Qlik Insight Bot Portal Guide

Qlik Insight Bot®
February 2020
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1. Introduction

The Qlik Insight Bot portal provides a one-stop solution for configuring and managing apps for Qlik Insight Bot. It enables customers to manage Qlik Sense application(s) for Qlik Insight Bot. It also provides other configuration options and settings to help monitor and administer Qlik Insight Bot.

The Qlik Insight Bot portal is accessed using [https://localhost:4435](https://localhost:4435) on the server with the same credentials as for the Configuration application. See the Qlik Insight Bot Deployment guide for details about users and permissions.

Google Chrome is required for the Qlik Insight Bot portal.

To summarize, with Qlik Insight Bot portal, you:

- Manage apps
  - Sync apps
  - Load/refresh the metadata
  - Train the bot
  - Undeploy apps
- Configure apps
  - Choose only the dimensions and/or measures you need deployed.
  - Add tags (as synonyms) for chosen dimensions and/or measures.
  - Choose measure formats.
  - Associate Date fields for specific measures.
  - Create Measure-Dimension(s) mappings to improve analytics.
  - Create rules using the Rule Engine to customize answers.
- Schedule a task
  - Create a task to schedule a bot training.
2. Qlik Sense apps

The list of all published Qlik Sense apps of the stream(s) you configured in the Qlik Insight Bot Configuration application appears in the portal. You can sync the apps, load/reload the metadata, train the bot, or undeploy any app. Qlik Insight Bot answers are based only on those apps which have been trained from the portal.

2.1 Sync

Changes to the published/unpublished status of apps in the configured stream on Qlik Sense server are not updated to the portal automatically. Click Sync (Sync) to update the app list.

2.2 Apps

- **App Name**
  The name of published apps in the configured stream(s).

- **Stream**
  The name of the stream where the app is published.

- **Modified Date**
  Date on which any operations such as modification of synonyms of dimension(s)/measures(s) or mappings, load/reload metadata are performed on an app.

- **Metadata Status**
  - (grey) - If the metadata of an app has not yet been pulled from Qlik Sense to the local repository.
  - (green) - If the metadata of an app has been successfully pulled from Qlik Sense to the local repository.

- **Push Status**
  - (grey) - If the metadata of an app has not yet been pushed from the local repository to NLU.
  - (green) - If the metadata of an app has been successfully pushed from the local repository to NLU.
### Last Activity Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queued - <em>&lt;task&gt;</em></td>
<td>Application is queued to perform a task.</td>
</tr>
<tr>
<td>Loading</td>
<td>Metadata is being loaded from the Qlik Sense app.</td>
</tr>
<tr>
<td>NLU Updating</td>
<td>Metadata is being updated to NLU for the Qlik Sense app.</td>
</tr>
<tr>
<td>Reloading</td>
<td>Metadata is reloading from the Qlik Sense app.</td>
</tr>
<tr>
<td>Reloading (Triggered)</td>
<td>Metadata of an app is reloading automatically on Qlik Sense Application reload.</td>
</tr>
<tr>
<td>Undeploying</td>
<td>The app is being undeployed from Qlik Insight Bot.</td>
</tr>
<tr>
<td>Unloading</td>
<td>Metadata is being removing from the Qlik Insight Bot storage.</td>
</tr>
<tr>
<td>Loaded</td>
<td>Metadata loaded successfully from the Qlik Sense app.</td>
</tr>
<tr>
<td>NLU Updated</td>
<td>Metadata is updated in NLU successfully for the Qlik Sense app.</td>
</tr>
<tr>
<td>Reloaded</td>
<td>Metadata of an app reloaded successfully from the Qlik Sense app.</td>
</tr>
<tr>
<td>Reloaded (Triggered)</td>
<td>Metadata of an app reloaded automatically successfully from the Qlik Sense app.</td>
</tr>
<tr>
<td>Undeployed</td>
<td>App undeployed successfully from Qlik Insight Bot.</td>
</tr>
<tr>
<td>Unloaded</td>
<td>Metadata unloaded successfully from Qlik Insight Bot.</td>
</tr>
<tr>
<td>Load Failed</td>
<td>Metadata loading from the Qlik Sense app has failed.</td>
</tr>
<tr>
<td>NLU Update Failed</td>
<td>Metadata update to NLU has failed.</td>
</tr>
<tr>
<td>Reload Failed</td>
<td>Metadata reload has failed.</td>
</tr>
<tr>
<td>Reload Failed (Triggered)</td>
<td>Automatic reload of metadata has failed.</td>
</tr>
<tr>
<td>Undeploy Failed</td>
<td>App undeployment has failed.</td>
</tr>
<tr>
<td>Unload Failed</td>
<td>Metadata removal from the Qlik Insight Bot storage has failed.</td>
</tr>
</tbody>
</table>
• **Portal Controls**

  - ![Icon](image1.png)
  - ![Icon](image2.png)
  - ![Icon](image3.png)
  - ![Icon](image4.png)
  - ![Icon](image5.png)

  Load metadata of an app.

  Reload metadata of an app.

  Push metadata of an app to update NLU.

  Un-deploy an app.

  Backup metadata of an app.

  Restore metadata of an app.

  Refresh app list.

  ![Icon](image6.png)

  Sync the app list with configured Qlik Sense server.

  ![Icon](image7.png)

  Train bot only for those app of which metadata has been pushed successfully.
2.3 Load metadata of an app

Qlik Insight Bot stores the details of all measures and dimensions as a metadata, which helps Qlik Insight Bot to understand the questions better. The metadata must be loaded before training the bot. You can add (or remove) synonyms of measure(s) or dimension(s). Adding the synonyms helps Qlik Insight Bot to identify the right measure/dimension whenever a user asks questions. You can also add mappings of measure-dimensions after loading the metadata.

Click Load ( ) to load the metadata of an app.

You can view and manage dimensions/measures/mappings of an app. To do so, click the app name after the metadata of the app has been loaded successfully.

2.4 Dimensions

You can add tags to act as synonyms of a dimension during conversations with Qlik Insight Bot. Adding more relevant synonyms helps Qlik Insight Bot to understand user requests more efficiently.

For example, users may refer to Sales Persons as Agent, Sales Rep, Sales Representative, or Salesman, so you would add those phrases as tags.

You can also exclude or include dimension(s) or dimension values using check boxes. Excluding a dimension will not push either the dimension or its values. Excluding dimension values will push the dimension only and not the dimension values.

If any new dimensions are added to the Qlik Sense app after the metadata has already been loaded on the Portal, you can add them by reloading the dimensions list. Click Reload ( ) to load newly added dimensions to the list. Save the changes by clicking Save ( ).
2.5 Measures

You can add tags to act as synonyms of a measure during conversations with Qlik Insight Bot. Adding more relevant synonyms helps Qlik Insight Bot to understand user requests more efficiently.

For example, users may ask about Total Employees as Headcount, Employee count, Employees, Users etc.

The default date field is the date field tagged with "_calendarfield". For each measure, you can associate a separate date field. This helps Qlik Insight Bot apply filters on the correct date field. E.g. For a measure “Total Leads”, you may associate it with the date field “Lead Created Date” while “Total Oppty” may associated with “Oppty Created Date”.

Format helps Qlik Insight Bot to display measure values in a proper and desired format. You can also exclude/include measures using check boxes.

If any new measures have been added to the Qlik Sense app after the metadata has already been loaded on the Portal, you can add them by reloading the measures list. Click Reload (Reload) to load newly added measures to the list. Save the changes by clicking Save (Save).
Below is the list of supported formats for measures.

<table>
<thead>
<tr>
<th>Money</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>$#,###0</td>
<td>#,##0</td>
<td>#,##0%</td>
</tr>
<tr>
<td>$#,###0.0</td>
<td>#,##0.0</td>
<td>#,##0.0%</td>
</tr>
<tr>
<td>$#,###0.00</td>
<td>#,##0.00</td>
<td>#,##0.00%</td>
</tr>
<tr>
<td>$#,###0:($#,###0)</td>
<td>#,##0%;(#,##0%)</td>
<td></td>
</tr>
<tr>
<td>$#,###0.0:($#,###0.0)</td>
<td>#,##0.0%;(#,##0.0%)</td>
<td></td>
</tr>
<tr>
<td>$#,###0.00:($#,###0.00)</td>
<td>#,##0.00%;(#,##0.00%)</td>
<td></td>
</tr>
<tr>
<td>£#,###0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>£#,###0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>£#,###0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>£#,###0:(£#,###0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>£#,###0.0:(£#,###0.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>£#,###0.00:(£#,###0.00)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.6 Mappings

Mappings are measure-dimension pairs which perform a key role in generating advanced narratives, showing surprising facts around a measure/dimension and suggesting measures that are relevant to the user question.

When you load an app, several mappings are generated automatically based on the charts in the Qlik Sense app.

For example, assume the Qlik Sense app has two charts: 1) Sales by City 2) Sales by Product. The mappings 1) Sales-City and 2) Sales-Product are generated automatically.

You generate other mappings from the MAPPINGS tab. Click Save to save all changes.
2.7 Rule engine

With the help of the Rule Engine, you can create tailored responses to give total control over the responses Qlik Insight Bot serves to the users of your organization.

Create a rule

1. In the top right corner of the Rule Engine tab, click Add Rule (Add Rule). Select the type of rule you want to set:
   a. Limit
   b. Measures
   c. Dimensions
   d. Filter Dimensions

2. After selecting the type, click plus (+) to set a custom answer and other conditions. You can set the custom answer text in the textbox provided. The custom answer contains two types of text:
   - Dynamic text, such as the measure value, dimension value or a filter value
   - Static text, which forms the rest of the statement
Adding dynamic text to the response requires a certain syntax to be followed, as shown in the following table.

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>@[Measure]</td>
<td>To display Measure value.</td>
</tr>
<tr>
<td></td>
<td>E.g. Here is the total sales @[Total Sales].</td>
</tr>
<tr>
<td>#[Dimension]</td>
<td>To display Dimension value. You can use list to display dimension value in a list format.</td>
</tr>
<tr>
<td></td>
<td>E.g. Categories wise Orders: &lt;list&gt;#[Category] - @[Orders]&lt;/list&gt;</td>
</tr>
<tr>
<td>.[Dimension Value]</td>
<td>To get a response of a measure for particular value of a dimension.</td>
</tr>
<tr>
<td></td>
<td>E.g. Total sales of New York is @[Total Sales]#[City].[New York]</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> “.[Dimension Value]” must be preceded by “#[Dimension].”</td>
</tr>
<tr>
<td>.[Time Period]</td>
<td>To get a response of a measure by a time period.</td>
</tr>
<tr>
<td></td>
<td>E.g. Sales for current year is @[Total Sales]#.Current Year].</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> “.[Time Period] must be preceded by @[Measure]”.</td>
</tr>
<tr>
<td>$FilterValue</td>
<td>To get a response for a particular dimension value.</td>
</tr>
<tr>
<td></td>
<td>E.g. For $FilterValue, Total Sales is @[Total Sales] and Gross Margin is @[Gross Margin].</td>
</tr>
<tr>
<td>&lt;list type=top/bottom size=&quot;n&quot;&gt;.........&lt;/list&gt;</td>
<td>To display values as a list, where type can be top or bottom, and size a number between 1 and 5.</td>
</tr>
<tr>
<td></td>
<td>E.g. Sales by Store: &lt;list type=&quot;top&quot; size=&quot;3&quot;&gt; @[Sales]-#Store&lt;/list&gt;</td>
</tr>
<tr>
<td>Break Line (Enter)</td>
<td>To add line break.</td>
</tr>
</tbody>
</table>

**Note:** All keywords are case sensitive. Use the Tab key to change Dimension or Measure name after typing @[ or #[.}
Measures rule

If you require Qlik Insight Bot to give a tailor-made response when a question regarding a specific measure is asked, you need to set a Measure rule. Along with the tailor-made message, you can also add a chart (Line, Bar, or Pie chart) to the response, having a measure and a dimension of importance.

The following example shows a rule for when users ask about “sales” and you want Qlik Insight Bot to provide a custom message containing sales and expense. Also, you want to show a line chart of sales by month year.

Now, whenever any user asks about “sales”, bot should respond with a custom answer.
**Adding date periods for custom answers**

What if you want to bind a measure to some selected date periods i.e. Last Quarter, MTD, Today etc.? That is, you want Qlik Insight Bot to provide a custom answer to the users only when they ask about a measure for a particular date period.

Qlik Insight Bot’s Rule Engine allows you to set specific date periods for any type of rule. To do so, check “Allow Date Periods” and select the period(s) of your choice.

For example, you may want a custom answer for sales for current date periods.

The response for a question with allowed date period:
The response for a question with other date period:
**Setting a custom answer for targeted keywords**

You have seen how you can leverage the capabilities of the Rule Engine to set custom answers. What if you want to get a custom answer for measure (or any other rule type) when you ask about it with a combination of specific keywords?

E.g. Tell me the **sales summary**. Here, “sales” is a measure and “summary” is keyword.

![Edit Rule](image)

To which the bot responds:
Dimensions rule
The dimension type rule works same as a measure rule. Set the dimension rule when you want a custom-made answer from the bot specific to a dimension.

For example, you want to see sales by cities only by saying the dimension name (city) and nothing else. The rule is as follows:

The bot should respond like this upon asking about category:
Filter Dimensions rule

Set the Filter Dimension rule when you want a custom answer for a dimension value against any measure.

E.g. You want the bot to show sales, expense and budget details based on the dimension value.
Below should be the response when a user asks about Tobacco details:
Limit rule

Set the Limit rule whenever you want a custom answer for questions asking for a top or bottom list. For example, ‘Show me top states by sales’. The limit rule must include at least one measure or dimension.

E.g. When user asks about top products, you want the bot to reply with top products by sales.

When you ask let’s say Top products by sales, the output would be:
Edit a rule

You can edit any existing rule by clicking Edit ( ✂️ ) next to the rule.

Delete a rule

User can edit any exist rule by clicking Delete ( ⚪️ ) next to the rule.

2.8 Push

If you have made any change in measures or dimensions, click Push ( 🔗 ) to push the metadata to the NLU.

2.9 Train

Once you push the metadata of an app, click Train ( 🔄️ ) to train the bot. This trains the bot only for those apps for which metadata has been pushed successfully.

Check Sync Qlik Sense Users with NLU to enable Qlik Insight Bot to email users directly (Email me or Email to someone).
If pushing metadata or training bot is taking more than 30 minutes and showing status like "NLU Update Failed" or "Training Failed", follow these steps to change the request timeout.

1. Go to "C:\Program Files (x86)\Qlik Insight Bot\Qlik Insight Bot Deployment Engine Service".
3. Find the tag for RequestTimeout under appsettings tag.
4. Change the value for RequestTimeout.

Note: The value for time is in milliseconds.

2.10 Back up metadata of an app

Qlik Insight Bot allows you to back up the details of all measures, dimensions, mappings and/or rules with a single click. The same can be used again when you want to train the app which is being re-deployed. With a single click, all backed-up information of an app will be restored.

Clicking will ask you to select All/Dimension/Measure/Mappings/ Rules to either back up everything or the selected metadata category. Click after performing the selections to run the backup.

---

2.11 Restore metadata of an app

Qlik Insight Bot allows you to restore details of all measures, dimensions, mappings and/or rules of an app with a single click. Clicking will ask you to upload the JSON file. Select the file and click to upload the file.
2.12 Reload metadata of an app

If you have made any changes in measures or dimensions in a Qlik Sense app or you changed the Qlik Sense app name and you want Qlik Insight Bot to give an answer related to this app information, measures or dimensions, you must reload the metadata for the app. Click to reload the metadata. If you have not pushed metadata for an app, you see an option to reload App Info, Dimensions, Measures and Visualizations along with an option to unload the metadata.

![Reload / Unload Metadata](image)

If you have pushed metadata for an app already, it will give you an option to reload App Info, Dimension, Measures, and Visualizations only.

![Reload Metadata](image)

Please note that reload button on Application details page i.e. will do the same operation.

2.13 Undeploy an app

To remove an app from Qlik Insight Bot, you must undeploy it. Click Undeploy to undeploy the app. Once, the last activity status changes to “Undeployed”, you must train the bot again.

2.14 Refresh list

When you are training the bot or undeploying any app or you have made changes in synonyms of dimensions/measures or measure-dimension mappings, you can check the status of the process by clicking Refresh.
3. Tasks

Here, you can schedule the bot training to be done automatically. The scheduling module is similar to the QMC task scheduler. You can set the time zone, date/time of task starts and ends and recurring frequency of a task. Also, you can disable individual tasks when not necessary.

- Controls
  - Add new task.
  - Edit existing task details.
  - Delete task.

![Task Scheduler](image-url)
There are different recurring frequencies for tasks to be executed.

1. **Once**
   This allows the task to be executed only once.

   ![Recurring Frequency: Once]

2. **Hourly**
   This allows the task to be executed after every set hours/minute.
   E.g. If you have set 2 as recurring hours and 30 as recurring minutes, the task will be executed after every 2 and a half hours from the task start date/time.

   ![Recurring Frequency: Hourly, Recurring Hour(s): 2, Recurring Minute(s): 30]

3. **Daily**
   This allows the task to be executed after every day(s) given.
   E.g. If you have set 4 as recurring days, the task will be executed after every 4 days from task start date.

   ![Recurring Frequency: Daily, Recurring Day(s): 4]

4. **Weekly**
   This allows the task to be executed after every week(s) given. You can also set the day of a week on which the task should be executed.
   E.g. If you set 3 as recurring weeks and Monday as recurring day, the task will be executed every 3 weeks on upcoming Monday from task start date.

   ![Recurring Frequency: Weekly, Recurring Week(s): 3, Recurring Day: Monday]

5. **Monthly**
   This will allow the task to be executed every month on the day specified.
   E.g. If you set 2 as recurring date, the task will be executed on every 2nd of a month from task start date.

   ![Recurring Frequency: Monthly, Recurring Date: 2]
4. Custom calendars

Qlik Insight Bot’s custom calendar allows you to apply date selections based on the fiscal calendar available in your Qlik Sense app. You can map various time dimensions (Year, Quarter, Period, Month, Week, Date) with the corresponding fiscal date fields. Once they are mapped, you can assign the custom calendar to the measures of your choice. A custom calendar can be created per app for which the data has been loaded.

Click **Add Calendar** to create a new custom calendar.

1. **App**
   Select the app for which you want to configure a custom calendar.

2. **Calendar Name**
   Appropriate name for the calendar. This calendar name will be added to the list of **Date Fields** in Measures tab of the app which you have selected E.g. Fiscal Calendar.
3. **Granularity**
   Select the appropriate date fields (to be chosen from – Year, Quarter, Period, Month, Week, Date) from the list based on the fields available in the Qlik Sense app.

4. **Time Dimensions**
   The relevant time dimension(s) will be enabled for further configuration based on the granularity value selected.
Custom calendars

The following items are required to configure the selected time dimension.

<table>
<thead>
<tr>
<th>Field name</th>
<th>Select appropriate field of the Qlik Sense app for the selected time dimension.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format</td>
<td>Type the exact format which is already assigned to the above selected field in the Qlik Sense app.</td>
</tr>
<tr>
<td>NOTE: Click Field Format Help button to know how to give format.</td>
<td></td>
</tr>
<tr>
<td>Sorting Expression</td>
<td>Add appropriate sorting expression (This is similar to applying a sorting expression in the Qlik Sense app). This is optional.</td>
</tr>
<tr>
<td>Sorting Order</td>
<td>Select appropriate sorting order. This is optional.</td>
</tr>
</tbody>
</table>

Any fiscal date field in the Qlik Sense app must contain a year along with it. E.g. a quarter field must be formatted as “QQ-YYYY” (or any other format with year included).

5. Default Time Dimension

If a question contains only a measure (for example, ‘Show me sales’), the answer shows a chart of measure by month-year. In the case of custom/fiscal calendar, you can set the time dimension field on which measure by time dimension chart will be created. Ex. If default time dimension is set to Period and on asking “Show me Sales”, it will show chart of Sales by Period (field assigned to Period).

6. Variable

This section allows you to form a response for the questions asking a measure value for a current/previous time period i.e. Show me the sales for current quarter. This can be done by mapping a variable of Qlik Sense app to the Qlik Insight Bot variable (for more information, see Preparing Bot-Compatible Qlik Sense Apps).
Select the variable from the variable drop-down list for the custom dates based on the granularity level. Select an appropriate app variable from second dropdown list.

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Select a variable for a specific time period. Set variables only for selected Time Dimensions.</th>
</tr>
</thead>
</table>
| App variable  | Select the relevant Qlik Sense app variable.  
**NOTE:** All variables of Qlik Sense app are listed. |
| Synonyms      | User can add relevant synonyms for the same. Synonyms must be comma separated. |

**Click to add variable.**

7. **Comparison Fields**
   This section allows you to form a response for the questions asking for period over period comparison i.e. YoY Sales, MoM Sales, QoQ Sales, etc. Also, Qlik Insight Bot will show the buttons for period over period comparison after each answer asked for a measure.
   This can be done by mapping appropriate values of ‘to date’ fields.

<table>
<thead>
<tr>
<th>Default Field</th>
<th>Select a field for a specific time period.</th>
</tr>
</thead>
</table>
| App Field        | Select the relevant Qlik Sense app field.  
**NOTE:** All fields of Qlik Sense app are listed. |
| Operator         | It could be equal to or not equal. |
| Enter Static value/Variable | Add the appropriate value of field for the comparison condition. It can be a static value or a variable. i.e. 1 or vYTD |

**Click to add mapping.**

8. **Measures**
   Select measure(s) for which you want the bot to answer with respect to custom calendar.

9. **Refresh App Fields & Variables**
   Click **Refresh App Fields & Variables** to reflect any changes made in the Qlik Sense app field(s) and variable(s).

Click **Save** to save all above configurations.
5. Custom help

Custom Help let you insert a customized response whenever users ask for help specific to the app. You can now set the custom help text at the app level. If you do not want to set any custom help for an app, Qlik Insight Bot shows the default custom help. You can also change the default custom help displayed as General in Management Console.

Click Add Custom Help to set customized help text.

<table>
<thead>
<tr>
<th>Application</th>
<th>Select app for which you want to add customized text.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom text</td>
<td>Add customized text for selected app.</td>
</tr>
</tbody>
</table>

Click Save to save the customized help text.
6. Logs

You can see the activity logs of an app. The logs show events, at what time the events occurred to the app i.e. when the app data was loaded/reloaded, when the app was queued to be pushed, when the app was pushed etc. This also shows a descriptive message or an error message (in any) associated with the event.