



Product Description for Qlik® Software

This Product Description for Qlik Software is part of the Documentation for Qlik Sense® (Client-Managed), Qlik Analytics Platform®, Qlik Data Integration, Gold Client®, Qlik Alerting™, Qlik Catalog®, Qlik Connector for SAP®, Qlik GeoAnalytics®, Qlik Geocoding®, Qlik Insight Advisor, Qlik NPrinting® and QlikView®, and governs the use of these Qlik Products.

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I. Qlik Sense Enterprise

Qlik Sense Enterprise (QSE) Client-Managed edition allows customers to deploy on premises or in a customer-managed cloud. The customer manages all aspects of the deployment, including infrastructure. Client-Managed subscriptions include access to one Test and one Development Site for the subscription period.

QSE Client-Managed customers can also add Qlik Sense Enterprise SaaS to the same subscription, which allows applications to be managed and distributed across on-premises or cloud environments from a unified platform. Subscription options include user and access types for listed below. Qlik Sense Tokens remain available only to customers with existing Qlik Sense Token licenses.

A Qlik Sense Client-Managed site refers to a deployment, which is managed with a single license key and may cover multiple servers or nodes (“Site”). Customers requiring multiple Client-Managed Sites are required to have separate licenses for each Site. Test and Development Sites require separate licenses, except where expressly included in a subscription.

Client
Managed

- Qlik Sense Enterprise Professional User
- Qlik Sense Enterprise Analyzer User
- Qlik Sense Enterprise Analyzer Capacity
- Qlik Sense Enterprise CPU Cores
- Qlik Sense Enterprise SaaS Add-On

A. Qlik Sense Enterprise Client-Managed Licenses

User Type*	License	Description
Professional User	Client-Managed Subscription	Professional User is a full developer and user license, which provides access to all features of Qlik Sense Enterprise Client-Managed. Professional Users receive all of the features of the Analyzer User plus the ability to create Qlik Sense applications (“Applications”) and sheets, access My Work, and authenticate to both the Qlik Sense mobile application and Qlik Sense Desktop. Professional User subscriptions include access to Qlik GeoAnalytics Base and Qlik Web Connectors at no additional cost during the subscription period and for so long as the products are generally available. Professional Users are not available for external use by third parties.
Analyzer User	Client-Managed Subscription	Analyzer User is a limited user license and allows users to access and explore Qlik Sense Applications. Analyzer Users may not create or modify Qlik Sense Applications, create or publish new sheets, update or modify data, access My Work, or authenticate to Qlik Sense Desktop. At least one Professional User is required to purchase an Analyzer User. Analyzer Users may be accessed and used by external third parties authorized by the customer. At least one Professional User license is required to purchase an Analyzer User.
Analyzer Capacity		Analyzer Capacity is a capacity-based license option and offers access to QSE Client-Managed with metered usage. Analyzer Capacity is sold in packs of 1,000 minutes per month. Minutes are allocated and reset on a monthly basis and any unused minutes remaining at the end of a month are forfeited. Consumption of minutes is based on active use and in minimum increments of 6 minutes. Usage is actively metered and users will be denied access if the licensed capacity is exceeded. If a customer enables and consents to overage, customer will be permitted to exceed purchased minutes and will be invoiced for any overage (at 125% of list price) the following month. Analyzer Capacity functionality is the same as the Analyzer User functionality and is administered with the Qlik License Service beginning with the February 2019 release. Analyzer Capacity requires at least one Professional User license for development.

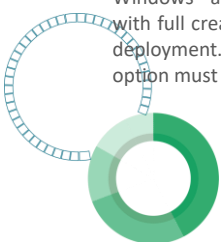
*To access a Professional or Analyzer User license, the user must be uniquely identified and authenticated. An IP address is not a valid form of user identification.

B. Qlik Sense Enterprise SaaS Add-On

Customers with a QSE Client-Managed subscription can add a Qlik Sense Enterprise (QSE) SaaS Add-On to their deployment for an additional charge¹. The QSE Add-On includes all of the features of QSE SaaS (Standard). QSE SaaS Add-On will include the same user or access types and quantities as the underlying QSE Client-Managed subscription. With a Qlik Sense Enterprise SaaS Add-On, named users have one identity and login across both QSE Client-Managed and SaaS deployments and users can distribute content from QSE Client-Managed to QSE SaaS.

C. QlikView Add-On

¹ Subscriptions for Qlik Sense Enterprise Professional/Analyzer/Capacity licensed between June, 2018 to July, 2020 include deployment options on Windows® and Qlik Cloud (“Multi-Cloud”). QSE on Windows refers to the standard on-premises deployment (or in a customer or third-party cloud) with full create and consume capabilities. This environment is where application development and reloads occur and is required for a multi-cloud deployment. Applications can be distributed from QSE for Windows to Qlik Cloud. Eligible customers wishing to take advantage of the Multi-Cloud option must renew QSE Client-Managed subscriptions with Qlik Sense Enterprise SaaS Add On.



The QlikView Add-On allows access to QlikView to be added to Qlik Sense Enterprise Client-Managed deployments using a common license model. A unified license requires use of the Qlik License Service, which enables Professional Users, Analyzer Users or Analyzer Capacity Packs to be centrally managed and assigned or allocated for use with either QlikView or Qlik Sense.

D. Qlik Sense Client-Managed Sites

	Description
Production Site	A Qlik Sense deployment on Windows can include both a development node and a production node supported by one license key. If there is a need to separate the production node from the development node, separate license keys (or one per Qlik Sense site) would be required.
Test Site	A Qlik Sense Test Site provides an environment separate from production to use for validation, testing, and quality assurance. A Qlik Test Site may not be used in production.
Development Site	A Qlik Sense Development Site provides an environment separate from production to use for development of Applications or release management prior to testing. A Qlik Development Site may not be used in production. A Development Site is purchased separately from the Test and Production Site. If a Development Site is purchased with production capacity, the Development Site will mirror the production capacity at the time of purchase of the Development Site.

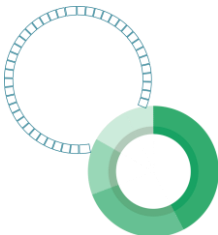
E. Qlik Sense Enterprise Core-Based License

Qlik Sense Enterprise core-based sites are licensed based on the number of CPU Cores (“Cores”) on which the software will operate. The license key limits the maximum number of Cores on which the Qlik Associative Engine and its components may operate. Cores must be licensed for the Qlik Associative Engine on the central node and any other node used for reloading data or providing user access to an application supported by the Software. A Core means a single processing unit within a processor or CPU, whether physical or virtual, including a vCPU or virtual core, which is capable of executing a single software thread at a time. If the software is installed across multiple nodes, the total number of Cores on all nodes may not exceed the licensed number of Cores.

F. Qlik Sense Tokens

Qlik Sense Tokens are only available to customers with existing Token licenses using a QSE Windows-based deployment. Qlik Sense Tokens are used to assign access pass types that determine how users are able to access Qlik Sense. For customers using Tokens, Qlik Sense is administered using a license key, which holds the number of Tokens available to allocate as access passes. An access pass allows users to access streams and Applications within a Qlik Sense site. A Qlik Sense site is a collection of one or more nodes connected to common central node.

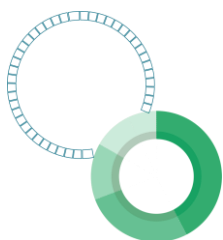
1. Access Passes. There are different types of access passes to choose from and each type corresponds to a specific consumption model for accessing Qlik Sense. Each access pass provides the Qlik Sense user with a certain type of access to Applications. The following table lists the types of access passes that are available to the Qlik Sense Server.



Access Pass Type	Description
User Access Pass	<p>A User Access Pass allows a unique and identified user to access the Qlik Sense hub. The access pass is valid within an entire Qlik Sense site. For example, if a user first connects to a node in the USA and then, at a later stage, connects to a node in the UK, the user consumes the same access pass, if the two nodes are connected to the same central node.</p> <p>The maximum number of parallel user connections for a single user of this type of access pass is five (5). A user connection is the combination of device and browser that is used by a single user to connect to Qlik Sense. If a user who already has a user connection connects to Qlik Sense from another browser or device, an additional user connection is established.</p> <p>One (1) token corresponds to one (1) User Access Pass. User Access Passes are allocated using the Qlik Management Console (QMC).</p>
Login Access Pass	<p>A Login Access Pass allows an identified or anonymous user to access the hub for a maximum of 60 continuous minutes per 28-day period. If the user exceeds the 60-minute time limitation, the user connection does not time out. Instead, another login access pass is used. If no more login access passes are available, the session is discontinued.</p> <p>If an identified user is disconnected, the user can re-connect and continue to use the same access pass, if re-connecting within the 60 minutes. If an anonymous user is disconnected, the user gets a new access pass when re-connecting. The login access pass tracks the number of logins and runs over 28 days. For example, if 1000 logins are assigned to Group A, the users in Group A can use 1000 logins over 28 days. If 100 logins are consumed on Day 1, the 100 logins are available again on Day 29.</p> <p>The maximum number of parallel user connections for a single identified user of this type of access pass is five (5). Note that an anonymous user can only have one (1) user connection.</p> <p>One (1) token corresponds to ten (10) Login Access Passes. Login Access Passes are allocated using login access groups in the QMC Table Text</p>

2. Removing Access Passes

Access Pass Type	Description
User Access Pass	<p>When a User Access Pass is removed, it enters a quarantine period for seven (7) days starting from the last time that the access pass was used. For example, if the access pass is used on January 10, the Tokens used to allocate the access pass are not available for new allocations until January 18. During the quarantine period, the original allocation of the access pass can be reinstated, which means that the quarantine period ends and the user can start using the access pass again.</p>
Login Access Pass	<p>When a Login Access Pass is removed, the tokens used to allocate the access pass become available in accordance to the following procedure:</p> <p>For every ten (10) unused Login Access Passes, one (1) Token is freed up.</p> <p>For every ten (10) Login Access Passes that leave the used state after 28 days, one (1) Token is freed up.</p>



II. Qlik Analytics Platform

The Qlik Analytics Platform includes a suite of application program interfaces (“APIs”) as well as a development toolkit with developer, governance and management tools. Developers may build applications by using these APIs, the developer toolkit, or other standard web and Windows® development tools. No built-in client functionality is included with the software, therefore, access to QAP Applications must be through other platforms such as portals, web servers or locally installed applications.

A. Cores

The Qlik Analytics Platform (“QAP”) is licensed based on the number of Cores on which the software will operate. The software license is administered using a license key, which limits the maximum number of Cores on which the Qlik Associative Engine (“Engine”) and its components may operate. Cores must be licensed for the Qlik Associative Engine on the central node and any other node used for reloading data or providing user access to an application supported by the software (“QAP Application”). A Core means a single processing unit within a processor or CPU, whether physical or virtual, including a vCPU or virtual core, which is capable of executing a single software thread at a time. If the software is installed across multiple nodes, the total number of Cores on all nodes may not exceed the licensed number of Cores.

Use of QAP is subject to the following minimum configuration and license requirements.

QAP Editions	Minimum Configuration	License Model
Qlik Analytics Platform for OEM	4 Cores	Subscription
Qlik Analytics Platform External Edition	4 Cores	Perpetual or Subscription

B. Use of Qlik Analytics Platform

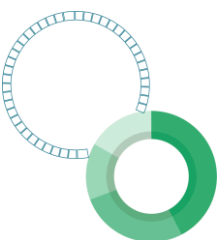
The right to access and view a QAP Application is limited to external third parties authorized by the customer. Authorized third parties may not create, upload, or modify any of the data, which they are permitted to view, and may not install, download, or copy the Software in connection with viewing QAP Applications. QAP may not be used to deploy Qlik applications for customer’s internal users and access to QAP Applications from inside the LAN is not permitted, except for purposes of testing and validation. Separate Qlik Sense Enterprise licenses and environments are required to develop Qlik applications or deploy Qlik applications for use internally. However, where access to a QAP Application is both publicly available and no user authentication or login is required (e.g., from a public website), such use is permitted regardless of whether the end user is internal or external.

C. Test Sites

The QAP test and development sites are licensed separately, and the test or development site does not have to mirror the LEF for a production site. A QAP test or development site may not be used for production purposes.

III. Qlik Data Integration

Qlik Data Integration (“QDI”) products include Qlik Data Integration for CDC Streaming, Qlik Data Integration for Data Warehouse Automation and Qlik Data Integration for Data Lake Creation. Qlik Data Integration products are available on a subscription basis and includes the software features and components listed below.



	Replicate	Enterprise Manager	Compose for DW	Compose for DL	Qlik Catalog
QDI for CDC Streaming	✓	✓			
QDI for Data Warehouse Automation	✓	✓	✓		✓
QDI for Data Lake Creation	✓	✓		✓	✓

A. Metrics

QDI is licensed for a specific data connection, which is identified by both the source system from which the data originates (“Source”) and the destination or target system (“Target”). The applicable license metric for QDI is determined by the Source type from which the data is being replicated.

Source Type	Metric	Description
RDBMS and SAP RDBMS	Core	Data connections from a Relational Database Management System (“RDBMS”), including SAP RDBMS sources, are licensed per Core. A Core means a single processing unit within a processor or CPU, whether physical or virtual, including a vCPU or virtual core, which is capable of executing a single software thread at a time. A virtual processor is considered to have the same number of threads and cores as each physical processor on the underlying hardware. If the Software is installed across multiple nodes, the total number of Cores on all nodes may not exceed the licensed number of Cores.
Mainframe	MSU (Per 10 MSUs)	Mainframe sources are licensed based on the number of source MSUs (million service units) assigned to the LPAR monitored by Replicate. MSUs will be measured by IBM SCRT utility report.
Data Warehouse and Data Lake	TB (Per 100 TBs)	Data warehouses, data lakes, data marts and file-based sources, such as file servers and object stores, are licensed based on the capacity or storage size in terabytes (TB) attached to the server or appliance monitored by Replicate.
SAP HANA	GB (Per 200 GBs)	Data connections from an SAP Hana database are licensed based on the capacity or storage size in gigabytes (GB) on the server or appliance monitored by Replicate.
SaaS Application	Per Instance	An application instance refers to a virtual server in a public or private cloud used to provide a specific set of software capabilities for an end user.

B. Qlik Data Integration Components

1. **Qlik Replicate.** Replicate is included with all QDI options and may only be used with the specific Source and Target endpoints for which it is licensed. If QDI is licensed for an unlimited number of Sources and Targets, Replicate may only be used with any of the supported endpoints identified in the Documentation as of the purchase date. All QDI products also include Enterprise Manager, which is a central operational management tool for Replicate that includes a management center, analytics and metadata modules.



2. **Compose.** Compose for Data Warehouse (DW) is included with QDI for Data Warehouse Automation. Compose for Data Lakes (DL) is included with QDI for Data Lake Creation. Supported Targets are not the same for Compose CDW and CDL.

3. **Qlik Catalog.** Qlik Catalog (formerly Qlik Data Catalyst) is included with QDI for Data Warehouse Automation (QDI-DW) and QDI for Data Lake Creation (QDI-DL) only as more fully described below.

C. Test and Disaster Recovery

All QDI Products include test and development environments with a paid subscription. Test and development environments are limited to the same capacity as the production environment. Test and development sites may not be used for production purposes. QDI products can be installed on backup servers for disaster recovery purposes. However, no more than the licensed quantity or capacity may be running at any given time. Thus, a cold standby environment can be installed, but cannot be in use prior to the live or production environment being shut down.

IV. Gold Client

A. Overview

Gold Client and **Gold Client for Data Protection** refer to SAP application-specific software. Gold Client solutions are offered for all major SAP applications, including Enterprise Resource Planning (ERP), S/4 HANA, Business Warehouse (BW), Customer Relationship Management (CRM), Supplier Relationship Management (SRM), Global Trade Services (GTS), Supply Chain Management/Advanced Planner and Optimizer (SCO/APO), Human Capital Management (HCM), Transportation Management (TM), Event Management (EM) and Extended Warehouse Management (EWM).

B. Metrics

Gold Client is licensed per gigabyte (GB) of data and licensed for a Customer's specific environment, which is identified by an SAP Installation Number and SID ("SAP Environment"). If a Customer wishes to use the Software in more than one SAP Environment within Customer's organization, an additional license for each such additional SAP Environment is required. Any changes to the SAP Environment may require a new license or license key.

V. Qlik Catalog

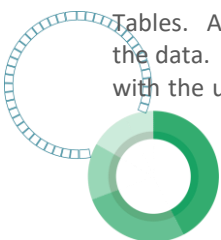
Qlik Catalog (formerly Qlik Data Catalyst) builds an enterprise-scale repository of data for analytics. One Qlik Catalog license is included per customer with QDI for Data Warehouse Automation and QDI for Data Lakes. Qlik Catalog may also be purchased separately.

A. Scope

Qlik Catalog, as included with QDI for Data Warehouse and QDI for Data Lakes, may be used with data from any source, but may only be used to publish to licensed QDI Targets. QDI customers who wish to publish to additional targets may separately license Qlik Catalog on a stand-alone basis.

B. Metrics

Use of Qlik Catalog is restricted to no more than 1,000 Tables (production capacity) and for a single node. A "Table" refers to a data asset, which is displayed in the Catalog as an entity. Registered and managed entities are counted as Tables. A Table includes a fixed number of columns or fields but may have any number of repeating records containing the data. Customers who choose to use Qlik Catalog shall be solely responsible to manage the catalog size and comply with the use restrictions. Customers shall further provide Qlik with quarterly reports on Catalog size and agree to an



annual true up payment, if consumption exceeds 1,000 Tables during the subscription term. Customers can purchase additional capacity in packs of 1,000 Tables.

VI. Qlik Alerting

A. Overview

Qlik Alerting is an intelligent alerting platform for Qlik Sense Enterprise on Windows. Qlik Alerting customers must be utilizing a currently supported version of Qlik Sense Enterprise on Windows. Qlik Alerting capabilities are associated with the Qlik Sense Enterprise license as shown below.

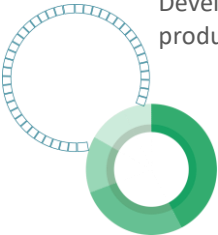
Qlik Sense Enterprise License Type	Qlik Alerting Capabilities
Professional User	Create/receive all alert types
Analyzer User	Create self-service alerts and receive all alert types
Analyzer Capacity	Receive broadcast and notification alerts only (via e-mail only)
Token - User Access Pass	Create/receive all alert types
Token - Login Access Pass	Not recommended as one Login Access Pass is consumed per each alert generation, but can create/receive all alert types.
CPU Core-based users	Create/receive all alert types
Any Recipient (No Qlik Sense License)	Receive broadcast and notification alerts only

B. Alert Types

1. **Data Alerts:** Alerts based on the data in Qlik Sense applications using simple or complex conditions, notifying users when data changes.
 - Self-service alerts: A data-based individual alert created by a user for personal delivery and not enabled for sharing with other users.
 - Distributed alerts: A data-based alert created by a Professional User with one or multiple recipients:
 - Broadcast: Every recipient receives the same alert message.
 - Managed: Every recipient receives the alert based on their data privileges on the source application.
2. **System Alerts:** Alerts that let users know about important system events that have taken place (unsuccessful application reloads, etc.).
3. **Notifications:** A notification whereby every recipient receives the same message created by an administrator.

C. Deployment Types

1. **Single Deployment per Qlik Sense Enterprise Site:** Each Qlik Alerting Server may be connected to one unique Qlik Sense Enterprise Site. For purposes of this Product Description, a Qlik Sense Enterprise Site means deployment of a single Qlik Sense Enterprise license key within a single node or multi-node instance of Qlik Sense Enterprise on Windows. Deployment prerequisites are set forth in the Qlik Alerting Product Documentation at help.qlik.com.
2. **Test and Development Sites:** Each Qlik Alerting Enterprise Server license for Professional, Analyzer or Analyzer Capacity users includes one test site and one development site during the subscription period only. Test and Development Sites for Token or CPU Core sites are not included. Test and development sites may not be used for production purposes or for disaster recovery.



VII. Qlik Connector for SAP

The SAP Connector is available for Qlik Sense Enterprise (“QSE”) Client-Managed and QlikView. A separate connector is required for use with QSE SaaS. Connectors are licensed based on the Qlik Sense or QlikView configuration.

QSE Client-Managed	QSE SaaS	QlikView
One connector is required for each Qlik Sense site.	One connector is required for each QSE SaaS tenant.	One connector is required for each QlikView cluster or QlikView Desktop2.

VIII. Qlik GeoAnalytics and Geocoding

Qlik GeoAnalytics enables geographical analysis with both Qlik Sense and QlikView. The product consists of (i) extensions that provide geographical visualizations, (ii) a Qlik GeoAnalytics Connector and (iii) for Qlik GeoAnalytics Enterprise Server, a Qlik GeoAnalytics Server. The Connector is used to load data from supported data sources and enables several analytical operations using a wizard that can be applied to external data or data that is already loaded in a Qlik application.

Qlik GeoAnalytics & Geocoding Products

PRODUCT	DESCRIPTION	LICENSE
Qlik GeoAnalytics Base	<p>The Base Software³ consists of extension objects used in the client and a connector. The connector and the extensions communicate with an external Qlik-hosted server that does all lookups and operations and sends back the results.</p> <p>Qlik GeoAnalytics Base includes a user-selectable feature, Qlik GeoAnalytics Plus, that can be installed to provide geo calculations on premise (except routing and location lookups) and access to local resources.</p>	<p>Qlik GeoAnalytics Base is offered as a subscription.</p> <p>Each Qlik GeoAnalytics Base license may be used with multiple QlikView and/or Qlik Sense servers.</p>
Qlik GeoAnalytics Enterprise Server (includes a Qlik GeoAnalytics Test Server)	<p>The Enterprise Server Software includes all of the features of Qlik GeoAnalytics Base plus a local server that provides background maps, location lookups and geo-calculations (serving of satellite imagery is performed remotely).</p>	<p>Qlik GeoAnalytics Enterprise Server is offered as a subscription. Customers with a perpetual license to GeoAnalytics Base may upgrade their perpetual license to GeoAnalytics Enterprise Server.</p> <p>Each Qlik GeoAnalytics Server is separately licensed, but one Qlik GeoAnalytics Enterprise Server can</p>

²For existing QlikView customers with Publisher licenses, one connector is required per Publisher, irrespective of the number of QlikView servers.

³GeoAnalytics data is included without additional charge for so long as i) Customer maintains a subscription, or remains current on Maintenance with a perpetual license, and ii) Qlik continues to make such data generally available.

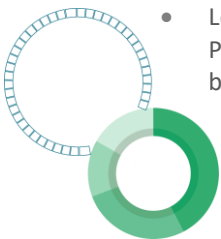


PRODUCT	DESCRIPTION	LICENSE
		serve multiple QlikView and/or Qlik Sense servers.
Qlik GeoAnalytics Test Server	The Test Server Software includes all of the features of Qlik GeoAnalytics Enterprise Server but is limited to use only in a Test Environment.	Test Server is a server license that provides an environment separate from production to use for data validation, application testing, and preparation/migration of Qlik Applications to new versions and/or releases of QlikView or Qlik Sense.
Qlik Geocoding	Add-on package for Qlik GeoAnalytics Base and GeoAnalytics Enterprise Server that provides conversion from street addresses to geographical coordinates, and vice versa.	Qlik Geocoding requires Qlik GeoAnalytics Base or Qlik GeoAnalytics Enterprise Server, and is licensed as a fixed quantity of geocoding lookups that must be exercised within one (1) year of purchase.
Qlik GeoAnalytics for OEM	Same as Qlik GeoAnalytics Base.	Qlik GeoAnalytics for OEM is licensed as an annual subscription.
Qlik GeoAnalytics Enterprise Server for OEM (includes a Qlik GeoAnalytics Test Server)	Same as Qlik GeoAnalytics Enterprise Server.	Qlik GeoAnalytics Enterprise Server for OEM is licensed as an annual subscription.
Qlik Geocoding for OEM	Same as Qlik Geocoding	Qlik Geocoding for OEM requires Qlik GeoAnalytics for OEM or Qlik GeoAnalytics Enterprise Server for OEM, and is licensed as a fixed quantity of geocoding lookups that must be exercised within one (1) year of purchase.

Test Environment. A Test Environment provides an environment separate from production to use for data validation, application testing, and preparation/migration of QlikView/Qlik Sense documents including geospatial information.

Qlik GeoAnalytics Operations. Qlik GeoAnalytics includes geographic analysis operations when data is loaded into Qlik Sense or QlikView. Depending on the product, there are certain restrictions in the following categories:

- **Data Source per Operation.** This is related to the size of the input data to each operation call. The Connector supports different input data types, but the input data is typically a loaded table.
- **Data Source for Route-Based Operations.** The route operations are: “Route,” “TravelAreas” and “Closest” (all transportation modes except “Bird”).
- **Location Lookups.** These are operations that use the included location database, such as “Standard Areas and Points.” A lookup occurs when a place name is translated into an area or a point. A place name can, for instance, be a country, county, city, zip code or an airport.



- Map Views. Each Map View is a map transaction that is used to load a map image or tile into the browser window. A typical map consists of ten (10) tiles.

PRODUCT	MAXIMUM DATA SOURCE PER OPERATION	MAXIMUM DATA SOURCE FOR ROUTE-BASED OPERATIONS	LOCATION LOOKUPS	MAP VIEWS
Qlik GeoAnalytics Base or Qlik GeoAnalytics for OEM	20,000 rows	400 rows	50,000 rows	1 million per month per Customer or OEM Partner
Qlik GeoAnalytics Enterprise Server or Qlik GeoAnalytics for OEM – Enterprise Server	Up to available memory	Unlimited (available memory)	Unlimited (available memory)	Unlimited (available memory)

Qlik Geocoding Operations. Qlik Geocoding provides geographical (GPS) coordinates corresponding to a location, such as a street address and vice versa. Address and key information is sent to remote servers for each lookup request. Each address or individual coordinate set sent to the Qlik Geocoding server constitutes a lookup request, regardless of the extent to which resulting data is returned (e.g. an invalid or incomplete street address or GPS coordinates may result in non-discrete data or no data at all being returned). Up to five thousand (5,000) lookup requests may be sent in a single call to the Geocoding server.

Geocoding is sold as a fixed quantity of lookup requests, where such quantity of lookups must be used within one (1) year from the date of purchase. Unused lookup requests remaining as of the date of expiration are forfeited.

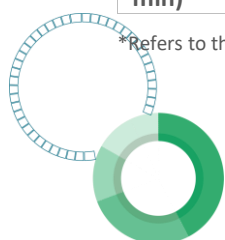
Cold Standby for Qlik GeoAnalytics Enterprise Server. Qlik GeoAnalytics Base and Enterprise Server licenses can be installed on as many servers as required for backup or disaster recovery purposes. However, no more than the licensed number of GeoAnalytics Software may be running at any given time. Thus, a cold standby environment can be installed and ready to run, but cannot be live (that is, the services cannot be started) and in use prior to the live environment being shut down.

IX. Qlik Insight Advisor

Qlik Insight Advisor enables users to engage in conversations with their data using Qlik Sense Enterprise on Windows and certain third-party messaging and collaboration tools. Qlik Insight Advisor is licensed on a subscription basis per Qlik Sense site or by CPU cores for a Qlik Sense core-based site. Qlik Insight Advisor can be accessed by named users in the Qlik Sense Enterprise Management Console, so that Qlik Sense can authenticate users and manage permissions within the apps.

	Access	Requirements
Qlik Insight Advisor Site License	May be accessed within the Qlik Sense client or with supported third party collaboration tools.	Requires Qlik Sense Enterprise on Windows (April 2018 release or later)
QIB CPU Cores* (4 Core min)	May be accessed within the Qlik Sense client only.	Requires Qlik Sense Enterprise on Windows (June 2019 release or later)

*Refers to the same definition of a Core as set forth in the description for Qlik Sense.



Single Deployment per Qlik Sense Enterprise Site. Each Qlik Insight Advisor may be deployed on one unique Qlik Sense Enterprise Site. A Qlik Sense Enterprise Site means deployment of a single Qlik Sense Enterprise license key within a single node or multi-node instance of Qlik Sense Enterprise on Windows. Deployment prerequisites are set forth in the Qlik Insight Bot Product Documentation located at help.qlik.com.

Multiplexing. Multiplexing occurs when multiple users are able to simultaneously access a single system through a common shared interface. Because Qlik Insight advisor may assign a license to the shared interface rather than to each of the users accessing Qlik Insight Advisor via the shared interface, multiplexing can result in more users having access to Qlik Insight Advisor than are licensed. It is customer’s responsibility to ensure that if Qlik Insight Advisor is utilized with an interface that permits multiplexing to occur, each Qlik Insight Advisor user accessing Qlik Insight Advisor via the multiplexing front end is assigned a unique Qlik Sense user license.

Test and Development Sites. Each Qlik Insight Advisor Server license includes one test site and one development site during the subscription period only. Test and development sites may not be used for production purposes or for disaster recovery.

Third Party APIs. Use of Qlik Insight Advisor with third party messaging and collaboration tools may require customers to agree to, and comply with, third-party terms and conditions. Qlik has no control over any third-party application programming interface (“API”) or any third-party data which may be used in conjunction with Qlik Insight Advisor. Customers’ use of Qlik Insight Advisor may be affected by any change or discontinuance of any APIs by the respective third parties.

Concurrency and scale guidance is provided in the Qlik Insight Advisor Product Documentation at help.qlik.com.

X. Qlik NPrinting

Qlik NPrinting is software that enables report generation, distribution and scheduling within QlikView® and Qlik Sense® Client-Managed.

- 1. Server.** Qlik NPrinting Server license includes a single engine to be installed on one server. A “Server” means a single physical or virtual machine instance capable of running server software. For clarity, each virtual machine, hardware partition, or blade on which Qlik NPrinting Server is running is considered to be a separate server. Additional server engines may be added for a fee.
- 2. Test Server.** Qlik NPrinting Test Server provides an environment separate from production to use for data validation, application testing, and preparation/migration of QlikView or Qlik Sense documents to new versions and/or releases of Qlik Products. Qlik NPrinting Test Server comes in two editions, Qlik NPrinting Test Server and Qlik NPrinting SBE Test Server, both of which have the same features and limitations as the corresponding production servers. Test Servers are marked in the License Enable File (LEF) to indicate a Test Version.
- 3. External Use.** NPrinting reports may be distributed to external users. The NPrinting software may not be distributed to external users and may only be installed on servers owned by the customer. However, customers may permit external users to access the Newsstand on the NPrinting server.

XI. QlikView

QlikView is licensed as an Add On to Qlik Sense Enterprise SaaS or Qlik Sense Enterprise Client-Managed. Customers with legacy Client Access Licenses (CALs) are eligible to purchase additional CALs for existing license sites.



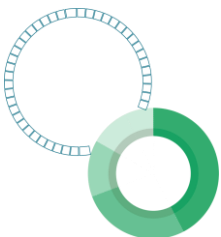
A. Client Access Licenses

To connect to a QlikView Server (QVS), each client needs a Client Access License (CAL). The CALs must be licensed together with a QlikView Server and associated with the server serial number. CALs require a device to connect to the QlikView Server. A device refers to a machine, tablet, phone as well as different browsers within the same device. A CAL can only support one session at a time per device. CALs cannot be transferred to a QlikView client program or between different QlikView Server clusters. If a user is required to work with documents residing in different clusters, a separate CAL is needed for each of the clusters. **Note:** 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.

B. Client Access License (CAL) Types

The CALs described below are used to provide users access to the various QlikView Servers identified below in *QlikView Server Editions*. CALs are used for licensing only and have nothing to do with user authentication for data access purposes.

CAL Type	Description
Named User CAL	<p>A Named User CAL is assigned to a unique and identified user (see Section 3, Identification) for information on how users are identified) who may access as many QlikView documents as may reside on the server or server cluster to which the Named User CAL is assigned using one (1) User Connection. A User Connection is established when a user is identified by the QlikView Server from one QlikView client program (for example, the AJAX client, QlikView Desktop, or the Internet Explorer plugin) using a Computer or Tablet or Mobile device.</p> <p>A Named User CAL may only be transferred to another user in accordance with the license terms and the user definitions in Section 3 below, in which case there is a 7-day quarantine before the Named User CAL can be transferred to another user. There is no time limit for how long a user assigned a Named User CAL can access a QlikView document.</p>
Document CAL	<p>A Document CAL is assigned to a unique and identified user, who may access only the one QlikView document to which the Document CAL is assigned using one (1) User Connection. A QlikView document refers to a .qvw file, which is the file format for applications generated by using QlikView. Multiple Document CALs can be assigned to a particular user. For example, if a user connects to two QlikView documents, the user will have been assigned two Document CALs. A Document CAL may be transferred to another user pursuant to the software licensing agreement, in which case there is a 7-day quarantine before the Document CAL can be transferred to another user. There is no time limit for how long a user assigned a Document CAL can access the QlikView document to which the CAL is assigned.</p>



CAL Type	Description
Session CAL	A Session CAL allows any user, identified or anonymous, using one (1) User Connection to access as many QlikView documents as may reside on the QlikView Server (or server cluster) to which the Session CAL is assigned for a minimum period of 15 minutes. The term QlikView client program refers to a QlikView software client such as the AJAX client, QlikView Desktop, or the Internet Explorer plugin. Each QlikView client program which is opened creates a connection to the QlikView Server when it connects to an access point or to a QlikView document directly for the first time and utilizes a separate Session CAL. The session is held open until that instance of the QlikView client program is closed. Users may open and close multiple QlikView documents in one session as long as the QlikView client program itself is not closed and reopened. 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 minutes has passed. Sessions 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	A Usage CAL allows any user, identified or anonymous, using 1 (one) User Connection to access only one QlikView document, residing on the server or server cluster to which the Usage CAL is assigned for a time period of 60 minutes per 28-day period. 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. Every 28 days, the Usage CAL is refreshed and the user may once again view a new QlikView document for 60 minutes using the same Usage CAL. Usage CALs are continuously recharged (at a rate corresponding to 1/28 of the total number of Usage CALs assigned to the QlikView Server per day).

C. Identified Users

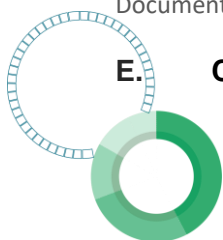
To use a Named User CAL or Document CAL, the user must be identified via an authenticated user name (Windows Active Directory or through a ticket exchange between the web server and QlikView Server). The two methods of identification cannot be mixed on the same QlikView Server. An IP address is not a valid form of user identification. Note that the user name identification requires Windows authentication on AJAX clients, since machine name identification cannot be used for these clients. Named and Document CALs are assigned to an identified user and may not be transferred to another user unless the transfer is due to a i) termination of employment, or ii) a transfer of the user to a new business unit or group resulting in no access to the Qlik Software. When a Named User or Document CAL is transferred, there is a 7-day quarantine before the CAL can be used by another user.

D. Document CAL Restrictions

The purpose of the Document CAL is to provide a license to use a single QlikView document. To prevent the combination of many data models in a single QlikView document, there are restrictions in the documents that can be used with the Document CAL. The Named User CAL, the Session CAL, and the Usage CAL can be used to open any functional QlikView document. However, the Document CAL can only be used with QlikView documents that have a single contiguous data model and do not contain any chasm traps between tables.

Most common data models used in QlikView documents can be used for Document CALs. For instance, proper star schemas and snowflake schemas typically have the field with the highest cardinality in the fact table and the keys in dimensional tables have a lower cardinality. For snowflake schemas, the cardinality decreases further when moving away from the fact table. Documents containing such models typically fulfill the above demands and are well-suited for Document CALs.

E. Combining Different CALs



A given instance of QlikView Server can carry any combination of the CAL types listed in Section 2 (CAL Types). When different CAL types are combined on the same server, 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.
7. If none of the above, access is denied.

F. License Lease

A QlikView client program that does not have a registered license is allowed to connect to a QlikView Server and “borrow” a license, so that the user can work offline for a period of 30 days. The QlikView client program must then make an authenticated log on (not anonymous) and obtain a Named User CAL. Each time QlikView is started, QlikView tries to contact the QlikView Server and renew the license lease. If the QlikView client program cannot reach the server after 30 days, the license lease expires. A license lease can only be used with QlikView Desktop and the Internet Explorer plugin. This means a license lease cannot be obtained when using an AJAX client. A license lease is not supported by OEM Servers or Test Servers.

G. Cluster Licensing

A special type of license is available to allow multiple QlikView Server installations to share the same license serial number and support shared CALs. The servers are automatically considered as clustered. Note that this configuration affects networks where unauthorized license sharing between test and production environments has been configured. **Note:** 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.

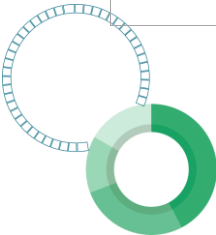
H. Cold Standby/Disaster Recovery

QlikView Server and QlikView NPrinting Server license keys can be installed on as many servers as required for backup or disaster recovery purposes. However, no more than the licensed number of Servers may be running at any given time. Thus, a cold standby environment can be installed and ready to run, but cannot be live (that is, the Windows services cannot be started) and in use prior to the live environment being shut down.

I. QlikView Server Editions and Other Products

QlikView Server comes in a number of editions designed for different organizations and purposes. Upgrading is done through the license key. The various editions of QlikView Server are listed below.

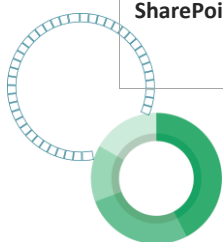
Server	Description
QlikView Enterprise Edition (EE) Server	QlikView EE Server is designed to be used in large and complex deployments and provides features such as unlimited documents, server-based collaboration, integration with third-party security systems, server clustering, and cluster licensing.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



Server	Description
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.
QlikView Information Access Server (IAS)	QlikView IAS is a QlikView Server that is licensed for an uncapped number of users and a single QlikView document. The IAS may be licensed with multiple QlikView documents for an additional fee. QlikView IAS runs in anonymous mode and must be publically accessible without authentication (on the public Internet). The AJAX client or a customized AJAX client can be used via QlikView WorkBench, which is included in IAS. Note: There is no license lease from QlikView IAS.
QlikView Extranet Server (QES)	QES allows users to deploy QlikView documents to their extranet and may only be used by authorized third parties located outside of the firewall strictly to view QlikView documents on the server. Use of the QES inside the LAN is not allowed. The QES can only be deployed with Session or Usage CALs. Authorized third parties are not permitted to create, upload, or modify any of the data which they are permitted to view and may not install, download, or copy the QlikView Software in connection with viewing a QlikView document. 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.
QlikView Test Server	QlikView Test Server is a server license that provides an environment separate from production to use for data validation, application testing, and preparation/migration of QlikView documents 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. In addition, the watermark "Test" is superimposed on all charts. Test Servers are marked in the License Enable File (LEF) to indicate a Test Version. Note: There is no license lease from QlikView Test Server.

In addition to the QlikView Server editions described above, other available QlikView products are listed below.

Product	Description
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 documents. 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 PDF Report Distribution, any QlikView document report can be distributed as a .pdf file to a folder or via email or SMTP.
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. WorkBench also allows for rapid deployment of QlikView objects within Microsoft SharePoint portal environments by a div tag integration. Note: 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. Note: QlikView Web Parts is not available for use with QlikView SBE Server. Note: Web Parts is not available for QlikView 12 (and later versions). QlikView WorkBench may be used in place of Web Parts.

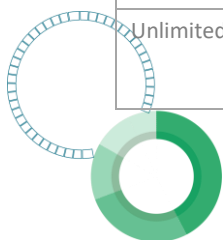


Product	Description
QlikView Local Client	QlikView Local Client is a client with functionality used to develop QlikView documents. The user may store or install one (1) backup copy for archival and disaster recovery purposes. The Local Client may not be shared for use on different computers or servers. If a serial number, password, license key or other security device is provided to the user for use with the Local Client, the user may not share or transfer such security device with or to any other user of the Software or any other third party.
QlikView Personal Edition	Any registered user may be permitted to download QlikView and develop QlikView documents for personal use. QlikView Personal Edition cannot open QlikView documents created by other users or perform an import of an entire layout from an XML file.
Qlik Connector for SAP®	The Qlik Connector powered by SAP NetWeaver® (“SAP Connector”) allows users to deploy QlikView documents tied to SAP modules. The SAP-certified connector works as a read-only remote function call and enables direct access to SAP data. One SAP Connector can be used to access different SAP servers, but is licensed for each QlikView Server and not based on the number of SAP servers. If Publisher is also licensed with a QlikView Server, the QlikView SAP Connector is licensed based on the number of Publishers without regard to the number of QlikView Servers or SAP Servers. If only Desktop is licensed, the QlikView SAP Connector is licensed for each Desktop. All users allocated a Named User CAL from a QlikView Server licensed with a QlikView SAP Connector license can use the same license key as the Local Client (through the license lease).

J. QlikView Features and Limitations

The table below lists the features and limitations of each edition of QlikView Server (Yes = Supported, No = Not Supported).

SUMMARY				
	EE Server	SBE Server	IAS Server	QES Server
LICENSING				
NAMED USER CAL	Yes	Yes (max 25)	No	No
SESSION CAL	Yes	No	Yes (unlimited)	Yes
USAGE CAL	Yes	No	No	Yes
DOCUMENT CAL	Yes	Yes (max 100)	No	No
EXTERNAL USER RIGHTS	No	No	Yes	Yes
CLIENTS				
AJAX (and mobile devices via AJAX)	Yes	Yes	Yes (WorkBench included)	Yes (WorkBench included)
Internet Explorer Plugin	Yes	Yes	No	No
Installed QlikView Client	Yes	Yes	No	No
SCALABILITY				
Can be clustered (additional server license required)	Yes	No	Yes	Yes
Unlimited Documents	Yes	Yes	Yes (Additional fee required)	Yes



			for more than one document.)	
INTEGRATION				
Third Party Security Integration	Yes	No	No	Yes
Dynamic Data Update	Yes	Yes	Yes	Yes
FEATURES				
License Lease (offline access, Named User CALs required)	Yes	Yes	No	No
Annotations	Yes	Yes	No	Yes
Collaboration (sheets, sheet objects, and input fields)	Yes	Yes	No	No
Session Collaboration	Yes	Yes	No	Yes
QlikView Publisher and PDF generation (additional license required)	Yes	Yes	No	Yes
Qlik Connector for use with SAP NetWeaver (Additional license required)	Yes	Yes	Yes	Yes
Test Server Option	Yes	Yes	Yes	Yes
Can be embedded in Microsoft SharePoint (QlikView Web Parts for Microsoft SharePoint) (additional license required)	Yes	No	Yes	Yes
Build bespoke mashups/AJAX applications (QlikView WorkBench) (additional license required)	Yes	No	Yes (included)	Yes (included)
SECURITY				
Anonymous User	Yes (with Session CALs)	No	Yes (mandatory)	No

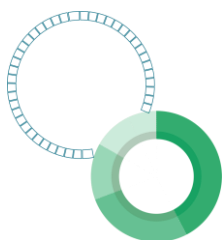
XII. General Provisions

These general provisions are applicable to Qlik Sense Enterprise and Qlik Analytics Platform unless stated otherwise.

A. External Use

Licenses for which external use is permitted may be accessed by third parties authorized by the customer for viewing Applications incidental to a business relationship with the authorized third parties. Authorized third parties shall not be permitted to create applications, or to create, upload, or modify any of the data which they are permitted to view. Customer may not share license keys or permit third parties to install download or copy the Qlik Sense Software in connection with viewing applications.

License	Internal Use	External Use
Qlik Sense Professional User	Y	N**
Qlik Sense Analyzer User	Y	Y
Qlik Sense Analyzer Capacity	Y	Y
Qlik Sense Tokens	Y	Y



Qlik Sense CPU Core	Y	Y
Qlik Analytics Platform	N*	Y
Qlik Sense Business	Y	Y

* Except for purposes of application testing and validation

** Except as permitted under a Qlik OEM Agreement

B. Named User Licenses

Named user licenses are assigned to an identified user and may not be transferred or reallocated to another user unless due to business circumstances in which the user no longer requires use of the license (e.g., termination or transfer to a new business unit). Licenses may not be freely transferred, reassigned or otherwise shared among a pool of users, so that the ratio of licenses to users is greater than one-to-one on a recurring basis. QSE user licenses deployed on Windows, which are assigned to an identified user, will be subject to a quarantine period before the license can be reassigned to another user.

Named User License Types	Quarantine Period
Qlik Sense Professional User	7 days
Qlik Sense Analyzer User	7 days
Qlik Sense Tokens (User Access Pass)	7 days

C. Disaster Recovery

Qlik Sense customers using a Windows deployment may stand up a separate node for disaster recovery purposes. If there is a need to separate the production node, license keys may be installed on additional servers as required for backup or disaster recovery purposes on cold standby. No more than the licensed quantity of Software may be running at any given time. A cold standby environment can be installed and ready to run, but cannot be live (i.e., the Windows services cannot be started) and in use prior to the live environment being shut down.

D. Display Accounts & Public Displays

User licenses are reserved for end user individuals, but may also be assigned to a service account to manage system services (e.g., web servers) that require a user ID. One user license should be assigned to one service account, and one service account should be designated per service or application.

A user license may also be designated for a monitor, screen or other publicly displayed device (“Display”) to publish or display an Application to many viewers, provided the Display is not interactive. Use of a Display to circumvent user licensing requirements is not permitted. One user license should be assigned for each Display. A single user license may not be used to create parallel connections for multiple Displays.

E. Multiplexing/Shared User Accounts

Multiplexing occurs when multiple end users are able to simultaneously access a single system through a common shared interface, such as a web server product. Because Qlik Sense may assign a license to the shared interface rather than to each of the end users accessing Qlik Sense via the interface, multiplexing can result in the number of actual users exceeding the number of users licensed. If Qlik Sense software is utilized with an interface that permits multiplexing to occur, customer is required to license a quantity of licenses equivalent to the total number of actual users at the multiplexing front end. The use of user login sharing, sharing of user credentials, shared logins or passwords is prohibited in Qlik Sense Enterprise SaaS.



F. Third Party APIs

Qlik Products may connect with or access third party web-based applications, including Geocoding and connectors. Third-party application programming interfaces (“API”) are not managed by Qlik, and Qlik cannot be responsible for disruptions in connectivity, if any third-party APIs are changed or discontinued by the respective third parties.

