

Overhauling Traffic Monitoring



Xoriant helps a Network Management Product company move from thick to thin client architecture, increasing client relevance while lowering TCO.

Background

Our client provides intelligent performance management and business continuity solutions for mission-critical application environments. Over six hundred customers worldwide and across different industries rely on our client's solutions. Our client has two product lines - one for Network Traffic Management and the other for Database Traffic Management. The Network Traffic Management line has four products, whereas the Database Traffic Management line currently has one product. It is our client's endeavor to improve the current products as well as introduce new products with expanded functionality within each product line.

The client's existing products were designed in the old client-server (thick client) environment that had to be migrated to the new thin client web-based architecture. With shifting economies and dwindling revenues, it was very difficult and expensive for our client to maintain the old products as well as undertake the product migrations to the desired environment.

Client Requirements

Our client was looking for a development partner who could sustain and support the current thick client architecture, and also participate in re-architecting the products as well as performing the migration. An architectural change was envisaged to replace the current CORBA-Java based thick client application and the adapter interface by a web-based administration interface with built-in Web Server. To keep the migration efforts minimum, the decision was made to keep the most of the business logic same and migrate the current monitoring tools like charts, statistics views etc. in the web format. The new web-based administration interface was expected to support multiple clusters as opposed to the existing single cluster support.

It was expected that the proposed partner would have the skills and track record in the areas of networking, databases, web technologies and user interfaces. In addition, the partner would have expertise in multi-platform migration, testing, and performance tuning. A background in technical support and internationalization was also needed. The platforms comprised Solaris, Windows (Server as well as Client), HP-UX, IBM-AIX and Linux. The languages included C, C++ and Java. Various networking protocols were also involved.

Our Solution

Xoriant worked closely with the client to gain extensive understanding of the products, customer environments, and escalation points in implementation and maintenance. Once we proved our comfort level, one Xoriant team began performing the support and sustaining tasks for the current client product, while another team of experts studied the operations of the current product line with a view to re-architecting it. In a few cases where the existing product documentation was not sufficient, we used this process to sort out the business functionality based on validations from the existing code. We built a new web-based architecture on top of the existing core functionality code; removing the existing CORBA links and making it work with multiple sites simultaneously. To avoid the third party Web-server dependency we developed a lightweight web-server in Java, and also included the servlet engine in the web-server to enable creation of dynamic web pages. To display real-time statistics, chart components were designed as Java applets. We made sure that the new version was able to use as much existing core code (such as protocol stacks) as possible, while rendering a 3-tier architecture to the product.

Client Results

By establishing a multi-faceted team in India, our client was able to augment the product development as well as support teams, thus increasing the engineering bandwidth and support

the current customers. It also helped them to simultaneously enhance the existing product functionality and re-architect the product. The team also facilitated quick multi-platform migration and compatibility testing. The re-architecting was efficiently executed by marrying the domain knowledge of our client engineers and product engineering expertise from Xoriant.

Using this new re-architected product, our client's customers can now monitor the network traffic activity remotely through any web browser without installing a thick client. This offers a high amount of mobility to the user. Using the new architecture, a user can monitor the activity across multiple sites simultaneously. This was a significant improvement over the old product.