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ClearPath Connection

A Quarterly Newsletter for Unisys ClearPath Customers

Contents

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Pivoting Toward the Future

By Brian Herkalo, Director, ClearPath Solutions and Portfolio Management, Unisys

Sometimes, when you want to talk about the future, the best place to start is the past.

And when it comes to discussing what the future holds for the ClearPath® program, it makes sense to turn our attention back to the year 2006.

This was the year we announced an aggressive new strategy that would define the characteristics of the ClearPath infrastructure for years to come: the transition from proprietary hardware IP to firmware that could run on Intel® processors. We called it the ClearPath Next-Generation Server Architecture Strategy.

Around the same time we introduced the Next-Generation Server Architecture Strategy, we also declared our intention to begin the work that would eventually allow us to blend Microsoft® Windows® and Linux® operating environments within the ClearPath environment.

We accomplished a great many things in the years following the formalization of these two strategies. Each innovation, whether in the system firmware or the ClearPath MCP or OS 2200 operating environments, has effectively reshaped the ClearPath environment from what it was then, to what it is today.

The Strategies Come to Life

We first delivered on the promise of the Next-Generation Server Architecture Strategy in 2008 with the introduction of the ClearPath Libra and Dorado 4000 class systems. >>

One of the core principles we focused on while building these initial next-gen systems was to mature the technologies within the ClearPath environment in ways that would optimally benefit the new Intel® foundation.

For example, when it became clear to us that we couldn't find an existing partitioning capability well-suited to this environment, we set out to build one ourselves. This effort resulted in the release of our Secure Partitioning (s-Par®) technology – an advance that would ultimately set the stage for the *Forward!* By Unisys™ enterprise computing platform.

Along these same lines, the ClearPath Libra 4200 and Dorado 4300 series systems introduced a new high-speed interconnect between the processor-memory and I/O modules. When combined with s-Par, these interconnects made it possible for a single ClearPath system to function as a distributed, yet tightly integrated, computing platform – something we would dramatically expand upon in the ClearPath fabric-based infrastructure.

Thanks to these advances, as well as the transition from proprietary hardware IP to Intel® firmware, the newest ClearPath operating environments – ClearPath MCP Release 17.0 and ClearPath OS 2200 Release 16.0 – have helped uniquely position ClearPath systems to provide even greater levels of security, performance, and scalability for mission-critical solution environments around the world.

These examples illustrate the strength of our passion for driving innovation, and, more importantly, our commitment to meeting the goals we set for ourselves in 2006. And now, nearly a decade later, these qualities have culminated in the ClearPath Dorado 8300 systems.

Meeting – and Exceeding – Our Goals

The release of these first-of-their-kind, premium-high-end members of the ClearPath Dorado family is truly a momentous occasion.

Designed specifically to address the unique, discerning needs of the world's largest ClearPath OS 2200 clients, the Dorado 8300 systems realize the potential of every facet of the ClearPath Next-Generation Server Architecture Strategy. Namely, they exceed all CMOS-based Dorado systems in terms of performance, scalability, and reliability. What's more, they do so while leveraging the innovative ClearPath fabric-based infrastructure. In this way, these systems fulfill the goals of the two strategies we announced in 2006.

As fifth-generation next-gen systems, they have completed the transition to an industry-standard, Intel® based foundation. And because they are fabric-based models, the Dorado 8300 systems can seamlessly accommodate Windows and Linux workloads within the ClearPath environment, opening up new integration opportunities while bringing more predictability and security to non ClearPath workloads.

And by meeting these two commitments, the Dorado 8300 systems set the stage for the next phase in the ClearPath program's evolution.

Building Towards a New Future

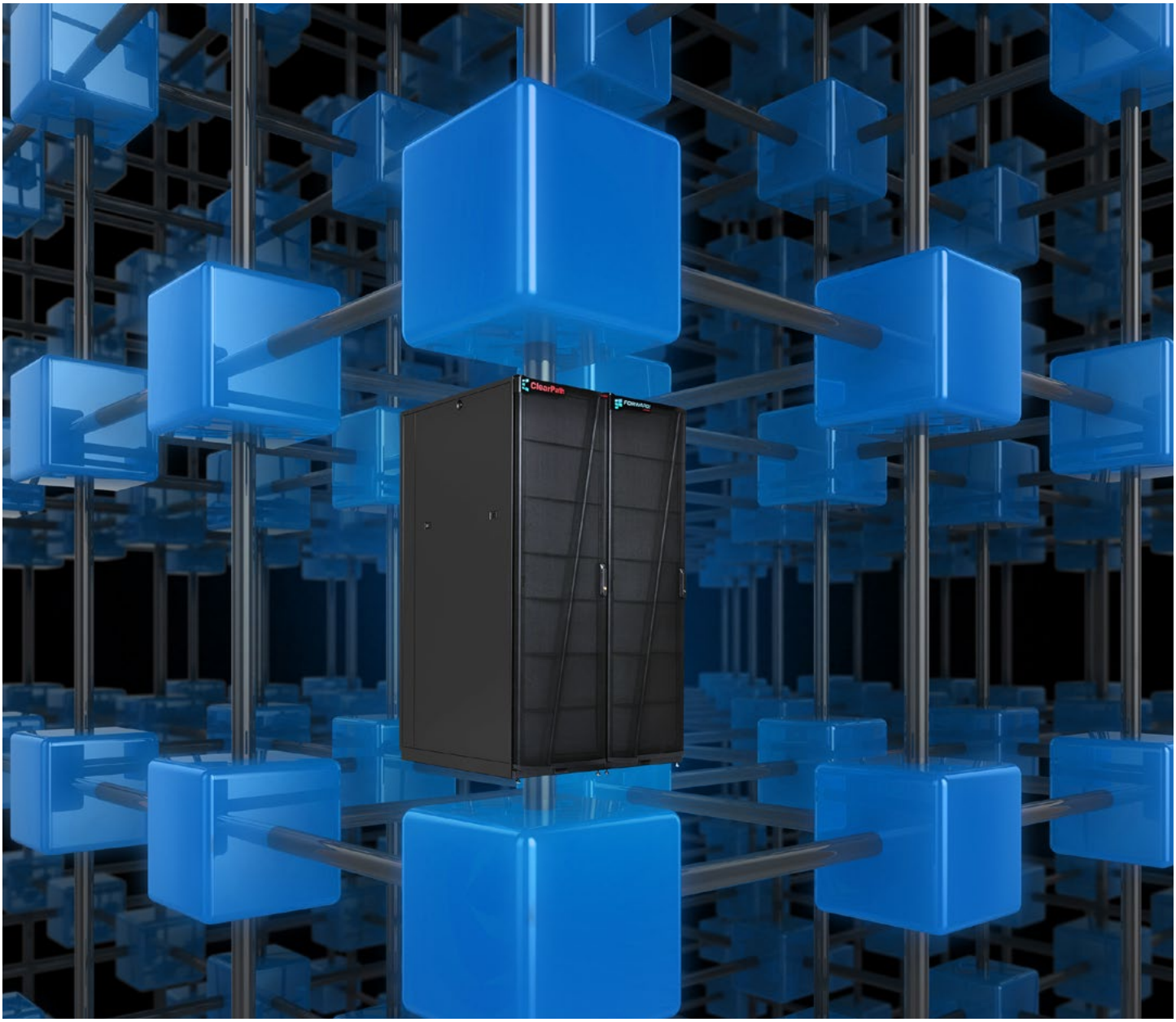
The work that gave rise to the Dorado 8300 systems – as well as the ClearPath fabric-based infrastructure – represented the climax of ten years' worth of planning and execution. But, it also signals the pivot toward a new era.

Now that we have moved the systems' firmware to an Intel® foundation, and made it possible to blend ClearPath, Windows, and Linux workloads within a common infrastructure, it's time to extend what we have in place to new ends.

Specifically, we will evolve ClearPath in ways that enable it to become an integral component of a software-defined data center, where hardware is simply an abstraction of the software. Software-defined data centers promise to help you focus more on the applications running on top of the infrastructure – and less on the hardware itself – by using software to define how business solutions are implemented within your environment. >>

In this way, you can manage multiple infrastructures without concerning yourself with the complexities of the components underpinning them. If this is the place data centers are moving toward, then we want to be sure ClearPath systems are well positioned to facilitate this shift.

When we complete this next milestone, it will become the step in the continuum that began with the launch of the ClearPath Next-Generation Server Architecture Strategy in 2006, saw the release of the ClearPath fabric-based infrastructure and Dorado 8300 systems, and continues to come to fruition as we unveil the IT environments of the future.



OS 2200

ClearPath Dorado 8300 Systems: The Next-Gen Promise, Realized

We have done it! With the introduction of the **brand-new, premium-high-end** ClearPath Dorado 8300 systems, we have met – and exceeded – the goals established by the ClearPath Next-Generation Server Architecture strategy nearly a decade ago.

What makes this such a watershed moment in the history of the Dorado family?

First and certainly foremost, these new systems are the most powerful models we have ever released, outperforming all previous Intel® based Dorado systems by a wide margin. But, even more significantly, they even exceed the capabilities of our proprietary, CMOS-based platforms – including the top-of-the-line ClearPath Dorado 800 systems.

The Dorado 8300 systems also make extensive use of the innovative ClearPath fabric-based infrastructure. Leveraging the fabric enables these platforms to enhance and improve upon the established benefits and capabilities of the ClearPath Next-Generation Server Architecture strategy by bringing more performance, security, reliability, scalability, and mission-critical characteristics to the Dorado environment.

The fabric-based infrastructure also allows the Dorado 8300 systems to leverage an Enterprise Partitionable Platform (EPP) that can be divided into unique environments dedicated to Windows or Linux workloads. Each system starts with one EPP and offers the flexibility to increase the number to a maximum of 28, giving you numerous options for advanced workload integration.

The Dorado 8300 systems offer additional advanced workload support by featuring dual OS 2200 partitions. Plus, the option to run the ClearPath ePortal for OS 2200, Utilization Report Utility for metered systems, Enterprise Output Manager, and ClearPath OS 2200 QProcessor specialty partitions – as well as Java integration services – within the fabric provides even more flexibility and customization options.

Unrivaled Performance

The Dorado 8300 systems are powerhouses in every sense of the word. Each OS 2200 partition delivers single-thread performance of **610 MIPS** and single-image performance of **6,200 MIPS**, giving you over **12,000 MIPS** of total processing power in a dual-partition system.

The advances don't stop there. These systems also showcase the latest Intel® based I/O Storage Module (ISM), which combines the highest performance of any Dorado I/O processor with the flexibility to easily change based on your specific requirements. Plus, new Fibre channel and FICON cards offer support for the latest high-capacity storage devices, including EMC® VNX® Unified Storage, VMAX®, and VMAXe®.

But, these massive levels of performance don't equate to a massive footprint – the Dorado 8300 systems will actually take up less space in your data center than a comparable CMOS-based platform. >>

Whereas a fully configured Dorado 800 system would require a minimum of three cabinets, the Dorado 8300 systems can provide over twice the system capacity, along with the flexibility of the fabric-based infrastructure, in just two. As a result, you can utilize all the new models have to offer in less floor space.

What's more, you have the freedom to benefit from these performance gains in a way that best fits your business needs.

You can choose a system that combines a traditional licensing model with Capacity on Demand options built to provide the agility needed to manage dynamically changing workloads. Or, you can implement a system that leverages Unisys unique metering technology to create a Pay-for-Use business model, helping you make costs predictable while offering the flexibility to tap into additional processing power as business and IT needs dictate.

Mission-Critical Reliability

Performance alone will only get you so far. To fully earn the "mission-critical" distinction, a platform must be up, running, and available at all times. And that's where the true value of the Dorado 8300 systems emerges.

Designed with resiliency in mind, the Dorado 8300 systems feature redundant Processor Memory Modules (PMMs) and ISMs. So, should one PMM or ISM go down, the system will keep running as if nothing even happened.

They also include a High Availability Processor Memory Module (HA PMM) as a standard feature. In the rare event of a fatal error in the active PMM, the HA PMM allows the Dorado 8300 systems to restart with the remaining components in a matter of minutes – all via a single operator command.

In addition, dual A/C power inputs make it possible to draw electricity from separate provider grids, giving you the added confidence that an external electrical disruption won't have any effect on your operations.

Sustaining the Core ClearPath Values

As with every new hardware release, the Dorado 8300 systems extend our commitment to evolving the qualities that have come to define a ClearPath platform. So in addition to delivering unparalleled levels of security, reliability, and availability, they also maintain object-code compatibility with previous models. This means you can benefit from everything the Dorado 8300 systems have to offer without making any changes to your applications. And as a result, you can migrate to the new system as smoothly – and with as little risk – as possible.

Please visit the Dorado homepage to learn more about the Dorado 8300 systems and other members of the ClearPath Dorado family.

MCP

ClearPath MCP Release 17.0: Better Apps, Better Security, Better Data Center

ClearPath MCP Release 17.0 is here! This release furthers our commitment to continually improving the MCP environment by extending its proven attributes with new innovations designed to address today's critical business and IT demands.

So in addition to delivering numerous enhancements to existing products – many of which were suggested by the MCP user community – this major release also introduces the brand-new Connectivity Services product.

And as always, all of the products and features in this release have been designed, developed, and tested together, so that they can be quickly and cost-effectively implemented – and deliver the performance and reliability your mission-critical applications require.

With ClearPath MCP Release 17.0, you can realize considerable benefits across three important areas:

- The mission-critical applications you rely on to run your business
- The security of your systems and data
- Your data center environment

Applications

When it comes to your applications, ClearPath MCP 17.0 will help you:

- Integrate business processes both within and between organizations
- Improve developer productivity through contemporary tools and technologies
- Enhance the end-user experience without having to modify existing application logic
- Increase the scalability of mission-critical applications and databases in ways that support business growth

Here's how:

Connectivity Services: This **ALL-NEW** capability enables MCP applications and products to exchange information with applications residing in Windows environments over the high-speed Infiniband interconnects in fabric-based ClearPath systems. And should the Infiniband connection be unavailable for any reason, Connectivity Services will switch to an Ethernet connection in a manner that is completely transparent to the applications. Plus, the product includes APIs that enable MCP and Windows applications to use its services.

XML Parser for ClearPath MCP: MCP 17.0 allows the XML Parser to convert XML files to Cobol 01 records. In addition, the XML Parser can now be used by Enterprise Application Environment (EAE) applications.

HTTP Client for ClearPath MCP: In MCP 17.0, the HTTP Client can be used by EAE applications.

ProgramBinder: The ProgramBinder can now export a library interface in XML format.

Relational Database Server for ClearPath MCP: The recently released Relational Database Server for ClearPath MCP receives the following updates in MCP 17.0:

- A stored procedure capability that enables you to develop procedures, store them in the database, and then execute them
- An ODBC driver that allows Windows and Linux applications to access relational databases >>

- Support for SQL functions, which provides additional flexibility when querying relational databases

ClearPath MCP IDE *for Eclipse*™: MCP 17.0 includes numerous new Eclipse features, including:

- Support for Eclipse 4.4
- Java 8 support
- The ability to view MCP backup printer files in Eclipse
- Various ease-of-use improvements to the editing function

ClearPath ePortal for MCP: The ClearPath ePortal for MCP Release 6.1 is included in MCP 17.0. This release delivers enhancements across four key areas: application capture and modeling; web and mobility; services and SOA; and deployment and runtime. For a closer, more detailed look at everything ePortal 6.1 has to offer, check out the announcement article later in this issue.

Enterprise Output Manager: Offered alongside MCP 17.0, Enterprise Output Manager 12.0 allows you to insert file content, images, and logos into emails and personalize your messages with new font and color options. In addition, Enterprise Output Manager 12.0 also includes:

- The ability to hide the URLs of files in the File Finder search results page
- Enhancements to the Data Dependent Attribute (DDA) conditional commands, set variable, and convert variable
- A find and replace function in the Configuration Explorer that helps you quickly locate an attribute or piece of text and replace it with the desired value

Security

The enhancements delivered in ClearPath MCP 17.0 bolster the security of your environment by enabling you to:

- Protect sensitive data from unauthorized access
- Automate audit and regulatory compliance activities

Here's how:

Transaction Server – Custom Connect Facility (CCF): Applications can now query client network addresses.

Security Center: Updates to Security Center in MCP 17.0 provide support for multiple public keys per usercode for SSH authentication and use the SSH keyscan to simplify the process of gathering public keys from SSH hosts. It also includes an option to force a password change on first use. And, the unwrap command now utilizes granulated privileges when handling hazardous files.

Software Inventory Assessment Utility: First made available in ClearPath MCP Release 16.0, updates to the product in MCP 17.0 allow it to add information to the system log following a memory dump.

Locum Software Products: ClearPath MCP 17.0 includes updates to the following products from Locum Software:

- ***Locum Safe & Secure:*** The AdminDesk's new Configuration Wizard makes installation simpler and more flexible. Customization has been improved, as well.
- ***Locum SafeSurvey:*** New functionality in SafeSurvey extends the Guardfiles report to include invalid accesscodes and groupcodes, as well as missing programs, allows for multi-family browsing and importing of SSV files, and makes reports available in PDF format.
- ***Locum RealTime Monitor:*** RealTime Monitor now offers advanced filtering that keeps alerts more focused. Plus, it can automatically check for updates to the latest dashboard. >>

- ***Locum SecureAudit:*** Enhancements to SecureAudit allow for the multi-family browsing and import of SCA files and make reports available in PDF format.

Data Center

ClearPath MCP 17.0 offers capabilities that enhance your data center environment, so you can:

- Utilize commonly available skills to manage MCP operations
- Increase the availability of mission-critical applications
- Move large quantities of data across networks with greater efficiency

Here's how:

dbaTOOLS: Updates to the dbaTOOLS Analyzer and dbaTOOLS Monitor products in MCP 17.0 allow you to perform automated online garbage collection.

Workload Management for ClearPath MCP: MCP 17.0 enhances Workload Management for ClearPath MCP by providing programmatic access to month-to-date MIPS usage values and delivering numerous usability improvements.

Operations Sentinel: Operations Sentinel 15.0 is included in MCP 17.0. The latest version of our automated system management tool features several noteworthy enhancements:

- Advanced editing capabilities and a richer GUI experience in the Autoaction Database Manager (ADBM) Editor that enable you to quickly automate actions based on system alerts
- Flexible time scheduling capabilities that allow you disable the Alert Policy action as necessary
- The ability to silently and automatically install the Operations Sentinel Windows Resource Monitor (WRM) and Unix/Linux Resource Monitor (ULRM) agents on multiple systems
- SNMP v2 support

Business Continuity Accelerator (BCA): In MCP 17.0, BCA includes integration with Disk Encryption, allowing it to support failover with encrypted disks. Plus, it also automates the management of EMC SRDF® in BCA failover environments.

Data Compression: Initially offered with ClearPath MCP Release 16.0, Data Compression receives enhancements in MCP 17.0 that enable it to compress Enterprise Database Server for ClearPath MCP backup files, audit files, and internal large objects (ILOBs). Plus, it now includes an API that can be used by application programs.

Ready to Learn More?

Please visit the MCP homepage to learn more about the updates and enhancements included in MCP Release 17.0. And be sure to check out the MCP 17.0 Software Release Announcement, Planning and Migration Overview, and Software Product Catalog for further information about the new products, software, and enhancements included in this release.

Evolutionary and Revolutionary: New ClearPath ePortal Enterprise Platform and Software Release 6.1

Big things are happening in the ClearPath ePortal world!

We are excited to announce the availability of the new, fourth-generation, Intel® based ClearPath ePortal Enterprise platform – as well as the new ePortal software Release 6.1 for ClearPath OS 2200 and MCP environments!

Designed to deliver a suite of edge-of-market application modernization capabilities, these releases make it easy to rapidly extend ClearPath applications using Web, mobile, or Web Services technologies – all without requiring you to continuously track, procure, prototype, scale, and secure your solutions.

By automating so much of this process, ePortal can help you execute your projects using skills you already have in house. As a result, you'll be able to increase business agility and accelerate time to market – all while you realize a quicker return on your investment.

And now, with ePortal release 6.1, we've extended these capabilities further by delivering enhancements across four key areas:

- Application capture and modeling
- Web and mobility
- Services and SOA
- Deployment and runtime

Application Capture and Modeling

To make it easier for you to capture and model your applications, ePortal 6.1 includes:

- Improvements to the View-Model Message design
- Integrated Bootstrap components for multi-device applications

Web and Mobility

To help you web- and mobile-enable your apps with greater efficiency, ePortal 6.1 has been updated to deliver:

- Improvements to the Unisys Hybrid Mobile Application Build Service
- Mobile and service project templates
- A multi-device mobile app simulator
- Support for Visual Studio Universal Apps
- Support for flexible application scaffolding
- Support for multi-device development on phones, tablets, and PCs running Windows 8.1 >>

Windows 8.1 Support in ePortal 6.1

We've increased support for Windows 8.1 in ePortal 6.1 by offering:

- Integrated access to community plug-in directories from within Visual Studio
- Support for Apache™ Cordova™ community plug-ins on multi-device applications
- Automatic localization and resource file creation for Microsoft model-view-controller (MVC) applications

Services and SOA

ePortal 6.1 enhances your ability to enable applications to participate in SOA environments by offering:

- Flexible and customizable service scaffolding for Microsoft Windows Communication Foundation (WCF) SOAP service generation

Deployment and Runtime

With ePortal 6.1, you can deploy your apps faster and better manage the runtime environment with the help of:

- Improved SSL/TLS certificate encryption support and management
- Support for the Network Load Balancing (NLB) NONE affinity option
- DNS resolution for outbound services communication
- Support for the Microsoft .NET Framework 4.5.2

For additional information, please read about the benefits ePortal can bring to MCP and OS 2200 environments. And, if you'd like to download ePortal 6.1, you can do so via the Unisys support site (requires login).

SAP HANA Certified for Fabric-Based ClearPath Systems

We are excited to announce that, after months of testing, analysis, and engineering, SAP HANA® has been certified for the *Forward!* By Unisys enterprise computing platform.

So, if you're currently operating a ClearPath Libra or Dorado 4300, 6300, or 8300 system, you now have the freedom to deploy SAP HANA in the ClearPath fabric-based infrastructure. In addition, the ClearPath architecture now supports the SAP S4 next-generation ERP solution running on the HANA database, as well.

As a result of our ongoing commitment to increasing the value of the ClearPath environment, you're now able to improve the speed and ease with which you leverage SAP HANA for advanced, real-time analytics, so it's easier to transform data in innovative ways that drive tangible business results.

Please contact your Unisys sales representative for more information about how you can take advantage of this exciting update.

New Papers Discuss the Importance of Middleware in the Fabric Environment

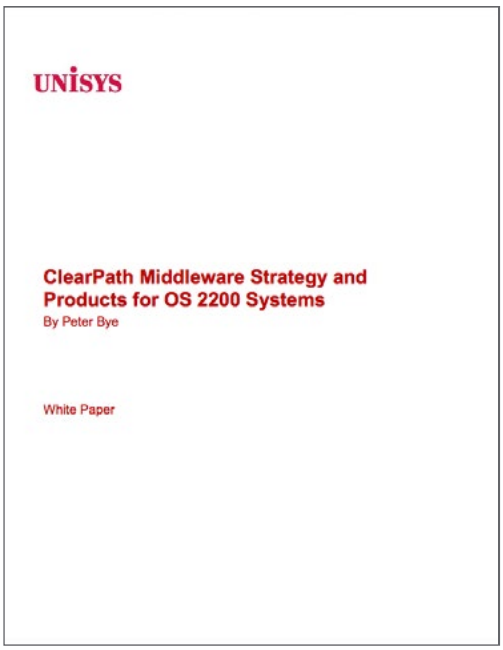
Middleware is the enabling technology behind distributed systems. As a result, ClearPath middleware plays a critical role in allowing you to integrate your ClearPath applications with heterogeneous applications, databases, and systems.

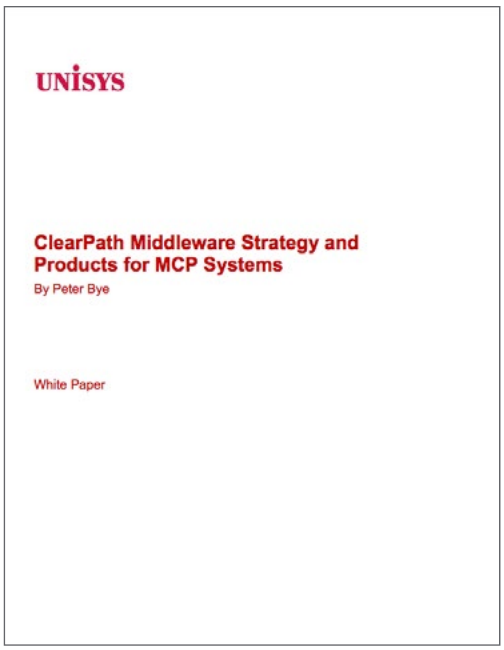
And, more importantly, it also is instrumental in helping you take advantage of everything the ClearPath fabric-based infrastructure has to offer.

To help you understand the importance of the relationship between middleware, the ClearPath environment, and the fabric, we have developed two detailed new white papers: "ClearPath Middleware Strategy and Products for OS 2200 Systems" and "ClearPath Middleware Strategy and Products for MCP Systems."

Each paper takes time to explain the role of middleware as an enabling technology, reviews Unisys middleware strategy, and describes the middleware products available in ClearPath OS 2200 and MCP environments. Then, the papers provide some examples of how these principles come together in a fabric-based ClearPath system.

Interested to learn more? Give "ClearPath Middleware Strategy and Products for OS 2200 Systems" and "ClearPath Middleware Strategy and Products for MCP Systems" a read today!





Resources

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

- ClearPath homepage
- Agile Business Suite homepage
- Business Information Server (BIS) homepage
- ClearPath & Innovation Blog
- ClearPath How-To Videos on YouTube
- ClearPath Libra/MCP Webinars
- ClearPath Dorado/OS 2200 Webinars
- eBook: Built for Today, Ready for Tomorrow: Unisys ClearPath Systems
- eBook: Understanding the Economics of ClearPath Systems
- eBook: How to Shift Your IT Focus from Administration to Innovation
- ClearPath Customer Education Homepage
  - Guide: ClearPath OS 2200 Course Catalog
  - Guide: ClearPath MCP Course Catalog
  - Guide: ClearPath OS 2200 and MCP Specialty Partitions Course Catalog
  - Guide: Agile Business Suite Course Catalog
- Newsletter: Developing *Agility* April 2015
- Newsletter: ClearPath Connection March 2015
- White Paper: ClearPath Middleware Strategy and Products for OS 2200 Systems **(NEW)**
- White Paper: ClearPath Middleware Strategy and Products for MCP Systems **(NEW)**