CASE STUDY Intel® Xeon® Processor E7545

Financial Services
Mission-Critical Computing



Loan Processing Powered Up with Faster, More Efficient Platform

Migration to an Intel® architecture-based platform powered by Intel® Xeon® processor E7545 provides robust support for Fullerton India's mission-critical applications



"Moving from RISC-based architecture to the Intel Xeon processor-based platform provided savings of up to 45 percent on operation costs, while offering easy availability of skill sets around the Intel platform. The support environment and knowledge base available enhance the overall usage experience of the Intel platform and allow for easy maintainability."

Samir Khare General Manager and Head of IT Business Solutions Fullerton India

CHALLENGES

- Improve turnaround and response time. Meet high demand for loan processing uptime and availability.
- Reduce operations costs. Achieve substantial savings on operations costs and platform maintenance.

SOLUTIONS

- Migrate from RISC-based platform to Intel® architecture platform powered by Intel Xeon processor E7545. Improve performance of loan processing core system by moving to an Intel Xeon processor-powered IA platform.
- Utilize higher storage capacity per server offered by Intel® Xeon®. Reduce operations and hardware maintenance by taking advantage of the higher processing power offered by Intel Xeon processor E7545.

BUSINESS VALUE

- Achieved substantial savings on operations costs. Deploying Intel architecture platform running on Intel Xeon processor E75545 provided 45 percent savings on operations expenses.
- Better customer service. The added processing power provided by Intel Xeon processor E7545 boosted the loan processing time, creating a competitive advantage for Fullerton India as it reduced the loan application time for customers.

TECHNOLOGY RESULTS

- Provided robust support for mission-critical applications. Migration from RISC-based architecture
 to Intel architecture platform powered by Intel Xeon processor E7545 offered advanced reliability,
 availability and serviceability to support mission-critical applications such as loan processing.
- Additional processor features. Intel's integrated features provide data integrity and system resilience required to support mission-critical environments.

Expanding financial services business

Fullerton India is driven by its commitment to help its customers fulfill their needs and aspirations. It provides customers customized financial solutions by offering home mortgage loans, personal loans and loans for two wheelers. It also offers working capital loans for self-employed individuals, shop improvement loans to the retail segment, micro loans for livelihood advancement in rural areas, inventory funding, financing of commercial vehicles, as well as small and medium enterprises.

The key systems that Fullerton India uses for processing the loans of its clients include the loan origination system and loan management system. The loan origination system is where Fullerton India branches log on to register a loan case. Credit officers log on to this system to register new customer details which then go through the credit and writing phase, which

is also done on the system. Once the credit officer clears the loan application for lending, the loan information then moves to the loan management system.

The loan origination system is the lifeline for Fullerton India's business verticals. It is very critical to ensure smooth operations between its network of branches, which works across more than 300 cities and spanning more than 350 branches across urban and rural India. From getting a customer onboard to taking down loan requirements, to giving the client the loan, loan officers use this system to process applications. It is the main databank of all of Fullerton India's loan cases. Each of Fullerton India's branches must be able to successfully log on to the system without any delay. This system, then, has a high demand for uptime, availability, and turnaround time for end users.



Increased pressures

As Fullerton India's branch network was steadily growing, there was an increased pressure on the applications to perform impressively to meet the committed turnaround time and response time between processing and approving of loans. To accommodate the increasing load, Fullerton India realized it needed to add processing power to the existing RISC-based platform that runs the loan origination system.

On top of the additional processing power, Fullerton India also needed to have adequate redundancies in the system. This meant creating another backup system for its production environment.

The need to improve its system happened at a time when cost pressures on the company were immense due to the economic situation. There was a need to invest more on the hardware to keep up with the adequate turnaround time to commit to the demands of the business, but there were cost implications that made Fullerton India think twice about investing even more in the existing hardware.

"We realized the RISC-based architecture, which runs our system, was costing us more on operational expenses. If we were to increase the capacity to meet the demand on turnaround time, and to build on the redundancy backup system, we had to invest a higher amount on the RISC-based architecture. So we thought of looking for an alternative which was equally efficient, if not better, which would also provide us with a cost benefit, in addition to other tangible benefits like having the latest hardware and providing better services," shares Samir Khare, general manager and head of IT business solutions for Fullerton India.

Migrating to a more efficient, cost-effective platform

The most feasible solution for Fullerton India was to migrate from its existing RISC-based platform to a more cost-effective platform, which will provide the same, or even better, level of performance for its loan processing needs.

"The key factor for us when we were choosing the hardware for this migration project was to ensure that there was no dip in the performance level of the turnaround time. We started to look for hardware solutions with proven track records and came across Intel Xeon processor E7545, which seemed to be the best option at the time," says Khare.

During deployment, Fullerton India and Intel worked together to ensure a smooth migration. They deployed two servers running on Intel Xeon processor E7545, which had a memory capacity of 64 GB, compared to the old hardware that had 46 GB to 18 GB more storage capacity per server.

Fullerton India employed the same benchmarking measures and performance indicators on the throughput time of the transaction processes which it had on the RISC-based architecture during deployment of the new platform. To evaluate for performance level, the migration team checked for three important factors:

Intel® Xeon® processor E7545 boosts Fullerton India's loan origination system, providing faster and more efficient turnaround time while saving on operations costs

- If the loan processing applications will work on the Intel architecture platform
- If the new Intel architecture platform will provide the same, if not higher, performance than Fullerton India had with its previous RISC-based platform
- If the capacity of the new platform could sustain the amount of transaction as it continues to increase

The deployment team ran transaction processes to check if the new platform would meet the benchmark Fullerton India wanted to achieve. During this process, the team checked for the performance of the new platform in terms of transaction per hour and capacity to increase. The team wanted to ensure that the performance would meet, if not exceed, the par levels of the old RISC-based platform.

"Migration went through pretty smoothly. There were regular recaps, which happens in every migration project. But migration went smoothly as the applications were firmly supported on the new Intel Xeon processor-based Intel architecture platform," shares Khare.

Improved loan processing procedures

Ten to 12 months since migration, Fullerton India has achieved the results it expected from deploying the Intel Xeon processor-based Intel architecture platform. It has saved about 45 percent on operation costs without a dip in performance. If it had continued using the RISC-based platform, it would have invested 55 percent more on costs.

The bigger advantage, though, for Fullerton India, was the easy availability of the skill sets around the Intel platform. The support environment and knowledge base, as well as the easy maintainability of the platform that Intel provides, have enhanced the overall usage experience.

"Intel's architecture is very easy to understand. If there were problems on hardware, information was readily accessible through Intel and we didn't need to go outside and seek help from any hardware service provider," shares Khare.

On top of these benefits, Fullerton India also appreciates the fact that using Intel Xeon processor-based platform has allowed it to practice greener operations. The new Intel architecture platform helped reduce power consumption, allowing Fullerton India to become a more eco-friendly organization.

"Supporting this architecture based on Intel provided a much simpler task for our IT managers. We will always bear in mind the advantages we've reaped from using Intel when we are going to adopt a new system or hardware in the future," adds Khare.

Find a solution that's right for your organization. Contact your Intel representative, visit Intel's Business Success Stories for IT Managers (www.intel.com/itcasestudies) or explore the Intel.com IT Center (www.intel.com/itcenter).

- Businesses that have updated their systems have successfully run mission-critical workloads, embraced cloud computing, and prepared for big data analytics to be used within their businesses.
- The benefits of migrating to a new platform are compelling. Companies have saved millions of dollars by migrating mission-critical applications to Intel Xeon processor-based servers.
- Scalable systems based on Intel Xeon processor E7 family provide robust support for missioncritical applications and advanced reliability, availability, and serviceability. These features have been integrated by Intel into the silicon and system level to provide the data integrity and system resilience required to support mission-critical environments.

COMPANY SPOTLIGHT: FULLERTON INDIA

- One of India's leading non-banking finance companies (NBFCs)
- Launched its commercial operations in January 2007
- Has since then established itself firmly in the country's financial landscape, with a network of over 350 branches spanning more than 300 towns and cities
- Strives to design financial products and services that would fulfill the needs and aspirations of customers in the retail and commercial lending verticals in both urban and rural India
- Has over 6,500 employees reaching out to its customers
- To date, it has a customer base of nearly a million and caters to a wide variety of financial people

Copyright ©2012 Intel Corporation. All rights reserved. Intel, the Intel logo, and Xeon are trademarks of Intel Corporation in the U.S. and other countries.

*Other names and brands may be claimed as the property of others.

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more information go to http://www.intel.com/performance.

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. A "Mission Critical Application" is any application in which failure of the Intel Product could result, directly or indirectly, in personal injury or death. SHOULD YOU PURCHASE OR USE INTEL'S PRODUCTS FOR ANY SUCH MISSION CRITICAL APPLICATION, YOU SHALL INDEMNIFY AND HOLD INTEL AND ITS SUBSIDIARIES, SUBCONTRACTORS AND AFFILIATES, AND THE DIRECTORS, OFFICERS, AND EMPLOYEES OF EACH, HARMLESS AGAINST ALL CLAIMS COSTS, DAMAGES, AND EXPENSES AND REASONABLE ATTORNEYS' FEES ARISING OUT OF, DIRECTLY OR INDIRECTLY, ANY CLAIM OF PRODUCT LIABILITY, PERSONAL INJURY, OR DEATH ARISING IN ANY WAY OUT OF SUCH MISSION CRITICAL APPLICATION, WHETHER OR NOT INTEL OR ITS SUBCONTRACTOR WAS NEGLIGENT IN THE DESIGN, MANUFACTURE, OR WARNING OF THE INTEL PRODUCT OR ANY OF ITS PARTS. Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined". Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information. The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are availabl

Intel® 64 architecture requires a system with a 64-bit enabled processor, chipset, BIOS and software. Performance will vary depending on the specific hardware and software you use. Consult your PC manufacturer for more information. For more information, visit http://www.intel.com/info/em64t. 1212/JAY/PMG/XX/PDF 328403-001US