

QLIKVIEW IN THE ENTERPRISE

IT Overview

The QlikView Business Discovery platform is a natural fit within an organization's Information Architecture, allowing IT and BI groups to serve the ever-growing analytical needs of the business without needing massive incremental expenditure in software, personnel or services. With QlikView's rapid application development capabilities, applications and dashboards can be developed in days and weeks, providing easy to use, fast analytics to business users.

DELIVER ANALYTICS VALUE TO THE BUSINESS FASTER

QlikView enables IT and BI groups to deliver significant business value quickly and with agility.

- Respond quickly to requests from the business for new and varied analytics
- Provide business users a single, associated view across all relevant data sources
- Provide visualization and discovery capabilities in a user-friendly environment
- Create built-to-purpose analytic apps rapidly
- Greatly enhance the decision-making capabilities of the organization

“With QlikView, this was one of those rare instances – I can honestly say – that when we delivered this to the business we exceeded their expectations. They actually got more than they thought they were going to get. For an IT professional, that's very satisfying.”

– CIO, Fortune 500
Pharmaceutical Company

“QlikView is the poster child for a new end-user-driven approach to BI.”

– Gartner

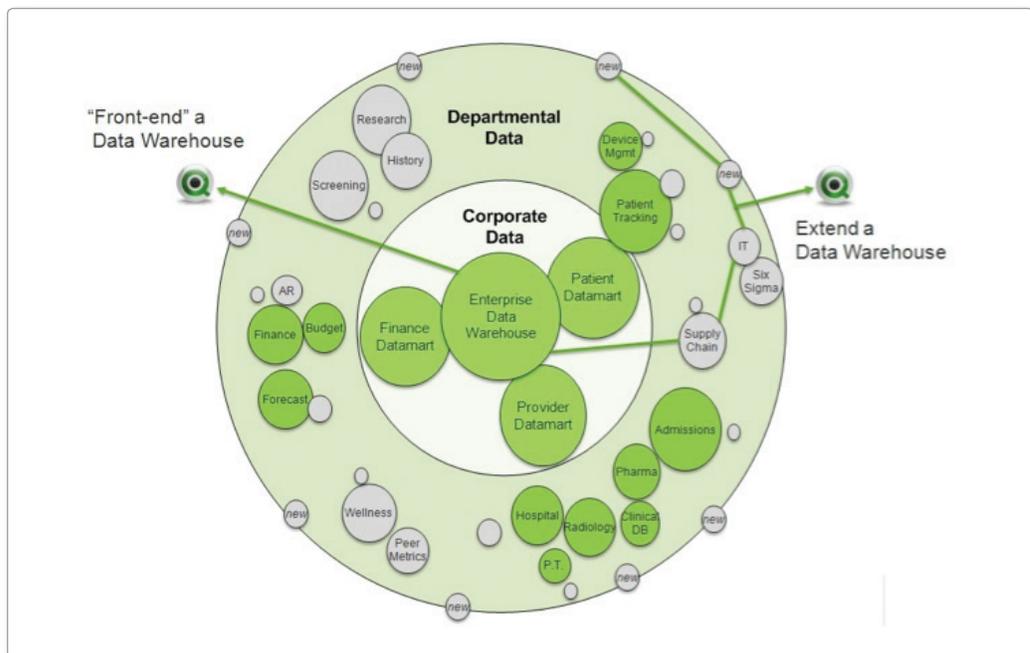


FIT WITHIN AN EXISTING ARCHITECTURE

QlikView sits seamlessly within an organization's existing IT architecture, complimenting exiting investments in data warehouses, security systems and cloud-based solutions.

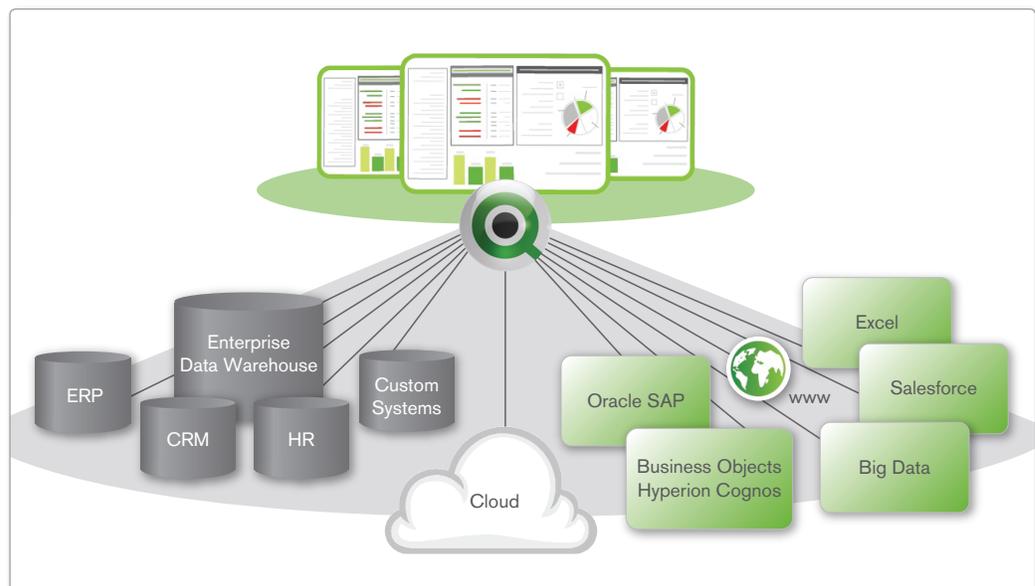
Data Infrastructure

- Data Warehouses:** QlikView unlocks the value of your data warehouse by providing a very fast and flexible analytics and visualization layer. IT professionals and business users alike can reap the benefit of the large investments made in your enterprise data warehouse by 'sitting' QlikView on top. QlikView provides value even as the data warehouse is being built, providing immediate insights and rapid prototyping of data models and visualizing this data. BI teams can see how non-DW and DW data are being analyzed together. This knowledge of high use-data allows them to build a more comprehensive data warehouse roadmap.
- Operational Data Stores:** QlikView can easily merge data from multiple data stores using a selection of standard ODBC drivers and custom connectors. QlikView provides an open standard 'QlikView Exchange (QVX)' format for even the most obscure data sources.
- Ad-hoc data stores:** In most organizations, analytics is conducted using a blend of data sources. Enterprise Data Warehouses, operational data stores, local databases and Excel spreadsheets are all used to support decision-making. QlikView seamlessly merges data from all sources, providing a single, associative view across them all.



Operational Infrastructure

- **Management Systems:** Integrating with existing management systems, such as license managers, is straightforward. QlikView provides programmatic control of common management tasks via a web services API.
- **Automation & Scheduling:** QlikView provides for integration with external task scheduling systems such as IBM Tivoli® and Control-M®.
- **Source and Deployment Control:** QlikView provides out-of-the-box integration with Microsoft TFS® and Apache Subversion® for project management of teams of QlikView developers and has partners, who offer highly granular version control capabilities for QlikView.
- **Existing 3rd Party Applications:** Embedding QlikView within Salesforce.com® or placing visualization objects within MS SharePoint® are just two examples of how QlikView customers integrate with existing solutions.



Further information about QlikView integration can be found in the 20-page white paper, QlikView Integration Overview Technology White Paper (<http://www.qlikview.com/us/explore/resources/>).

QLIKVIEW DEPLOYMENTS SCALE ACROSS AN ENTERPRISE

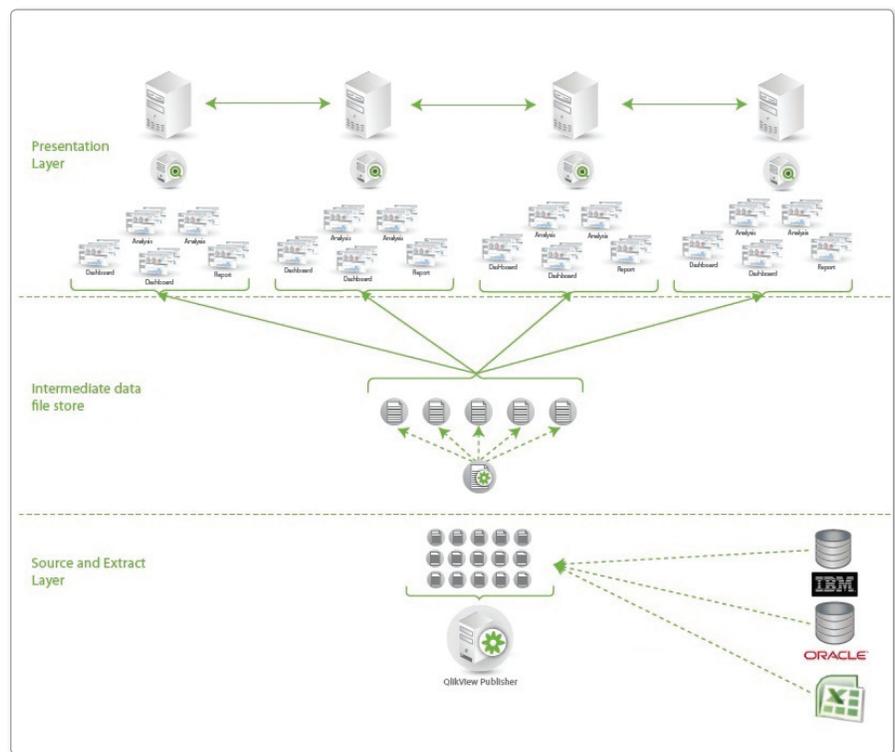
Large Scale QlikView Deployment at a Multinational Bank

- 6150 business users located in 8 regions
- 1600 concurrent users
- 1.4 TB of financial data
- 3088 clicks per minute
- Average response time less than 3 seconds

SCALABILITY

The QlikView Business Discovery platform is designed with scalability in mind. By using an n-tier architecture, providing both horizontal and vertical scaling and by offering a choice of in-memory only or a hybrid in-memory/direct data access approach, QlikView has thousands of deployments supporting thousands of users, accessing TB of data and supporting multiple departments in an organization.

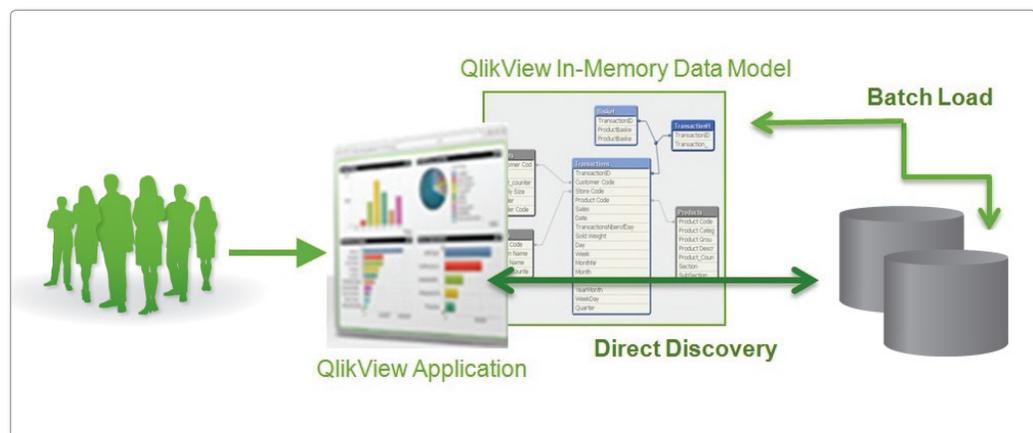
Horizontal Scaling with QlikView



- **Horizontal and Vertical Scaling:** QlikView's server-side components (QlikView Server & Publisher) are designed to scale both horizontally and vertically, depending on the customer's requirements. QlikView's performance is uniform when scaling, allowing for predictable and repeatable scaling.

- In-Memory or Hybrid:** QlikView deployments can utilize an in-memory-only approach (benefitting from up to 90% data compression ratios, super fast analytics and predictable loading of source data systems) or can chose to combine data in-memory with data accessed directly from source system (Direct Discovery). In hybrid mode, all data is still associated – giving the business user a truly seamless experience – and virtually unlimited amounts of data can be addressed.
- Incremental Data Loading:** QlikView has the ability to load only the newest data, rather than all data, on every reload. Data can be added to any given application more quickly, reducing data reload and network access times.

Hybrid Data Access with QlikView



Further information about QlikView scalability can be found in the 37-page white paper, QlikView Scalability Overview Technology White Paper (<http://www.qlikview.com/us/explore/resources/>).

QLIKVIEW SECURITY – 3 COMPONENTS

Authentication – QlikView uses standard authentication protocols such as Integrated Windows Authentication, HTTP headers and ticketing.

Document-level

Authorization – QlikView uses Windows NTFS or its own Document Metadata Services (DMS) to determine file-level privileges.

Data-level Authorization –

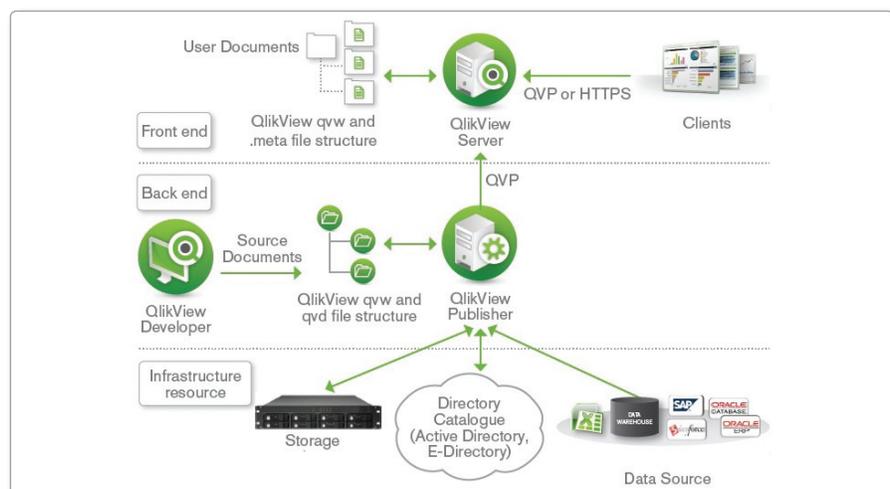
QlikView supports both row- and field-level security.

SECURITY

QlikView is implemented in thousands of highly sensitive organizations throughout the world, from banks to government agencies to healthcare providers. QlikView employs a multi-faceted approach to security, ensuring that the most sensitive data is only accessed by persons with the correct credentials.

- **Integration with all existing security infrastructure:** All authentication of users is done outside of QlikView and credentials are passed to QlikView. Whether you use Microsoft Active Directory® or a separate Single Sign-On system, QlikView can integrate seamlessly.
- **Row-level, role-based security.** QlikView accepts group-level and role-based resolution from existing security infrastructure. This is tied to row-level security within QlikView to ensure a user can access only the data they are entitled to, no more.
- **N-tier architecture.** QlikView's n-tier architecture ensures that a highly secure 'back end' can exist where data access and security privileges are defined. Only authorized personnel are allowed into the back end. Business users are only permitted to access the presentation layer.
- **Auditing.** QlikView contains a rich set of built-in auditing capabilities to track who is accessing which applications and data.

Highly secure n-tier architecture

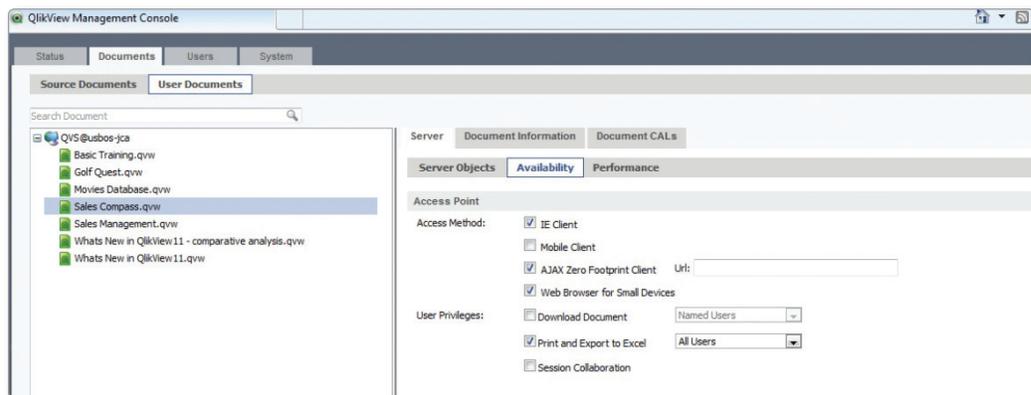


Further information about QlikView security can be found in the 17-page white paper, QlikView Security Overview Technology White Paper (<http://www.qlikview.com/us/explore/resources/>).

MANAGEABILITY & GOVERNANCE

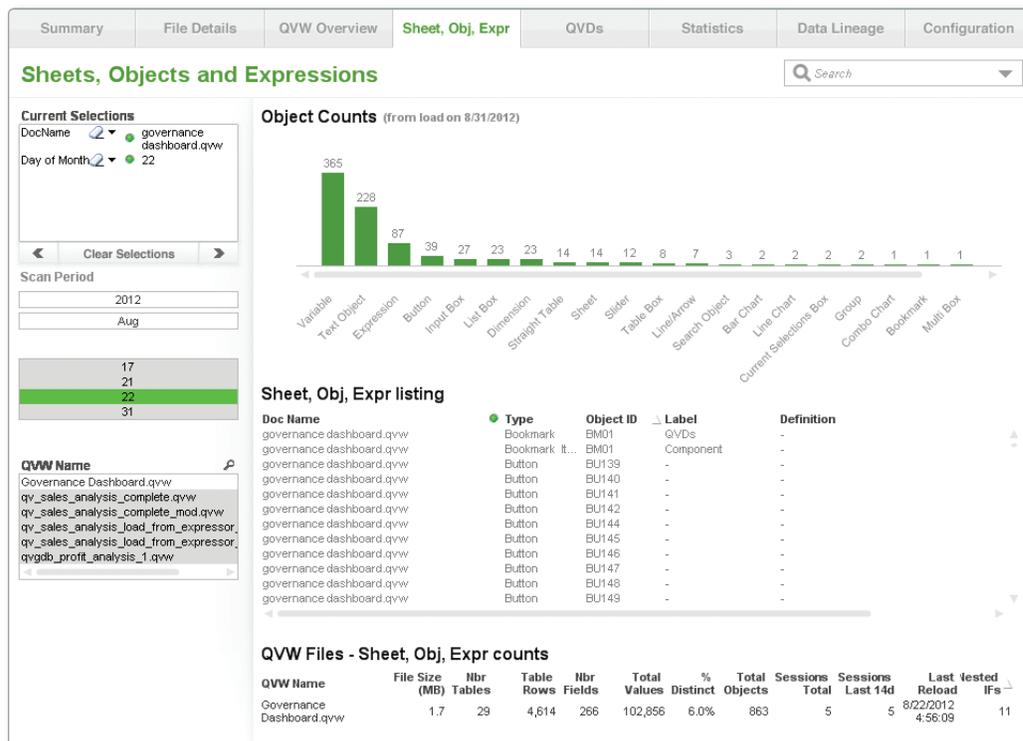
A central consideration for any IT professional is how to manage and govern any software solution. QlikView addresses these requirements with a variety of capabilities including a centralized Management Console, centralized data integration and management APIs.

QlikView Management Console



- **Full featured Management Console:** QlikView's server-side management console allows an IT admin to centrally manage reload tasks, license and user management, external event triggering and access system logs.
- **Centralized, metadata-driven data integration:** QlikView Expressor is a technology that gives IT professionals the power to centrally define data models for QlikView and create common data transformation rules and business metrics for use throughout the entire QlikView estate.
- **Governance Dashboard:** QlikView provides a free QlikView app – called the QlikView Governance Dashboard – giving IT and QlikView admins a 360 degree view of the data as it flows through the entire QlikView estate.

QlikView Governance Dashboard



Further information about QlikView governance can be found in the 19-page white paper, QlikView Governance Technology White Paper (<http://www.qlikview.com/us/explore/resources/>).