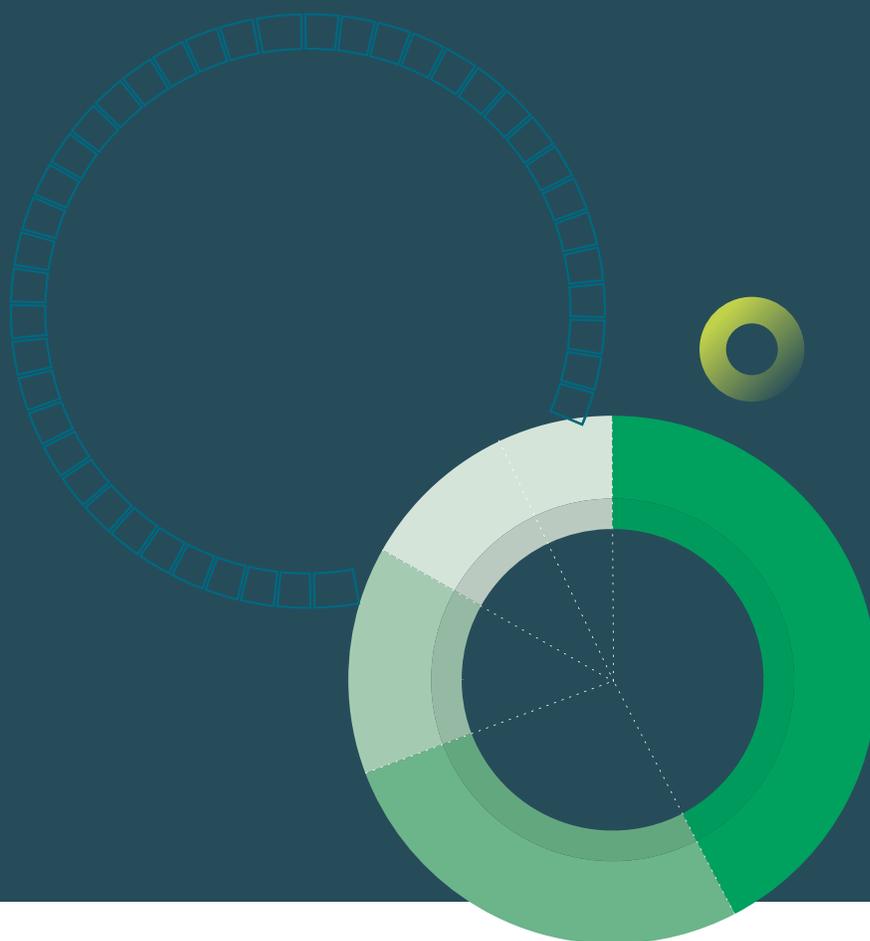


DATA INTEGRATION

# Modern DataOps

Using the Qlik Data Integration  
Platform for Better Analytics



## Enabling DataOps for Analytics-Ready Data

Qlik's Data Integration Platform (formerly Attunity solutions) automates real-time data streaming, cataloging, and publishing, so you can quickly find and free analytics-ready data — and take action on it.

In today's hyper-competitive business climate, real-time insights are critical. Users need robust data integration and agile analytics solutions, to make decisions fast. Unlike traditional batch data movement and ETL scripting — which are slow, inflexible and labor intensive — Qlik's data integration platform automates the creation of data streams from core transactional systems. It efficiently moves data to applications, warehouses, and lakes — on premise and in the cloud — and makes data immediately available via an Amazon-like catalog marketplace experience. With Qlik, users get the frictionless data agility they need to drive greater business value.

Data consumers need better access to their data in real time. Many existing processes and technologies simply can't keep up with this increasing demand, creating more complexity and tighter bottlenecks within IT.

DataOps seeks to bring improvements to data integration. Borrowing methods from DevOps — which combines software development (Dev) and IT operations (Ops) to improve the velocity, quality, predictability, and scale of software development and deployment — DataOps focuses on the practices and technologies for building and enhancing data pipelines to rapidly meet business analytics needs.



# Data Warehouse Automation

Business needs are in a continual state of flux. Data sets are increasingly diverse. To meet the growing need for analytics-ready data delivery at the speed of now, Qlik's Data Integration Platform automates the entire data warehouse lifecycle.



## Real-time data ingest and update

Change Data Capture moves data to your warehouse — in real time — from a wide variety of heterogeneous databases, data lakes, and enterprise sources like mainframe and SAP.

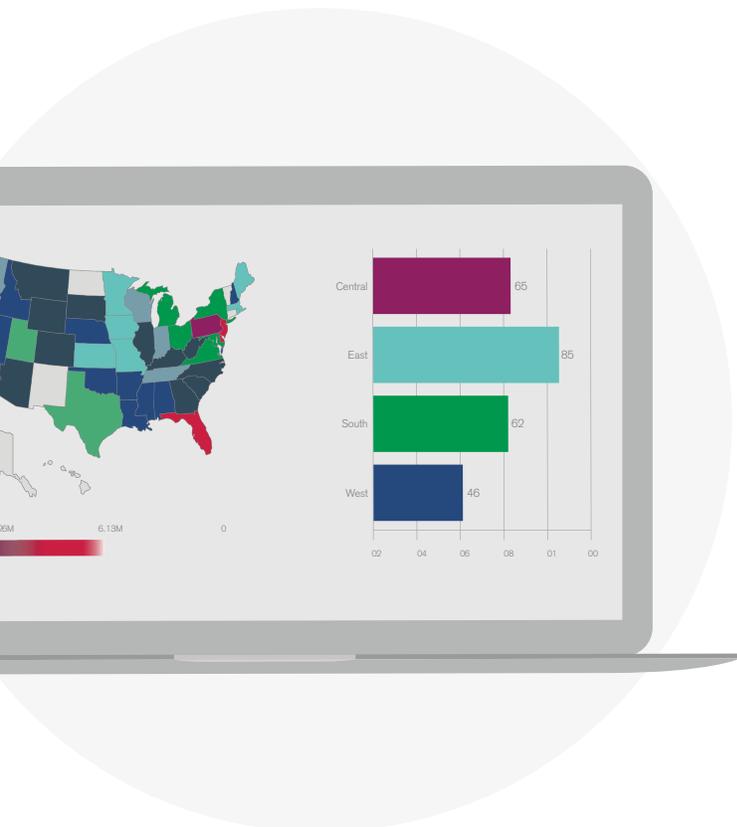
- CDC streams
- Universal sources, targets, and platforms
- Enterprise-wide monitoring and control



## Automated and continuous refinement

Qlik automates designing the warehouse, generating ETL code, and applying updates — all while leveraging best practices. The platform quickly performs complex data federation, modeling, and transformation that can be executed at scale. A unified orchestration and management console allows integration tasks to be performed both on premise or in the cloud, no matter the size.

- Intelligent model-driven workflow
- Automated ETL, field set, and data mart script generation
- Rollout change management propagation
- Registers new data sets to catalog for immediate use



# Data Lake Creation

Business users need to know that their data is accurate, updated, and trusted for analysis. Qlik data integration for data lake creation automates the data management process. It gives data consumers powerful tools to find, understand, and use data based on their unique needs and security credentials. It also allows data engineers to quickly add new sources and ensure success across the entire pipeline — from real-time data ingest to refinement, provisioning, and governance. Data protection features are easy to administer, even in very large settings with many users, data sources, or complex infrastructure.



## Real-time data streams

Change Data Capture (CDC) moves data to your lake — in real time — from the widest variety of heterogeneous databases, data warehouses, and enterprise sources like mainframe and SAP.

- CDC streams
- Universal sources, targets, and platforms
- Enterprise-wide monitoring and control



## Trusted, enterprise ready data

Qlik builds a secure, enterprise-scale catalog of all the data in your lake and throughout your organization, no matter where it resides. Business users get a single, go-to data marketplace to find, understand, and use any enterprise data source to gain insights.

- Smart, integrated data catalog
- Security and governance
- IT and business collaboration



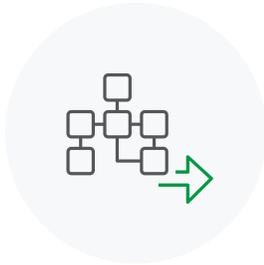
## Automated and continuous refinement

Qlik standardizes and combines change streams into a single transformation-ready data store in the lake. It automatically merges multi-table and/or multi-sourced data into a flexible format that retains full history. The result is that data consumers have fast access to trusted data without having to understand the automated structuring behind it.

- Pipeline automation and orchestration
- Resilient and self-healing
- Prepare and provision at scale

# CDC Streaming

The Qlik Data Integration platform uses Change Data Capture to efficiently deliver analytics-ready data from a wide range of sources to data warehouses and lakes, streaming, and cloud platforms. CDC ensures your data is always current and your source systems aren't impacted.



## CDC

Qlik moves data in real time through a simple graphical interface that completely automates end-to-end replication, allowing data engineers can easily set up, control, and monitor data pipelines with ease.

- Agentless, log-based approach
- Zero footprint architecture
- Optimized for cloud



## Enterprise-wide monitoring and control

Design, execute, and monitor thousands of integration tasks across distributed data centers and cloud environments. Easily scale and monitor data flow, in real time, through KPIs and alerts.

- Centralized management
- Optimized performance and resource utilization
- Open APIs for REST and .NET

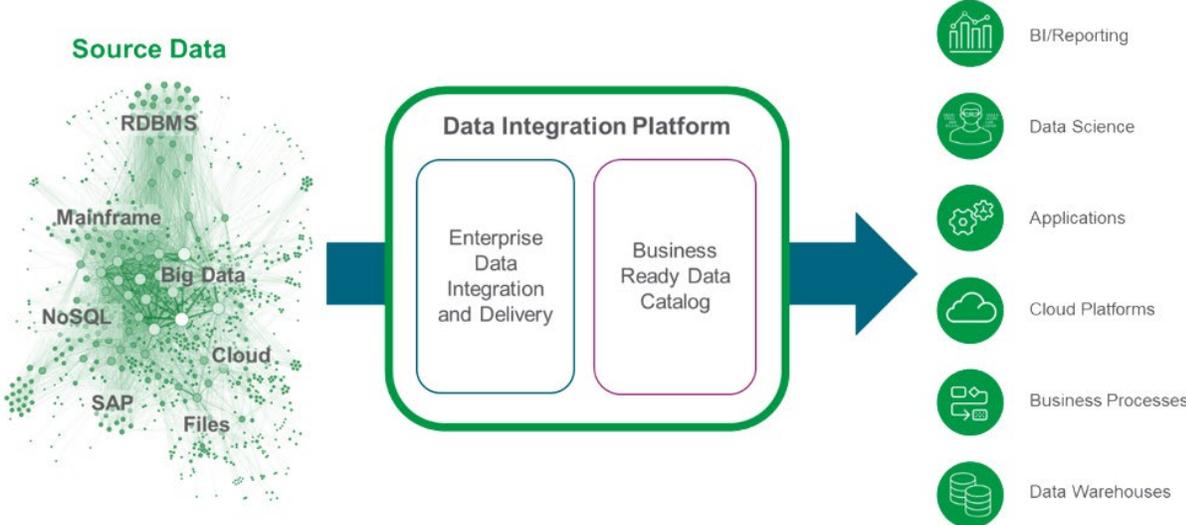


## Universal sources, targets, and platforms

Qlik supports the broadest range of sources and targets, enabling you to load, ingest, migrate, distribute, consolidate, and synchronize data on premise and across cloud or hybrid environments. (For a complete list of connectivity options, please refer to the support matrix.)

- RDBMS: Oracle, SQL, DB2, MySQL, Sybase, PostgreSQL
- Data warehouses: Snowflake, Azure Synapse, Exadata, Teradata, IBM Netezza, Vertica, Pivotal, MS SQL
- Cloud: AWS, Azure, Google Cloud, Databricks
- Hadoop: Apache, Cloudera, MapR
- Streaming platforms: Apache Kafka, Confluent
- Enterprise Applications: SAP, Salesforce
- Legacy: IMS/DB, DB2 z/OS, RMS, VSAM, COBOL

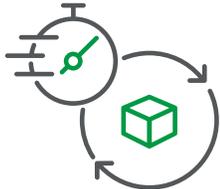
The Qlik Data Integration Platform provides everything you need to solve even the most challenging enterprise-scale integration initiatives.



**Qlik Replicate™ (formerly Attunity Replicate)**

Automated, universal, real-time data delivery

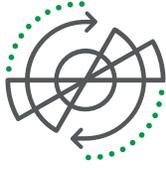
- Change data capture (CDC) across the most comprehensive source and target platform support
- Large volumes of heterogeneous data from source systems
- Real-time delivery to streaming and cloud platforms, data warehouses, and data lakes



**Qlik Compose™ (formerly Attunity Compose)**

Automated creation of analytics-ready data mart and data lake structures

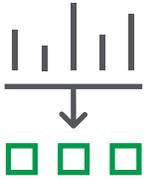
- Agile, model-driven automation without scripting
- Continuous integration for always-fresh data
- Resilient to source schema drift
- Self-service data mart creation



### **Qlik Enterprise Manager™ (formerly Attunity Enterprise Manager)**

Command center to configure, execute, and monitor data pipelines at scale

- Metadata management and integration
- Complete governance and security
- Open APIs



### **Qlik Catalog™**

Simplifies and accelerates cataloging, management, preparation, and delivery of business-ready data to analytic tools

- Full data profile and automated data tagging
- One simplified view of all your data, including data lineage
- Simple drag-and-drop preparation steps to prepare new data sets, including combination of data sets, row and column filtering, and data transformations
- Actionable data on demand
- Enterprise-grade data management, including data encryption, obfuscation, and user access based on role



### **About Qlik**

Qlik's vision is a data-literate world, one where everyone can use data to improve decision-making and solve their most challenging problems. Only Qlik offers end-to-end, real-time data integration and analytics solutions that help organizations access and transform all their data into value. Qlik helps companies lead with data to see more deeply into customer behavior, reinvent business processes, discover new revenue streams, and balance risk and reward. Qlik does business in more than 100 countries and serves over 50,000 customers around the world.

[qlik.com](http://qlik.com)