



BT Retail Internet Operations

CUSTOMER SUCCESS

BT Retail Logs Hundreds of Thousands of Dollars in Cost Savings and Cost Avoidance using Precise Application Performance Management Solution

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Neal Kelshaw

Head of Infrastructure
BT Retail Internet
Operations

At its peak, BT Retail Internet Operations receives more than 7,200 online orders per day—or five orders per minute—for its broadband services. By optimizing its business-critical order management application using Precise i³ software from Precise, the company saved £392,000 (US\$746,000) in one year through improved scaling, resulting in a 156 percent return on investment over three years. The company is also able to manage an increase in daily order volumes and has deferred a £120,000 (US\$231,000) hardware investment for three years.

BT Retail Internet Operations delivers broadband services to more than five million business and consumer customers in the United Kingdom (UK) for the BTYahoo! and BT Business ISP Brands. Two years ago, the company developed a new portal, designated eHub, which supports all product ordering, activation, and customer amendments. This portal is based on a distributed architecture using BEA WebLogic Server with Java 2 Platform, Enterprise Edition (J2EE) technology. It spans multiple Sun servers running the Solaris Operating System, with connections to a remote database and order throughput systems for customer management and broadband provisioning.

Configuration Bottleneck Puts Revenue at Risk, Undermines Service

Following a broadband price promotion campaign, BT Retail discovered that eHub was under-performing due to a bottleneck in system configuration. Over a period of six months, more than 60 patches were installed, but these remedies only enabled BT Retail to tune the system manually in response to each change in the order demand profile. An analysis by the IT team uncovered the root of the problem: the order management system was performing sub-optimally, with customer orders at risk of not meeting agreed upon SLAs.

Three objectives were identified: improving the methodology for releasing

Company Profile

BT Retail Internet Operations (www.bt.com), a leading ISP, delivers a range of Internet services to five million business and consumer broadband customers.

Industry

Communications

Solution

Application Performance
Management

Using Precise i³ software, BT Retail is saving £272,000 (U.S. \$523,000) in operational costs, while delivering much-improved customer service.

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new environments into production, introducing end-to-end monitoring of application environments, and reducing the time to detect and resolve performance problems.

Precise i³ Software Identifies and Resolves Performance Problem in One Day

As part of a coordinated, far-reaching Service Improvement Plan geared towards customer satisfaction, BT Retail turned to Precise. “Precise i³ met 100 percent of the requirements in the RFI document,” says Neal Kelshaw, head of infrastructure at BT Retail Internet Operations. “Previous successful experience with the software on another BT project—the software’s ease of use and its seamless integration with our eHub architecture and operating system—made it the ideal choice.”

Owing to time constraints, BT Retail implemented Precise i³ software—straight out-of-the-box—into its live production environment, all within a few hours. Within one hour, Kelshaw and his team comprehensively outlined the components of the eHub infrastructure and identified an individual component responsible for the underperforming response time.

“On the first day of its full use, following six months of exasperation, using Precise i³ software, we identified the cause of the problem. There was an Oracle performance problem on the provisioning database that was affecting the BEA WebLogic [Server] links connecting the remote Oracle database. This impacted the resilience of eHub and resulted in the failure of order queues. Using Precise i³ software, we fixed it immediately. Prior to this we had only been able to see the symptoms as presented to us at the front end—unable to make the true correlation to the real cause of the problem.”

Precise Consulting Services Delivers Design and Implementation Assistance

Precise Consulting Services was closely involved in the implementation. The team coordinated the architecture design and implementation. “The Precise Consulting team knew exactly what we were aiming to achieve and took every effort to understand our business and our environment,” says Kelshaw. A highly effective, customized training and configuration program was also provided over five days by Precise Education.

Cost Avoidance Equates to Significant Savings

Using Precise i³ software, BT Retail is realizing significant cost savings. Last year, the company invested £112,000 (US\$215,000) in problem management—including fault management and management of instability. The company invested an additional £80,000 (US\$154,000) in maintenance—primarily fixing and scaling the platform. There was also an additional £160,000 (US\$308,000) capital investment in platform

hardware, testing, and development. This resulted in total infrastructure project costs of £312,000 (US\$600,000).

After introducing Precise i³ software and successfully investigating and finding solutions for performance problems, BT Retail invested only £40,000 (US\$77,000) this year in routine platform maintenance and upgrades. As a result, year-over-year, the cumulative saving equates to £272,000 (US\$523,000).

ROI Results from Application Performance Improvements

This exceptional return on investment (ROI) is also reflected in improved application performance. Last year, BT Retail introduced a price cut to its broadband service offering, code-named 'Conway'. At the peak of this price cut campaign, the company received up to 5,600 orders per day. This naturally placed an exceptionally high load on the CPUs, reaching as much as 80 percent of capacity, which placed significant strain on system resilience and performance.

Once the service improvement plan had been undertaken using Precise i³ software, the company was able to manage more than 7,200 orders per day, with CPU utilization never exceeding 50 percent

"In the past, we didn't know which application component was coupled to broadband orders," says Kelshaw. "Using Precise i³, we immediately identified a response problem with the back-office end of the application. It used to take four hours and 40 minutes of system processing time each day to provision 5,600 orders. We ran Precise i³, analyzed data from one day, and reduced the daily system processing time to one hour and 25 minutes. This represents a 207 percent increase in performance. Indeed, by improving the management of CPU usage, we also deferred a £120,000 (US\$228,000) investment in scaling the hardware."

Kelshaw has examined ROI in other ways as well. Over the course of three years, BT Retail plans to invest an additional £400,000 (US\$769,000) in Precise i³ software (including license and support costs). As a result, BT Retail believes it will receive cumulative benefits valued at approximately £624,000 (US\$1.2 million) over the same period. BT Retail's estimated ROI therefore equates to approximately 156 percent over three years.

Business risk has been reduced as well. "Before the deployment of Precise i³, the peak load experienced on the order management platform would have given rise to a business risk equivalent to £1.72 million (US\$3.27 million) a year in revenue. This was due to instability in the system running at peak load and lack of resilience due to an unscalable application," Kelshaw explains. "Thankfully, Precise i³ has eliminated the opportunity for this occurring. Precise i³ has provided us with a significant risk reduction and cost savings as well as better performance, scalability, and resilience."

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SOLUTION AT A GLANCE

Business Drivers

- Avoid revenue disruptions due to system outages
- Lower system maintenance cost
- Improve IT staff productivity
- Enhance customer service

Technology Challenges

- Proactively identify and resolve system performance problems
- Uncover and rectify 6-month system configuration bottleneck causing degradation in e-Hub performance
- End-to-end system monitoring and management

Solution

- Application performance management for eHub portal providing broadband services to consumer and business customers

Precise Products

- Precise i³

Technology Environment

- BEA TUXEDO
- BEA WebLogic Server
- J2EE technology
- Sun servers running the Solaris Operating System

Partner

- Linxcel Europe, Ltd. Worked Precise Consulting and Education to deliver Application performance management solution

Greater Flexibility

BT Retail gained greater flexibility through performance improvements and enhanced visibility of capacity issues associated with increased order volumes. Specifically, the ISP was able to introduce accurate capacity planning and eliminate the need for a planned hardware capacity upgrade.

In addition, BT Retail benefited from operational support with Precise i³ software. Within only five days, the application enabled the company to introduce a Service Improvement Plan which resolved issues that had been outstanding for two years.

Summarizing the Results

Kelshaw summarizes his experience using Precise i³ software: "It really is a remarkable product. I strongly recommend that any company experiencing capacity and performance management problems should evaluate Precise i³. It has transformed the production environment for one of our most critical applications, delivered a 156 percent return on investment, and led to significantly more efficient product release cycles."

More customer success stories can be found at: www.precise.com

BUSINESS VALUE AND TECHNICAL BENEFITS

Return on Investment

- 156% ROI over years

Cost Savings

- £392,000 (US\$746,000) saved in one year

Risk reduction

- Removal of revenue risk of £1.72 million (US\$3.27 million) Caused by unscalable applications

Cost Avoidance

- £120,000(US\$231,000) in hardware investment deferred

Scalability

- 5,600/day to 7,000/day increase in order volumes

Application Management

- 207 percent increase in application performance