

# Webinar – SAP Lumira SDK Introduction and cool examples

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# Topics

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- Lumira overview and pre-requisites for SDK
- What/Why extensions – message from Product Manager
- Demo – Sample extension
- Advanced extensions
- References – cool examples, help documents, forums
- Q/A

# Lumira overview and pre-requisites for SDK

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- ❑ **Lumira (Free / License Edition)**

<http://www.sap.com/downloadlumira>

- ❑ **Chrome Browser**

- ❑ **Knowledge in:**

HTML, CSS, JavaScripts, JQuery, JSON, D3

# What/Why extensions – message from Product Manager

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**Q1: Why Extensions? I would like to understand what are the key aspects of going for Lumira Extensions. Lumira itself has so many variety of visual analytics charts, geomaps etc, so what would be burning need for someone to go for extensions.**

**[GW] first, Lumira provides more than 20+ chart types, such as bar, pie, line and etc. they are mostly for general business analytic purpose. However, when analyze the specific areas or business, those charts is not enough. I.e compare history and current data with different area in one visualization, bullet chart would be more fit. But it is not provided by Lumira. And when comes to relationship analytic in social media, I am afraid none of build-in chart can't perfectly fulfill this need. Second, some of our partners already have created some eye-catching visualization, or D3 community have different kind of visualization, Lumira's extension can enable those partners to earn money via SAP store by creating Lumira extension.**

**Q2: Can we use datasources we already setup for out of box visual charts?**

**[GW] yes. The extension charts and Lumira built-in charts shares the same data model, cross table data model. So when you set up a datasource in Lumira, these data source could be also used by extension. All you need to do in extensions is to define the correct data feedings. The example of bullet chart is a good example to understand it. The upload local csv in VizPacker is helping you building data structure, and run in web browser locally. Like you said, this csv file is just referring as example. So you will understand how many dimension or measure to define in extension, and how our rendering function to work with those data. In Lumira, you can put whatever another datasource, such as HANA or SQL.**

**Q3: Lumira also has variant called predictive analytics. Are those APIs exposed for Extensions?**

**[GW] Technically yes. Predictive Analysis (PA) shares the same architecture as Lumira, just packaging differently. But we didn't promote extension usage in PA yet, as mostly this kind of extension may need leverage the build-in predictive algorithm or getting more predictive data in dataset, which is not fine-grained.**

# Demo – Sample extension

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## ❑ Step by Step Approach

- Use Vizpacker.html
- Upload Dataset
- Create Extension
- Add Chart logic
- Deploy
- Test

<http://scn.sap.com/community/lumira/blog/2013/12/19/hello-world-extension-for-sap-lumira>

<http://scn.sap.com/community/lumira/blog/2014/02/19/how-to-add-a-d3-extension-for-sap-lumira>

# Advanced extensions

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## ❑ Advanced Examples on SCN

### ❑ Walkthrough

Matt Lloyd ([Hello World](#), [Bulleted chart](#), [Exoplanet](#))

Terry Penner ([Stack Group](#), [Column Variety](#), [Pie charts](#))

Robert Russell ([Custom Choropleth](#))

## ❑ D3 Examples

### ❑ Walkthrough - <http://d3js.org/>

# References

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## HTML5 Knowledge

<http://www.w3schools.com/>

## Javascript Charting Frameworks

<http://d3js.org/>

[http://en.wikipedia.org/wiki/Comparison\\_of\\_JavaScript\\_charting\\_frameworks](http://en.wikipedia.org/wiki/Comparison_of_JavaScript_charting_frameworks)

Official Lumira SDK Guide: [http://help.sap.com/businessobject/product\\_guides/vi01/en/lum\\_114\\_vp\\_en.pdf](http://help.sap.com/businessobject/product_guides/vi01/en/lum_114_vp_en.pdf)

D3 web-book: <http://chimera.labs.oreilly.com/books/1230000000345/index.html>

Lumira vs Tableau: <https://mdmrc.wordpress.com/2013/10/03/visualization/comment-page-1/>

One big downside of Tableau in my evaluation context is the absence of a connector for SAP BusinessObjects 3.x or 4x (BO). According to a Tableau account manager, a beta version will be available to a few users in the coming months.

The main advantage of Lumira is the full integration with SAP products and especially BusinessObjects. All semantic layers and filters available in the universe are reusable in Lumira. The user experience is similar to Webi, the users familiar with the universe will quickly understand the semantic layer in Lumira. The way to filter, exclude and drill through data is extremely well done and intuitive.



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