

**Objective**

Replace IT infrastructure which was reaching the end of its six-year refresh cycle

Approach

Reviewed solutions from three IT major vendors

IT Matters

- Reduced power consumption by 27 per cent and heat dissipation by 30 per cent
- Reduced space usage by 28.5 per cent
- Halved backup time, from six hours to three hours
- Compressed database by 52 per cent

Business Matters

- Reduced Total Cost of Ownership (TCO) considerably
- Ensured reliability of system running mission-critical SAP environment

Greaves cuts Total Cost of Ownership considerably with SAP infrastructure upgrade

HPE servers and storage provide reliable mission-critical system



One of the six Greaves manufacturing facilities in India

Engineering company Greaves Cotton Ltd. needed to replace its core IT infrastructure, which was reaching the end of its planned lifecycle. After reviewing proposals from three major IT vendors, the Company chose a solution from HPE based on HP-UX and Intel® Itanium® processors. The new system is reliable, easy to manage, and has improved performance.

Challenge**Infrastructure refresh**

Based in Mumbai, Greaves Cotton Ltd. is a well-established Indian engineering company, with six manufacturing units throughout the country. It produces a wide range of automotive engines, industrial engines, generators and farm equipment, with customers in India and overseas.

To manage its business, Greaves runs SAP Enterprise Central Component software on its main IT infrastructure, with Oracle as the database. This provides a broad range of Enterprise Resource Planning functions, including handling financial transactions, production and business intelligence. These applications are mission-critical for the company, and must run reliably to enable Greaves' 24/7 production operations to keep functioning without interruption.



Greaves manufactures more than 400,000 engines annually with a turnover close to USD 300 Million

For its core infrastructure, the Company has a policy of reviewing and refreshing the system every six years. Until recently, Greaves was using i2 series server blades and EVA storage from Hewlett Packard Enterprise (HPE), which were providing a reliable solution with no downtime or major issues, but had reached the end of the six-year refresh cycle. There was also a steady increase in the number of end users, which was placing increasing pressure on the hardware.

“With an ageing infrastructure, we wanted to reduce the risk of downtime. Additionally, our CPU and memory utilisation were high, and we wanted to reduce them,” says Mr. D’souza, general manager – IT at Greaves. “Our storage was also almost full, and we were bringing in additional users.”

Solution

Intel® Itanium® architecture

To meet its needs, Greaves reviewed proposals for its SAP system from three large IT companies, which included solutions based on an x86 architecture. Following this review process, Greaves selected a solution from HPE, based on Integrity BL860c and BL870c i4 Server Blades with Intel Itanium processors. The solution includes HPE 3PAR StoreServ 7200 Storage, and uses the HP-UX 11i v3 operating environment.

“Although the competitive vendors reduced their prices drastically, we decided to stick with HPE for the simple reason of technology, and for its reliability,” says Mr. D’souza. “We had been users of HPE for the previous six years, and that gave us an additional reason to choose them – we felt very confident that HPE was supporting the hardware and software for the long-term.”

The HPE Technology Services team designed the architecture for the new system, with inputs from Greaves’ IT department. HPE local partner, Unique Solutions, worked with HPE to handle the move to the new system.

“The partner did a great job, and everything went smoothly, with the migration completed on time,” says Mr. D’souza. “One of the commendable results was that they managed to achieve a 52 per cent compression of our database.”

The new HPE infrastructure is located in a data center near Mumbai, and the SAP applications running on it are used by 900 people throughout Greaves’ business.



Greaves deploys state-of-the-art infrastructure and IT systems at all its facilities across geographies in India

Benefit

Reduced Total Cost of Ownership

According to Mr. D'souza, the new HPE infrastructure has reduced Total Cost of Ownership (TCO) considerably. He comments, "We benchmarked the new system against our existing equipment, and found the TCO would come down drastically."

As part of this benchmarking, Greaves calculated that power consumption would come down by 27 per cent and heat dissipation by 30 per cent, and the infrastructure would use 28.5 per cent less space. Another factor driving down TCO is that Greaves can share the new storage with other applications, including Product Lifecycle Management.

Manageability has improved, with fewer points of failure, due to reduced cabling in the blade server infrastructure. Software deployment is now more flexible and efficient, thanks to HP-UX Virtual Partitions (vPars) and Integrity VM v6.1.

Backup time halved

With the new system, which uses a newer generation of tape technology, the backup window for the SAP system has reduced by 50 per cent, from more than six hours to only around three hours. Mr. D'souza explains, "We have parallel backup processes, so at the same time we can do a backup of two or more systems, which means that the production backup time has drastically reduced."

"If our system is taking too much time in backup, it puts more load on the infrastructure," says Mr. D'souza. "Our plants are running 24/7, so with the backup window reduced, our users can now do their normal transactions in the time that is freed up on the system."

Greaves has also found that jobs are now running faster, due to the increased performance of the new HPE infrastructure and higher LAN and SAN bandwidths, and that response time has improved for end users.

The storage system allows for radial placement of production data on outer rings, which enables faster read/write. File system re-organisation time has also been drastically reduced, due to automatic zero reclaim support with thin provisioning support.

Fast support

"HP-UX is a very stable environment, everything is very smooth, and it's simple to manage," says Mr. D'souza. "We feel assured in the resilience of the system."

If support is required, Greaves calls HPE, and Mr. D'souza comments, "We are very confident, with nothing to worry about – 24/7, we can definitely rely on HPE."

Case study

Greaves
Cotton Ltd.

Industry

Engineering

Customer at a glance

Application

SAP Enterprise Central Component

Hardware

- HPE Integrity BL860c i4 Server Blades
- HPE Integrity BL870c i4 Server Blades
- 3PAR StoreServ 7200 Storage

Software

- HP-UX 11i v3 operating environment

HPE services

- HPE TS Support Services for 5 years (24*7 service) with 4 hour response time

“HP-UX offers a highly robust and stable environment, coupled with round-the-clock ease of management, we know we can rely on HPE.”

— Anil D'souza, general manager - IT, Greaves Cotton Ltd.

HPE also provides predictive maintenance, with a direct connection to Greaves' hardware. This enables HPE to see logs and other information, and to respond quickly to any faults, or indications that a failure is likely to occur.

“The HPE team have been very good when we required them for a technical discussion or any other contact,” says Mr. D'souza. “The team in Mumbai are very helpful, and when needed they have put in a request to HPE in Singapore, and have always got back to us very quickly.”

Long-term commitment

For the future, Greaves will continue to use the HPE infrastructure for its core SAP systems, and is also planning to add customer relationship management software running on the infrastructure. The company will also evaluate the SAP HANA in-memory platform, but has not yet made a decision on whether to move in that direction with its SAP environment. The scalability of the servers and storage mean that disruption will be minimized when the system adapts to meet future challenges.

Based on its overall company policy, Greaves will refresh the current HPE infrastructure when it reaches the end of its planned six-year lifetime. With the HPE long-term roadmap for Itanium-based servers, Greaves feels confident in its plans for its mission-critical IT.

Mr. D'souza comments, “Our business growth is stable, and enables us to plan ahead – by and large we are sizing our system for up to the next ten years, and we have also seen additional benefits from HPE advanced compression.

“Overall, I'm satisfied with the solution, and I would definitely recommend HPE,” says Mr. D'souza. “In fact, there have been two or three people who have come to ask me about our experience of the refresh, and I have recommended they go with HPE.”

Learn more at
hpe.com/solutions



Sign up for updates


**Hewlett Packard
Enterprise**

© Copyright 2016 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Oracle is registered trademark of Oracle and/or its affiliates.
Intel and Itanium are trademarks of Intel Corporation in the U.S. and other countries.

4AA6-6838EEW, September 2016