bryteflow®

For ⊠ Microsoft® SQL Server®

BRYTEFLOW TO LIBERATE YOUR SQL SERVER DATA

KEY FEATURES

- Zero source impact
- Change Tracking capability
- Real time data replication
- Click-to-extract interface
- Automated outage recovery
- Data masking and encryption
- Flexible deployment options
- Historical data retention
- Automated data monitoring and reconciliation

BENEFITS

- Faster time to insight & action
- Low cost data storage
- Improved application performance
- Lower ETL footprint
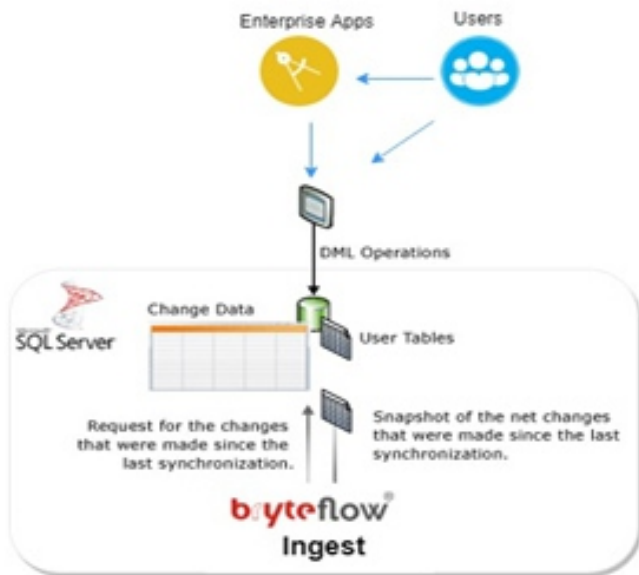
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For SQL Server

In the current hyper-competitive and customer-centric business environment, organizations are expected to intimately know and anticipate their customer preferences. Little is left to chance as organizations seek to apply Data Science, Machine Learning and AI to their Data Assets.

With some of the planet's most important applications running on them, Microsoft SQL Server database environments contain large amounts of valuable enterprise and customer data. However, the true value in this data is rarely uncovered due to issues with application impact, cost, scale and underlying data complexities.

BryteFlow makes it easy to Extract, Sync and Start analysingSQL Server data by combining industry leading change data capture (CDC) technologies with native support and integrations for AWS Big Data infrastructure.

Zero Impact at Source with Change Tracking

BryteFlow eliminates the need for costly database queries, triggers, new tables to store tracking information, and custom cleanup processes or extensive logging to extract data. It syncs data by obtaining tracked changes from SQL Server database, apply these changes to S3 and/or Redshiftand does not require any additional agents or software to be installed. The software can be configured to read change tracking information directly from a SQL server database which has change Tracking enabled on it.

Built on industry standards

BryteFlow is built on Industry Standard SQL ServerChange Trackingmethodology. It is futureproof and compatible with upgrades to SQL Server 2008 and above or SQL Server on Amazon RDS.

Automatic catch-up from network dropout

In the event of a network error or outage, BryteFlow backtracks its last successful load and automatically resumes operations once connectivity is re-established. The software also features a high performance catchup mode, designed to rapidly bring systems back into sync.

Continuous data sync

Incremental extraction removes the need for resource intensive batch extraction which frees up valuable processing time and limits the risk of large bulk data uploading failures. It also ensures that analysts and data scientists have access to current and up to date data.

Metadata Management

With Bryteflow, users can leverage a Google-like interface to search and explore data sets. Bryteflow automatically tags key data attributes and structures into an AWS Data catalogue that can be accessed directly by end users or third-party tools / applications.

Source switching

To eliminate high source system impact during initial full table loads, users can leverage Bryte's source switch functionality. This enables initial extracts to be completed using backup or standby databases. Once the initial extract has been completed, BryteFlow switches to the system logs for new data updates.

Historical data retention

BryteFlow provides out-of-the-box options to maintain **full record history** by using an industry standard type-2 approach. This tracks historical data by creating multiple records for a given natural key in the dimensional tables with separate surrogate keys and version numbers.
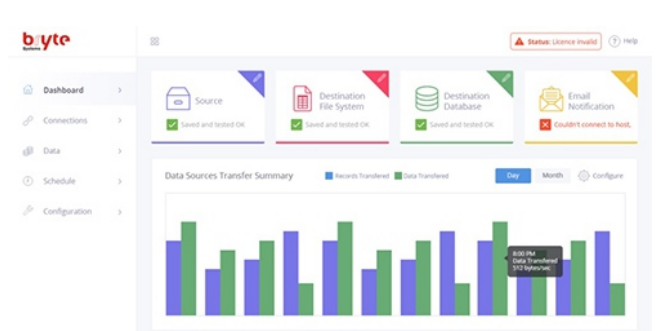
Masking and Encryption

BryteFlow enforces **data encryption** in transit and rest, and enables selected fields to be excluded from Data Extraction processes.

Flexible deployment options

BryteFlow software features **flexible deployment options**. It can be deployed on EC2 instance or on premise behind the organization's firewall / proxies.

Click-to-extract

BryteFlow's click-based user interface delivers a codeless development environment to configure and monitor data streams – eliminating time spent managing complex ETL jobs.

Monitoring and Alerting

BryteFlow features an advanced **data monitoring console** which performs continuous data **health checks and reconciliations**. Users are automatically alerted and notified in the event of any system errors.

Advanced analytics ready

BryteFlow can be configured with custom business logic to provide cleansed, modelled and analytics ready data.

It also features out of the box integrations with **Hadoop / Spark on Amazon EMR, AI** with **Amazon Machine Learning** and powerful Data Warehousing with **Amazon Redshift**. With BryteFlow, data scientists can access and analyse data on-demand, using any technology or tool of their preference.

Partitioning

BryteFlow is built to effectively extract large application tables using partitioning algorithms. This process breaks up large tables into multiple sections for an effective multi-part upload.

Low cost data storage

BryteFlow is designed to land data into low cost Amazon Web Services Infrastructure on either Amazon S3 or Amazon Redshift. With Amazon S3 Object Storage, clients can store their data for just 1 – 3 cents per GB per month.

Built-in AWS Best Practices & Optimizations

BryteFlow automates all core AWS best practices for data ingestion, storage and access. This includes Amazon KMS Encryption, Amazon S3 File Management / Naming Conventions, Sort and Dist Keys, S3FS integrations with EMR, Multi-part and parallel data uploads.

Configuration file for versioning and macro changes

BryteFlow maintains an XML file which captures all configuration changes. With this file, power users can speed up the configuration by copying-and-pasting macro changes.

ABOUT BRYTE

Bryteprovides an **out-of-the-box** software driven approach to help enterprises build **high performance cloud Data** Lakesand Analytics Environments.

Our company mission is to make **Data Access, Innovation and Analytics** more pervasive, **cost effective** and easier than ever before by blending together the latest in **Innovative Cloud, Business Intelligence** and Data liberation technologies.We are recognized by our clients for world class expertise with **Amazon Web Services,Real Time Data Lakes** and Software Driven Automation on Cloud.