Infographics

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Style your apps	Images by dimension	Dynamic Stories	Trellis & native charts	Viz on the fly

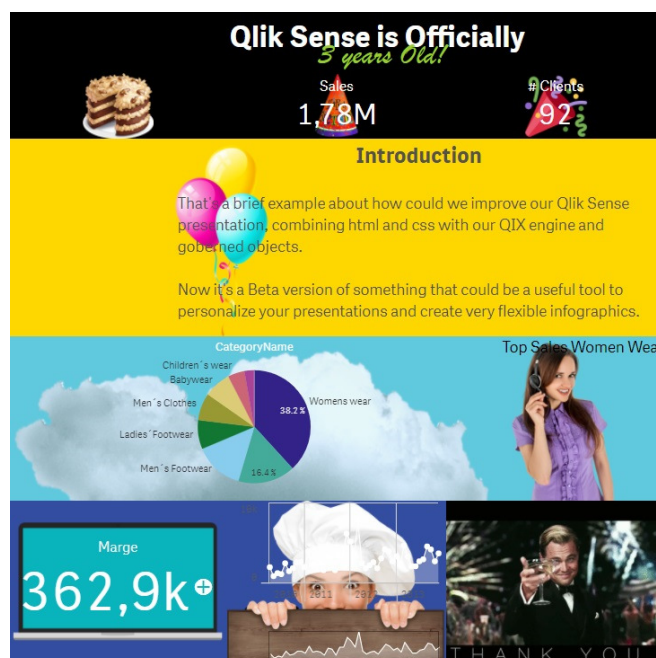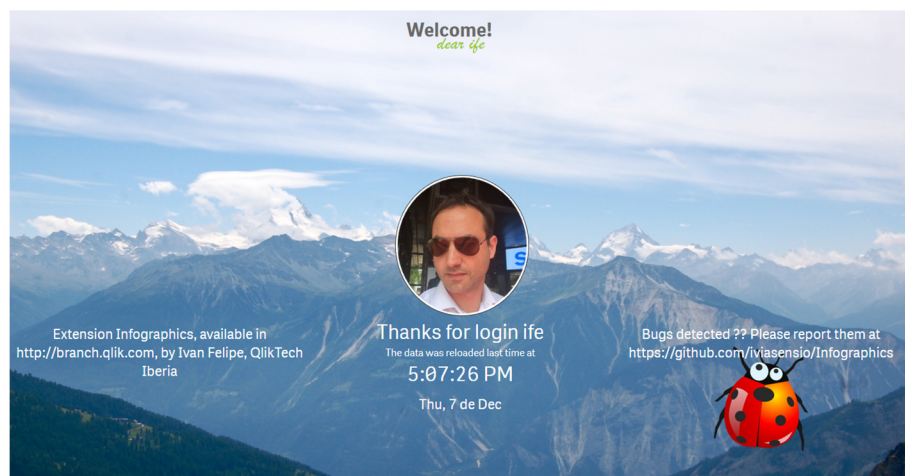Qlik Sense Infographics extension manual

1) **Requisites**
   a. Qlik Sense September 2017
      i. Some of the features are just available within Sep 2017 and beyond, i.e. some of the APIs function used and some characteristics of the settings panel like color-picker (which metadata has changed recently from integer to object)

2) **Standard Mode**
   a. That's the mode by default
      i. You'll work always with std mode unelss you chose specifically Trellis Mode.
   b. With the std mode you can build visualizations like those

c. Basically you can have a matrix with a maximum of 5 rows and 8 columns and controll everything separatelly on each cell:
   i. Height
   ii. Width
   iii. Background color
   iv. Background image
   v. Titles
   vi. QS Charts (from master objects)
d. Independently of the cells content you can also include a global title and a global background
e. Let's see the features in detail:
   i. Dimensions panel
      • It's a native dimension settings
      • You can include only one dimension
      • That dimension can be used to generate dynamic images, i.e.:
         • You can use a 'user' dimension =Mid(OSUser(),index(OSUser(),'; UserId=') + 9,40), and keep your user images inside the extension, in the app, or in any path, to show their picture each time one user access
         • Or visualize an image of your products each time you select one How to do that is expained in the below lines.
   ii. Settings / General Settings
      1. *Number of Tabs*
         a. Chose how many rows (or panels with visualizations) you want to create
         b. From 1 to 5 (a part of the header)
         c. If you chose 'trellis', instead of a number then you'll start working with the trellis functionality and the settings will change
      2. *Default Images Path*
         a. It will show a path by default the first time you create the infographics object, something like http://localhost/content/Default/
         b. This is a local path used to allocated the images in the default path of your environment

Media library	
In app	Qlik_default_feathers.png
Default	Qlik_default_flower.png
	Qlik_default_green.png
	Qlik_default_leaf.png
	Qlik_default_orange.png
	Qlik_default_plant.png
	Qlik_default_qlikcircles.png

    c.   Anyway it can also be useful to type an external path for your images. i.e. if you already have a corporate directory to allocate product images, you can use these images without copying them inside the extension, just typing //ImagesServer/ACDivision/Img/Products/

3. *Set Global Background*

It's switch to off by default.

If you switch it to on then you'll be able to type global background settings, in other words, you'll create a background color and background images for all the panels, which will turn to transparent in order to allow the visualization of the global background settings.

    a. *Background Color Global*

        i.   That's a combo with more than 100 colors (including 'transparent')

        ii. Sorted alphanumeric asc

    b. *Opacity*

        i.   You can turn your global background colors and images semi-transparent, as much as you want

    c. *Use Dimension Images*

It's switch to off by default

If you turn it on you'll be able to show an image for element of the primary dimension you included previosly.

i.e. :

* Dimension→ Category

* content →BabyWear, WomensWear,...

* if you have an image for each category, in any folder, it will be shown as bakground image

      i. *Image Origin*

       Your images can be placed at:

- *App* : the images can be uploaded to your app with the media object, or a native Text object i.e.
- *Default* : this is a global directory, visible from all the apps. And also it can be modifyed with the previous 'Default Images Path' box, and then use an external directory to get your dynamic images
- *Extensions* : you can copy your images directly in the extension, in the folder ..\Extensions\Infographics\img\Dim

      ii. *Images Extension (jpg, png, gif)*
- All your image must have the same image extension

  d. *Background Image*
      i. Use the media object to insert a static global background image

  e. *Sizing*
      i. Decide the size

  f. *Position*
      i. Use the buttons matrix to decide where to insert it

  g. *Add 2nd Image*
      i. This 2nd option has the same feature as the previous one.
      ii. You can insert a second image infront of the previous background, and this second image can be static or dynamic (an image for each primary dimension element)

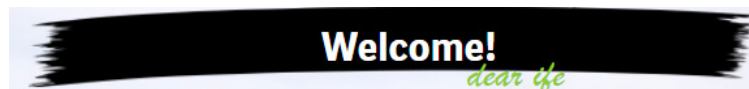4. *Change QS Text Color*
  a. *Charts text color*
      i. This will change the color properties of the native charts you work with
      ii. Only some of the elements can be modyfied and this elements can vary depening of the type of chart
      iii. i.e. the title color of the native visualizations can be modifyed

iii. Settings / Header

1. *First just decided if you want to include a header or not*
2. *Background Color*
   a. Use on the more than 100 colors as header background, or use the transparent one
3. *Include a Banner*
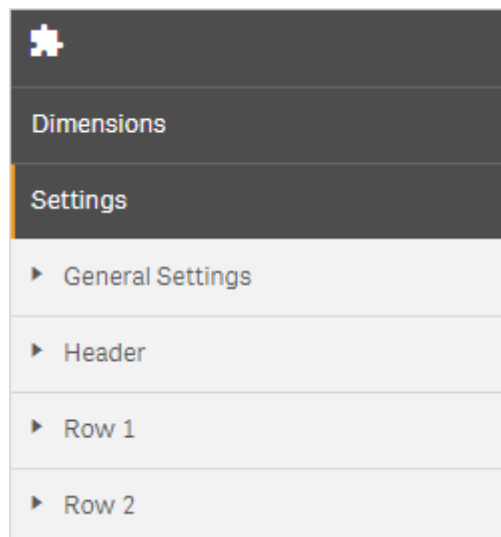   o By default it's set to off
   a. *Header Banner*
      If you swtich it on, you'll get a list of different images to set as background banner image for your header

4. *Banner padding left*
   a. Useful to help you to center the whole banner
   b. The whole banner is a combination of image, first and second text
5. *Banner width*
   a. You can enlarge the banner
6. *Title*
   a. Corresponds to the first title string
7. *Text Padding left*
   a. Useful to help you to center the text
8. *Font Family*
   a. 8 font families available
9. *Font Size*
   a. Small, medium or large
10. *Title Text Color*
    a. More than 100 colors available
11. *Include a 2nd title*
    a. This contains the same features of the first title
    b. Allows to overlap this second string over the previous one
12. *Padding Top*
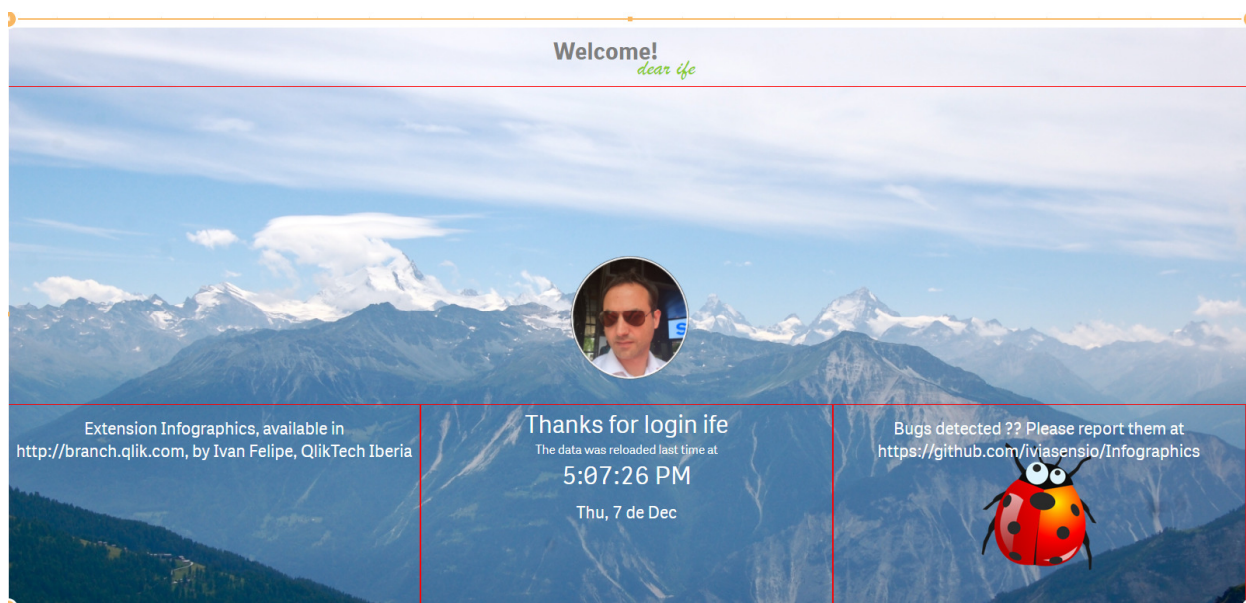   a. If you chose a second title you can overlap it modifying the padding in vertical and horizontal position

iv. Settings / Row 1,2,3,4,5
   • You'll have a Row menu for each row you decide to have
   • With a maximum of 5 rows (that you can modify in Global Settings)
   • A row is a panel with up to 8 cells
   • You can modify a lot of elements of each cells

1. *Height*
   a. By default each row will have the same height, 25% of the total heigh available
   b. But You can modify the height of each row if you want, from 0% to 100%, with the slider
   c. i.e., here we have two rows, the first one has a manual height about 66% of the total height and the second one is about 33% of the total height

2. *Number of Columns*
   a. Chose from 1 to 8 possible cells
3. *Show Col '1' properties*

Infographics for Qlik Sense

There is a lot of properties around all the possible columns, so by default all these properties are just hidden.
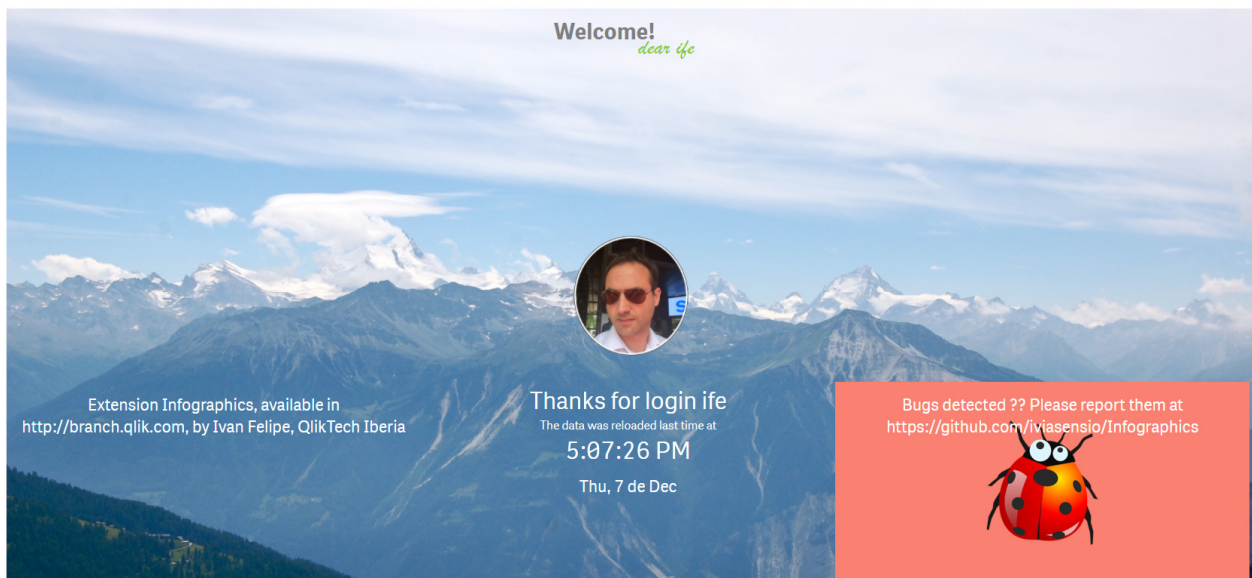
Switch if to on if you want to manipulate the settings of each cells.

a. *Cell '1' width*
    i. By default all the cells will have the same width, but you can set different widths for each one
    ii. If the sum of all width exceeds 100% you'll get a horizontal scroll at the bottom of the extension
b. *Background Color*
    i. Even if you chose a global background for the whole visualization you can type an specific different color for each cell

c. *Background image*
    i. You can insert a static background image in each cell
d. *Sizing*
    i. You can manipulate the sizing of the images
e. *Position*
    i. Decide where to put it
f. *User Chart or text*
    i. If you use 'Text' (by default)
        - *Title*
            a. Type a title, it can be an expression
        - *Padding Top*
            a. Decide where to put it
        - *Font Family*

a. 8 font families available
- *Font Size*
  a. 3 sizes available
- *Title Text color*
  a. More than 100 colors available

ii. If you use 'Chart'
- *Chose a chart*
  a. A list of **master visualizations**, that you can insert in each cell
- *Title Text Color*
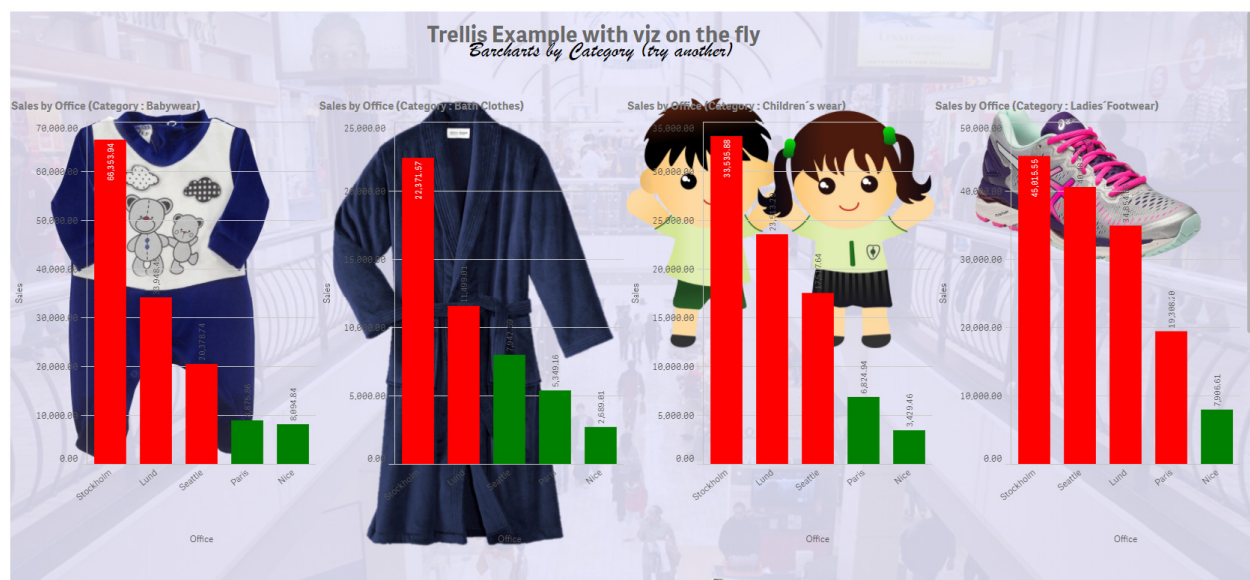 a. Some visualizations allows to modify the color

3) Trellis Mode
   a. If you chose 'Trellis' in the option **Settings→General Settings→Number of Tabs** then the extension will work in a different way.
      i. A Trellis is a visualization repeated one time for each element inside a dimension, i.e. : if you have 4 countries and 8 categories, you can have 4 barcharts by Category, one barchart for each Country
      ii. It's mandatory to add one dimension to work with Trellis, in order to be able to make that loop
   b. *Number of columns*
      i. 1,2,3 or 4 columns per row
   c. *Number of Rows*
      i. 1 or 2 rows, if you chose 1 row the height of the visualizations will be the 100% of the height available, if you chose 2 rows the visualizations will have a height about 50%
      ii. Two Rows
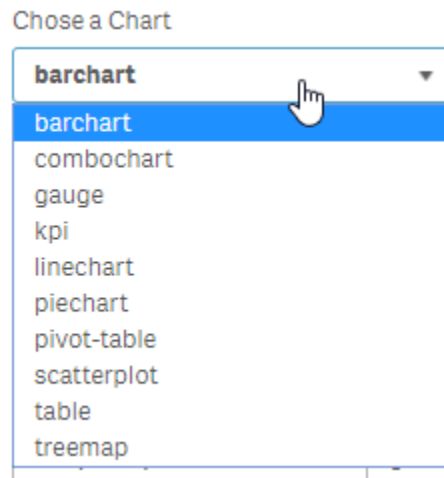
    iii.   One Row

    d.   *Chose a Chart*
         i.   10 visualization types available

e. *Chose a dimension*
    i. Depending on the chart type you can chose 0, 1 or 2 dimensions
        1. i.e. if you chose KPI you won't have the possibility to chose any dimension
        2. if you chose treemap or pivot table you'll be able to include more than one
    ii. It will show a list of all master dimensions
    iii. This dimension is not the one use to make a loop, this consist in the dimension include inside the chart
    iv. The dimension of the loop is the primary dimension include in the top of the settings 'Dimensions'
f. *Trellis loop*
    • How does the trellis work internally?
        o The visualization API does not allow to include a hypercube on the fly in a visualization on the fly
        o So if works modifying the content of the expression you type for the charts, inserting set analysis content, to create a condition based on each element of the primary dimension for each chart
    • So it transform this **(sum(Sales)-sum({<Billing = {"Yes"}>}COS))/sum(Sales)** into this **(sum({<Category = {[Babywear]}>}Sales)-sum({<Category = {[Babywear]},Billing = {"Yes"}>}COS))/sum({<Category = {[Babywear]}>}Sales)**
    i. *Replace that symbol*
        1. Sometimes the expression are too complex to be modifyed correctly
        2. For these cases I've include the optino Replace that symbol
        3. To allow you to type the set analysis content when you decide
        4. i.e transform this **(sum({<?>}Sales)-sum({<Billing = {"Yes"},?>}COS))/sum({<?>}Sales)** into **(sum({<Category =**

**{[Babywear]}>}Sales)-sum({<Category = {[Babywear]},Billing =
{"Yes"}>}COS))/sum({<Category = {[Babywear]}>}Sales)**

     5. Just replacing the symbol '**?**', automatically, by set analysis

  g. *Expression 1(don't start with =)*

      i. Type a valid QS expression

     ii. It's very rellevant do not start your expression with '=', if you start with '=' the expression will not be modifyed internally to create the trellis and it will show global values

  h. *Label Expression 1*

      i. The label of the expression

     ii. It can be dynamic

  i. *Number formatting*

You can chose the format *Auto* or *Custom*.

If you chose Custom, you'll be able to modfify the number format, it's recommendable in case of pivot-table, but not needed in case of KPIs

      i. *Number of decimals*

         1. Just include the number of decimals needed

     ii. *Thousand*

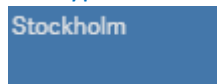   1. Chose ',' or '.' for thousands, then the opposite will be applyed to decimals

    iii. *End Symbol*

         1. You can include '€', '$',…

         2. If you type '%' then the number will be showed as a percentage

  j. *Colors Custom*
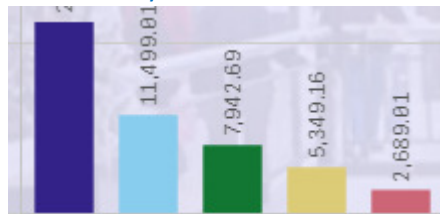
      i. *Primary*

         1. The typical standard QS blue color

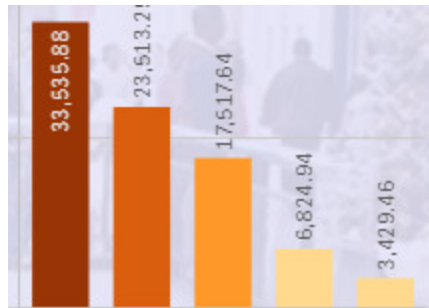   ii. *byDimension*

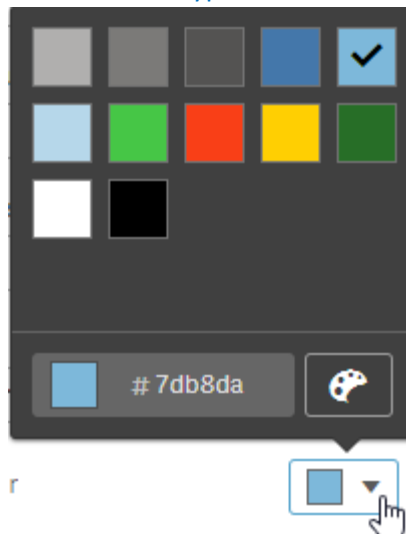   1. One color by each element of the second dimension

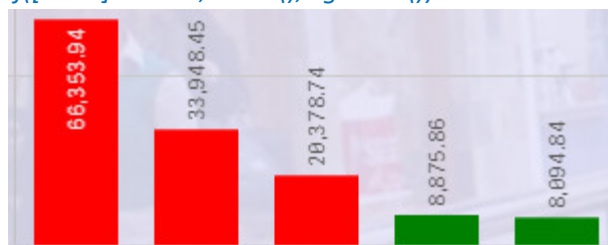   iii. *byMeasure*

         1. Heatmap by measure

iv. *singleColor*

1. Pick a color or type a hexadecimal one manually

v. *byExpression*

1. A valid dynamic QS color Expression, like
   if([Sales]<10000,Green(),LightRed())

k. Depending on the type of chart you can have more than 1 expressions, up to 3 in case of pivot-table or treemap, for example.

l. *Use Dynamic Images*

You can have one custom image for each chart of the loop

It works the same way as explained previously in General Settings, but in this case each image will be shown as a background image for each chart.

The image will be associated to the primary dimension, the dimension used to make the loop.

    i.   *Image Origin*
        1. *App*
        2. *Default*
        3. *Extension*
    ii. *Image Extension (jpg,png,gif...)*
    iii. *Sizing*
    iv. *Position*