

Case Study

BT



Scapa® Test and Performance Platform



BT

<http://www.bt.com>

BT is one of the world's leading communications services companies, active in the UK and in more than 170 countries worldwide providing fixed-line services, broadband, mobile and TV products and services as well as networked IT services to consumers, small and medium sized enterprises and the public sector. In addition, BT sells wholesale products and services to communications providers in the UK and around the world and supplies managed networked IT services to multinational corporations, domestic businesses and national and local government organisations across the globe.

This case study describes the how BT, used Scapa TPP to ensure the smooth migration of their Expedio (a BMC Software Remedy-based system) to new higher-specification hardware.

"Scapa TPP provided the information we needed at each stage of our migration project, ensuring it could be completed smoothly and successfully. We were also able to do a 'before and after' analysis of system performance on the old and the new hardware in order to confirm it had improved."

– Jeremy Piggott, BT

"Expedio plays a vital part in our day-to-day business operations, so when any changes are required we need to make sure end-users are not affected. We use Scapa TPP to help us achieve that."

Jeremy Piggott, BT

The Business Problem

Migrating a complex, mission-critical system to new hardware

BT is one of the world's largest communications services companies, utilizing highly complex, mission critical IT systems. One of these, a BMC® Software Action Request System® or Remedy®-based application called Expedio, supports a large number of users, a huge workflow and several other mission-critical systems as well. With the large numbers of people and processes dependent on Expedio, its ongoing maintenance can cause a few headaches. When the decision to migrate Expedio to new, higher specification hardware had to be taken, BT wanted to ensure that they could:

- a) visualize a complete picture of the performance of the Expedio application, before and after migration,
- b) pinpoint any system issues before the pain of these was felt by the people using Expedio, and
- c) ensure that the Expedio migration project brought with it the additional capacity and the desired improvement in performance for its end-users.

The Solution

Scapa TPP, the professionals' load testing and capacity planning tool of choice.

Due to the highly complex nature of the Expedio application, with its workflow generating up to thousands of Remedy API requests, often touching hundreds of different forms and direct database queries, BT knew it needed to find a unique solution capable of recreating realistic user activity with the utmost fidelity and flexible enough to cope with unexpected changes to the project. The search began to find a full-featured, load, capacity, scalability and performance testing tool from a company with proven experience in ensuring successful system migrations, particularly regarding Remedy-based applications.

Scapa Technologies is an Independent Software Vendor with a unique and powerful testing tool: Scapa Test and Performance Platform (TPP). Scapa TPP is the only test tool with the power, flexibility and feature list required for the most complete and accurate reliability, performance, capacity and scalability testing of BMC Software's Action Request System and ITSM™ Suite as well as custom applications, such as BT's Expedio. With a highly scalable engine technology, tests can be scaled to hundreds of thousands of users, covering the system end-to-end, from client to server (including the mid-tier).

The creation of tests for Expedio within Scapa TPP involves capturing and recreating accurate, valid user transaction data. Due to the number of cross-references and the number of APIs executed in Expedio for even a simple workflow, it was feared that the process of creating a test would prove challenging. Scapa TPP's uniquely sophisticated connectivity to Remedy-based systems, however, was able to handle the genuine user transaction data, maintain its validity and also introduce variability into the data to measure how the system would cope under different types of stress.

With Scapa TPP risks are minimized, profits maximized.



"Our Expedio application is a highly complex one that has evolved over a number of years and continues to evolve in line with our business requirements. We knew, therefore, that we would need a very specialised product that could recreate our user transactions accurately and test our Remedy-based system thoroughly. Scapa TPP covers these requirements, which made the testing process possible." Jeremy Piggott, BT

The Result

From the beginning of the project, BT understood that testing is essential in ironing out any unforeseen issues and to appreciate the system's limitations with regard to:

- a) CAPACITY - the amount and variety of user transactions (workflows),
- b) RELIABILITY - failures that may occur if the system becomes overloaded,
- c) SCALABILITY - transactions or parts of transactions that do not scale well under load, and
- d) PERFORMANCE - how the system performs from the end user's perspective.

With this understanding, BT was able to use Scapa TPP to make improvements in all four of these areas.

The migration of the Expedio Remedy-based system to new, higher specification hardware took place and the new system was launched successfully. Scapa TPP is now being used to help evaluate and pinpoint any areas of the Expedio application that might need some tweaking as well as testing new, modified and otherwise essential areas of the application's functionality.

"The support team at Scapa Technologies was very responsive to our requirements, providing assistance on planning tests, creating scripts and analysing results, sharing their expertise when required. With their help, we were able to complete our project successfully."

Jeremy Piggott, BT

Why BT Selected Scapa TPP

Besides wanting to ensure a smooth migration to new hardware, obtain evidence of increases in system capacity and performance from the migration and on an ongoing basis, BT selected Scapa TPP for the following main reasons:

- 1) Scapa TPP provides genuine, accurate end user experience. Its coverage of Remedy-based applications is incomparable, offering the most complete testing and monitoring solution for this type of system.
- 2) Scapa TPP is flexible enough to be able to test customised systems taking into account the customer's application mix and usage scenarios.
- 3) Scapa TPP is used to provide continual insight into Remedy-based systems' performance thereby further increasing its ROI.
- 4) In addition, Scapa consultants work directly with the Scapa development team to ensure we are providing a best of breed solution within an agile, ever-changing environment.

Benefits

The benefits of using Scapa TPP in this migration project, include:

- Even with the highly complex nature of the Expedio system and its significance in terms of the number of users and operational processes depending upon it, Scapa TPP gave BT the ability to create and execute tests quickly and easily, helping to bring about a successful migration.
- Scapa TPP allowed BT to see at a glance the system issues and their root causes, helping make improvements to their Expedio application in a timely way, before these were allowed to impact negatively on user performance and ultimately, on customer interactions.
- BT continues to benefit from being able to use Scapa TPP to monitor Expedio and see how to achieve the best return on investment (ROI) from the entire system (software applications, hardware etc.).

Scapa Technologies (www.scapatech.com)

Scapa TPP is a best-of-breed performance testing tool for Virtual Desktop, Remote Desktop, Citrix® and BMC Software® Remedy® AR System®, with support for additional technologies (such as HTTP(s) protocols).

All of the functionality is available in a single product and can be applied in combination, allowing Scapa TPP to:

- Benchmark
- Prove the value of WAN Optimization
- Highlight bottlenecks
- Reveal the performance and scalability characteristics from the end user perspective.
- Function in virtual architectures of any complexity.
- Facilitate migration projects between physical or virtual architectures in any combination and of any complexity.

Scapa Test and Performance Platform has a unique level of integration with Remedy AR Server and ITSM™ architectures at the C API, Java API and the http layer (mid-tier), and via multiple other touchpoints.