

Qlik Sense Installation Guide

Simplifying a single or multi-node installation.

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Please note that the content of this document has been extracted from the November 2019 release of the [Deploy Qlik Sense Enterprise on Windows](#) guide and improved by Qlik Digital Support to include common issues and useful tips when installing Qlik Sense.

INTRODUCTION

This guide breaks down the Qlik Sense installation procedure into a simple step-by-step procedure.

This document includes:

- Instructions for a Single Node setup
- Instructions for a Multi Node setup
- Links to relevant and related content
- Tips and Tricks as collected by Qlik Support to help tackle challenges

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Installing Qlik Sense Enterprise on Windows

When installing Qlik Sense there are several deployment options depending on the size and requirements of your organization. Before beginning the installation process, choose the appropriate architecture. Consider scalability and performance and factors such as how many apps will be running concurrent users on the system, or how many reload tasks will be running per hour.

Size of organization	Qlik Sense deployment
Small	Single-node
Medium	Single-node or multi-node
Large	Multi-node

Installing Qlik Sense on a single node

A basic installation of Qlik Sense can be done by installing all of the Qlik Sense services on a single node. This kind of deployment works best in a single time zone, where reloads of data can be done during the night. To determine if a single-node installation is the right choice for you, see [Planning your Qlik Sense Enterprise deployment](#).

For information about multi-node deployments of Qlik Sense, see section [Installing Qlik Sense in a multi-node site](#).

Prerequisites

- Check that your environment meets the system requirements. See: [System requirements for Qlik Sense Enterprise on Windows](#)
- Check that the required ports are available. See: [Ports](#)
- Check that your browser is supported. See: [Supported browsers Qlik Sense Enterprise on Windows](#)
- Prepare the user accounts required to run the Qlik Sense services. See: [User accounts](#)
- Understand how Qlik Sense uses LEF for site licensing and user access allocation and have your license key available. See: [Qlik Sense Licenses](#)

Install Qlik Sense

1. Log in to the server where you plan to install Qlik Sense as the Qlik Sense service account. You must have full administrator rights to run the Qlik Sense setup. The Qlik Sense services can run either with an administrator or a local user without administrator privileges. See: [User accounts](#)



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this Help.qlik.com page.

- [Interactive Logon Rights for Qlik Sense installation](#)
- [How to Change the Qlik Sense Service Account - Considerations when changing the Sense Service account](#)
- [How to: Change the Qlik Sense Proxy certificate if the service account does not have local administrative permissions](#)
- [Qlik Sense repository service fails to start due to error "SeSecurityPrivilege" error](#)

2. Create a file share before you run the Qlik Sense setup. The file share is a shared folder that stores all the Qlik Sense application data. Reference: [Creating a file share](#)
 - a. Create a new folder.
 - b. Right click on the folder and click **Properties**.
 - c. On the **Sharing** tab and click **Share**.
 - d. Enter the names of Windows users that you want to share the folder with and click **Add**.
Share this folder with your Windows Qlik Sense administrator and your Windows Qlik Sense services user. For more information, see [User accounts](#).
 - e. In the **Permission level** column, select **Read/Write**, and click **Share**.



Make note of the network path displayed on the confirmation screen. You will enter this information during the Qlik Sense setup. The network path will be in the following format: \\server-name\QlikShare

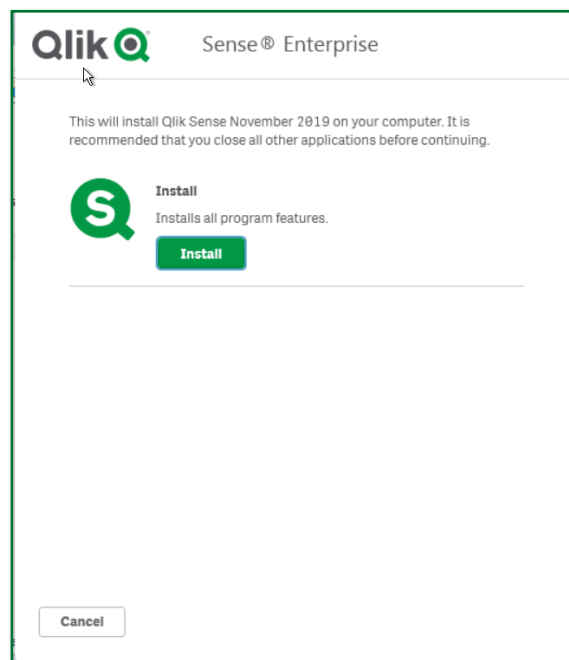


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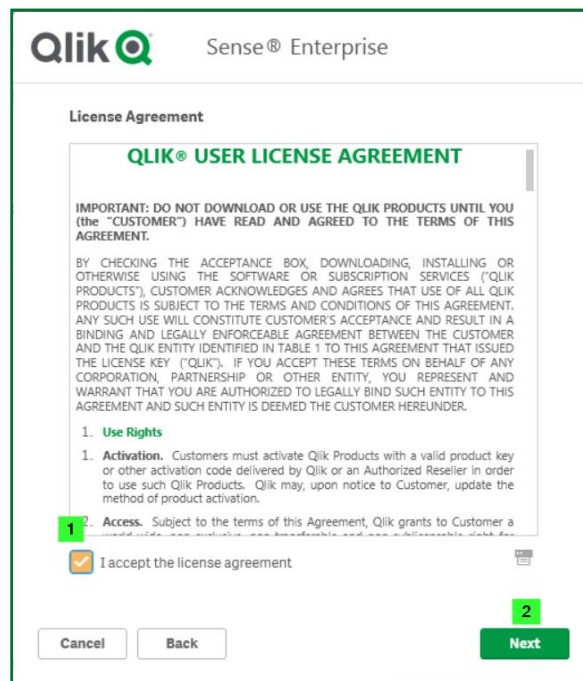
- [Qlik Sense Share Storage options and requirements](#)
- [How to change the share path in Qlik Sense \(Service Cluster\)](#)
- [File Share Persistence Requirements](#)

3. Download and review the *Qlik_Sense_Release_Notes.pdf* file.
 - a. Navigate to <https://qlikid.qlik.com/portal/download>
 - b. Log in using your Qlik ID and Password
 - c. Use the filters on the left-hand side to filter the Product on Qlik Sense
 - d. Select the Release Version if required
 - e. Find the *Qlik_Sense_version_ReleaseNotes.pdf* and download the file
4. Download the *Qlik_Sense_setup.exe* file and launch the setup.
 - a. Navigate to <https://qlikid.qlik.com/portal/download>
 - b. Log in using your Qlik ID and Password
 - c. Use the filters on the left-hand side to filter the Product on Qlik Sense
 - d. Select the Release Version if required
 - e. Find the *Qlik_Sense_setup.exe* and download the file
5. Navigate to the folder the *Qlik_Sense_setup.exe*. Please ensure it is on a local drive.
6. Right click the *Qlik_Sense_setup.exe* and choose “Run as administrator”

7. The Qlik Sense Enterprise Install splash screen will appear. Click Install to proceed.



8. If the license agreement is accepted, click **Next**.



9. On the **Create or join a cluster screen**, click **Create cluster**.

Qlik Sense® Enterprise

Create or join a cluster ?

Create cluster
Create a single node deployment or the first node in a cluster.

Create cluster

Join cluster
Create a node to join an existing cluster.

Join cluster

Cancel Back

10. In the **Host Name** screen, verify the name of the server that you are installing Qlik Sense on and click **Next**.

Qlik Sense® Enterprise

Host Name

The central node uses certificates to communicate with other servers securely. Specify the address to this machine in the same format that other machines will use to connect to this machine.

Enter the address for this machine ?

QlikServer1.domain.local

or select one of the pre-defined values below:

✓ QlikServer1.domain.local


Cancel Back Next



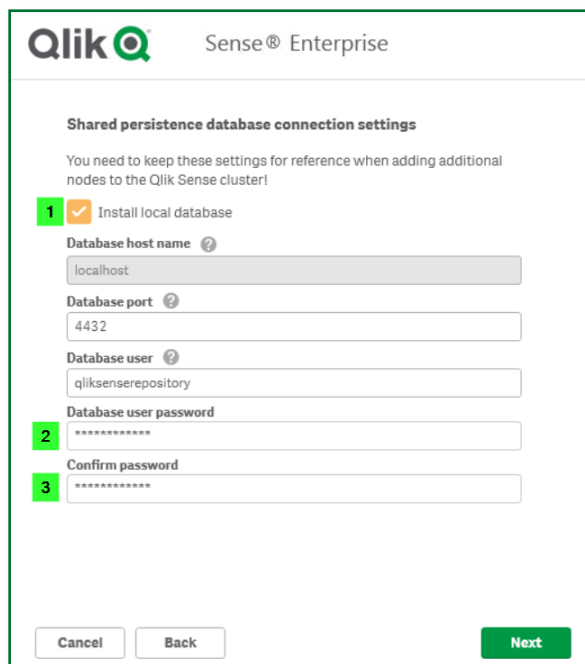
Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](https://help.qlik.com) page.

- [Qlik Sense: Change hostname \(and certificates\) after an installation](#)
- [Authentication fails repeatedly when using external DNS alias locally on the server](#)
- [How to: Change the certificate used by the Qlik Sense Proxy to a custom third party certificate](#)

11. On the **Shared persistence database connections settings** screen, select the **Install local database** check box if you want to install a local repository or leave the check box unchecked if you want to connect to an existing repository database. For more information, see [Installing and configuring PostgreSQL](#). If you want to connect to an existing repository database, then enter the following values:

Field name	Value
Database host	Enter the full URL to your repository database.
Database port	4432
Database user	Enter the username that will be used to access the database. <div>  Do not enter the username postgres. </div>
Database user password	Create your own database user password to access your repository password database in the PostgreSQL database.

12. If accepting the defaults, **create** a database user **password** to access your repository password database in the PostgreSQL database. **Confirm** the password.





Qlik Sense® Enterprise


Shared persistence database connection settings

You need to keep these settings for reference when adding additional nodes to the Qlik Sense cluster!

1 ☒ Install local database

Database host name 
localhost

Database port 
4432

Database user 
qliksenserepository

Database user password

2 Confirm password

3 *****

Cancel Back Next

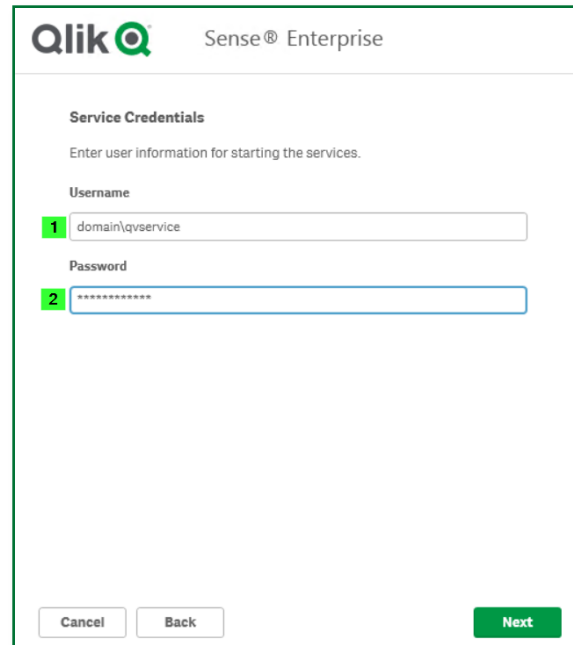
13. Click **Next**.



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](https://help.qlik.com) page.

- [Repository Database persistence requirements](#)
- [Database traffic encryption](#)
- [Qlik Sense Logging Service does not have support for SSL Database traffic encryption](#)
- [Configure Qlik Sense to use a dedicated PostgreSQL server](#)

14. On the **Database configuration** screen, click **Next**. There is no need to configure the database service to allow connections from other nodes in a single-node installation.
15. On the **Service Credentials** screen, enter the domain, user name and password for the account that you want use to run the Qlik Sense services, and click **Next**.



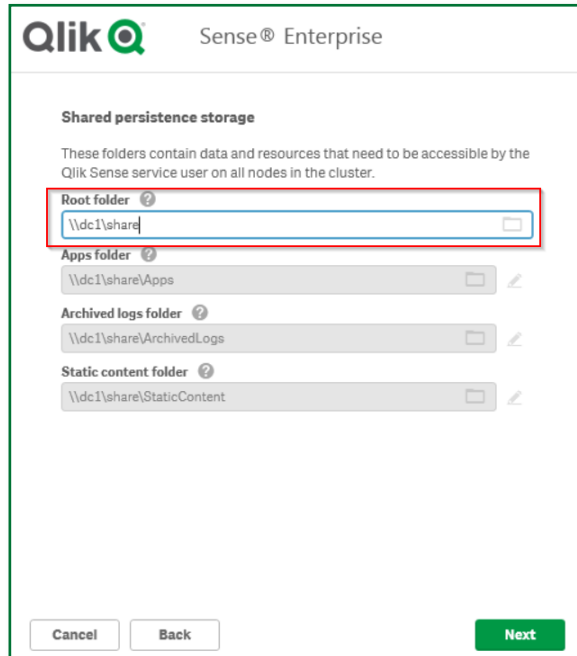
If you enter a username that is more than 20 characters long, it must be in UPN format, and must include the full domain name. For example, longusername@full.domain.name.



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](https://help.qlik.com) page.

- [Interactive Logon Rights for Qlik Sense installation](#)
- [How to Change the Qlik Sense Service Account - Considerations when changing the Sense Service account](#)
- [How to: Change the Qlik Sense Proxy certificate if the service account does not have local administrative permissions](#)
- [Qlik Sense repository service fails to start due to error " 'SeSecurityPrivilege " error](#)

16. On the **Shared persistence storage** screen, enter the path or URL to your file share, for example \\<domain>\QlikShare, and click **Next**. Your file share can either be a local folder or a remote folder.



Qlik Sense® Enterprise

Shared persistence storage

These folders contain data and resources that need to be accessible by the Qlik Sense service user on all nodes in the cluster.

Root folder ?
\\dc1\share

Apps folder ?
\\dc1\share\Apps

Archived logs folder ?
\\dc1\share\ArchivedLogs

Static content folder ?
\\dc1\share\StaticContent

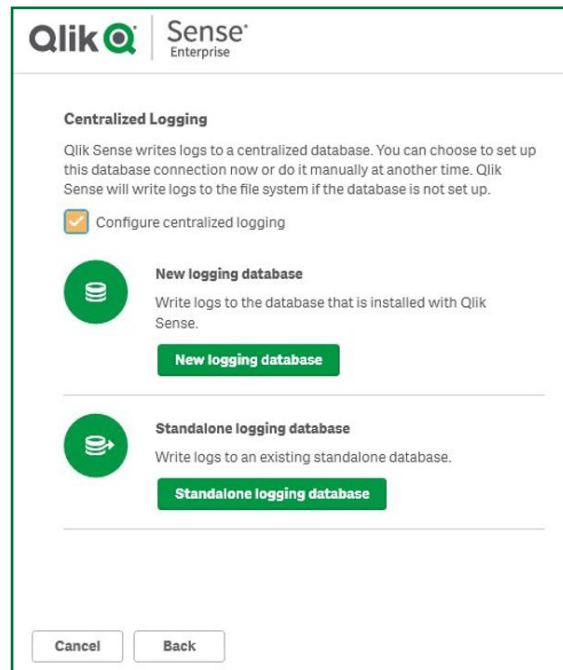
Cancel Back Next



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this Help.qlik.com page.

- [Qlik Sense Share Storage options and requirements](#)
- [How to change the share path in Qlik Sense \(Service Cluster\)](#)
- [File Share Persistence Requirements](#)

17. On the **Centralized Logging** screen, leave the **Configure centralized logging** check box selected if you want to set up centralized logging, or clear the check box if you want logs to be written to files. If you decide not to set up centralized logging at this time, you can set it up later by using the logging service utility; see [Qlik Logging Service](#).



Qlik Sense Enterprise

Centralized Logging

Qlik Sense writes logs to a centralized database. You can choose to set up this database connection now or do it manually at another time. Qlik Sense will write logs to the file system if the database is not set up.

☒ Configure centralized logging

New logging database
Write logs to the database that is installed with Qlik Sense.
New logging database

Standalone logging database
Write logs to an existing standalone database.
Standalone logging database

Cancel **Back**

- a. If you want to write logs to a new database that is installed with Qlik Sense, click **New logging database**. Enter the following values and click **Next**.

Field name	Value
Log writer password	Create a password for the qlogs_writer user to access the centralized PostgreSQL database.
Log reader password	Create a password for the qlogs_reader user to access the centralized PostgreSQL database.

- b. If you want to write logs to an existing database on the same node that you are installing Qlik Sense on or on another node, click **Standalone logging database**. Enter the following values and click **Next**.

Field name	Value
Hostname	Enter the host name or IP of the centralized PostgreSQL database.
Port	4432
Log writer password	Enter the password for the qlogs_writer user to access the centralized PostgreSQL database.
Log reader password	Enter the password for the qlogs_reader user to access the centralized PostgreSQL database.

- c. If you use a logging database on another node, ensure that this is a new and empty logging database before proceeding with the installation. If a QLogs db is already present on the remote database the schemas may be incompatible. See: [Installing and configuring PostgreSQL](#)



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this Help.qlik.com page.

- [Qlik Sense - Installation fails with "The centralized logging setup failed" or "Could not validate database user"](#)
- [Qlik Sense Installation failed with central logging database - CustomAction CA_SetupLocalLoggingDb returned actual error code 1603](#)
- [How To Enable/Disable Centralize Logging Mode](#)
- [How to set up the Qlik Sense Logging Service](#)

18. On the **Installation location** screen, choose your own installation location or install Qlik Sense to the default location on the C:\ drive, and click **Next**.

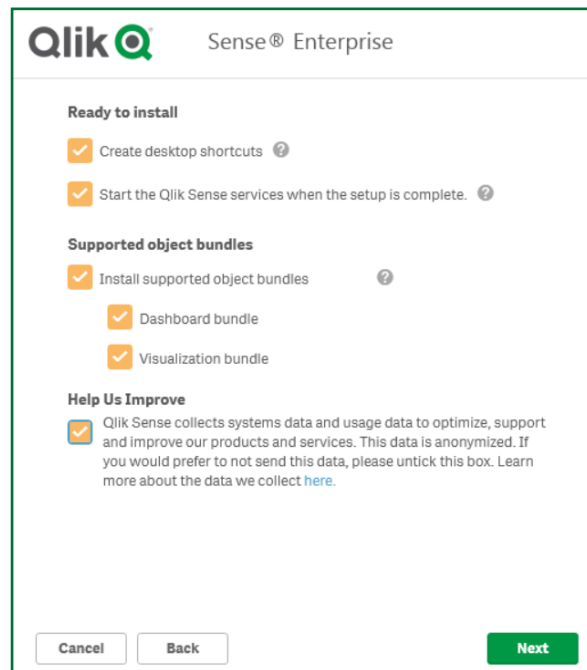


Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this Help.qlik.com page.

- [Antivirus exceptions for Qlik Sense- McAfee, Symantec & Other Anti-Virus exclusions absolutely required](#)
- [Anti-virus software scanning affects performance](#)

19. On the **Repository Database Superuser Password** screen, enter a password for the PostgreSQL repository database superuser. Confirm the password and click **Next**. See: [User accounts](#).

20. On the **Ready to install** screen, optionally select to create desktop shortcuts and automatic start of the Qlik Sense services when the setup is complete.



If you selected local system as the user account type in the Service Credentials screen, but want to use a dedicated service account to run the Qlik Sense services, clear the Start the Qlik Sense services when the setup is complete selection.

21. In the **Supported object bundles** section, optionally select to install the object bundles. Then, select the object bundles to install from the list of those available. Object bundles can always be added or removed from the Qlik Sense Installation at a later time. See: [Modifying an object bundles installation](#).



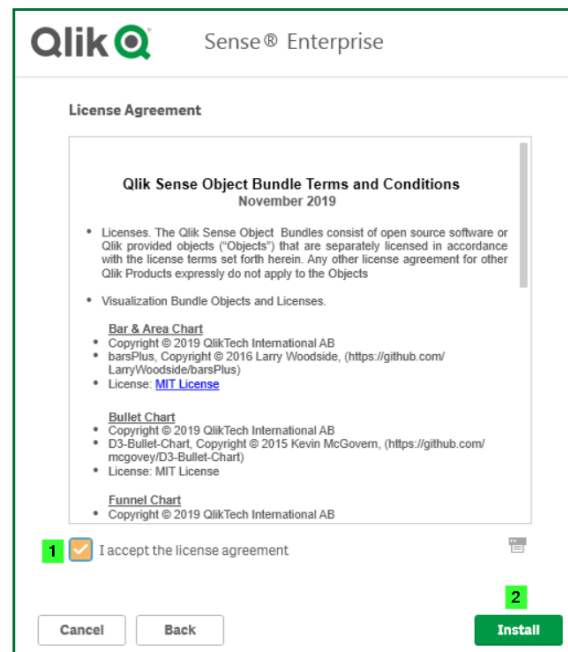
Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](#) page.

- [Installing and removing Qlik Sense Extension bundle](#)

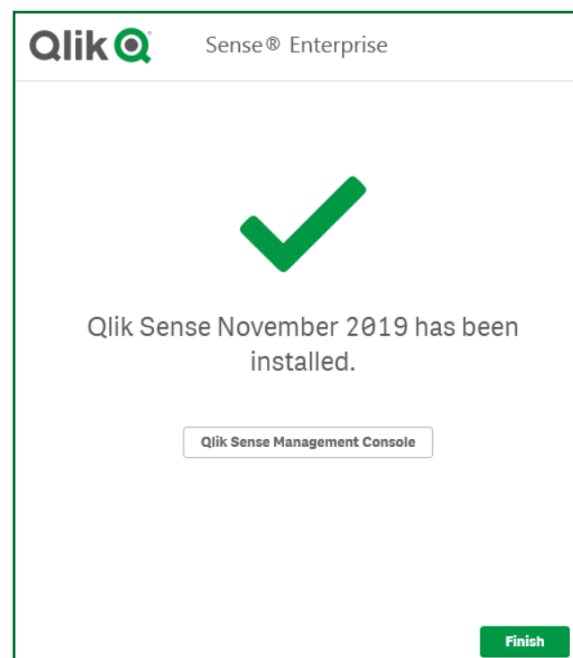
22. In the **Help Us Improve** section, optionally select if you want to share system data with Qlik in anonymous form. You can learn more about what data Qlik collects by clicking the link in the message.

23. If you have chosen not to install the object bundles, click **Install**. Otherwise, click **Next**.

24. If you are installing any of the object bundles, accept the object bundles license agreement. Then, click **Install**.



25. You will see a message indicating that Qlik Sense has been installed successfully. Click **Finish**.



26. If local system was selected as the user account type in the **Service Credentials** screen but wish to use a dedicated service account to run the Qlik Sense services, change the user account type and manually start the Qlik Sense services now. See: [Changing the user account to run Qlik Sense services.](#)

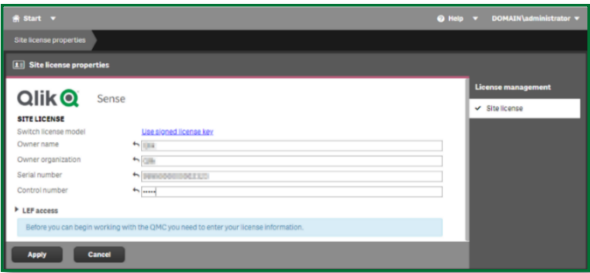
Qlik Sense has now been successfully installed.

Licensing Qlik Sense


Before Qlik Sense can be used, the site license must be applied.

Proceed with the following steps:

1. Open the Qlik Sense Management Console (QMC). When opening the QMC for the first time, the **Site license properties** screen is displayed.
2. Enter the license information from the License Enabling File (LEF).




The property group **Site license** contains properties related to the license for the Qlik Sense system. All fields are mandatory and must not be empty.



If you want to set up Qlik Cloud Services or Qlik Sense Enterprise on Kubernetes, please contact your Qlik representative or Qlik Support to obtain a valid license for the setup.

Property name	Description
Owner name	The username of the Qlik Sense product owner.
Owner organization	The name of the organization that the Qlik Sense product owner is a member of.
Serial number	The serial number assigned to the Qlik Sense software.
Control number	The control number assigned to the Qlik Sense software.

3. Expand **LEF access** and click **Get LEF and preview the license**. If you received your LEF via email, you can copy and paste the information into the text field.



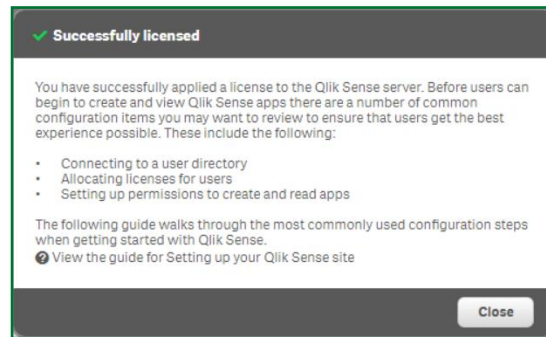
Failed to get LEF from server is displayed if the serial number or control number is incorrect.



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](https://help.qlik.com) page.

- [How to license a QlikView or Qlik Sense server without Internet access](#)

4. Click **Apply**. The **Successfully licensed** popup is displayed.



5. Click **Close**.



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](https://help.qlik.com) page.

- [Qlik Sense Licenses](#)
- [New Product Activation Method - Signed License Key](#)
- [Insufficient Privileges to register the license - the operation failed due to insufficient privileges](#)
- [Login Access Passes: Is there a way to find out when their quarantine has expired?](#)

The Qlik Sense license has now been activated.

Allocating access to users (non-Core-Based licensing)

Now it is time to connect to a user directory (optional), allocate user access or professional access, and set up permissions. The license is either based on access types, with professional access allocation as an option, or on tokens, with user access allocation as an option.

Access types license (non-Core-Based licensing)

The Qlik Sense license includes a number of professional access allocations that are used to grant users in your organization access to Qlik Sense.

Proceed with the following:

1. In the QMC, from the **Start** menu, click **License management**. The **License usage summary** screen is displayed.
2. Click the **Professional access allocations** tab.
3. Click the **+ Allocate** button. The **Users** screen is displayed.
4. Select the users that you want to provide access to from the list and click **Allocate**.



Allocate is disabled if the number of available allocations is insufficient for the number of selected users.

The users that are allocated access will appear in the **Professional access allocations** overview table.

Token-based license

The Qlik Sense license includes a certain number of tokens that are used to allocate Qlik Sense access to users in your organization.

Proceed with the following steps:

1. In the QMC, from the **Start** menu, click **License management**. The **License usage summary** screen is displayed.
2. Click the **User access allocations** tab.
3. Click the **+ Allocate** button. The **Users** screen is displayed.

4. Select the users that you want to provide access to from the list and click **Allocate**.



Allocate is disabled if the number of tokens available for allocation is insufficient for the number of selected users.

The users that are allocated access appear in the **User access allocations** overview table.



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](#) page.

- [Qlik Sense Token and Access Passes](#)

Additional configuration

After installing Qlik Sense, it may be necessary to:

- Configure the virtual proxy advanced settings to add your own hosts names to the [white list](#).
- Configure the [user directory connector](#) to retrieve users from a user directory.

Congratulations! Qlik Sense is now configured for usage.

Installing Qlik Sense in a multi-node site

A Qlik Sense multi-node deployment offers more configuration options than single node deployments. In a multi-node site, Qlik Sense services can be distributed across one or more server nodes to optimize scalability and performance.

Preparing a large, enterprise multi-node deployment requires careful planning. Ensure all the architecture and configuration options available have been considered. For more information on multi-node architecture and configuration options see:

- Planning your Qlik Sense Enterprise deployment
- Qlik Sense Enterprise on Windows Architecture
- Qlik Sense Enterprise on Windows security

Prerequisites

- Check that the planned environment meets the system requirements. See: [System requirements for Qlik Sense Enterprise on Windows](#).
- Prepare the user accounts required to run the Qlik Sense services on the computer where Qlik Sense will be installed. See: [User accounts](#).



Important: If during the installation, you want to run the Qlik Sense services as a local user, without administrator rights, then the user must be created first.

- Ensure that the firewall is enabled and the appropriate rules have been created to allow rim nodes to communicate with the central node. See: [Ports](#) for a full list of ports.
- Repository database - if you already have a Qlik Sense repository database on another server from a previous installation, you can continue to use this in your new deployment. If you do not intend to use this database, then remove it before you start. Keep in mind that for every new node added, more connections to the database are needed and authentication/whitelisting for the new rim node's connection. In order to allow for this, please see configuration steps under [Configuring PostgreSQL](#).
- Create a local file share to store the Qlik Sense application data. See: [Creating a file share](#).
- Understand how Qlik Sense uses the License Enabler File (LEF) for licensing and have your license key available. See: [Qlik Sense Licenses](#).

- Check that your browser is supported. See: [Supported browsers Qlik Sense Enterprise on Windows](#).

Installing Qlik Sense

Qlik Sense server can be installed as either a central node or as a rim node. In a multi-server site, rim nodes must be connected to a central node. See: [Qlik Sense Enterprise on Windows Architecture](#). If installing a central node, a failover candidate may be configured. The option to create a failover candidate is only available when creating a node.

Proceed with the following steps:

1. Create a file share before running the Qlik Sense setup. The file share is a shared folder that stores all the Qlik application data and must be accessible to all nodes in the Qlik Sense environment. The file share can either be created on the same server as the central node or on another server. See: [Creating a file share](#).



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- [Qlik Sense Share Storage options and requirements](#)
- [How to change the share path in Qlik Sense \(Service Cluster\)](#)
- [Repository Database Persistence Requirements](#)

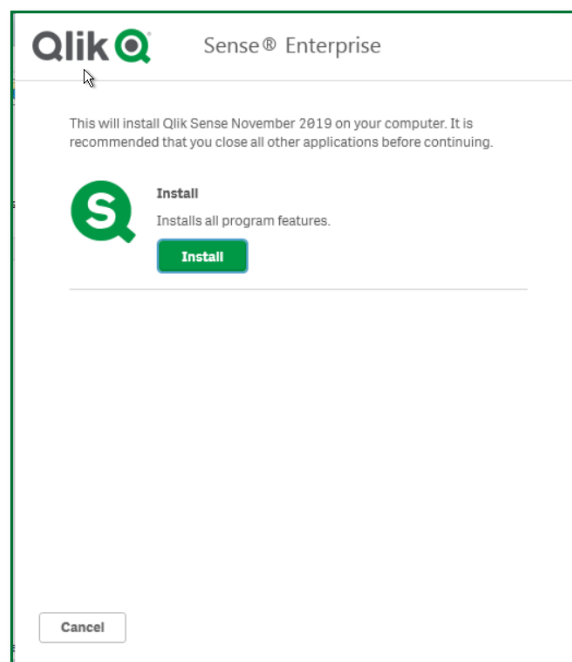
2. Log into the server where Qlik Sense will be installed as the Qlik Sense service account. The service account must have full administrator rights to run the Qlik Sense setup. The Qlik Sense services can run either with an administrator or a local user without administrator privileges. See: [User accounts](#).



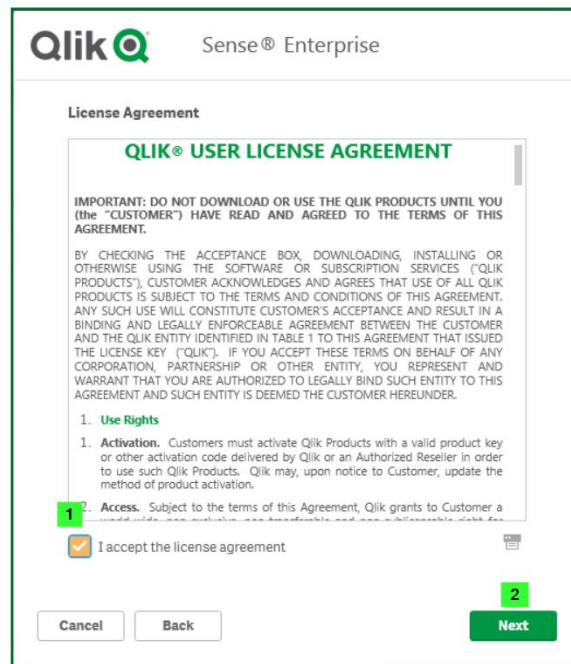
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- [How to Change the Qlik Sense Service Account - Considerations when changing the Sense Service account](#)
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- [Qlik Sense repository service fails to start due to error "SeSecurityPrivilege" error](#)

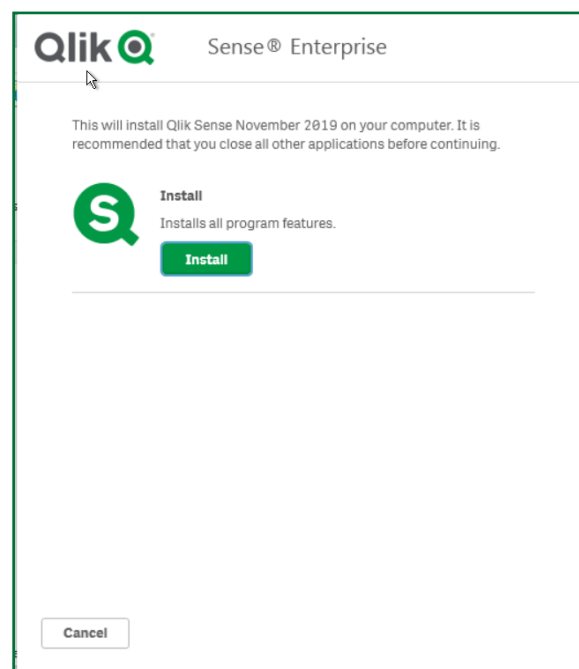
3. Download the **Release Notes** file and **review** the document.
 - a. Navigate to <https://qlikid.qlik.com/portal/download>
 - b. Log in using your **Qlik ID** and **Password**
 - c. Use the filters on the left-hand side to filter the **Product** on Qlik Sense
 - d. Select the **Release Version** if required
 - e. Find the **Qlik_Sense_version_ReleaseNotes.pdf** and **download** the file
4. Download the **Qlik_Sense_setup.exe** file.
 - a. Navigate to <https://qlikid.qlik.com/portal/download>
 - b. Log in using your **Qlik ID** and **Password**
 - c. Use the filters on the left-hand side to filter the **Product** on Qlik Sense
 - d. Select the **Release Version** if required
 - e. Find the **Qlik_Sense_setup.exe** and **download** the file
5. Run the installation program as an administrator, and on the first screen click **Install**.



6. Read the **License agreement** screen. If you agree, select the check box and click **Next**.

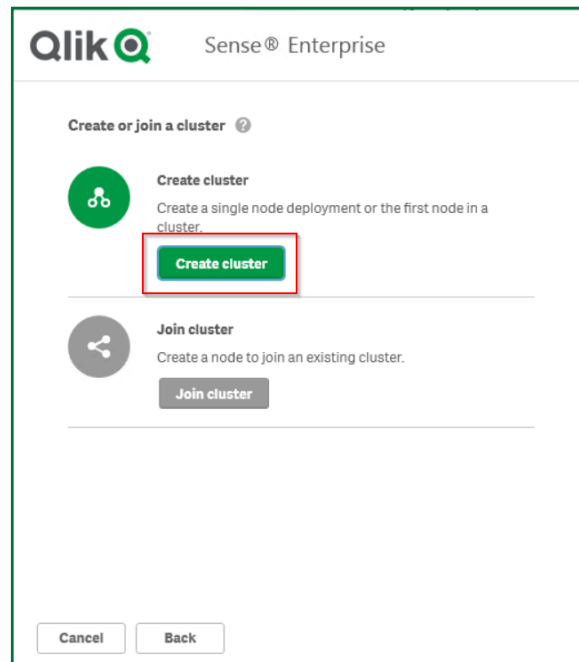


7. The Qlik Sense Enterprise Install splash screen will appear. Click **Install** to proceed.

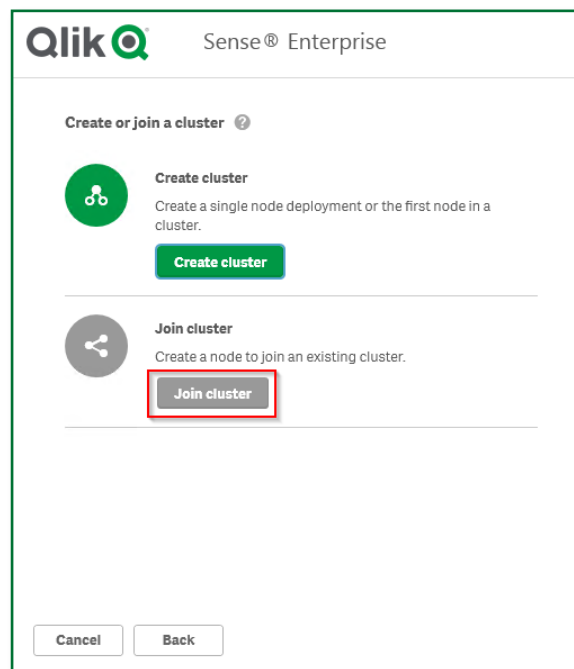


8. On the **Create or join a cluster** screen, you have two options:

- a. **Create cluster** - To install a central node. All the other nodes in your site will connect to this node.



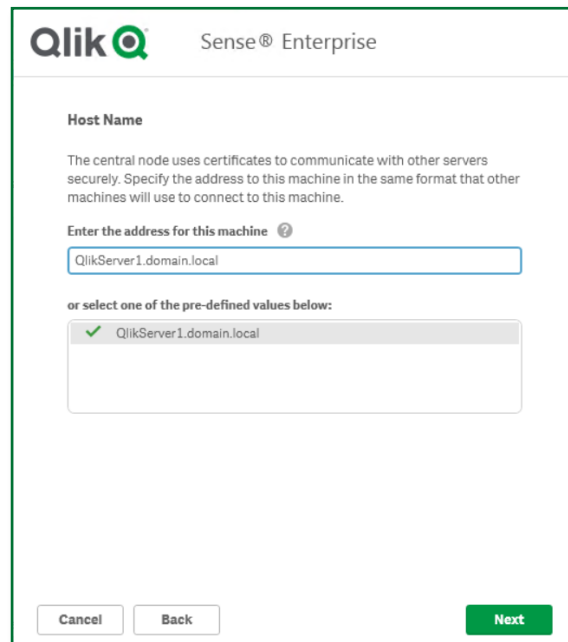
- b. **Join cluster** - To install a rim node that connects to a central node (if you choose this option, fewer screens are displayed in the setup).



9. On the **Host Name** screen, enter the address for the Qlik Sense node that you are installing, and click **Next**. The address must be in a format that other nodes can use when connecting to this node, otherwise the connection will fail.

For example:

- a. IP address: 10.1.123.234
- b. Machine name: WIN-QS1BOL9FM99D
- c. Fully qualified machine name: WIN-QS1BOL9FM99D.CUSTOMER.COM



The screenshot shows the 'Host Name' configuration window in Qlik Sense Enterprise. The window has a title bar with the Qlik logo and 'Sense® Enterprise'. Below the title bar, the section is titled 'Host Name'. A paragraph explains that the central node uses certificates to communicate with other servers securely and that the user must specify the address in the same format as other machines. There is a text input field labeled 'Enter the address for this machine' with a help icon, containing the text 'QlikServer1.domain.local'. Below this, a section titled 'or select one of the pre-defined values below:' shows a list box with 'QlikServer1.domain.local' selected and marked with a green checkmark. At the bottom, there are three buttons: 'Cancel', 'Back', and 'Next'.



Ensure that the recommended server node name displayed in the Enter the address for this machine field matches the one you will use to access this node, otherwise enter an appropriate address or fully qualified domain name. Only use the fully qualified name if you understand the full implications.




Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](https://help.qlik.com) page.

- [Qlik Sense: Change hostname \(and certificates\) after an installation](#)
- [Authentication fails repeatedly when using external DNS alias locally on the server](#)
- [How to: Change the certificate used by the Qlik Sense Proxy to a custom third party certificate](#)

10. ***On the **Shared persistence database connections settings** screen, select the **Install local database** check box if you want to install a local repository database, or leave the check box unchecked if you want to connect to an existing repository database hosted on another server. See: [Installing and configuring PostgreSQL](#).


a. If installing a local repository database, enter the following values:

Field name	Value
Database host	Localhost
Database port	4432
Database user	Enter the username that will be used to access the database.  Do not enter the username postgres.
Database user password	Create your own database user password to access your repository password database in the PostgreSQL database.

b. If connecting to an existing repository database on another server, enter the following values:

Field name	Value
Database host name	Enter the full URL to your repository database.
Database port	4432
Database user	<i>qliksenserepository</i> This is the login role you created in the PostgreSQL database (QSR)
Database user password	Enter the password you created in PostgreSQL.

c. Make a note of these values as you will need them again when you install a rim node.



All Qlik Sense servers must be in the same geographic location or data center as the repository database and the file share.

11. On the **Database configuration** screen, under **Advanced settings**, configure the listen addresses, IP ranges, and max connections from other nodes, and click **Next**. This is a required step if a local repository database is installed and more than one Qlik Sense server node installed. You can also configure this afterwards manually in the `pg_hba.conf` and `postgresql.conf` files directly in the

PostgreSQL repository database. See: [Installing and configuring PostgreSQL](#). Enter the following values:

Field name	Value	Description
Listen addresses	*	The IP address(es) to listen on. Use the value * to allow access for all IP addresses. If entering multiple listen addresses use a comma separated list.
IP ranges	0.0.0.0/0, ::/0	To allow all servers to access the repository database, use the value 0.0.0.0/0 (for all IPv4 addresses) and ::/0 (for all IPv6 addresses). If entering multiple IP addresses use a comma separated list.

Field name	Value	Description
Max connections	100	Specify the maximum number of concurrent server connections to the database. The default value for a single server is 100. Multiply this value by the number of nodes in the cluster.



This screen does not appear if you are using a remote PostgreSQL database or if you are installing a rim node (Join cluster option).



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](#) page.

- [QlikSense - Database connection max pool reached](#)
- [Qlik Sense - Unable to connect to the Qlik Sense engine. Possible causes: too many connections, the service is offline, or networking issues.](#)
- [Repository Database persistence requirements](#)
- [Database traffic encryption](#)
- [Qlik Sense Logging Service does not have support for SSL Database traffic encryption](#)

12. ***On the **Service Credentials** page, enter the domain, user name and password for the account that you want use to run the Qlik Sense services, and click **Next**. See: [User accounts](#).



If you enter a username that is more than 20 characters long, it must be in UPN format, and must include the full domain name. For example, longusername@full.domain.name.



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](#) page.

- [Interactive Logon Rights for Qlik Sense installation](#)

- [How to Change the Qlik Sense Service Account - Considerations when changing the Sense Service account](#)
- [How to: Change the Qlik Sense Proxy certificate if the service account does not have local administrative permissions](#)
- [Qlik Sense repository service fails to start due to error " 'SeSecurityPrivilege " error](#)

13. On the **Shared persistence storage** screen, enter the path or URL to your file share, for example \\<domain>\QlikShare and click **Next**. The file share can either be a local folder or a remote folder on another server. See: [Creating a file share](#).



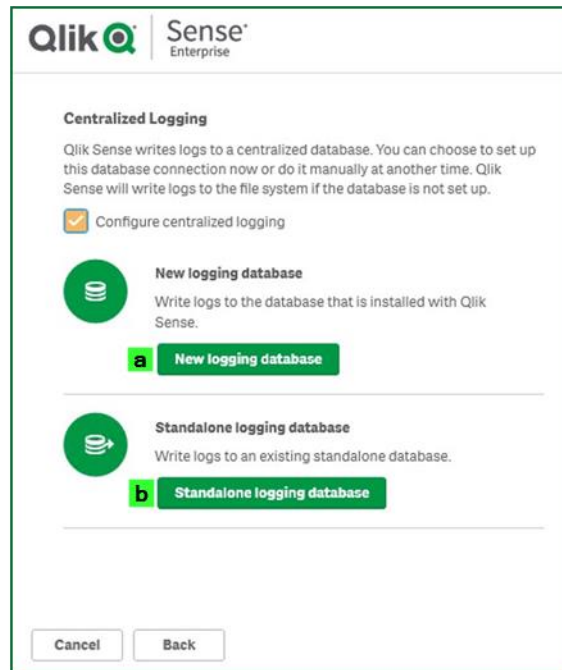
This screen does not appear if you are installing a rim node (Join cluster option).



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](https://help.qlik.com) page.

- [Qlik Sense Share Storage options and requirements](#)
- [How to change the share path in Qlik Sense \(Service Cluster\)](#)
- [Repository Database Persistence Requirements](#)

14. On the **Centralized Logging** screen, leave the **Configure centralized logging** check box selected if you want to set up centralized logging, or clear the check box if you want logs to be written to files. If you decide not to set up centralized logging at this time, you can set it up later by using the logging service utility. See [Qlik Logging Service](#).




Qlik Sense Enterprise

Centralized Logging


Qlik Sense writes logs to a centralized database. You can choose to set up this database connection now or do it manually at another time. Qlik Sense will write logs to the file system if the database is not set up.

☒ Configure centralized logging



New logging database
Write logs to the database that is installed with Qlik Sense.


a **New logging database**



Standalone logging database
Write logs to an existing standalone database.

b **Standalone logging database**

- a. If installing Qlik Sense on a central node and you want to write logs to the database that is installed with Qlik Sense, click **New logging database**. Enter the following values and click **Next**.

Field name	Value
Log writer password	Create a password for the qlogs_writer user to access the centralized PostgreSQL database.
Log reader password	Create a password for the qlogs_reader user to access the centralized PostgreSQL database.
 <p><i>Do not use mixed character sets when creating a password.</i></p>	

- b. If you want to write logs to an existing database on another node, click **Standalone logging database**. Enter the following values and click **Next**.

Field name	Value
Hostname	Enter the host name or IP of the centralized PostgreSQL database.
Port	4432
Log writer password	Enter the password for the qlogs_writer user to access the centralized PostgreSQL database.
Log reader password	Enter the password for the qlogs_reader user to access the centralized PostgreSQL database.

The screenshot shows the 'Centralized Logging' configuration window in Qlik Sense Enterprise. The window has a title bar with the Qlik logo and 'Sense® Enterprise'. Below the title bar, the section is titled 'Centralized Logging'. A message states: 'In order for Qlik Sense to write logs to the database, you need to configure the connection to the logging database.' There are four input fields: 'Hostname' with the value 'qliksrver1.domain.local', 'Port' with the value '4432', 'Log writer password (qlogs_writer user)' with a masked password '1 *****', and 'Log reader password (qlogs_reader user)' with a masked password '2 *****'. At the bottom, there are 'Cancel' and 'Back' buttons on the left, and a 'Next' button on the right, which is highlighted with a green box and the number '3'.

Qlik Sense® Enterprise

Centralized Logging

In order for Qlik Sense to write logs to the database, you need to configure the connection to the logging database.

Hostname ?
qliksrver1.domain.local

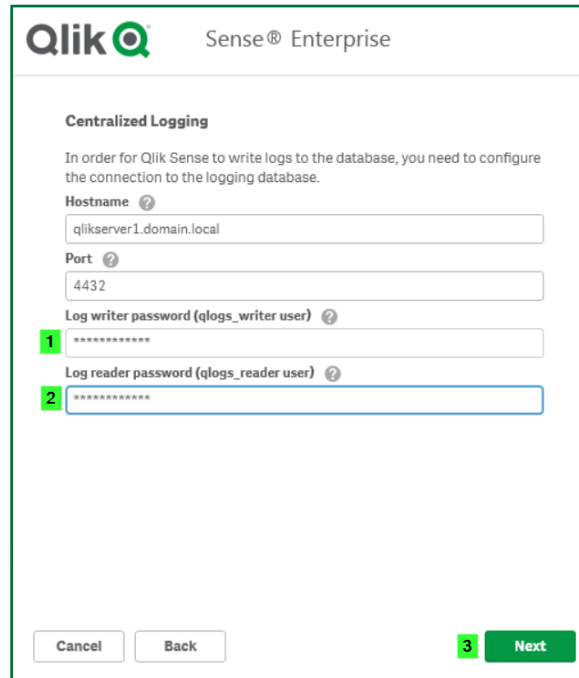
Port ?
4432

Log writer password (qlogs_writer user) ?
1 *****

Log reader password (qlogs_reader user) ?
2 *****

Cancel Back 3 Next

- c. If using a logging database on another node, ensure that this is a new and empty logging database before proceeding with the installation. If a QLogs db is already present on the remote database, the schemas may be incompatible. See: [Installing and configuring PostgreSQL](#).



Qlik Sense® Enterprise

Centralized Logging

In order for Qlik Sense to write logs to the database, you need to configure the connection to the logging database.

Hostname ⓘ
qlikserver1.domain.local

Port ⓘ
4432

Log writer password (qlogs_writer user) ⓘ
1 *****

Log reader password (qlogs_reader user) ⓘ
2 *****

Cancel Back 3 Next



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](#) page.

- [Qlik Sense - Installation fails with "The centralized logging setup failed" or "Could not validate database user"](#)
- [Qlik Sense Installation failed with central logging database - CustomAction CA_SetupLocalLoggingDb returned actual error code 1603](#)
- [How To Enable/Disable Centralize Logging Mode](#)
- [How to set up the Qlik Sense Logging Service](#)

15. On the **Installation location** screen, choose a location to install Qlik Sense or use the default location on the C:\ drive, and click **Next**.



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](https://help.qlik.com) page.

- [Antivirus exceptions for Qlik Sense- McAfee, Symantec & Other Anti-Virus exclusions absolutely required](#)
- [Anti-virus software scanning affects performance](#)

16. On the **Repository Database Superuser Password** screen, create a superuser password for the PostgreSQL database, and click **Next**.



This screen does not appear if you are using a remote PostgreSQL database or if you are installing a rim node (Join cluster option).

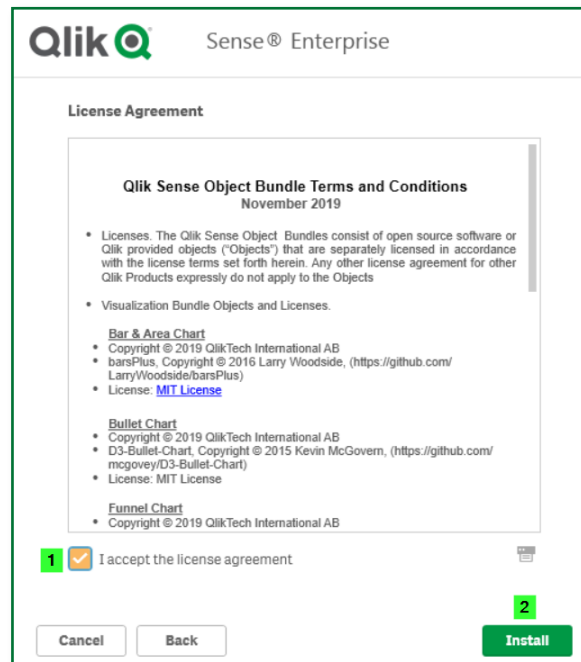
17. On the **Ready to install** screen, optionally select to create desktop shortcuts and automatic start of the Qlik Sense services when the setup is complete.



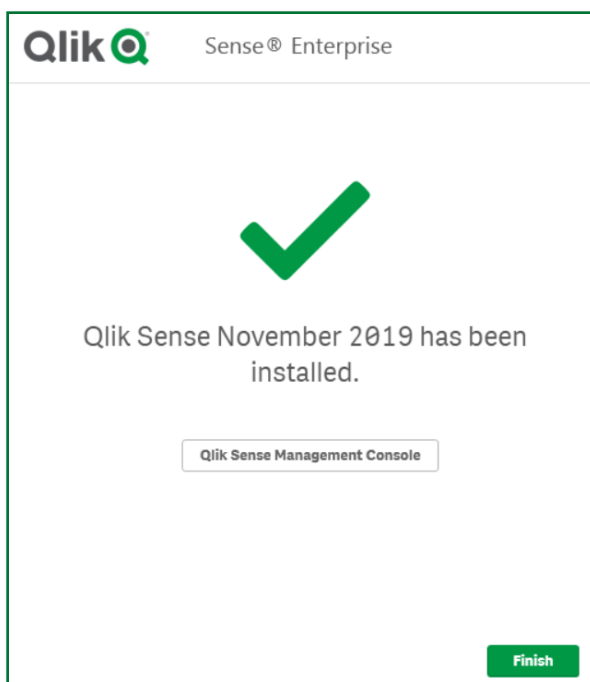
*If you want to use a dedicated service account to run the Qlik Sense services, clear the **Start the Qlik Sense services when the setup is complete** selection. The **Supported object bundles** section is only available when installing on the Central node.*

18. In the **Supported object bundles** section, optionally select to install the object bundles. Then, select which object bundles to install from the list of those available. Bundles can always be added or removed from the Qlik Sense installation later. See: [Modifying an object bundles installation.](#)

19. In the **Help Us Improve** section, optionally select to share system data with Qlik in anonymous form. Learn more about what data Qlik collects by clicking the link in the message.



20. If bypassing the extension bundles, click **Install**. Otherwise, click **Next**.
21. If installing any of the extension bundles, accept the extension bundle license agreement. Then, click **Install**.
22. Once the installer is finished, a message will appear indicating that Qlik Sense has been installed successfully. Click **Finish**.



23. If you selected local system as the user account type in the **Service Credentials** screen but wish to use a dedicated service account to run the Qlik Sense services, change the user account type and manually start the Qlik Sense services now. See [User accounts](#)

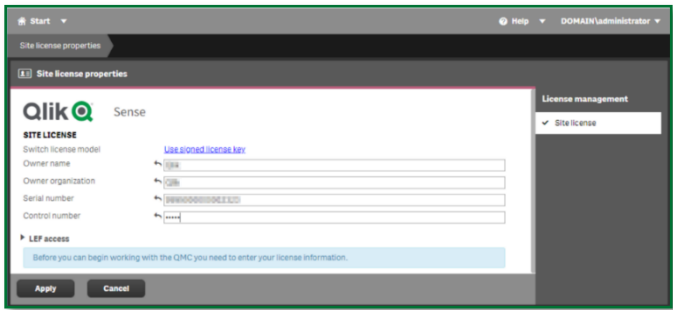
Qlik Sense has now been successfully installed.

Licensing Qlik Sense

Before Qlik Sense can be used, the site license must be applied.

Proceed with the following steps:

1. Open the Qlik Sense Management Console (QMC). When opening the QMC for the first time, the **Site license properties** screen is displayed.
2. Enter the license information from the License Enabling File (LEF).



The property group **Site license** contains properties related to the license for the Qlik Sense system. All fields are mandatory and must not be empty.

If you want to set up Qlik Cloud Services or Qlik Sense Enterprise on Kubernetes, please contact your Qlik representative or Qlik Support to obtain a valid license for the setup.

Property name	Description
Owner name	The username of the Qlik Sense product owner.
Owner organization	The name of the organization that the Qlik Sense product owner is a member of.
Serial number	The serial number assigned to the Qlik Sense software.
Control number	The control number assigned to the Qlik Sense software.

3. Expand **LEF access** and click **Get LEF and preview the license**. If you received your LEF via email, you can copy and paste the information into the text field.

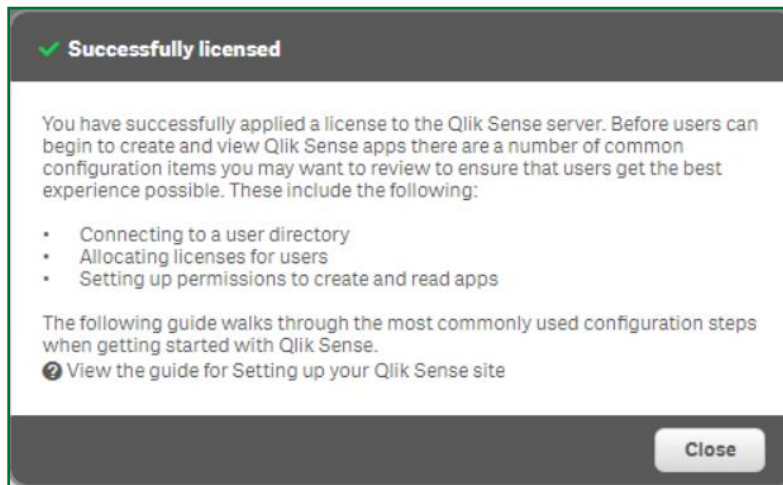
Failed to get LEF from server is displayed if the serial number or control number is incorrect.



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](https://help.qlik.com) page.

- [How to license a QlikView or Qlik Sense server without Internet access](#)

4. Click **Apply**. The **Successfully licensed** popup window is displayed.



5. Click **Close**.

The Qlik Sense license has now been activated.



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this [Help.qlik.com](https://help.qlik.com) page.

- [Qlik Sense Licenses](#)
- [New Product Activation Method - Signed License Key](#)
- [Insufficient Privileges to register the license - the operation failed due to insufficient privileges](#)
- [Login Access Passes: Is there a way to find out when their quarantine has expired?](#)

Allocating access to users (non-Core-Based licensing)

Now it is time to connect to a user directory (optional), allocate user access or professional access, and set up permissions. The license is either based on access types, with professional access allocation as an option, or on tokens, with user access allocation as an option.

Access types license (non-Core-Based licensing)

The Qlik Sense license includes professional access allocations (based on the license agreement) that are used to grant users in your organization access to Qlik Sense.

Proceed with the following:

1. In the QMC, from the **Start** menu, click **License management**. The **License usage summary** screen is displayed.
2. Click the Professional access allocations tab.
3. Click the **+ Allocate** button. The **Users** screen is displayed.
4. Select the users that you want to provide access to from the list and click **Allocate**.



Allocate is disabled if the number of available allocations is insufficient for the number of selected users.

The users that you allocated access to appear in the **Professional access allocations** overview table.

Token-based license

The Qlik Sense license includes a certain number of tokens that are used to allocate Qlik Sense access to users in your organization.

Proceed with the following steps:

1. In the QMC, from the Start menu, click License management. The License usage summary screen is displayed.
2. Click the User access allocations tab.
3. Click the **+ Allocate** button. The Users screen is displayed.
4. Select the users that you want to provide access to from the list and click Allocate.



Allocate is disabled if the number of tokens available for allocation is insufficient for the number of selected users.

The users that are allocated access appear in the **User access allocations** overview table.



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this Help.qlik.com page.

- [Qlik Sense Token and Access Passes](#)

Adding a Qlik Sense node

After installing a central node and a rim node, configure the central node to connect to the rim node. Before the rim node can be verified it is running correctly, it must be connected the central node. Use the QMC on the central node to register a rim node.



Links to common deployment issues and tips are found in this box. Please note that information may not fully match the current product release version associated with this Help.qlik.com page.

- [Using an account without administrator privileges to run the Qlik Sense services during the installation of a node](#)
- [RIM node registration or connection fails: cannot reach host](#)

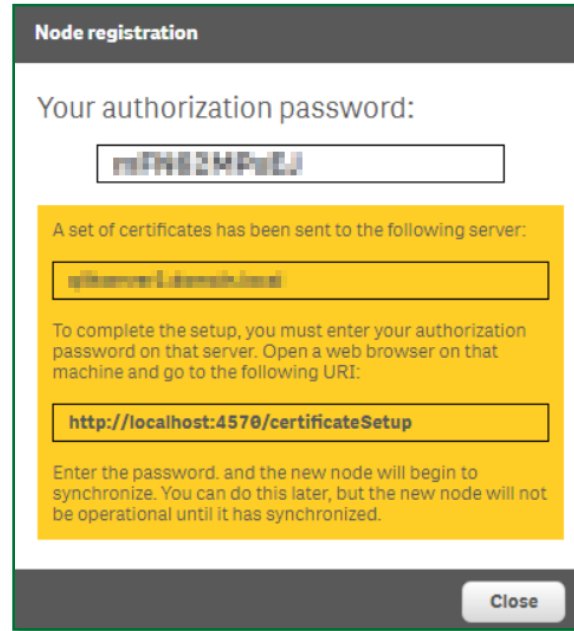
To configure a central node to connect to a rim node:

1. On the central node, open the QMC, and click **Nodes**.
2. Click Create new.
3. In the **Edit node** window, enter the following configuration details about the node you want to connect to:

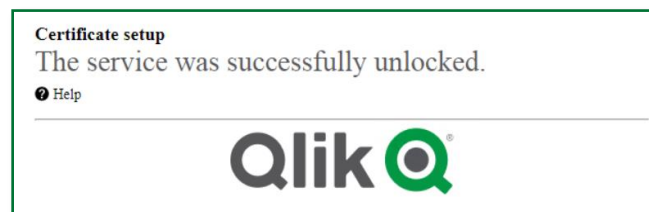
Field name	Description	Example value
Name	Provide a suitable name for the node.	For example, <i>Consumer node 1</i>
Host name	Enter the full URL of the node you want to connect to.	For example, <domain>-<servername>.qliktech.com
Node purpose	Choose a suitable purpose for the node: Production Development Both	For example, choose Production for a scheduler node or Development for a developer node used for creating apps. Check that your license supports the node purpose that you have chosen.
Node configuration	Select this node as a failover candidate.	For example, if you select this node as a failover candidate it means that this node can perform the same role as the central node if the central node fails. See: Failover
Service activation	Select the services you want to run on this server node: Repository Engine Printing Proxy Scheduler	For example, if you are installing a consumer node select the Repository and Engine services. For more information on which services to run on different types of nodes, see: Qlik Sense Enterprise on Windows Architecture and Services

- Click **Apply**. The central node generates a certificate that you use to register the rim node. If the central node cannot connect to the rim node you will see a **Node registration** error message. If you get this error, first check that you have opened port 4444 on the central and rim nodes to allow certificates to be sent.

5. The **Install certificates** pop-up window then opens providing you with a URL and a password to authorize the certificate on the rim node.



6. On the rim node, paste the URL into a new browser window.
7. On the **Install certificates** page (in your browser), enter the password and click **Submit**. If successful, you see the **Successfully licensed** message.



8. Follow the same authorization procedure for each node that you want to add to your deployment.
9. To verify that all rim nodes are configured correctly, open the QMC, click **Nodes** and you can see the status of all the nodes in your deployment.

Verify the installation

To verify that Qlik Sense has installed correctly:

1. Open the Qlik Management Console(QMC).
2. Open the Qlik Sense Hub.

If the QMC and Hub open without any security warnings displayed in the browser, then **Qlik Sense has been installed correctly.**

Additional configuration

After Qlik Sense has been installed and verified that Qlik Sense, you may find the following configuration information useful:

- Load balancing - create load balancing rules in the QMC to improve resilience and performance in a multi-node site.
- Host white list - configure the virtual proxy advanced settings to add your own hosts names to the white list.
- User imports (UDC) - configure the user directory connector to retrieve users from a user directory.



If you are installing custom connectors in a multi-node setup, the custom connectors must be installed on each node.

Congratulations! Qlik Sense has now been successfully installed.



About Qlik

Qlik's vision is a data-literate world, one where everyone can use data to improve decision-making and solve their most challenging problems. Only Qlik offers end-to-end, real-time data integration and analytics solutions that help organizations access and transform all their data into value. Qlik helps companies lead with data to see more deeply into customer behavior, reinvent business processes, discover new revenue streams, and balance risk and reward. Qlik does business in more than 100 countries and serves over 50,000 customers around the world.

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