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Create Custom, Interactive Map Visualizations in Oracle Business Intelligence

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Safe Harbor Statement

The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract.

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Agenda



- Oracle Business Intelligence SampleApp (5 min)
- Product Overviews (15 min)
 - Oracle Business Intelligence, Oracle Maps and Spatial
- **Demo of HTML5 maps in OBIEE** (20 min)
- **Hands-on Exercises** (1 hr 20 min)

The collage features a wide variety of data visualization techniques:

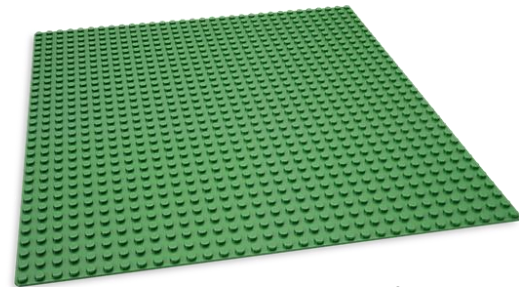
- Bar Charts:** A 'Unit Price' bar chart with an orange header; a '100% Stacked Bar' chart with multiple colored segments; a '1-Booked' vs '5-Shipped' funnel chart with percentages (17.77%, 79.37%, 66.20%); and a 'Catalina Island Island Rainfall' bar chart.
- Line Graphs:** A 'Unit Price' line graph with a red trend line; a 'Unit Price' line graph with a red trend line; a 'Unit Price' line graph with a red trend line; and a 'Unit Price' line graph with a red trend line.
- Maps:** A 'Unit Price' map of the United States; a 'Unit Price' map of the United States; a 'Unit Price' map of the United States; and a 'Unit Price' map of the United States.
- 3D Models:** A 'Unit Price' 3D model of a mountain; a 'Unit Price' 3D model of a mountain; a 'Unit Price' 3D model of a mountain; and a 'Unit Price' 3D model of a mountain.
- Other Visualizations:** A 'Unit Price' pie chart; a 'Unit Price' pie chart; a 'Unit Price' pie chart; and a 'Unit Price' pie chart.

Oracle Business Intelligence SampleApp

- Preconfigured, prepackaged turn-key Virtual Image that contains OBIEE, other related software and lots of sample contents



Everything you can possibly build



A clean, green-field platform
to run it on

OBIEE SampleApp



- Key products included:
 - OBIEE 11.1.1.7.1, BI MAD, Essbase, Oracle Database 12c, TimesTen, Endeca, ORE and much more
- Host-agnostic, portable, fairly exhaustive
- Distributed to all Stakeholders
 - Prospects, Customers, Partners, Field, Consultants, Dev, QA...



Oracle Technology Network

• [OTN & OVirtualBox Page](#)



[Public Live URL](#)



[Oracle BI Tech Channel](#)

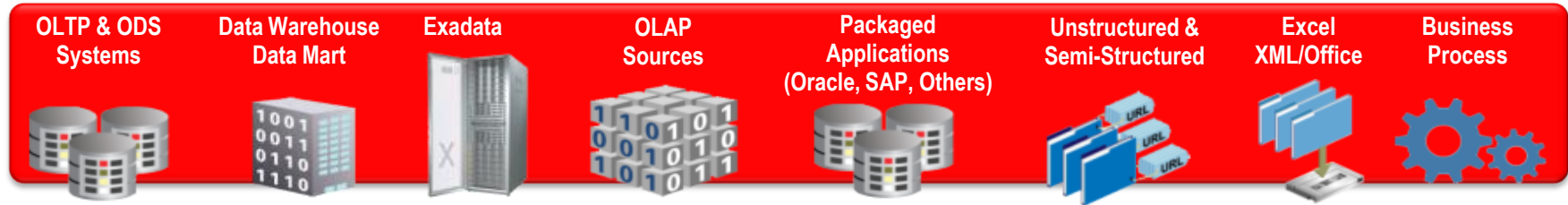
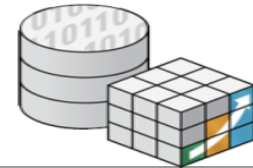
Oracle Business Intelligence

Complete, Open, Integrated



Common Enterprise Information Model

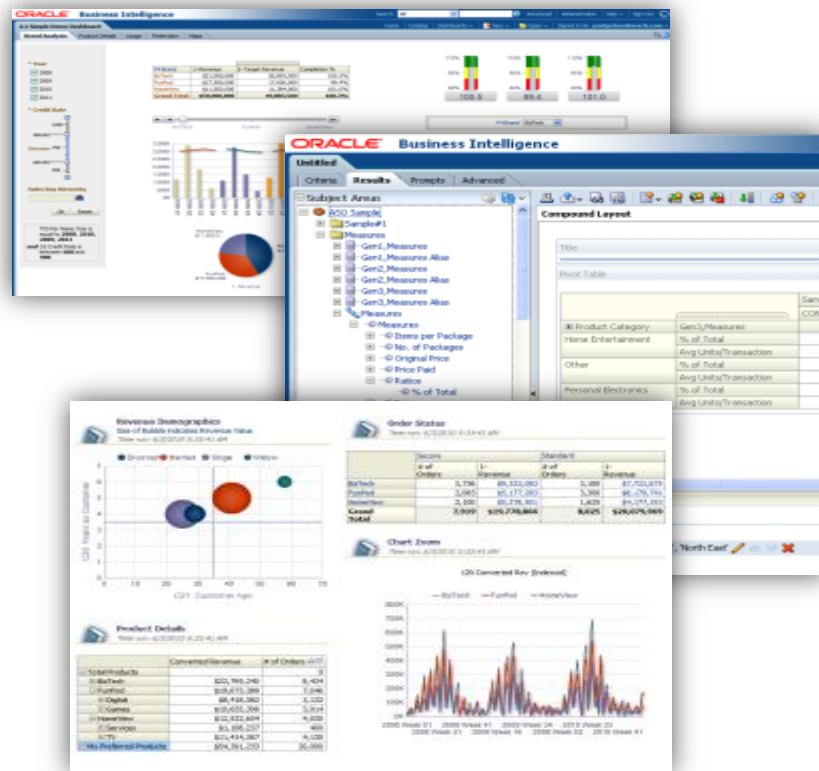
- Common Metadata Foundation across all Data Sources
- Common Security, Access Control, Authorization, Auditing
- Common Request Generation and Optimized Data Access Services
- Common Clustering, Workload Management, & Deployment
- Common Systems & Operational Lifecycle Management



Best-in-Class Query & Analysis User Interface



- Powerful dashboards
 - Visually appealing, Intuitive, 100% thin client
- Across all styles of analysis
 - R-OLAP, M-OLAP, Scorecards, Reporting, Collaboration, Actions
- Across all data sources
 - Simplified model for users
 - Federated data access
 - On-the-fly calculations, even with complex share and time series
 - Custom members & groups
 - Share, collaborate, & publish



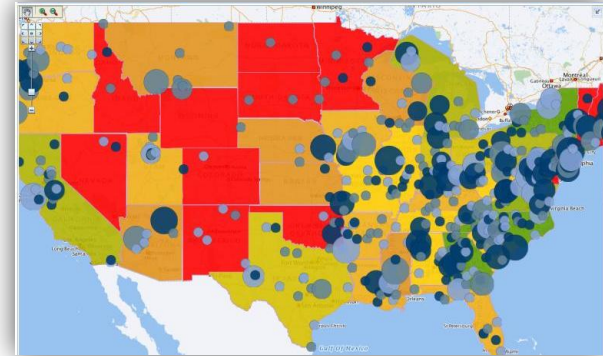
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Geo Spatial Analysis in BI

Most business data has a location



- Visualize data related to geographic locations
- Show or detect spatial relationships and patterns
- Show lots of data in a relatively small area
- Overview to a detailed report, chart, or graph



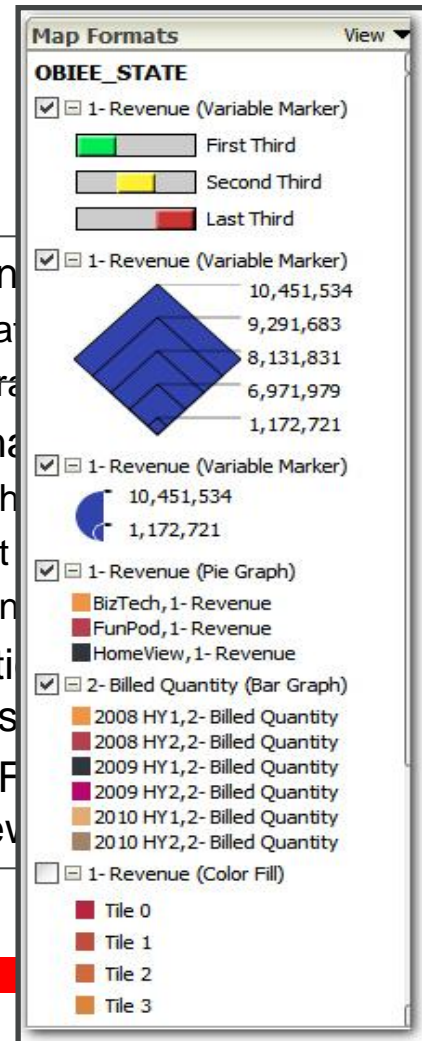
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Location Integration in OBIEE

Map Views in 11g

- First-class view in Answers
- Support for thematic overlays
- Master-detail linking
- Map Metadata Management
 - Via Presentation Server Administration
- Fully supported on mobile devices

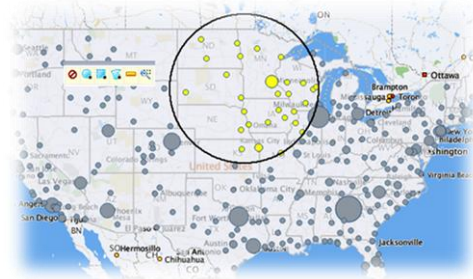
- Point-and-click
 - Create
 - Interact
- State map
 - Dash
 - Print
 - Agen
- Integrati
- Oracle F
- MapView



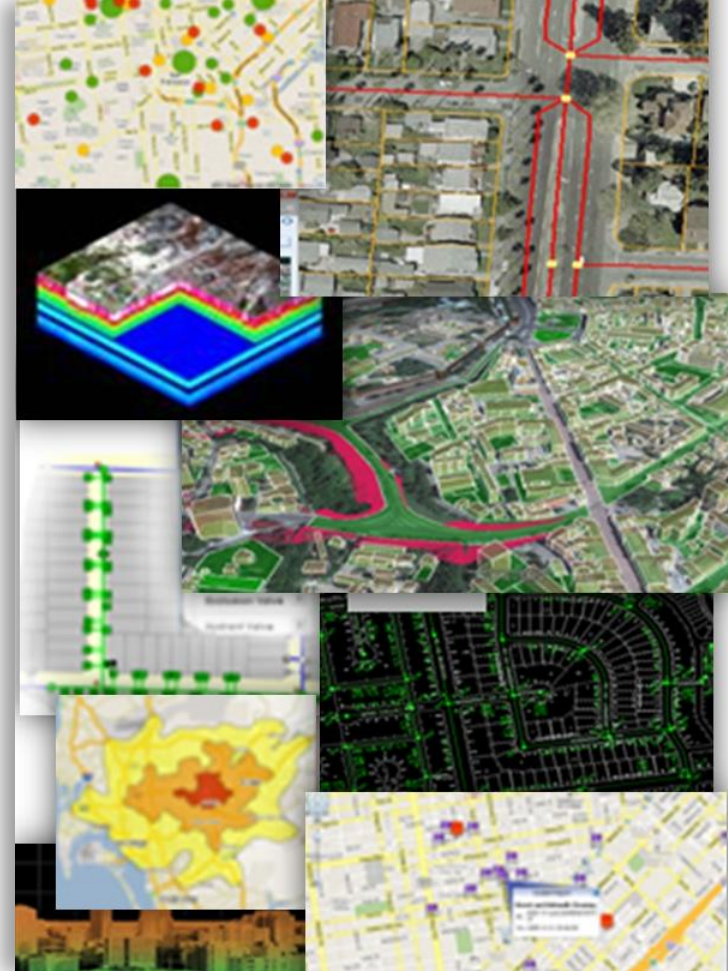
So, why Map Viewer HTML5 JS API in OBIEE?



- Enhanced functionality
 - Create highly interactive reports
 - Augment BI data with external data
 - Use any Answers calculated column as Geo identifier
 - Leverage huge functionality improvements in V2 APIs
- Richer user experience (performance, interactivity)
- BI Mobile App Designer Plugins
- No map metadata management



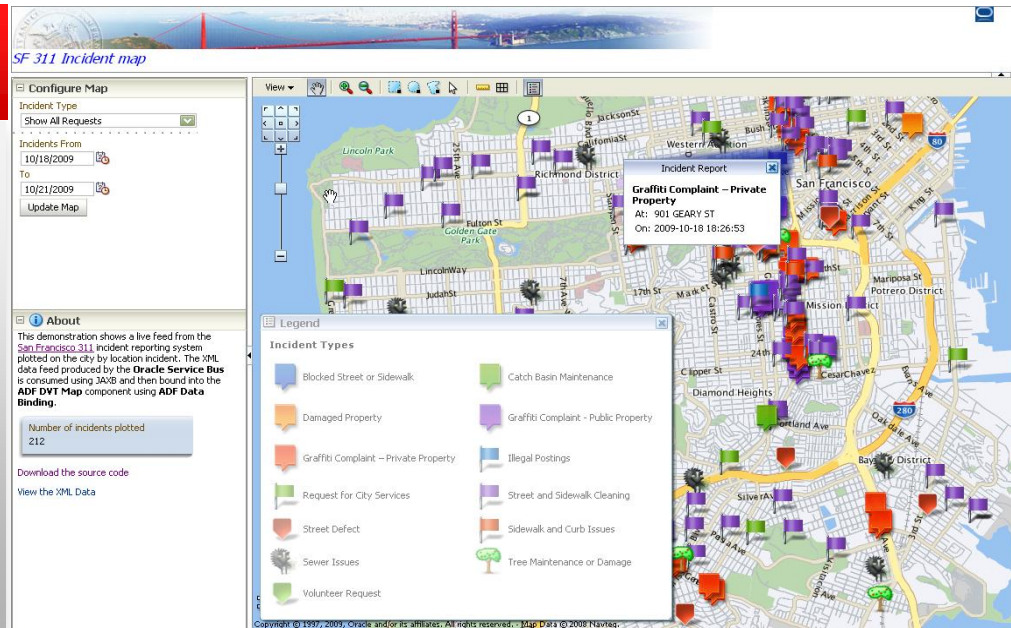
Oracle Maps and Spatial



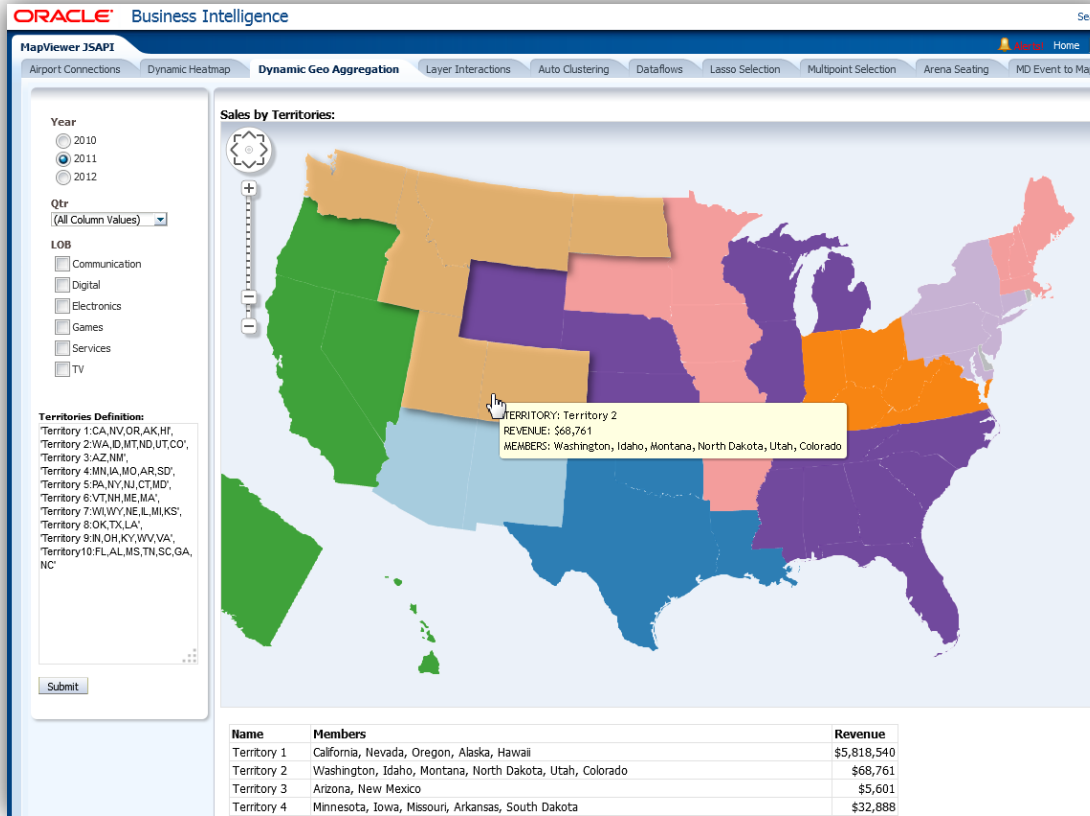
Oracle Fusion Middleware MapViewer

JEE Mapping Component

- A JEE component (.ear) for developing web mapping applications. Usually deployed in WLS.
- Renders geospatial content stored in Oracle databases and other sources.
- Provides JavaScript (HTML5) and REST/XML APIs
- Built-in support of OGC standards
- Easy mash-up with 3rd party map services
- Companion desktop tool (MapBuilder)

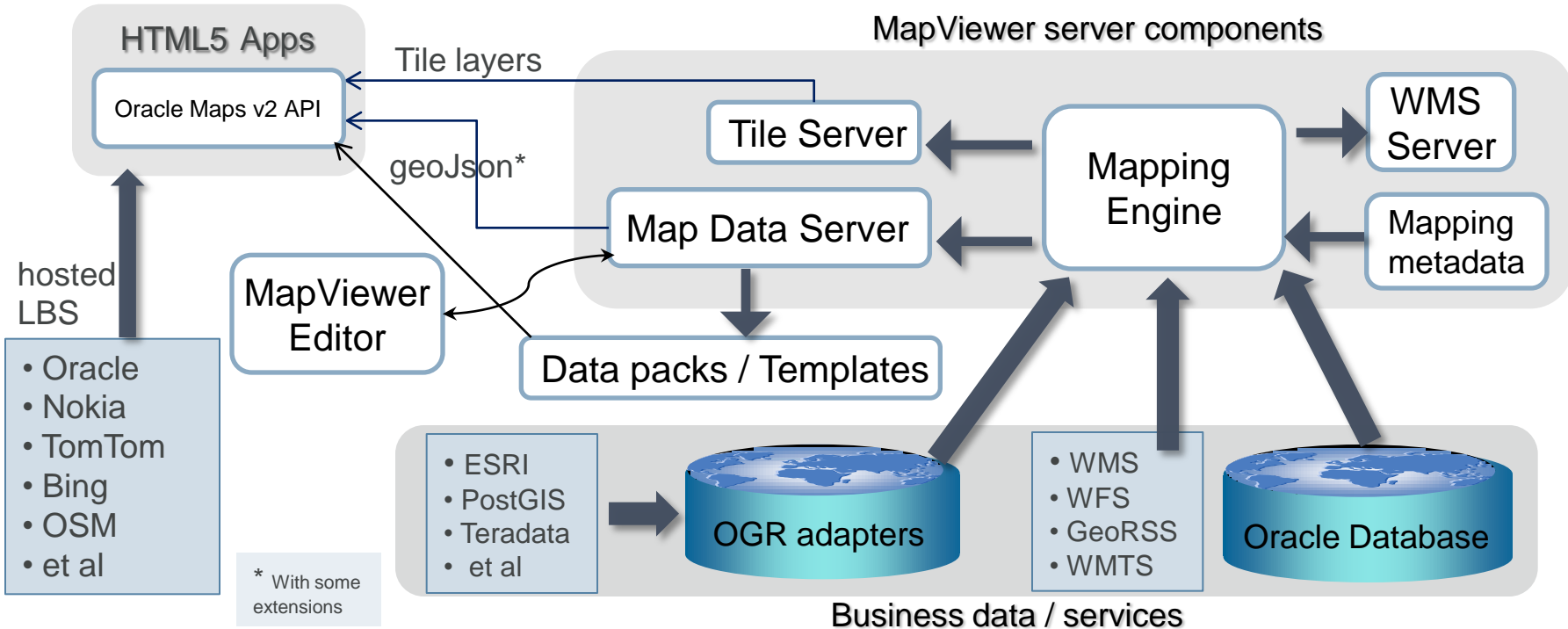


Render application content on interactive maps



MapViewer Architecture

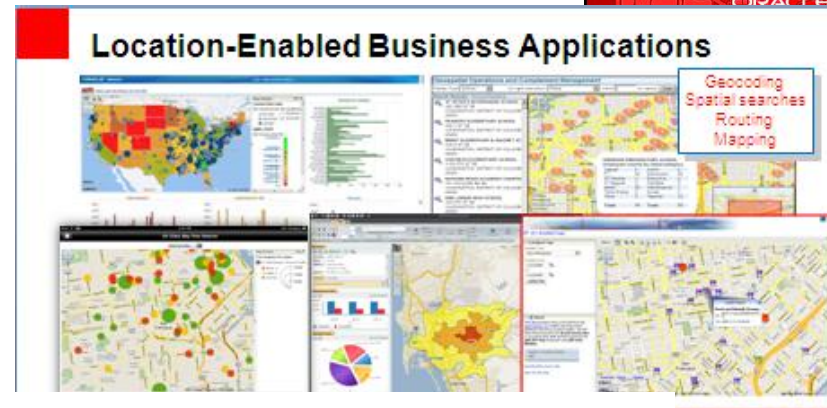
As of version 11.1.1.7.x



Oracle Spatial and Graph option

Spatial Features

- Spatial Data Types and Models
 - 2D and 3D Geometries
 - Raster Imagery and Gridded Data
 - Land Management Persistent Topology
 - Geographic and Whole Earth (Geodetic)
 - Network Data Model Graph
- Spatial Analysis
 - Spatial Search (Containment & Proximity)
 - Geocoding (Address conversion)
 - Routing (Turn by Turn directions)
 - Indexing of 2D & 3D
 - Full Coordinate System Support





D E M O N S T R A T I O N

Custom Integrated HTML5 Maps in OBIEE

Maps and Spatial in OBIEE 11g

1. Out-of-the-box maps integration
 - First-class view in Answers, Point-and-click interface
 - Managed and reusable map metadata
2. HTML5 maps using custom JavaScript
3. Spatial and Network Analytics
 - e.g. Business in Distance Range, Blocks in Distance Range, Geocoding, Driving Distance, Network Data Model

This session's focus

Hands-on Exercises



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Building Blocks

Criteria and Filters in BI Answers

Airports by Flight Count

Criteria Results Prompts Advanced

Subject Areas

- X - Airlines Delay
 - Date
 - Route
 - Carrier
 - Schedule
 - Delay
 - Flight Facts
 - Delay Facts
 - Config

Selected Columns

Double click on column names in the Subject Areas pane to add them to the analysis. Once added, drag-and-drop columns to reorder them. Edit a column's properties.

| Destination | | | | Flight Facts | Delay Facts |
|--------------|-------|--------------|------------------|-------------------|--------------|
| Airport Code | State | Airport Name | Dest Airport Lat | Dest Airport Long | # of Flights |
| | | | | | Delay Perf % |

Column number:

@1 @2 @3 ...

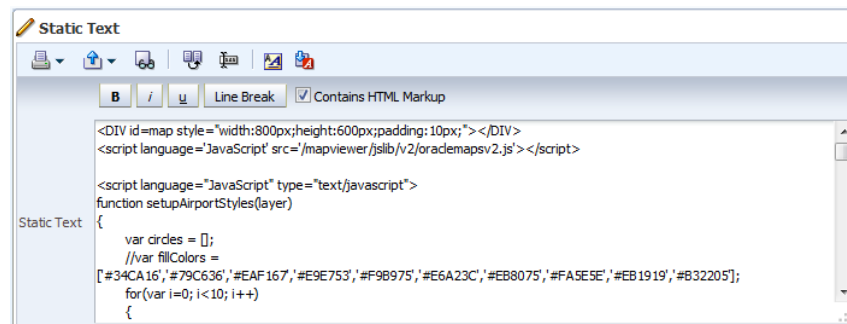
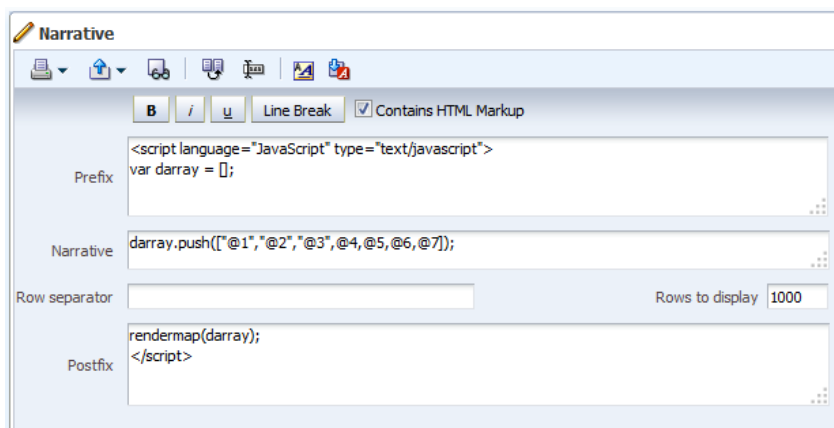
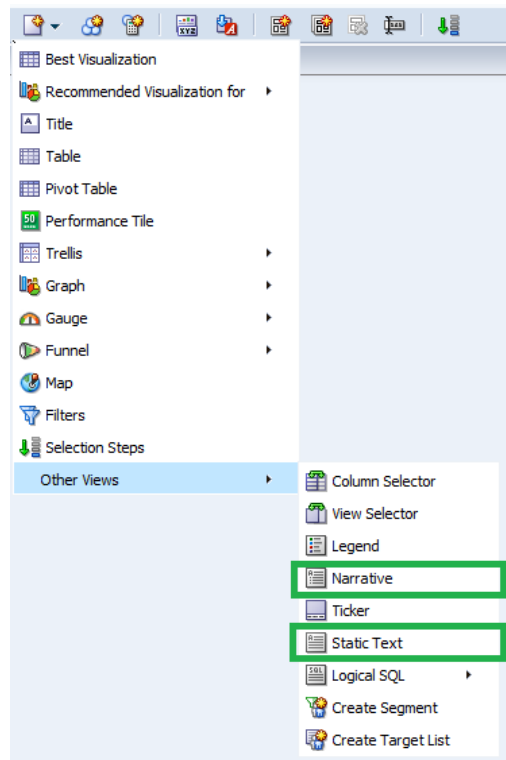
Filters

Add filters to the analysis criteria by clicking on Filter option for the specific column in the Selected Columns pane, or by clicking on the filter button in the Filter pane.

- Dep Year is equal to / is in 2010
- AND Dest Region Name is prompted
- AND # of Flights is prompted

Building Blocks

Narrative and Static Text Views in BI Answers



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