LeapLytics

# Traffic Light – Extension for Qlik Sense

Manual

Version: 1.3



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# 1 Introduction

Keep track of your project status and milestones with this visual traffic light solution! This is the major objective of this traffic light extension. "Traffic Light" is a highly customizable Qlik Sense Extension for monitoring your KPIs. Multiple settings like horizontal and vertical alignment or a two/three light system adapts this extension to your reporting needs.

This extension can also be used for monitoring and indicating thresholds for all types of physical measures, quality indicators and divergences in general. With this, it can be applied to a broad number of uses cases, that occur different businesses. The following listing shows a selection of possible uses cases, that had been already implemented:

Project Management: Show Project Status in a Project Management Dashboard

IT: Indicate exceeding of system performance threshold in an IT-Performance-Monitoring Tool

**Infrastructure:** Show buildings, where a threshold for incidents and repairs is exceeded, which leads to a general evaluation of heavy maintenance

# 2 Installation

- Your LeapLytics contact provides you a proper download-link (contact <u>LeapLytics</u> for your download link now)
- Download the extension via the provided download link or inside the download section of your LeapLytics user account
- 3. Install the extension
  - a. Unzip the downloaded file and place the folder in your Qlik Sense Extensions directory on your computer (e.g.:
     *"C:\Users\YourUserName\Documents\Qlik\Sense\Extensions"*)
  - b. Import it to your Qlik Cloud or Enterprise Server by using the Qlik Management Console (QMC)

There is also a general installation guide available for Qlik Sense.

### 3 Getting Started

Open Qlik Sense and the relevant app, where you want to use the "Traffic Light" extension. Open your worksheet in edit mode and you will find the "Traffic Light" extension as well as all your other purchased LeapLytics extensions under "LeapLytics Bundle" within the "Custom Objects" section. Drag and Drop the extension to any area on your dashboard (*You can change the appearance of the extension later in the advanced settings*).



Figure 1: Where to find the extension

After you have placed an instance of the extension to your dashboard, the properties panel will

appear on the right side. The properties panel is separated into the following sections:

In the following chapters, you will learn how to use LeapLytics "Traffic Light" extension and how to customize it to your needs by using the properties correctly.

Measures		
Ranges		
Appearance		
Navigation & Actions		
About		

Figure 2: Properties Panel

#### 3.1 Measures

The measure defines the value, that is processed together with the ranges to create the colours of the traffic light. The measure can have all possible QlikSense-Formats. You can add a measure like this:

- Click the "Add measure" button in the properties panel under the section "Measure" or by clicking the "Add measure" button inside the extension window on your dashboard
- 2. Choose a measure from the dropdown list and click on it
- (Optional): Choose the right aggregation for your needs (Sum, Avg, Min, Max, etc.)

When using time formats, it must be ensured, that the format is set according to the format of the processed measure.

Measures				
Add measure				
User Defined Label:	Î			
Expression				
Sum(Num)	fx			
Label				
User Defined Label:	fx			
Number formatting				
Auto	▼			

Measure Type	Guidance	Measure Input Format	Formular
Number			No format needed
Currency			No format needed
Date	Should be defined properly in the data load editor	446785	date() or date#()
		'01/01/2020' mm/dd/yyyy	No format needed
Time	Should be defined properly in the data load editor	0.0625	interval() or interval#()
		01:30:00 hh:mm:ss	interval() or interval#()

#### Table 1: Measure Formatting

These expressions also need to be considered when defining the ranges. Please select the format of the measure accordingly.

Figure 3: Measure Properties

#### 3.2 Ranges

When "Ranges" is clicked, you can select between "Three Lights" or "Two Lights" in order to adjust the look of your traffic light.<sup>1</sup>

Measures				
Ranges				
<ul> <li>Light System</li> </ul>				
Light System				
Three Lights Two Lig	hts			
▼ Red				
Min:				
	fx			
Max:				
	fx			
▶ Yellow				
▶ Green				



Afterwards, define the individual ranges with "Min" and "Max" values in order to set the intervals of each colour. *Please use the format-formulars according to the measure-formular.* 

<sup>1</sup> Keep in mind, that the option to define the yellow interval is hidden, if you select "Two Lights" in the "Light System" properties (all described use cases can be applied)

# The basic logic for all user cases is: From small values (red) to high values (green). For detailed use cases, see the table below:

Use Case	Range System	Guidance	Logic	Effect
Revenues / Time / Dates / Cost / Distance / Physical Measures	Closed range (basic use case)	All ranges need to be defined (Min. and Max.)	From red to green	Values can be out of range, which results in an empty traffic light. *Robust against outliers or errors in the data
Revenues / Time / Dates / Cost / Distance / Physical Measures	Open range	Red=Min. / Green=Max. can be left blank <sup>2</sup> Use inverted algebraic sign for green to red logic → Red=Max. / Green=Min.	From red to green From green to red <sup>2</sup>	All values in dataset lead to evaluation in the traffic light.
Project status e.g. Time / Scope / Budget	Closed range (categorical value)	Ranges are defined by only one value (e.g. Min = 1 & Max. = 1) * <i>if data includes text</i> <i>instead of values (e.g.</i> <i>'Red') then transform into</i> <i>value e.g. 1</i>	From red to green	Values can be out of range, which results in an empty traffic light. *Robust against outliers or errors in the data
Revenues / Time / Dates / Cost / Distance / Physical Measures on different levels of hierarchy / Regions / Products	Closed range (basic use case / case sensitive)	All ranges need to be defined (Min. and Max.) By defining the limit of each hierarchy with "if" formular <i>if region_level = country</i> <i>then 10;</i> <i>Else region_level = city</i> <i>then 5;</i>	From red to green	

Table 2: Use Cases with logic

# 4 Advanced Settings

#### 4.1 Alignment / Size

You can use the alignment switcher to bring your traffic light in a vertical or horizontal position (*Vertical alignment is set by default*).

The current version of the traffic light is adapting the size of the extension automatically.

#### 4.2 Border Settings

With the border setting, you can adjust the appearance of the traffic light to your needs.

"Traffic Light Border" enables or disables the outer borders of your system.

"Traffic Light Shades" enables or disables the inner borders of the lights.



Figure 5: Border Properties

#### 4.3 Text Settings

You can apply changes to the text displayed underneath the icon within the "Text Settings" properties.

Show or hide text with the "Text Visible" switch.

Change the size of the text with the "Font Size" slider.

You can change between bold text and normal text with the "Font Style" switcher.

Measures				
Ranges				
Appearance	Appearance			
<ul> <li>General</li> </ul>				
<ul> <li>Alternate states</li> </ul>				
<ul> <li>Alignment / Size</li> </ul>				
<ul> <li>Border Settings</li> </ul>				
<ul> <li>Text Settings</li> </ul>				
Text Visible  Visible				
Font Size: 14px				
Font Style				
Normal	Bold			

Figure 6: Text Properties

# 5 Navigation & Actions

You can apply Navigation & Actions to your "Traffic Light" extension to navigate to QlikSense Sheets, websites, etc.

Actions need to be activated with the corresponding button.

"Traffic Light" supports two different navigation types:

1. Button:

Choose "Button" to add a button underneath your traffic light icon.

You can rename the button by using the "Button Text" field.

Enter a URL for a website or QlikSense Sheet you want to navigate to\*.

You can open the URL in the same window or in a separate tab by using the "Open in same window" checkbox.

#### 2. Object:

Choose "Object" to make the entire object clickable (*"Button Text" field will be hidden*). Enter a URL for a website or QlikSense Sheet you want to navigate to\*.

You can open the URL in the same window or in a separate tab by using the "Open in same window" checkbox.

Measures		
Ranges		
Appearance		
Navigation & Actions		
Action by Click: Activated		•
Navigation Type: Button	Objec	t
Button Text:		
Button		
Website URL:		
https://www.leaplytics.de <b>f</b> x		
Open in same window		

Figure 7: Navigation & Actions

\*URLs always have to start with "http://www." or "https://www."

# 6 About

This Qlik Sense extension is developed by LeapLytics.

The About-Section show information regarding this extension.

Version: Shows the installed version of this extension

License valid until: Shows the license expiring date

License valid on server: Shows on which server ID this extension can be used

# AboutThis Qlik Sense extension is developed<br/>by LeapLytics.Version: 1.2For a detailed documentation and<br/>further information, click the link<br/>below.LeapLytics.dePlease subscribe if you want to receive<br/>exclusive releases for the Traffic Light<br/>Extension for QlikSense.SubscribeLicense valid until: 30.12.2029License valid on server:

LICENSE Valid on server: LEAPLYTICS.EU.QLIKCLOUD.COM

Figure 8: About-Section

#### 6.1 Compatibility

This extension has been tested with:

<u>Qlik Sense 2020/09</u>

Qlik Sense 2019/09

#### 6.2 Version History

Version	Date	Content
1.0	24.11.2020	Initial Version
1.1	09.12.2020	<ul> <li>Subscription functionality for release upgrades</li> <li>Optimized space within horizontal alignment</li> </ul>
1.2	22.04.2021	<ul><li>Navigation &amp; Actions added</li><li>Improved properties panel</li></ul>
1.3	15.11.2021	<ul> <li>Dynamic reseizing of the extensions according to the screen resolution</li> </ul>

Table 3: Version history

#### 6.3 Contact

For further information, training material or use cases contact us via our <u>contact form</u>, or <u>subscribe</u> to latest news and updates to certain products.

For bugs and troubleshooting, you can contact: info@leaplytics.de

#### 6.4 Copyright

Copyright (c) 2021 LeapLytics