



AMT-LION MIGRATES ACTIVE LINC AND COBOL!

ABOUT BROCK UNIVERSITY

Located at the centre of Canada's beautiful Niagara Peninsula in St. Catharines, Ontario, Brock University is the only Canadian university with the distinction of being part of a UNESCO Biosphere Reserve. The University offers strong undergraduate, graduate and interdisciplinary degree programs that include co-op and other experiential learning opportunities to a student population of more than 17,000.

Brock serves the Niagara region as a cultural, academic and recreational centre and offers the community excellent facilities for people of all ages. Brock's annual economic impact on the Niagara region is \$265 million.

BROCK'S SITUATION AND NEED

In mid-2004 Brock realized the lease on their Unisys LXE 65600, 1300 RPMs, was due to expire soon and they knew they didn't want to continue with the current mainframe technology.

Brock's legacy system consisted of their student registration application, as well as their finance, payroll and alumni applications. The registration application supported Brock's more than 17,000 students. The system was 100% web-based, written in LINC, Active LINC and COBOL utilizing ASP pages. There were over 750,000 lines of LINC code and 200,000 lines of COBOL. At its peak the registration performance issues with the legacy system required Brock to limit user access to the system. The fact was the legacy applications were no longer meeting user requirements.

Brock needed a solution that would significantly improve its performance during the peak periods and allow Brock to lift the restrictions to its users during these periods. Brock also wanted a solution that allowed them to begin a major upgrade of their existing application systems to take advantage of the web. They wanted a solution that was easy to use and where the upgrades were not difficult and time consuming to implement.

THE SOLUTION FOR BROCK

Brock decided the solution for their situation and their need was Asysco's Migration Technology (AMT) LION. This technology offered many benefits, both immediate and long term, including:

- SQL Database technology;
- The removal of the limitations of the mainframe languages;
- Readily available resources to support the hardware and software;
- Ability to implement web resources;
- Significant cost saving into the future; and
- Improved work environment for IT staff as a result of working with new technologies.

Asysco presented both AMT-LION and the Asysco Methodology to Brock University's IT management and staff. Brock felt AMT-LION was viable for them. Asysco conducted an on-site discovery process to define the full scope of the migration project. All integration and interface

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issues were explored and defined. AMT-LION needed to interface with Brock's own specific processes for printing on a LINUX print server. All LINC, Active LINC, & COBOL code running on the mainframe was documented. The LINC, Active LINC and COBOL programs were to be converted by Asysco into AMT-LION language. There was no special coding needed to web-enable Brock's applications within AMT-LION. Responsibilities were defined and a project plan created. A configuration was designed that would support the needs of the application and the needs of Brock for resilience.

THE SERVERS CONFIGURATION SUGGESTED WAS:

- 2 dual processor servers for the Database Servers, With 4 Gb of memory and RAID 10 disk
- 3 dual processor servers for Application Servers, With 1 GB of memory
- 1 dual processor server for the Development Database Server
- 1 dual processor server for the Development Application Server
- 1 dual processor server for the Portal Server

The final migration project plan was reviewed closely and the final, revised cost justification was presented to top management for final approval.

THE PROCESS

Asysco personnel worked at Asysco headquarters to complete the initial conversion process. In the meantime, Brock ordered the required hardware and prepared for the migration. Asysco delivered the converted code to Brock. Asysco worked hand-in-hand, side by side, with Brock to support the testing process and the implementation of the integration issues. Asysco provided training to the operations staff in the running of the AMT-LION environment. AMT-LION Developer training was also delivered to the IT staff. All training was completed over a 2 week period. The implementation of the AMT-LION was then conducted as scheduled.

Brock went live seven months after the contract was signed, with a newly converted system leaving the proprietary mainframe environment behind.

THE FINAL RESULT

All applications are off the mainframe and are accessible over the web. The performance of AMT-LION is much faster than the mainframe's performance. There are also no restrictions on user access to the system as there was on the mainframe. At its peak during this registration

period, there were 900+ concurrent users, executing roughly 400,000 transactions/hour, including batch transactions. Normal transactions are estimated at 350,000 transactions/day, with 350+ concurrent users. The systems are currently running at about 17% utilization, with an average response time of 15msec.

“THE END USERS LIKE THE IMPROVED RESPONSE TIME AND THE EXTRA FUNCTIONALITY AVAILABLE TO THEM BECAUSE OF AMT-LION SUCH AS THE ABILITY TO VIEW REPORTS AND SEARCH FOR VALUES INSTEAD OF PRINTING.”

Brock University developers agree that the AMT-LION development environment is much easier and friendlier to work with and have made the transition to it easily. The end users like the improved response time and the extra functionality available to them because of AMT-LION such as the ability to view reports and search for values instead of printing.

CUSTOMER

Brock University a Canadian university that offers strong undergraduate, graduate and interdisciplinary degree programs that include co-op and other experiential learning opportunities to a student population of more than 17,000.

SECTOR

Education

PROBLEM

Brock did not want to continue the mainframe technology and was looking for a solution that would significantly improve its performance during the peak periods and allow them to lift the restrictions to its users during these periods. Brock also wanted to start a major upgrade of their existing application systems to take advantage of the web.

SOLUTION

Asysco's Migration Technology (AMT) LION helped Brock University to take all applications off the mainframe and make these accessible over the web. The performance of AMT-LION is much faster than the mainframe's performance. There are also no restrictions on user access to the system.

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