SUSE

Pearl Global

Industry and Location
Manufacturing | India

Product and Services
SUSE Linux Enterprise Server
for SAP Applications

91%	20%
reduction in time taken to produce key reports	raise in performance levels

Pearl Global Industries enables business expansion with SUSE, SAP and Hitachi

Success Story

At-a-Glance

A period of rapid growth placed strain on the IT infrastructure supporting Pearl Global Industries' mission-critical systems. To drive greater agility and establish a robust roadmap for future expansion, the manufacturer upgraded its SAP applications and migrated to the widely supported, highly flexible SUSE® Linux Enterprise Server (SLES) for SAP Applications operating system, running on Hitachi Blade 500 servers — enabling further expansion.

Overview

Throughout its facilities located across Bangladesh, India and Indonesia, Pearl Global Industries manufactures top-quality women's, men's and kid's fashion for leading brands, such as Ann Taylor, Banana Republic and Ralph Lauren. The company employs up to 10,000 people across its manufacturing facilities in South Asia and handles a wide range of manufacturing techniques for its clients, including needlework, dyeing and smocking.

Challenge
Infrastructure two sizes too small

Each day, Pearl Global Industries aims to meet its goal of delivering a wide range of cost-effective apparel-sourcing solutions and producing the freshest fashion for

its clients. To successfully and efficiently achieve this, the manufacturer must effectively manage operations with external suppliers and distribution centers, and carefully negotiate production quantity and delivery relationships. These activities require a stable IT infrastructure able to process large volumes of core data. As the company grew, it discovered that its existing systems were simply no longer up to the task.

Subodh Kumar Patro, deputy general manager IT — IDC & SAP Infrastructure at Pearl Global Industries, says: "For approximately seven years we had been running HP-UX on HP Itanium servers. Of course, when we initially invested in this infrastructure we didn't expect to experience the level of business growth that we see today. So, as we grew, it became clear that we needed to refresh our IT architecture, especially as our existing technology was becoming unable to efficiently process higher workloads.

"Doing nothing to improve our architecture would have risked the stability of our systems, which, in turn, could have hindered the services we provide for our clients. This is because our HP Itanium servers were near end-of-life, which also meant that finding people with the skills in India to support our systems was becoming increasingly difficult. This could have

> "With SUSE software, Pearl Global Industries is free to innovate and benefit from participating in the open source Linux community."

SUBODH KUMAR PATRO
Deputy General Manager IT — IDC & SAP Infrastructure
Pearl Global Industries

placed us in an uncomfortable position if we had encountered significant problems.

"With the performance of our systems decreasing, our sales, inventory and purchasing reports were becoming much slower — making it harder for executive decisions to be made quickly. This issue was becoming particularly acute in the run-up to the auditing period in our financial calendar."

At Pearl Global Industries, every moment counts: manufacturing, distribution and delivery processes must be completed within strict timeframes agreed in contracts with clients. If there are any delays, the company runs the risk of losing customers and damaging its strong reputation for reliable execution.

"In addition to the performance and support issues we faced, we were also experiencing compatibility issues between HP-UX and our Oracle database, as well as with HP-UX and SAP ECC," says Patro. "We use SAP technology to run mission-critical applications, such as billing and order tracking, and to monitor the flow of materials and goods across our business. We store the data for these SAP applications in our Oracle database.

"We began to find that our HP-UX deployment was not ideally suited to support SAP applications, and this was making life more difficult for our IT department, who were keen to realize the benefits of upgrading our SAP platform."

Pearl Global Industries explored ways to grow its architecture to meet its needs with its existing vendor but was disheartened by the limited options on offer.

Patro says: "We felt locked into our legacy system and cut off from the innovative world of more flexible platforms such as Linux and x86. This vendor lock-in left us unable to tailor our architecture to precisely match the needs of our systems for the best price and obstructed us from planning ahead to adapt our systems to meet future growth."

> "We no longer experience compatibility issues. As the name suggests, SUSE Linux Enterprise Server for SAP Applications is fully optimized for SAP workloads, helping us to ensure strong uptime and high performance for our core planning, management and reporting systems."

SUBODH KUMAR PATRO
Deputy General Manager IT — IDC & SAP Infrastructure
Pearl Global Industries

Solution
New solutions for a season of success

Pearl Global Industries decided to replace its HP Itanium servers with five Hitachi Compute Blade 500 servers with x86 processors. At the same time, the company migrated from HP-UX to the open source, widely supported SLES for SAP Applications operating system.

Patro says, "When deciding which Linux distribution to implement, we compared Red Hat offerings with SLES. It was clear that SLES was better suited for our company, thanks to the high degree of compatibility between the operating system and the SAP solutions. Indeed, the strong partnership between SUSE and SAP gave us great confidence in the solution.

"We chose to run our SAP ERP environment on a 5-node Hitachi Compute Blade 500 because it offers unparalleled virtualization capabilities and has the performance and capacity to support our business growth. The fact that the Hitachi servers use x86 processors was another reason we opted for the hardware; we knew it was time to break away from being locked into a closed, proprietary architecture."

On two of its five blade servers, Pearl Global Industries runs two instances of SLES for SAP Applications, supporting its Oracle Database landscape and the SAP ERP Central Component. The remaining three blades are virtualized using VMware ESX Server, hosting multiple virtual instances of SLES for SAP Applications to support Pearl Global Industries' SAP application servers. Also, running in this virtualized environment are data backup and disaster recovery systems.

"During the implementation process, we took the opportunity to upgrade to SAP Enhancement Package 7 for SAP ERP 6.0, which lays the groundwork for future upgrades of SAP products," says Patro. "We had wanted to do this with our previous architecture but were limited by compatibility issues."

SUSE

> "All the time that our IT staff used to dedicate to changing the parameters of partitions can now be channeled into activities that add value to Pearl Global Industries, such as testing and refining new SAP functionality for our business users."

SUBODH KUMAR PATRO
Deputy General Manager IT — IDC & SAP Infrastructure
Pearl Global Industries

Getting the perfect fit

For Pearl Global Industries, migrating to SLES for SAP Applications was a smooth and successful process, and the company was quick to take advantage of the operating system to optimize business agility.

Patro says: "We were very impressed with the seamlessness of the migration process to SLES for SAP Applications; we experienced no downtime, implemented some elements ahead of time and completed the whole project on schedule. Once we had implemented the solution completely, there were no issues and we got it up and running very smoothly.

"Once installed, we quickly got to work exploring the features of the system, such as the Page Cache Management option, which helps optimize the performance of our SAP software."

Pearl Global Industries uses the Page Cache Management option in SLES for SAP Applications to ensure high performance when working with large SAP workloads. Normally, the Linux kernel frees up rarely accessed application memory pages and uses them as a general-purpose cache to improve overall system performance. As many SAP applications require rapid access to data, potentially including data that is accessed relatively infrequently, this can cause unacceptable delays as the system needs to keep going back to disk and reloading the cached-out memory pages. With the SUSE Page Cache Management option in place, the Linux kernel is limited in the amount of cache memory it can use, and application memory is prioritized, helping to keep response times as fast as possible for SAP users and applications.

Results
A whole wardrobe of opportunity

Having refreshed its IT infrastructure with Hitachi Compute servers and SLES for SAP Applications, Pearl Global Industries has a reliable, high-performance platform for SAP ERP and can more easily fine-tune its architecture to meet the changing needs of the business as it grows.

> "Thanks to SUSE, we are better placed to meet the future needs of our clients, and we have the tools to grow and expand our business."

SUBODH KUMAR PATRO
Deputy General Manager IT — IDC & SAP Infrastructure
Pearl Global Industries

Patro says: "Moving to SLES for SAP Applications has enabled us to achieve what we set out to do: to break away from being locked into proprietary technology that limits our ability to grow. With SUSE software, Pearl Global Industries is free to innovate and benefit from participating in the open source Linux community.

"Being part of this community also means that we have wider access to support than ever before, which improves our resilience against unforeseen problems and makes any issues that may arise much easier and more cost-effective to resolve. With SLES for SAP Applications, we have more control over our architecture and the ability to run on the hardware of our choice. We can run multiple logical partitions on our Hitachi hardware supporting different operating systems harmoniously and efficiently."

The close partnership between SAP and SUSE has empowered Pearl Global Industries to overcome its previous compatibility issues.

"We no longer experience compatibility issues," says Patro. "As the name suggests, SLES for SAP Applications is fully optimized for SAP workloads, helping us to ensure strong uptime and high performance for our core planning, management and reporting systems."

Spotting trends faster

After establishing a high-performance, flexible solution with SUSE Enterprise Server for SAP Applications, Pearl Global Industries has slashed the time taken to produce critical sales, auditing and inventory reports.

"Our reporting is so much faster than before," says Patro. "Reports that used to take 45 minutes now take less than five minutes. Quicker reporting provides our business with a great advantage: with faster access to data, we can stay ahead of the curve with our buying and logistics coordination. What's more, having accelerated overall system performance by 20%, we no longer experience bottlenecks in the run-up to the auditing period.

"With this capability, we can stay competitive and ensure that we always have the best quality materials at the best price, so we can produce and deliver excellent

fashion to our clients on time, every time."

Saving time, adding value

Patro says: "Not only have we saved time by speeding up reporting, but we have also cut the time required to maintain and manage our architecture.

"Previously our IT teams would have to set kernel parameters for each partition and component manually; this would sometimes take up to 10 hours, because it was necessary to reboot the system after each change to any parameter. Now, it takes just over one hour for our staff to change the parameters of partitions and requires only one reboot to finalize any changes. All the time that our IT staff used to dedicate to changing the parameters of partitions can now be channeled into activities that add value to Pearl Global Industries, such as testing and refining new SAP functionality for our business users."

As SLES for SAP Applications makes creating and managing environments easy, IT staff at Pearl Global Industries can quickly set up new virtual servers, enabling them to thoroughly test updates, patches and new functionality before they are rolled out. This enables the IT team to minimize disruption to services by ensuring that software is always precisely calibrated for its systems and users.

Patro says: "SLES for SAP Applications has provided us with a clear roadmap for the future; it is the first and most important step toward embracing the SAP HANA

in-memory database, which we intend to adopt in coming years. Thanks to SUSE, we are better placed to meet the future needs of our clients and have the tools to grow and expand our business."

Benefits

- Cuts the time taken to produce key reports from 45 to five minutes, helping to drive quicker executive decisions even during busy accounting periods.
- Elevates performance levels by 20% and ensures consistent uptime.
- Automates the task of calibrating system configurations, giving staff more time to dedicate to value-add activities.
- Helps IT staff deliver more reliable, better tested solutions by providing them with the flexibility to easily create and manage testing environments.

Find out how SUSE can help you become an innovation hero!

- Sales-Inquiries-APAC@suse.com
- Sales-Inquiries-EMEA@suse.com
- Sales-Inquiries-LATAM@suse.com
- Sales-Inquiries-NA@suse.com

SUSE

For more information, contact SUSE at:

+1 800 796 3700 (U.S./Canada)

+49 (0)911-740 53-0 (Worldwide)

Innovate
Everywhere