ClearPath Connection

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A Year of Change

By Ed Coleman, Chairman and CEO, Unisys Corporation

When I started at Unisys in October of 2008, I knew I was joining an organization with a long and illustrious history of innovation and leadership, especially in the mainframe sector. I knew Unisys had an excellent reputation for delivering complex, high-performance systems in demanding environments across the globe. I also knew the company was taking on the challenge of building a global outsourcing and services business. Yet I was sure that leveraging the company's core capabilities and strengths from the past – while adapting to emerging client demands and competitive pressures – would ensure Unisys plays a significant role in the future.

A major recession doesn't make an executive's job easier, but it has helped Unisys focus on how best to capitalize on changing times. With my management team, we created an agenda that focuses and invests in our areas of strength, while simultaneously reducing costs in response to new competitive drivers in our sector. And we sought to polish our image as a reliable and predictable partner by delivering solid financial results. I'm pleased to say we have made considerable progress toward these goals over the past year. For example, we completed a significant debt restructuring, increased net cash generation, and significantly reduced our cost base – all of which make us more stable and competitive for the future.

We have also set about building upon our strengths in:
• Security
• Data center transformation and outsourcing
• End user outsourcing and support services
• Application modernization and outsourcing

These areas of strength reflect major client demand domains, and build upon core skills and capabilities we have developed over many years. I am interested to hear what you think about our progress, and ways we can better serve your needs.

As many at Unisys will tell you, I'm obsessed with quality and customer service. I've revamped our customer satisfaction process, because I feel that delivering on your specific demands earns your future trust *and* enhances our reputation and business accordingly. I review customer satisfaction feedback regularly with my management team, and force action where we need to improve.

ClearPath – At the Heart of Unisys

As I have traveled across the world over the last year, I'm impressed by your enthusiasm for the technology-based solutions ClearPath delivers to your organization. It's been a consistent message from all ClearPath clients I've met. I understand how critically important this technology is to your businesses, and to your reputation for delivering consistent service to *your* customers. >>

This is a business capability on which I want to build. To do so, we must match your long-term commitment to this technology through initiatives that include:
• Extending long-term visibility into our technology roadmaps
• Stating, and delivering on, our commitment to future innovations
• Enabling your ClearPath systems to integrate into a service-oriented architecture (SOA)
• Ensuring that the economics of the ClearPath mainframe compare favorably against the alternatives in the market

Looking Forward

So far, 2009 looks like another successful year for ClearPath. We have closed long-term contracts with many of our largest clients, and continue to invest in research and development to generate the new services and product offerings you need to modernize and streamline your processes, applications, and infrastructure.

After a year on the job, I'm confident Unisys is well positioned to continue its decades-long tradition of innovation and delivering results in some of the world's most demanding and complex systems areas. As an example, our recent cloud computing announcements are generating excellent analyst responses, and we're pleased with the resulting positive headlines. This is what we strive for as innovators.

I want to see our reputation for innovation and delivery value grow among you and your colleagues. I welcome your feedback, and would like to know if we are meeting your expectations. ClearPath is at the heart of our business – we would like it to remain at the heart of yours.

Thank you for your business and continued support.

"...ClearPath is a modern mainframe and it's an open system. It runs industry standard hardware, supports state-of-the-art middleware, supports state-of-the-art development languages, and just happens to run operating systems that are known in the industry for being the most secure, reliable and highest performing operating systems in the industry." [1]

– Ed Coleman, Unisys Chairman and CEO

[1] Unisys Corp. 3Q 2009 Earnings Call Transcript. Seeking Alpha. 28 October 2009. Web. 2 November 2009.
  <http://seekingalpha.com/article/169503-unisys-corp-q3-2009-earnings-call-transcript?page=-1>

ClearPath Deliverables Speak Louder Than Words

How do you show commitment? With action – and over the last 12 months, Unisys has delivered new and updated products at unprecedented pace. Here's a rundown of what's new since October 2008:

- **NEW** entry-level, mid-level, and high-end **ClearPath Dorado servers**
  - **NEW Dorado 780 and 790 Servers:** High-end OS 2200 based servers that employ Unisys CMOS technology
  - **NEW Dorado 740 and 750 Servers:** Mid-range OS 2200 based that employ Unisys CMOS technology
  - **NEW Dorado 4080 and 4090 Servers:** Mid-range OS 2200 based servers featuring Unisys Next-Generation Server Architecture and Intel® processors
  - **NEW Dorado 4080 and 4090 High Availability (HA) Servers**
  - **NEW Dorado 4050 Servers:** Entry-level OS 2200 based servers featuring Unisys Next-Generation Server Architecture and Intel® processors

- **NEW** entry-level, mid-level, and high-end **ClearPath Libra servers**
  - **NEW Libra 780 and 790 Servers:** High-end MCP based servers that employ Unisys CMOS technology
  - **NEW Libra 4080 and 4090 Servers:** Mid-range MCP based servers featuring Unisys Next-Generation Server Architecture and Intel® processors
  - **NEW Libra 4080 and 4090 High Availability (HA) Servers**
  - **NEW Libra 450 Servers:** Entry-level MCP based servers featuring Unisys Next-Generation Server Architecture and Intel® processors

- **NEW ClearPath software portfolio releases**
  - **OS 2200 12.0:** A major operating environment release with new functionality in the key areas of application development and modernization, data center transformation, and security with more than 100 software enhancements
  - **MCP 12.1:** A significant operating environment update release with new functionality in the key areas of application development and modernization, data center transformation, and security for over 125 products

- **New BIS 46R1:** A major release with features that include an enhanced Developer Workshop that provides an integrated, multi–windowed graphical development environment for BIS script or JavaScript routines and the capability to build Java applications that access BIS resources

- **New AB Suite Release 2.0:** An important release providing many new capabilities, including test automation (ATT) and user interface development (AJAX and mobile device based-browsing)

- **NEW specialty engines**
  - **ClearPath OS 2200 QProcessor:** For high-performance IBM WebSphere MQ messaging
  - **ClearPath OS 2200 JProcessor:** For enterprise-class Java EE
  - **ClearPath MCP JProcessor:** For enterprise-class Java EE

- **NEW ClearPath professional services portfolio:** A range of services focusing on integration, SOA, and IT automation that are designed to help you achieve a Real-time Enterprise

- **NEW Agile Business Suite Transition services:** A menu of services to aid in migration from EAE, from planning to implementation

Our commitment to ClearPath customers is stronger than ever – and the last 12 months certainly prove that point! For more information about all of the new and updated products and services, please visit the eCommunity.

New White Paper Confirms the Economics of ClearPath Systems

Your ClearPath mainframe is the hub that drives your business. Powering a diverse array of applications and business processes, it remains a cutting-edge, state-of-the-art platform that continually promotes agility, responsiveness, and innovation.

However, ClearPath systems are the subject of widespread misconceptions, particularly when it comes to understanding the real cost of ownership. All too often, economic comparisons with other system types are made without considering all the relevant factors. In fact, alternatives that appear on the surface to be cheaper often prove to be far more expensive in practice.
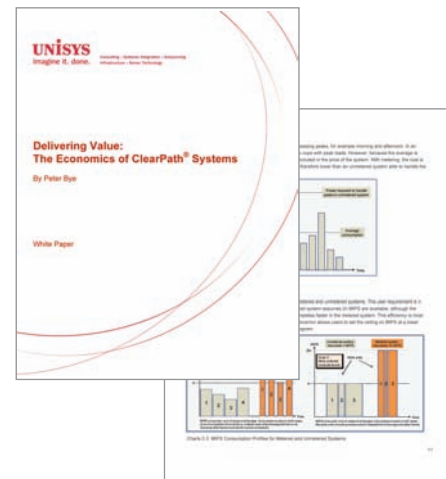
For example, advocates of the great "client/server boom" in the early 1990s predicted the death of mainframes. Experience proved otherwise. In addition to serious reliability and security problems, client/server systems' management costs, which were generally ignored by the enthusiasts, turned out to be as much as 70 percent of the total cost – completely altering the economics of their decision.

So if you are interested in learning about how ClearPath systems deliver great economic value from your IT investments, we encourage you to read the new white paper "Delivering Value: The Economics of ClearPath Systems."

Authored by Peter Bye, this paper examines the wide range of factors that contribute to the overall cost of an IT platform, and looks at the ways in which the economics of ClearPath systems excel when compared to the alternatives. Additionally, it provides in-depth analyses of the platform's capabilities, discusses the cost-saving qualities of each, and reviews how they work together to contribute to your ability to economically deliver IT service, ensure reliability, availability, and security, and speed the development of high-value applications.

The economic strengths of the ClearPath mainframe discussed in this particular paper can have a positive impact throughout your organization, and are best summed up in the following categories:

- **Reduced Administration Time:** High availability, efficient operations, support for multiple business-critical applications, the ability to accommodate processor loads close to 100 percent, and cross-platform automation enable ClearPath systems to operate with lower overall complexity, helping you more effectively manage the platform with fewer resources.

- **Better Cost Management:** With the ability to pay for only the resources you consume, while providing the flexibility to add processing power as needs dictate, ClearPath systems help you drive cost efficiencies, and maintain the agility needed to capitalize on emerging business opportunities. What's more, tight interoperability with co-operating systems and technologies allows the platform to fully participate in a service-oriented architecture (SOA) framework, which enables you to extract greater value from existing investments and avoid the expenses and risks associated with new implementations. >>

- **Shortened Development Time:** Offering a wide range of development options, including the popular Eclipse IDE (for Java, COBOL, ALGOL, and more) and Unisys Enterprise Application Environment (EAE), Agile Business Suite, and Business Information Server (BIS) tools, the platform speeds the release of innovative, high-value applications and IT services, without requiring specialist knowledge, or extensive, time-consuming training programs.

- **Lower Risk:** The high levels of reliability, security, availability, and stability inherent in the mainframe environment are cornerstones of the ClearPath platform, and work together to help you maintain operations and quickly recover in the event of a failure – helping you reduce the risks and costs associated with data vulnerability, downtime, and a lack of responsiveness.

The above factors maximize the value of the mission-critical applications that are typical of ClearPath environments. ClearPath users simply don't have to contend with the erratic behavior, unavailability, and poor security that are inherent in many other platforms – shortcomings that dramatically undermine confidence in sensitive systems in finance, government, and other sectors, and even lead to loss of business or worse. ClearPath users expect *and get* systems that are totally predictable and secure – all with the highest levels of productivity, too.

An indispensible resource for the ClearPath advocate, "Delivering Value: The Economics of ClearPath Systems" centralizes key ClearPath value propositions and documents many of the qualities you were already aware of – as well as some things you may not know.

As such, this paper helps you understand the ways to maximize the platform's economic value – and gives you the facts and figures you need to prove that your ClearPath mainframe is the most powerful, reliable, and economically sound system available. Visit the eCommunity to read it today.

Innovative ClearPath Libra 450 Server Delivers Power and Flexibility

MCP

There's a new ClearPath in town – the Intel® Xeon® processor based ClearPath Libra 450 Server. This platform is just the latest in what's now a long line of Next-Generation Server Architecture systems that deliver everything you expect from a ClearPath mainframe at a lower total cost of ownership. What's more, you sacrifice nothing in the way of MCP operating environment security, reliability, and capabilities while gaining the flexibility to run Microsoft® Windows® 2008 Enterprise Edition x64 on the same server hardware.

The Libra 450 Specs

The entry-level Libra 450 open mainframe offers up to two quad-core Intel® processors, along with a lower price entry point and maintenance costs that are aligned with other Intel® technology-based systems.

The Libra 450 Server boasts a performance range of 40 – 300 MIPs (972 to 7,290 RPMs) – with single thread performance of 200 MIPs – making it ideal for a wide variety of demanding workloads.

As always, there's no need to recompile or make any changes to your applications to move them to this MCPvm based platform. Complete code compatibility remains a hallmark of the ClearPath family of servers.

Finally, the Libra 450 platform offers Unisys powerful Capacity on Demand option, which allows organizations to respond to unpredictable changes in demand by quickly tapping into additional horsepower via temporary performance, emergency, and/or disaster recovery keys.

Match Business Needs to IT Costs

The Libra 450 system offers four flexible software-licensing options:
• User-based pricing on the two entry-level models (in increments of eight)
• Traditional MCP licensing based on performance models
• Agile Business Suite workload licensing
• Software Developer's Kit workload licensing with all compilers and application software development tools included

These options are designed to help you easily align your infrastructure expenditures to business demands.

Is the Libra 450 Right for Your Organization?

The ClearPath Libra 450 Server sets a new, lower price point with strong scalability. Learn more about this new server, including its robust high-availability features, by taking a look at the specification sheet in the eCommunity. And, contact your Unisys sales executive to find out if this system is right for your business and technical needs.

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Mastering the Unexpected: Unisys Extended Transaction Capacity (XTC) Now Available on ClearPath Dorado Next-Generation Server Architecture Platforms

OS 2200

Since we first announced ClearPath Next-Generation Server Architecture, which features Unisys ClearPath Servers using Intel® processor technology, we have followed a roadmap of incremental deliveries designed to offer excellent business value via standardization of IT infrastructure on Intel® processors – combined with proven ClearPath mission-critical mainframe attributes.

We're proud to announce that we have taken another **MAJOR** step in the Next-Generation roadmap with the introduction of the full functionality of Unisys Extended Transaction Capacity (XTC), which uses eXtended Processing Complex Locking (XPC-L) to enable host clustering for the ClearPath Dorado 4000 Family of Servers. By clustering multiple Dorado Servers, you gain two important features: continuous operations and access to greater overall processing capacity by adding a scale-out capability to the scale-up of a single host. The XTC functionality is included in the Dorado 4000 Plateau 2.0, which also includes a number of other reliability and resiliency enhancements.

XTC is a database record locking innovation for multi-host, clustered Dorado Server environments. The XPC-L server protects the integrity of data being updated by various system managers across a multi-host ClearPath environment. For example, with XPC-L the same database record can be accessed and updated by different applications on up to four different ClearPath Dorado servers. And should host operations be interrupted, transaction processing will continue because the clustered servers are accessing a shared common database.

Now available on both the Dorado 4080 and 4090 platforms, this new functionality, which enables real-time data delivery and secure, continuous business operations in a Unisys ClearPath Dorado multi-host environment, is clear evidence of Unisys continued commitment to ClearPath and to delivering the highest levels of resilience and availability for all members of the Dorado Family.

The introduction of XTC on the Dorado 4000 Family of Servers brings one of the most complex areas of Dorado technology – developed over many years to support the needs of the world's most demanding computing environments – to Next-Generation Dorado Servers. No small task – but one that we knew was essential for our Dorado customers.

ClearPath Dorado 4000 Servers offer a "best of both worlds" computing platform that combines Intel® processors, the innovative and robust OS 2200 operating environment, and proven ClearPath mainframe attributes of performance, security, reliability, scalability, manageability, and tight integration with open middleware. And now with XTC ultra high availability capabilities, the Dorado 4080 and 4090 Servers are ready to support highly complex, database-centric workloads.

For more information about ClearPath Dorado 4000 Servers, Unisys Extended Transaction Capacity, and Unisys Extended Transaction Processing Architecture, visit the eCommunity.

"The introduction of the XTC ultra high availability solution on the Dorado 4000 Family of Servers brings one of the most complex areas of Dorado technology – developed over many years to support the needs of the world's most demanding computing environment – to Next-Generation Dorado Servers."

Tech Corner: Behind the Scenes of the ClearPath OS 2200 QProcessor

OS 2200

By Diane Schaefer, Senior Software Engineer, Unisys TCIS

The WebSphere MQ product has been available running on the OS 2200 operating environment for a long time. It is just one of many options ClearPath customers have to integrate applications and data within their IT infrastructure and across to other systems.

In May 2009, we introduced a new specialty engine – the OS 2200 QProcessor – plus the availability of WebSphere MQ version 6.0 for ClearPath Dorado Servers. The OS 2200 QProcessor is dedicated to WebSphere MQ processing with tight OS 2200 integration and running under the control of the OS 2200 environment. Shipments of WebSphere version 6.0 and the OS 2200 QProcessor started on September 25, 2009. Please note that the OS 2200 QProcessor is supported on the ClearPath Dorado 4000 Series, Dorado 300 Series, and Dorado 700 Series.

With WebSphere MQ version 6.0 come a number of important new features, including:
- **Secure Sockets Layer (SSL) support**, which provides an added measure of security.
- **The introduction of WebSphere MQ Publish/Subscribe capability**, which eliminates any need for your OS 2200-based applications to "know" anything about the target applications with which they are exchanging messages. With this new feature, information is sent to a standard destination managed by MQ Publish/Subscribe, which handles further distribution.
- **A new clustering feature** that enables a group of queue managers to communicate directly with one another over a single network – without the need for a transmission queue, channel, or remote queue definitions.

Why Message Queuing for OS 2200 Environments?

Integration is everything in today's information-centric world. Message queuing (MQ) is just one of many ways you can connect your ClearPath applications and data with other applications. By using the very popular MQ approach, you gain the ability to:

- Easily integrate asynchronous applications for reliable and secure message delivery – either persistent or non-persistent
- Run independently with or without an active network connection because messages are retained on queues and are not lost
- "Trigger" application initiation to process messages
- Fit into the integration strategy of a heterogeneous data center
- Provide both synchronous and asynchronous exchange of system and application messages
- Offer applications that are written to use message queuing techniques without being affected by changes in the way queue managers work
- Eliminate the need for programmers to worry about communications protocols – message queuing handles them

This latest version of WebSphere MQ is available only via the OS 2200 QProcessor, which is specially engineered to integrate seamlessly with your OS 2200 environment and meet your high expectations in the areas of security, performance, and reliability (more about this later.)

With the OS 2200 QProcessor, you are able to continue to use the following: existing MQSeries version 5.2 (a.k.a. MQS2200) applications without relinking, the UNX processor for management of queues and the environment, and the WMQ2200 daemon for life cycle management and debugging. As in previous versions, WebSphere MQ is integrated with Open Distributed Transaction Processing (TM2200) so that your OS 2200 database updates and WebSphere MQ messaging are all completed within global transactions. >>

The difference is that the actual processing of messages is done on the OS 2200 QProcessor. This greatly reduces the footprint of WMQ2200 in terms of Dorado system IP, SUP, and CPU resources. In addition, running WebSphere MQ on the OS 2200 QProcessor allows OS 2200 applications to take advantage of 64-bit threading of queue managers, plus the new version 6.0 features I highlighted above. Finally, this approach simplifies the software release process, which allows us to get new WebSphere MQ releases and functionality to you faster.

Let's take a look "behind the scenes" at how the OS 2200 QProcessor is engineered and review what it takes to migrate to WebSphere MQ version 6.0 running on this specialty engine.

Robust Technology Delivers High Availability

The OS 2200 QProcessor specialty engine runs under the control of the OS 2200 operating environment and comprises both hardware and software elements – some designed and developed by Unisys and others selected from the best industry-standard solutions on the market.

Special care has been taken to ensure the highest levels of reliability and serviceability for the OS 2200 QProcessor specialty engine, including selection of a best-in-class Intel® platform and making the entire unit field replaceable to improve service quality and timeliness.

Ensuring the highest levels of availability is always a primary driver of our engineering efforts and the OS 2200 QProcessor is no exception, featuring:
• Redundant NIC ports
• Redundant switches for its private internal LAN
• The ability to enable resilient IPs on the OS 2200 operating environment

In addition, there are two storage options that allow you to align the OS 2200 QProcessor implementation with your own backup and recovery needs:
• Three on-board SATA one-terabyte hard drives
  – Two RAID 10 drives for MQ logs and operating system software
  – One non-RAID drive for the /var/mqm file system
• Customer-provided external storage, which can be used to store the WebSphere MQ file systems or to backup log and data files
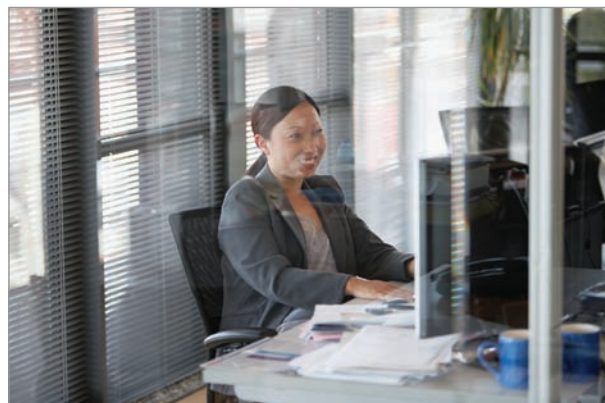
We've enabled disk mirroring for the OS 2200 QProcessor, thus providing seamless recovery from a disk failure.

Finally, you have the option to configure a second, redundant OS 2200 QProcessor as a "standby" for primary OS 2200 QProcessor operations. This provides the ability to recover and restart the WebSphere MQ environment in the event of a failure. The primary system's IP addresses are enabled on the secondary system and access to the OS 2200 QProcessor is restarted from the WMQ2200 daemon. If you keep your WebSphere MQ data and logs on the internal disks, the physical disks can easily be moved to the standby system if necessary. If you use the optional external disk subsystems, then the disk subsystems simply need to be mounted on the secondary system to continue processing. In the future, we plan to implement a heartbeat check and automated failover between the two OS 2200 QProcessors. >>

The OS 2200 QProcessor software environment includes:
• A specially adapted graphical user interface (GUI) Administration Console
• WebSphere® MQ version 6.0 for ClearPath OS 2200
• Interconnect, Unisys developed software that provides communication between the OS 2200 partition and specialty engine.

The entire environment has been configured for optimal WebSphere MQ operations.

ClearPath Strength Security

Security is built into the very foundation of every ClearPath server – and that's also the case for the OS 2200 QProcessor specialty engine. Its security follows the very same standards as ClearPath OS 2200 systems, was designed by Unisys ClearPath security experts, and is built into the specialty engine firmware.

Let me review some of the major things we've done in the way of security:
• The operating environment on the OS 2200 QProcessor is configured out-of-the-box to maximize security, while allowing required access and flexibility. For example:
  – Installation and configuration are limited to only those software elements that are necessary to support the MQ environment. This minimizes possible security and stability problems that might come from software that is not intended to be executed.
  – Network services are limited to only those required for necessary functionality, which greatly reduces opportunities for the system security to be maliciously targeted. For example, the device has no email or HTTP interface.
  – Root access is tightly controlled and limited to only a restricted-access local console.
• The OS 2200 QProcessor is connected to the ClearPath Dorado host and Operations Server via its own private LAN – making it impossible for any network-based attack to directly affect host-to-specialty-engine traffic. We recommend that the private LAN be made physically secure by locating it within the confines of your data center.
• The Interconnect software can be (optionally) set to only accept incoming connections from specific OS 2200 hosts.
• Public access to the specialty engine is further protected by a firewall, which is pre-configured such that most of the ports on the public adapter are closed by default.
• Configuration and management of the OS 2200 QProcessor is tightly controlled via a web-based Administration Console, which can only be accessed from Operations Server and your internal LAN. Each user must be registered before access is granted and default passwords must be changed the first time new users log in and are subject to similarly strict guidelines as those used in your OS 2200 operating environment.

Simplified and Integrated Management Capabilities

A new GUI-based Administration Console is now available with the OS 2200 QProcessor. Designed for ease-of-use, it supports remote, web-based operations across a secure, private LAN between the OS 2200 QProcessor and a Microsoft Windows system, such as the Service Processor. >>

The Administration Console gives you the ability to remotely perform a wide range of management and administrative functions for the OS 2200 QProcessor, including:
• Boot up and shut down
• Backup and restore
• Firewall configuration
• Software package management
• Dump and log management
• IP address and password set up
• Managing MQ queue managers and WebSphere MQ logs
• Viewing MQ error logs directly in the web browser

In addition, customers using ClearPath Operations Server will see that it's simple to oversee the specialty engine from this console as client software running on the OS 2200 QProcessor monitors the platform and passes alerts over to Operations Server when needed.

Back Up and Restore

The Administration Console allows you to back up and restore data from the OS 2200 QProcessor to your OS 2200 system. Several backup profiles that back up state and network configuration information are provided by default. The backup and restore feature uses OS 2200 CIFS shares and the OS 2200 Interconnect product provides a background run that helps to process backup and restore requests from the device.

Migrating to WebSphere MQ version 6.0 and the OS 2200 QProcessor

Migration to the OS 2200 QProcessor and WebSphere MQ version 6.0 for ClearPath Dorado Servers is straightforward. The first step is to install the new WMQ2200 product and OS 2200 QProcessor specialty engine on your Dorado server. Using the Queue "load" and "unload" utility (IBM support Pack MO03), MQS2200 userids and groups can be easily migrated to the OS 2200 QProcessor. In addition, we supply scripts to migrate all queue manager objects, messages, and other related items to the OS 2200 QProcessor. Once all the items have been migrated, a simple "recover and restart" of the queue managers is all that's needed to continue processing. The elapsed time for the migration of objects, messages, and so on, will vary depending on the volume of messages in your queues at the time of migration – but should be less than an hour in all but the most extreme circumstances.

Getting Started with OS 2200 QProcessor

To learn more about the OS 2200 QProcessor, visit the WebSphere MQ section of the eCommunity to see presentation materials and the specification sheet.

If you have any questions about this article, send me a note.

Partner News: SightLine Systems Corporation

As a long-time Unisys partner, SightLine Systems has been delivering leading-edge performance management solutions to Global 2000 organizations for over 20 years. SightLine's advanced technology collects thousands of relevant metrics from the business-critical systems across your enterprise – servers running the ClearPath MCP and OS 2200 operating environments as well as Microsoft Windows, UNIX®, Linux®, VMware®, HP OpenVMS, Stratus VOS, and others. SightLine products are qualified with the latest releases of Unisys platforms and operating systems.

Today, many data centers house a heterogeneous mix of hardware platforms and operating systems. The SightLine solution helps organizations gain an enterprise-wide view of the IT landscape, providing a single source for efficient monitoring, analysis, and capacity planning purposes across the environment. This eliminates the need for per-platform point solutions and minimizes silos, finger pointing, maintenance costs, implementation timeframes, and support efforts.

SightLine also helps organizations manage the performance of applications and databases, including ClearPath Enterprise Database (DMS II), ClearPath DMS and RDMS, Oracle, Microsoft SQL Server, Microsoft Exchange, and others.

With a long history of helping ClearPath shops address performance and capacity management and planning challenges, SightLine Systems stands ready to help your organization get the most value and highest performance from your IT infrastructure investment.

To view a demo, visit the SightLine Systems web site. And, for more information, please contact Bob Carnahan, Vice President – Sales, SightLine Systems Corporation.

Specifications are subject to change without notice.