

Updated HERE Maps Sample Dataset for Oracle Analytics

Last updated: 8 June 2018

Contents

- Overview 2
- Deployment Instructions 2
 - Pre-requisites 2
 - Import the samples data dump file 3
 - Import Map layer Metadata 3
 - Configure Map Viewer to add map datasource..... 4
- Description of Sample Maps Content 5
 - 1) Boundaries for States within selected countries: 7
 - 2) Counties boundary information for selected countries: 8
 - 3) More cities added to the world Cities list 8
 - 4) Towns/Villages information for India & Australia..... 9
 - 5) Administrative Division information for France..... 9
 - 6) Boundary definition for other Administrative divisions 11
 - 7) Support to Build Hierarchies using Map Layers 12
 - 8) Street level view detailed Maps for Mumbai..... 12
 - 9) Point Of Interest(POI) data for selected cities across world..... 12

Overview

In this document we will discuss about sample dataset for Maps provided by [HERE](#) (formerly known as Navteq) and its deployment instructions. We will also look at few examples of Reports and Dashboards built using that data. This sample dataset can be used to build geo-spatial reports in Oracle Analytics Cloud, Oracle Autonomous Analytics Cloud as well as OBIEE.

Note: *If you are familiar with OBIEE_NAVTEQ maps dataset included in OBIEE SampleApp, please note this update includes more recent geo data and some additional information as well (as of August 2017). However list of layers, geometries covered in the updated sample is not exactly same as what is present in OBIEE SampleApp.*

This dataset contains sample geographic information like boundaries (geometries) of continents, countries, states, counties, cities and granular information to the extent of streets in some cities. Please note that this dataset contains only a sample subset of the geographical information at various levels. Please visit the following link to download this sample dataset and read terms and conditions of usage of this dataset:

<http://www.oracle.com/technetwork/database/options/spatialandgraph/downloads/spatial-partners-data-087203.html>

Contents of this dataset along with few examples are described [here](#)

Deployment Instructions

Pre-requisites

- 1) Fully functional Oracle Analytics Cloud (OAC) or Oracle Business Intelligence Enterprise Edition (OBIEE) on-premises installation with access to MapViewer Console and Answers (Admin access required for configuration).
- 2) Fully functional Oracle Database on-premises installation or Oracle Database Cloud Service, Oracle Database Cloud Service Bare-Metal services. Please note that Oracle Database Cloud Service –Schema account is not sufficient to deploy this dataset.

Import the samples data dump file

Please note that the same set of import instructions are applicable for both On-Premises and Database cloud Service accounts.

- 1) Download OA_HERE_MAPS.dmp dump file from OTN ([link](#)) and copy it to a local directory.
- 2) Connect as system/Admin123@pdborcl and create a new tablespace using the following command:
SQL> create tablespace OA_HERE_MAP datafile 'HERE.dbf' size 100m autoextend on;
- 3) Create import directory using the following sql:
SQL>conn system/Admin123@pdborcl
SQL>create or replace directory IMP_DIR as '<DIR_PATH>'
- 4) Use the following import command to import OBIEE_HERE schema from the dump file:
!impdp system/Admin123@pdborcl directory=IMP_DIR dumpfile=OA_HERE_MAP.dmp logfile=OA_HERE_MAP.log
- 5) Import should succeed without any errors.
- 6) Confirm that you can connect to the following schema and view the tables
SQL>conn OA_HERE_MAPS/Admin123@pdborcl

Import Map layer Metadata

While connected to OA_HERE_MAPS schema (with password Admin123) run the following insert statements to import map layer metadata

```
insert into user_sdo_maps select * from sdo_maps;  
insert into user_sdo_themes select * from sdo_themes;  
insert into user_sdo_styles select * from sdo_styles;  
insert into user_sdo_cached_maps select * from sdo_cached_maps;  
commit;
```

Configure Map Viewer to add map datasource

Sign into Map Viewer console in OAC/OAAC/OBIEE and go to configuration tab.

URL format: [http://hostname\[:port\]/mapviewer/console/configuration.jsp](http://hostname[:port]/mapviewer/console/configuration.jsp)

In the configuration tab you will find MapViewerConfig.xml. This xml contains all configuration and Maps datasources information. Make an entry for new maps datasource we have just imported by adding the following entry in “**Predefined Data Sources**” section:

```
<map_data_source name="OA_HERE_Sample"
    jdbc_host="<Host_Name>"
    jdbc_sid="//pdborcl"
    jdbc_port="1521"
    jdbc_user="oa_here_maps"
    jdbc_password="!<Password>"
    jdbc_mode="thin"
    number_of_mappers="10"
    allow_jdbc_theme_based_foi="true"
    editable="true"
/>
```

Note:

- 1) For jdbc_password parameter you need to enter the schema password preceded by “!”. For example in this case since password is Admin123, you need to assign the following value for jdbc_password “!Admin123”. Exclamation mark in jdbc_password field tells the Mapviewer to encrypt the password.
- 2) If you are using database service name instead of sid, prepend the service name with ‘//’

Also add mds_config information for this data source by adding the following lines to mds_config(Maps Data Server Configs) section in MapViewerConfig.xml:

```
<data_source name="OA_HERE_Sample">
    <allow_predefined_themes>true</allow_predefined_themes>
    <allow_dynamic_themes>true</allow_dynamic_themes>
</data_source>
```

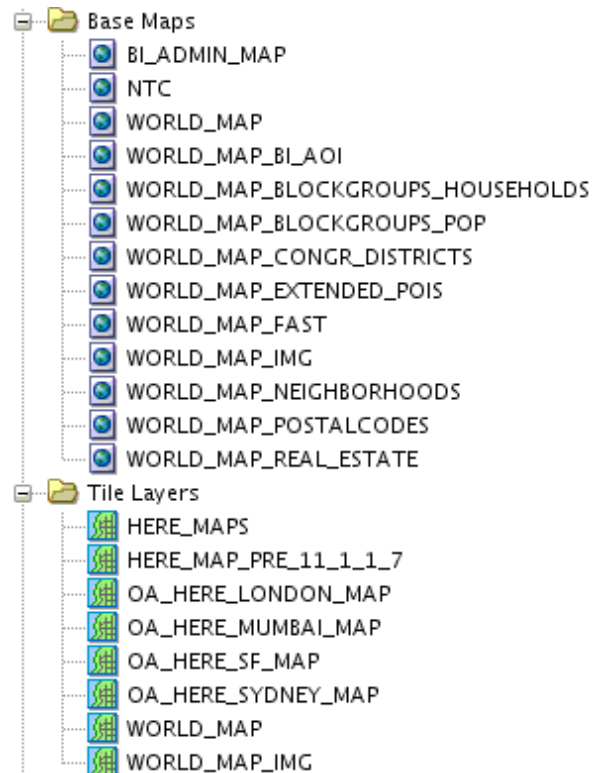
NOTE: mds_config section in MapViewerConfig.xml starts with the tag <mds_config>

Description of Sample Maps Content

This sample dataset contains boundary (geometries) information for all countries and continents along with street level view of selected cities: San Francisco, London, Sydney, Mumbai. In addition to that the dataset contains geographic information like counties and state boundaries for selected countries, Commune and Departments level information for France and Administrative District/Taluk level information for selected regions in India and Australia. This dataset also contains Points of Interest for various categories like Business, Public Transport, Restaurants, Public facilities etc. The dataset also contains boundary information for specific Zip code selected regions in California State.

The dataset is shipped with few default Base Maps, Tile Layers and some custom built Base Maps, Tile Layers to demonstrate this data. You can view the Base Maps, Tile Layers using Oracle Map Builder. More information on how to install Oracle Map Builder and how to build Base Maps, Tile Layers and build some examples can be found in this Tutorial: [Map Builder Tutorial](#)

Here is a list of Base Maps and Tile Layers in this schema as viewed from Oracle Map Builder:



Here are the screenshots of Layers and Background Maps imported into OAC:

Layers

Administration

Manage Map Data

Manage map components and associate geographic layers to BI data

Layers Background Maps Images

Name	Description	Location
Congress Districts		OA_HERE_Sample/CONGRESSIONAL_DISTRICTS
France Communes		OA_HERE_Sample/OA_HERE_FR_COMMUNES
France Départements		OA_HERE_Sample/OA_HERE_FR_DEPTS
India Districts		OA_HERE_Sample/OA_HERE_IND_DISTRICTS
POI ATM		OA_HERE_Sample/NTC_POI_ATM
POI Banks		OA_HERE_Sample/NTC_POI_BANK
POI Bus Stands		OA_HERE_Sample/NTC_POI_BUS_STATION
POI Commuter Rail Stations		OA_HERE_Sample/NTC_POI_COMMUTER_RAIL_STATION
POI Ferry Terminal		OA_HERE_Sample/NTC_POI_FERRY_TERMINAL
POI Public Transport		OA_HERE_Sample/NTC_POI_PUBLIC_TRANSPORT
POI Restaurants		OA_HERE_Sample/NTC_POI_RESTAURANT
POI Shopping		OA_HERE_Sample/NTC_POI_SHOPPING
POI Taxi Stands		OA_HERE_Sample/NTC_POI_TAXI_STAND
POI Train Stations		OA_HERE_Sample/NTC_POI_TRAIN_STATION
POI Transportation Services		OA_HERE_Sample/NTC_POI_TRANSPORTATION_SERVICE
US Counties		OA_HERE_Sample/OA_HERE_US_COUNTIES
US Postcodes		OA_HERE_Sample/POSTCODES
World Cities		OA_HERE_Sample/OA_HERE_CITY
World Counties		OA_HERE_Sample/OA_HERE_WORLD_COUNTIES
World Countries		OA_HERE_Sample/BI_COUNTRY
World States		OA_HERE_Sample/BI_ADMIN_2
World Towns		OA_HERE_Sample/OA_HERE_TALUKS_SUBURBS

Background Maps:

Administration

Manage Map Data

Manage map components and associate geographic layers to BI data

Layers Background Maps Images

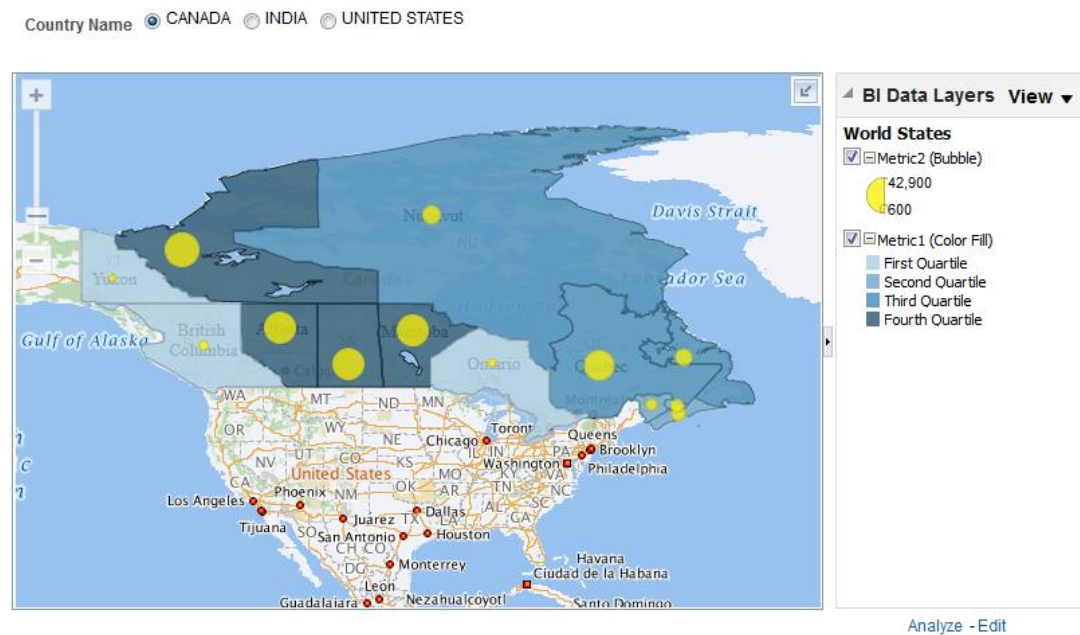
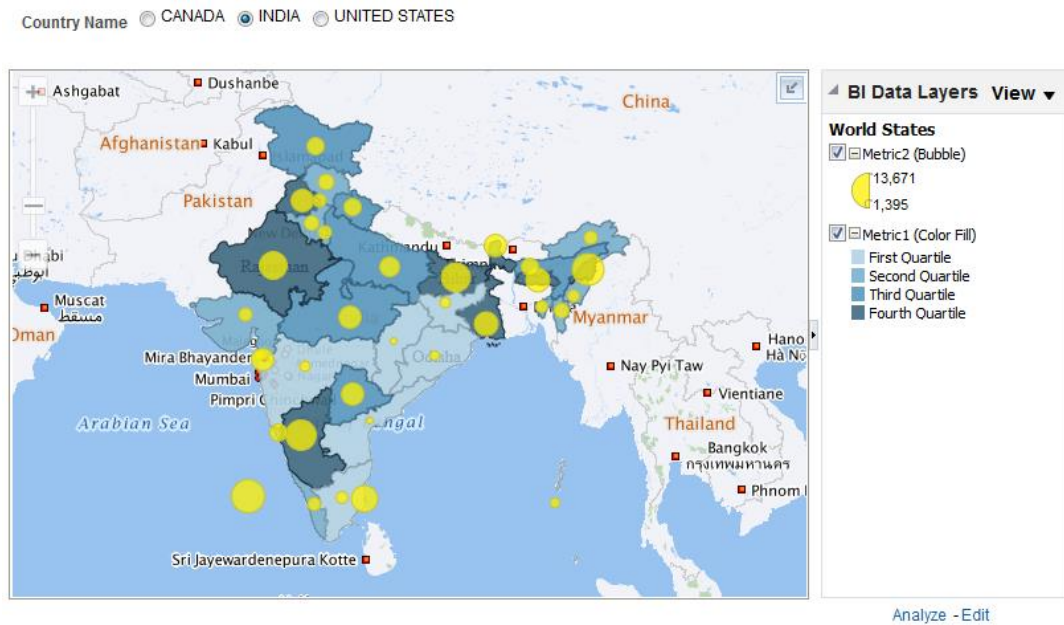
Name	Description	Location	Associated Subject Areas
OA_HERE_LONDON_MAP		OA_HERE_Sample/OA_HERE_LONDON_MAP	"PC0", "Sample HERE Maps"
OA_HERE_MUMBAI_MAP		OA_HERE_Sample/OA_HERE_MUMBAI_MAP	"PC0", "Sample HERE Maps"
OA_HERE_SF_MAP		OA_HERE_Sample/OA_HERE_SF_MAP	"PC0", "Sample HERE Maps"
OA_HERE_SF_POI		OA_HERE_Sample/OA_HERE_SF_MAP	"Sample HERE Maps"
OA_HERE_SYDNEY_MAP		OA_HERE_Sample/OA_HERE_SYDNEY_MAP	"PC0", "Sample HERE Maps"
WORLD_MAP		OA_HERE_Sample/WORLD_MAP	"PC0", "Sample HERE Maps"

More information on how to import the Layers and Background Maps into OAC/OAAC/OBIEE and how to join them with the Subject Areas can be found in “**Integrating a Map with OBIEE**” section in [Map Builder Tutorial](#). Same instructions are applicable for OAC and OAC as well.

Following section showcases examples that have been built on top of the new dataset to highlight the content

1) **Boundaries for States within selected countries:**

New dataset contains state boundary level information for India, Canada and US. This example uses a map layer called BI_ADMIN_2 which is available as part of the sample HERE dataset.



2) Counties boundary information for selected countries:

New dataset contains boundary information of counties in following countries: Australia, Great Britain, Mexico and United States.

World Counties

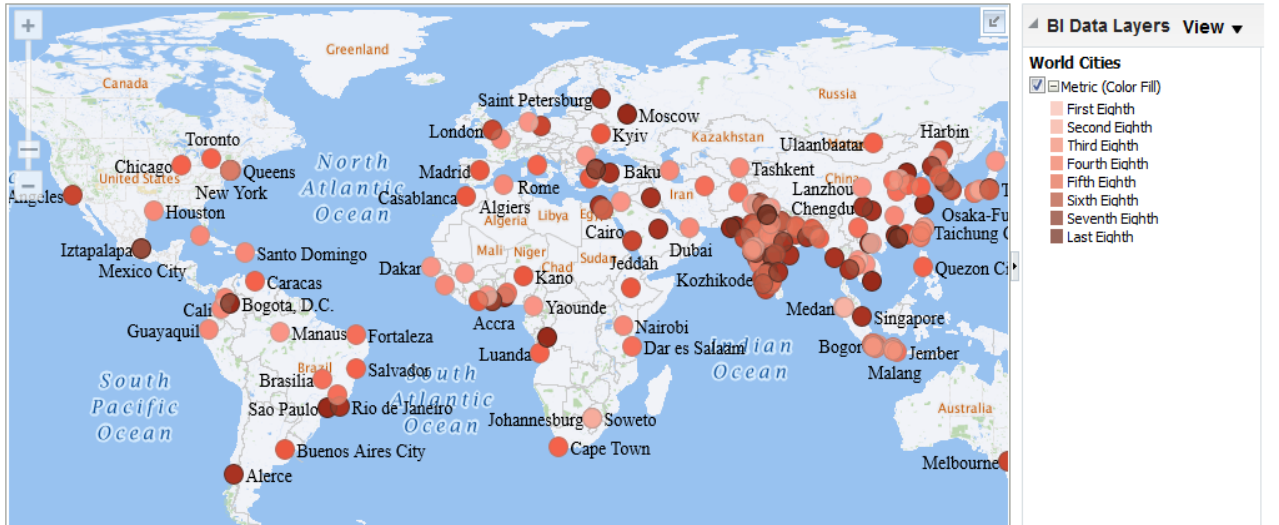


3) More cities added to the world Cities list:

More cities are added to the list of cities existing in the previous versions of HERE dataset. Updated list contains close to 1250 cities worldwide. Here is a snapshot of world map answers report with top cities:

TopN by Cities

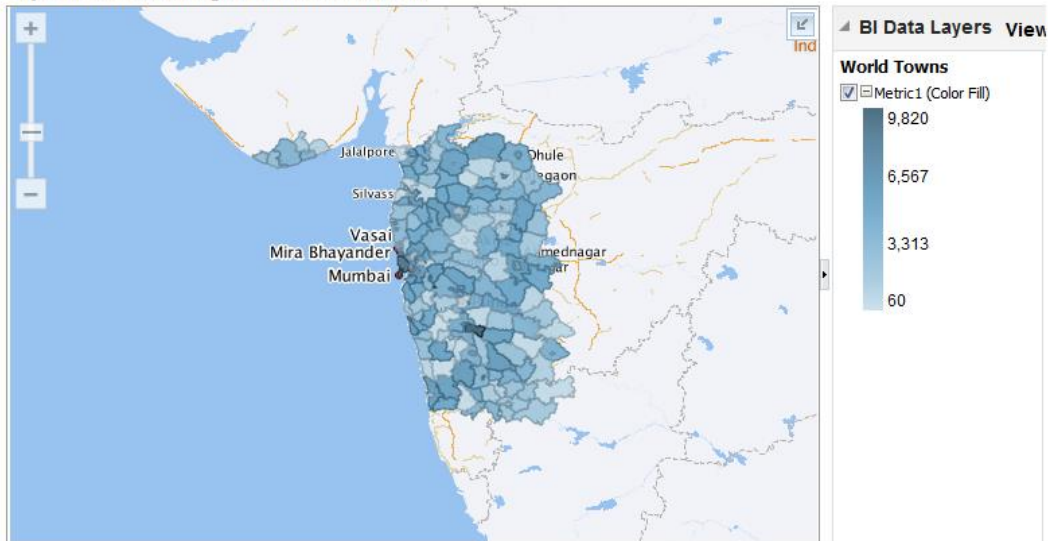
World Cities



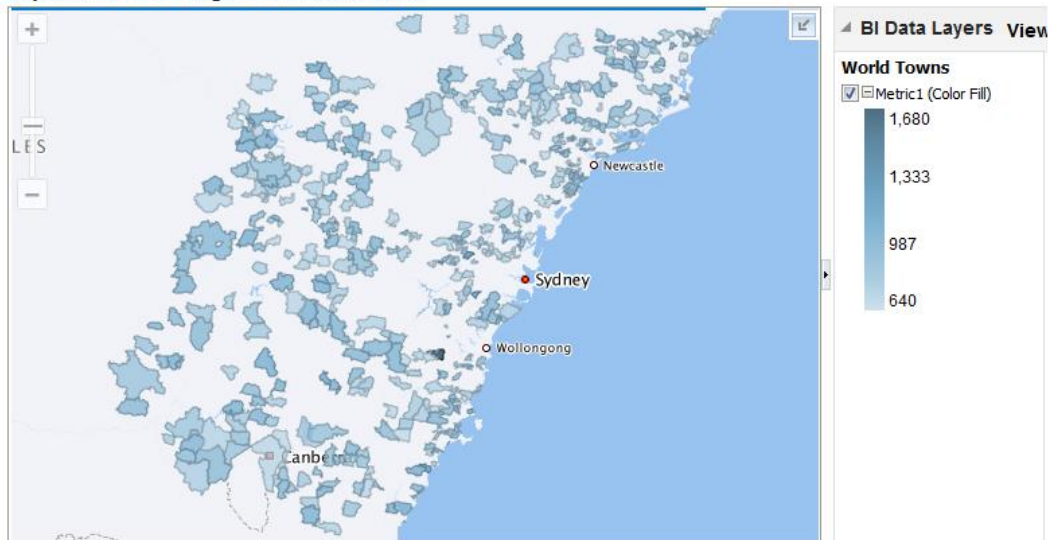
4) Towns/Villages information for India & Australia:

For selected regions in India and Australia we have Towns/Villages/Administrative divisions/Taluks boundary information. Here are a couple of snapshots of the maps report on a Map Tilelayer:

Top 500 Towns/Villages in India/Australia



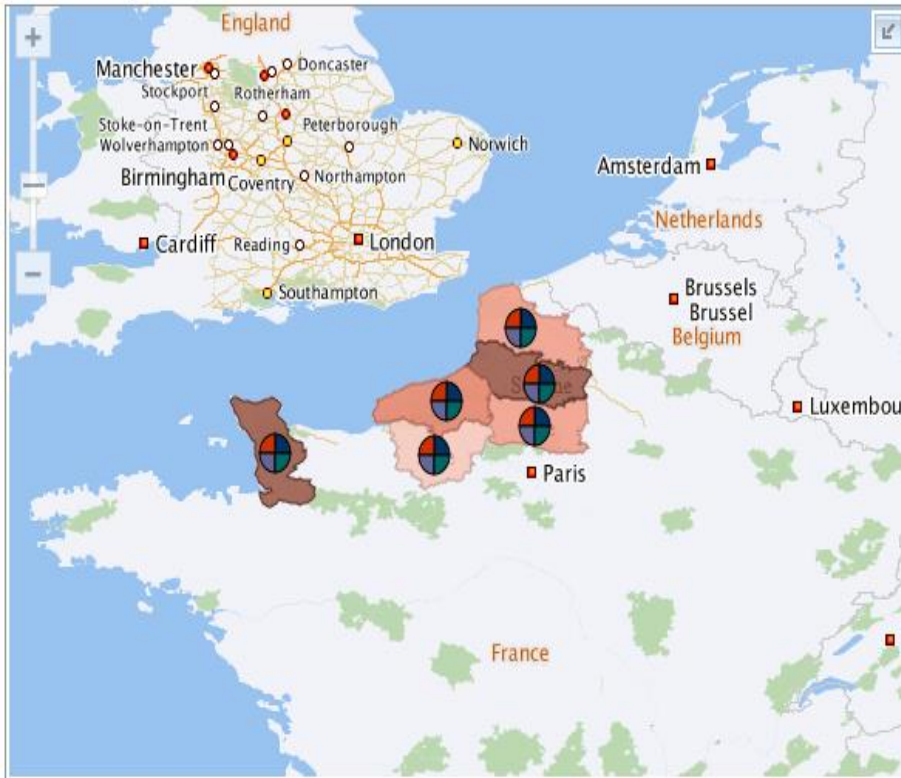
Top 500 Towns/Villages in India/Australia



5) Administrative Division information for France:

New maps dataset contains administrative regions information for a few Départements and Commune within France. Here is an example dashboard showing a map view displaying these Départements and Communes:

France Départements

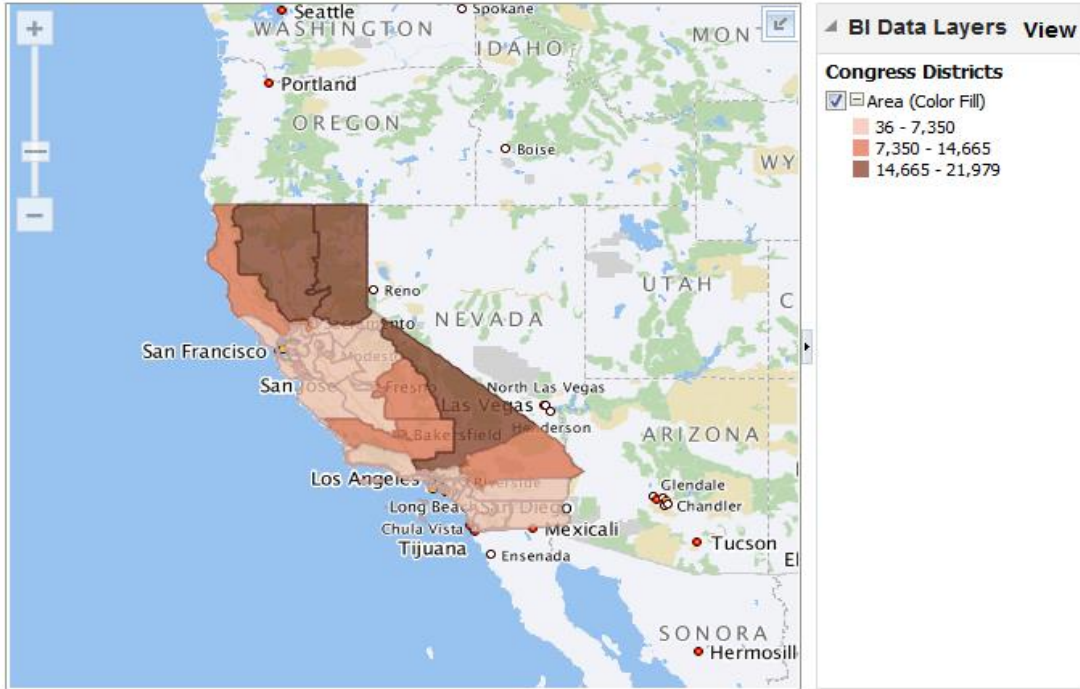


France Communes

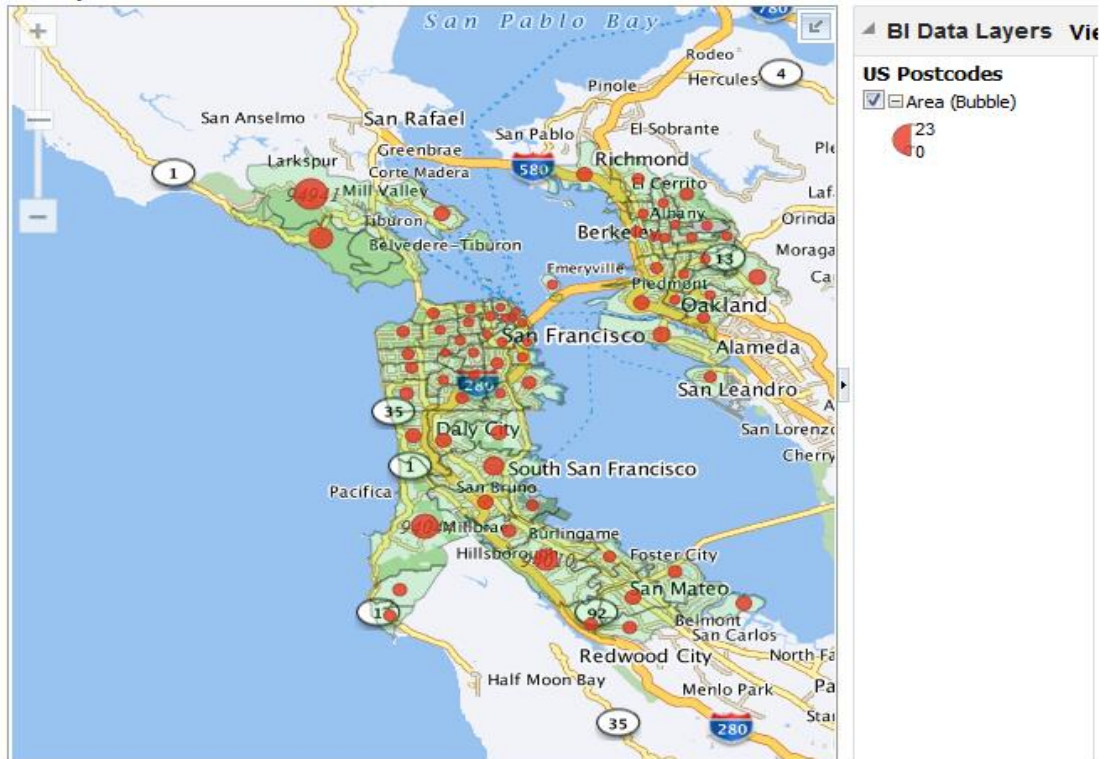


6) **Boundary definition for other Administrative divisions:**

New dataset contains boundary definitions for other administrative divisions like US Congressional Districts, Postal codes. This new sample dataset contains boundary data for areas surrounding San Francisco in US. Here is a snapshot of answers report using CONGRESS_DISTRICTS, US_ZIP tile layers available in the map dataset:



US Zipcodes

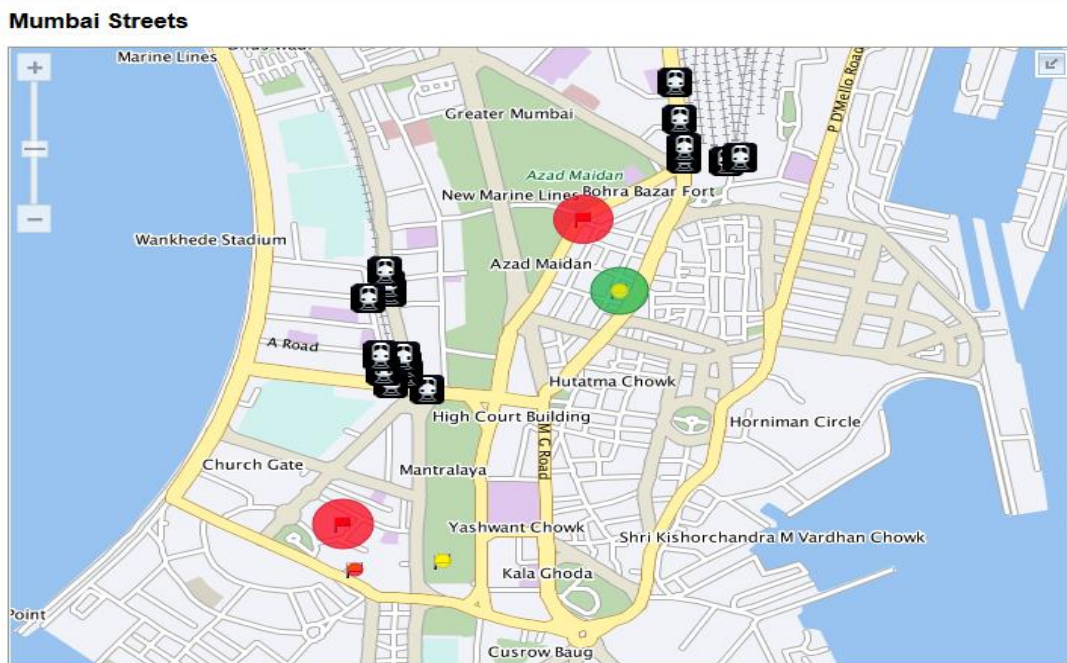


7) Support to Build Hierarchies using Map Layers:

Tables within this dataset have parent/child hierarchy relation defined through referential integrity constraints. These constraints allows users to build hierarchies to either drill down or roll up using map layers. Tables like **BI_ADMIN_GEOMETRY** and **BI_ADMIN_CITY_CENTER** contain boundaries geometry information and they also contain columns which define the hierarchy to allow drill down or rollup.

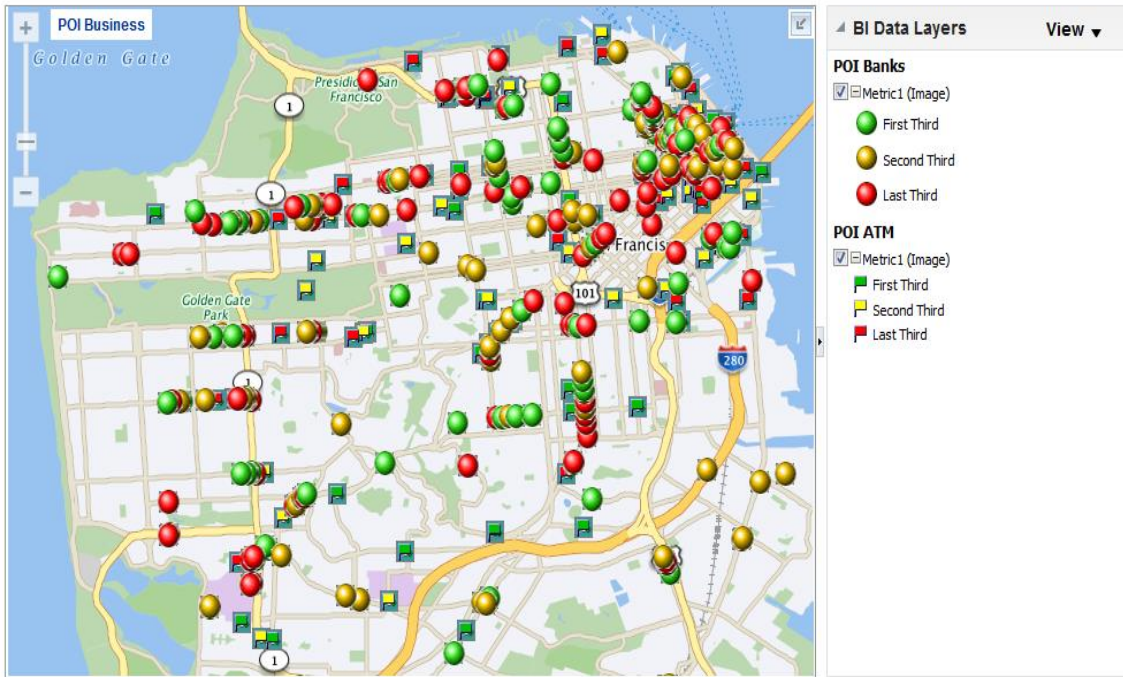
8) Street level view detailed Maps for Mumbai:

In addition to the street level detailed maps for SF, London and Sydney the new dataset has street level view maps for Mumbai. Here is a snapshot of a dashboard using a custom tile layer developed for Mumbai city:

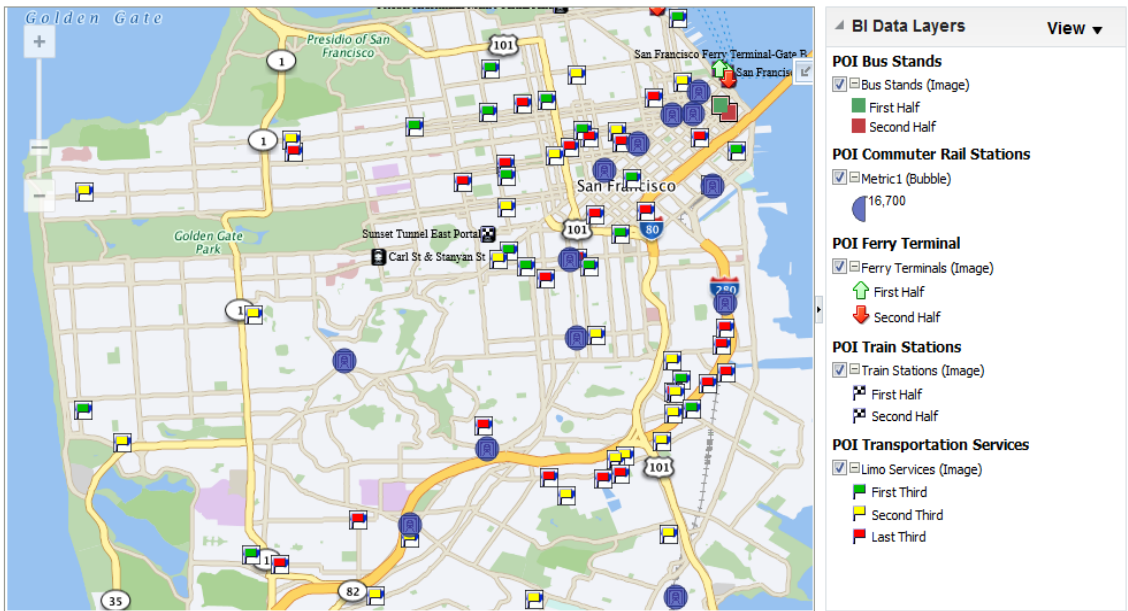


9) Point Of Interest(POI) data for selected cities across world:

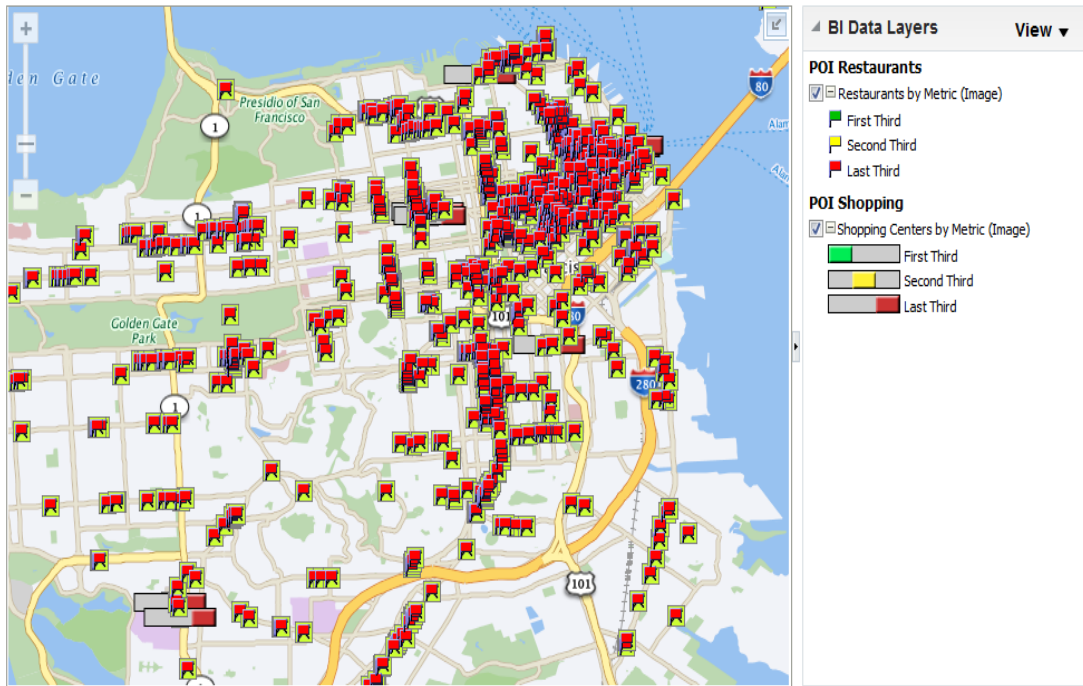
New map dataset contains geographic information (Street name, post code and other details) for various categories of Point Of Interest like Banks, Metro Stations, Recreation Centers, Parks, Schools etc and this list has good collection of POIs. Here are a couple of snapshots of example reports to showcase the POI geographic information available in the dataset:



POI SF Public Transportation



POI SF Restaurants & Shopping



Please note that the list above is not an exhaustive list of all the new content in the Map dataset. Download and import the maps dataset to explore more content available in this dataset.