Contents

1. Introduction ................................................................................................................................................. 1
2. Qlik Insight Bot licensing .......................................................................................................................... 1
3. System requirements ................................................................................................................................... 1
   3.1 Hardware .................................................................................................................................................. 1
       Processors .................................................................................................................................................. 1
       Memory ...................................................................................................................................................... 1
       Storage ..................................................................................................................................................... 2
   3.2 Software .................................................................................................................................................. 2
       Platforms .................................................................................................................................................. 2
       Chat platforms (channels) ...................................................................................................................... 2
       Supported browsers ............................................................................................................................... 2
       Supported languages .............................................................................................................................. 2
       Qlik Insight Bot Compatibility Matrix with Qlik Sense ........................................................................ 2
4. Ports ............................................................................................................................................................ 3
5. User accounts ............................................................................................................................................... 4
6. Architecture ............................................................................................................................................... 5
   6.1 Certificates ............................................................................................................................................. 5
7. Before you install ........................................................................................................................................ 5
   7.1 Exporting Qlik Sense certificates ......................................................................................................... 5
   7.2 Configuring Internet Information Services (IIS) .................................................................................... 6
   7.3 .NET Framework 4.7.1 or later ............................................................................................................... 9
   7.4 Opening the required ports in the firewall ............................................................................................. 10
   7.5 Right to create a sheet in Qlik Sense ..................................................................................................... 13
   7.6 Windows user group for QIB Administrators ....................................................................................... 14
   7.7 Security rules for Qlik Insight Bot access ............................................................................................. 14
8. Installation and configuration ..................................................................................................................... 16
   8.1 Install Qlik Insight Bot Applications ....................................................................................................... 16
   8.2 Install Qlik Insight Bot Services ............................................................................................................ 16
   8.3 Install Qlik Insight Bot Narrative service ............................................................................................. 16
   8.4 Install and configure Qlik Insight Bot NLU Service ............................................................................. 17
       Run the database script .......................................................................................................................... 17
   8.5 Install Qlik Insight Bot Duckling ........................................................................................................... 18
   8.6 Set up the Qlik Sense certificates ........................................................................................................... 18
Contents

Steps to install the root certificate ...........................................................................................................19
Steps to move the PEM format certificates .................................................................................................20
8.7 Configure Qlik Insight Bot Applications ..............................................................................................20
8.8 Configure Qlik Insight Bot Web Services ..............................................................................................28
Configure the Qlik Insight Bot engine service ..........................................................................................28
Configure Qlik Insight Bot management service .......................................................................................31
Configure Qlik Insight Bot NLP service ....................................................................................................34
Configure the portal ..................................................................................................................................37
8.9 Install Qlik Insight Bot Webchat service ...............................................................................................39
8.10 Install Qlik Insight Bot Slack engine service .........................................................................................39
8.11 Install Qlik Insight Bot SFB online service ..........................................................................................39
Appendix I – Mapping Qlik Sense node host name with its IP address ......................................................40
Appendix II – Getting the port for PostgreSQL ..........................................................................................40
Appendix III – Give Access to PostgreSQL ...............................................................................................40
1. Introduction

To use Qlik Insight Bot, you must install Qlik Insight Bot components as part of the Qlik Sense Enterprise deployment. You can run Qlik Insight Bot on the central node, or on a dedicated server.

You may also need to install Qlik Insight Bot components for third party platforms such as Slack or Microsoft Teams.

Versions of Qlik Sense earlier than February 2020 require the Webchat Service.

All components are available on the Qlik download site.

Required:

- Qlik Insight Bot Applications.exe
- Qlik Insight Bot Services.exe
- Qlik Insight Bot Narrative Service.exe
- Qlik Insight Bot NLU.exe
- Qlik Insight Bot Duckling.exe

Optional:

- Qlik Insight Bot Slack Engine Service.exe
- Qlik Insight Bot SFB Online Service.exe
- Qlik Insight Bot Webchat Service.exe (with Qlik Sense Enterprise June 2019 to Nov 2019 only)

2. Qlik Insight Bot licensing

A Qlik Insight Bot license is either:

- For Webchat in the Qlik Sense hub and extension (apps) only.
- For Webchat in the Qlik Sense hub and extension, and also for third-party chat platforms (Slack, MS Teams and Skype for business).

You apply the license as part of the installation of Qlik Insight Bot.

The Qlik Insight Bot license is part of the Qlik Sense Enterprise for Windows (QSEfW) license. Qlik Insight Bot is licensed as subscription only. However, a Qlik Insight Bot license can be added to any Qlik Sense Enterprise for Windows license.

For more information about Qlik Sense licensing, see Qlik product licenses on the Qlik help site.

3. System requirements

To install and run Qlik Insight Bot, you must meet minimum system requirements for the servers and the users.

3.1 Hardware

Processors
CPU cores: 8 minimum

Memory
32 GB minimum
Storage
Hard Disk Space: 25 GB minimum

3.2 Software

Platforms

1. Insight Bot Windows components
   a. Server Operating System
   i. Windows Server 2019
   ii. Windows Server 2016
   iii. Windows Server 2012 R2
   b. For development and test purposes
      i. Windows 10
      ii. Windows 8.1
2. Internet Information Services (IIS) (Configuring Internet Information Services (IIS))
3. .NET framework 4.7.1 or later

Chat platforms (channels)
Chat platform(s) (based on user requirement)
- Webchat on Qlik Sense Hub
- Webchat using extensions
- Slack
- Microsoft Teams
- Skype for Business (Online)

Supported browsers
For the Qlik Insight Bot Management Console, Google Chrome is required.

Supported languages
Qlik Insight Bot is available in English only.

Qlik Insight Bot Compatibility Matrix with Qlik Sense
Qlik Insight Bot supports with specific Qlik Sense Enterprise versions.

<table>
<thead>
<tr>
<th>Qlik Insight Bot Version</th>
<th>Nov 2019</th>
<th>Feb 2020</th>
<th>Feb Patch 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Qlik Sense Version</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 2019</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep 2019</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov 2019</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb 2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 2020</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Webchat installed with Qlik Sense
- Webchat Service is required to be installed separately
## 4. Ports

Required ports on Qlik Insight Bot servers.

<table>
<thead>
<tr>
<th>Service</th>
<th>Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qlik Insight Bot Engine Service</td>
<td>4434</td>
</tr>
<tr>
<td>If you are going to use Slack, MS Teams and Skype for Business (online) channels, this port must be open for an external network. For Qlik Sense Enterprise for Windows February 2020, this port must be accessible from where the Qlik Sense Service Dispatcher is installed. For Qlik Sense Enterprise June 2019 to Nov 2019, this port must be accessible from the machine where the Qlik Insight Bot Webchat Service is installed.</td>
<td></td>
</tr>
<tr>
<td>Qlik Insight Bot portal</td>
<td>4435</td>
</tr>
<tr>
<td>If the portal needs to be accessible from outside the machine where it is installed, this port must be open.</td>
<td></td>
</tr>
<tr>
<td>Qlik Insight Bot Management Service</td>
<td>4436</td>
</tr>
<tr>
<td>It is not required to expose this port to outside the machine.</td>
<td></td>
</tr>
<tr>
<td>Qlik Insight Bot NLP Service</td>
<td>4437</td>
</tr>
<tr>
<td>It is not required to expose this port to outside the machine.</td>
<td></td>
</tr>
<tr>
<td>Qlik Insight Bot NLU Service</td>
<td>5000</td>
</tr>
<tr>
<td>This port must be accessible from the machines where Qlik Insight Bot engine service, NLP service, and deployment services are installed.</td>
<td></td>
</tr>
<tr>
<td>Qlik Insight Bot Duckling Service</td>
<td>8000</td>
</tr>
<tr>
<td>It is not required to expose this port to outside the machine.</td>
<td></td>
</tr>
<tr>
<td>Qlik Insight Bot Narrative Service</td>
<td>8001</td>
</tr>
<tr>
<td>It is not required to expose this port to outside the machine.</td>
<td></td>
</tr>
<tr>
<td>Qlik Insight Bot Webchat Service</td>
<td>4431</td>
</tr>
<tr>
<td>Required open in network to access webchat on hub and extension from Qlik Sense app.</td>
<td></td>
</tr>
</tbody>
</table>

If Qlik Sense Enterprise and Qlik Insight Bot are installed on separate machines, Qlik Sense must be accessible from the Qlik Insight Bot machine. The following ports must be open on the central node of your Qlik Sense
User accounts

deployment. For more information about Qlik Sense Enterprise ports, see Ports overview in the Qlik Sense for administrator help.

<table>
<thead>
<tr>
<th>Port</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>443</td>
<td>Qlik Sense Proxy Port or the port on which Qlik Sense hub is accessible. It is required to access the charts created in Qlik Sense using chart links created by Qlik Insight Bot.</td>
</tr>
<tr>
<td>4242</td>
<td>Used by Qlik Sense Repository Rest API. Qlik Insight Bot communicates with Qlik Sense Repository API on this port.</td>
</tr>
<tr>
<td>4747</td>
<td>This port is used by Qlik Sense Engine Service Rest API. Qlik Insight Bot communicates with Qlik Sense Engine API on this port.</td>
</tr>
<tr>
<td>4243</td>
<td>This port is used by Qlik Sense Proxy Service Rest API. Qlik Insight Bot communicates with Qlik Sense Proxy API on this port.</td>
</tr>
<tr>
<td>9200</td>
<td>This port is used by Qlik Sense License Service Rest API. Qlik Insight Bot communicates with Qlik Sense Licensing API on this port for getting license information.</td>
</tr>
</tbody>
</table>

5. User accounts

For installation and configuration, you need:

- a Windows user with administrator rights on the central node of Qlik Sense Enterprise and on the server where you will install Qlik Insight Bot, if not the same
- a user with root admin privileges in Qlik Sense

For administration, you need:

- a user group in Windows that you create and name Qlik Insight Bot Administrators. Add your administrators to that group.

Requirements for users depend on how you plan to use Qlik Insight Bot:

- To use Qlik Insight Bot, users must be named users in the Qlik Sense Enterprise Management Console, so that Qlik Sense can authenticate users and manage permissions within the apps.
- To be able to click through to an app, users must be identified in a security rule that you create in the QMC.
- For Qlik Insight Bot to be able to create on-the-fly sheets and answers for users, those users must have the correct permissions to create sheets and charts in the app, and therefore must have the appropriate license.
- To receive alerts, to use EmailMe, or to use Slack or MS Teams or Skype for Business, users in the QMC must have associated email addresses.
6. Architecture

Qlik Insight Bot is made up of

- the chat clients for the Qlik Sense hub
- optional chat clients for Qlik Sense apps (a Qlik Sense extension), and for Slack for Skype for Business (via an Azure bot or directly)
- the Configuration application
- the Qlik Insight Bot Management console
- windows and web services

6.1 Certificates

Qlik Insight Bot NLU and Narrative services, and the Qlik Insight Bot web services need a valid SSL certificate (root.cer).

Qlik Insight Bot services need a Qlik Sense client certificate in Windows format from

- the central node
- each rim node with a Qlik Sense Enterprise engine in a Qlik Sense deployment

These certificates are to authenticate users and to determine authorizations for apps and data.

Qlik Insight Bot also needs a set of Qlik Sense certificates in PEM format on the same server as the Qlik Insight Bot server.

For more information, see the installation instructions (Set up the Qlik Sense certificates)

7. Before you install

Before you install Qlik Insight Bot, you must

- export certificates from Qlik Sense Enterprise for Windows
- configure Internet Information Services (IIS)
- install .Net framework 4.7.1 or later
- open ports
- set up user permissions

7.1 Exporting Qlik Sense certificates

During the installation steps for Qlik Insight Bot, you will need certificates from your Qlik Sense Enterprise for Windows installation. You export these from the QMC.

For information about Qlik Sense certificates, see Exporting certificates through the QMC in the Qlik Sense administrator help.
Before you install

Steps to export Qlik Sense certificates
1. In the Qlik Management Console (QMC), go to Certificate under Configuration System on the left pane.
2. Click Add machine name:
   - In the Machine name box, type the full computer name of the computer that you are creating the certificates for.
   - Do not set a password.
   - Check “Include secret key”.
   - Select Windows Format as “Export file format for certificates”.
3. Confirm that you have not set a password, and then click Export Certificates.
4. Change the format to Platform independent PEM-format and then click Export Certificates again.

   Certificates are exported to the central node of the Qlik Sense Enterprise deployment. The physical path where the certificates are stored is:
   C:\ProgramData\Qlik\Sense\Repository\Exported Certificates\<Machine Name>
5. If you are installing Qlik Insight Bot on a separate machine, copy all 8 certificate files to a folder on that machine.

7.2 Configuring Internet Information Services (IIS)
To host the Qlik Insight Bot Web Services on IIS, you must enable certain features of IIS.
1. Open Server Manager.
2. From the Manage menu, click Add Roles and Features.
3. Click **Next**.
4. Select **Role-Based or Feature-Based Installation** and click **Next**.

5. Select the appropriate server (local is selected by default) as shown and click **Next**.

6. Select **Web Server (IIS)** and click **Next**.

7. Ignore the **Features** tab and go on.
8. Click **next**.
9. Select the following and click **next**.
   - In Web Server
     - In Common HTTPS Features
       - Default Document
       - Directory Browsing
       - HTTP Errors
       - Static Content
     - In Health and Diagnostics
       - HTTP Logging
       - Request Monitor
       - Tracing
     - In Performance Features
       - Static Content Compression
     - In Security
       - Request Filtering
       - Windows Authentication
     - In Application Development Features
       - ASP
       - ASP.NET 4.5/4.6/4.7
       - CGI
       - ISAPI Extensions
       - ISAPI Filters
       - WebSocket Protocol
   - In Management Tools
     - IIS Management Console
10. Click **Install.**

11. Once the installation is complete, click **Close.**
   For a detailed guide, visit [this](#).

### 7.3 .NET Framework 4.7.1 or later

Check what version of the .NET Framework is installed on your machine.

1. Open **CMD.**
2. Go to `C:\Windows\Microsoft.NET\Framework\v4.0.30319` directory.
3. Execute the command `MSBuild.exe -version`.

If you don’t have .NET Framework 4.7.1 or later installed on your machine, download and install it now. For the installer and instructions, see the Microsoft Download Center [here](#).
7.4 Opening the required ports in the firewall

Ports 443, 4431 (for prior version of QSE Feb 2020), 4434, 4435 (optional), and 5000 (optional) must be open in the firewall (inbound) to access Qlik Insight Bot web services from outside the network. Port 4435 allows access to the Qlik Insight Bot portal.

For detailed information, see Ports.

If Qlik Insight Bot is installed on a different machine from Qlik Sense, ports 443, 4242, 4747 and 4243, and 9200 must be open in the firewall where Qlik Sense is installed.

Do the following:
1. Open Windows firewall. Click Advanced settings from left pane.
2. Click Inbound Rules.
3. Click New Rule… under Actions in right pane.
4. Select Port option, click Next.
5. In Protocol and Ports:
   - select TCP
   - select **Specific local ports** and enter **443, 4434, 4435, 5000**, and then click Next.
6. In **Action** section, select **Allow the connection**, click **Next**.

7. In **Profile** section, check for **Domain**, **Private** and **Public**, click **Next**.
8. Give an appropriate **Name** and **Description**, and then click **Finish**.

9. Follow the same steps to set **Outbound Rules** for the ports mentioned above. Also, change the action to **Allow the connection** at the time of creating the outbound rules.

**Important:** Make sure the ports used by **Qlik Sense Services** are open in firewall if Qlik Sense and Qlik Insight Bot are on separate servers.

### 7.5 Right to create a sheet in Qlik Sense

When a user asks a question that will require a chart which is not already present in master visualizations, Qlik Insight Bot creates a chart on the fly. The on-the-fly chart object is created in a new sheet of the Qlik Sense app. Therefore, the user must have permission to create sheets. If you don’t want users to create charts in Qlik Sense, this rule is not needed. This will not affect the Qlik Insight Bot response.

Update the Stream rule from Security Rules in QMC if necessary.
7.6 Windows user group for QIB Administrators

In the Windows machine where Qlik Insight Bot is going to be installed, a user group must be created named “Qlik Insight Bot Administrators”. Add members in this group to whom you want to give access to configure and administer the Qlik Insight Bot.

![User Group Window](image)

7.7 Security rules for Qlik Insight Bot access

In the Qlik Sense QMC, create a security rule for Qlik Insight Bot access. The resource filter must be QIBUser_* and the action is one of the following:

- Read, for most cases
- Read and update, in which case users can force refreshes the connections of all users and settings from the chatbot

For example, to give all named users access to Qlik Insight Bot (user name not equal to null), enter the following condition:

```plaintext
((user.name!=""))
```
Before you install

Note: Root Admin will have access to Qlik Insight Bot regardless of rule.
Installation and configuration

8. Installation and configuration
You install and configure each component of Qlik Insight Bot separately in below order. See below for detailed instructions.

- Install Qlik Insight Bot Applications
- Install the Qlik Insight Bot Services
- Install the Qlik Insight Bot Narrative Service
- Install Qlik Insight Bot NLU
- Install Qlik Insight Bot Duckling
- Copy the required Qlik Sense certificates
- Configure Qlik Insight Bot Applications
- Configure the services in IIS

If you are using version of Qlik Sense Enterprise June 2019 to Nov 2019, you must also install the Webchat service (this component is part of the Qlik Sense Enterprise installation in later versions of Qlik Sense Enterprise):

- Qlik Insight Bot Webchat Service (Install Qlik Insight Bot Webchat service)

As well as using Qlik Insight Bot from the Qlik Sense hub, you can install it for your Slack or Skype for Business users directly, or by using an Azure Web bot. For instructions about setting up an Azure bot, see Creating a Bot in Azure. If you do not use Azure, you must install the appropriate service.

- Qlik Insight Bot Slack Engine Service (Install Qlik Insight Bot Slack engine service)
- Qlik Insight Bot SFB Online Service (Install Qlik Insight Bot SFB online service)

8.1 Install Qlik Insight Bot Applications
Qlik Insight Bot Applications installs the Configuration tool, for managing the Qlik Insight Bot deployment, and the portal, for managing Qlik Sense apps and users.

Run Qlik Insight Bot Applications.exe as an administrator. When complete, you will have:

- Qlik Insight Bot Configuration: A Windows application
- Qlik Insight Bot Portal – a web application to manage Qlik Sense apps and user access. For more information, see the Qlik Insight Bot Portal guide.

8.2 Install Qlik Insight Bot Services
Run the Qlik Insight Bot Services setup file in administrator mode. Once finished successfully, you should have:

- Web services - IIS
  - Qlik Insight Bot Engine Service
  - Qlik Insight Bot Management Service
  - Qlik Insight Bot NLP Service
- Windows Service
  - Qlik Insight Bot Deployment Engine Service

8.3 Install Qlik Insight Bot Narrative service
Run the Qlik Insight Bot Narrative Service setup file in Administrator mode.
8.4 Install and configure Qlik Insight Bot NLU Service

NLU can be installed on the same machine as other QIB services or on separate machine. It creates and uses separate database in PostgreSQL for storing metadata. You can install separate PostgreSQL if installing on separate machine or can utilize the one which is installed with other QIB Services.

1. Run the Qlik Insight Bot NLU Service setup in Administrator mode.
2. Provide the hostname/IP of the machine where PostgreSQL is installed (default is localhost). Make sure if PostgreSQL is reachable on the host/IP and port (default is 5432).
3. Provide the database password

Run the database script

If you are installing the NLU service on the same machine as the other Qlik Insight Bot services, you must update the database as follows.

1. Open C:\ProgramData\Qlik Insight Bot\DB Script
   You will find below files.
   a. qib_nlu_db_1_3_0.bat – Creates DB
   b. qib_nlu_db_1_3_0.sql
2. Right click on batch file qib_nlu_db_1_3_0.bat and run as administrator.
3. In command line window, enter
   a. Hostname as localhost
   b. Database owner/user
   c. Path to qib_nlu_db_1_3_0.sql file
Installation and configuration

4. This will create the schema in the PostgreSQL.

If you are installing the NLU service on a different machine from the other Qlik Insight Bot services, then you must update the database as follows.

1. Install PostgreSQL 11 on the server where NLU is installed or ensure that the PostgreSQL installed on the Qlik Insight Bot machine is shared. For instructions, see Appendix III.

2. In case of shared PostgreSQL, follow above steps (1-4) as mentioned above and go to step 7 here.

3. If separate PostgreSQL is installed, open C:\Program Files (x86)\Qlik Insight Bot\Qlik Insight Bot NLU Service\DB script

You will find below files.

a. qib_nlu_db_1_3_0.bat – Creates DB
b. qib_nlu_db_1_3_0.sql

4. Right click on batch file qib_nlu_db_1_3_0.bat and run as administrator. This should be run on the machine where PostgreSQL 11.0 is installed.

5. In a command line window, enter

   a. Hostname as localhost
   b. Database owner/user
   c. Path to qib_nlu_db_1_3_0.sql file
   d. Password of PostgreSQL

6. This will create the schema in the PostgreSQL.

7. Copy C:\ProgramData\Qlik Insight Bot to NLU server at same location.

8.5 Install Qlik Insight Bot Duckling

Run the Qlik Insight Bot Duckling setup file in Administrator mode.

8.6 Set up the Qlik Sense certificates

Install the root certificate into the certificate store for the server where you are installing Qlik Insight Bot. If Qlik Sense and Qlik Insight Bot are on same server, it is not required to install root certificate. Please make sure that root certificate is installed. You can check it from MMC on windows.

Move the PEM format Qlik Sense certificates to the Qlik Insight Bot program data, so that they will be available to the Narrative, Duckling, and NLU services.

You set up the remaining certificates when you configure the Qlik Insight Bot web services in IIS.
Steps to install the root certificate

1. Go to the folder with the certificates that you exported from Qlik Sense.
2. Double-click on the root certificate (root.cer) and install it:
   - Under **Store Location**, ensure you select **Local Machine**
   - Browse to select the certificate store **Trusted Root Certification Authorities**

<table>
<thead>
<tr>
<th>Name</th>
<th>Date modified</th>
<th>Type</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>client.pem</td>
<td>1/29/2020 9:28 AM</td>
<td>PEM File</td>
<td>2 KB</td>
</tr>
<tr>
<td>client</td>
<td>1/29/2020 8:58 AM</td>
<td>Personal Information</td>
<td>3 KB</td>
</tr>
<tr>
<td>client_key.pem</td>
<td>1/29/2020 9:28 AM</td>
<td>PEM File</td>
<td>2 KB</td>
</tr>
<tr>
<td>root</td>
<td>1/29/2020 8:58 AM</td>
<td>Security Certificate</td>
<td>1 KB</td>
</tr>
<tr>
<td>root.pem</td>
<td>1/29/2020 9:28 AM</td>
<td>PEM File</td>
<td>2 KB</td>
</tr>
<tr>
<td>server.pem</td>
<td>1/29/2020 9:28 AM</td>
<td>PEM File</td>
<td>2 KB</td>
</tr>
<tr>
<td>server</td>
<td>1/29/2020 8:58 AM</td>
<td>PEM File</td>
<td>4 KB</td>
</tr>
<tr>
<td>server_key.pem</td>
<td>1/29/2020 9:28 AM</td>
<td>PEM File</td>
<td>2 KB</td>
</tr>
</tbody>
</table>

To confirm that the certificate is installed, you can go to the MMC and check. You should see the server name of your Qlik Sense server in the Trusted Root Certification Authorities list, with a current expiry date.
Steps to move the PEM format certificates

1. Go to the folder with the certificates you exported from Qlik Sense and copy root.pem, server.pem, and server_key.pem.
2. Paste them into C:\ProgramData\Qlik Insight Bot\Certificate.
3. From the Internet Information Services (IIS) Manager, restart the server.
4. In Windows, restart any of the Qlik Insight Bot services already installed:
   - Qlik Insight Bot Deployment Service
   - Qlik Insight Bot Duckling Service
   - Qlik Insight Bot Narrative Service
   - Qlik Insight Bot NLU Service

8.7 Configure Qlik Insight Bot Applications

Open Qlik Insight Bot Configuration Application from desktop. You must log in with a Windows user that belongs to the Qlik Insight Bot Administrators group that you created in Windows earlier. For more information, see Security rules for Qlik Insight Bot access.

1. In the Qlik configuration tab, enter the following and then click Connect:
   - QRS URL: The URL of the Qlik Sense server. In a multi-node installation, this is the URL of the central node. If you are installing Qlik Insight Bot on the same machine as Qlik Sense, use localhost. E.g. https://localhost or https://qliksense.domain.com
   - The Qlik Sense Repository Service port is 4242 by default.
   - Qlik User ID: A Qlik Sense user id with “Root Admin” access.
   - Qlik User Directory: Name of the User Domain Directory from Qlik Sense.
   - Certificate: The client certificate that you exported from Qlik Sense. E.g. C:\ProgramData\Qlik\Sense\Repository\Exported Certificates\<Machine Name>
2. Click Connect.
   Qlik Insight Bot retrieves the license information and verifies that Qlik Sense is licensed to use Qlik Insight Bot. A success message appears, the Qlik Sense streams appear in the Stream dropdown, and proxies appear in the list on the right.
3. From the Stream dropdown list, select the streams you want to make available for Qlik Insight Bot.
4. Node Status Check Interval: Set time interval to check status of nodes allocated for Qlik Insight Bot Multi-Node.
5. Configure each node which will communicate with Qlik Insight Bot (usually, each node with a Qlik Sense engine installed).
   - Proxies: Select the Proxy from the list of available proxies.
   - Virtual Proxies: Select the Virtual proxy from the list of available virtual proxies.
   - External URL: The URL of the Qlik Sense server. A Single Configurator URL points to an on-the-fly Qlik Sense object and is sent as a link to you when you demand a chart from Qlik Insight Bot. E.g. https://qliksense.domain.com Do not use “localhost” as a value here.
   - Node: Select Load Balancer node. This node will be used by Qlik Insight Bot to interact with Qlik Sense.
   - Certificate: The client certificate of the node you have selected. E.g. C:\ProgramData\Qlik\Sense\Repository\Exported Certificates\<Machine Name>
6. Click Test Connection. If the connection is successful, click Add.
The proxy appears in the table below.

**Note:** Qlik Insight Bot can connect to a Qlik Sense server only by means of the host name of the Qlik Sense node. When the host name of Qlik Sense node is not bound to its domain, you must map the host name of Qlik Sense node with its IP address.

Refer to Appendix I for the steps to map the host name of Qlik Sense node with its IP address.

7. In the **System** tab under **Database**, configure the postgres database installed with Qlik Insight Bot, and change the password if needed. Once you enter the password, click Create Database (Create Database) to create a database, and then click **Save** to save all details.

- **Name:** qlikinsightbot
- **Port:** Enter PostgreSQL port, which is "5432" by default.
  
  **Note:** See Appendix II for instructions on how to check and verify the PostgreSQL port.
- **User:** Superuser Name of Postgres which is postgres by default.
- **Password:** Password of the Superuser of Postgres (default: “postgres”).

**Azure Bot**

Enter the **Microsoft App Id**, **Microsoft App Password**, **Storage Connection String (optional)** of any bots which have been created. For more information see the Creating A Bot in Azure user guide.

**Alert**

Check "Enable" to send alert(s) email to user. (By default, it is enabled.) Alerts are only sent when the following are true:

1. Alerts are enabled from the Configuration application.
2. The Qlik Sense app was reloaded (minimum time difference between Qlik Sense application reloads is 2 hours).
3. The alert condition(s) fulfilled.

Alerts can be set to trigger once or recurring.

1. **Once:** Default, it is set to Once. Alert will trigger once and then disabled.
2. **Recurring:** An alert will be sent every time when Qlik Sense application reloads, and condition(s) matched.

**Set Limit:** Maximum number of alerts a user can set.
8. From **Network Configuration** section, you can configure SMTP to enable **Alert me** and **Email me** features.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SMTP Server</strong></td>
<td>The host name of the SMTP (Simple Mail Transfer Protocol) server of email ID entered in Email which will be used to send mails for Alert me, email me features.</td>
</tr>
<tr>
<td><strong>SMTP Port</strong></td>
<td>The Port number of the SMTP server.</td>
</tr>
<tr>
<td><strong>Email</strong></td>
<td>A legitimate Email ID.</td>
</tr>
<tr>
<td><strong>Password</strong></td>
<td>Password of the Email ID.</td>
</tr>
<tr>
<td><strong>Use SSL</strong></td>
<td>Check it to enable Secure Socket Layer (Recommended).</td>
</tr>
<tr>
<td><strong>Test email address</strong></td>
<td>Email address to send a test mail.</td>
</tr>
</tbody>
</table>
9. Before adding URL of NLU service, please make sure to setup certificates as mentioned ([Set up the Qlik Sense certificates](#)) and restart the NLU services under windows services.
   a. Enter the URL for the NLU service.
   b. Click Configure NLU

**NLU Service Configuration**

<table>
<thead>
<tr>
<th>URL</th>
<th>URL of Qlik Insight Bot NLU Service along with its port number:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="https://localhost:5000">https://localhost:5000</a> – If installed on same server as other Qlik Insight Bot components</td>
</tr>
<tr>
<td></td>
<td>https://&lt;server-name&gt;:5000 – if installed separately</td>
</tr>
</tbody>
</table>

10. In the Component tab, configure the Management, Narrative, and NLP services, and then click Save.

**Management Service Configuration**

<table>
<thead>
<tr>
<th>Remote URL</th>
<th>Remote URL of Qlik Insight Bot Management Service which will be</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="https://localhost:4436">https://localhost:4436</a></td>
</tr>
</tbody>
</table>

**Narrative Service Configuration**

<table>
<thead>
<tr>
<th>Host</th>
<th>Host name of server on which Qlik Insight Bot Narrative Service is installed in this case it will be <a href="https://localhost">https://localhost</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Port</td>
<td>Port number of Qlik Insight Bot Narrative Service, on which you want to start Qlik Insight Bot Narrative Service, by default it will be 8001.</td>
</tr>
<tr>
<td>Allow Remote Host</td>
<td>This will allow Qlik Insight Bot to communicate with Narrative service when installed on another machine than the Qlik Insight Bot.</td>
</tr>
<tr>
<td></td>
<td>If you are using PC Name, IP Address or Domain name instead of localhost in Host, check this option. This will add the host as a trusted entity.</td>
</tr>
</tbody>
</table>

**NLP Service Configuration**

<table>
<thead>
<tr>
<th>URL</th>
<th>URL of Qlik Insight Bot NLP Service which will be</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="https://localhost:4437">https://localhost:4437</a></td>
</tr>
</tbody>
</table>
11. On **Channel Configuration** section, you can configure **Slack, Skype for Business, Webchat** channels through which you want to communicate with the Qlik Insight Bot.

### Slack

<table>
<thead>
<tr>
<th>Allow New Users</th>
<th>This will allow new user(s) to be added.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Token</strong></td>
<td>Use the <strong>Bot User OAuth</strong> access token which we have generated in <strong>Save Application Credentials</strong> section of QIB – Configuring Channel document.</td>
</tr>
<tr>
<td></td>
<td>e.g. xoxb-000000000000-00000000000-xxxxxx0xxxxxx0xxxxxx0xxxxxx00x</td>
</tr>
<tr>
<td><strong>Qlik Insight Bot Engine URL</strong></td>
<td>If you are using “Qlik Insight Bot Slack Engine” exe, Qlik Insight Bot Engine service url which must be the below <a href="https://localhost:4434">https://localhost:4434</a> Leave this field blank if “Qlik Insight Bot Slack Engine Service” is not used.</td>
</tr>
</tbody>
</table>

### Skype for Business

<table>
<thead>
<tr>
<th>SFB Username</th>
<th>The user created in Office 365 environment. (QIB - Configuring Channels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Password</td>
<td>Password of the user created in Office 365 environment.</td>
</tr>
<tr>
<td>Tenant</td>
<td>Domain name of SFB User Name. E.g. qlik.com</td>
</tr>
<tr>
<td><strong>Client ID</strong></td>
<td>Provide the Application ID which we have saved earlier. (QIB - Configuring Channels)</td>
</tr>
<tr>
<td><strong>Qlik Insight Bot Engine URL</strong></td>
<td>Qlik Insight Bot Engine service url <a href="https://localhost:4434">https://localhost:4434</a></td>
</tr>
</tbody>
</table>
Installation and configuration

### Webchat

| Qlik Insight Bot Engine URL | If Qlik Insight Bot and Qlik Sense server are installed on the same machine, use Qlik Insight Bot Engine service url [https://localhost:4434](https://localhost:4434)  
If Qlik Insight Bot and Qlik Sense server are on different machines, provide the URL which can be accessed by webchat service. E.g. [https://<Server URL>:4434](https://<Server URL>:4434) |
| Webchat Service URL | This URL should be the URL of the machine on which you have installed Qlik Insight Bot webchat service which may be the same as the Qlik Sense access URL from outside the network.  
*(For Qlik Sense Enterprise June 2019 to November 2019 only)* |

**Note:** You are required to configure webchat to use Qlik Sense Extension and Webchat for Qlik Sense Hub. For more information, see *Configuring Webchat and Qlik Sense Extension*.

![Channel Configuration](https://example.com/channelconfiguration.png)

12. From Other Configuration tab, you can configure the following.

**Filter**

If Auto Clear is set, Qlik Insight Bot will remove any applied filters, context and currently selection application after the minutes you have set in *Clear Filter Time* if the user seats idle for that time period.

**Auto Convert**

Money – This will show the amount in symbolic form, i.e $1000000 will be shown as $1M.  
Number – This will show the amount in symbolic form, i.e 10000 will be shown as 10K.

**App Object**

Disable chart creation in Qlik Sense application by checking the box. A Qlik Sense chart will not be created and hence, the chart link will not be generated. This won’t change the response of the query.  
Qlik Sense application objects created by Qlik Insight Bot will be deleted automatically after configured day(s) for Delete Sheet Time.  
For example, if the “Delete Sheet Time” is set to “1”, all sheets created by Qlik Insight Bot will be deleted after 1 day.
Installation and configuration

Timezone
Qlik Insight Bot will consider the time zone you have set from this section while giving any response to the user.

Log Configuration
You can enable the Qlik Insight Bot question logging feature by enabling the Log Configuration. This will store the questions asked by users in a log file. Select path for storing the Qlik Insight Bot questions log file, which is "C:\ProgramData\Qlik Insight Bot\Logs" by default.

Note: Make sure that IIS_IUSRS has read/write permission to the selected folder.

Prefix for Synonyms Tags
Qlik Insight Bot consumes tags added into Master Items. It may be possible that there are few tags which are already added into master items and you don’t want to consider them for Qlik Insight Bot. In this case, you can configure that prefix in the Configuration Application and add tags with any prefix. So, Qlik Insight Bot will pick up only those tags which has this prefix added. If prefix is not added, it will pick all available tags from master items. Ex. If you want to pick tag with prefix QIB_, you simply add prefix QIB_ in configuration application and tag can be QIB_Cities for the master dimension City.

Please note that the configuration for prefix is applied to all the application.

13. From Add On tab you can download the Qlik Sense Extension and Webchat for Qlik Sense Hub.

Notes:
The Qlik Sense Extension is used when you want Qlik Insight Bot to be available within apps. The Webchat service is only required for the June 2019 to November 2019 version of Qlik Sense Enterprise (and earlier). For more information, see the Qlik Insight Bot Configuring Webchat and Qlik Sense Extension guide.

a. For Qlik Sense Extension, click Download. Also, you need to configure the web chat from the channel configuration tab.

b. For Webchat for Qlik Sense Hub, select the appropriate Qlik Sense version, and click Download. Also, you need to configure the web chat from the channel configuration tab.
Note: If you make any changes in the Qlik Insight Bot Configuration application for the webchat channel, you are required to re-download and re-configure the Qlik Sense Extension and Webchat for Qlik Sense Hub.

14. The License section shows the license detail. If your license information (License Expiration Information) has been updated by Qlik and you need to reflect those changes on Qlik Insight Bot, click **Update License** button. All Qlik Insight Bot Services need to be restarted in order to reflect the change.

Qlik Insight Bot should now be configured.
8.8 Configure Qlik Insight Bot Web Services

Configure the Qlik Insight Bot engine service

After installing Qlik Insight Bot Services, configure the Web services as follows.

1. Open IIS Manager.
2. Select engineservice under sites on left pane.
3. Click Bindings under Edit Site on right pane.
4. Click Add…
5. Enter the following and click OK.

<table>
<thead>
<tr>
<th>Type</th>
<th>Select https</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port</td>
<td>Enter 4434</td>
</tr>
<tr>
<td>SSL Certificate</td>
<td>Select your SSL certificate from drop down menu.</td>
</tr>
</tbody>
</table>
6. Select other Binding, click **Remove**.

7. Go to **SSL Settings**, then select **Require SSL** and check **Accept**.
8. After changing the port of Qlik Insight Bot Engine Service, you need to check that the service is running or not by hitting https://<servername>:4434 in the web browser.
Configure Qlik Insight Bot management service

1. Select `management service` under sites on left pane.
2. Click Bindings under Edit Site on right pane.

3. Click Add…

4. Enter the following and click OK.

<table>
<thead>
<tr>
<th>Type</th>
<th>Host Name</th>
<th>Port</th>
<th>IP Address</th>
<th>Binding Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>https</td>
<td></td>
<td>4436</td>
<td></td>
<td>Select your SSL certificate from drop down menu.</td>
</tr>
</tbody>
</table>
5. Select other Binding, click **Remove**.

6. Go to **SSL Settings**, then select **Require SSL** and check **Accept**.
Installation and configuration

7. After changing the port of Qlik Insight Bot Management Service, you need to check that the service is running or not by hitting `https://<servername>:443` in the web browser.
Configure Qlik Insight Bot NLP service

1. Select **nlp service** under **sites** on left pane.
2. Click **Bindings** under **Edit Site** on right pane.

3. Click **Add**.

4. Enter the following and click OK.

<table>
<thead>
<tr>
<th>Type</th>
<th>Select <strong>https</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Port</td>
<td>Enter <strong>4437</strong></td>
</tr>
<tr>
<td>SSL Certificate</td>
<td>Select your SSL certificate from drop down menu.</td>
</tr>
</tbody>
</table>
Installation and configuration

5. Select other Binding, click **Remove**.

6. Go to **SSL Settings**, then select **Require SSL** and check **Accept**.
7. After changing the port of Qlik Insight Bot NLP Service, you need to check that the service is running or not by hitting [https://<servername>:443](https://<servername>:443) in the web browser.
Configure the portal

1. Open IIS Manager.
2. Select portal under sites on the left pane.
3. Under IIS, select **Authentication**, and confirm that **Windows Authentication** is enabled.
4. Click **Bindings** under **Edit Site** on right pane.
5. Click **Add…**
6. Enter the following and click OK.

<table>
<thead>
<tr>
<th>Type</th>
<th>Select https</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port</td>
<td>Enter 4435</td>
</tr>
<tr>
<td>SSL Certificate</td>
<td>Select Your SSL certificate from drop down menu.</td>
</tr>
</tbody>
</table>

7. Select other Binding, click **Remove**.

8. After changing the port of Qlik Insight Bot Management Console (portal), you need to check that the service is running or not by hitting `https://<servername>:4435` in the web browser and login using the creds which were used in the Qlik Insight Bot Configuration application.
8.9 Install Qlik Insight Bot Webchat service
If you want to use Qlik Insight Bot as a Qlik Sense Hub Chat (versions before February 2020) or as a Qlik Sense Extension, run the Qlik Insight Bot Webchat Service setup file in Administrator mode.

8.10 Install Qlik Insight Bot Slack engine service
If you want to use Qlik Insight Bot in Slack (if no Azure Bot is created for Slack channel), run the Qlik Insight Bot Slack Engine Service setup file in Administrator mode.

8.11 Install Qlik Insight Bot SFB online service
If you want to use Qlik Insight Bot in Skype for Business Online (if no Azure Bot is created for SFB Online channel), run the Qlik Insight Bot SFB Online Service setup file in Administrator mode.

Qlik Insight Bot is installed, and services are configured.
Appendix I – Mapping Qlik Sense node host name with its IP address

1. Go to QMC > CONFIGURE SYSTEM > Nodes.
2. Copy the host name of a Central node (column “Host name”).
3. Go to “C:\Windows\System32\drivers\etc”.
4. Open the Host file in text editor in administrator mode.
5. Reach to end of the document and put Qlik Sense Server node IP address along with its host name.
6. Save and close.

Appendix II – Getting the port for PostgreSQL

1. Open pgAdmin.
2. Right click PostgreSQL 11 server, select Properties.
3. Go to Connection tab.
4. Copy the port.

Appendix III – Give Access to PostgreSQL

1. Open file C:\Program Files\PostgreSQL\11\data\pg_hba.conf.
2. Go to end of the file.
3. Add a host entry of IP of NLU, where x.x.x.x is the IP address.
   Ex. host all all 192.168.10.10/32 md5
4. Save the file.