

tcVISION

Mainframe-to-AWS Data Replication

Fact Sheet

Mainframe data integration has taken on more urgency in recent years as organizations seek to relocate mainframe workloads to lower-cost platforms, modernize mainframe applications, and leverage analytics for customer insight and competitive advantage. These factors are driving adoption of the Cloud as a strategic component in corporate technology architectures.

As customers look at newer Cloud technologies on which to exploit their mission critical data, they are discovering the power of Amazon Web Services (AWS).

tcVISION supports AWS Relational Database Service (RDS) databases, such as Aurora, PostgreSQL, MySQL, SQL Server, and Maria DB as targets, in addition to traditional Linux/Unix/Windows (LUW) targets such as Oracle, IBM Db2 LUW, Software AG Adabas LUW, IBM Informix, Sybase, Microsoft SQL Server, PostgreSQL, and ODBC.

tcVISION on-premises acquires large amounts of data in bulk or via change data capture methods, including in real time, from virtually any IBM mainframe data source (Software AG Adabas, IBM Db2, IBM VSAM, IBM IMS/DB, CA IDMS, CA Datacom, even sequential files), and transforms and delivers it to the AWS Cloud.

Users can easily model and map their data, and create links between data sources and target systems with tcVISION's GUI interface. tcVISION also has features to prevent looping and provide conflict detection for bi-directional data processing, allowing mainframe updates to be reflected on the AWS databases and changes on the AWS databases to be reflected back to the mainframe again.

The tcVISION Solution

tcVISION is available as an Amazon Machine Image (AMI) and as an "on-premises" mainframe product.

The tcVISION AMI component automatically sets up the product on the AWS Cloud and allows customers to establish network connectivity between their on-premises mainframe and AWS databases. Using the tcVISION AMI, customers can migrate data, or perform real-time data replication between their on-premises mainframe and Amazon Relational RDS databases on the AWS Cloud. An enterprise with mission critical data in a mainframe environment can rapidly deploy databases globally within minutes, and with minimal administration requirements.

The tcVISION on-premises product is installed at the customer site.

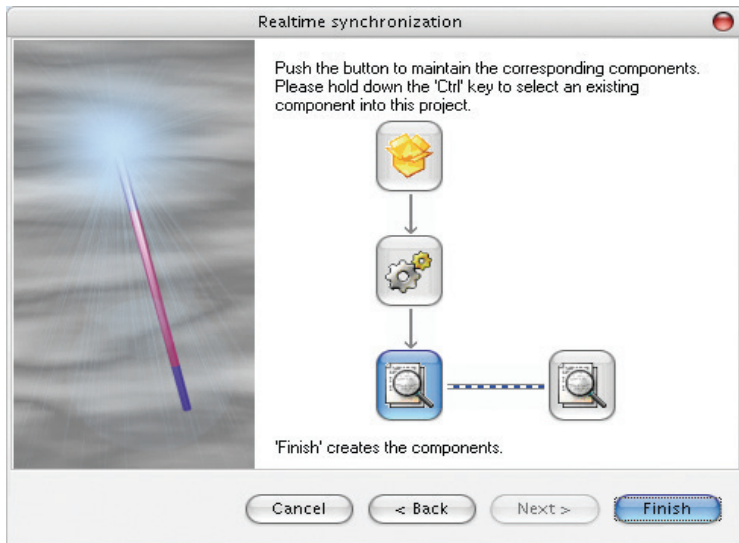
Why tcVISION?

- Increasing number of enterprise applications that utilize their own databases.
- Requirement for up-to-date information demands real-time, bi-directional data synchronization between mainframe and Cloud/open systems.
- Business globalization cannot tolerate interruptions in online systems – data exchange with batch-window limitations is no longer acceptable.
- tcVISION has implemented AWS as a standard target, including an AMI for ease of integration.



tcVISION: Real-time and
Bi-directional
Data Replication Between
Mainframe and AWS



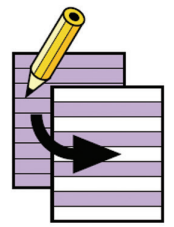


tcVISION – Technology

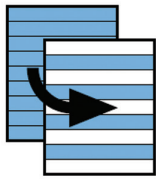
tcVISION considerably simplifies mainframe data exchange processes. The structure of the existing mainframe data is analyzed by tcVISION processors, then automatically mapped to a target data mapping. The data mapping information is presented in a user-friendly and transparent format – even for users with no mainframe knowledge.

The mapping information is saved in a meta data repository hosted on a relational database, and can easily be made available to other applications. The Windows-based Control Board of tcVISION provides an easy-to-use facility to administer the data flow. tcVISION provides a variety of interfaces to allow seamless integration with ETL or EAI solutions.

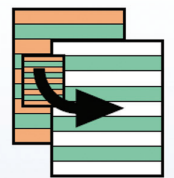
Change Data Capture Methods



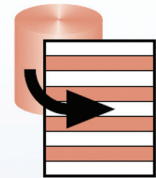
Logfile Analysis



Bulk Transfer



Batch Compare



DBMS Extension

tcVISION offers different CDC methods to identify mainframe and relational data. The change capture method deployed depends on the source database, the data volume, the volume of changed data, and the required currency of the information. Changes are automatically transferred to the targets in time intervals or in real time by tcVISION data change publishing facilities.

tcVISION Change Publishing

tcVISION converts the captured changes to a format compatible with the target system. A target database can reside on a workstation or on open systems or Windows server (e.g., Oracle, SQL Server, Db2 LUW, etc.)–or another mainframe database (e.g., DL/1 -> Db2).

The transfer to the target system can be in various formats: SQL, Flat File, XML or any user-specific format that can be accessed by an API. It is also possible to insert the data into a message queue or to pass it to any ODBC target. tcVISION provides the user with enormous flexibility and guarantees openness for future technologies.

A powerful script language is available to implement automated data-exchange processes. Wizards and "drag and drop" technologies enable usage of the script language with no need for training.

tcVISION – Benefits

With tcVISION, data synchronization between mainframe and the Cloud pays off:

- Real-time replication of mainframe data enables real-time analytics, offloading mainframe application functionality (e.g., online banking queries, e-Government, etc.) to AWS with data synchronized between the platforms.
- Replication costs are minimized as only changes are exchanged.
- Mainframe resource usage and costs are minimized.
- Data exchange processes can be designed, deployed, and maintained with tcVISION without mainframe knowledge, providing cost savings, quicker delivery and project autonomy in Cloud initiatives.
- Reporting and analytics applications are more comprehensive and valuable when mainframe data can be replicated to AWS.

Supported Environments

IBM-Mainframe: Open Systems:
IBM z/OS, z/VSE, z/Linux Windows, Unix, Linux, Open Systems

Target database can reside on AWS, a workstation, or on an open systems or Windows server (e.g., Oracle, SQL Server, Sybase, Db2 LUW, etc.)–or another mainframe database (e.g., DL/1 -> Db2).

Transfer to the target system: SQL, MQ Series, Flat File, XML, or any user-specific format that can be accessed by an API.