Case Study

DB2 Mainframe Migration to Open System

This case study details how Datavail responded to its client's urgent need by performing a full database migration from a mainframe DB2 onto an open system within a two week period.

The Challenge

The customer provides digital voice, connectivity, and communications services to thousands of corporate clients across multiple borders. Its databases and tablespaces are extensive and contain trillions of bits of sensitive information. Access was 24x7, and the third-party database vendor also provided support services to maintain optimal database functionality.

The communications customer contacted Datavail after learning that its database vendor was decommissioning its mainframe database server and that support for its data was expiring at the end of the month. Worse, the only option offered to the customer was to pay for extended support at the hefty cost of a half-million dollars per quarter. Adding pressure to the situation was that the timing was the holiday season.

Best practices encourage this type of migration to roll out over months or even a year. Datavail was asked to complete the process within two weeks.

The Solution

Datavail immediately accepted the project and assessed the situation:

- Gaining access to the mainframe proved to be its own challenge.

- Upon access, it was difficult to determine within the mainframe itself which tools, if any, were available or functional to assist with the move.

- The customer had no available personnel capable of strategizing for or performing the migration.

- Once those barriers were discerned, Datavail recognized the full extent of the migration challenge:

    - The database itself was three terabytes, all of which needed to move into the new database structure.

    - Formatting issues throughout the mainframe created additional obstacles that required individual attention to repair.

Datavail performed a short 'pilot project' to identify available software on the mainframe that could be used in the migration process and to establish an approach to the larger migration procedure. Then, using a small and select tablespace as a sample, Datavail developed the strategy that would export the schema and data from the mainframe to the new database and validate the data after its migration. Thereafter, it was a matter of methodically moving segments of the mainframe data to the new database via the newly devised procedures.

The Results

Within the two-week period, Datavail moved all the customer's data off the mainframe and onto the new DB2 open system. The newly generated database included iterative views so users could access data while reordering it to suit their needs.

Datavail was also careful to leave sample scripts and other artifacts for the customer's future use to trace their steps back to their previous configuration. Finally, Datavail retained a variety of original formats in case those were needed, as well as several redundant copies in the event any one version failed.