the site-specific "maximum number of background runs allowed" working value.

- **HTTP methods in ICE:** With the new variable we've added, you can capture the incoming HTTP method – GET, PUT, POST, DELETE, PATCH, etc. – and make it available in ICE runs by loading the variable in ICESVCHND.

- **"S" option in the "Find" function:** You can use the new "S" option in the "Find" function to indicate that the operation must begin on the line at which the target report is currently displayed, rather than the start of the report. >>

- **JBoss 7 support:** BIS ICE now works with the JBoss Enterprise Application Platform 7.1 or later, while the BIS Resource Adapter is now compatible with JBoss Enterprise Application Platform 7.1 or later.

- **Same-screen support for next "Find" command:** Using the new "U" option for the "Find" command, you're now able to display matches on successive screens, starting from the first match.

- **New "@DIAG" command option:** With the new "L" option we added to the "@DIAG" command, you can display the first and last lines of a renamed report result.

- **Accounting log analysis:** You can use the new "MAPACC" script to reduce the data in the accounting log by sorting and subtotaling its entries.

To learn more about these releases, please refer to the [BIS 50R1 for ClearPath OS 2200 software release announcement](#), the [BIS 14.1 software release announcement for Windows](#) and BIS 14R1 software release announcements for [SUSE Linux](#) and [Red Hat Linux](#).

Announcing Operations Sentinel 18.0

Operations Sentinel 18.0 is now generally available to all ClearPath Forward clients!

The updates and enhancements included in the latest release of our feature-rich, end-to-end data center management tool make it easier to automate, consolidate, access, monitor, and manage heterogeneous systems and applications.

Plus, you'll have new ways to facilitate anytime, anywhere remote operations, anticipate and address abnormal conditions, and reduce the resources dedicated to operations and support activities.

And when it comes to Operations Sentinel 18.0, you can do all this and much more thanks to the release's key new features:

- **Lock ADBM database file:** With the ability to lock each individual ADBM database file (bld file), you'll prevent the unwanted modifications that could occur when users edit the same file.

- **Remote registry read elimination:** You can establish a secure communication between the Operations Sentinel Workstation components and the Operations Sentinel Server, enabling you to transfer any necessary data without using remote registry reads.

- **Install location flexibility:** You're now free to set the defined install path for the Operations Sentinel output folder.

- **Log Viewer auto-refresh:** Using this feature, you can set an interval for the logs in the Log Viewer to be automatically refreshed, eliminating the need for frequent, manual refreshes.

- **Log file scrolling:** When moving the horizontal scrollbar to the extreme right of the screen and then scrolling up, the bar will no longer reset to the extreme left of the screen, making it much easier to view and analyze large log files.

- **ClearPath OS 2200 Software Series configuration wizard:** With this enhanced version of the ClearPath OS 2200 Software Series configuration wizard, your admins can set up, add, or modify configurations automatically from a single application, eliminating the need to manually manage configurations across multiple wizards.

- **SAIL-based configuration wizard for Dorado x300, x400, and x500 systems:** Your admins are now able to set up new ClearPath Forward Dorado x300, x400, and x500 configurations – and modify existing ones – using a new SAIL-based application that eliminates manual effort, saves time, and prevents errors.

Please visit the Operations Sentinel homepage to learn about everything you can do with the tool. And for specifics about the features included in Operations Sentinel 18.0, please check out the release's overview video.

Data Exchange 6.0: Enhance Your Customers' Experience

The long-term success of your business depends in no small part on your ability to retain customers. But today's customer expects a lot from you. From around-the-clock digital access to omnichannel interactions, they demand a high level of engagement at every touchpoint.

That's where Unisys Data Exchange comes in.

With Data Exchange, you can perform selective and near-real-time data replication and propagation from a source data store to one or more target data stores. As you do, you'll be able to apply transformations that support business process integration, reporting, big data analytics, and business intelligence activities.

As a result, you'll increase operational efficiency, avoid the costs inherent in developing and maintaining data integration and transformation tools, and make IT more flexible and responsive to the business's changing needs.

The recently released **Data Exchange 6.0** builds on these strengths with a wide array of new features and enhancements.

In particular, Data Exchange 6.0 adds integration with Enterprise Network Database Server for ClearPath OS 2200, enabling you to propagate data from this database to Apache Kafka®. And with the release's new performance enhancements, you'll have the flexibility to scale up and scale out during CDT and BDT.

But there's more. Data Exchange 6.0 also introduces:

- **Better resource management:** You're now able to use Data Exchange Management Studio (DEMS) to display the details of Windows and ClearPath Forward hosts where Data Exchange component instances are installed, helping you keep a sharper eye on resource consumption.

- **Multiple transformations from a single source:** With the new "Streams" runtime functionality, you can group multiple transformations and administer them as a single unit.

- **Support for nested data types:** You'll reduce tedious manual mapping efforts thanks to newly added support for the Enterprise Database Server for ClearPath MCP "Occurs" data type.

- **Apache Avro support:** With support for the Apache Avro™ message format, you'll be able to take advantage of the recommended standard for highly efficient data transfers and wide interoperability.

- **Higher availability:** Using unattended failure detection and recovery, you'll automate failover in non-clustered environments, helping improve availability and minimize downtime.

- **Enhanced error handling:** You're now free to set the error handling policy for missing records in the Update and Delete operations.

Be sure to visit our web site to see all the great things Data Exchange can help your business do with its valuable data assets. And if you have questions about Data Exchange 6.0, or want to explore putting this release to use in your organization, please contact your Unisys sales representative today.

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
- ClearPath Forward 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 OS 2200 Release 19.0 Technical Update (8 videos)
- Video Playlist: ClearPath MCP Software Release 18.0 Technical Update (21 Videos)
- Newsletter: ClearPath Forward Connection May 2020
- Newsletter: Developing Agility November 2020

The latest:

Videos:
- Explainer Video: ClearPath Software Series for Azure
- Explainer Video: Stealth for ClearPath Forward
- Explainer Video: ClearPath Extension Kit for OS 2200
- "What does cloud mean to our clients?" Chuck Lefebvre Executive Viewpoint

- Cloud Without Compromise: Risk-Free Cloud Transition with Unisys CIO Upinder Phanda

Blogs:
- When is a Mainframe Not a Mainframe?
- Empowering Your ClearPath Forward
- Thinking Security: Security Hygiene in the New Normal

Collateral:
- ClearPath OS 2200 Executive Brief
- Python for ClearPath Forward Applications White Paper
- Data Exchange Executive Brief
- ClearPath Software Series for Microsoft Azure Executive Brief
- Research 451 Data Analytics Business Impact Brief
- Cloud Migration, Another Step in Digital Transformation White Paper

Podcast:
- Learn how you can replatform your ClearPath Forward apps to Azure risk-free