Case study

Bimbo

Food manufacturer tracks down network bottlenecks and optimises its infrastructure both now and in the future

"We were in conversation with BT, talking about different ways to deal with our network problems, and they suggested that we look at Application Assured Infrastructure. We asked BT for references from other businesses and the information was very persuasive.”

Antonio Guaràs Muncunill
Country Service Manager (Iberia)
Sara Lee International

Bimbo, one of Spain’s best-known food brands, has been able to prepare for future network development and speed current performance with BT Applications Assured Infrastructure services

Executive Summary

Bimbo, a Sara Lee Bakery Europe subsidiary, is one of the largest food manufacturers in Spain and Portugal, with 11 factories and 75 sales offices across the two countries. The company has a BT-managed Frame Relay-based network, which is critical to its operations. Orders received throughout each day are processed in the afternoon and overnight for delivery the next morning, so there is practically no margin for delays or downtime. But in 2005 the company started to experience some network traffic problems, precisely at a time when it was wondering whether the network would be able to support planned increases in operations.

BT came to the rescue with its Applications Assured Infrastructure (AAI) services, a range of packaged offers aimed at bringing IT infrastructures under control, maximising the utilisation of assets and improving the performance of applications.

Taking advantage of just one of AAI’s service modules – the Audit functionality – technicians installed a probe which unobtrusively collected information on network traffic and performance over a period of 15 days, for analysis by BT experts.

The results of the analysis allowed Bimbo to pinpoint exactly where and how the network bottlenecks were caused, making it easy to correct the faulty equipment configurations that were the sources of the problems. It also gave Bimbo the information the company needed to target capacity investment at the network sites where it was needed most. Furthermore, Bimbo and BT now have highly detailed knowledge of the network’s behaviour, which will be invaluable as the company migrates to newer technologies such as multi-protocol label switching (MPLS).
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Bimbo engaged BT to carry out an AAI audit of its infrastructure within 10 days of the initial meeting, and was sufficiently confident in BT’s ability to deliver that it did not seek comparisons with other possible auditing applications on the market.

In order to carry out the audit, BT inserted a probe into Bimbo’s network. The probe (actually a Windows PC carrying AAI auditing software) took advantage of the port mirroring capabilities of one of Bimbo’s switches to listen in on traffic unobtrusively. The switch was configured to send a copy of all traffic to a separate port, the Switched Port Analyser (SPAN), which can be used for monitoring purposes without interfering with the traffic flow. The AAI probe was hooked up to the SPAN and left to record all activity for a period of 15 days.

Results

After the first week, a BT engineer carried out a site visit to collect a backup copy of the data and send it off for preliminary analysis. Both the preliminary and the full data sets were analysed by a BT specialist AAI team.

“The report enabled us to make an initial inventory of applications and principal nodes,” says Antonio Guaràs Muncunill. “We had further complaints about network delays at two or three centres, so we asked for a further analyses focusing on these locations.”

A BT AAI analyst from the UK flew out to Barcelona to join the local BT AAI consultant and account team for a presentation of the results to Bimbo. By this time the source of the problems was becoming clear. Although the types of traffic and response times in the network were normal, and SAP response times were within acceptable limits, one file server cluster was badly configured and was generating excess network traffic. In addition, the analysis uncovered excess Network Time Protocol (NTP) traffic used for synchronising the clocks of devices on the network. It found some NTP data aimed at incorrect IP addresses; PCs configured to direct traffic to out-of-date proxies; and a fault with a backup process on one of the point-to-point links.

Antonio Guaràs Muncunill recalls: “There were two or three issues that could easily be solved. The AAI analysis made it easy to pinpoint what needed to be done. In addition, we knew we were going to have to increase the capacity of some links and this gave us a way of seeing which network elements we would have to focus on.”

The audit has also given the BT people responsible for managing the Bimbo network a detailed overview of the infrastructure that it could not have gained in any other way. BT and Bimbo see this knowledge as invaluable in helping to plan the future evolution of Bimbo’s technology infrastructure. For example, it became clear that Bimbo could benefit by migrating from Frame Relay to a multi-protocol label switching (MPLS) infrastructure.

With the problem fixes underway, Bimbo’s network performance is now enabling the shift to real time order processing, with beneficial effects upon Bimbo’s customer service and competitive position. Furthermore, the detailed network picture provided by AAI has given the organisation a clear view of its infrastructure capabilities now and how they will be improved in the future by the MPLS migration.

Why BT?

• The AAI proposition is unique in the level of analysis it provides, backed up by the services of BT people expert in its use
• With no disruption whatsoever to the business, BT was able to provide a complete, detailed overview of the network and its weak points
• BT works in partnership with Bimbo, and has managed the company’s network for a five-year period
Besides audit functions, the services that AAI includes are:

- **Monitor**: continuous monitoring of applications, server performance and end-user experience, graphically represented on a unique online dashboard.
- **Manage**: an enhancement to the Monitor service, Manage provides an incident investigation service that reactively or proactively investigates performance incidents, analyses the cause and recommends corrective action.
- **Assure**: a service level agreement that BT has developed, Assure gives the customer the benefit of ensuring business critical applications will perform in the way they are expected to. (Note that assured application performance is only available on infrastructures provided and managed by BT.)
- **Optimise**: using the information gathered – from Audit, Monitor or Manage – Optimise advises customers on how to achieve better performance by suggesting ways to optimise elements across the infrastructure.

Using the information from the audit or monitor phases, BT can make recommendations to improve asset utilisation, optimise infrastructure performance, consolidate and rationalise equipment in data centres and elsewhere, improve end-user experience and implement IP-based end-user services.

### Main BT products and services

- **BT Applications Assured Infrastructure services**
- **Analysis and recommendations by BT AAI experts**

### Offices worldwide

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