

Q-Data Warehouse

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Q-Data Warehouse allows you to store large volumes of data over extended periods, consolidating all business, technical, operational, and logistical information into manageable and actionable systems. Through a unique archiving and housekeeping utility, Q-Data Warehouse makes it possible to comply with every corporate data retention requirement, while allowing for efficient data storage management.

Make *better business decisions* with customized data collection across your *entire enterprise*

Good decision-making comes from good data, and good data comes from across your entire enterprise. For a complex and global organization, collecting and analyzing all necessary information can be extremely difficult—especially when it is in different formats, sources, and locations. All these machines, systems, and devices are essentially speaking different languages. Unless you have a way to collect and organize that data in a meaningful and useful way—all you can hear is noise.

By serving as the central hub for all your enterprise data, Q-Data Warehouse lets you cut through the noise and makes true analysis possible. All business information—operations, logistics, sales, finance, marketing, forecasting, and accounting—can be collected, sorted, and distilled, as needed and in real-time. Q-Data Warehouse achieves this through database normalization and de-normalization. In tandem these processes reduce data redundancy, improve data integrity, and make data storage more efficient, while also increasing performance of reporting and analysis.

With Q-Data Warehouse, all your information is continually collected, giving you the ability to run comprehensive reports, at any scale—from simple to complex—at any time. But it's not just new data. Built-in archival retrieval tools allow you to move old data in and out of file systems when necessary and with relative ease. The system can be configured to archive data into XML formats that can be zipped for effective space management.

Q-Data Warehouse delivers continually updated and securely managed data.

Key Features

- Easily consolidate data from a many data sources, transforming it from high-speed data input format to an efficient data retrieval / analysis format.
- Extensive ETL environment for efficient data extraction and tailoring
- Interactive, user-friendly interface for data modeling and interface setup. Integrates with ERP and MES systems
- Extensive user access management
- Multi-lingual support (supports both single byte and multi byte languages)

Tracking, sorting, and reporting all your data—all the time

Q-Data Warehouse allows you to optimally extract data from various data sources as it is generated and transform this it into a common format. Just think, continually updated information about every business system—always ready, always on. Today's global organizations never sleep; your data collection shouldn't either. With high-quality information always available, enterprise-level reporting and analysis is easier, more intuitive, and more accurate.

Q-Data Warehouse provides a versatile ETL tool to handle data inconsistencies and can “clean” and organize your data for efficient and easy reporting. By providing flexible and easily configurable

interfaces to different database types, while also supporting a multitude of file formats, Q-Data Warehouse solves data consistency issues.

In a manufacturing environment, Q-Data Warehouse allows you to keep the line/test systems “lean”, with a few weeks of data, ensuring that large data volumes do not disrupt the actual production processes. A manageable time slice, to constitute a sufficient dataset, is live to run accurate and comprehensive reports. Data is moved into the data warehouse in real-time, so the end users running resource intensive queries will not “cost” the actual production/data storage processes.

Q-Data Warehouse serves as the informational core of a technology-driven enterprise.

Complete system integration

Today’s global organizations generate an incredibly large amount of information, from personal communications to internal and external reports to manufacturing, inventory, and logistical logs to meta-level data points from a range of business systems. All this disparate information spans across the enterprise—and frequently across the globe.

When it comes to rendering this data useful and actionable, integration is paramount. As data is collected from all the disparate sources, inconsistencies, redundancies, and even errors, can occur. True information integration can only happen when these issues are resolved. Q-Data Warehouse continually looks for these incidents and inconsistencies, and makes the necessary adjustments on the fly, solving data problems.

Q-Data Warehouse allows integration with various “feeder systems” through direct database access or through data export. The data from these systems can be accessed in real-time and transformed and moved over into the data warehouse environment. Once moved, the data is readily available for extensive analysis and reporting.

In addition to integrating with current and legacy data sources, Q-Data Warehouse works directly with Q-Net Report Sapphire, Q-Dashboards and Q-Marquee making it possible to create adhoc reports and perform detailed analyses with relative ease.

Better performance measuring based on customized indicators

For large-scale businesses and operations, accurate performance measurement can be challenging. Every organization has its own key performance indicators, and those metrics can evolve over time—especially as business needs change. Q-Data Warehouse utilizes “crawlers” capable of extracting and calculating KPIs from the MES systems, making them readily available for reporting. These KPIs can be configured to span multiple years’ worth of data, and can be visualized immediately through Q-Net Report Sapphire. This visualization can reduce data latency, making it easier retrieve source data. With Q-Data Warehouse, you get direct access to live data—even when it’s dispersed across multiple systems. This is essential for real-time reporting and KPI analysis.

Real-time your enterprise across

Q-Data Warehouse collects, aggregates, and efficiently stores the data residing at different sources and in different forms, and provides a reconciled and unified view that can be easily recalled. No matter what form your data is in—from the latest databases to older legacy systems, Q-Data Warehouse can make it truly useable. Unlike other systems, Q-Data Warehouse captures data as it is being collected. Continuously identifying and analyzing updates and deletions, the system makes the information available for instantaneous recall and use without the lag of other systems.

For organizations operating on a large scale, this means that reporting can happen continuously—without the need for time-consuming, system-wide reconciliations. You get access to all your data, wherever and whenever you need it.

Operational flexibility through top-down or bottom up functionality

Q-Data Warehouses is a flexible tool and can be deployed as a top-down or bottom-up solution. Its top-down design collects all data from your operations at a granular level and then allocates the data to specific data marts or organized sections. The bottom-up approach works by first creating data marts that are oriented towards a specific location, function, business line, team, or task. The system combines them to form a complete data repository that can be easily searched, archived, and used across the entire enterprise. These data marts increase the performance of Q-Data Warehouse, making information more accessible.

Meeting and exceeding data retention requirements

In a global business environment driven by change, the right information can make all the difference. As decentralization has made it possible for even small-to-midsized companies to work internationally, a new set of business requirements has emerged in the form of regulatory oversight. Further complicating matters, these requirements can change often—especially in charged political climates. For businesses, that means information must be saved in specific forms for recall and review at specific times. If your operations span multiple locations in different countries, these requirements can quickly become complicated.

The Q-Data Warehouse archiving utility is optimized for more efficient data storage and management—making it easier to comply with data retention, audit, and regulatory requirements. This flexible archiving utility, allows you to manage complex data retention requirements. Q-Data Warehouse can automatically export older data into file formats, including XML and CSV, and compress these before storing in file servers. Additionally, recall and retrieval is optimized down to the smallest level—making audit, review, and compliance easier to manage, while maintaining security and data integrity.

By tying directly into our MES systems—including Q-Pulse and Q-Trace—Q-Data Warehouse ensures that all the historical data is stored, managed, and readily available for long-term analysis. This connectivity allows the MES systems to efficiently utilize the hardware resources and provide accurate reporting in real-time.

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