

Client Reference

Toshiba Europe GmbH-Computers

www.toshiba-europe.com



IS Solutions has applied its extensive knowledge of Broadvision technology to build and support a European-wide, consistent and unified web presence for Toshiba Europe.

IS Solutions

Toshiba Europe GmbH (TEG) is part of Toshiba Corporation, the world's seventh largest integrated manufacturer of electrical and electronic equipment. Toshiba Corporation's diverse activities range from the development of multi-megawatt power stations all the way down to leading-edge power saving miniaturised chip technologies and it employs more than 160,000 people globally.

TEG's product offerings in Europe include personal computers and PDAs, electronic storage devices, LCD projectors, fax and copier machines and consumer products like televisions, video recorders, DVD players and digital cameras. IS Solutions has worked with TEG since 1997 on projects that span the range of solutions skills and experience that we offer.

Consultancy

Challenge

In the past, each Toshiba Computers country office was responsible for their own Internet presence within Europe including the look and feel of the site and hosting and support arrangements. TEG computers sought to unify its web offering across Europe to present a consistent level of service and image across all web sites.

The company also wanted to benefit from the economies of scale which a European-wide hosting and support arrangement could bring it. In addition, site security was a key consideration since levels of security varied across country sites, leaving some open to potential intrusion by unauthorised parties.

Market Overview

TEG operates in a market of household names and global brands. This competitive position dictates high standards in web communications but this requirement demands significant investment.

It is key therefore that every opportunity is taken to maximise that investment to ensure that the return is in line with expectations and an appropriate level of value. This must occur against the backdrop of new and innovative methods of conducting e-business, many of which need to be investigated and assessed for their potential to enhance TEG's strategies in this area.

Solution

TEG approached IS Solutions to help the company achieve its objectives of European consolidation, cost saving and consistency. IS Solutions proposed and implemented a connectivity and infrastructure solution for the Toshiba Hosting Centre, located at a single primary site at Redbus Interhouse in London, using TEG's chosen ISP, AboveNet.

The solution features disaster recovery and redundancy plans in-built from the outset to provide a robust and secure environment. It incorporates off-site data storage facilities for core technical functions and disaster recovery and extensive mirroring, load-balancing and back-up hardware devices to ensure minimal downtime.

IS Solutions is also providing regular strategic planning advice to TEG covering aspects of the solution such as performance enhancements, capacity planning and application environments. Regular failover tests are performed upon the systems to ensure that in the event of any failure, back-up systems respond as expected.

Commenting on the project, Nigel Fusedale E-Business Group Manager at TEG said: "With IS Solutions' expertise and extensive support capabilities, Toshiba have been able to ensure that we have an infrastructure environment that will deliver maximum benefit both to our customers in terms of performance and reliability, and to ourselves in terms of security and economies of scale."

Key Activities

In addition to the depth and breadth of knowledge and experience required by our analysts and consultants, a strong degree of cross-discipline technical expertise was needed to provide a solution that gives TEG confidence in the infrastructure. This required representatives from across IS Solutions, and especially from our development and support teams, to include their skills in the formulation of an appropriate delivery strategy. These skills are explored and demonstrated further in this Client Reference.

Development

Challenge

TEG's Distributor Business Extranet (TDBEX) is just one example of the extensive range of development projects that IS Solutions has carried out for Toshiba. TDBEX was developed to cater for countries within the territory covered by TEG but that were not represented by a dedicated country office. It seeks to provide distributors in those countries with a comparable level of sales and marketing support to enable them to successfully promote and distribute TEG's product set. The key objectives of the project were as follows:

- To gain a reduction in time spent by country managers in distributing standard information.
- To supply distributors with an up-to-date price list specific to their country along with delivery schedules.
- To provide simple access to databases to assist in the marketing of TEG.
- To ensure a scalable and flexible solution for growth and future integration with wider TEG internal systems.

Soution

IS Solutions used its vast experience in development using BroadVision technology, both previously with Toshiba and also with other clients, to build a functional site to meet these objectives and offer the potential for growth. Specifically, Toshiba's proven Global Platinum System, which provides a portal for Toshiba's channel partners globally, and which had already been developed by IS Solutions, was chosen as an appropriate base for the TDBEX platform.

The following functionality was developed:

- An authentication tool to allow single sign-on for all authorised databases.
- Personalisation of content to allow display of information by user or group.
- Multiple access levels.
- Multiple editing levels with workflow functions to allow, for example, a regional manager to handle content for distributors within his area.
- Multiple administration levels.
- A straightforward content publishing and management tool.
- Interactive manipulation of content to enable country manager control over promotion of particular items to certain distributors.

- Upload facility for distribution of files and drivers for users to download.
- Notification by e-mail of new content.
- Search facility.
- Contact centre to enable users to access key contact information with the ability to update their own contacts.
- Platform to enable availability of future applications including user fora and personalised alerts.

Key Technologies:

- BroadVision Enterprise Information Portal.
- Oracle database.
- Sun Microsystems hardware with Solaris operating system.

Key Activities:

- Business analysis in the initial requirements specification.
- User interface design and information architecture skills in the development of site design and navigation.
- BroadVision development expertise.

TEG has also benefited from IS Solutions' project management capabilities which use a methodology based upon industry standard practices tightly integrated with our own experience in successfully delivering complex projects.

Support

Challenge

The natural progression of the consultancy effort outlined earlier in this Client Reference was to implement the connectivity and infrastructure solution for the Toshiba Hosting Centre. This was an immense project that was fraught with technical and practical challenges. IS Solutions' experience in previous large infrastructure projects was invaluable in overcoming these risks and potential issues and successfully delivering the project as planned.

Solution

Infrastructure

The solution involved both relocating existing web servers and simultaneously building new servers to provide a total implementation of some 30 systems. The hardware, which has since expanded to more than 50 systems, is a combination of Sun Solaris and Toshiba Windows 2000 systems that together power multiple web sites for more than a twenty countries.

The web servers use a mixture of Lotus, BroadVision, Java and Microsoft ASP technologies with load balancing across the sites that use BroadVision application software. This load balancing is provided by Alteon devices in order to ensure the best possible site performance by transparently splitting users across different servers running mirrored web sites.

Connectivity is provided through the inclusion of a number of Cisco routers and switches located at key points throughout the infrastructure.

Secure connectivity

To enable e-selling, TEG works very closely with a number of channel partners to ensure that product information and stock status is available and up-to-date. This requires communications with back-office ordering and fulfilment systems; it was therefore essential that these third party organisations had secure access to the various TEG servers to update product,

pricing and stock information both with automatic feeds and manual amendment alternatives. It was particularly vital for the smaller business partners, many of whom cannot afford complex secure systems, to be able to communicate securely.

IS Solutions implemented a Virtual Private Network (VPN) using Nortel VPN devices to enable known partners and TEG offices to connect securely with the back-office systems in order to carry out their routine updates. Security for the TEG Hosting Centre is provided by a series of CheckPoint firewalls, with back-up firewalls taking over from the first in event of a failure. Continuing work on the web applications also takes place via e-business partners who are connected to the VPN system.

Support

IS Solutions is providing the support for the Toshiba Hosting centre which also includes managing Domain Name Services (DNS) for most of the European web sites.

A Service Level Agreement (SLA) operates on a 24x7 Managed Service basis that primarily covers first, second and third line system monitoring and hardware, software and application support services, with a 30 minute response time.

IS Solutions also provides a number of general services under the SLA to ensure that the infrastructure is performing correctly and planned upgrades and back-ups are carried out as required. Extensive reporting mechanisms incorporating a mixture of daily, weekly, monthly and quarterly reports ensure that TEG is kept informed of the infrastructure's performance.

Security is a high priority for TEG so a customised plan is incorporated within the SLA focusing on these aspects of the implementation. Independent security analysis and penetration testing of the network environment ensures security measures are constantly re-evaluated as a result of changing security risks presented to public access Internet sites.

Nigel Fusedale further comments: "It was a lot to do in a short space of time, but we were pleased with the flexibility and fast response that IS Solutions demonstrated throughout the project. The commitment and expertise that IS Solutions is showing in supporting our solution enables us to be secure in the knowledge that we will deliver a higher quality of service to our clients and partners."

Key Activities

In addition to round-the-clock support and maintenance, IS Solutions also provides regular strategic planning advice to TEG covering aspects of the solution such as performance enhancements, capacity planning and application environments.

Regular failover tests are performed upon the systems to ensure that in the event of any failure, back-up systems respond as expected.



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