Qlik GeoAnalytics Server Installation Guide

Qlik GeoAnalytics Server April 2018 (4.9)

This is a brief installation guide on how to install the Qlik GeoAnalytics Server for local hosting of services for Qlik GeoAnalytics.

This installation is for Windows Vista or later.

Note that keys and paths are examples and need to be modified for each installation.

This guide serves as an overview guide, please also see the installation guides for each individual product.

1. Prerequisites

Make sure Java 8 or Java 9 is installed, get one from
http://www.oracle.com/technetwork/java/javase/downloads/index.html if you
need one. The Java SE Server JRE is the preferred one. You should select the
64-bit version of Java if you have a 64-bit system.

The Server communicates with http and https. Make sure the ports used
(default 80 and 443) are open to the clients.

See the document *Qlik GeoAnalytics Server Requirements* for information on
required memory, CPU and disk.

2. Download

Download the Qlik GeoAnalytics Server installation (standalone server for
Windows) from the URL provided by Qlik.

3. Install

Run the Qlik GeoAnalytics Server installation program. Parameters set during
installation can be changed afterwards by rerunning the installer. They can
also be found in the file C:\ProgramData\Qlik GeoAnalytics Server\config.ini
(restart the Qlik GeoAnalytics Server service when changed).

3.1 Memory usage

The memory requirements depend on what data package you will use with
the server. For the normal map data package 2GB is enough. While with the
enterprise data package you should set it to at least 10GB (preferably 16GB)
as the GeoAnalytics operations and especially the route database requires a
lot of memory.
This is set in the installer when installing the GeoAnalytics Server and can be
configured later in the *Configure Service* tool, as *Maximum memory pool*
under the *Java* tab.

3.2 HTTPS

Note that you need to enable HTTPS if you use HTTPS for communicating
with your Qlik Server. Then you need to get a certificate for your site name,
self-signed does not work. The server needs the certificate and private key
bundled in either the Java KeyStore or the PKCS12 (.pfx, .p12) format.

You can export certificates from the windows certificate manager by right
clicking them, selecting All Tasks > Export.

You will need to select that it should export the private key, and on the Export File Format screen select PKCS #12 and to include all certificates in the certification path.

Then set a password and save it where it can be accessed by the Qlik GeoAnalytics Server.

Additional HTTPS related security settings like HSTS can also be enabled, see *9. Advanced settings* for more details.

3.3 Passwords

Only characters in the ASCII character set are supported in passwords. This applies to all passwords set during installation, including administrator, api and keystore passwords.

4. Login and add the Qlik GeoAnalytics Server license

Login to Qlik GeoAnalytics Server Admin Interface from the start menu (http://localhost:<port>/ravegeo/admin/) using the *admin* user and password created in the server installation. Use the port specified during installation (default 80).

Then go to the License Administration section and add the license by pasting the LEF you got from Qlik into the text area and clicking Add License.

In the field below you paste the LEF control number.

If the server has internet access it will check with the Qlik license servers daily to see if the LEF has been updated, but you can also force an update check by pressing the "Refresh" button.

If you do not have a license (LEF) for Qlik GeoAnalytics Server please contact a Qlik reseller.

5. Installing and configuring map data

Map data and instructions are available at the Qlik download site.

Follow the Qlik GeoAnalytics Data Package Installation Guide to install and configure the required map data.
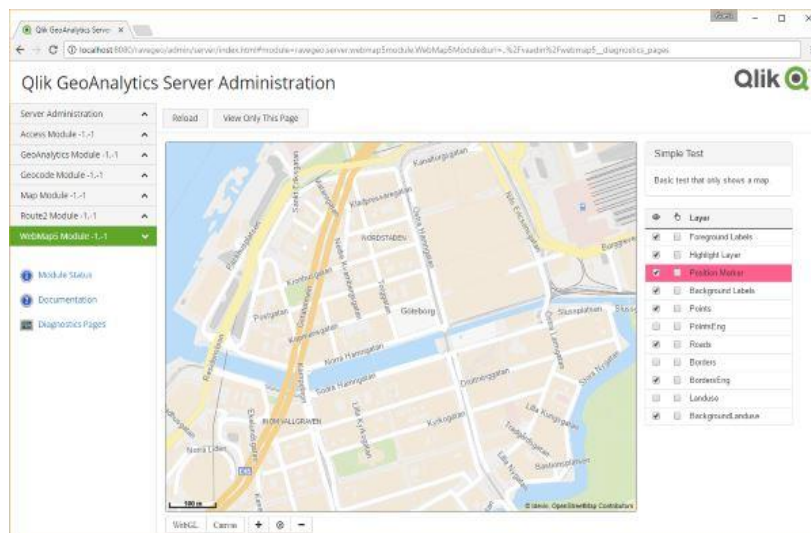
6. Checking the installation

To verify that the installation went well, check that we can display a map.

In the Qlik GeoAnalytics Server administration interface, go to:

WebMap5 Module -> Diagnostics Pages -> (default) Go To Diagnostics Pages -> Simple Test

It then should display a map that looks something like this:

In WebMap5 Module -> Module Status, there should be (versions might differ):

Configured WebMap Service: osm.15.6

Configured Geometry Services: default

Configured Vector Tile Services: osm.15.6

Configured Maps: tiledraster.15.6, default.16.6, plain.15.6

If you have any problems, check the log at:

Server Administration -> View Log

7. Using with Qlik Sense map

From Qlik Sense April 2018, the built-in map can use GeoAnalytics Server for getting map data. For this also GeoAnalytics Data Package 18.1 or newer is needed. First install the data package and follow the special instructions there to make it available for the Qlik Sense map. Then point the Sense map to the server by editing the file mapconf.json in
C:\Program Files\Qlik\Sense\Client\assets (or similar)
and set the URL to the server in the *serverUrl* property and the password you have chosen during data package installation for Sense map users in *serverKey*. Example:

```
{
  "serverUrl":"https://mysite.com",
  "serverKey":"abcdefg"
}
```

When this is done and Note, this file must be updated when Qlik Sense is updated.

8. Using with Qlik GeoAnalytics

When installing Qlik GeoAnalytics extensions and/or connector for Qlik Sense or QlikView, use the serial of the LEF you used as the server license (the first row of the LEF, 16 digits) as license key.

Do not forget to set the default server URL for them to the local server instead of the defaults pointing to https://maps.qlikcloud.com.

For Qlik Sense Server edit the file /Extensions/ideviomap/settings.js to
define(
{
*   "server": "https://myurl.com"*
}
);
For Qlik Sense Desktop the default url can be changed on step 3 of the GeoAnalytics setup.

For the connector, set *serverURL* in the file
IdevioGeoAnalyticsConnector.exe.config which normally is at both:

- *C:\Program Files\Common Files\Qlik\Custom Data\QvIdevioConnector* (for Qlik Sense)
- *C:\Program Files\Common Files\QlikTech\Custom Data\QvIdevioConnector* (for QlikView)

9. Advanced settings

By editing C:\ProgramData\Qlik GeoAnalytics Server\config.ini you can enable more advanced features like HSTS, here is a list of additional settings available:

Setting	Type	Default	Description
stsMaxAgeSeconds	Integer	-1	Enables HSTS and sets max-age to the specified value. Disabled if negative.
stsIncludeSubdomains	Boolean	false	Sets `includeSubDomains` on the HSTS header
disableGzip	Boolean	false	Disables GZIP compression
disableRemoteAdmin	Boolean	false	Disables access to the admin GUI from other computers
sslKeystoreType	String		Certificate key store type. Set to *pkcs12* for using PKCS#12 certs in Java 7.

They can be added anywhere in the config file, they don't need to be under a specific section.

8.1 IP address / referrer pseudo anonymization for logs

There is now a setting for making all logged IP addresses and referrer information pseudo anonymous.
When enabled, logged referrer headers will be stripped down to only contain protocol, host, and port number. IP addresses will be masked so that for IPv4 the last octet will be set to 0, while IPv6 addresses the last 80 bits will be zeroed.
To enable this, add an attribute called *anonymizeLogging* to the root tag in the file *C:\ProgramData\Qlik GeoAnalytics Server\server3\config\ServerSettings.xml* and set it to *true*.

10. Troubleshooting

If the server fails to start, a good place to start investigating is the logs folder at C:\ProgramData\Qlik GeoAnalytics Server\server3\logs.

Log file	Description	Check if
daemon.[date].log	Service log	Service does not start
jetty.log	Jetty log	Service or server fails
main.log	Main server log	Server error or GeoAnalytics does not work

Service does not start after install

Check the log folder, does it contain the file jetty.log? If so open it and check the end.

The error "java.net.BindException: Address already in use: bind" means that there is already another program using the port you selected for Qlik GeoAnalytics Server. Either disable / reconfigure that program or change the port for Qlik GeoAnalytics server.

Service fails with error code 1 / daemon log complains about Win32

You get this if the service tries to use 32 bit Java on a 64 bit system.

Make sure that you have 64 bit Java installed and then either:

- Uninstall all versions of 32 bit Java if not needed.
- Or, force the service to use 64 bit Java by opening the service config tool at Start Menu -> Qlik GeoAnalytics Server -> Configure Service. Then go to the Java tab, uncheck *Use default* and as *Java Virtual Machine* you select the file bin\client\jvm.dll (jre\bin\server\jvm.dll if you use JDK) in the Java home folder, usually in Program Files\Java\[java version]\.

11. Links to more info

http://bi.idevio.com/

http://developer.idevio.com/ravegeoserver/

http://www.oracle.com/technetwork/java/javase/downloads/index.html