

# Real-time Data Replication and Change Data Capture

## Databases Supported

- IBM® DB2® for i, AS400
- IBM® DB2® for z/OS (OS/390)
- IBM® DB2® LUW
- IBM® Informix®
- Oracle®
- Microsoft® SQL Server®
- Microsoft® Azure SQL
- MySQL™
- OpenText™ Gupta SQLBase
- Google® App Engine Datastore
- SAP® IQ
- SAP® Sybase® SQL Anywhere
- SAP® Sybase® ASE
- IBM® PureData™ (Netezza®)
- Actian® Vector
- HP® Vertica®
- SAP® HANA®
- Ingres®
- PostgreSQL®
- Teradata®
- Hadoop®

Syniti Data Replication (formerly DBMoto®) is the preferred solution for heterogeneous Data Replication, Change Data Capture and Data Transformation requirements in an enterprise environment. Whether you are migrating data to a lower TCO database, synchronizing data among disparate operational systems, creating a new data warehouse, high-speed analytic or columnar database, building a business intelligence application or deploying a backup of key corporate data, Data Replication is the solution of choice for fast, trouble-free, easy-to-maintain Data Replication and Change Data Capture projects.

If you depend on data from multiple databases, you need a data replication solution that supports major relational database systems, big data platforms and data warehouse appliances out-of-the-box. Providing an efficient visual interface, intuitive wizards and easy-to-follow guides, Data Replication helps IT staff implement the toughest replication requirements quickly and easily. Data Replication is mature and approved by enterprises ranging from mid-sized to Fortune 1000 businesses worldwide.

Enabling dependable data delivery in enterprise environments requires expertise in database servers. HiT Software has offered relational data access products since 1994, and Data Replication incorporates proven integration technology to ensure high performance yet minimally intrusive data replication using Change Data Capture for maximum efficiency.

## Powerful, Flexible, Configurable Change Data Capture

Data Replication does not require any programming on the source or target database platforms in order to deploy or run its powerful data replication features.

Data Replication provides all functionality in easy GUI and wizard-based screens; no stored procedures to develop; and no proprietary syntax to learn.

# Key Features

## Database Support

- Support for multiple relational databases as sources and targets
- Support for data replication to Apache Hadoop data storage and processing environments.
- Support for analytic/columnar data storage solutions as targets including SAP HANA, IBM PureData System (Netezza), HP Vertica and Actian Vectorwise
- Support for database cluster environments
- Support for Oracle RAC and Sequences
- Support for data replication in Cloud environments, including disconnected databases and Google App Engine™ Datastore
- Open APIs to integrate Data Replication into corporate architectures, or into third-party solutions

## Replication Support

- Replication modes: Refresh (snapshot), Mirroring (change data capture), Synchronization (real-time bi-directional mirroring with conflict resolution)
- “Multi-Server Synchronization” to synchronize changes bi-directionally between source and multiple targets, with built-in conflict resolution
- Automatic creation of target tables
- Extensive log reporting and accessibility
- Powerful visual tools for information on replication performance, status and errors
- Data Replication Verifier™ tool to easily compare and reconcile replication results for accuracy and auditing
- Support for extended data types, such as XML
- Built-in transformation functions, with custom functions definable at any time

## User Support

- User-friendly graphical interface
- Wizards for fast, easy configuration and setup
- Configuration and management of entire replication process through one or many Data Replication Management Center console(s) on Windows platform
- Remote administration of Data Replication Replicator through Management Center
- Customizable via Microsoft C# and VB.NET scripting and event-driven environment
- Extensive security including user and certificate authentication via TCP/IP and HTTP
- No programming needed on source or target database platforms
- Source and target table access via standard .NET data provider protocol

## Real-Time Data Replication and Change Data Capture

### Refresh (Snapshot) Mode

Reads data set, applies administrator-defined mapping rules, and writes the entire result to the target database

### Mirroring (CDC) Mode

One-way replication using CDC from source to target in real-time, based on transaction log management whenever possible

### Synchronization Mode

Uses Data Replication’s CDC-based transaction log management and custom conflict resolution strategies to keep multiple databases bi-directionally synchronized

Data Replication supports the following Databases, Cloud Systems, Analytic Systems	Snapshot (Refresh)	One-way CDC (Mirroring)		Bi-directional CDC (Synchronization)
	Source or Target	Source	Target	Source or Target
IBM DB2 for i, AS400 V4R3 and later	✓	✓	✓	✓
IBM DB2 z/OS (OS/390) v5 and later	✓	✓	✓	✓
IBM DB2 for LUW v5 and later	✓	✓	✓	✓
IBM Informix	✓	✓	✓	✓
Oracle v8 and later	✓	✓	✓	✓
Microsoft SQL Server v6.5 and later	✓	✓	✓	✓
Microsoft Azure SQLv11 and later	✓	✓	✓	
MySQL v3.23 and later	✓	✓	✓	✓
Gupta Technologies SQLBase	✓	✓	✓	✓
Google App Engine Datastore	✓	✓	✓	✓
SAP IQ v15.4 and later	✓		✓	
SAP Sybase SQL Anywhere	✓	✓	✓	✓
SAP Sybase ASE v12.50 and later	✓	✓	✓	✓
IBM PureData System for Analytics (Netezza)	✓		✓	
Action Vectorwise	✓		✓	
HP Vertica	✓		✓	
SAP HANA	✓		✓	
Ingres 2006	✓		✓	
PostgreSQL	✓		✓	
Teradata v13 and later	✓		✓	
Apache Hadoop v2.6.0 and later	✓		✓	

With Data Replication, users define data replication and transformations by applying built-in mapping and customized business rules.

Business rules can be applied through scripts, which are used to filter data or to add business logic to a replication. They are generally implemented through automatically-generated events during a Data Replication replication. Scripting can perform source/target table lookups, append log activity, and update target tables. Data Replication also includes a powerful expression generator for interactive data transformation.

### Data Replication's Management Center GUI console:

- Identifies and connects to multiple source and

target databases

- Creates target tables
- Manages and controls access to replication configurations
- Sets up replication processes and groups them for efficient execution
- Stores replication mapping and rules in a metadata database
- Monitors replication processes, compares results and analyzes issues
- Provides real-time information on replication status
- Records replication activity, performance and errors into logs, to quickly spot and manage errors

### System Requirements

- Windows Server 2012/2008/2003
- .NET Framework 4.0 or higher

