

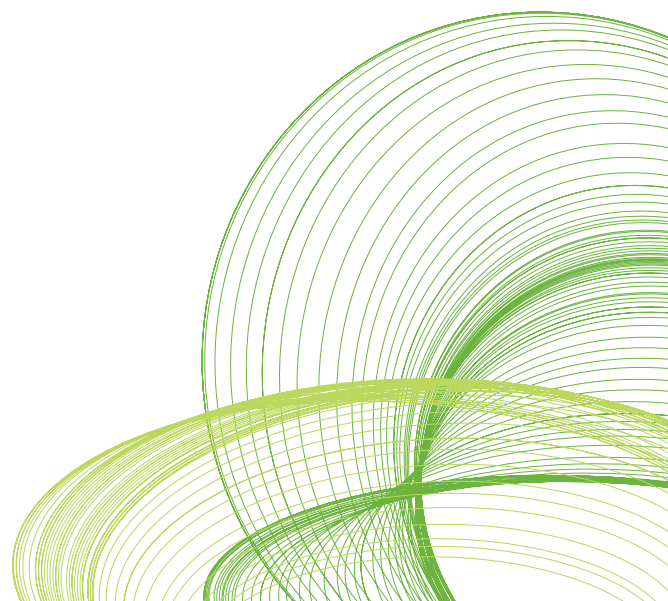


QLIKVIEW LICENSE

QlikView Technical Reference Document

March 2012

qlikview.com



QlikView License

This document explains the license details for each component of a QlikView deployment and it discusses how the different license types work together by providing some guidelines.

This document is not intended to provide guidance on how to license a QlikView deployment and it does not have any information on pricing. It is advisable to work with the account executive or with the QlikTech sales representative to determine the best licensing options for your deployment.

The following part of the paper explains the two basic license types: client and server, giving an overview of how they work together and finally covering some scenarios that illustrate the use of different licensing approaches.

What is QlikView Client Access License?

A QlikView license is referred to as a **C**lient **A**ccess **L**icense (CAL). The licenses (CALs) are server based, meaning they reside on and are administered by the QlikView Server and not the QlikView Desktop client. Server based CALs are tied to the serial number of the server where QlikView resides. CALs are specific to a single QlikView Server or, if a cluster license is used, a specific QlikView Server cluster. CALs cannot be transferred between different QlikView Servers or Server Clusters. Please also note that the CALs require the QlikView Servers within a cluster to be within the same geographical and physical location and within the same network sub-net/segment.

QlikView offers four different license types or CALs: Named User, Document, Session, and Usage. The following section explains each of these and covers how they work.

NAMED USER CAL

A Named User CAL is assigned to a unique and identified user. A user who is assigned to a Named User CAL has access to any QlikView application as authorized by the organization's security policies in QlikView. A Named User CAL may be unassigned and reassigned to another user pursuant to the software licensing agreement, in which case there is a 24-hour quarantine period before the Named User CAL can be reused and transferred to another user. To use a Named User CAL, the client user must be identified via an authenticated user name or by machine id (QlikView does not authenticate users and it works in conjunction with either the O/S via Windows Active Directory or a 3rd Party authenticating agent via a ticket exchange between the web server and QlikView Server such as Kerberos, Site Minder, or others). Please note that an IP address is not a valid form of identification for a Named User CAL.

NAMED USER CAL LEASING

Named User CALs are also used for offline analysis and development. In order to license local desktop clients for this, the users can download a CAL from the server. This process is called 'leasing a Named User CAL' from the QlikView Server. With a leased Named User CAL, the QlikView Desktop Client is able to view local as well as Server hosted documents. Please refer to the QlikView License Lease Tech Brief document for further information on how to lease a license from a QlikView Server.

DOCUMENT CAL

A Document CAL allows one user to open one QlikView application. The license is perpetual and will allow the user to open a single QlikView application into perpetuity. One user can consume more than one Document CAL if they need to access additional QlikView applications. The combination of a user would be stored in QlikView Server like Named users but associated with a QlikView application instead of all of the applications available on the server or in the cluster. A Document CAL may be transferred to another user pursuant to the software licensing agreement, in which case there is a 24-hour quarantine before the Document CAL can be transferred to another user. To use a Document CAL, the client user must be identified via an authenticated user name (Windows Active Directory or through a ticket exchange between the web server and QlikView Server).

The purpose of the Document CAL is to provide a mechanism by which licensees can license the use of a single QlikView application. To prevent the combination of many data models in a single application, there are restrictions in the QlikView applications that can be used with the Document CAL. The Document CAL can only be used with applications that have a single contiguous data model and do not contain any chasm traps between tables. QlikView applications with multiple logical islands are normally not allowed. Multiple logical islands are only allowed, if the additional tables are unconnected and contain only few records or a single column. In addition, the QlikView application may not contain any loosely coupled tables where there are circular references between the tables in the data structure.

SESSION CAL

The Session CAL is used for sharing QlikView Licenses. It is similar to concurrent licensing but there are some subtle differences. A Session CAL is not tied to an individual user or machine but allows for both authenticated and "anonymous" users. Since the Session CALs are shared, if a user logs into QlikView and there are no Session CALs available, their access will be denied. The minimum session time for a Session CAL is 15 minutes, which means that sessions that end in less than 15 minutes will still consume the session until the 15 minute mark is passed; those which terminate after 15 minutes will consume their actual session length. By default, there is no maximum session length, but this can be configured.

USAGE CAL

The Usage CAL is designed to accommodate “overflow” usage during peak times. Usage CAL allows any user, identified or anonymous/unidentified, to access only one QlikView application, residing on the server or server cluster to which the Usage CAL is assigned. A Usage CAL allows one user to have access to one QlikView application for up to 60 minutes. If a user exceeds the 60 minute time limitation, the user will have consumed two Usage CALs without any warning being given to the user. Usage CALs are continuously recharged every 28 days (at a pace corresponding to 1/28 of the total number of Usage CALs assigned to the QlikView Server per day).

How to Assign Licenses?

QlikView Management Console (QMC) is the management component of the QlikView environment giving the administrators full access to all possible settings for QlikView Server and the Publisher module including licensing. The licenses tab on QMC is used to manage QlikView Server License, Publisher license and all of the client access licenses (CALs).

The assignment of the Named CALs to users can be managed on the “Assigned CALs” sub tab of the Licenses tab. On this tab, it is possible to manually assign the Named CALs to users. It is also possible to automatically assign Named CALs by using the “Allow dynamic CAL assignment” check box found under the General tab. When this option is checked, the Named CALs would be assigned to users based on first come first served basis. The user can also lease a Named CAL from a QlikView Server. More information on leasing a license from a QlikView Server can be found in the QlikView License Lease Tech Brief document.

To manage the assignment of Document CALs, the Document CALs sub tab under User Documents tab on QMC can be used. This is the manual way of assigning a Document CAL to a user for a specific QlikView application. Please note that assigning of a CAL does not imply access to the QlikView application. To automate this process, “Allow dynamic CAL assignment” option can be checked. This would allow dynamic allocation of Document CALs to that specific QlikView applications. It is also possible to develop a custom code to automate the Document CALs assignment by using the QlikView Server APIs.

Session CALs and Usage CALs are automatically assigned to the users in a first come first served basis.

When different CAL types are combined on the same server and the “allow dynamic CAL assignment” options are checked, the order of priority in the CAL assignment is done as follows:

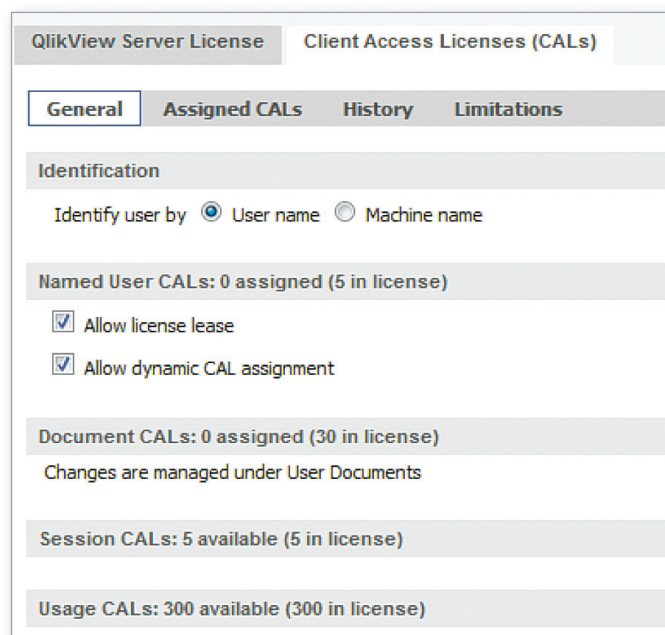
1. If there is a dedicated Named User CAL for the connecting client, it is used.
2. If there is a dedicated Document CAL for the connecting client, it is used.
3. If a new Named User CAL can be assigned to the connecting client, it is used.
4. If a new Document CAL can be assigned to the connecting client, it is used.
5. If there is an available Session CAL, it is used.
6. If there is an available Usage CAL, it is used.

How to Manage Licenses?

The licenses tab of QlikView Management Console (QMC) is used to manage QlikView Server License, Publisher license and all of the client access licenses (CALs).

The General sub tab has information about the number of assigned licenses from the available licenses for each type of CALs. The identification option can be used to identify the users either by user name or by machine name. This option is only relevant for the allocation of Named CALs. Please not that when identification by user option is checked, it is possible for a user to lease the same license twice. This flexibility allows a user to use the same license from two different machines.

Figure 1. Client Access Licenses tab on the QlikView Management Console



The Assigned CALs sub tab is used to manage the assignment of Named CALs. The information that is displayed on this sub tab includes the name of the user, last time the license is used and if the license for the user is under quarantined until a specific time. The quarantined until option is used when a license is marked to be deleted. This option allows to hold the CAL-to-user association for 24 hrs period. During this time period the CAL-to-user association can be undeleted by clicking the restore icon.

The History sub tab provides information on the lease licensed activities. By using the Limitations tab, it is possible to limit the number of CALs that can be used in the QlikView environment.

How Do These License Types Work Together?

Since most organizations have many different users with different Business Discovery needs, it is common that they will need a combination of QlikView licenses. A given instance of QlikView Server can carry any combination of the CAL types. The order of priority in the CAL assignment is explained in the “How to Assign Licenses” section of this paper when different CAL types are combined on the same server.

Usage Scenarios

In this section of the paper, we will discuss when to use different license types based on the users needs.

NAMED USER CAL

The Named User CAL is typically used for users that need dedicated access to QlikView applications. These are normally used for QlikView Developers, Power Users, and sometimes executive level managers, as well as a QlikView Developer who is in charge of creating and maintaining the QlikView Applications. These users will usually be using QlikView every day so there should be always a license available to them. The executive level managers may not reference the QlikView applications every single day, but it is a good practice to make sure when they do need to look at it that they have a dedicated license.

DOCUMENT CAL

Document CALs are used when department-specific applications are deployed and the users within these department only need access to these applications. For example, there maybe 100 users in the Finance Department that need to access only the QlikView Financial application. Since this is the only application that they need to access, a Document CAL is a cost-effective way to deploy to these users. Document CALs are very flexible in that they allow for multiple combinations of usage; 1 User can open 100 different documents or 100 users can open 1 document, or 50 users can use a sales application and 50 Users can use a Finance Application etc... The combination of Users and Documents must equal the number of Document CALs, i.e., 100 Doc CALs equates to any number of Users and Documents that equal 100.

SESSION CAL

Session CALs are a cost-effective way to deploy QlikView to a larger user base. Session CALs provide for anonymous users (meaning a Session CAL is not tied to an individual user). Session CALs are shared licenses that are normally used to accommodate less frequent QlikView users (users that will access QlikView couple times per week). Determining how many users can be supported by 1 Session CAL will vary depending on your user community and the frequency and the duration of their usage.

Business Analysts and mid management are usually good candidates for Session CALs. These individuals usually do not have the need to access QlikView on a daily basis so can share a pool of Session CAL licenses.

USAGE CAL

While it is recommended to try and identify the different user types and match them to the appropriate license type, there are times when additional users will be accessing QlikView. This usually happens during peak times such as month-end closing, year-end processing or promotional campaigns- all activities that will boost the usage of QlikView. For these times, Usage CALs can be utilized to accommodate these "overflow" users.

Usage CALs have a time limit and should not be used to accommodate individual or groups of users. A Usage CAL will allow a user to access one QlikView application for up to one hour within a 28 day period. While Usage CALs are a very cost-effective way to handle overflow usage, it is important to understand their limitations and plan your licensing strategy accordingly.

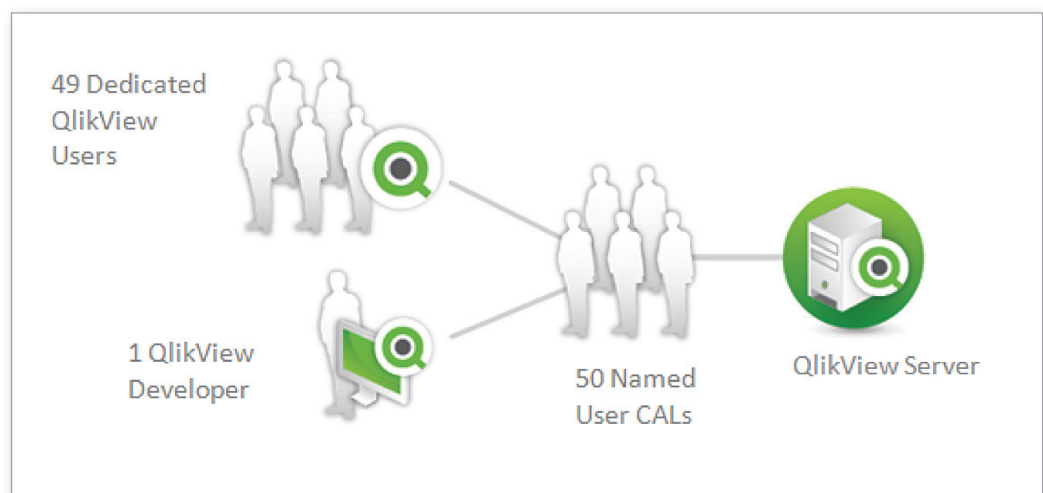
Licensing Configurations Examples

The following part of the paper examines the different licensing scenarios. They are simple examples of licensing configurations to give an understanding of when to use the different options. There is really no “right” answer and each organization has its’ own configuration based on their specific needs. Please work with your account executive to determine the best mix of licensing options to ensure you have the most optimum and cost-effective license configuration.

SCENARIO #1

In scenario #1, there are 50 users that will be accessing the QlikView applications on a daily basis. One of these 50 users will be in charge of creating the QlikView applications.

Figure 2. Scenario One Licensing Configuration



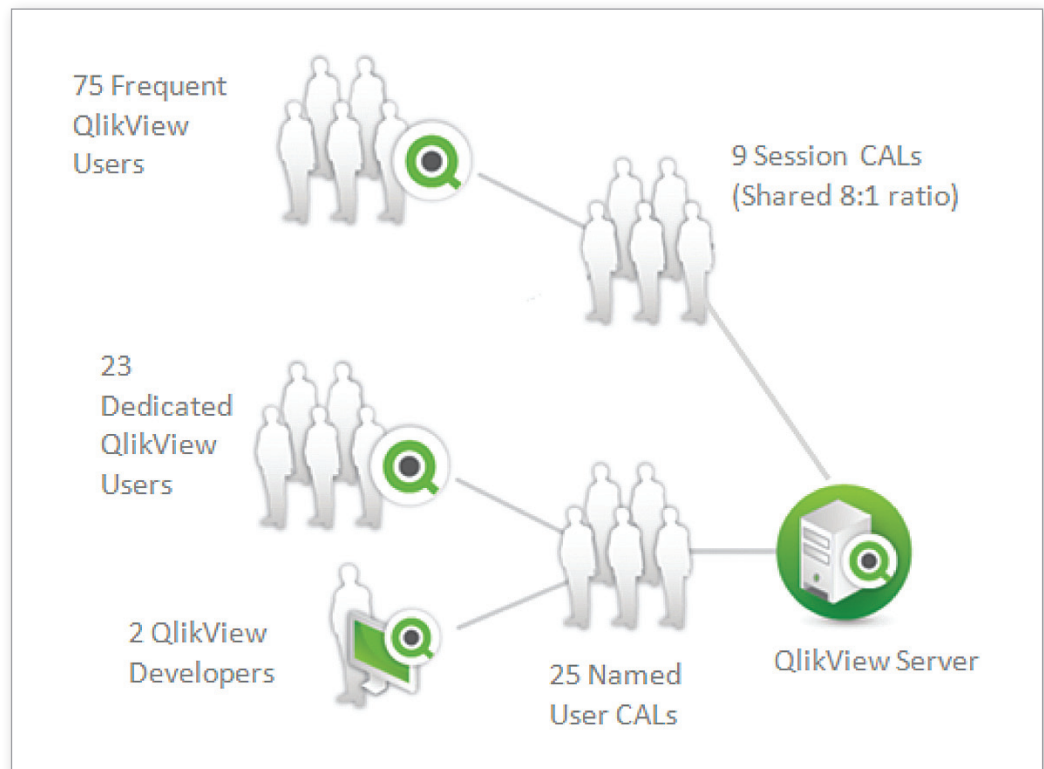
© 2012 QlikTech

Since each person is considered a dedicated user of QlikView, Named CALs are recommended so that these users are assured of dedicated access to the QlikView applications.

SCENARIO #2

In scenario #2, there are 100 users. 25 of these 100 users need frequent access to QlikView applications (once or twice per day). 2 Users will develop and maintain QlikView applications. The rest of the users will use QlikView applications on average 1-2 times per week.

Figure 3. Scenario Two Licensing Configuration



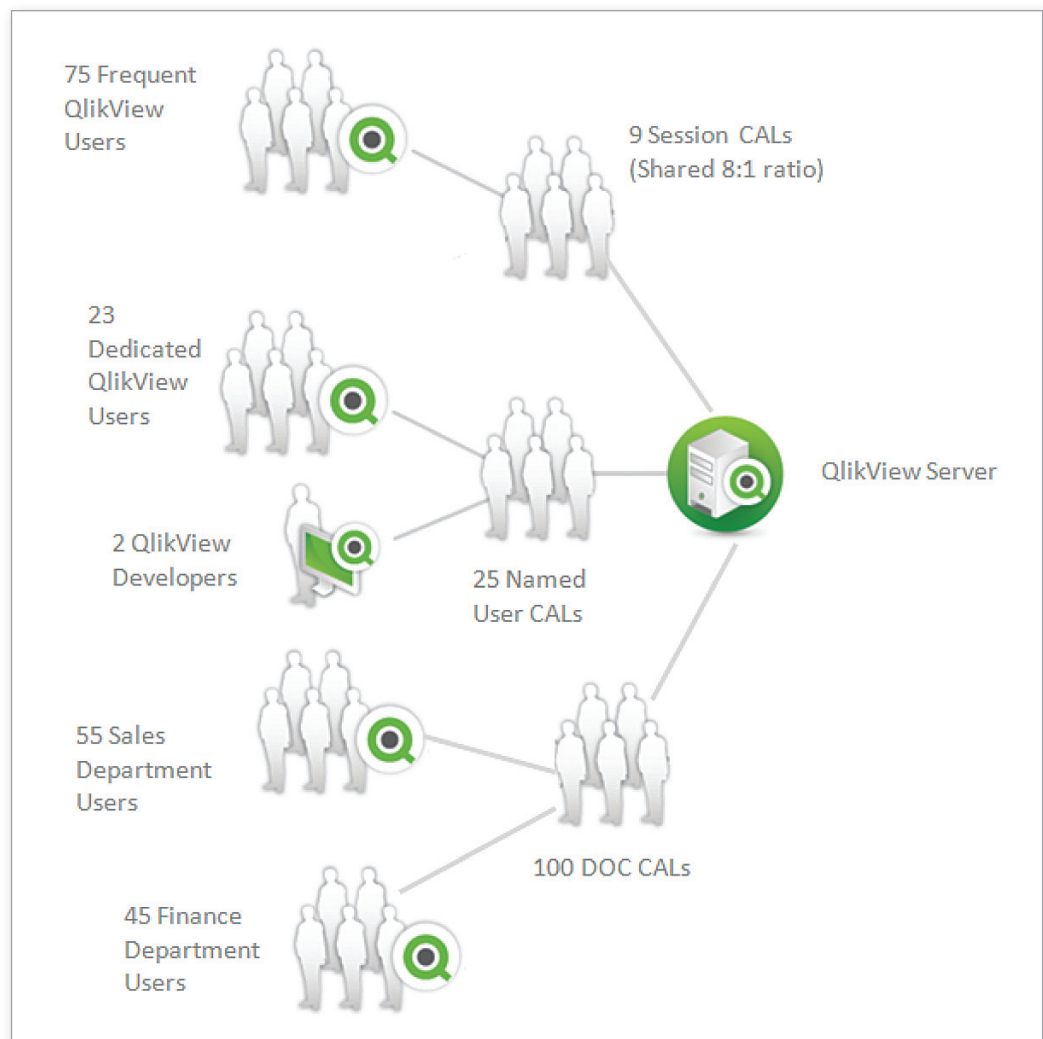
© 2012 QlikTech

In this scenario, there is a mix of frequent and infrequent QlikView users. Of the 100 total users, 25 of them will be using QlikView applications every day. To make sure that these users will always have access to their QlikView applications, the recommendation is to use Named CALs for them. The other 75 users are more infrequent users of QlikView and will only access QlikView applications 1-2 times per week on average. These users can share a pool of Session CALs. It is very important to understand the number of concurrent users when deciding on the number of session CALs. In this scenario, it has been determined that no more than 8 of these users will be accessing the QlikView applications at the same time. Using an 8:1 ratio, it has been determined that 9 Session CALs should be sufficient for the remaining 75 users.

SCENARIO #3

In this scenario, there are 200 users. 25 users need frequent access to multiple QlikView applications (once or twice per day). 2 users will develop and maintain QlikView applications. 75 users will access multiple QlikView applications on average 1-2 times per week. 55 users are in the Sales Department and need access to only the QlikView Sales application. 45 users are in the Finance Department and need access to only the QlikView Finance application.

Figure 4. Scenario Three Licensing Configuration



© 2012 QlikTech

Of the 200 total users, 25 of them will be using QlikView applications every day. It is recommended to make sure that these users will always have access to their QlikView applications so we will use Named CALs for them. 75 users are more infrequent users of QlikView applications and will only access 1-2 times per week on average but need access to multiple applications. For these users, it makes sense to share a pool of Session CALs. It has been determined that no more than 8 of these users will be accessing QlikView applications at the same time. Using a 8:1 ratio, it is determined that 9 Session CALs should be sufficient. The remaining 100 users are made up of 55 users in the Sales Department that only need access to the QlikView Sales application and 45 users in the Finance Department that only need access to the QlikView Finance application. For these users, DOC CALs are the most cost-effective way of deploying QlikView.

SCENARIO #4

This scenario introduces Usage CALs into the configuration. There are 100 users in total. 25 of these users will need frequent access to QlikView applications (once or twice per day). 3 Executives will have a QlikView dashboard application on their Desktop. 2 users will develop and maintain QlikView applications. The rest will use QlikView applications on average 1-2 times per week. During end of month close, usage of QlikView applications increases.

Figure 5. Scenario Four Licensing Configuration



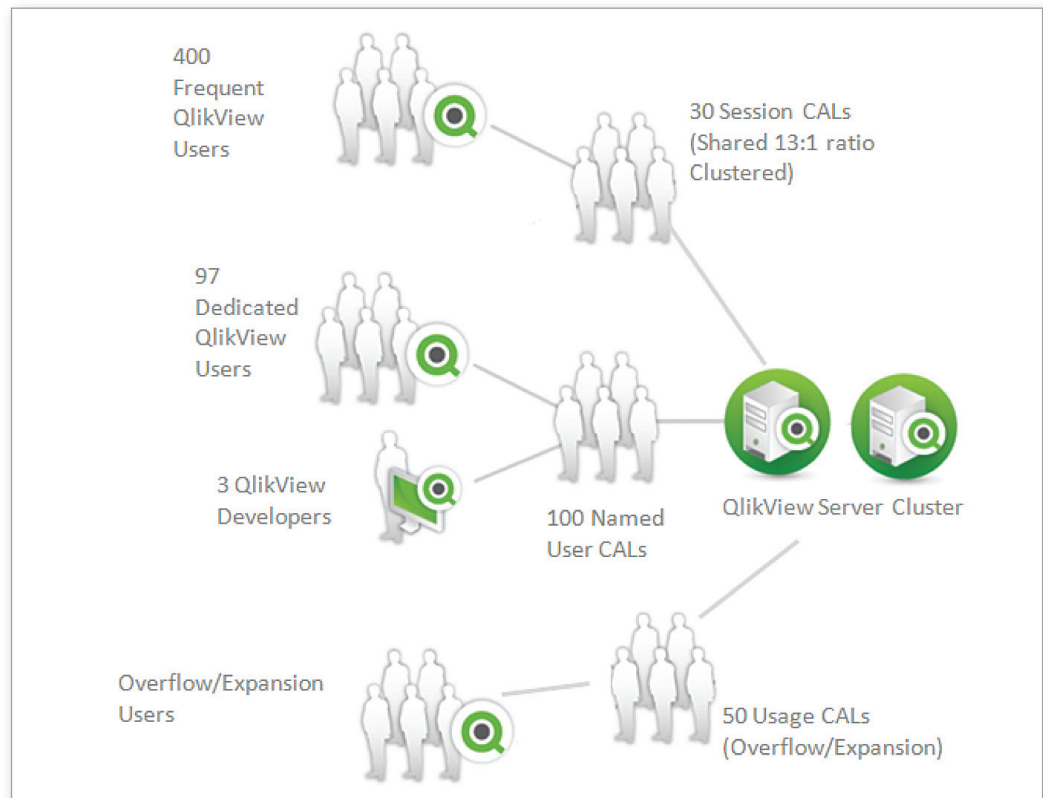
© 2012 QlikTech

In this scenario, 30 users will need their own Named CALs (there are 25 users who need frequent access to QlikView applications, there are 3 Executives who will have a QlikView dashboard application on their desktop and 2 users who will develop and maintain QlikView applications). The other 70 users will be infrequent users (accessing QlikView applications 1-2 times per week). The estimation is that there will only be 10 of these users accessing QlikView applications at the same time. These users can be accommodated with Session CALs using approximately a 10:1 ratio. Another factor to consider with this scenario is the end of month processing, which causes an increase on the QlikView application usage. Once end of month processing is finished, the usage goes back to previous levels. The most cost effective way to handle these usage peaks and ensure that everyone has access to the QlikView applications is to implement 5 Usage CALs.

SCENARIO #5

This scenario represents more of an enterprise implementation of QlikView. There is a large number of users with many QlikView applications spread across 2 clustered servers. In a clustered licensing environment, licenses can be shared across multiple servers (Please note that the CALs require the QlikView Servers within a cluster to be within the same geographical and physical location and within the same network sub-net/segment.). This prevents having to have duplicate applications on each server as well as not having to purchase duplicate licenses. The licensing is no different than the previous scenarios: frequent QlikView users will have Named User CALs and the rest will share 20 Session CALs. This customer doesn't have a good handle yet on how many users might be accessing QlikView applications at the same time via a Session CAL, so a 13:1 ratio is used and an additional 50 Usage CALs is used for overflow.

Figure 6. Scenario Five Licensing Configuration



© 2012 QlikTech

As new users come on board, they can utilize the Session CALs. Recommended license types for growth are Named User CALs and Session CALs. The Ops Monitor application, which is a free QlikView application can be used to get an idea of QlikView usage and make the determination as to how many additional licenses, and what types, need to be purchased.

LICENSING CONFIGURATIONS SUMMARY

QlikView's licensing strategy makes it very flexible to accommodate all types of users within an organization. QlikTech understands that every organization will have many different users with different needs when it comes to Business Discovery. QlikView makes it very easy to add additional licenses as the need for Business Discovery increases by not requiring buy licenses in blocks in advance.

QlikView Server Licensing

This section of the paper explains the licensing for different type of QlikView Server.

QLIKVIEW ENTERPRISE EDITION (EE) SERVER

QlikView Enterprise Edition Server is designed to be used in large and complex deployments and provides features such as unlimited documents, server-based collaboration, integration with third-party security systems, server clustering, and cluster licensing. The minimum configuration of a QlikView EE Server is ten Named User Client Access Licenses (CALs).

QLIKVIEW SMALL BUSINESS EDITION (SBE) SERVER

QlikView SBE Server is designed to be used in smaller deployments. The minimum configuration of a QlikView SBE Server is five Named User CALs. The maximum configuration is 25 named CALs, 100 Document CALs.

QLIKVIEW INFORMATION ACCESS SERVER (IAS)

QlikView IAS is a QlikView Server that is licensed for an uncapped number of users, but limited to a single QlikView application. QlikView IAS runs in anonymous mode and must be publically accessible without authentication (on the public Internet), that is, it must not be placed behind a firewall. No QlikView client can access QlikView IAS — the user interface must be built by the end user either manually or by using QlikView WorkBench.

QLIKVIEW EXTRANET SERVER (QES)

QES allows end users to deploy QlikView solutions to their extranet. QES is based on QlikView EE Server, but only supports up to three QlikView applications. The server can be deployed with a combination of Session and Usage CALs. QES supports mobile clients and can be deployed in clustered environments. The AJAX client or a customized AJAX client can be used via QlikView WorkBench, which is included in QES.

In addition to the editions of QlikView Server described above, there is also a number of additional, server-related products that can be purchased with QlikView Server.

QLIKVIEW TEST SERVER

QlikView Test Server is a license that provides an environment separate from production to use for data validation, application testing, and preparation/migration of QlikView applications to new versions and/or releases of QlikView. QlikView Test Server comes in two editions, QlikView EE Test Server and QlikView SBE Test Server, both of which have the same features and limitations as the corresponding production servers. Please note that the watermark “Test” is superimposed on all charts and added to all object captions on the QlikView applications that are opened on a QlikView Test Server. There is no license lease from QlikView Test Server.

QLIKVIEW PUBLISHER

QlikView Publisher is a license that adds significant functionality to the standard reload capability of QlikView Server. QlikView Publisher includes functionality to handle field level security and access control from central administration software like Window Active Directory or Novell® LDAP. QlikView Publisher is also needed to support complex distribution models for QlikView applications. In addition, each license of QlikView Publisher allows an additional node/server for reload, distribution, or security management in a multi-node/server deployment. With the additional component QlikView Publisher Report Distribution, any QlikView application report can be distributed as a .pdf file to a folder or via email or SMTP.

As the number of QlikView applications increase, it is possible to expand the QlikView Publisher deployment by either buying additional (separate) Publisher license(s), or by buying additional distribution service(s) for the existing QlikView Publisher. For most of the cases, it makes more sense to purchase additional distribution services and have one distributed QlikView Publisher. Each of these additional distribution services can be deployed to separate servers providing scalability on the QlikView application refreshes and distributions. All of the Publisher distribution services are managed from the same QlikView Management Console providing ease of maintenance and management.

There are also cases where multiple separate QlikView Publishers would make sense. For example, if the QlikView deployment is geographically distributed and each location has their own data sources, it would make sense to deploy separate QlikView Publisher at each of these geographic locations. It is recommended to work with the QlikView architecture experts to decide on the best deployment architecture based on your environment and Business Discovery needs.

QLIKVIEW WORKBENCH

QlikView WorkBench (an add-on to QlikView EE Server) is a development tool for creating web mash-ups with QlikView. It features drag and drop editing capabilities within the Microsoft Visual Studio® development environment and allows for custom web interfaces and integration with third-party services. Please note that QlikView WorkBench is not available for use with QlikView SBE Server.

QLIKVIEW WEB PARTS FOR MICROSOFT SHAREPOINT®

QlikView Web Parts (an add-on to QlikView EE Server) for Microsoft SharePoint allows for rapid deployment of QlikView objects within Microsoft SharePoint portal environments. Please note that QlikView Web Parts are not available for use with QlikView SBE Server.

Features and Limitations

The table below summarizes the features and limitations of each edition of QlikView Server. "Y" represents a supported feature and "N" represents a non supported feature.

	Enterprise Edition	Small Business Edition	QlikView Information Access Server	QlikView Extranet Server
Licensing				
Named User CALs	Y	Y (max 25)	N	N
Session CALs	Y	N	Y (unlimited)	Y
Usage CALs	Y	N	N	Y
Document CALs	Y	Y (max 100)	N	N
External Users Allowed	N	N	Y	Y
Clients				
AJAX (and mobile devices via AJAX)	Y	Y	Y (workbench included)	Y (workbench included)
Internet Explorer Plugin	Y	Y	N	N
Installed QlikView Client	Y	Y	N	N

Scalability				
Can be clustered (additional server license required)	Y	N	Y	Y
Unlimited Documents	Y	Y	N (1 only)	N (3 documents only)
Integration				
Third Party Security Integration	Y	N	N	Y
Dynamic Data Update (Real Time Server) (additional license required)	Y	N	Y (included)	Y
Features				
License Lease (offline access, Named User CALs required)	Y	Y	N	N
Annotations	Y	Y	N	Y
Collaboration (sheets, sheet objects, and input fields)	Y	Y	N	N
Session Collaboration	Y	Y	N	Y
QlikView Publisher and PDF generation (additional license required)	Y	Y	N	N
QlikView Connector for use with SAP NetWeaver® (additional license required)	Y	Y	Y	Y

Test Server Option	Y	Y	Y	Y
Can be embedded in Microsoft SharePoint (QlikView Web Parts for Microsoft SharePoint) (additional license required)	Y	N	Y	Y
Build bespoke mashups/AJAX applications (QlikView WorkBench) (additional license required)	Y	N	Y (included)	Y (included)
Security				
Section Access	Y	Y	N	Y
Document Metadata Service (DMS)	Y	N	N	Y
Service (DMS)				
Active Directory/NTFS	Y	Y	N	Y
Anonymous User	Y (with Session CALs)	N	Y (mandatory)	N