

License Metrics

Qlik Sense, QAP and Core

These License Metrics govern the use of Qlik Sense Enterprise®, Qlik Analytics Platform® and Qlik Core® (individually or collectively “Software”) and are part of the Documentation.

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I. Qlik Sense Enterprise

Qlik Sense Enterprise (QSE) license options are Professional and Analyzer Users, Analyzer Capacity, or CPU cores. Qlik Sense Tokens remain available only to customers with existing Qlik Sense Token licenses.

A. Professional and Analyzer Users

1. Professional and Analyzer Users are named user licenses and include the features described below.

	License	Description
Professional User	Perpetual	Professional User is a full developer, administrator and user license, which provides access to all features of Qlik Sense. 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 perpetual licenses include access to Qlik GeoAnalytics Base, Qlik Web Connectors, and Qlik DataMarket Essentials for so long as the customer remains current on maintenance and the products are generally available. Professional Users are not available for external use by third parties.
Professional User	Subscription	Professional User subscriptions include all of the features, functions and restrictions of perpetual Professional User licenses plus access to one Test and one Development Site for the subscription period only. Professional User subscriptions purchased after January 15, 2019 will include access to Qlik Continuous Classroom for Professional Users – Basic Subscription for the subscription term.
Analyzer User*	Perpetual	Analyzer User provides the ability to view Applications, create bookmarks, create and publish stories, print objects/stories/sheets, export data from an object to Excel or PDF, and authenticate to mobile. Analyzer Users may not use Qlik Sense for any other function, including but not limited to, create or modify Qlik Applications, create or publish new sheets, update or modify data, access My Work, or authenticate to Qlik Sense Desktop. Analyzer User perpetual licenses include access to Qlik GeoAnalytics Base, Qlik Web Connectors, and Qlik DataMarket Essentials for so long as the customer remains current on maintenance and

		the products are generally available. Analyzer User 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 User*	Subscription	Analyzer User subscriptions include all of the features, functions and restrictions of perpetual Analyzer User licenses plus one Test and one Development Site for the subscription period only.

*Analyzer User functionality is administered or controlled by the license key or LEF beginning with the April 2018 release. With earlier versions, it is the customer's sole responsibility to create and manage security rules and property-based access controls as needed to comply with Analyzer User functionality described above, including changing predefined and default rules as necessary and to update settings with each new release.

2. 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. Professional and Analyzer Users are assigned to an identified user and may not be transferred to another user unless due to: i) termination of employment, or ii) other business circumstance in which the user no longer requires access to Qlik Sense or a Qlik Sense Application (e.g., transfer of the user to a new business unit). When a Professional or Analyzer User is transferred, there is a 7-day quarantine, beginning from the date last used, before the license can be reused.

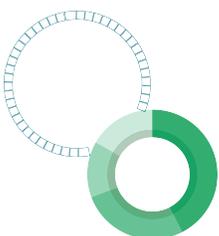
B. Analyzer Capacity

1. **Access.** Analyzer Capacity is a capacity-based license option and offers access to QSE 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 list price) the following month.

2. **Functionality.** 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 and is enabled for Multi-Cloud Capabilities.

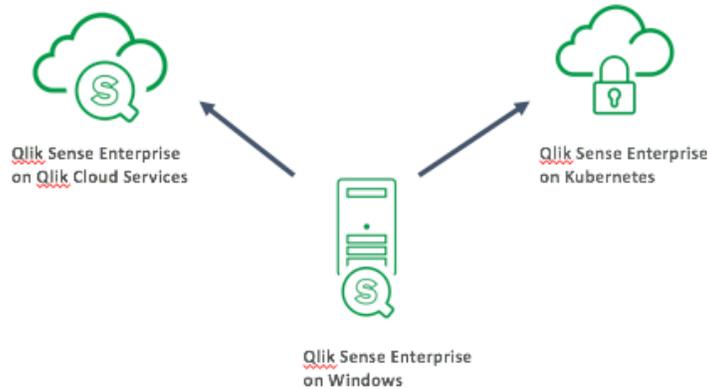
C. Multi-Cloud Capabilities

QSE releases on or after June, 2018 include a cloud-native architecture, which allows Applications to be managed and distributed across multiple on-premises and cloud environments from a unified platform. QSE has deployment options on Windows®, Kubernetes® and Qlik Cloud Services. QSE on Windows® refers to the standard on-premises deployment (or in a customer or partner-managed 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 multi-cloud environments for consumption using the following options:



- (i) QSE on Kubernetes® using cloud-native, container-based software (Linux®) in a private or public cloud which the customer selects, hosts and manages (e.g., Amazon® or Azure®); or
- (ii) Qlik Cloud® Services (QCS), a cloud environment that Qlik hosts and manages with a 500MB application size and 500 GB data storage limit. QCS is available as a subscription only and is subject to acceptance of additional terms.

Users will only be able to consume and interact with published Applications in the Kubernetes or QCS environments. Qlik Cloud® Services is not available to OEM or MSP partners or customers. Both options require the customer to contact Qlik for assistance and to enable the LEF.



D. QSE Core-Based Site (CPU)

Qlik Sense Enterprise core-based sites are licensed based on the number of CPU Cores (“Cores”) on which the Software will operate. The license is administered using a License Enabling File (LEF), which limits the maximum number of Cores on which the Qlik Associative Engine and its components may operate. Cores must be licensed for the Qlik 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.

D. Tokens

Qlik Sense Tokens are only available to customers with existing Token licenses. Qlik Sense Tokens are used to assign access pass types that determine how users are able to access Qlik Sense. Qlik Sense is administered using a LEF, which holds the number of Tokens available to allocate to different 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. Multi-Cloud capabilities are not enabled with Tokens.

1. Access Passes

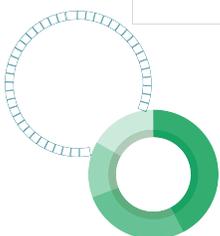
There are different types of access passes to choose from and each type corresponds to a specific consumption model for accessing Qlik Sense. Each access pass provides the Qlik Sense user with a certain type of access to Applications. The following table lists the types of access passes that are available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



Access Pass Type	License	Description
User Access Pass	Available with perpetual and subscription licenses	<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) Table Text.</p>
Login Access Pass	Available with perpetual licenses only	<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	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.
Login Access Pass	When a Login Access Pass is removed, the tokens used to allocate the access pass become available in accordance to the following procedure: For every ten (10) unused Login Access Passes, one (1) token is freed up. For every ten (10) Login Access Passes that leave the used state after 28 days, one (1) token is freed up.



E. Qlik Sense Applications

Applications can be created from the hub in a Qlik Sense Desktop installation or from the hub in a Qlik Sense server installation, if the user has the appropriate access rights. Applications are published to streams from the QMC in a Qlik Sense server installation. In order to publish an Application which is created in a Qlik Sense Desktop installation, the Application must first be imported using the QMC in a Qlik Sense Server installation. The security rules applied to the Application, stream or user determine who can access the content and what the user is allowed to do. The Application is locked when published. Content can be added to a published Application via the hub in a Qlik Sense server installation, but content that was published with the original Application cannot be edited. Applications can only be deleted from the Applications overview page of the QMC.

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, webservers 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 Enabling File (LEF), 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 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 restricted 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 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 publically 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 LEF for 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.

D. Allocation of Cores

The number of Cores allocated to each node can be manually set by the administrator through the Qlik Management Console (QMC) with QAP version 2.2 or later. For earlier versions, the Core capacity is allocated equally and shared automatically across each node with a Software Engine in a multi-node deployment as shown in Diagram 1. For example, if a deployment has 3 nodes comprised of a central node, one rim node for users and one node for Scheduler and the LEF contains a maximum Core allocation of 4, this will be spread automatically to the central node and the rim node for users with two Cores each, even if the Server has more capacity. If there are an odd number of nodes and the Cores cannot be allocated evenly, any remaining Core capacity is assigned to the central node.

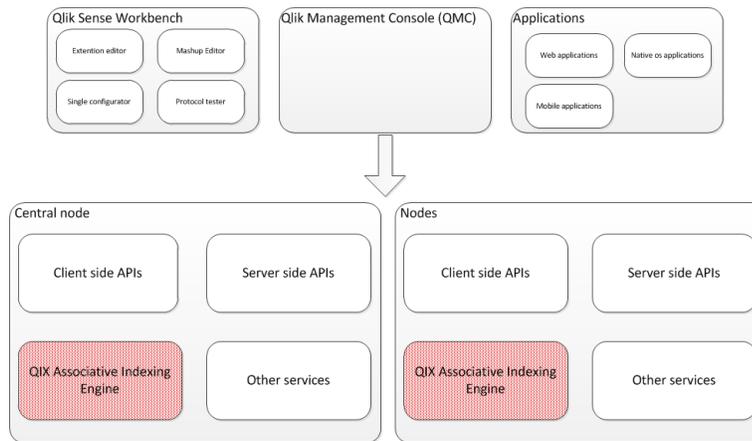


Diagram 1

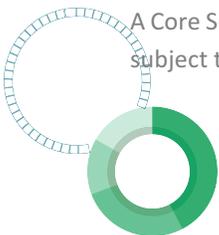
III. Qlik Core

Qlik Core includes a suite of application program interfaces (“APIs”), License Service and the Qlik Associative Engine (“Engine”). Applications may be built using these APIs. The function of the License Service is to unlock the Engine and collect usage metrics.

A. Sessions

Unless otherwise set forth in an order form, Qlik Core is licensed as an annual subscription for a fixed quantity of minutes per month that may be consumed during each month of the subscription. Minutes are metered in 5 minute increments (“Core Sessions”). The license is administered using a License Enabling File (LEF), which limits the maximum number of minutes during which the Engine may operate.

A Core Session is triggered at the commencement of any kind of connection with the Engine JSON API (“Connection”) subject to the following:



- i. Each Connection will be assigned a Core Session identifier (“Session ID”).
- ii. Connections that commence within 5 minutes from the start of an existing Core Session with the same Session ID will not trigger a new Core Session.
- iii. Connections which are assigned different Session IDs may each trigger and consume separate Core Sessions.

A Connection may include, but is not limited to, a user interface or program-to-program interface.

B. Disaster Recovery

The Software may be installed for backup or disaster recovery purposes in a cold standby environment. Any use of the Software, whether for backup, disaster recovery or production use, may trigger Core Sessions.

IV. General

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

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

* Except for purposes of Application testing and validation

Internal or external use for Qlik Core is permitted in accordance with the terms of the applicable license agreement.

B. LEF

Licenses are administered using a License Enabling File (LEF). A separate LEF is required for perpetual and subscription licenses. Subscription and perpetual licenses may not be combined on the same LEF.



C. 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: i) termination of employment, or ii) other business circumstance in which the user no longer requires use of the license and access to an Application (e.g., transfer of the user 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, or continually recycled among a group of users to defeat a quarantine.

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

D. Disaster Recovery

License keys can be installed on as many servers as required for backup or disaster recovery purposes. However, no more than the licensed quantity of 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 Windows services cannot be started) and in use prior to the live environment being shut down.

E. Service 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, email) 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.

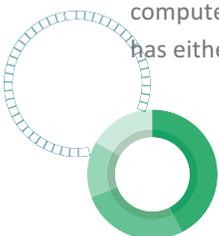
A user license may also be designated for a monitor, screen or other publically displayed device (“Display”) to publish or display an Application to many viewers, provided the Display is not interactive. Use of a Display to circumvent user licensing requirements is not permitted. One user license should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

F. Multiplexing

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 use licenses equivalent to the total number of actual users at the multiplexing front end.

G. Disconnected Node

If a node becomes disconnected from the central node in a Qlik Sense site (that is, if the node fails to synchronize with the central node), the disconnected node serves up to its current allocation of licenses. If the disconnected node cannot reach the central node within two (2) hours, the node does not allow any new user connections. When the two-hour period has passed, it is still possible to connect to the disconnected node from local host (the local computer on which the disconnected node is running). All user access to this node will be denied until the Node has either been synchronized back to the central Node or a new LEF has been installed.



H. Multiple Deployment Sites

	Description
Production Site	A Qlik Sense server deployment can include both a development node and a production node supported by one (1) LEF. If there is a need to separate the production node from the development node, two (2) LEF's (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. Test Sites are purchased separately from the Production Site. If a Test Site is purchased with production capacity, the Test Site will mirror the production capacity at the time of purchase of the Test Site.
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.

