THE FILLMORE GROUP
Relational Database Solutions

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VSAM to DB2 for z/Linux

Customer: United States Golf Association
Industry: Recreation

By migrating workloads from VSAM to DB2 for z/Linux the USGA was able to extend and modernize their application and analytics options.

The United States Golf Association (USGA) is the rule making and governing body for the game of golf in the United States. The handicap index – the means by which players of varying abilities can compete fairly against one another - was for decades calculated using a CICS/COBOL/VSAM application. VSAM is notoriously inflexible when it comes to changes in an application data model. This made it difficult to incorporate refinements in the handicap index calculation and to analyze the years of data USGA had accumulated to spot trends. The USGA opted to convert its existing application code to DB2.

The Golf Handicap Index Network (GHIN) subsidiary of USGA engaged The Fillmore Group to provide assistance for the full array of application development life cycle tasks including:

- » Data modeling and physical database design
- » Training application developers to imbed SQL in existing VSAM programs
- » Training database administrators to maintain a DB2 database
- » Supported code reuse by converting CICS transactions to DB2 Stored Procedures
- » Migrated data from VSAM to DB2
- » Performance tuned the application SQL, data model, and database server

The USGA now has greater flexibility in supporting its member associations and will be able to employ sophisticated tools such as Online Analytical Processing (OLAP) and data mining to analyze the scoring data it has amassed.

In addition, all new application development will be able to exploit web services, the SQL API, and invoke the Stored Procedures (formerly CICS transactions) using the SQL Call verb from Windows .NET applications.

DB2 Platform Re-hosting

Customer: Groupe Promutuel
Industry: Insurance

With TFG training Groupe Promutuel employees performed 75% of the project work. The total cost of the project was 20% of the expected increase in the CA tools cost.

Groupe Promutuel is a Quebec-based insurance service bureau. As the organization grew they continually added hardware support to their z/VM system. With each system expansion their annual Computer Associates software licensing fees increased. Faced with a major customer expansion that would result in an annual increase of CA fees of $500K, Groupe Promutuel decided to investigate options to lower costs.

TFG worked with the Groupe Promutuel staff to move their customer data from the DB2 Server for VSE&VM database to DB2 UDB on an Intel box, running Linux. Groupe Promutuel's applications remain in place on z/VM and access the data using DRDA (Distributed Relational Database Architecture). Benchmark tests run after the DB2 UDB implementation confirm predicted processing efficiency levels; in fact, the customer was amazed at the DB2 UDB on Intel performance.

DL/1 to DB2 for z/Linux Migration

Customer: Supreme Court of Virginia
Industry: State and Local Government

With TFG training SCVa employees understood and observed the first migration, assisted with the second migration, and independently managed subsequent migration efforts.

The Supreme Court of Virginia had a collection of VSE z/Series mainframe-based DL/I and DB2 Server for VSE&VM databases used to support the state's various court systems. In 2002, the Supreme Court was stymied by technical and volume limitations of DL/I.

Originally, data was migrated from DL/I for DB2 Server for VSE&VM. The initial application migration took several years. As a long-time IBM customer the Supreme Court of Virginia spent over a year attempting to procure "free" technical resources from IBM to assist with their migration. After many discussions with IBM, and at the advice of experienced IBM Data Management Technical Specialist Landon del Sordo, the Supreme Court of Virginia agreed to engage The Fillmore Group. Beginning in 2005, TFG provided database administration consulting, training, and mentoring on DB2 Server for VSE&VM.

As the project progressed, on TFG's recommendation, the Supreme Court IT staff agreed they would attempt migrate one database from DL/I directly to DB2 for z/Linux. Batch and CICS online applications continued to run on VSE. The direct migration was a success.

Newer development was enabled to exploit the feature and functional richness of DB2 for LUW while protecting and continuing to support the valuable business logic contained in the legacy applications.

DB2 Version-to-Version Migration

Customer: U.S. XPRESS Enterprises, Inc.
Industry: Transportation

Well planned and executed database upgrade migration completed over a weekend.

U.S. Xpress Enterprises is a nationwide truckload carrier based in Chattanooga. To complete the upgrade to a new, better performing version of IBM Rational software, a simultaneous upgrade of DB2 or Windows from version 7 to version 8 was required. To avoid disruption to the U.S. Xpress IT staff application developers, the upgrade took place over a weekend, beginning Friday evening and ending Sunday morning.

The Fillmore Group was responsible for all aspects of the DB2 upgrade including:

» Determining the state of existing databases

» Backing up all existing databases to establish a fallback point-of-recovery

» Preparing the databases for the Rational upgrade by expanding the sizes of affected tablespaces

» Installing DB2 version 8, Fixpack, and patch code specific to the Rational software

» Conducting installation verification testing

» Recommending configuration changes to improve performance

These tasks were conducted in a coordinated fashion with the team of Rational and WebSphere Application Server specialists from IBM. The customer achieved better Rational performance and the opportunity to exploit new feature/functionality available in the upgraded software.

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DB2 Migration to SQL Server

Customer: The National Gallery of Art
Industry: Museum/Not for Profit

Using TFG's remote, "DBA on Demand" services The National Gallery of Art migration team was able to focus on the target platform throughout the migration effort.

The National Gallery of Art maintained records of their art collection in a DB2 Server for VSE&VM database using a custom application developed using a decades old fourth generation language tool to meet their stringent requirements. The database shared space with the Gallery's financial system for many years.

When the Gallery's management opted to implement a new Windows-based financial system they began evaluating existing museum collection software applications able to run on the same system. Ultimately a selection was made, and efforts began to migrate collection records to the new Microsoft SQL Server database.

The Fillmore Group provided remote and onsite support and service to the Gallery to ensure the DB2 Server for VSE&VM system continued to perform while customization to the new application was completed, and assisted the new application development team to migrate user data from DB2 to SQL Server.