QlikView

WHAT'S NEW IN QLIKVIEW 10

QlikView 10 offers significant improvements over QlikView 9 and introduces new concepts to the QlikView portfolio. This document describes new features and functionality in the context of four QlikView 10 release themes and provides answers to frequently-asked questions (FAQs). With the investments we've made in QlikView 10, we've taken a major step toward QlikView becoming the standard for business intelligence software.

QLIKVIEW 10 IS EASIER TO USE

QlikView is renowned for its best-of-breed user experience. QlikView 10 is no exception. For end users we offer associative search, an additional chart type (Mekko chart), and an improved current selection box. For designers we offer containers, list box expressions, and web view mode in the developer client.

ASSOCIATIVE SEARCH

Associative search brings new data exploration capabilities to QlikView users. Associative search is a new filtering mechanism available with every list box. It enables users to search for values in a list box by searching against values in associated data elements.
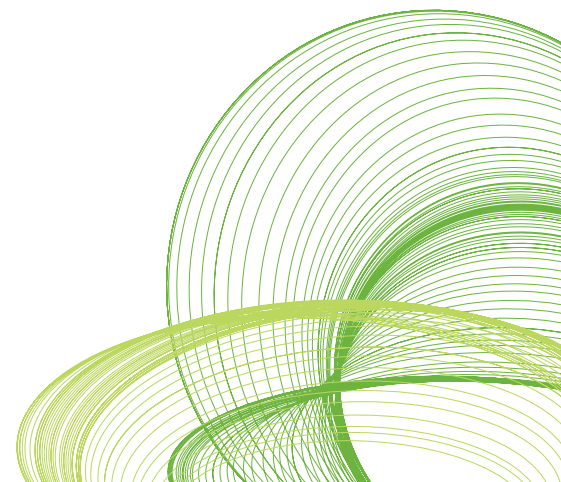
Associative search:

- **Is a simplified, everyday search tool.** It helps users find data using the keywords that make sense to them. They can find data even when they don't know the data structure or syntax. Search using keywords and let QlikView find the permutations.

- **Lets users explore data knowing only associated facts.** Imagine a marketing manager returning to the office after attending a trade show. He wants to recall who it was that he met but can only remember where the person worked and what their role was. Associated search lets him search a list box of contact names using just these two facts to get to all the possible matches.
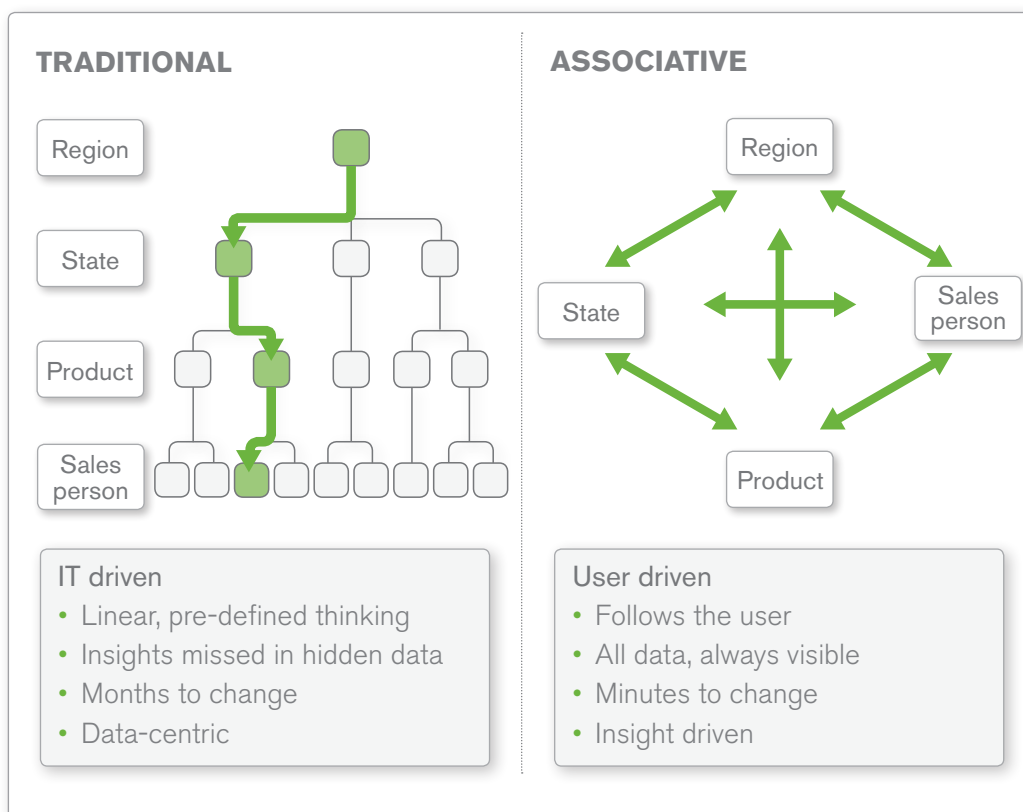
NEW FEATURES AND FUNCTIONALITY IN QLIKVIEW 10

QlikView 10 brings new levels of functionality and performance to the QlikView platform. We centered our investments in this release on four themes:

- Easier to use
- More open and extensible
- Faster performance
- Enterprise manageability

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QlikView's underlying architecture is associative

TRADITIONAL

Region
State
Product
Sales person

IT driven
- Linear, pre-defined thinking
- Insights missed in hidden data
- Months to change
- Data-centric

ASSOCIATIVE

Region
State
Sales person
Product

User driven
- Follows the user
- All data, always visible
- Minutes to change
- Insight driven

MEKKO CHARTS

Mekko charts offer a means to portray a relationship (or ratio) among dimensional values within a bar chart. A regular bar chart has fixed-width columns; Mekko charts have variable-width columns, which show another dimension of data beyond what is possible with ordinary bar charts.

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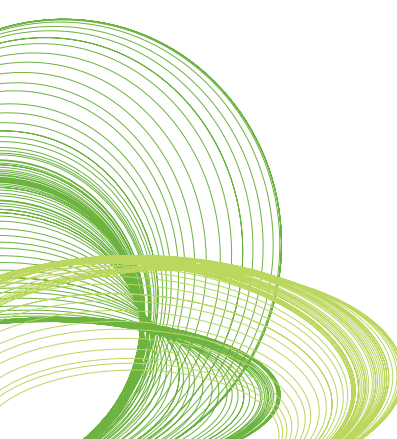
**Mekko charts portray relationships among dimensional values within a bar chart**
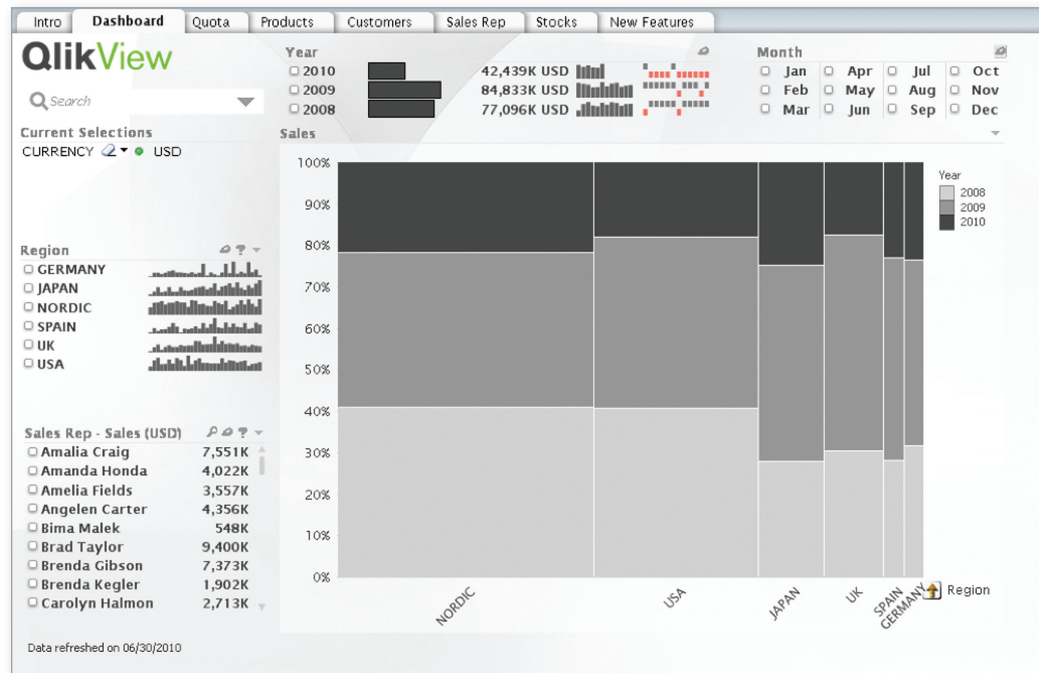
IMPROVED CURRENT SELECTION BOX

Users can now refine or change selections via a drop down list for each selection. This makes it easy to change selections at any level, negating the need for too many list boxes cluttering the screen at any one time.

CONTAINERS

In QlikView 9, designers who wanted to show multiple aspects of growth or trends utilized the quick change feature within a single chart design. One limitation of this is that the resulting charts all had to share the same measures and dimensionality. Another limitation is that it was not possible to include non-chart objects (e.g., list boxes, multi-boxes, text objects, etc.) in the quick change.

In QlikView 10, container objects give QlikView designers a means to present multiple perspectives on a set of facts in a single, space-saving, easy-to-use object. This object is not tied to any one viewpoint (dimensionality) or set of measures or type of object. Containers can simplify the presentation and enhance the analysis of any set of document objects.
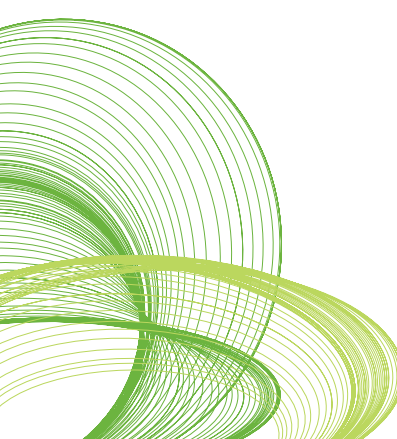
LIST BOX EXPRESSIONS

The list box is the central entity of every QlikView application. Providing users with the right set of list boxes they can use to explore, select, and eliminate values from their analysis is the cornerstone of QlikView document design. With QlikView 10, designers can now incorporate expressions in list boxes to convey additional business context for each list box value. Designers can use list box expressions to add values, mini-charts, and gauges to list boxes. List box expressions use the same expression syntax that is used throughout the rest of QlikView.

List box expressions convey additional business context for each list box value
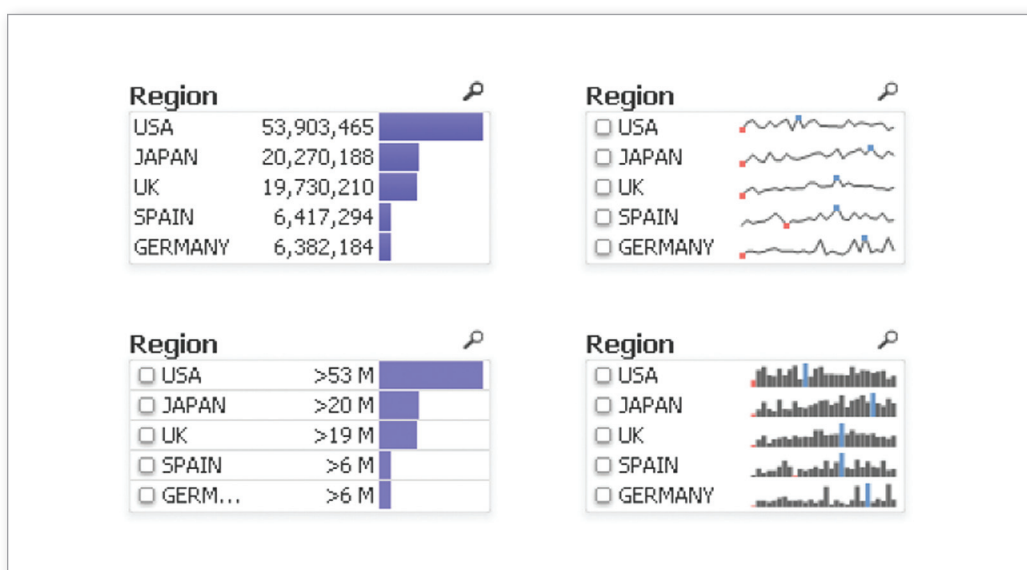
WEB VIEW MODE IN THE DEVELOPER CLIENT

QlikView 10 allows developers using the installed client to switch to a new web view mode. This new mode renders QlikView sheets as they would be seen when deployed through a browser. The web view mode shows all content including extensions.

QLIKVIEW 10 IS MORE OPEN AND EXTENSIBLE

QlikView 10 introduces a new level of openness for designers and IT professionals. For designers we offer QlikView extensions and a new QlikView Data Exchange (QVX) format. For IT pros we offer a configurable directory service provider for integration with enterprise directories and user databases. We also deliver a set of new application programming interfaces (APIs) that facilitate the flow of information and command between QlikView and its environment.

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QLIKVIEW EXTENSIONS

With QlikView extensions, designers can create custom visualizations and user interface components for use within QlikView. Extensions can also be used to bring mapping tools, Gantt charts, tag clouds, infographic charts, or any other visualization into QlikView. Once integrated into QlikView applications, custom and third-party visualizations can take advantage of QlikView's core capabilities.

With extensions users can embed Gantt charts and other elements in QlikView apps
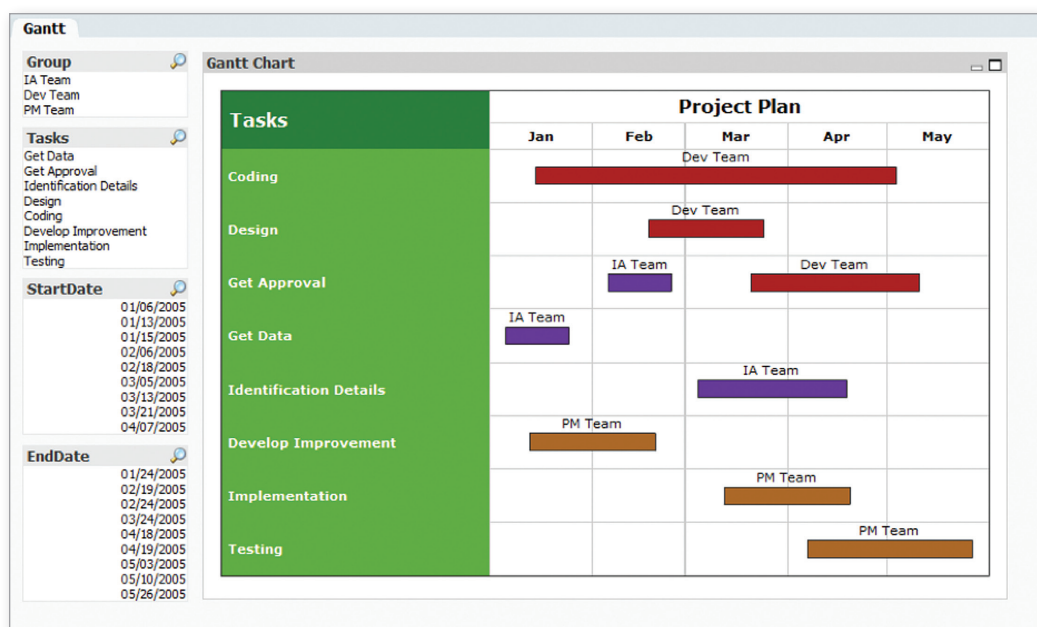
Developers build QlikView extensions using common web-based technologies such as Adobe Flash, HTML, Java, JavaScript, and Microsoft Silverlight. Once created and packaged, extensions can be installed and used within any QlikView application. This plug-in mechanism allows extensions to be developed once and reused multiple times.

QLIKVIEW DATA EXCHANGE FORMAT

We've introduced a new, highly optimized data format to support the mapping of data through custom connectors directly into a QlikView-ready format. QlikView supports QVX as both a file format and a message format for communication between a QlikView script and a custom data connector. This makes it very easy for third-party systems, for example, to output files that can be quickly accessed by QlikView.

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CONFIGURABLE USER DIRECTORY INTEGRATION

In addition to providing direct, out-of-the-box integration with Microsoft Active Directory, in QlikView 10 we introduce two new configurable directory service providers (DSPs) for integration with additional enterprise directories and user databases. DSPs perform two main functions: match user names with groups the users belong to, and make it easier for administrators to assign task recipients. Prior to QlikView 10, developers had to write custom dynamic link libraries (DLLs) to integrate with directories other than Microsoft's. QlikView 10 introduces a configurable lightweight directory access protocol (LDAP) DSP as well as a DSP for simple user databases (non-LDAP).

SERVER/PUBLISHER APIS

With QlikView 10, organizations have the option to bring the management and visibility functions of QlikView Enterprise Management Console into their own systems management and monitoring applications via a new simple object access protocol (SOAP)-based web service for QlikView Server/Publisher. This API provides programmatic control over QlikView Server/Publisher. The API could be used to automate routine task creation, deletion, and modification (e.g., deploying a new document to production) or add custom business logic. It could also be used to create streamlined, targeted user interfaces that enable a smaller set of functionality than the default QlikView Management Console user interface, or a different user interface altogether for interacting with QlikView Server or Publisher.

AJAX API

The new QlikView Ajax API enables developers to programmatically communicate with the QlikView Ajax client. This API has three main uses: support QlikView Workbench, support the creation of extension objects, and allow programmatic interactivity with the Ajax client. Prior to QlikView 10, developers' only choice was to use Workbench, which required development of a .NET web site in Microsoft Visual Studio. In its first release, the Ajax API covers charts (e.g., data, background, layout, header, style, and paging), QlikView document manager, and bookmark manager.

QLIKVIEW 10 DELIVERS FASTER PERFORMANCE

In QlikView 10, we deliver performance improvements across the board from data acquisition to the final end user interaction. QlikView 10 performance enhancements include:

- **Script execution**. With QlikView 10, QlikView script execution has additional intelligence to spread execution of a particular function across the underlying threads of the server machine. Transformations and calculations within a load statement benefit from being executed in a multi-threaded manner.

- **Direct load of non-relational data.** In QlikView 10, the highly optimized QVX data format supports the mapping of data through custom connectors directly into a QlikView-ready format.

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- **Ajax client asynchronous behavior.** No more waiting for the QlikView tab to completely refresh before beginning the next selection. In QlikView 10, each individual object displayed on a page becomes available as soon as it has completed its refresh.

- **Optimized Ajax/QlikView Server communications.** Reductions in the amount of data and code passed between an Ajax client and QlikView Server return a response to the end user significantly faster than similar operations in QlikView 9.

QLIKVIEW 10 PROVIDES ENTERPRISE MANAGEABILITY

For IT pros QlikView 10 offers auditing, centralized user management, and centralized section access management from within Publisher. New functionality to make QlikView more manageable for designers includes linked objects, metadata tags and comments, and separation of load/database thread from QlikView.

AUDITING

Risk management and compliance are top of mind wherever sensitive business data is concerned. New optional settings within the QlikView Enterprise Management Console allow organizations to audit user interactions. QlikView maintains logs at the system level to provide visibility into who is accessing what and when. Logs can be set to record administrators' actions within the Enterprise Management Console. Compliance staff can also track end user selections (e.g., values and bookmarks) and navigation (e.g., document or tab usage) to reveal any suspect or unauthorized data access within a QlikView application.

CENTRALIZED USER MANAGEMENT

With QlikView 10, administrators gain global visibility into their entire QlikView user population. The centralized user management functionality enables administrators to answer questions like: Who is accessing which documents? Which users are creating what collaboration objects? How have licenses been assigned to users? What kind of license has been allocated to a particular individual?

CENTRALIZED SECTION ACCESS MANAGEMENT
FROM WITHIN PUBLISHER

In QlikView 9 and earlier versions, document designers could control which users could open a document and which rows the user could see once the document was opened. They did this by editing the section access area of a script. None of that changes in QlikView 10; however, QlikView 10 introduces the ability to define and manage one or more central section access tables directly within QlikView Publisher. Now document designers can use a section access table, as defined in Publisher, in their documents. If the Publisher administrator adds a new user to the centralized section access table in Publisher, and fifteen QlikView documents use that table, all fifteen documents pick up that change the next time they are refreshed.

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LINKED OBJECTS

QlikView 10 introduces the notion of linked objects for streamlining document layout management. Linked objects allow users to create design templates and duplicate them from sheet to sheet. Linked objects ensure that any change in format, content (e.g. expression definition), or position is maintained across all instances of an object within a document.

METADATA TAGS AND COMMENTS

QlikView 10 introduces field tags, field comments, table comments, and expression and variable comments. These allow designers to capture supplementary information (such as the source tables and fields used) as well as add descriptions to expressions and variables. This feature provides useful information to developers and end users.

SEPARATION OF LOAD/DATABASE THREAD FROM QLIKVIEW

QlikView 10 uses a process called QVConnect to connect to underlying databases and stream data into QlikView. This leads to a more robust and resilient architecture and also means that QlikView can use either 32-bit or 64-bit ODBC drivers regardless of the version of QlikView installed.

FAQs

Can associative search reduce the number of list boxes I have to place on each tab?

Potentially, yes. Associative search can be used to allow users to search for attributes that don't ordinarily warrant list boxes of their own, but still help users get the answers they need.

Can I control the attributes used in associative search?

Yes. Search properties in the list box properties allow you to control which fields are searched: all fields, or just a subset of fields.

What is the advantage of containers over the quick change feature?

The quick change feature of charts allows you to switch the display of a set of dimensions or expressions among various chart types. Each of those charts must have the same dimensions and expressions. In contrast, containers allow you to group any sheet object (e.g., charts, tables, list boxes, and text boxes), regardless of type or definition, in a single object.

Can I have containers inside containers?

Yes. Any recursive content, however, will be disabled.

What are the design options for containers?

In QlikView 10, designers first build the original sheet object and then include the object in a container. We do not currently provide a facility for dragging sheet objects into containers or building objects directly within the context of a container.

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I already have document templates. How can I introduce linked objects without having to rebuild every sheet?

You can edit the object ID of each copy of the object to match the object ID of the template.

What is the performance impact of same object occurring multiple times in a document?

The impact is minor. Linked instances share calculation space. QlikView does not replicate calculations each time a linked instance is updated.

With QlikView 10, I see the CPU utilization of my machine rise during script execution. Why is this?

If you have multiple processing threads available on your machine during script execution, QlikView 10 will try to spread functions within a load statement across those threads.

Does parallel load involve spreading load statements across the processing threads of the CPU?

No. QlikView will not execute different load statements within a script on different threads. Multiple thread processing relates to the execution of transformation statements within each load statement.

Are there limitations in scripts that alter the ability to execute a statement across multiple cores?

Yes. Any inter-record operations within a load statement (e.g., peek, previous) will cause a load statement to be executed in a single-threaded manner.

I've read about using the Force 32-bit option on a 64-bit system. Does the concept of a Force 64-bit exist on a 32-bit system?

No. Whereas 32-bit ODBC drivers can now be used on 64-bit systems, 64-bit drivers cannot be used on 32-bit Windows systems.

I have a separate 32-bit environment for bringing data into my production 64-bit environment. With QlikView 10, can I retire my 32-bit environment and merge everything onto my 64-bit system?

Yes. With QlikView 10, your 64-bit environment can now attach to a 32-bit data source using the Force 32-bit option when building your script. This should allow you to retire your 32-bit server.

What do I need to do to upgrade my script to use the new Connect32 and Connect64 syntax?

You will not have to rewrite code to migrate your QlikView 9 applications to QlikView 10 to take advantage of the new Connect32 and Connect64 statements. An old connect statement will default to the number of bits of the current operating system.

What's the impact of QVX on my existing custom connectors?

Migrating to QlikView 10 does not require any change to existing custom connectivity. Prior to QlikView 10 all connectors were written as DLLs. These continue to work with QlikView 10. But with QlikView 10 and the separation of the connect execution process from the main QlikView execution process, we recommend that developers write custom connectors

as executable files. This allows the new execution model to manage and handle custom connectors in the same manner as Connect32 and Connect64.

What happened to the wildcard asterisks I used to use when searching in QlikView documents?

In documents created using QlikView 10, the default search (normal mode) eliminates the need to use the asterisk wildcard character. Wildcards are now implicit in every string, when in normal mode. Documents that started life before QlikView 10 will continue using the wildcard mode unless list box and document properties are changed.

Does my existing section access definition work with QlikView 10?

Yes. There is no need to migrate section access setup to Publisher before implementing QlikView 10. The migration can be conducted over time.

What is the difference between a tag and a comment?

A comment is intended to be used as a freeform text explanation of a table, field, expression, or variable. Tags are used to apply field categorization. In future releases of QlikView, it is likely that tags will aid field selection by helping users narrow down the list of attributes to consider when building a chart.

Where can I see tags and comments?

You can see tags and comments in the table viewer (hover on field); settings > document properties > tables (list of fields); select field dialog (hover on field); and chart dimension selection dialog (hover on field).

What is the effect of checking a field as a dimension or measure in the table dialog within document properties?

Checking these flags indicates to QlikView that these fields are candidates for dimension/ measure selection when building the list of available fields in the appropriate dialog. QlikView will bubble these checked fields up to the top of the list of the dimension/measure selection list so a user can identify and select them more readily.

Can I do everything in the web view mode that I can do in the standard QlikView desktop?

Yes, with some exceptions. For example, you cannot edit reports, and script and preference windows are not accessible via web view. Also, in web view mode you cannot align objects.

The document appearance in web view is not the same as the appearance in my Ajax client. Why is this?

In web view mode, we run an embedded session of Microsoft Internet Explorer. If you are running your Ajax client in a different browser you may see differences between the two sessions.

Why don't all of my extensions appear in web view?

If the technology you are using is not supported in 64-bit environments (e.g. Microsoft Silverlight or Adobe Flash) you will not see them on 64-bit Windows desktops.
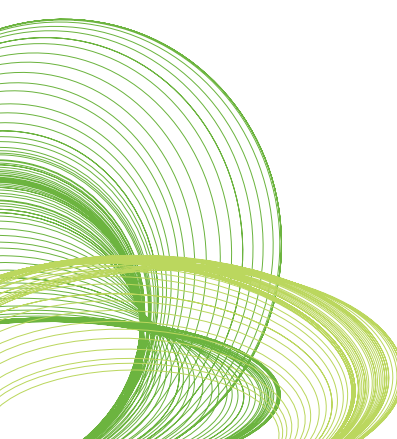
QlikView

How does QlikView 10 address scalability?

QlikView 10 offers improvements in management and configuration, Ajax performance, systems integration, and data loading. These improvements combined make QlikView 10 a highly scalable and manageable enterprise BI platform.

How do I get QlikView 10?

Please contact your local QlikTech office or QlikTech partner through www.qlikview.com for more details on how to get QlikView 10. If you are a member of QlikCommunity, you can also download QlikView 10 from community.qlikview.com.

THE DECISION IS SIMPLE

QlikView 10 brings new levels of functionality and performance to the QlikView platform for end users, designers and developers, and system administrators. QlikView 10 is easier to use and more open and extensible than ever before, with faster performance and enterprise manageability. QlikView 10:

- **Delivers the business intelligence consumer enterprise.** QlikView is renowned for its best of breed user experience. QlikView 10 is no exception. QlikView extensions enable users to incorporate custom and third-party visualizations in their applications. Associative search provides a new way of filtering complex data to find just the needed information. Mekko charts offer a means to portray a relationship among dimensional values within a bar chart.

- **Works with what you have.** In addition to providing direct, out-of-the-box integration with Microsoft Active Directory, in QlikView 10 we introduce a configurable directory service provider for integration with additional enterprise directories and user databases. QlikView 10 also adds APIs that facilitate the flow of information and command between QlikView and its environment: a new set of Server/Publisher APIs and an Ajax API.

- **Puts control in the hands of business users.** As with each QlikView release, QlikView 10 introduces new options for document layout design. Coupled with the extensions feature of QlikView 10 and innovations such as the search object from QlikView 9, QlikView documents now look better than ever and offer simplified data exploration for all users.