# **Database Replication**

Database replication helps improve the availability and reliability of data that organizations use for applications, analytics and new technology investments. Database replication becomes particularly critical as organizations continue to expand their business across different architectures, systems or platforms over time. A database replication offering that is vendor agnostic, enabling many sources and targets, as well as offering a light cost-efficient footprint is key to getting the most out of database replication processes.

#### Not All Sharing Methods Are Created Equal

As organizations have accumulated a range of systems that collect, store and process data, various sharing methods have been employed to help users get access to that data. From inefficient custom scripting to direct network access – each method comes with its own set of challenges.

Sharing Method	Common Challenges
Direct network access	<ul> <li>Negatively impacts network and database performance</li> <li>Causes user application failure and user dissatisfaction</li> <li>Loses control of the production database as queries can be run anytime</li> </ul>
Off-hours reports and extractions	<ul> <li>Business operates on aging data until next extraction</li> <li>Difficult to find acceptable time to perform an extraction</li> </ul>
Manual scripts	<ul> <li>High cost and investment – labor, test system expenses, maintenance costs</li> <li>Lost opportunities and budget for other initiatives</li> </ul>

Even companies that invest in change data capture (CDC) solutions find they aren't the silver bullet they had hoped for. While CDC tools address many of the deficiencies of other sharing methods, most are vulnerable to network or server failures, resulting in lost data and unexpected downtime.

## Database Replication Speeds Data Value Realization

Database replication facilitates the collection and sharing of data from a wide range of systems. This sharing of data should power real-time insights and business decisions – quickly showing its value to your business. However, replication run through underperforming CDC solutions can make seeing the business value of database replication difficult or non-existent. When assessing a CDC solution, you should ask about key functionality that will help improve the business value of data:

precisely

- Can the solution auto-create target tables or are users required to manually re-create the entire database schema?
- Are changes replicated as soon as they occur in real-time or are changes reflected in a batch?
- Is data able to be transformed and enhanced in transit?
- Will the solution impact performance by consuming production database resources versus running on another system?



# Achieve better control over assets and budgets

- Protect performance of production database by offloading data to a reporting system for queries, reports, BI and analytics
- Consolidate databases, data marts or data warehouses for business processing or comprehensive analysis
- Synchronize branch offices and keep siloed databases in sync in real-time
- Feed customer or partner applications and only provide specific data relevant to that customer or partner

# **Connect Your CDC Solution**

Precisely offers organizations the ability to perform real-time database replication across the business with Connect. Connect replicates application data across relational databases, streaming frameworks, and the cloud all while offering high-performance, resilience, fault-tolerance and guaranteed data delivery. Connect enables you to have a single tool, that requires no coding or tuning, to support data replication and big data convergence.

Connect is a real-time database replication solution, targeting streaming platforms, cloud, databases and data warehouses. Connect uses change data capture (CDC) technology for database replication to help organizations detect changes to data in real-time without overloading networks or affecting performance.

## **Reliability and availability**

In traditional sharing methods, when connectivity is lost most solutions will lose their place in the replication process. As a result, there are many negative impacts on business processes as data is missing or duplicated. When systems fail at this point, it means a manual restart of the system and that replication needs to start again from the initial load. Connect offers organizations reliability and availability of data at any point in the replication process. Some of Connect's advanced capabilities include:

- Resilient data delivery automatic recovery without any manual intervention or resynchronization
- · No data duplication with automatic restart at point of failure
- Zero data loss

Connect is the only software in the market that guarantees data delivery, helping to ensure that you are using the most accurate and reliable data. Processes dependent on replicated data benefit from reliable transfer of information coming from a wide range of ground and cloud-based databases.

### **Replicate Data from Legacy to Cloud**

Many businesses struggle with moving data to new platforms. While legacy environments are of high value to the business, when it comes to replicating data from these systems to new platforms, it is often not readily compatible with a new system. As a result, data is replicated in batches to the new platform and business performance is impacted. Precisely's expertise in a wide range of systems is reflected in Connect. Connect includes support for databases such as: Db2, Oracle, SQL Server, MySQL, PostgreSQL, Teradata, Informix and Sybase, as well as popular streaming services that can be replicated across a wide range of topologies.

#### **Proven Results with Connect**

Customers around the world use Connect for database replication to improve business insights and processes. Since implementing Connect within their organizations, Precisely customers have seen real business benefits such as:

- 100% more reliable data, with the ability to bring systems back online in the event of system or network failures, replicating from the correct position without any human intervention
- Offloading production resources extending the life of computing infrastructure by one year- 25% of the previous replacement cycle
- Real-time data to make time-sensitive decisions, and improve service levels and customer experience