Priority Health optimizes data center efficiency and flexibility with HP Integrity servers and blades

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PriorityHealth®

HP customer case study: Priority Health

Industry: Insurance

Objective:

To address continually growing business demands with limited data center space and resources, Priority Health needed a solution that provided greater resource utilization and a smaller physical footprint without sacrificing flexibility.

Approach:

Working with technology partners Open Systems Technologies (OST) and HP Services, Priority Health implemented HP Integrity blades and servers running HP-UX 11i with HP StorageWorks XP24000 arrays. HP Services was engaged for proactive infrastructure management and fast issue resolution.

Business technology improvements:

• Reduced physical server footprint

• Boosted performance dramatically at a fraction of the power and cooling requirements

• Simplified management of IT to free staff for more strategic projects

Business benefits:

• Met service-level commitments for a diverse user community while taking on significantly greater workloads

• Was better able to align IT with business requirements

• Reduced storage costs by one-third

• Maintained continuous business productivity during system maintenance

Building on a history of success with HP

Priority Health is a nationally recognized health insurance company providing a broad portfolio of products, including commercial and government health plans, to more than 8,500 employers and a half million individuals in 55 counties throughout Michigan. With its core mission being to improve health by providing all people with access to affordable, high-quality healthcare, Priority Health has consistently invested in advanced technology to enable greater efficiency and responsiveness across its business.

Facing 200 percent annual growth in some of its most critical applications and ever-growing demands for new and expanded business services, Priority Health again looked toward technology not only to address its

immediate needs, but also to provide a foundation for efficient, dependable long-term growth. The company did not have to look far. As a long-time HP customer, Priority Health engaged its trusted technology partner and HP reseller, Open Systems Technologies (OST), to assess its objectives and recommend an appropriate platform. The solution: HP Integrity blades and servers running HP-UX 11i.

Ed Kosten, Manager of Infrastructure Engineering at Priority Health, explains. "We've had great success with HP in the past, so we weren't interested in looking elsewhere. But Integrity and the [Intel®] Itanium® architecture were uncharted ground for us. Working with OST and HP, we were able to bring an Integrity server into our test lab and gain a better understanding of how our software would run on it. Based on the results we saw in the lab and with HP's demonstrated commitment to the Itanium architecture, we were confident that Integrity offered our best option for successfully growing our IT infrastructure while assuring the high quality of service our employees and customers have come to expect."

Improving performance with reduced energy demand
Today, Priority Health runs a broad range of Oracle® applications on Integrity BL860c Server Blades and rx7640 Servers, both running the HP-UX 11i v2 operating environment, to deliver mission-critical virtualization with robustness. Priority Health's most critical applications, including financials, claims processing, data warehouse reporting, Web portals, and even its phone system, all require the high levels of performance, availability, and scalability that Integrity platforms and HP-UX 11i deliver. While certain applications such as the data warehouse demand the expansive CPU and memory resources of the rx7640 server, Priority Health takes advantage of space-efficient Integrity blades wherever possible to gain reliable high performance at a fraction of the power and cooling requirements. HP Services also helps Priority Health enhance the operational effectiveness of its Integrity systems by providing Proactive 24 service, which includes advance problem identification and responsive technical assistance whenever needed.

"Like many data centers, our physical space is very limited and energy efficiency is a critical issue to our organization," says Kosten. "Integrity blades provide us with a very efficient way to get the performance and availability we need with the added advantage of reduced energy consumption. Integrity blades also fit perfectly into our grid strategy, providing small modular computer resources that enable increased flexibility and scalability as we continue to grow. By moving to Integrity, with the support of HP Services, we've been able to meet service-level commitments and deliver consistent high performance to our diverse user community while taking on significantly greater workloads."

Choice of operating environment was also crucial. Priority Health relies on HP-UX 11i to maximize the advantages of its Integrity servers, but is also evaluating the advantages of running multiple operating systems on a single machine.

"Of all the UNIX® flavors on the market, we feel HP-UX 11i is the most stable and offers the most mature feature set," asserts Kosten. "For our business, high availability, security, scalability, and manageability are all critical factors in choosing an operating system, and HP-UX 11i excels in all those areas. And we're confident in the long-term commitment from HP to enhance HP-UX 11i with additional performance capabilities, improved online management, and expanded storage support.

"We also see advantages to running Linux and Windows® alongside HP-UX 11i to increase utilization and gain additional flexibility, especially when utilizing Integrity Virtual Machines. Integrity VM will allow us to get the most out of our grid strategy, leveraging Integrity blades to create virtual servers for any of our three operating systems in a fraction of the time it would otherwise take to procure and install physical machines. With our ever-expanding need for applications, that means we can be much more responsive to the demands of our business."

Achieving productive disaster tolerance
Priority Health extends the theme of efficiency and flexibility across all aspects of its business technology infrastructure. For example, to achieve productive high availability and disaster tolerance, Priority Health combines HP Serviceguard with Oracle Real Application Clusters (RAC) not only to enable instant failover in the event of a problem, but also to allow non-disruptive system maintenance to ensure optimal performance.

"We view high availability solutions like Serviceguard and RAC as more than just an insurance policy, they're business enablers," continues Kosten. "Since we replicate data between two data centers, we can accommodate more frequent maintenance periods by moving critical applications from one data center to the other. This helps us to satisfy the technical requirements of our infrastructure and keep the business running without disruption. And at the same time, we have a solid protection strategy to recover full operations whether we lose a single server or an entire data center."

HP storage also plays a key role in assuring effective data management and protection. With the HP StorageWorks XP24000 Disk Array, Priority Health has a highly available storage platform that includes hardware redundancies, hot-swappable components, and non-disruptive online upgrades. As a tightly integrated part of Priority Health's clustering and disaster recovery solution, the XP24000 array not only enables complete business continuity, but also delivers enhanced data protection and security features that minimize exposure to data loss around the clock.

Customer solution at a glance

Primary applications
Priority Health runs a wide range of custom and off-the-shelf applications against a large Oracle database, including financials, claims processing, data warehouse reporting, Web portals, and a VoIP phone system. Priority Health's applications support approximately 1,000 employees; tens of thousands of providers such as hospitals, doctors' offices, and agents; and hundreds of thousands of individual insurance plan members.

Primary hardware
• HP Integrity rx7640 Servers
• HP Integrity BL860c Server Blades with Intel Itanium 2 processors
• HP StorageWorks XP24000 Disk Array

Primary software
• HP-UX 11i v2
• HP Integrity Virtual Machines
• HP Serviceguard
• Oracle Database
• Oracle Real Application Clusters (RAC)

HP Services
• Proactive 24 Service for servers
• Critical Service for storage
• ITSM Assessment

Priority Health also takes advantage of Critical Service from HP Services, which provides leading-edge remote technologies and tools to monitor the storage environment's stability, minimize downtime, enhance performance, and increase return on investment. Then if a critical problem occurs, HP Services helps Priority Health address it quickly via accelerated recovery and restoration processes.

"Our experience with HP storage and the XP line in particular is that it consistently provides measurable value to our production systems," notes Kosten. "As an early adopter of the XP24000 we expect to see everything run more efficiently and with higher performance. We're also very encouraged with the economics of the XP24000 in making it more feasible to take advantage of added capabilities such as external storage and thin provisioning. Based on our analysis, we'd expect the cost for those features to be about one-third of what they were previously."

Aligning IT with the needs of the business

Keeping Priority Health's mission-critical business technology infrastructure running at its best is a collaborative effort among Priority Health IT staff, partner OST, and HP Services. OST continues to provide valuable skills and experience for the HP and Oracle environments and will continue to guide the evolution of Priority Health's data center. In addition, Priority Health calls upon HP Services for its deep technology and process expertise and strategic assessments.

"We put a lot of faith and trust in OST for all our technology needs," says Kosten. "Also, when we need very high levels of technical expertise to address particularly complex issues, we turn to HP Services, which is always responsive to our needs for technical support. We know we can count on HP Services to isolate and resolve the problem quickly and cost-effectively. We also engage HP Services on an annual basis to perform an ITSM assessment, which we use in our decision-making process every year. This has been essential in helping us move toward becoming an ITIL-standardized organization that consistently delivers value to our business."

With its investments in business technology continually proving their value, Priority has experienced a notable shift in the way IT staff and business users relate. No longer does IT have to push through technology initiatives; instead, the business is turning to IT as a strategic partner in enabling enterprise-wide improvements.

"Priority Health has come to understand how investments in technology affect business outcomes," concludes Kosten. "This is extremely significant as we move forward because everything we do in IT is now aligned with the needs of the business, which are growing and changing all the time. That's why it's so important that we choose business technology that's proven, flexible, cost-effective, and efficient to scale and manage year after year. And with HP we get the added value of service management experts who can help us continually improve our service levels to the business. The combination of HP infrastructure with Integrity blades and servers along with HP Services has definitely helped improve IT efficiency, which frees up more time and resources to focus on the strategic needs of our business."

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