



RDC Speaks Your Business Language

RDC Datacentre, the European Automotive Solution Provider

For over thirty- five years, RDC Datacentrum has established and developed services concerning information, communication and computerisation in the Dutch Automotive sector. Originally, RDC was set up as a supplier of statistical information for the vehicle sector and it has grown into the computerisation centre of the vehicle branch via communication services such as motor vehicle tests, exchanging information on used cars and much more.

Every day, in the Netherlands alone, over 100,000 transactions are being processed by RDC via the Internet from dealers, manufacturers, importers, car companies, damage repairers and car lease companies. Almost 170 specialists at RDC develop and support the full service ICT solutions to the automotive sector, from network architecture to Support Desk, from application development to financial services.

The RDC Datacentrum B.V. is located close to the RAI, Amsterdam's famous Congress Centre. Almost 170 employees at RDC guarantee that the multiple activities and services of a modern data processing environment will be taken care of. IBM mainframes hosting the VSE/ESA operating system are in use. The production data of RDC is stored in IDMS-databases. AIX based systems act as servers to host the various Client/Server applications that use DB2/UDB as their DBMS. The favourite programming language used on the mainframe is COBOL. C, PHP and JAVA are the programming languages that RDC is using to develop the Open System applications.

Around 2001 RDC decided to make their IDMS databases available to Open System applications. Tom Boeken, System Manager: "A new Client/Server application was about to be developed and we needed a direct access to our IDMS databases on the VSE mainframe. In these days we made the decision for an American software package that allowed us to use SQL syntax to retrieve data from IDMS. We had to develop an interface module in C so that we could use the product within our AIX applications." The Client/Server application went into production and other applications followed, all using the same in-house developed interface and the middleware.

Richard van der Nat, Manager ICS, remembers: "It came to us like a shock in early 2004, when we learned that the Software company whose package we had licensed and that had become very strategic to us, was sold and the new owner of the package decided to completely drop support of the VSE version. We had to make the decision to get an alternative as soon as possible. That was the situation when we learned about B.O.S. Software and tcACCESS."

The production use of tcACCESS started at the end of 2004 and the product since then is in use every day. The experiences of RDC with tcACCESS are documented in a separate user story. Richard van der Nat: "Following tcACCESS we contacted B.O.S. again to learn more about their new tcVISION product. B.O.S. presented us the concept and we have been convinced that tcVISION was

exactly the product we were looking for to help us in the migration from IDMS to relational databases. Our focus and concern was the real-time synchronization between IDMS and DB2/UDB and MS SQL Server. The only – but major problem – we were facing at that time was that neither a VSE version nor support for IDMS was available. We have trusted in B.O.S. technical capabilities and ordered a VSE/IDMS version of tcVISION. Right in time the product was delivered to us and we could start the implementation process. tcVISION is in use now since Summer of 2005."

tcVISION's job is to automatically capture all changes in IDMS and to synchronize these changes with DB2/UDB and MS SQL Server databases. The applications affected are UNIX- and Windows-applications. Marcel Versteeg, responsible for the synchronization project: "tcVISION automatically captures all changes applied from our VSE applications to IDMS and propagates them to DB2/UDB on AIX and MS SQL Server on Windows. We have mirrored our IDMS networking architecture in the relational world. Changes performed by our Windows- and UNIX applications are captured by database-triggers and are passed as SQL statements to the VSE system. We use the tcACCESS ODBC driver for this. The tcACCESS VSE component takes the SQL statements and performs the corresponding IDMS updates. The challenge is to ensure that these changes are not being propagated back by tcVISION. IDMS is a networked database and supports "N to N" relations. To keep both worlds in synch it is mandatory that so called "Foreign Keys" must be propagated back as UPDATES from IDMS, when a new record has been inserted into IDMS. This is IDMS specific and rather complex. tcVISION masters this challenge without any difficulties. '

Richard van der Nat: "We are glad that we are partnering with B.O.S. The experience so far has been very encouraging. B.O.S. is a company that listens to what the customers say and then provides solutions. Taking tcVISION on board has been - and still is - a good decision."









The diagram shows the bi-directional synchronization between the VSE CA-IDMS database and various Unix and Windows applications that store their data in DB2 LUW and MS SQL Server databases.

The IDMS specific DBKEYS (internal database pointer) have been defined in DB2 and MS SQL Server as "Foreign Keys". tcVISION captures all real-time changes performed by the VSE programs and propagates the changes to DB2 LUW and MS SQL Server. The DBKEY-Foreign Keys are automatically maintained.

Changes performed to DB2 LUW and MS SQL Server by the Unix and Windows applications are captured using Triggers and passed to VSE via the tcACCESS ODBC driver. The mainframe VSE SQL-Engine performs the required changes to the IDMS database.

tcVISION recognizes all changes performed by tcACCESS. UPDATEs and DELETEs are not propagated back to Unix and Windows.

In case of an INSERT, the DBKEY in the DB2 LUW and MS SQL Server database is NULL. After the INSERT has been applied to IDMS, IDMS creates a new DBKEY for the record. tcVISION captures this DBKEY, rejects the INSERT and instead passes an UPDATE statement to Unix and MS SQL Server to apply the new DBKEY.

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