



### **Time Machine® Keeps Mission Critical Project On Track & Within Budget**

In the United Kingdom the governmental body 'Companies House' holds all the latest information for U.K. companies such as their company accounts lists, annual returns, records, and directors reports and is responsible for the collection of revenue taxes from all U.K. businesses.

With annually increasing growth of tax data and subsequent increase in transaction processing their existing Fujitsu Mainframe system was being severely over-taxed in keeping up with the increased demand needed while running their core business application "CHIPS" The CHIPS program is responsible for capturing all data on listed limited liability companies & partnerships in the UK, gathering fees and ensuring legal obligations of the companies listed are met, including the filing of annual accounting returns.

Companies House realized a major technology was needed

With the help of LogicaCMG, a major global solutions company with 21,000 staff in offices across 34 countries provides systems integration and outsourcing services and IT consultancy, Company House was able to migrate their CHIPS application from their soon to be de-commissioning Fujitsu Mainframe to a more cost effective and powerful Sun Microsystems multi-tier, web based Client/Server system.

#### **The Environment**

The final solution consisted of five-major sub-systems with a Three-Tier environment as follows:

1) CHIPS LAN.

Several virtual LANs derived from a meshed set of 4 Cisco 4507 routing switches giving high availability.

2) Web-based front end.

Shared between production, integration & test, this sub-system comprises of 4 Apache Web servers and 2 IP load balancers, once again to afford high availability.

3) The production Suite.

This suite contains 4 SUN V880's and 2 domains on 2 SUN Enterprise 6800's. The hardware is split into three Tiers:

- An BEA Weblogic™ application server
- The highly sophisticated Stafware™ workflow management layer.
- And an Oracle database engine that the overall solution relies on for the data repository.

To ensure complete and thorough testing of the new system and any possible future changes or additions to the system would or will function correctly a mirror of the production system was assembled using 2 Sun V280's running the BEA software, 2 Sun V 480's for Stafware testing and another instance of the Oracle database. SAN based storage for the test system is provided through 4 SUN Stor-edge RAID cabinets. These were all networked together with 4 Silkworm fiber channel switches.

### **The Application Test and Certification Challenge**

“On the Test Suite, it's a big challenge for us. The project has a very complex environment that requires Five (5) Separate Test Environments on the Primary Machine. Also, we have Training & Model Office Environments deployed on the Standby machines concurrently,” says John Pinkerton, principal project consultant of LogicaCMG.

After an initial investigation, LogicaCMG thought they would be unable to create the required test environments without procuring additional server systems or software licenses. Additionally, once configured, they would still need to resort to stopping applications, manually manipulating system clocks and restarting the various processes. This would not only create a nightmare for their system administrators, but also put into question the viability of this solution within the required budgetary and time constraints. Then they discovered Solution-Soft's Time Machine.

### **The Time Machine Solution**

LogicaCMG saw Solution-Soft's date and time simulation tool, Time Machine, as the optimal application to manage their testing. Using Time Machine they are able to individually manipulate the time differentials on each of their nine logical test environments, while having separation of the remaining environments. Development teams dynamically change each test environment date without restarting the core application or impacting the eight other environments. Combining Time Machine with existing hardware and software, LogicaCMG realized a huge cost savings since they were able to avoid purchasing additional hardware and software.

According to John, “Without Time Machine, we would not be able to complete our critical testing. Time Machine is the only tool that allows us to do this complicated test; it also helps us to save tremendously on planned and unplanned budgetary.”

Mr. Pinkerton goes on to say, “We are more than satisfied with Time Machine, it was simple to install, easy to use, and performed exactly as we envisaged. Moreover, Solution-Soft could not have been more helpful or more accommodating, both from a technical and commercial perspective.”