

Data Visualization: Maps for Everyone

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Oracle
October 2019

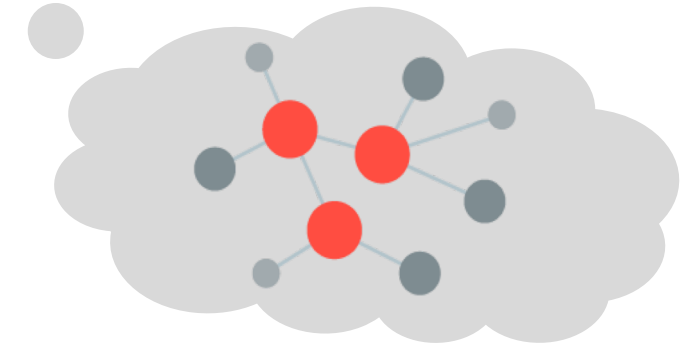
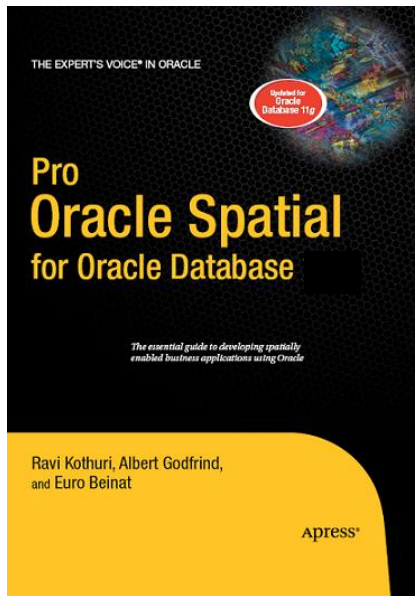
@agodfrin
albert.godfrind@oracle.com

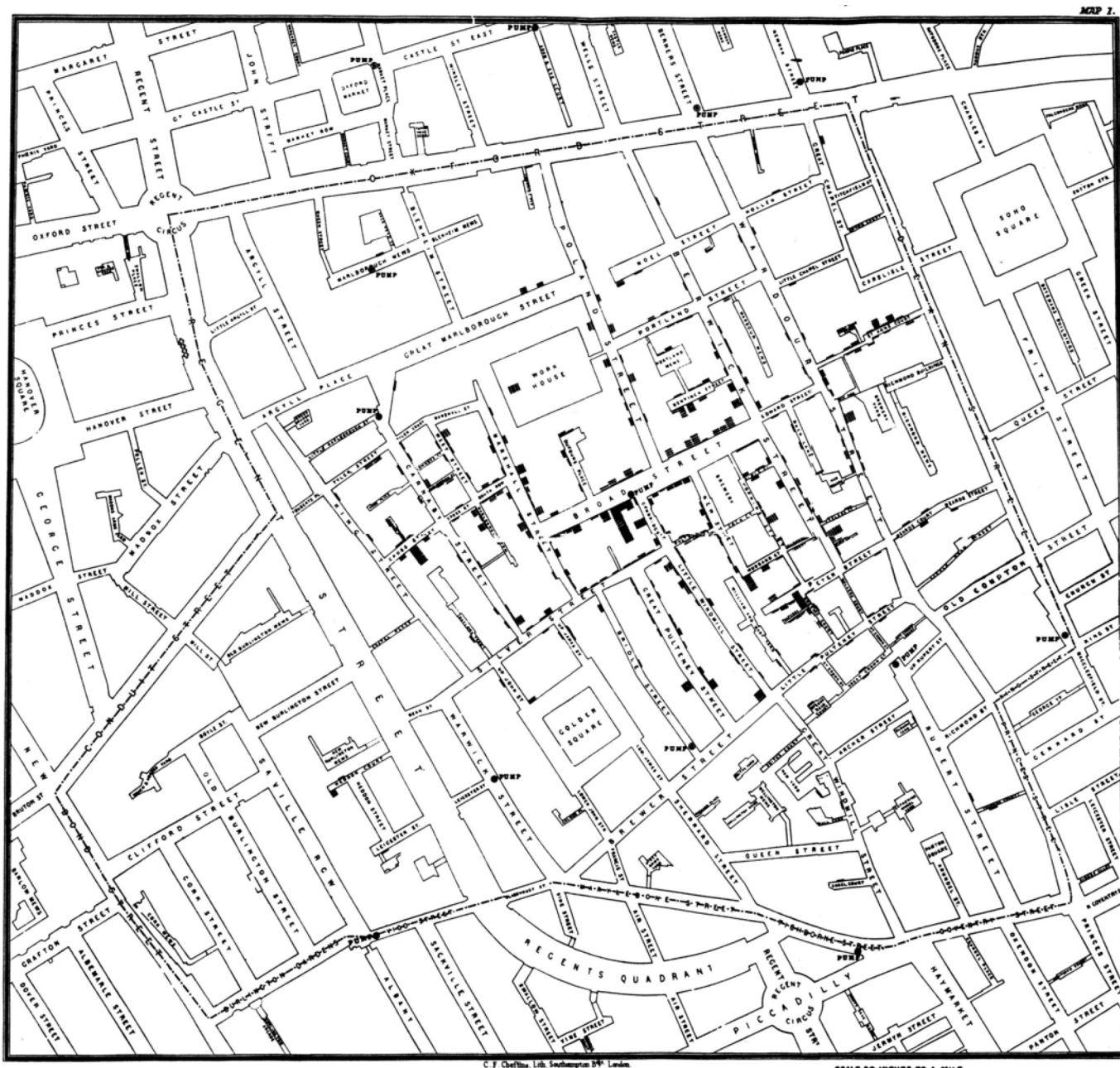
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- In IT for way too long!
- With Oracle for ever
- Oracle Spatial Evangelist
- Graph Evangelist
- Author





Analytics and Maps: A Natural Fit

- Maps are a natural choice for representing spatially-related data
- Help understand many phenomena's and their relationships



Carte Figurative des pertes successives en hommes de l'Armée Française dans la campagne de Russie 1812-1813.

Dressée par M. Minard, Inspecteur Général des Ponts et Chaussées en retraite Paris, le 20 Novembre 1869.

Les nombres d'hommes présents sont représentés par les largeurs des zones colorées à raison d'un millimètre pour dix mille hommes; ils sont de plus écrits en travers des zones. Le rouge désigne les hommes qui ont été en Russie, le noir ceux qui en sont sortis. Les renseignements qui ont servi à dresser la carte ont été puisés dans les ouvrages de M. M. Chiers, de Légar, de Fezensac, de Chambray et le journal inédit de Jacob, pharmacien de l'Armée depuis le 28 Octobre. Pour mieux faire juger à l'œil la diminution de l'armée, j'ai supposé que les corps du Prince Ségisme et du Maréchal Davout qui avaient été détachés sur Minsk et Mohilow et ont rejoint vers Orscha et Witebsk, avaient toujours marché avec l'armée.

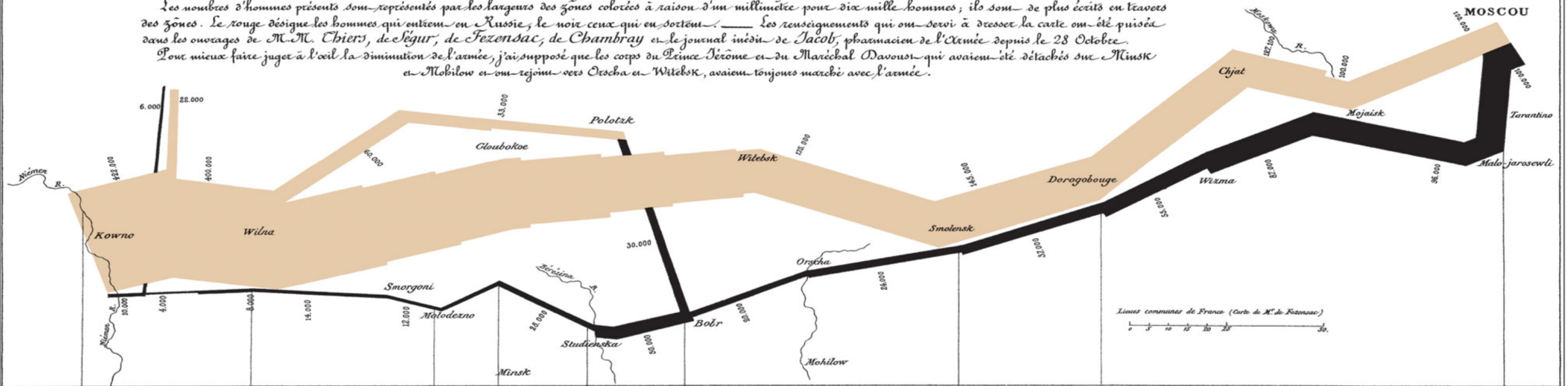
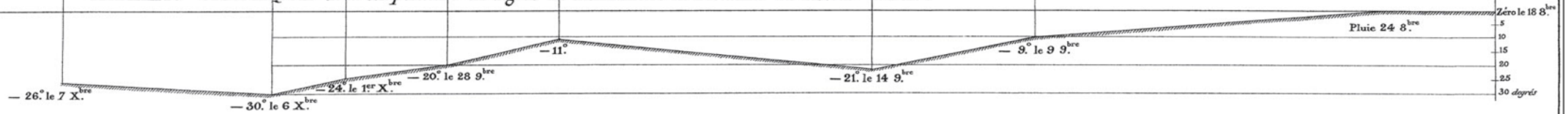


TABLEAU CRAPHIQUE de la température en degrés du thermomètre de Réaumur au dessous de zéro.



Les Cosaques passent au galop le Niéme gelé.

Autog. par Regnier, 8. Par. S^{te} Marie S^t G^{ermain} à Paris.

Imp. Lith. Regnier et Douv-dot.

Oracle Analytics Desktop

- Part of Oracle Analytics platform
- Stand-alone, desktop analytics
- Available for Windows and macOS platforms
- Low hardware requirements
 - 4GB of RAM
 - 2GB of disk space
- Download from OTN
- Many examples, tutorials and extensions
- **FREE !**





Ask "Oracle Cloud Applications"



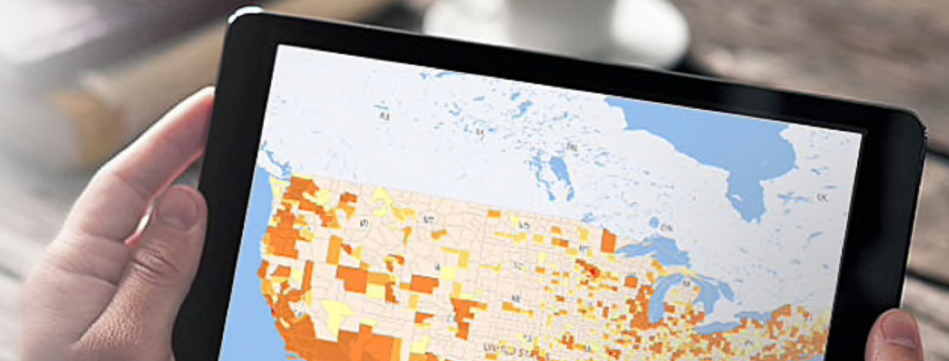
Oracle Cloud Free Tier

Solutions / Business Analytics / Data Visualization /

Oracle Analytics Library

No matter where you are in your analytics journey, we can help you leverage your data for smart insights into business performance.

[Download Oracle Data Visualization Desktop](#)



Overview

Examples

Tutorials

Extensions

Geo Layers

Live Demos

Videos

Choose Your Own Starting Point



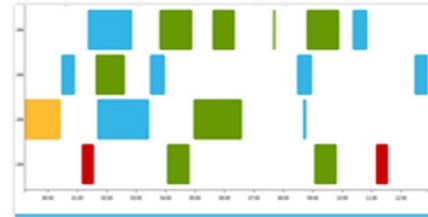
Examples

Create your data visualizations with the help of these prebuilt examples.



Tutorials

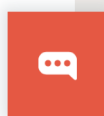
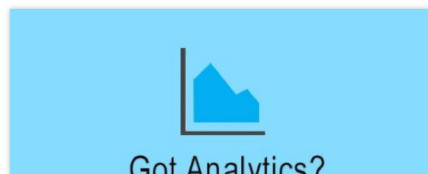
Download our tutorials today and learn advanced OAC functionality along with step by step guides and



Extensions

Supercharge your data with our custom DV extensions.

<https://www.oracle.com/solutions/business-analytics/data-visualization/library-overview.html>



Available on OTN

- Download the version for your platform
- Run through the installer

Download	Product	Version
 Download	Oracle Analytics	5.4

A blue speech bubble with the text "Download Here" points to the "Download" button in the table row.

Download Details

Download Instructions

The above download links will direct you to the Oracle eDelivery web site where you will complete your download. You will be prompted to login with your Oracle Single Sign On account, select a platform to download, and accept the appropriate license agreement to continue. Any additional technical resources, documentation, community resources, and related product information can be found below if applicable. For more information about eDelivery or if you find yourself unfamiliar with the new site, please take a moment to walk through the Oracle Software Delivery Cloud Upgrade Tour in the FAQ:

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Create



Get Started with Oracle Analytics Desktop

Watch Overview

Visualize Data

Explore your data and uncover important insights using interactive and intuitive visualizations

Prepare Data

Get your data ready for analysis using visual data flows that transform, enrich and blend different sources

Learn More

Visit our Academy and video library to learn how you can do more with Oracle Analytics

Search Everything

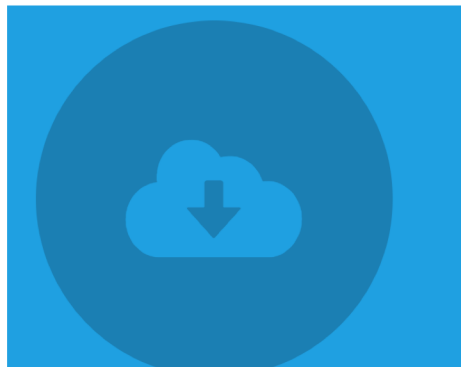
Projects

Data

Recent Data Sets

Machine Learning

Tip: Create a new Data Set by simply dropping your file anywhere on this page



Download Samples



Connect to Oracle Autonomous Data Warehouse



Connect to Your Data



Exploring Data in Oracle Analytics Desktop



Learn More in the Academy

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Academy

Academy

Get Started

- What is Oracle Analytics Desktop?
- How Do I Get Started?
- Get Started with Visualizing Data
- Download Samples

Bring Your Data

- Add a Spreadsheet
- Connect to a Database
- Connect to Oracle Applications
- Create Data Flows

Explore and Visualize

- Explore Data
- Create a Project and Choose Data Sources
- Blend Data

Learn more...

Get started

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Search



Sort By

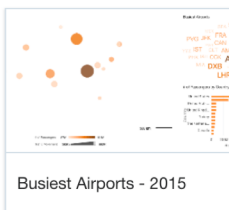
Modified



This Year



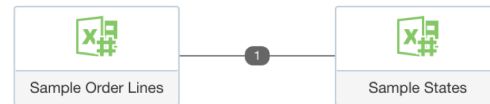
2018



Let's Look at the Sample Project

- Data
- Sample Order Lines
 - Order Line ID
 - # of Order Lines
 - Order ID
 - # of Orders
 - Order Priority
 - Customer ID
 - # of Customers
 - Customer Name
 - Customer Segment
 - City
 - Product Category
 - Product Sub Catego...
 - Grouped Sub Categ...
 - Product Container
 - Product Name
 - Profit
 - Quantity Ordered
 - Sales
 - Discount
 - Gross Unit Price
 - Shipping Cost
 - Ship Mode
 - Ship Date
 - Order Date
 - {Row Count}

Let's Look at the data for that project



Order Line ID

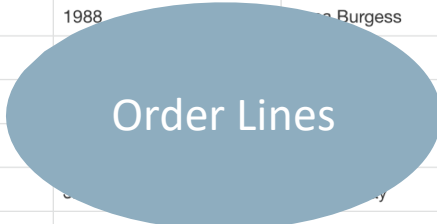
Name	Order Line ID
Treat As	Match
Data Type	Text
Match	None

Sample Project

Prepare Visualize Narrate Save

- Data**
- Sample Order Lines
 - Order Line ID
 - # of Order Lines
 - Order ID
 - # of Orders
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 - Customer ID
 - # of Customers
 - Customer Name
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 - Grouped Sub Category
 - Product Container
 - Product Name
 - Profit
 - Quantity Ordered
 - Sales
 - Discount
 - Gross Unit Price
 - Shipping Cost
 - Ship Mode
 - Ship Date
 - Order Date
 - {Row Count}

Order Line ID	# of Order Lines	Order ID	# of Orders	Order Priority	Customer ID	# of Customers	Customer Name
7819	7819	88284	88284	Medium	2860	2860	Joann Mullen
2999	2999	88108	88108	Medium	1133	1133	Marjorie Owens
6925	6925	87917	87917	Medium	2543	2543	Josephine Dalton
2603	2603	88390	88390	Medium	1015	1015	Beverly Cameron
3884	3884	86400	86400	High	1461	1461	Norman Adams
2463	2463	9285	9285	Critical	949	949	Ernest Oh
5151	5151	88470	88470	High	1923	1923	Theodore Cannon Gc
2137	2137	85908	85908	High	817	817	Rhonda Wong
9304	9304	90502	90502	Critical	3367	3367	Renee McKenzie
8600	8600	88254	88254	Critical	3116	3116	Justin Hull
491	491	89093	89093	Not Specified	191	191	Gerald Kearney
3213	3213	90803	90803	Low	1220	1220	Kathy Reese
1407	1407	90909	90909	High	550	550	Edna Monroe Talley
444	444	87463	87463	Low	169	169	Janice Cole
2068	2068	86998	86998	Not Specified	776	776	Holly Love Butler
3878	3878	86738	86738	Medium	1459	1459	Steve Raynor
3435	3435	90666	90666	Not Specified	1301	1301	Hilda Porter
4118	4118	88495	88495	High	1547	1547	Jean Bryan
5334	5334	89999	89999	High	1988	1988	John Burgess
8687	8687	85850	85850	Critical	3146	3146	John Burgess
3110	3110	85941	85941	Medium	1187	1187	John Burgess
8800	8800	90692	90692	Not Specified	3183	3183	John Burgess
862	862	90973	90973	Not Specified	326	326	John Burgess
7193	7193	85914	85914	Critical	2630	2630	Betsy Puckett
7195	7195	85914	85914	Critical	2630	2630	Betsy Puckett
2318	2318	89536	89536	Critical	890	890	Billie Fowler



- Recommendations (41)**
- All Columns
Select a column to filter list
- R(x) Extract Part_1 from Gross Unit Price
 - R(x) Extract Part_2 from Gross Unit Price
 - R(x) Extract Part_1 from Product Container
 - R(x) Extract Part_2 from Product Container
 - R(x) Extract Part_1 from Shipping Cost
 - R(x) Extract Part_2 from Shipping Cost
 - R(x) Extract Part_1 from Ship Mode
 - R(x) Extract Part_2 from Ship Mode
 - R(x) Extract Day of Week from Ship Date
 - R(x) Extract Day of Month from Ship Date
 - R(x) Extract Day from Ship Date
 - R(x) Extract Day of Year from Ship Date
 - R(x) Extract Month of Year from Ship Date
 - R(x) Extract Quarter of Year from Ship Date
 - R(x) Extract Quarter from Ship Date
 - R(x) Extract Year from Ship Date
 - R(x) Extract Part_1 from Customer Name

Sample Project

Prepare Visualize Narrate Save

- Data**
- Sample Order Lines
 - Order Line ID
 - # of Order Lines
 - Order ID
 - # of Orders
 - Order Priority
 - Customer ID
 - # of Customers
 - Customer Name
 - Customer Segment
 - City**
 - Product Category
 - Product Sub Category
 - Grouped Sub Category
 - Product Container
 - Product Name
 - Profit
 - Quantity Ordered
 - Sales
 - Discount
 - Gross Unit Price
 - Shipping Cost
 - Ship Mode
 - Ship Date
 - Order Date
 - {Row Count}

Results

Formatted data

City	Product Category	Product Sub Category	Grouped Sub Category	Product Container	Product Name
Santiago	Furniture	Bookcases	Stationery	Jumbo Box	Bush Mission Pointe Library
Libreville	Office Supplies	Binders and Binder Accessories	Stationery	Small Box	Staples General Use 3-Ring Bin
Burlington	Technology	Telephones and Communication	Computer & Electronics	Small Box	T65
Ryazan	Office Supplies	Pens & Art Supplies	Stationery	Small Pack	Boston 1645 Deluxe Heavier-Du
Recife	Office Supplies	Binders and Binder Accessories	Stationery	Small Box	Recycled Premium Regency Co
Dortmund	Office Supplies	Binders and Binder Accessories	Stationery	Small Box	Avery Trapezoid Ring Binder, 3"
Hong Kong	Office Supplies	Labels	Stationery	Small Box	Avery File Folder Labels
Kaliningrad	Technology	Computer Peripherals	Computer & Electronics	Small Pack	Imation 3.5" DS/HD IBM Forma
Denver	Office Supplies	Labels	Stationery	Small Box	Avery 506
Columbus	Technology	Telephones and Communication	Computer & Electronics	Small Pack	Accessory32
Birmingham	Technology	Computer Peripherals	Computer & Electronics	Small Box	Fellowes 17-key keypad for PS/
Cairo	Furniture	Bookcases	Stationery	Jumbo Box	Safco Value Mate Steel Bookca
Perth	Office Supplies	Pens & Art Supplies	Stationery	Wrap Bag	Newell 323
Cardiff	Technology	Office Machines	Computer & Electronics	Large Box	Polycom ViaVideo™ Desktop Vi
St. Petersburg	Furniture	Office Machines	Furniture	Jumbo Drum	Office Star - Contemporary Tas
Sao Paulo	Technology	Copiers and Fax	Computer & Electronics	Large Box	HP LaserJet 3310
Buenos Aires	Technology	Telephones and Communication	Computer & Electronics	Small Box	HP LaserJet 3310
Hamburg	Technology	Telephones and Communication	Computer & Electronics	Small Box	HP LaserJet 3310
Merida	Furniture	Office Furnishings	Furniture	Small Box	MA
San Francisco	Office Supplies	Paper	Stationery	Small Box	ge
Cairo	Furniture	Bookcases	Stationery	Small Box	ase
San Diego	Office Supplies	Paper	Stationery	Small Box	
Manchester	Technology	Telephones and Communication	Computer & Electronics	Medium Box	700 Caller ID
Riyadh	Furniture	Office Furnishings	Furniture	Large Box	Electrix Halogen Magnifier Lam
Riyadh	Technology	Office Machines	Computer & Electronics	Jumbo Drum	Panasonic KX-P1150 Dot Matri
Voronezh	Technology	Telephones and Communication	Computer & Electronics	Small Box	232

- City (11)
- Enrich City with Lat
 - Enrich City with Lon
 - Enrich City with Country
 - Enrich City with Province
 - Enrich City with Jurisdiction
 - Enrich City with Population
 - Enrich City with Elevation_Meters
 - Enrich City with Timezone
 - Enrich City with Is_Preferred
 - Enrich City with Feature_Type
 - Enrich City with State_Code

States: linked to Order Lines by City Name

City

Name	City
Treat As	Match
Data Type	Text
Match	Sample States.City

Sample Project

Prepare Visualize Narrate Save

Data

- Sample States
 - City
 - State
 - Postal_Code
 - Country**
 - Latitude
 - Longitude
 - Continent
 - Region
 - {Row Count}

Country

- Name: Country
- Treat As: Attribute
- Data Type: Text
- Aggregation: None

Results

Formatted data

City	State	Postal_Code	Country	Latitude	Longitude	Continent	Region
Abra Pampa	Jujuy	AR101514	Argentina	-22.71	-65.69	America	South America
Adelaide	South Australia	AU101679	Australia	-34.93	138.60	Oceania	Australia and New Zealand
Ahmedabad	Dadra and Nagar Haveli	IN101449	India	23.030	72.580	Asia	Southern Asia
Ahmednagar	Maharashtra	IN11439	India	19.110	74.750	Asia	Southern Asia
Albany	New York	US10878	United States	44.620	-123.0	America	Northern America
Aomori	Aomori	JP101537	Japan	40.825	140.71	Asia	Eastern Asia
Augusta	Virginia	US10914	United States	33.460	-81.98	America	Northern America
Austin	Texas	US10908	United States	30.266	-97.74	America	Northern America
Baltimore	Maryland	US10853	United States	39.299	-76.61	America	Northern America
Bangalore	Karnataka	IN11436	India	12.969	77.560	Asia	Southern Asia
Barcelona	Cataluña	ES101694	Spain	41.383	2.1833	Europe	Southern Europe
Belfast	EN	GB101409	United Kingdom	54.600	-5.960	Europe	Northern Europe
Berlin	Berlin	DE101427	Germany	52.521	13.401	Europe	Western Europe
Birmingham	EN	GB101495	United Kingdom	52.474	-1.919	Europe	Northern Europe
Boise	Idaho	US10959	United States	43.608	-116.2	America	Northern America
Bristol	EN	GB101490	United Kingdom	51.449			Northern Europe
Buenos Aires	Ciudad de Buenos Aires	AR101631	Argentina	-34.60			South America
Burlington	Vermont	US05401	United States	40.807			Northern America
Canberra	Canberra	AU101555	Australia	-35.28			Australia and New Zealand
Cancun	Quintana Roo	ME11670	Mexico	21.169			Central America
Cape Town	Western Cape	ZA101698	South Africa	-33.92	18.434	Africa	Southern Africa
Cardiff	EN	GB101410	United Kingdom	51.499	-3.225	Europe	Northern Europe
Carhue	Ciudad de Buenos Aires	AR101554	Argentina	-37.18	-62.73	America	South America
Charleston	South Carolina	US10896	United States	32.792	-79.99	America	Northern America
Charlotte	Florida	US10911	United States	35.204	-80.83	America	Northern America
Cheyenne	Colorado	US10840	United States	41.140	-104.8	America	Northern America

Name of Countries

Country (18)

- Enrich Country with iso2
- Enrich Country with iso3
- Enrich Country with iso_numeric
- Enrich Country with fips
- Enrich Country with country_name
- Enrich Country with capital
- Enrich Country with square_km
- Enrich Country with population
- Enrich Country with continent
- Enrich Country with tid
- Enrich Country with currency_abbr
- Enrich Country with currency_name
- Enrich Country with phone_country_code
- Enrich Country with postal_code_format
- Enrich Country with postal_code_regex
- Enrich Country with languages
- Enrich Country with geonameid
- Enrich Country with neighboring_countries

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Data Sets Connections Data Flows Sequences

Search Data



Sort By

Modified



Type	Name	Description	Modified	Refreshed
	ng_lga	Uploaded from ng_lga.xlsx.	Jul 13, 2018	Jul 13, 2018
	ng_states	Uploaded from ng_states.csv.	May 29, 2018	May 29, 2018
	KONYA_ROADS	External Data Set	Apr 27, 2018	Apr 26, 2018
	Sample States	Uploaded from Sample States.xlsx.	Apr 13, 2018	Apr 13, 2018
	2015 Busiest Airports	Uploaded from 2015 Busiest Airports .xlsx.	Apr 13, 2018	Apr 13, 2018
	Sample Order Lines	Uploaded from Sample Order Lines.xlsx.	Apr 13, 2018	Apr 13, 2018

Data can come from a variety of sources

- Spreadsheets (CSV, text)
- Databases ...
- Cloud services ...

- Data**
- Sample Order Lines
 - Order Line ID
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 - # of Orders
 - Order Priority
 - Customer ID
 - # of Customers
 - Customer Name
 - Customer Segment
 - City
 - Product Category
 - Product Sub Category
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 - Product Name
 - Profit
 - Quantity Ordered
 - Sales
 - Discount
 - Gross Unit Price
 - Shipping Cost
 - Ship Mode
 - Ship Date
 - Order Date
 - {Row Count}

Customer Segment: All | Continent: All | Product Category: All

Line

Trellis Columns: Product Categ..

Trellis Rows:

Values (Y-Axis): Sales

Category (X-Axis): Order Date (M...)

Color: Product Categ..

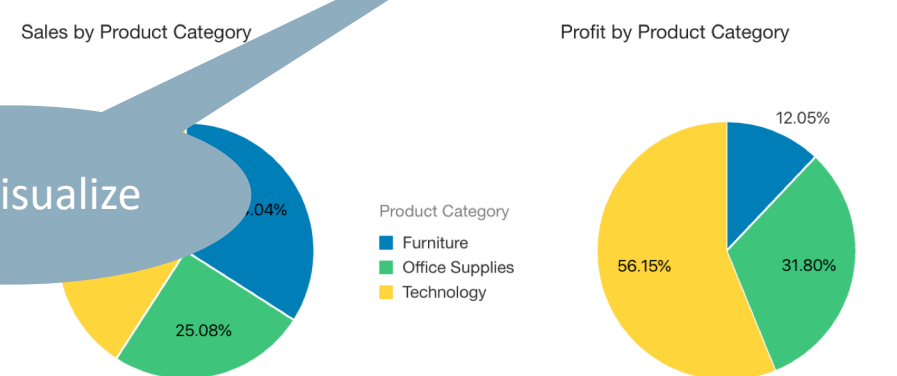
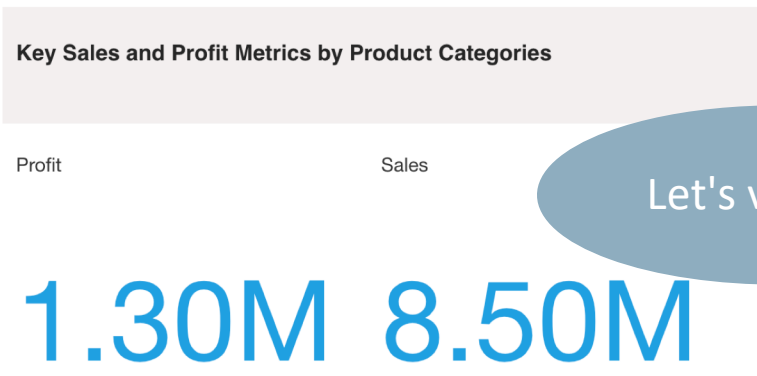
Size (Width):

Shape:

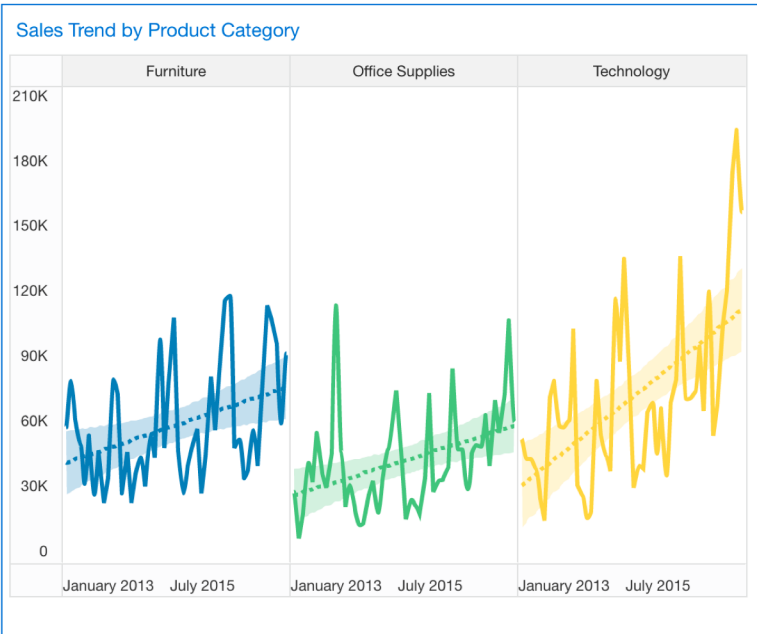
Tooltip:

Detail:

Filters:



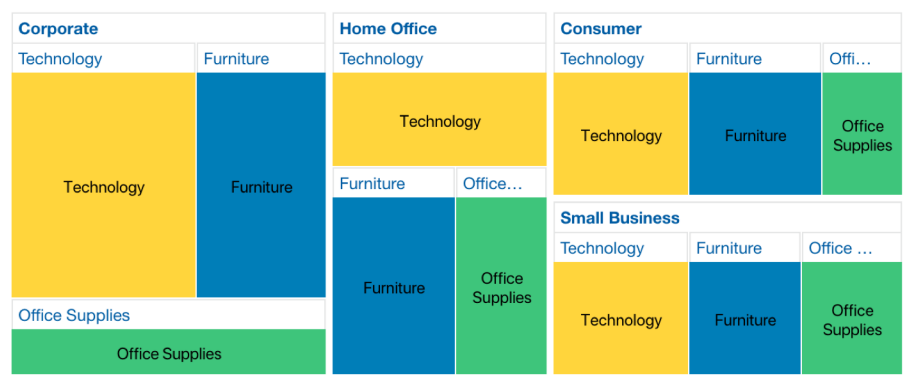
Let's visualize



Key Metrics by Product Category

	# of Order Lines	Sales	Profit Value	Profit	Profit Ratio
Furniture	1,884	2.89M	156.6K	12.0%	5.41%
Office Supplies	4,831	2.13M	413.4K	31.8%	19.39%
Technology	2,285	3.47M	730.0K	56.2%	21.01%
Total	9,000	8.50M	1.3M	100.0%	15.29%

Product Sales by Customer Segment



Sales Trend by Product Cat...

Settings: #, Clock, Magnifying Glass

Title: Custom

Sales Trend by Product Category

Font: Auto

Line Type: Curved

- Data**
- Sample Order Lines
 - Order Line ID
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 - # of Orders
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 - Customer ID
 - # of Customers
 - Customer Name
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 - Grouped Sub Category
 - Product Container
 - Product Name
 - Profit
 - Quantity Ordered
 - Sales
 - Discount
 - Gross Unit Price
 - Shipping Cost
 - Ship Mode
 - Ship Date
 - Order Date
 - {Row Count}

Customer Segment: All
 Sales: Top 15
 Product Category: All

Map

Trellis Columns

Trellis Rows

Country Layer (P...)

Category (Location): Country

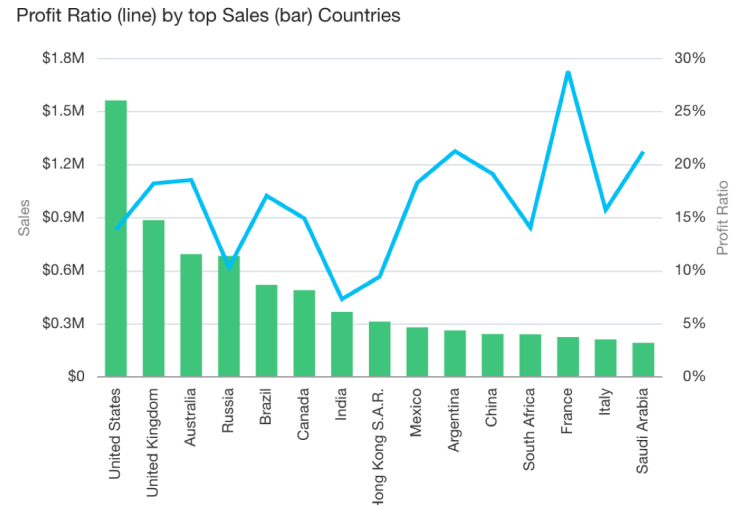
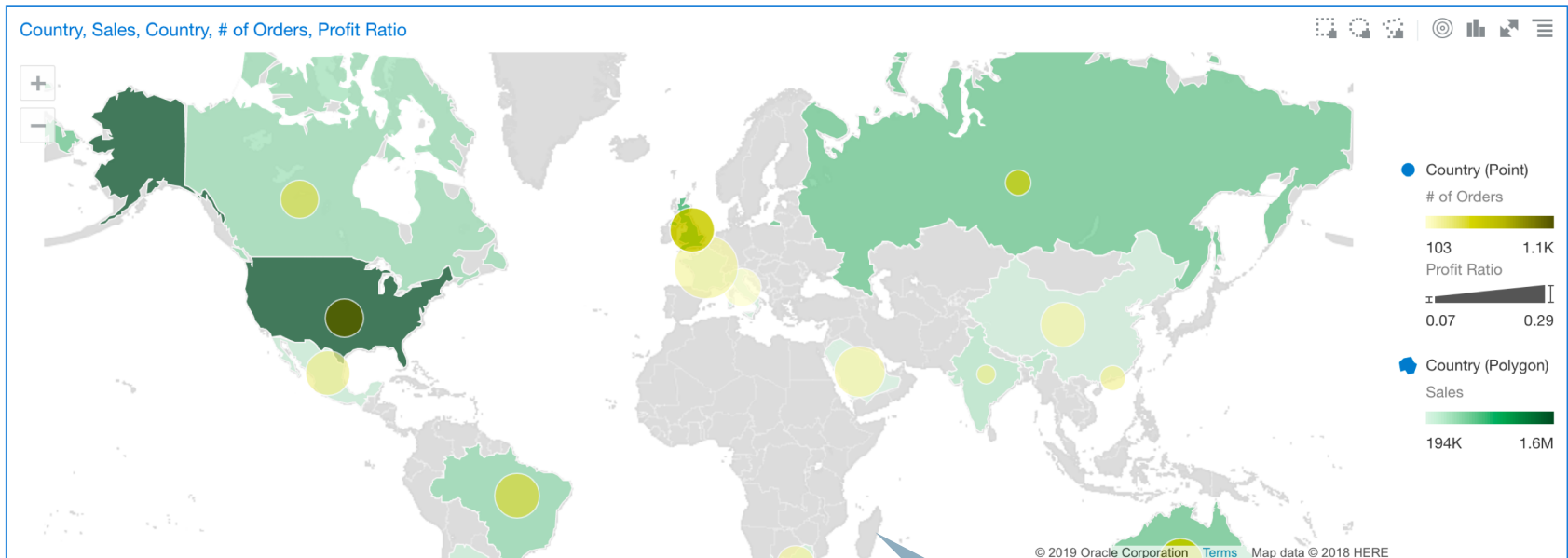
Color: # of Orders

Size: Profit Ratio

Shape

Tooltip

Filters



Here is the Map

Country, Sales, Country, # o...

Title: Auto

Font: Auto

Legend: Auto

Title: Auto

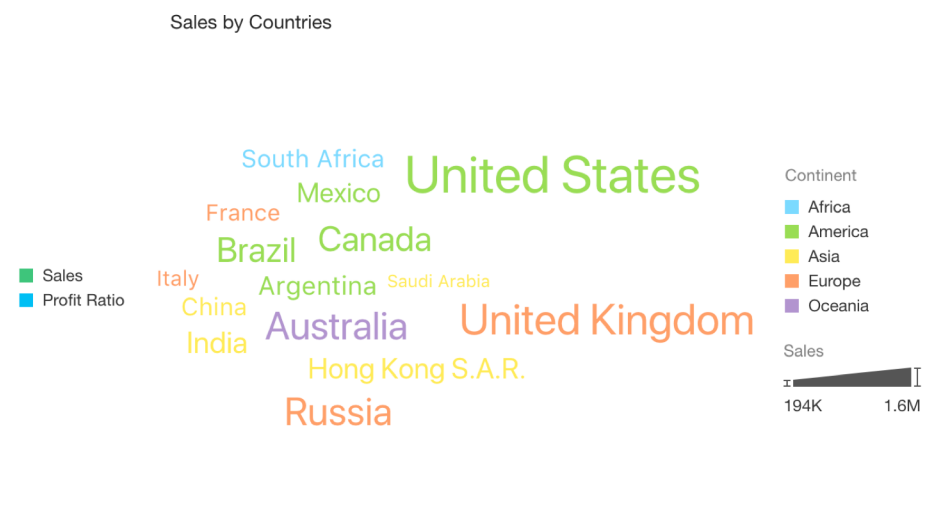
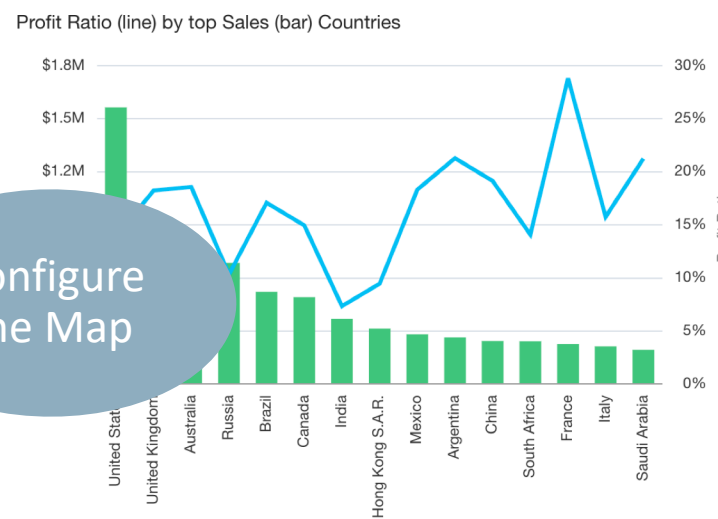
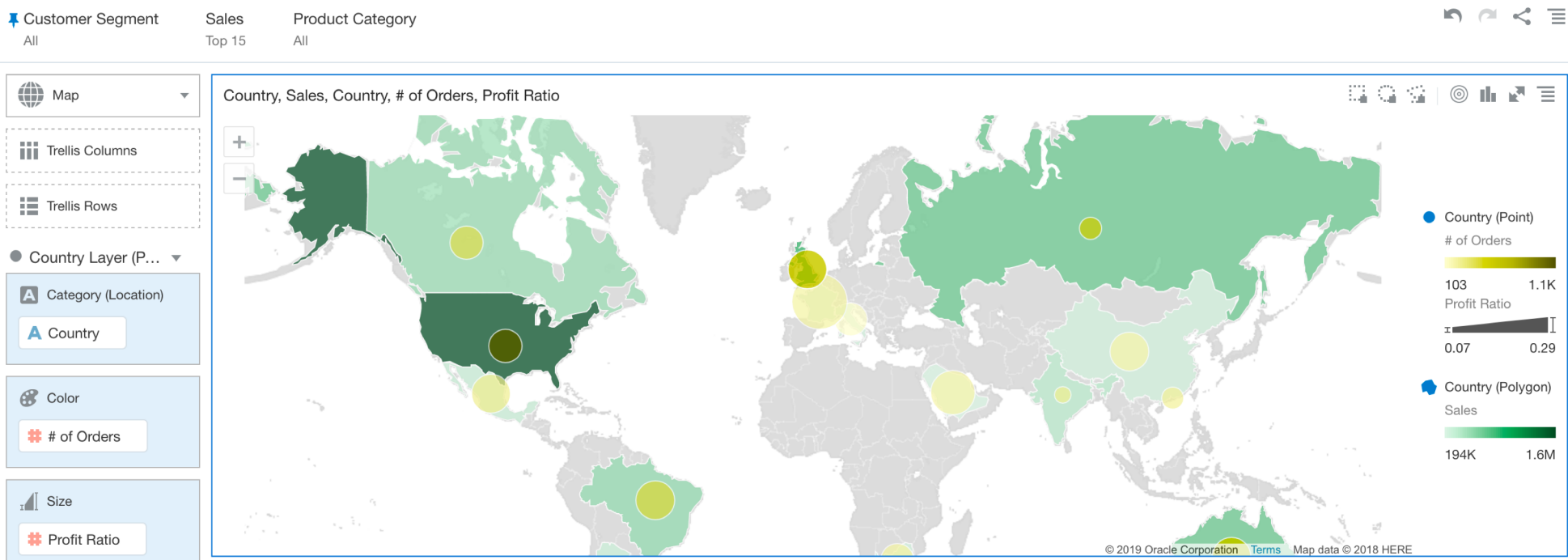
Data

- Sample Order Lines
 - Order Line ID
 - # of Order Lines
 - Order ID
 - # of Orders
 - Order Priority
 - Customer ID
 - # of Customers

Country, Sales, Country, # o...

Data Layers

- Country (Point)
 - Name: Auto
 - Map Layer: world countries
 - Layer Type: Point
 - Transparency: 30
 - Tooltip: All Data
 - Show Layer:
- Country (Polygon)
 - Name: Auto
 - Map Layer: world countries
 - Layer Type: Polygon
 - Transparency: 30
 - Tooltip: All Data
 - Show Layer:



Configure the Map

So How does this all work ?

To show things on a map, you need two things:

- A **map** to show things on
- The **things** to show on that map

Maps are constructed in **layers**


- The **Background Map**
- One or more **Map Layers**


Map Layers are **connected** to the BI data

- Via a column (country name, city name, ...)

The screenshot displays two panels of map controls. The top panel, titled 'Country, Sales, Country, # of Orders, Profit Ratio', includes icons for settings, zoom, visibility, and layers. Below these icons are three settings: 'Zoom Control' (On), 'Scale' (None), and 'Background Map' (Oracle BI). The 'Background Map' setting is highlighted with a red box. The bottom panel, also titled 'Country, Sales, Country, # of Orders, Profit Ratio', includes icons for settings, zoom, visibility, and layers. Below these icons is a 'Data Layers' section with a plus icon. Two data layers are listed: 'Country (Point)' and 'Country (Polygon)'. Both data layer entries are highlighted with a red box. Two blue arrows point from the text 'The Background Map' and 'One or more Map Layers' to the respective red boxes in the screenshot.


Configure the Map


 Category (Location)

 Country




- Link to the **Map Layer**


 Color

 Sales




- This value drives the **color** of the map layer elements


 Color

 # of Orders



- This value drives the color of the **bubble** (if any)

 Size

 Profit Ratio




- This value drives the **size** of the bubble


- Home
- Catalog
- Data
- Machine Learning
- Console**
- Academy

Console

Visualizations and Sharing




Maps



Extensions

Configuration and Administration



Safe Domains



- Home
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Maps

Backgrounds Map Layers

Map Backgrounds

Default	Include	Name	Description	Modified
	✓	OpenStreetMap	General purpose background map using OpenStreetMap data	Aug 1, 2017
	✓	Oracle BI	Thematic world map from Oracle (light grey colored)	Aug 1, 2017
	✓	Oracle Maps	General reference world map from Oracle	Aug 1, 2017

+ Add Background

Google Maps

Baidu Maps

Add New Backgrounds

Available Map Backgrounds

Home

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Maps

Backgrounds [Map Layers](#)

▶ Custom Map Layers

▲ System Map Layers

Include	Name
<input checked="" type="checkbox"/>	Usa Cities
<input checked="" type="checkbox"/>	Usa Counties
<input checked="" type="checkbox"/>	Usa States
<input checked="" type="checkbox"/>	World Cities
<input checked="" type="checkbox"/>	World Continents
<input checked="" type="checkbox"/>	World Countries
<input checked="" type="checkbox"/>	World Regions
<input checked="" type="checkbox"/>	World States Provinces

Available
Map Layers

- Home
- Catalog
- Data
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- Academy

Maps

Backgrounds [Map Layers](#)

Custom Map Layers

Include	Name	Description	Size	Modified
<input checked="" type="checkbox"/>	bin_250		175 KB	Nov 26, 2018
<input checked="" type="checkbox"/>	LGA		2474 KB	Jul 13, 2018
<input checked="" type="checkbox"/>	ng_states	Nigeria States	666 KB	May 29, 2018
<input checked="" type="checkbox"/>	zone_gent_geo		196 KB	Nov 22, 2018

+ Add Custom Layer (click, or drag and drop GeoJSON file)

System Map Layers


Add your own Custom Map Layers

Using Custom Map Layers





- Encoded in GeoJSON

```
{
  "type": "FeatureCollection",
  "features": [
    {
      "type": "Feature",
      "properties": { "CITY": "Jersey City", "STATE_ABRV": "NJ", "POP90": 228537.0, "RANK90": 67.0 },
      "geometry": { "type": "Point", "coordinates": [ -74.064962, 40.7113, 0.0 ] }
    },
    ...
    { "type": "Feature",
      "properties": { "CITY": "Riverside", "STATE_ABRV": "CA", "POP90": 226505.0, "RANK90": 68.0 },
      "geometry": { "type": "Point", "coordinates": [ -117.397363, 33.940437, 0.0 ] }
    }
  ]
}
```

Catalog of GeoJSON files



Get Started

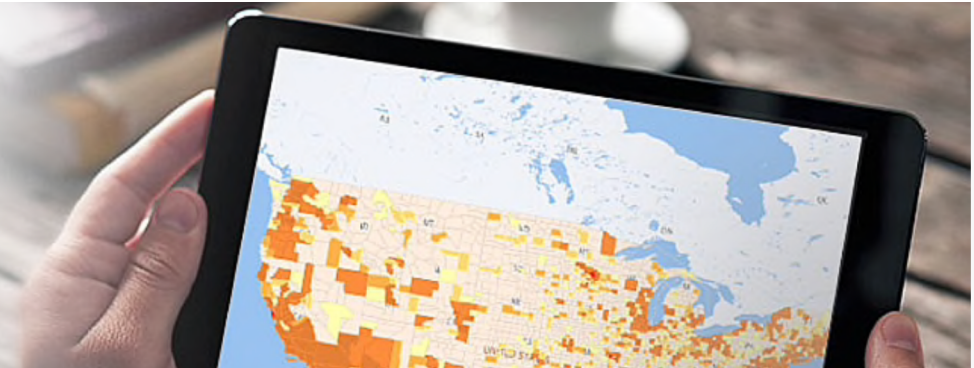
-  What is Oracle Analytics Desktop?
-  How Do I Get Started?
-  Get Started with Visualizing Data
-  **Download Samples**



Oracle Analytics Library


Custom DV examples to enhance your data visualization experience. Standalone .dva projects that can be re-used with your own data.


[Download Oracle Data Visualization Desktop](#)



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Examples

Search 

sort by Last Updated 





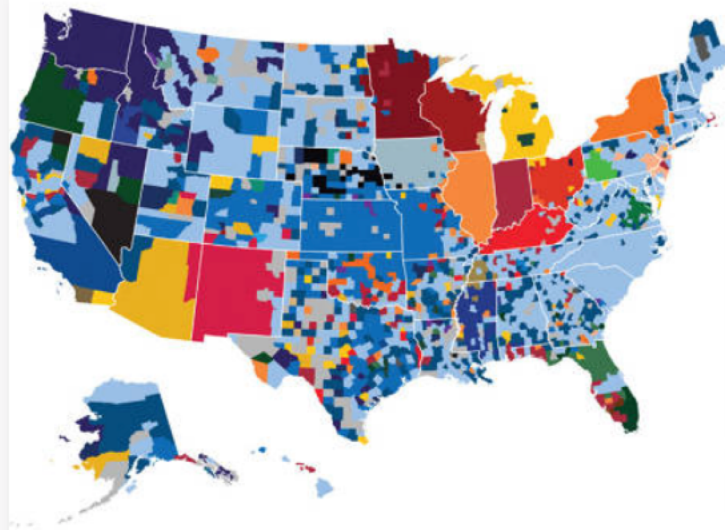
Canadian provinces

Oracle

January 11, 2018

Sample map layer (geoJSON) for Canadian provinces. Download includes pre packaged .dva w/examples.

[Download](#)



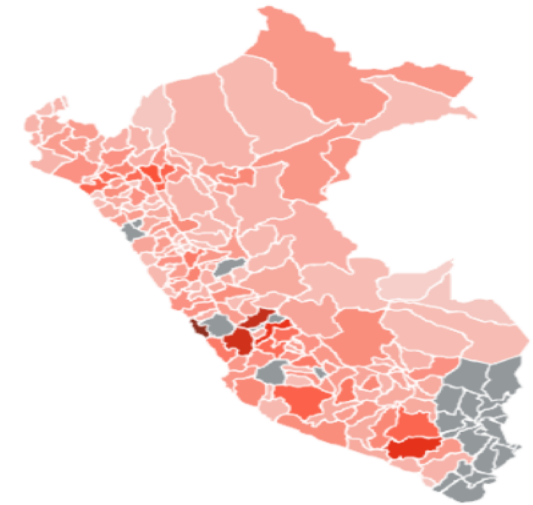
Matching U.S Cities

Oracle

January 11, 2018

Sample map layer (geoJSON) for cities in USA. It includes ,City Name, Location (latitude & longitude), its State name and State code.

[Download](#)



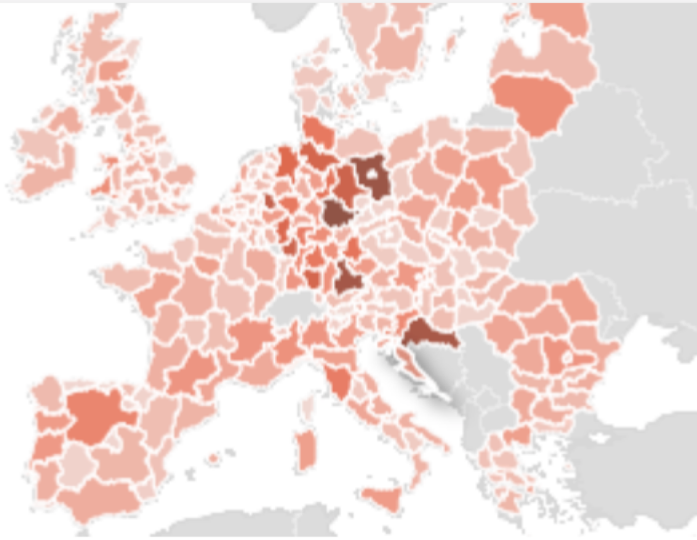
Peruvian departments & provinces

Oracle

Feb 20, 2018

Sample map layer (geoJSON) for Peruvian departments & provinces. Includes a completed .dva with prebuilt samples.

[Download](#)



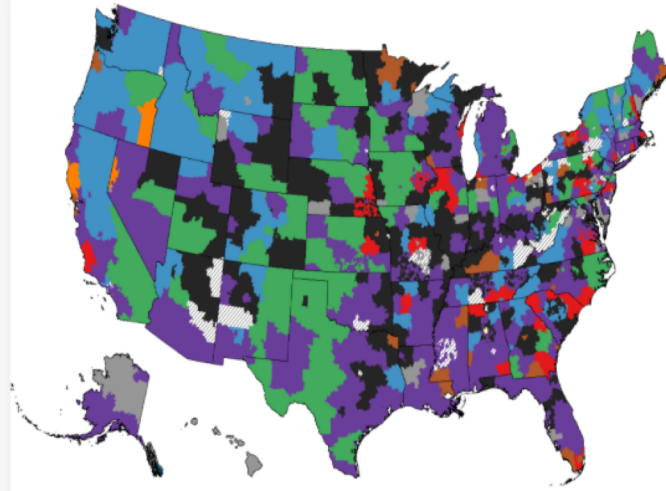
EU NUTS map layer

Oracle

December 21, 2017

The NUTS classification (nomenclature of territorial units for statistics) is a hierarchical system for dividing up economic territory of the EU. Download includes example geoJson map layers for level 0 to 3 geo regions under NUTS.

[Download](#)



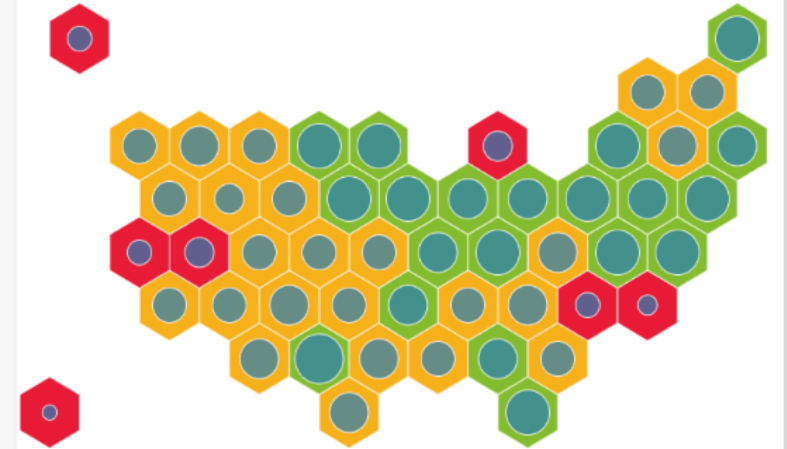
US Zip Codes Map layer

Oracle

May 01, 2018

This map layer includes zip code boundaries for Mainland United States. It can be used to analyze data on Maps at zip code level in USA. Note: default data governance limits on Data Visualization views may not allow viewing all zips on a Map visualization at once, so it is recommended to use filters while using this map layer to visualize zip code regions of interest

[Download](#)



Map Layer: U.S Hex Tile

Oracle

Jan 24, 2018

GeoJson hex tile U.S map layer. Use with any state driven data

[Download](#)



Arena Layout

Oracle

June 21, 2017

Map depicting arena layout in Oracle DV.
Project import password=Admin123.

[Download](#)



Map layer: Washington DC (Metro)

Oracle

July 10, 2017

Example of line geometry based custom map layer depicting Metro lines in Washington DC. Package contains custom map layer JSON file and a sample .dva project(Admin123) to demonstrate this custom layer. Import the JSON using custom map layers UI manager and choose both Name and ObjectID as layer keys.

[Download](#)



Map layer: Floor Plan Map

Oracle

July 05, 2017

This is an example of non geographic custom map layer. This package contains a JSON for Floor Map showing different Rooms/sections on the floor. Import this JSON using custom map layers UI manager and choose CAGE_ID as layer key.

[Read me](#)

[Download](#)

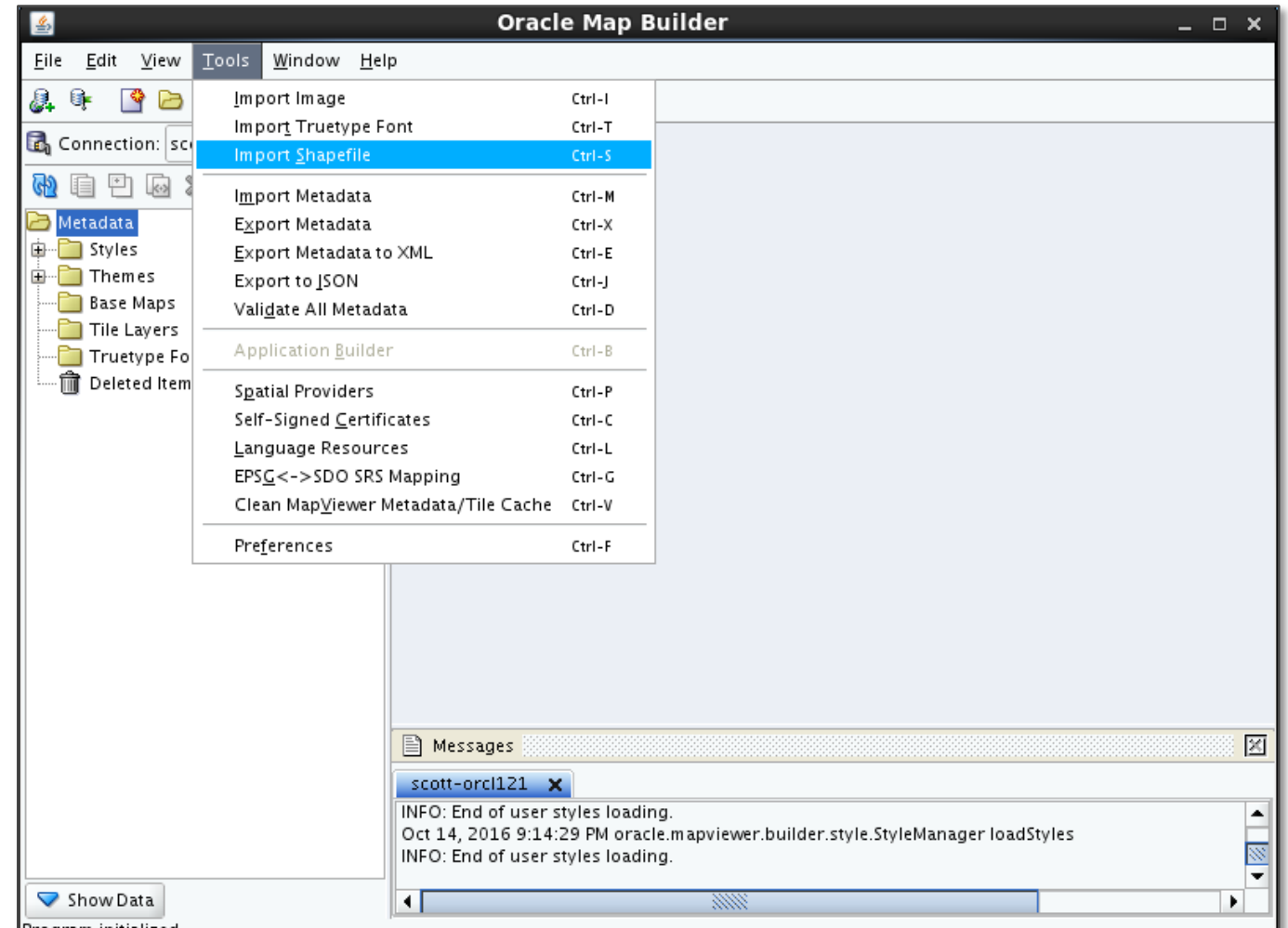
Other Sources for Map Layers ?

- Available in-house from GIS department ...
 - Your own business spatial data
 - Sales territories,
- Obtained from external suppliers ...
 - Administrative boundaries, etc
 - Mapping agencies (NGI)
 - Data suppliers (Here, Tom Tom, GfK, ...)
 - Public sources (gadm.org, openstreetmap.org)



Conversion tools: Mapbuilder

- Free Oracle tool
- Load and manage spatial data in Oracle
- Loads ESRI Shape Files only
- Loads multiple files in one step
- Guided loading via wizard
- Export to GeoJSON



Conversion tools: **GDAL**

- Open source library and tools. Supports many formats
- Sources available from <http://www.gdal.org/>
- Included with Oracle 18 and later
 - Linux64, Win64
- Command-line tools
 - Use scripting to automate
- Can import and export many formats
- Can apply transformations



```
$ ogr2ogr -f GeoJSON us_counties.json us_counties.shp
```


Projects

Data

Active Project

Console

Tasks

Active Project

Create

Data Visualizations

Add Dataset Add Analysis

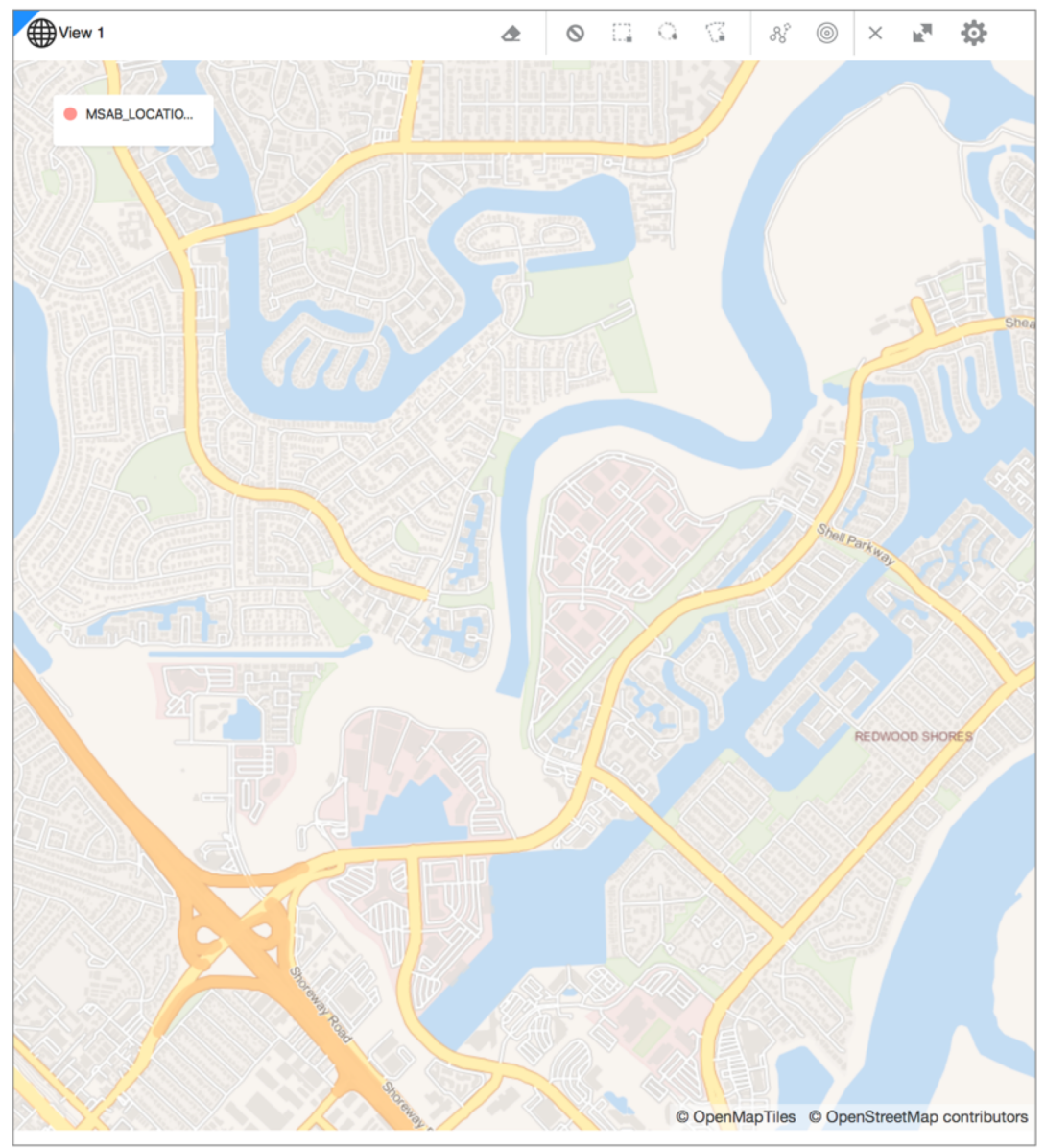
- My Datasets
 - MSAB_LOCATIONS
- My Analyses

MSAB

Layers














Layers List

- Data
 - MSAB_LOCATIONS
- Background
 - Oracle OSM Bright



Spatial Analysis Operations

All Filter Combine Transform Measure

-  **Add a buffer of a specified distance** ★
SDO_GEOM.SDO_BUFFER
More information
-  **Return shapes having spatial relationships to another** ★
SDO_RELATE
More information
-  **Calculate area** ☆
SDO_GEOM.SDO_AREA
More information
-  **Combine a set of shapes into one** ☆
SDO_AGGR_UNION
More information
-  **Return shapes having any spatial interaction with another** ☆
SDO_ANYINTERACT
More information
-  **Return shapes that contain another** ☆
SDO_CONTAINS
More information
-  **Calculate minimum distance between shapes** ☆
SDO_GEOM.SDO_DISTANCE
More information
-  **Return shapes that are inside another** ☆
SDO_INSIDE
More information
-  **Calculate length or perimeter** ☆
SDO_GEOM.SDO_LENGTH
More information
-  **Return shapes nearest to a another** ☆
SDO_NN
More information
-  **Return shapes that overlap another** ☆
SDO_OVERLAPS
More information
-  **Determine if shapes are within a specific distance of each other** ☆
SDO_GEOM.WITHIN_DISTANCE
More information
-  **Return shapes within a specified distance of another** ☆
SDO_WITHIN_DISTANCE
More information












▶ **Advanced**

MSAB_LOCATIONS : Export

File Format: GeoJSON

Simplify Geometry Shapes

Columns to Include: Select All Unselect All

-  CASE_ID
-  CASE_VIEW_ID
-  SEQ
-  LATITUDE
-  LONGITUDE
-  ALTITUDE
-  FILE_NAME
-  CASE_VIEW_NAME
-  LOCATION_NAME
-  GPS_TIME
-  APPLICATION

OK

Cancel

Thank You

Albert Godfrind

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Oracle

October 2019

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