



Basic Qlik Sense Site Installation Example

Qlik Sense 4 Server Multi Node

Last updated : 22 April 2015

A Qlik Sense site is a collection of one or more nodes (that is, server machines) connected to a common logical repository or central node.

In a typical Qlik Sense installation, there is only one production site, which contains a single central node that contains data for the entire site and, optionally, one or more additional nodes that may be used to increase capacity and resilience. All nodes connect with the central node. App data and all necessary meta-data are synchronized between the central node and the other nodes using asynchronous communication.

System Specifications

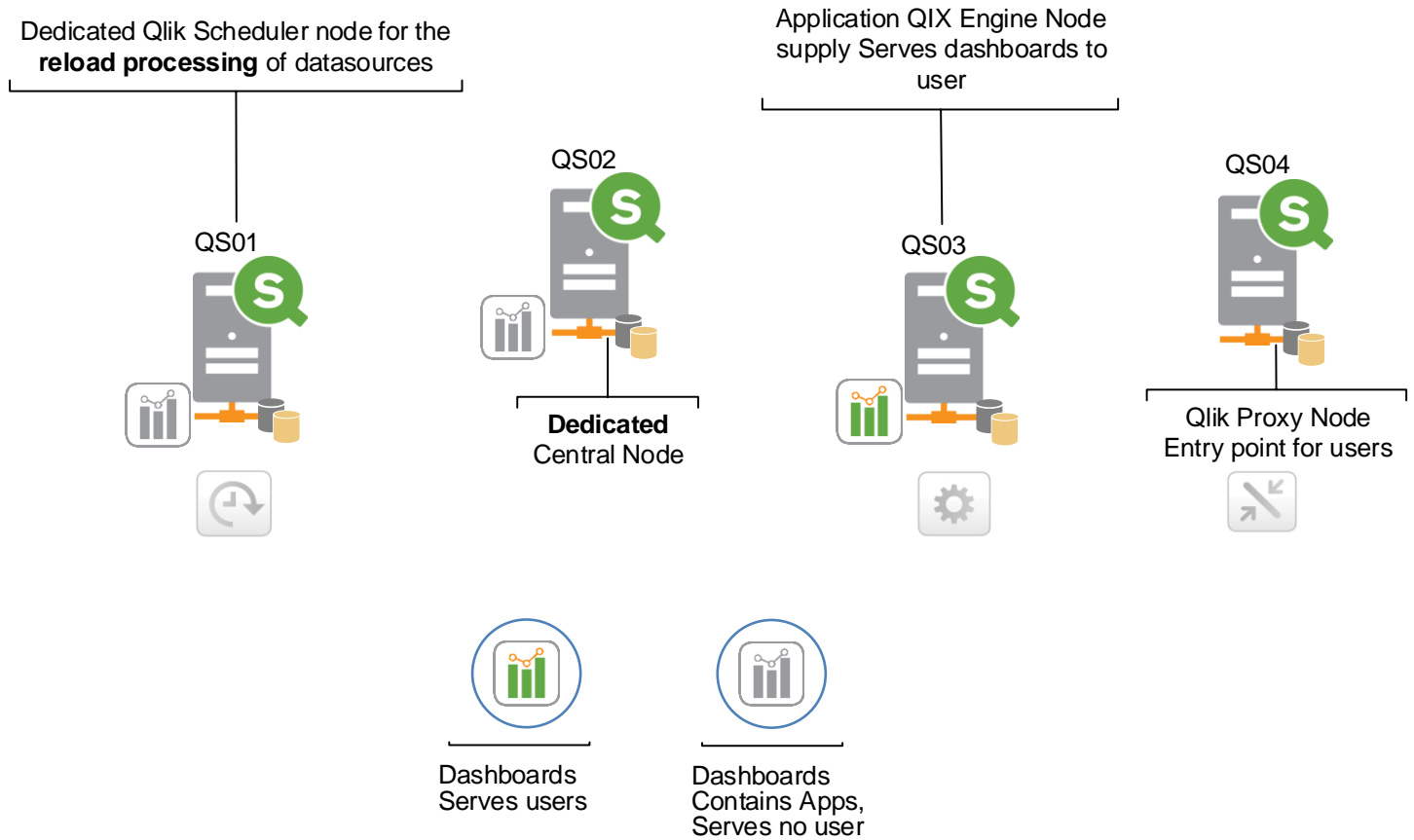
Qlik Sense Product Release version 1.1

This section lists the requirements that must be fulfilled by the target system in order to successfully install and run Qlik Sense.

Platforms	Microsoft Windows Server 2008 R2 Server 2012 Server 2012 R2	Browser support	Google Chrome Microsoft IE10 or higher Mozilla Firefox (requires hardware acceleration, not supported in virtual environments)
Processors (CPUs)	Microsoft Windows 7 (64-bit version only) Microsoft Windows 8.1 (64-bit version only) Multi-core x64 compatible processors	Qlik Sense Hub	As above + iOS: iPad 2 and above or iPhone 5 and above with latest iOS (Script editing not supported on tablet devices.) Apple Safari version 6.1 or higher
Memory	8 GB minimum (depending on data volumes, more may be required)		
Disk space	500 MB total required to install		
Security	Microsoft Active Directory Microsoft Windows Integrated Authentication Third-party security		
.NET framework	4.5.1		
Internet protocol	IPv4		

Overview

This document describes the installation of Qlik Sense on four virtual servers. The servers are divided as shown below.



System Account

Userid: `srv_qlik`

It is recommended that you create/use a domain or local Windows Administrator account during the Qlik Sense installation and for the services that will be installed.

This account can be a separate Administrator account that has an ID name that identifies the Qlik Sense system user.

Make sure that the account has complete administrative access privileges to install software and services to the system you are installing the Qlik Sense platform to.

User Account

Userid: `Qlik`

It is recommended to create a separate user account for user testing. Depending on the chosen authentication method this account must be a local windows user account or a domain user account.

Windows Hostname/Domain

Have the appropriate machine hostname/domain available (FQDN), as this will be used when setting up the system services in combination with the system account you created.

Browser

Make sure you have a supported web browser installed on the system in order to access the Management Console to perform Qlik® Sense configurations.

In order to avoid all possible interruptions due to strict browser settings, ensure that JavaScript is enabled and that your security for trusted zones is set to minimal, at least for the initial configuration.

On some machines, Internet Explorer may be locked down by other GPO policies and it may be difficult to change its settings. A workaround is to install an additional browser such as FireFox or Google Chrome.

Network (Internet Access)

It is preferable to have the direct internet access from the server(s) to the internet, at least during the initial setup, in order to license the Qlik Sense Server.

If this is not possible, make sure you have the appropriate LEF (License Enablement File)

Ports

Make sure that on the Qlik Servers no other windows services or programs are making use of ports 443 or 80.

Summary

Servers

SERVER ROLE	SERVER NAME	IP ADDRESS
Scheduler Node	QS01	192.168.150.10
Central Node	QS02	192.168.150.11
Consume Node	QS03	192.168.150.12
Proxy Node	QS04	192.168.150.13

URL

Product	URL	Description
QMC	https://qs02/qmc	QMC Central Node
Proxy	https://qs04/hub	End user Access

User Accounts

Product Accounts	Username	Password	Purpose
PostGresDB Password		qlik123	Database account
Qlik Service Account	Srv_Qlik	qlik123	Installation account
	Qlik	qlik123	Windows account

Qlik License Tokens

Token License Number	xxxxxxx
License Control Number	xxxxxxx

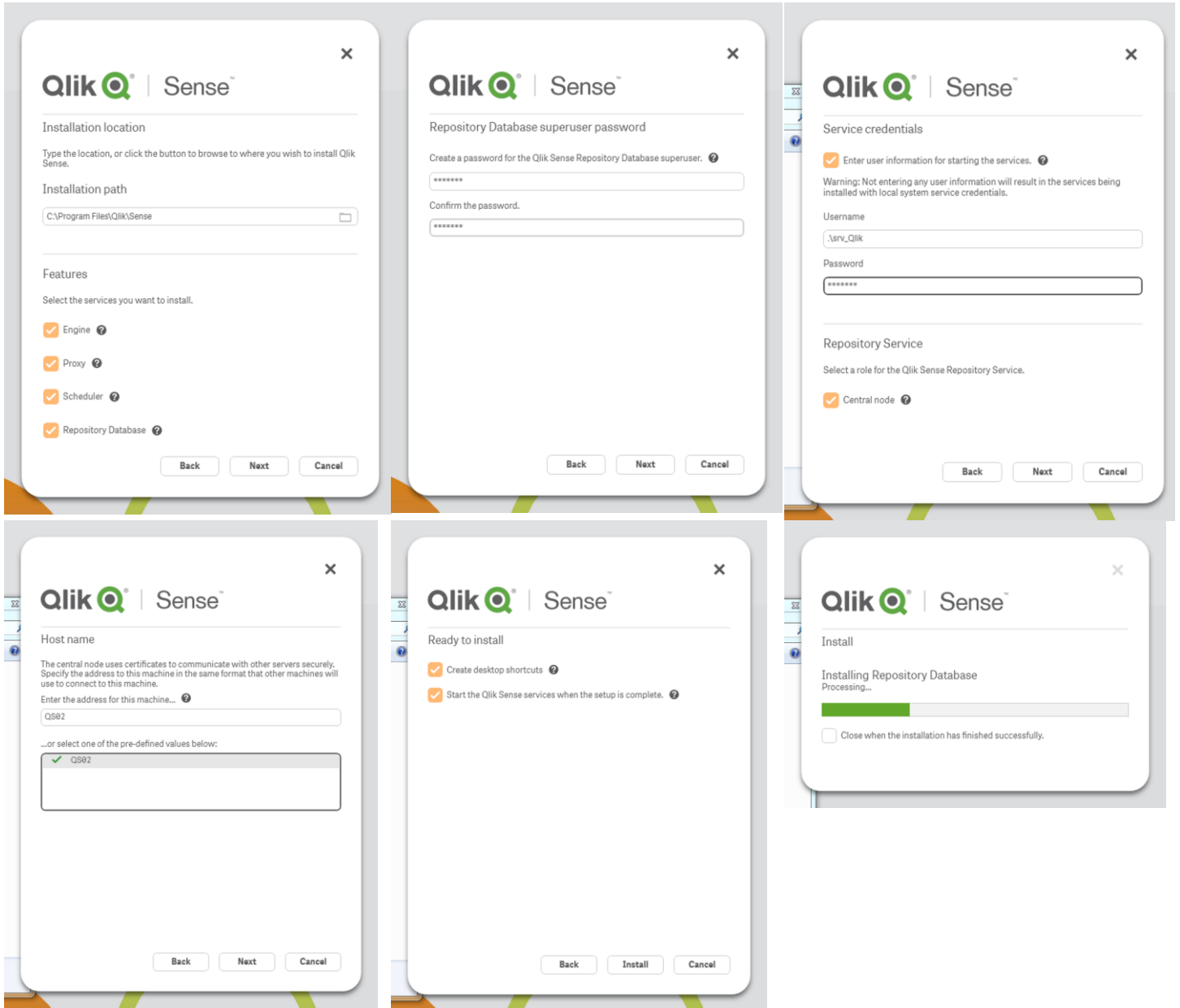
When using NTLM users are identified per computer system. Example QS01\Qlik, QS02\Qlik and so on. Logon through each server first and then assign a token to each user.

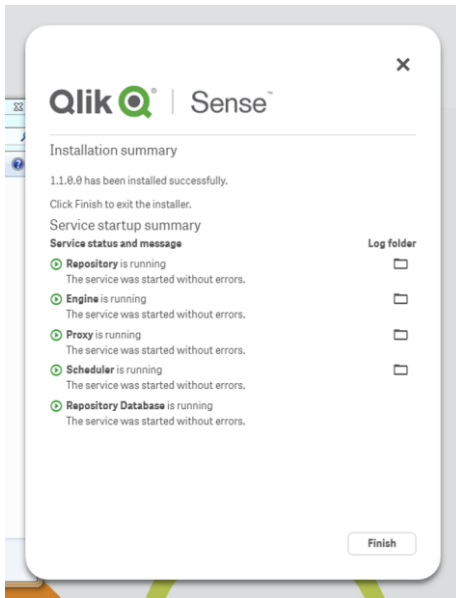
While setting up Qlik the following accounts are used

Software Installation

The installation will be carried out on four servers

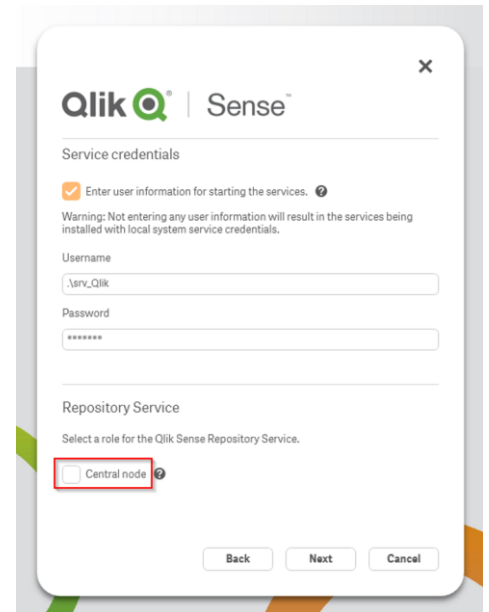
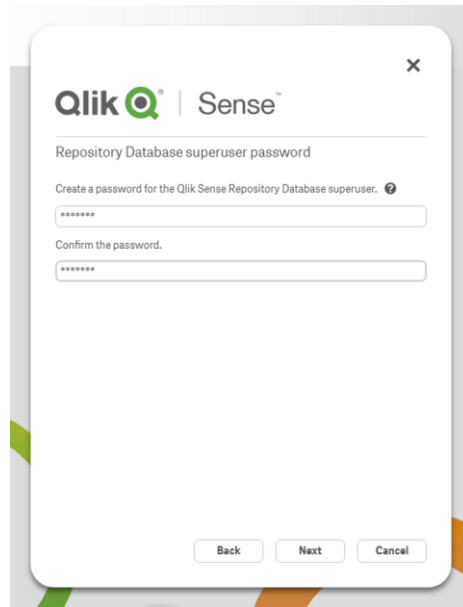
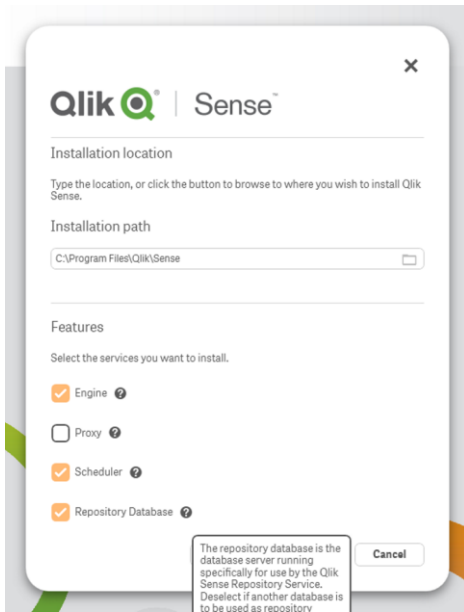
Central Node – SQ02

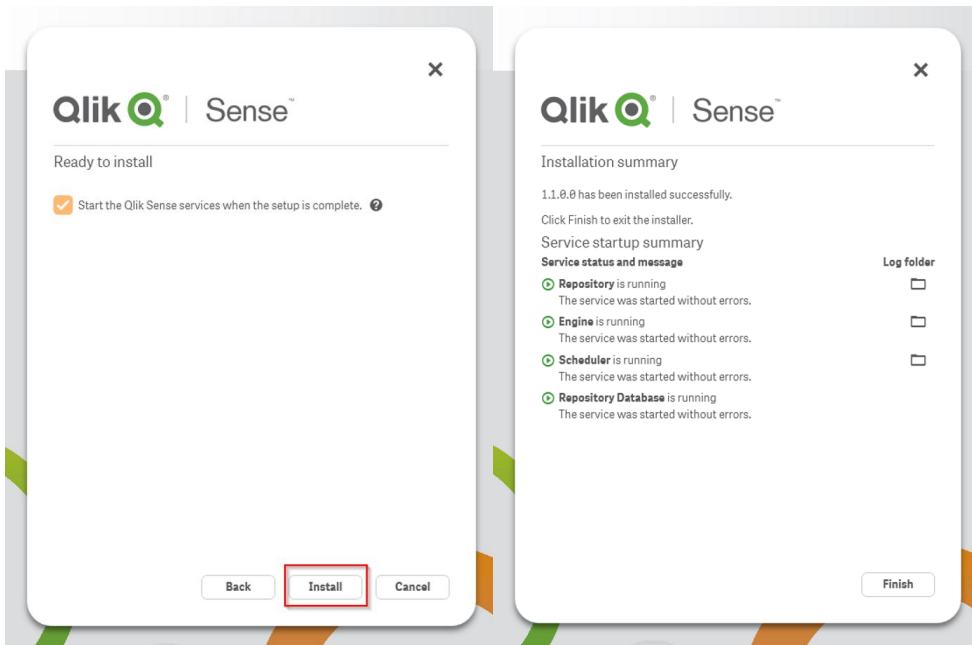




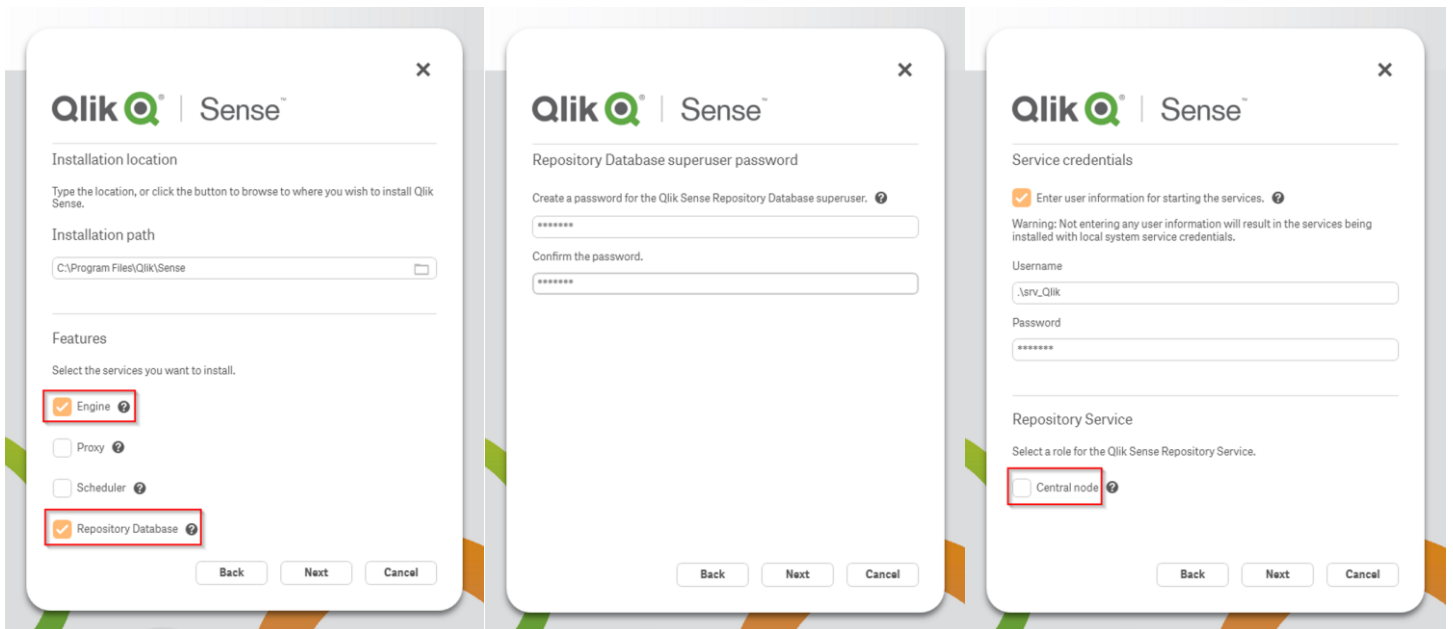
Qlik Sense Engine Service	Provides the analytical power of Qlik S...	Started	Automatic (Delayed Start)	.\srv_Qlik
Qlik Sense Proxy Service	Manages Qlik Sense authentication, se...	Started	Automatic (Delayed Start)	.\srv_Qlik
Qlik Sense Repository Database	Qlik Sense Repository Database	Started	Automatic (Delayed Start)	Local System
Qlik Sense Repository Service	Manages persistence and replication o...	Started	Automatic (Delayed Start)	.\srv_Qlik
Qlik Sense Scheduler Service	Manages scheduled reloads of Qlik Se...	Started	Automatic (Delayed Start)	.\srv_Qlik

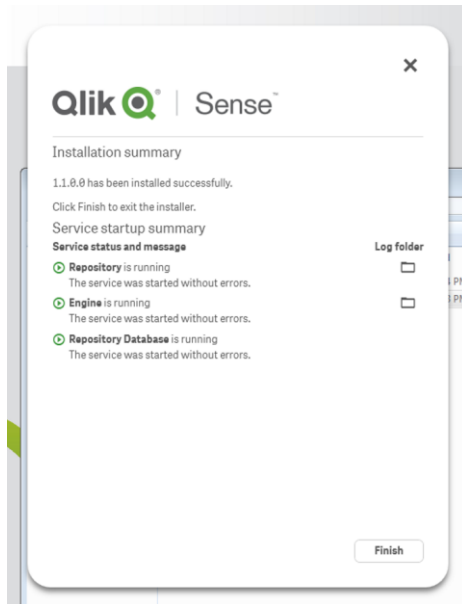
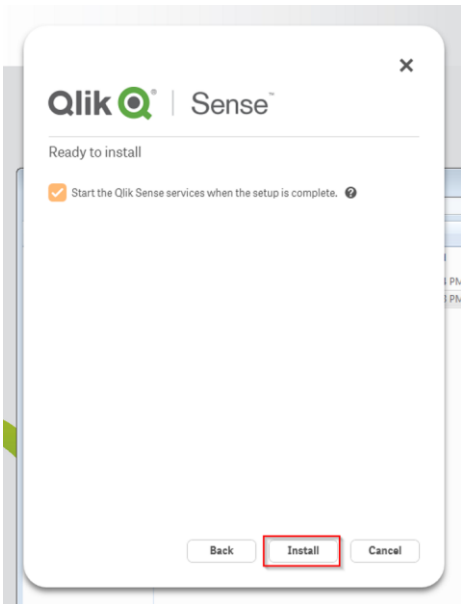
Scheduler Node – SQ01



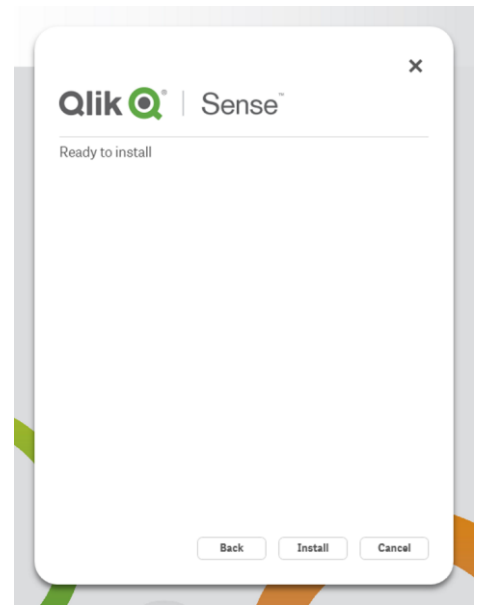
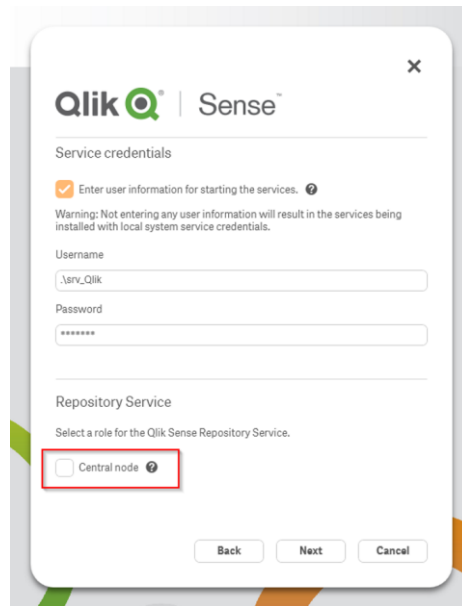
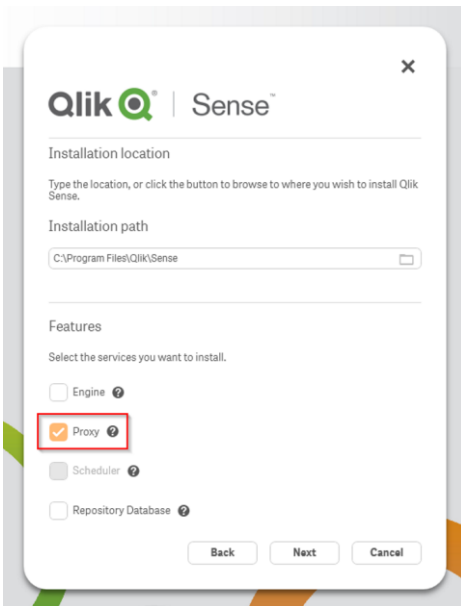


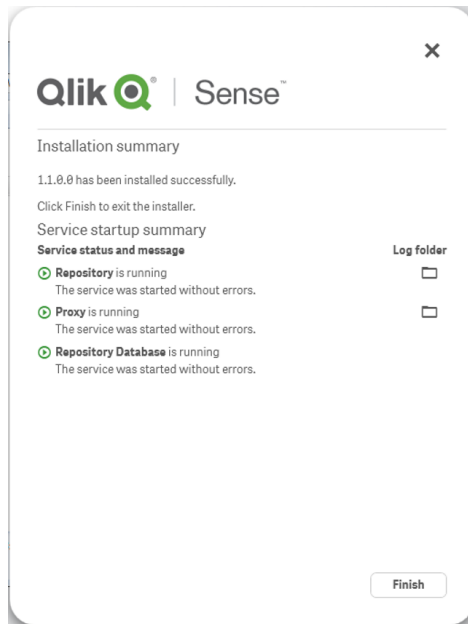
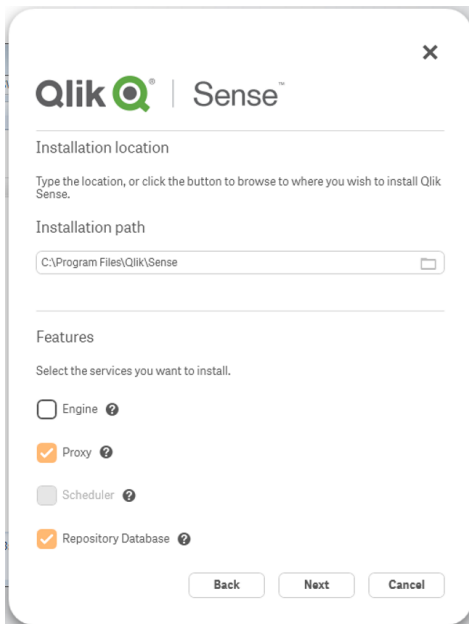
Consume Node – SQ03





Proxy Node – SQ04





Configuration

Adding License Key

On the configuration system menu select "License"

Start ▾
✓ Successfully licensed

Site license properties

SITE LICENSE

Owner name:

Owner organization:

Serial number:

Control number:

▼ LEF access

Get LEF and preview the license

====;Qlik Sense License 2015;=====
 PRODUCTLEVEL;50;
 TOKENS;500;
 TIMELIMIT;2016-01-31
 OVERAGE;NO;
 =====;

Notice

If you received your LEF via email you can copy and paste it into the text field to the right and then press Apply to license your installation.

Before you can begin working with the Qlik Management Console (QMC) you need to enter your license information.

Apply
Cancel

You have successfully applied a license to the Qlik Sense server. Before users can begin to create and view Qlik Sense apps there are a number of common configuration items you may wish to review to ensure that users get the best experience possible. These include:

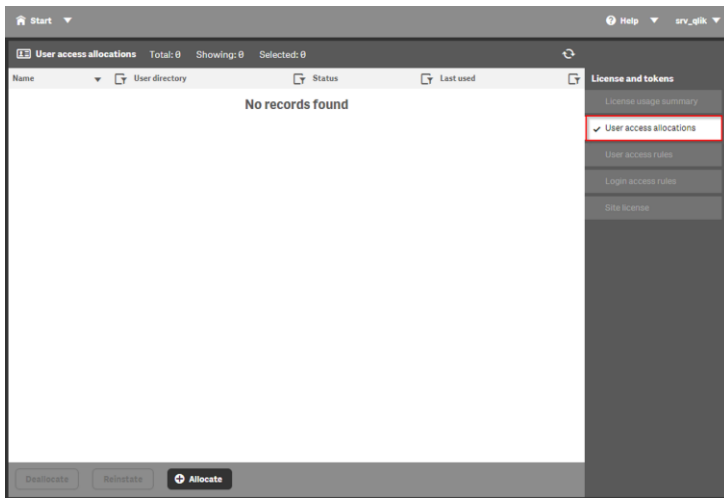
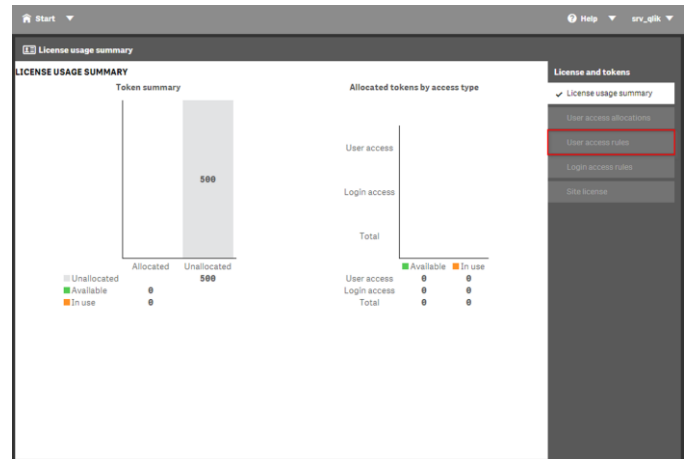
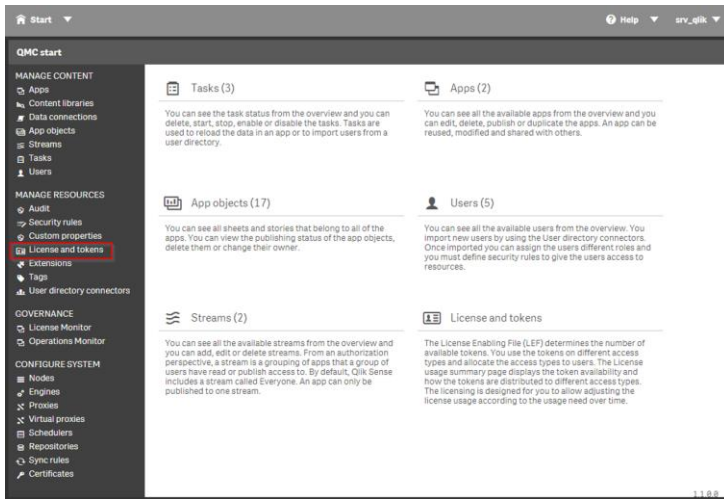
- Connecting to a user directory
- Allocating licenses for users
- Setting up permissions to create and read apps

The following guide walks through the most commonly used configuration steps when getting started with Qlik Sense.

[View the guide for Setting up your Qlik Sense site](#)

Close

Assign License Tokens



Login as Qlik user first. UDC Sync does not retrieve the ntlm user qlik

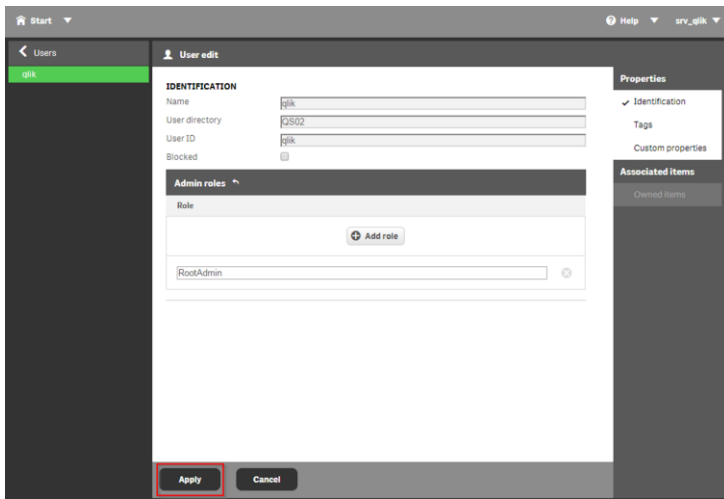
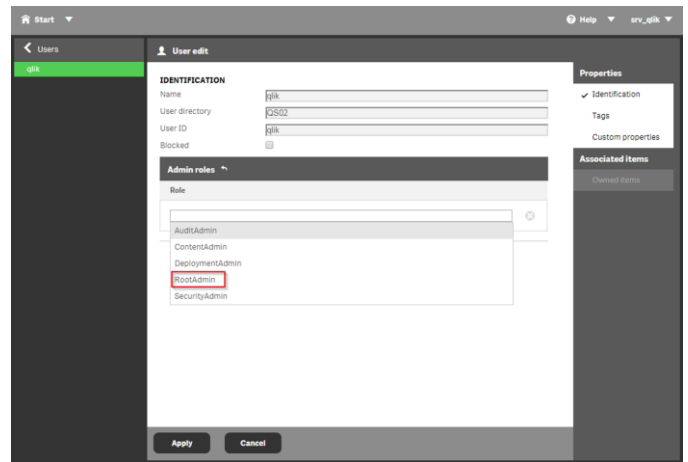
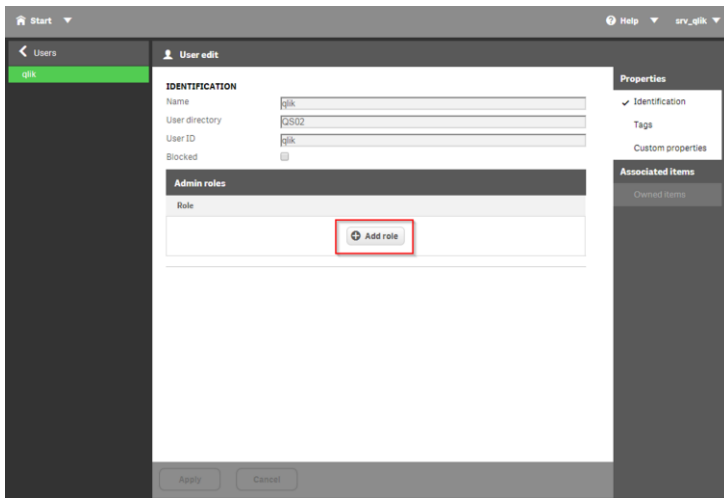
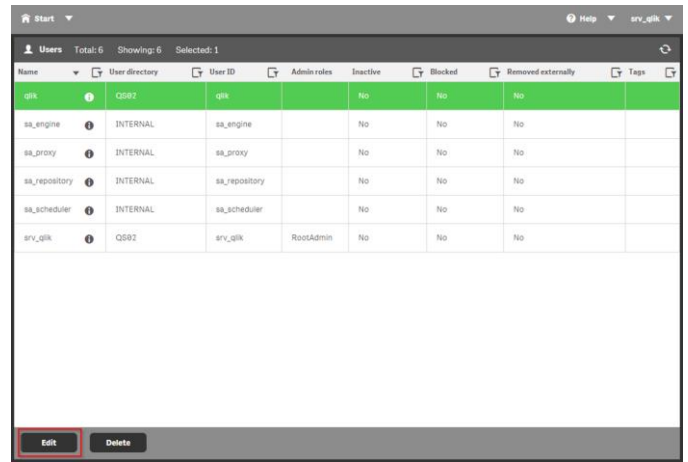
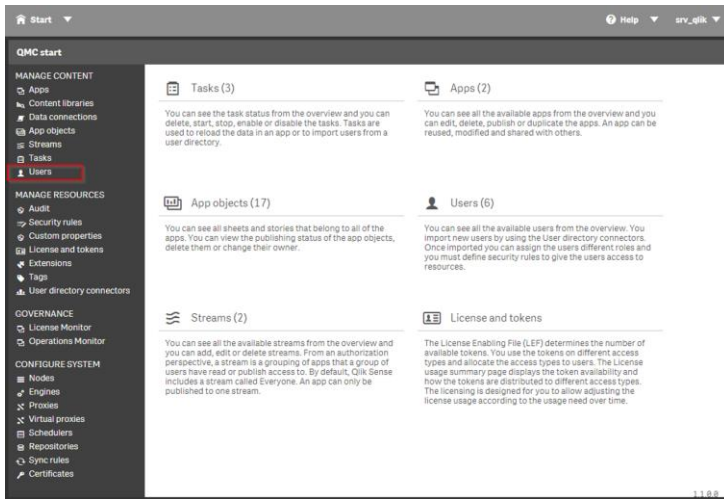
User name	User directory	User ID	Tags
qlik	QS02	qlik	
sa_engine	INTERNAL	sa_engine	
sa_proxy	INTERNAL	sa_proxy	
sa_repository	INTERNAL	sa_repository	
sa_scheduler	INTERNAL	sa_scheduler	
srv_qlik	QS02	srv_qlik	

User name	User directory	User ID	Tags
qlik	QS02	qlik	
sa_engine	INTERNAL	sa_engine	
sa_proxy	INTERNAL	sa_proxy	
sa_repository	INTERNAL	sa_repository	
sa_scheduler	INTERNAL	sa_scheduler	
srv_qlik	QS02	srv_qlik	

Name	User directory	Status	Last used
qlik	QS02	Allocated	-

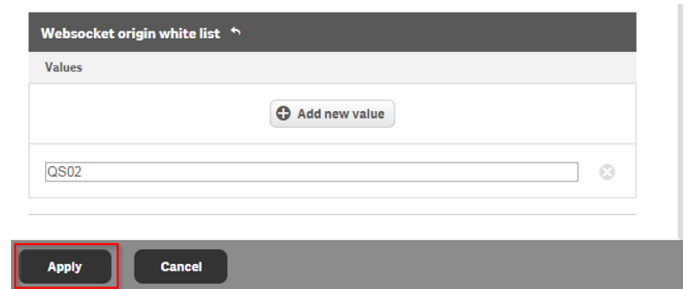
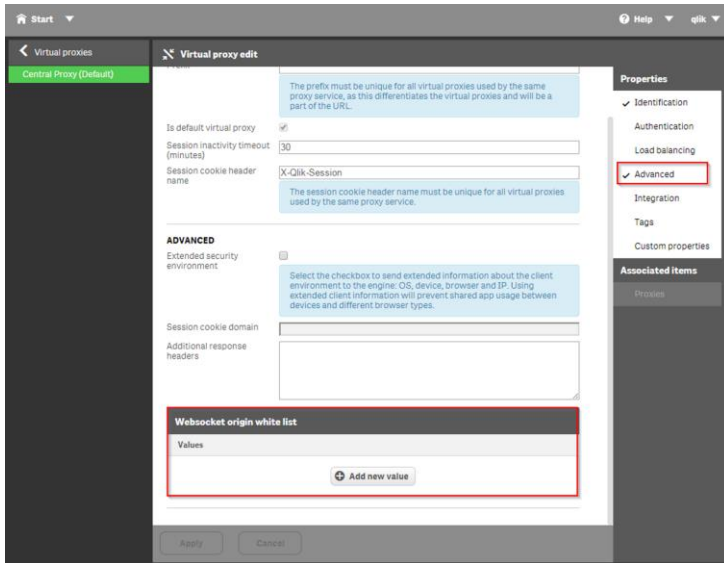
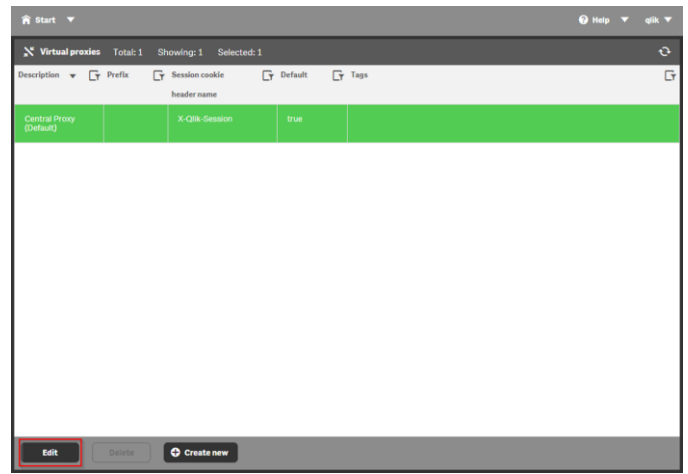
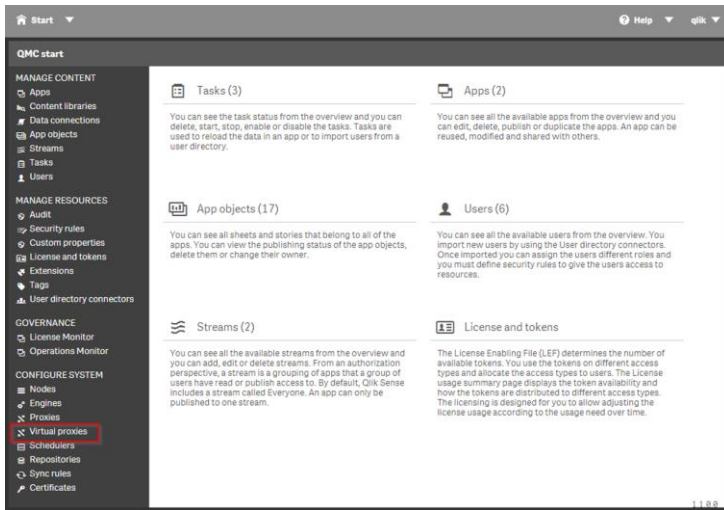
Assign Roles

The account used to activate the license will automatically become a "Root Admin". This process describes how to assign Root Admin privileges to the user Qlik.



Proxy Whitelist

Configure the Proxy to allow access from outside the server. Configuration of the whitelist should be done before the configuration of the second node.



Apply changes to virtual proxy

Any proxies associated with this virtual proxy will be restarted. Sessions handled by these proxies will be ended and the users will be logged out. Continue?



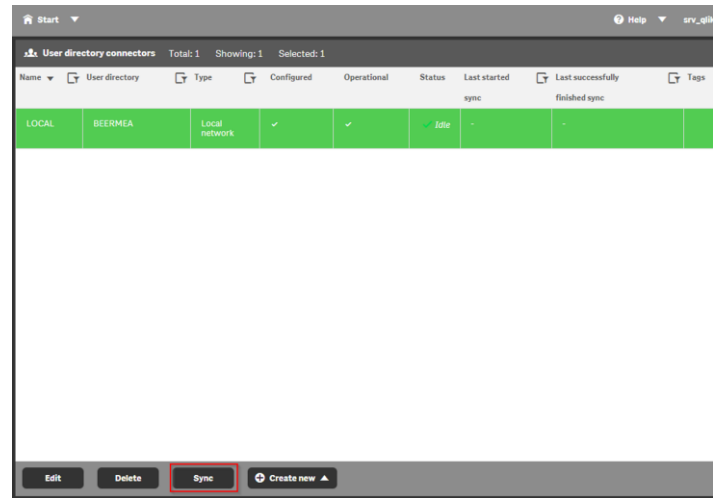
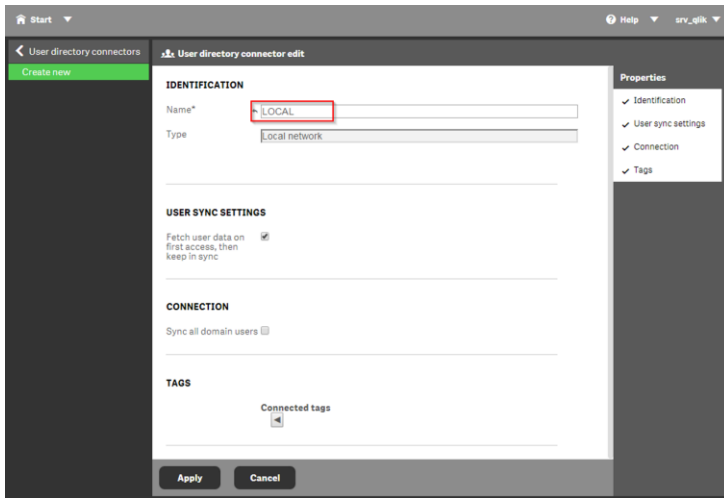
Your session has ended

You have been logged out from QMC due to inactivity or due to a restart of the proxy. Please click Restart QMC to start a new session.

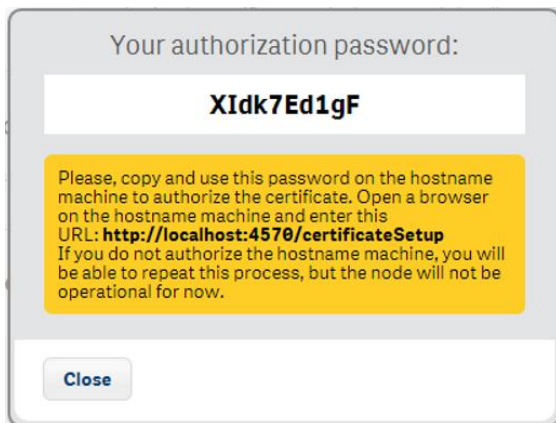
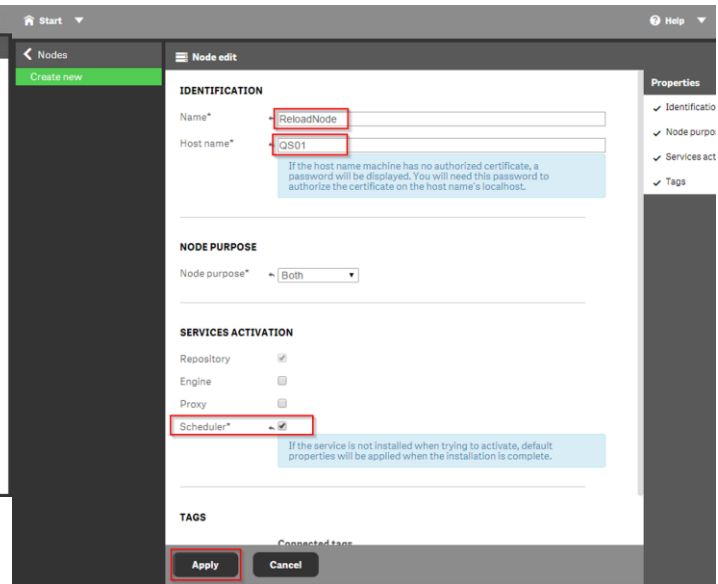
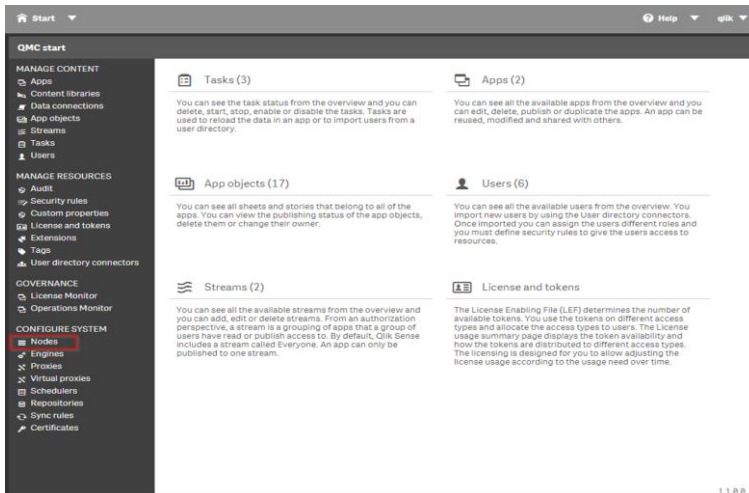


User Directory Connector (UDC)

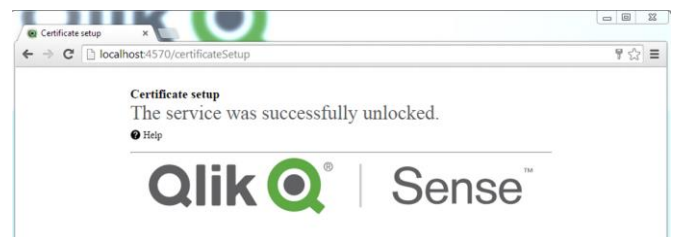
On the configuration system menu select “User Directory connectors”. Click “Create new”. In this case “Local Network” was selected



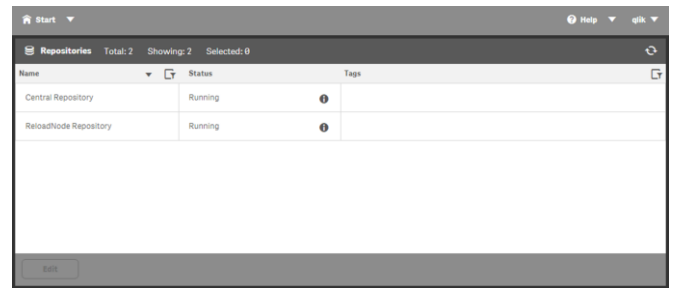
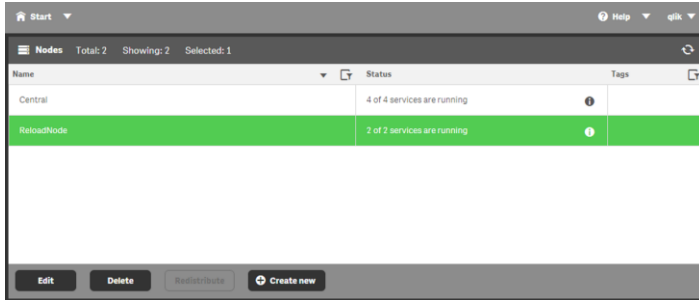
Schedule Node – QS01



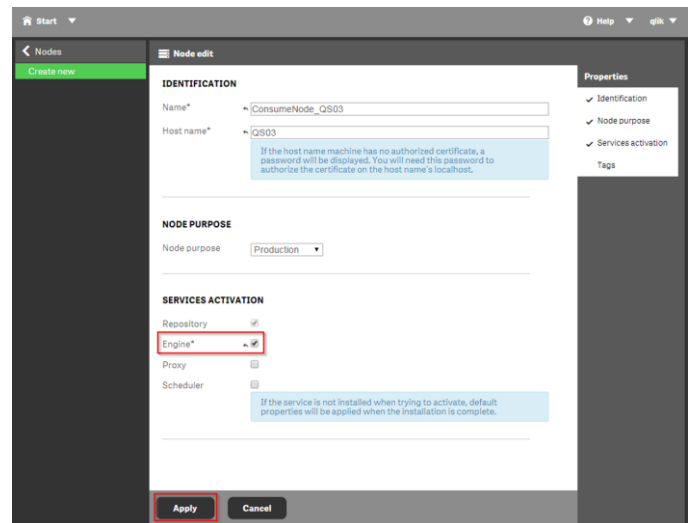
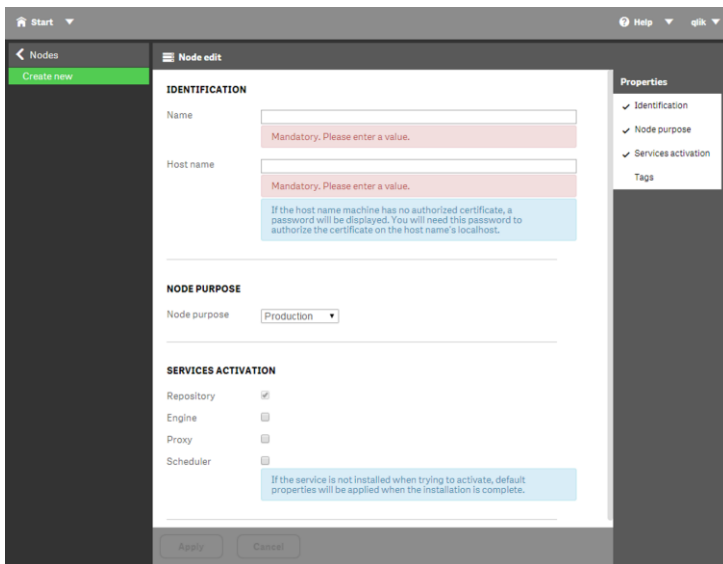
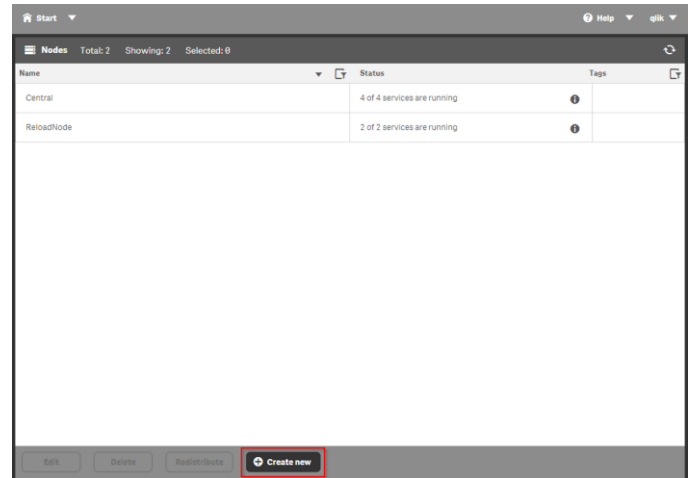
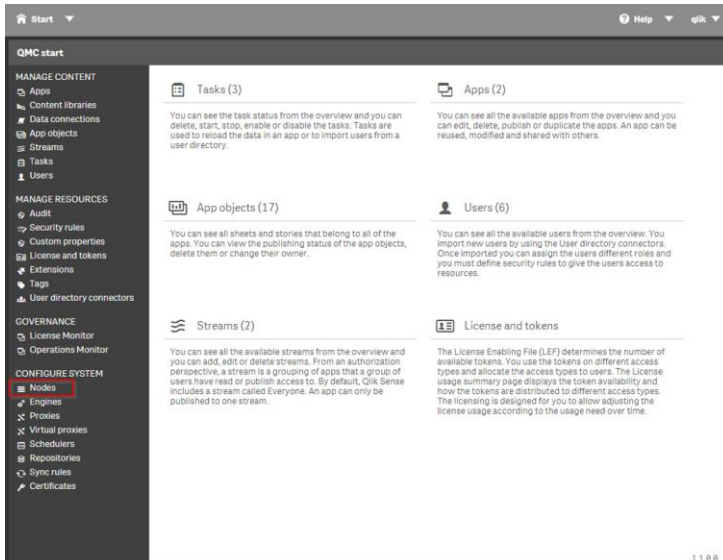
Run the link in a browser on server QS01
<http://localhost:4570/certificateSetup>
 Password XIdk7Ed1gF



Go to the server QS02 (Central Node) where you will see the scheduler node added to the configuration

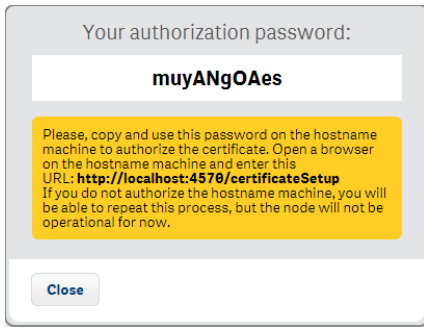


Consume Node – QS03

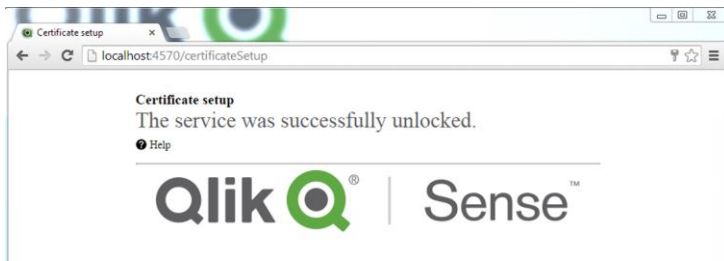
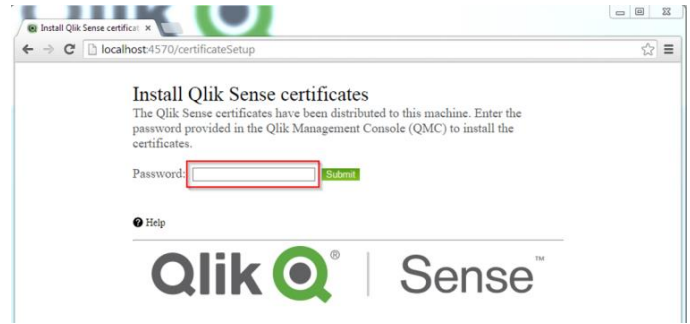


Go to server QS03, type the URL

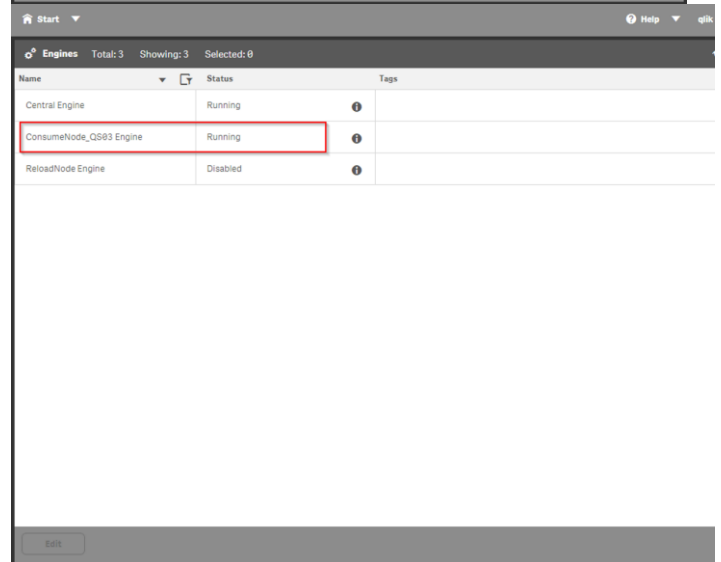
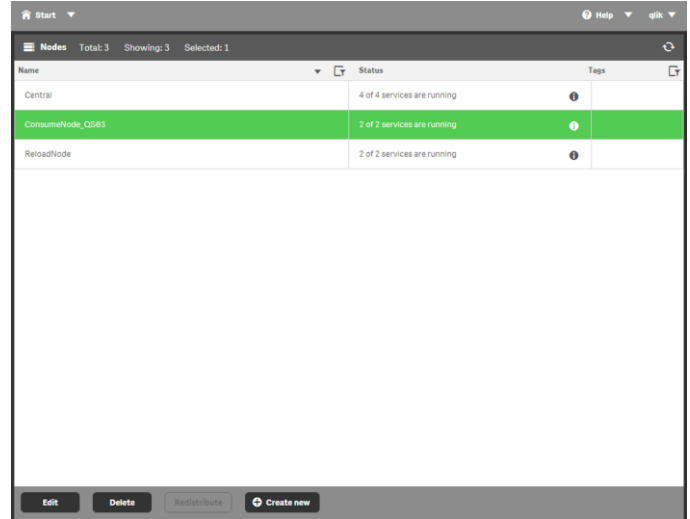
<http://localhost:4570/certificateSetup>



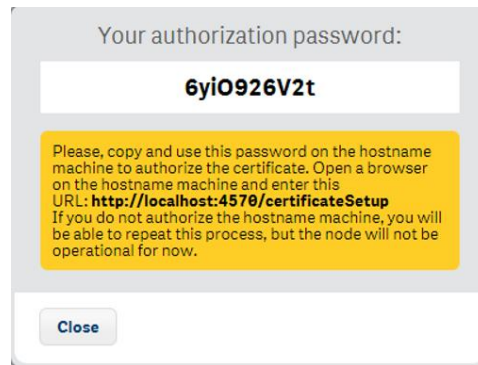
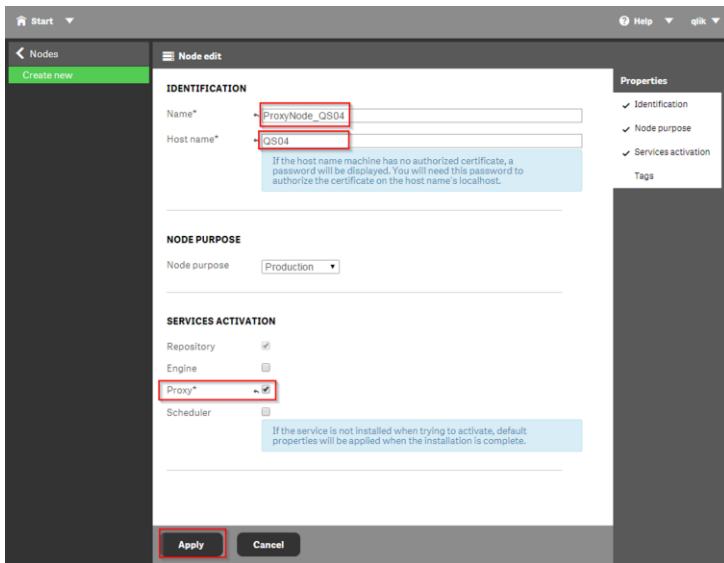
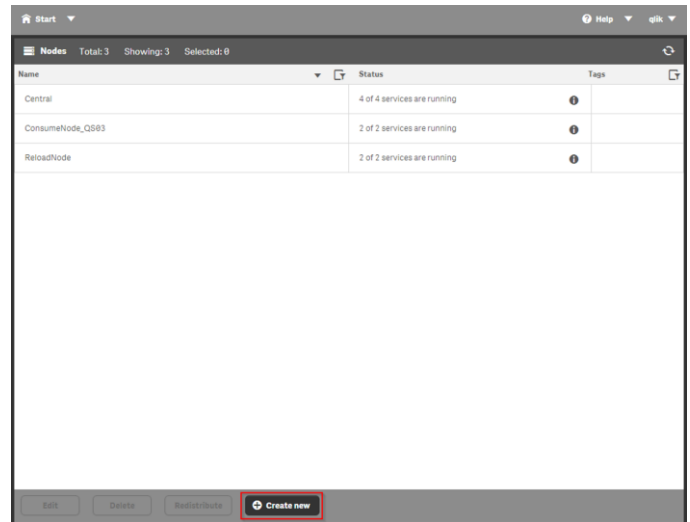
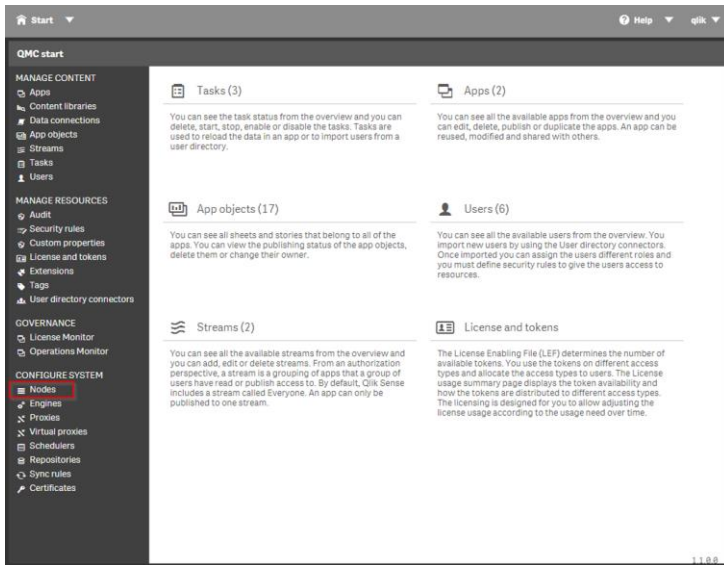
Password muyANgOaes



Validate if Engine is activated. Select "Engine" from the QMC start menu

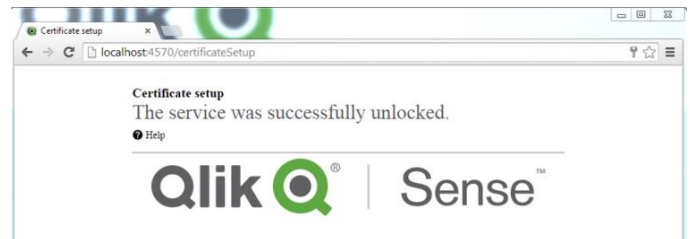
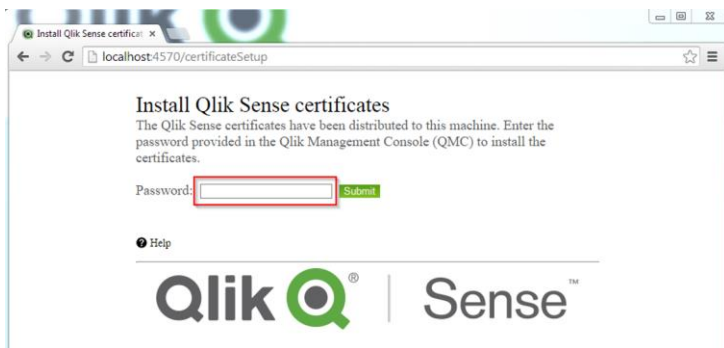


Proxy Node – QS04



Password 6yiO926V2t

Go to the server QS04 and paste the URL in the web browser <http://localhost:4570/certificateSetup>



You need to perform the following configuration on the proxy of the added rim node.
(This is necessary only when you installed proxy service on the rim node.)

Adding a node to “Load balancing nodes”.

Adding entries to "Web socket origin white list".

The screenshot shows the Qlik Sense QMC start page. The left sidebar contains a navigation menu with categories: MANAGE CONTENT, MANAGE RESOURCES, GOVERNANCE, and CONFIGURE SYSTEM. Under CONFIGURE SYSTEM, 'Virtual proxies' is highlighted with a red box. The main area displays overview cards for Tasks (3), Apps (2), App objects (17), Users (6), Streams (2), and License and tokens.

The screenshot shows the 'Virtual proxies' list in QMC. The table has columns for Description, Prefix, Session cookie header, and Default. The 'ProxyNode_QS04 Proxy (Default)' row is highlighted in green. At the bottom, the 'Edit' button is highlighted with a red box.

Description	Prefix	Session cookie header	Default
Central Proxy (Default)		X-Qlik-Session	true
ConsumeNode_QS03 Proxy (Default)		X-Qlik-Session	true
ProxyNode_QS04 Proxy (Default)		X-Qlik-Session	true
ReloadNode Proxy (Default)		X-Qlik-Session	true

The screenshot shows the 'Virtual proxy edit' form for 'ProxyNode_QS04 Proxy (Default)'. The 'LOAD BALANCING' section is active, showing a list of 'Server node' entries. The 'Add new server node' button is highlighted with a red box. A yellow warning message states: 'You must add server nodes to load balancing for users to be able to access apps.'

The screenshot shows the 'Add server nodes to load balance on' dialog. It displays a list of server nodes: Central, ConsumeNode_QS03, ProxyNode_QS04 (highlighted in green), and ReloadNode. The 'Add' button is visible at the bottom.

The screenshot shows the 'Virtual proxy edit' form for 'ProxyNode_QS04 Proxy (Default)'. The 'Websocket origin white list' section is active, showing a list of values: QS02 and QS04. Both entries are highlighted with red boxes.

The screenshot shows the 'Virtual proxy edit' form for 'ProxyNode_QS04 Proxy (Default)'. The 'LOAD BALANCING' section is active, and 'ProxyNode_QS04' is now listed as a server node in the 'Server node' list.

