VISUAL BI EXTENSIONS (VBX) FOR SAP LUMIRA DESIGNER

Product Roadmap

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### What You Get With VBX - Summary

<table>
<thead>
<tr>
<th>CHARTS</th>
<th>MAPS</th>
<th>SELECTORS</th>
<th>UTILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>50+ Charts, with 23 exclusive to VBX</td>
<td>400+ map options</td>
<td>Advanced input &amp; filter controls</td>
<td>Customizable Export, Print &amp; Presentation options</td>
</tr>
<tr>
<td>400+ Properties for extensive formatting</td>
<td>GeoJSON support for custom maps</td>
<td>Easier slice &amp; dice, sort, filter &amp; alert capabilities</td>
<td>Excel, Google Sheets &amp; Web Service connectors</td>
</tr>
<tr>
<td>40% faster delivery with reduced scripting</td>
<td>Marker, Cluster, Choropleth, Heat &amp; Bubble layers</td>
<td>Integrated Search to handle larger data sets</td>
<td>Responsive UI Container for mobile UX</td>
</tr>
<tr>
<td>2x-6x performance gains through Data Utility</td>
<td>30+ Base Map layers E.g. ESRI, Google, OSM</td>
<td>Patented time period selectors</td>
<td>Advanced Table, KPI Tile, What-If Analyzer &amp; more</td>
</tr>
</tbody>
</table>

### BW & HANA Hierarchy Support | Webl-as-a-Data-Source | Reusable Data Sources | Advanced Interactivity & Drill-Through
Context Menu | Advanced Conditional Formatting | Mobile-Compatible & Responsive
Custom Events | Custom Scripting Functions | ... and more

**1-CCLICK CONFIGURATION**
## Visual BI Extensions for SAP Lumira Designer (What is Included as Today)

### Charts

- **50+ Charts**
  - Basic Charts (Line, Column, Bar)
  - Stacked Chart (Column / Bar)
  - Combination (Single / Dual Axis)
  - Pie / Donut Chart
  - Scatter plot / Bubble Chart
  - Treemap / Heatmap
  - Waterfall
  - Progress Bar / Bullet Chart
  - Radar Chart
  - Chart Selector
  - Table with Sparkline Charts
  - Funnel Chart
  - Specialty Charts: Marimekko, Tag Cloud, Box Plot
  - Gauge (Advanced, Angular, Solid, Linear)
  - Drilldown Chart (Bar, Column, Pie, Funnel, Pyramid, Tree)
  - Pyramid Chart
  - Polar chart
  - Circular/ Number Counter /Semi Circular Donut
  - Stacked and Grouped Charts
  - Specialty Charts: Gantt Chart, Risk Matrix, Calendar Heatmap, Waffle Chart
  - Fixed Column Charts
  - Multiple Axis Charts / Super Combination Chart
  - Advanced Column Bar Chart
  - Spie Chart
  - Stream Graph
  - Sankey Chart
  - Parallel Coordinates Chart
  - Slope Chart
  - Sunburst Chart
  - Pyramid Chart
  - Lolli Pop Chart
  - Activity Gauge
  - Dot Plot Chart

### Additional Features

- **Data Utility**
- **Hierarchies:** Leverage BW/HANA hierarchies
- **Chart Export options:** PDF, JPEG, SVG, PNG
- **Predefined themes (CSS)**
- **Enhanced Chart Interactivity**
  - Zoom and Lasso / Reverse Lasso (including Mobile)
  - Show / Hide series based on legend click
  - Drill Down & Expand / collapse
- **Advanced Conditional Formatting**
- **Identical Scaling for multiple charts**
- **Permanent color assignment for measures and dimensions**
- **Custom Data Label and Tooltip**
- **Support for Trendlines / Error Bars**
- **Ability to rename Measure Labels**
- **Extensive Scripting options**
  - Chart, line and Plot Area Formatting
  - Value Display Formatting (in axis, tooltip, etc)

- **Conditional Formatting Enhancements**
- **Bullet Chart Enhancements**
- **Runtime Deviation Bar**
- **Dynamic Series (enable/disable)**
- **Legends for the Series (Show/Hide)**
- **Series Label options**
- **Configuring the pattern for the series**
- **Custom Ranking for Measures**
- **Annotations in Charts**
- **Annotations at run time**
- **Additional Properties – German Support**
- **Custom Context Menu in Charts**
- **Conditional Formatting - Positive and Negative Value colors for Boolean Formats**
- **Plot Line and Plot Band Scripting**
- **Stacked Waterfall Chart**
- **CSV Export on Charts Context Menu**
- **Table Context Menu – Enhancements**

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### Visual BI Extensions for SAP Lumira Designer (What is Included as Today)

<table>
<thead>
<tr>
<th>Maps</th>
<th>Utilities</th>
<th>Selectors</th>
<th>Speciality Charts</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Drill Down Capability</td>
<td>- Advanced KPI Tile</td>
<td>- Period Selector</td>
<td>- Data Utility as Component</td>
</tr>
<tr>
<td>- Various Map Types</td>
<td>- Advanced Label</td>
<td>- What If Analyzer</td>
<td>- Analytics</td>
</tr>
<tr>
<td>- - Marker Layers</td>
<td>- Export Options</td>
<td>- HTML Box</td>
<td>- Gantt Chart Enhancements</td>
</tr>
<tr>
<td>- - Choropleth Layer</td>
<td>- - PDF</td>
<td>- Pictogram</td>
<td></td>
</tr>
<tr>
<td>- - Bubble Layer</td>
<td>- - Microsoft Word</td>
<td>- Search Box</td>
<td></td>
</tr>
<tr>
<td>- - Cluster Layer</td>
<td>- - Microsoft PowerPoint</td>
<td>- Alerting capabilities</td>
<td></td>
</tr>
<tr>
<td>- - Heat Map Layer</td>
<td>- - Email</td>
<td>- Range Slider</td>
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</tr>
<tr>
<td>- GeoJSON for custom maps</td>
<td>- Advanced Table</td>
<td>- Facet Filter</td>
<td></td>
</tr>
<tr>
<td>- Data Types</td>
<td>- Trend Icon</td>
<td>- - Y-M</td>
<td></td>
</tr>
<tr>
<td>- - Latitude and Longitude</td>
<td>- Additional Data Source</td>
<td>- - Y-Q-M</td>
<td></td>
</tr>
<tr>
<td>- - Regional dimensions</td>
<td>- - Microsoft Excel</td>
<td>- - Y-Q-M Multi Select</td>
<td></td>
</tr>
<tr>
<td>- - (Country, State, Counties)</td>
<td>- - Google Sheets</td>
<td>- Hierarchy Filter</td>
<td></td>
</tr>
<tr>
<td>- - Support for full address details</td>
<td>- - WSDL</td>
<td>- Dynamic Grid Box</td>
<td></td>
</tr>
<tr>
<td>- 400+ regional Maps</td>
<td>- - OData</td>
<td>- Listbox and Dropdown</td>
<td></td>
</tr>
<tr>
<td>- (Continents, Countries, States..)</td>
<td>- What If Analyzer</td>
<td>- - Search Box</td>
<td></td>
</tr>
<tr>
<td>- Multiple Data source for Maps</td>
<td>- HTML Box</td>
<td>- - Alerting Dropdown</td>
<td></td>
</tr>
<tr>
<td>- Custom Data Label and Tooltip</td>
<td>- Pictogram</td>
<td>- Range Slider</td>
<td></td>
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<tr>
<td>- Support for Mobile</td>
<td>- Script Box</td>
<td>- Facet Filter</td>
<td></td>
</tr>
<tr>
<td>- Ability to define initial Zoom / Location</td>
<td>- Search Box</td>
<td>- - Y-M</td>
<td></td>
</tr>
<tr>
<td>- Advanced Conditional Formatting</td>
<td>- Search Box</td>
<td>- - Y-Q-M</td>
<td></td>
</tr>
<tr>
<td>- Custom marker icons</td>
<td>- Sorting</td>
<td>- Hierarchy Support</td>
<td></td>
</tr>
<tr>
<td>- Zoom / Lasso Functionality</td>
<td>- Advanced KPI Tile Enhancements</td>
<td>- New Selector - Time Slicer</td>
<td></td>
</tr>
<tr>
<td>- 30+ Map layer options</td>
<td>- Advance Table Enhancements</td>
<td>- Period Selector Week / Month Quarter</td>
<td></td>
</tr>
<tr>
<td>- - ESRI Maps with Charts</td>
<td>- Constant Data source with BYOD</td>
<td>- List Box/ Combo Box enhancements</td>
<td></td>
</tr>
<tr>
<td>- - Google Maps</td>
<td>- Multiscreen View in Responsive UI</td>
<td>- Select Enhancements</td>
<td></td>
</tr>
<tr>
<td>- - - Open street Maps</td>
<td>- Advanced KPI Tile Enhancements</td>
<td>- Facility Filter Template</td>
<td></td>
</tr>
<tr>
<td>- - - Custom Map</td>
<td>- Advance Table with more API Scripts</td>
<td>- Configuration</td>
<td></td>
</tr>
<tr>
<td>- Data Visualization for Heat Maps</td>
<td>- Custom Context Menu in Advanced Table</td>
<td>- VBX Theme</td>
<td></td>
</tr>
<tr>
<td>- Performance Enhancements - Heat/Bubble Map</td>
<td>- Advanced Table with predefined Table Templates</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>- Indoor Analyzer</td>
<td>- Indoor Analyser Enhancements</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
Visual BI Extensions for SAP Lumira Designer (What is Included in VBX 2.4)

<table>
<thead>
<tr>
<th>Charts</th>
<th>Utilities</th>
<th>Selectors</th>
<th>Speciality Charts</th>
</tr>
</thead>
</table>
| ▪ New Charts  
  - Pyramid Chart  
  - Lolli Pop Chart  
  - Activity Gauge  
  - Dot Plot Chart  
▪ Additional Features  
  - CSV Export on Charts Context Menu  
  - Enhancements in Table Context Menu | ▪ Additional Features  
  - VBX Theme | ▪ Additional Features  
  - Facet Filter Template Configuration | ▪ New Speciality Charts  
  - Analytics  
  - Gantt Chart Enhancements |

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The Marker Layer in ESRI Map can be configured with the Tooltipl showing the Column Dimensions and Z-Axis Measures with a Chart display.
VBX Theme can be applied for all the components by navigating to the Standard Properties of VBX Theme Application and thereby selecting the Theme types for the Display property.
VBX 2.4 Highlights – VBX Theme

DOWNTIME ANALYSIS DASHBOARD

Drill Down Reports:
- Specific Month
- Specific Day
- Non Producing Wells
- Zero Downtime Wells

Period: Aug 2018
Region: All
District: All
Reason: All

Downtime vs Lost Production
- Avg Downtime
- Downtime (hrs)
- Lost Production
- Number of Records
- Well Count

Well Count vs Avg Downtime (hrs)
- Well Count
- Avg Downtime

Top 5 Downtime Reasons
- Well Servicing
- Surface Equipment
- Temporarily Abandon
- Regulatory
- Weather Related
The chart type can be selected as Pyramid in the VBX Additional Properties of the Column Bar Chart. Here you can visualize each Pyramid representing the Column Bar for the assigned Dimensions.
The chart type can be selected as Lolli Pop in the VBX Additional Properties of the Column Bar Chart. Here you can visualize each Lolli Pop representing the Column Bar for the assigned Dimensions.
Activity Gauge is a highly customizable, supported and easy-to-use VBX extension which gives you the ability to compare multiple measures or single measure split by dimensions. It is used to explore visually the relative performance of categories for a direct comparison in radial bars.
The chart type can be selected as Dot Plot in the VBX Additional Properties of the Line Chart. Here you can visualize the Line Chart as Dot Plot Chart with the dots appearing as plots.
# VBX Roadmap

## Upcoming – 2019 & 2020

### Charts
- New Chart Types: Packed Bubble Chart, Tornado chart, Rainfall Chart, Chord, Scatter Punch card and Venn Diagram
- Runtime Additional Properties Sheet
- Conditional Formatting Enhancements

### Maps
- New Maps: eCharts Map

### Utilities
- Data Merge / Joining Component

### Selectors
- Multi-select auto fill box

### Speciality Charts
- New Visuals: Dependency Graph Tree, Breakdown Tree
- R Box
## Visual BI Extensions

### Product Roadmap – 2019 & 2020

<table>
<thead>
<tr>
<th>CHARTS</th>
<th>MAPS</th>
<th>UTILITIES</th>
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</thead>
<tbody>
<tr>
<td>Additional Chart Types</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Packed Bubble Chart</td>
<td>New Maps</td>
<td>Data Merge Joining Component</td>
</tr>
<tr>
<td>▪ Tornado Chart</td>
<td>▪ eCharts Map</td>
<td>▪ Ability to combine 2 or more data sources and create a new &quot;virtual data source&quot;</td>
</tr>
<tr>
<td>▪ Rainfall Chart</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Chord</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Scatter Punch Card</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Venn Diagram</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Runtime Additional Properties Sheet
- Able to edit the Additional Properties of the Charts in Runtime

### Conditional Formatting Enhancements
- Conditional Formatting Enhancements for Charts

### SELECTORS
- Multi-select Auto Fill Box
  - A component providing user with auto complete feature while selecting dimension members

### SPECIALITY CHARTS
- New Visuals
  - Dependency Graph Tree
  - Breakdown Tree

### R Box:
- A utility for bringing R Visualizations as part of Lumira

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# Support for SAP Lumira Designer Client Version

<table>
<thead>
<tr>
<th>SAP Lumira Designer Release</th>
<th>Supported Visual BI Extensions (VBX) Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lumira Designer 2.0 or higher</td>
<td>1.68 or higher</td>
</tr>
<tr>
<td>Lumira Designer (2.1, 2.2, <strong>2.3 or higher</strong>)</td>
<td><strong>2.0 or higher</strong></td>
</tr>
</tbody>
</table>

**Helpful Hint:**
- If you're using Lumira Designer 2.0 or higher, ensure you have Visual BI Extensions (VBX) Release 1.68 or higher.
- For Lumira Designer (2.1, 2.2, **2.3 or higher**), the requirement is Visual BI Extensions (VBX) Release **2.0 or higher**.

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Friday March 22, 2019
Testimonials

... support and advice has been **excellent**. Easy to use and they add that bit extra to our charts that are not available 'out of the box' ...

... a **must have** for any dashboard/analytic app developer... Support has been **outstanding** as well

... **significantly reduces** the development time and makes design studio on par/superior compared to other competitors...

... **very well** documented... and you don’t need to be a programmer to use them

It fills the gaps that you find in the design studio. The support was very **prompt**

..helped us **significantly reduce** dashboard development time and cut down on the amount of scripting... This suite is **worth** the investment

...I had zero Design Studio experience and was **quickly** able to create professional dashboards using the VBX suite...

VBX Charts provided us with **exactly** the kind of properties control **we needed**

**Fully recommend** this to every customer.

helped us significantly reduce dashboard development time...We received **fantastic** and **fast** support

a **'must have'** for building flexible, professional looking, interactive dashboards...support was **first class**

...It has been a **successful** and **popular** choice!...
Download your 15 Day Trial from: https://products.visualbi.com/vbx/

You will receive all components (charts, maps, selectors, utilities)
No functional limitation