

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 Microsoft Windows 7 (64-bit version only) Microsoft Windows 8.1 (64-bit version only)	Browser support	Google Chrome Microsoft IE10 or higher Mozilla Firefox (requires hardware acceleration, not supported in virtual environments)
Processors (CPUs)	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	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 Chome.

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

Prduct 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	XXXXXXXX
License Control Number	XXXXXXXX

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



1.1.8.9 has been installed successfully. Click Finish to exit the installer. Service startur and message Log fold Service startur and message Log fold Papository is running In The service was started without errors. In Proxy is running In The service was started without errors. In Scheduler is running In The service was started without errors. In Scheduler is running In The service was started without errors. In Scheduler is running In The service was started without errors. In Scheduler is running In The service was started without errors. In Scheduler is running In The service was started without errors. In Scheduler is running In The service was started without errors. In Scheduler is running In The service was started without errors. In	Installation summary	
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	Repository Database is running The service was started without errors.	

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

× Qlik Q° Sense	× Qlik Q' Sense	× Qlik Q' Sense
Installation location	Repository Database superuser password	Service credentials
Type the location, or click the button to browse to where you wish to install Qlik Sense.	Create a password for the Qlik Sense Repository Database superuser.	Enter user information for starting the services. Warning: Not entering any user information will result in the services being instituted with least entering entering entering.
C:\Program Files\Qiik\Sense	Confirm the password.	Username
Features Select the services you want to install.		Password
C Engine @		Repository Service
Scheduler @		Select a role for the Qik Sense Repository Service.
Repository Database @ The repository database is the database server running specifically for use by the Qlik Sense Repository Service. Deselect if another database is to be used as reconstrov	Back Next Cancel	Back Next Cancel



Consume Node – SQ03

× Qlik Q° Sense	× Qlik Q° Sense	× Qlik Q° Sense
Installation location	Repository Database superuser password	Service credentials
Type the location, or click the button to browse to where you wish to install Qlik Sense. Installation path	Create a password for the Qlik Sense Repository Database superuser. @	Enter user information for starting the services. Warning: Not entering any user information will result in the services being installed with local system service credentials. Username
Features		\.srv_Qlik Password
Select the services you want to install.		Repository Service
Proxy @		Select a role for the Qlik Sense Repository Service.
Back Next Cancel	Back Next Cancel	Back Next Cancel



Proxy Node – SQ04

Qlik Q [®] Sense [®]	Qlik Q Sense	Qlik Q Sense
stallation location	Service credentials	Ready to install
pe the location, or click the button to browse to where you wish to install Qlik	Enter user information for starting the services.	
istallation path	Warning: Not entering any user information will result in the services being installed with local system service credentials.	
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	.\srv_Qlik	
eatures	Password	
elect the services you want to install.		
Engine 🕢		
Proxy @	Select a role for the Olik Sense Repository Service.	
	Cantral and a	
Scheduler 🚱		
Repository Database 📀		
Back Next Cancel	Back Next Cancel	Back Install Cano



Configuration

Adding License Key

On the configuration system menu select "License"

Start ▼	✓ Successfully licensed
E Site license properties	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. ? Wiew the guide for Setting up your Qlik Sense site
✓ LEF access Get LEF and preview the license Get LEF and preview the license Construct and then press Apply to license your installation. Construct and then press Apply to license Solutions Solutions Construct and then press Apply to license Solutions Soluti	Close
Before you can begin working with the Qlik Management Console (QMC) you need to enter your license information.	
Apply Cancel	

Assign License Tokes





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

Jser name 🔻 🔽	User directory	User ID	Tags
qlik	Q\$02	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	

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l	User name 🔻 🔽	User directory	User ID	Tags [3
	sa_engine	INTERNAL	sa_engine		
	sa_proxy	INTERNAL	sa_proxy		
	sa_repository	INTERNAL	sa_repository		
	sa_scheduler	INTERNAL	sa_scheduler		
	srv_qlik	Q\$02	srv_qlik		



ame	▼ Ly User directory	Ly Sta	tus LT	Last used	LT	license and tokens
qlik	QS02	A	llocated			License usage summary
						 User access allocations

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.

		Ø Help ▼ srv_qlik ▼	R Start	•						0	Help 🔻 srv_qlik 🔻
QMC start			1 Users	Total: 6	Showing: 6	Selected: 1					0
MANAGE CONTENT	Tasks (3)	Apps (2)	Name	• 5	User directory	Gr User ID G	Admin roles	Inactive	T Blocked	T Removed externally	Er Tags Er
Content libraries Data connections	You can see the task status from the overview and you can	You can see all the available apps from the overview and you	qik	0	QS82	qlik		No	140	No	
App objects	delete, start, stop, enable or disable the tasks. Tasks are used to reload the data in an app or to import users from a user directory.	can edit, delete, publish or duplicate the apps. An app can be reused, modified and shared with others.	sa_engine	0	INTERNAL	sa_engine		No	No	No	
Tasks			sa_proxy	0	INTERNAL	sa_proxy		NO	NO	NO	
MANAGE RESOURCES	App objects (17)	Lusers (6)	sa_repositor	0	INTERNAL	sa_repository		No	No	No	
S Audic Security rules	You can see all sheets and stories that belong to all of the	You can see all the available users from the overview. You	sa_scriedule	. 0	INTERNAL	sa_scheduler	Destadoria	No	NO	NO	
Extensions	apps, you can view the publishing status of the app objects, delete them or change their owner.	Once imported you can assign the user directory connectors. Once imported you can assign the users different roles and you must define security rules to give the users access to	srv_quix	0	(2902	srv_qik	Rooseamin	NU	NO	NO	
 Tags User directory connectors 		resources.									
GOVERNANCE	Streams (2)	[▲Ξ] License and tokens									
및 License Monitor 및 Operations Monitor	You can see all the available streams from the overview and	The License Enabling File (LEF) determines the number of									
CONFIGURE SYSTEM	perspective, a stream is a grouping of apps that a group of users have read or publish access to. By default, Qik Sense includes a stream called Everyone. An ann can goly be	sensable tokens and allocate the access types to users. The License usage summary page displays the token availability and how the tokens are distributed to different access types									
e* Engines ☆ Proxies	published to one stream.	The licensing is designed for you to allow adjusting the license usage according to the usage need over time.									
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	Add role					AuditAdmin					
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	User ID qlik Blocked	Custom properties									
	Admin roles 🔨	Associated items									
	Role	Owned items									
	C Add role										
	RootAdmin	0									
	Apply Cancel										

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.





	Add new value	
S02		8

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.



4

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

A Start ▼	🕜 Help	🔻 qlik 🔻		
Nodes Total: 2 Showing: 2	Selected: 1			
Name	* G	Status	Tags	Gr
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Repositories Total: 2						Ð
Name	• [7	Status		Tags		(
Central Repository		Running	0			
ReloadNode Repository		Running	0			
Edit						

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

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Proxy Node – QS04



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

Production •

Node purp

SERVICES ACTIVATION Repository

Apply Cancel

X

•



If the service is not installed when trying to activate, defa

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".



If you do not authorize the hostname machine, you will be able to repeat this process, but the node will not be operational for now.

Close

Password 6yiO926V2t

Adding entries to "Web socket origin white list".





A Start ▼			🕑 Help 🔻 qlik 🔻
 Virtual proxies 	💥 Virtual proxy edit		
ProxyNode_QS04 Proxy (Def	Prefix		Properties
		The prefix must be unique for all virtual proxies used by the same proxy service, as this differentiates the virtual proxies and will be a part of the URL.	✓ Identification
	Is default virtual proxy	2	Authentication
	Session inactivity timeout (minutes)	30	 Load balancing
	Session cookie header	X-Qlik-Session	 Advanced
	name	The session cookie header name must be unique for all virtual proxies used by the same proxy service.	Integration
			Tags
	LOAD BALANCING		Custom properties
	Load balancing nodes		Associated items
	Server node		Proxies
		Add new server node	
	Central		
	ProxyNode_QS84		
	ADVANCED		
	Extended security environment		
		Select the checkbox to send extended information about the client environment to the engine: OS, device, browser and IP. Using extended client information will prevent shared app usage between devices and different browser types.	
	Apply Can		