Severn Trent Water Case Study

Background

Severn Trent plc is a leading London stock market listed FTSE100 water utility group serving 3.7 million domestic and business customers in England and Wales and provides purification, operating and testing services in the UK and overseas.

In 2004, Severn Trent identified a requirement to integrate a number of existing customer service related applications. Severn Trent selected IBM's WebSphere® MQ (WMQ) as the asynchronous messaging based platform to support this integration because WMQ fulfilled every basic need to develop a solid, stable, scalable and flexible solution. Severn Trent considered the ability to audit and to diagnose potential problems with message delivery as a key requirement. However WMQ does not readily include the facilities to provide point-in-time analysis of message flows after they have been processed. In order to fill this gap, Severn Trent searched for an out of the box solution that could do the job and discovered Cressida's **ReQuest™** for WebSphere MQ, a diagnostic solution that would ensure their new application was performing as designed and with the ability to identify missing messages at a given point-in-time.

The Challenge

During 2006, a new business critical application was under development. Severn Trent considered this application an important part of the strategy for maintaining their position as a world class Utility provider. A central and vital component of this application was again WMQ and there was a critical requirement to implement rapid emergency recovery in the event of an application failure. A crucial part of this process was the ability to restore the MQ queue managers to the same point in time quickly and accurately. This type of functionality was not provided for in the application design or in the underlying native WMQ.

The Search

Severn Trent initially carried out a study into the native WMQ features and facilities and discovered that most of the information that they required for recovery was actually contained in the WMQ log files.

Severn Trent objectives:

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- Severn Trent considered this application an important part of the strategy for maintaining their position as a world class Utility provider.

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The Solution

Cressida's **ReQuest™** for WMQ is a powerful Message Tracking, Message Reporting, Message Replay, Point-in-Time Message Recovery and Auditing solution. **ReQuest™** uses unique filtering technology to analyse critical message activity information already contained in WMQ logs. **ReQuest™** is non intrusive; no application changes are required and it had provided Severn Trent with all the features they required to provide point in time analysis of message flows.

Severn Trent already had some experience of Cressida's **ReQuest™** for WMQ for message tracking and auditing purposes. After evaluating other potential solutions to this challenge, it became apparent that the ideal answer was probably already in place.

However, the scope of this new application was much wider and the impact more critical, covering components on many platforms, now including the mainframe and 20 or so other UNIX servers. It was therefore decided to carry out a further trial and evaluation of **ReQuest™** to ensure that it could scale up to the new application requirements. With the assistance of Cressida technical specialist support staff, **ReQuest™** was rapidly implemented across the required platforms and procedures put in place to provide the required emergency recovery functions including using ReQuest to identify messages processed in an "in doubt" window and allow the recreation of lost messages to support synchronisation of Queue Managers following recovery.

Summary

Cressida's **ReQuest™** for WebSphere MQ provided Severn Trent plc with a reliable, scalable, flexible solution to their requirement for a rapidly deployable recovery procedure.