

PREPARING BOT COMPATIBLE QLIK SENSE APP



Qlik 
Insight  Bot

Qlik Insight Bot™

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Introduction

To get insightful answers from Qlik Insight Bot regarding your data, it is required that the Qlik Sense app, for which you are asking the questions, is prepared in a way that Qlik Insight Bot requires.

The purpose of this document is to guide you how to prepare Qlik Sense app compatible to Qlik Insight Bot.

Adding Dimensions, Measures and Visualizations to master items

Qlik Insight Bot takes data only from dimensions, measures and visualizations which are added as master items in Qlik Sense app. Hence, the user needs to add those dimensions, measures and visualizations to master items for which user is expecting to consume information, in the form of question-answers, through Qlik Insight Bot.

It is also required to add tags for the master items. The tags usually are synonyms of a dimension/measure which help Qlik Insight Bot to understand identifying the relevant dimension/measure to prepare a response of a user question. Also, there is a set of predefined tags to serve different purposes which ultimately helps Qlik Insight Bot to get accurate information to its users. These predefined tags should be added to master items based on how a master item should be handled by the bot. Make sure that if you have added any **Tag Prefix** in Qlik Insight Bot Configuration application, use those as a prefix of the synonyms while you are adding to tags.

E.g. City could be Town, Municipality etc.

Employees could be Total Employees, Headcounts, # of Employees, No of Employees etc.

Below are the allowed characters to name the master items. i.e. no other characters except from the table below can be used to name any master item.

- (Hyphen)	0 - 9	a - z	A - Z
# (Hash)	` (Back Quote)	! (Exclamation)	' (Quote)
* (Asterisk)	\$ (Dollar)	% (Percentage)	? (Question Mark)
, (Comma)	+ (Plus)	= (Equal)	/ (Forward Slash)
. (Period)			

Also, below are the keywords reserved by Qlik Insight Bot. Do not use them as a name of any master items or as a tag.

ahead	alert	alert me	all	an	apps
bar chart	clear	clear all	compare	create	current
dimension	dimensions	disable insights	disable narratives	email	email me
enable insights	enable narratives	for	forecast	from	highest
in	insights disable	insights enable	insights off	insights on	Kpi/KPI
Kpis/KPIs	least	line chart	list	lowest	me
measure	measures	more	most	narratives disable	narratives enable
narratives off	narratives on	off insights	off narratives	pie chart	select
show	show all filters	show all selections	show apps	show dimensions	show kpis
show measures	show visualizations	surprise me	table	tell me	the
them	visualizations	viz	vizs	vs	

Note: Please refer [Appendix I](#) for more details of reserved keywords.

Important: Make sure none of the master measures contain an expression with any inline formatting applied to it.

Adding predefined tags to master items

The predefined tags provide a meaning to the master item. Adding those tags help Qlik Insight Bot to understand the master items' nature and how they should be represented as an information while a user asks any question.

Below is the list of predefined tags user requires to add to the master items in order to make them comprehensible to Qlik Insight Bot.

Note: By default, the master dimensions are shown as a “dimension” and the master measures as a “measure” in Qlik Insight Bot.

_formatPercent

- This tag is used to show a numeric data in the form of percentage in visualizations.
- This tag can only be used in master measures.
E.g. Average Penalties, Readmission Rate.

_formatMoney

- This tag is used to show a numeric data in the form of money (\$) in visualizations.
- This tag can only be used in master measures.
E.g. Charges, Total Sales.

_formatNumber

- This tag is used to show a numeric data in the form of numbers in visualizations.
- This tag can only be used in master measures.
E.g. Total Cases, Total Orders.

_*<groupname>*Group

- This tag is used to group measures, dimensions and visualizations of a same or similar type.
- This tag can be used in master measures, dimensions and visualizations.
- This tag is case sensitive.
E.g. `_salesGroup`, `_readmissionGroup`, `managerGroup`, `productGroup`.

_negative

- Not every measure's increased value always indicates a positivity i.e. some measures are good for an organization when their value is decreasing or low. E.g. Canceled Orders, Penalty, Expenditure, Casualty etc.
- This tag is used to discriminate such negative measures which increased values is not good for an organization.
- This tag can only be used in master measures.
- The effect of “_negative” tag can only be seen when insights/narratives are turned on and users asks for a measure which is marked negative.
- By default, the measure, in the narratives, will be shown in –
 - **Red** if its value is increased or increasing
 - **Green** if its value is decreased or decreasing

However, it is possible to provide custom colors for both positive and negative values. This can be done by adding few configurations manually in `system.xml` under `<WebchatConfiguration>` located at `C:\ProgramData\Qlik Insight Bot\Configuration` as mentioned below.

```
<ColorForNegative>#ff0000</ColorForNegative>  
<ColorForPositive>#00ff00</ColorForPositive>
```

_exclude

- This tag is used to exclude any dimension, measure or visualization from being displayed while user requests to see dimensions, measures or visualizations to Qlik Insight Bot.
- This tag can be used in master dimensions, measures or visualizations.
E.g. Month Year, Quarter Year, Week Year.

_calendarfield

- This tag is used to identify a dimension as a calendar field.
- This tag can only be used in master dimension which contains dates.
E.g. Date, Order Date.

_masterKPI

- This tag is used to identify master KPI table for Show KPI feature.
- This tag can only be used in master visualization which is “MasterKPI” table.

To summarize the usability of the predefined tags discussed above, refer below table.

Tags	Can be used for		
	Dimension	Measure	Visualization
_formatPercent	×	✓	×
_formatMoney	×	✓	×
_formatNumber	×	✓	×
_ <groupname> Group	✓	✓	✓
_negative	×	✓	×
_exclude	✓	✓	✓
_calendarfield	✓	×	×
_masterKPI	×	×	✓

Adding “Show KPIs” feature to Qlik Insight Bot

You can see your all important KPIs just by asking the bot “Show KPIs”. To be able to get the list of your desired KPIs from Qlik Insight Bot, it is required to add a straight table in the Qlik Sense app.

Follow below steps to create the straight table for KPIs –

1. Create a Table object in Qlik Sense app.
2. Add ‘1’ as a **Dimension**.
3. Add the **Measures** in the table which are required to be shown as KPIs by the bot.
4. Name this Table “**Master KPI**” and add it to master items.
5. Add **_masterKPI** tag to this master visualization.

Creating Calendar fields and add to master Dimensions

Create below calendar field in your Qlik Sense app and add it to master dimensions, if not present already. Calendar field will be used at the time of forecasting or displaying any measure value’s trend line.

1. Date (add **_exclude** and **_calendarfield** tags)

Creating variables and ‘to date’ fields for Custom Calendar (to be used by Qlik Insight Bot)

Qlik insight Bot’s **Custom Calendar** feature allows you to use the fiscal calendar of your Qlik Sense app. By configuring the fiscal calendar of an app from management console, the users will be able get the answers with respect to the fiscal timeline from the bot.

It is required to amend the Qlik Sense app in way that is become compatible for Qlik Insight Bot’s Custom Calendar feature. A few variables are required to be created in Qlik Sense app to support the user question aiming to get answers for any current or previous fiscal period i.e. Current year/Previous Year, Today/Yesterday, Current Period/Last Period etc.

Below are the time entities for which the relevant variables must be created in Qlik Sense app.

- Current Year
- Current Quarter
- Current Period
- Current Month
- Current Week
- Today
- Last Year
- Last Quarter
- Last Period
- Last Month
- Last Week
- Yesterday

Important: Make sure the variable must have the same output format as the actual field used to create the variable.

To enable the bot to answer the questions of period over period comparison, there should be ‘to date’ fields for year, quarter, period, month or week (based on the availability of the fields) in the application. Ex. Field for YTD (Year to Date) should be available with the value 1 or 0/true or false, and this must be configured in the QIB Management Console.

Making a Qlik Sense sheet default for Qlik Insight Bot

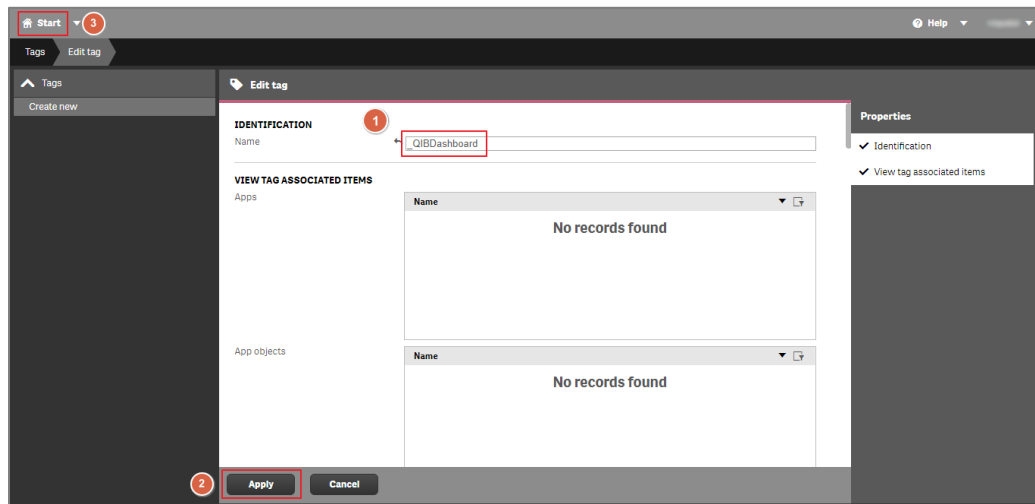
Qlik Insight Bot gives the **Source link** in the response which will redirect the user to the Qlik Sense application. Clicking the link opens the **App overview** of Qlik Sense application by default. What if you want to set other sheet as a default? You can set which sheet should be opened when user clicks the source link.



To set your desired sheet as a “default”, you need to add **_QIBDashboard** tag to that Qlik Sense sheet. Below are the steps to add **_QIBDashboard** tag.

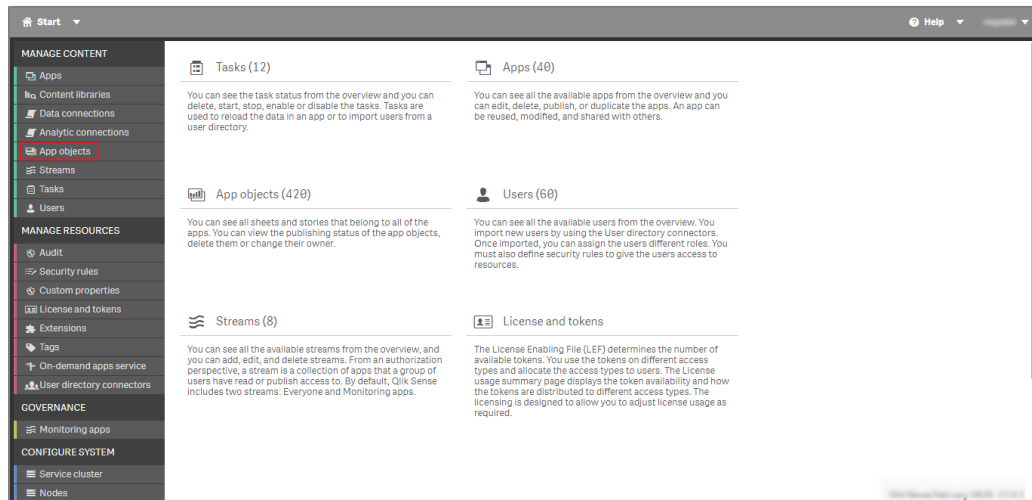
Add **_QIBDashboard** tag in QMC

1. Open QMC (Qlik Management Console), select **Tags** under **Manage Resources** from left pane.
2. Click **Create new** to create a tag.
3. Write **_QIBDashboard** as a name, click **Apply** to save.

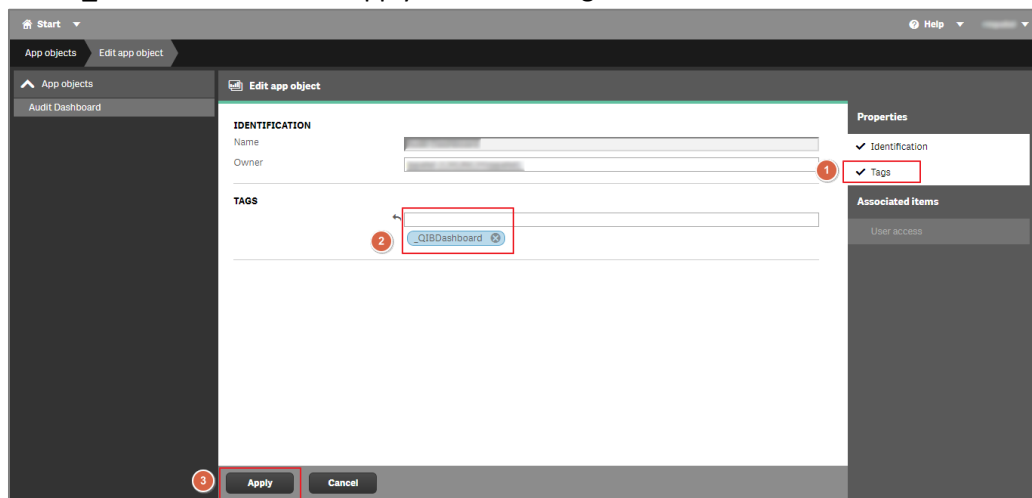


Assign _QIBDashboard tag to sheet

1. Open QMC (Qlik Management Console), select **App Objects** under **Manage Content** from left pane.



2. Select the sheet which you want to set as a default sheet to be opened.
3. Select **Tags** under **Property** on right pane to enable tags property. Click **Tags** textbox and select _QIBDashboard. Click apply to save settings.



Appendix I – Reserved keywords description

KeyWord	Definition	Usage
ahead		
alert	It is used as to show alerts to user.	Show alert
alert me	It is used for creating an alert.	Alert me when sales is greater than 5K.
all	In some scenarios, 'All' is used to identify as a whole.	List all cities.
an	'An' can be used as an article in question and if it is there in the dimension values, it will be identified by it. Hence it should be avoided.	How about an apple.
apps	This is used to show list of all deployed applications	Show apps, apps
bar chart	It is used to specify a chart type in asked question	Create a bar chart for sales by city
clear	This is asked to clear all the applied selections	
clear all	This is asked to clear all the applied selections	
compare	It is asked to identify the question of comparative analysis	Compare sales for New York vs New Jersey
create	It is used in a question which are asked to create a chart	Create a chart of sales by category
current		
dimension	It is asked to show the dimension's list	Show dimension
dimensions	It is asked to show the dimension's list	Show dimensions
disable insights	It is asked to disable the insights	
disable narratives	It is asked to disable the insights	
email	It is asked in the question where user wants to send an email to someone or to set an alert	Email me when sales is greater than 5K Email this to someone
email me	This phrase is used to send an email to own	
enable insights	It is asked to enable the insights	
enable narratives	It is asked to enable the insights	
for	This is used as a preposition	Show me sales for 2019
forecast	This is used as a keyword to identify the question if it is of forecasting	Forecast my sales for next 3 months
from	This is used as a preposition and can be conflict with the same value in dimension	
highest	This is used to identify the question if it is asked for top dimensions by measures	Show me highest selling products
in	This is used as a preposition	
insights disable	It is asked to disable or off the insights	
insights enable	It is asked to enable or on the insights	
insights off	It is asked to disable or off the insights	
insights on	It is asked to enable or on the insights	
kpi	It is asked to show the list of KPIs	Show KPI
kpis	It is asked to show the list of KPIs	Show KPIs

least	This is used to identify the question if it is asked for bottom most dimensions by measure	Show me products with the least selling.
line chart	It is used to specify a chart type	
list	When asked with the dimension, the question is to show list of dimension values	List Cities
lowest	This is used to identify the question if it is asked for bottom most dimensions by measure	Show me lowest selling product
me	It is a part of the phrase “email me” and “alert me”	
measure	It is to show list of measures	Show measure, measure
measures	It is to show list of measures	Show measures, measures
more	This is used to identify the question if it is asked for top dimensions by measures	Alert me when sales is more than 2M
most	This is used to identify the question if it is asked for top dimensions by measures	
narratives disable	It is asked to disable or off the insights	
narratives enable	It is asked to enable or on the insights	
narratives off	It is asked to disable or off the insights	
narratives on	It is asked to enable or on the insights	
off insights	It is asked to disable or off the insights	
off narratives	It is asked to disable or off the insights	
pie chart	It is used to specify a chart type	
select	It is to identify the question if asked for applying any filter/selection	Select NewYork
show	“Show” is the keyword which is asked in most questions	Show sales, Show measures, Show Dimensions,etc..
show all filters	This is the phrase which can be asked to show all the applied selections	
show all selections	This is the phrase which can be asked to show all the applied selections	
show Apps	This phrase is used to show all the deployed apps	
show dimensions	This phrase is used to display the list of all dimensions	
show KPIs	This phrase is asked to display the list of KPIs	
show measures	This phrase is asked to display the list of measures	
show visualizations	This phrase is asked to display the list of all visualizations	
Surprise Me	This phrase is asked when user wants to show surprise me information with or w/o mentioning dimension or measure	
table	It is used to specify a chart type	
Tell me	This phrase can be in the questions started with tell me	Tell me my sales
the	This is used as the article	
visualizations	This word can be asked to display the list of visualizations	

viz	This word can be asked to display the list of visualizations	
vizs	This word can be asked to display the list of visualizations	
vs	This keyword is used in a question for comparative analysis	Show me sales for new york vs new jersey

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