

# Implement Maps in OBI in a Week

SPRING 2016 HEARTLAND OUG CONFERENCE

Arthur Dayton

Thursday, January 28, 2016



# Agenda

- Licensing
- OBIEE Map Architecture Components
- FREE! Map & Geo Coding sources
- Importing, modifying and building maps

# Vlamis Software Solutions

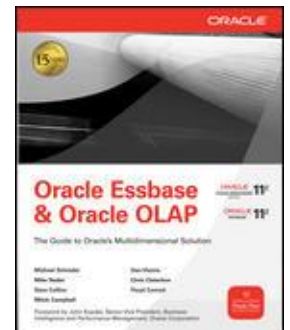
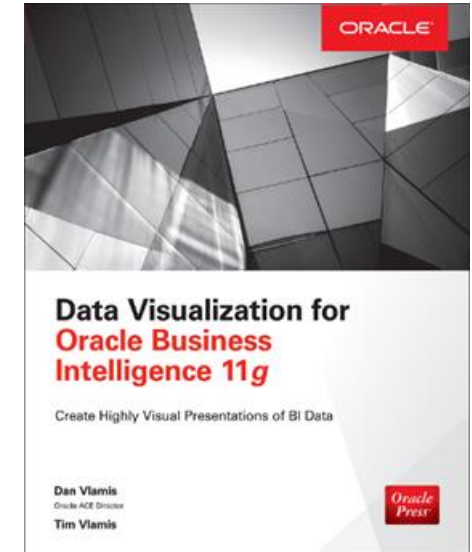
- Vlamis Software founded in 1992 in Kansas City, Missouri
- Developed 200+ Oracle BI and analytics systems
- Specializes in Oracle-based:
  - Enterprise Business Intelligence
  - Data Warehousing
  - Data Mining and Predictive Analytics
  - Data Visualization
- Multiple Oracle ACEs, consultants average 15+ years
- [www.vlamis.com](http://www.vlamis.com) (blog, papers, newsletters, services)
- Co-authors of book “Data Visualization for OBI 11g”
- Co-author of book “Oracle Essbase & Oracle OLAP”
- Oracle University Partner
- Oracle Gold Partner

ORACLE EDUCATION RESELLER

ORACLE APPROVED EDUCATION CENTER

ORACLE Gold Partner

Specialized  
Oracle Business Intelligence  
Foundation Suite 11g





# My Background

## Arthur

- Financial Accounting background
- BS in Accounting / MS Management Information Systems
- Adjunct Technology Professor at University of Nebraska
- 10+ years developing with Oracle software
- Many years as an Oracle customer
- Twitter - [@arthurdayton116](https://twitter.com/arthurdayton116)
- Blog – [VlamiS.com](http://VlamiS.com) & [helpmewithoraclebi.wordpress.com](http://helpmewithoraclebi.wordpress.com)



# Licensing

- MapViewer comes with integrated with OBIEE
- All Oracle Database versions include Oracle Locator (Free)
- Data Visualization option (Not Free) includes automatic mapping



# OBIEE Map Architecture Components

Figure 1-1 Basic Flow of Action with MapViewer

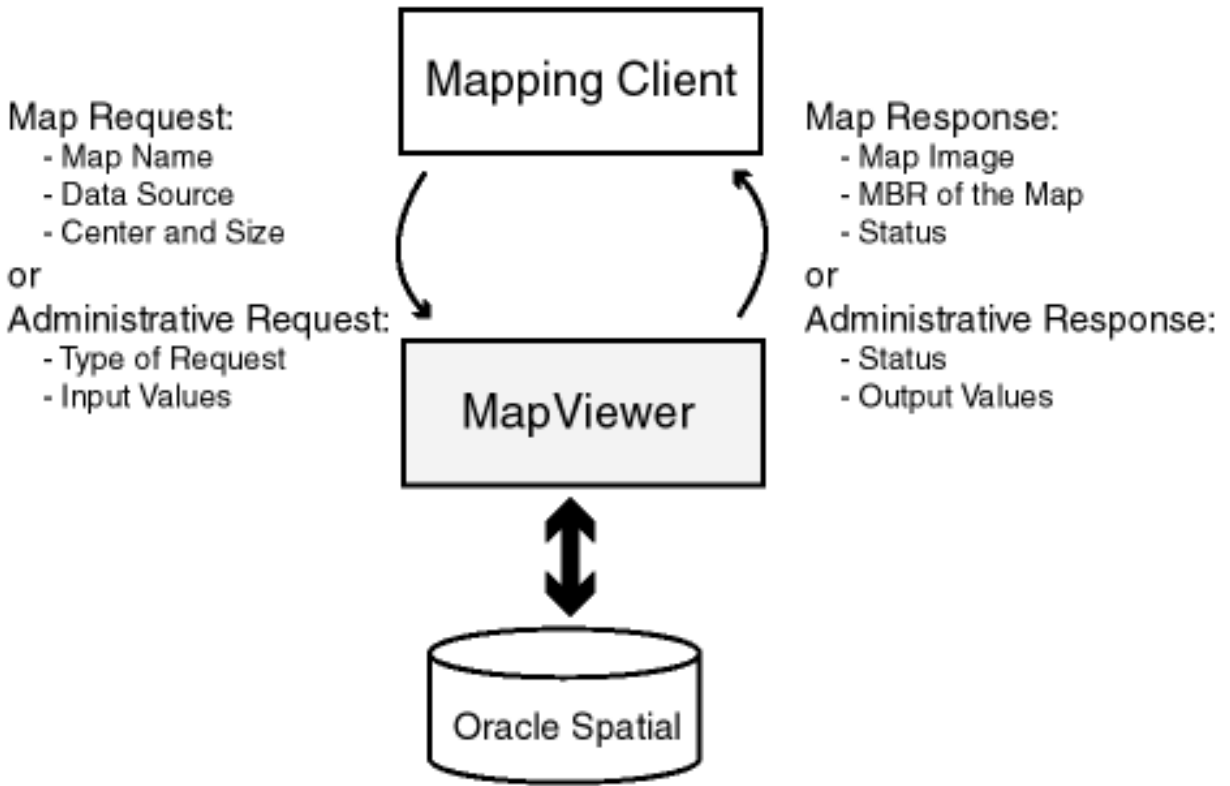
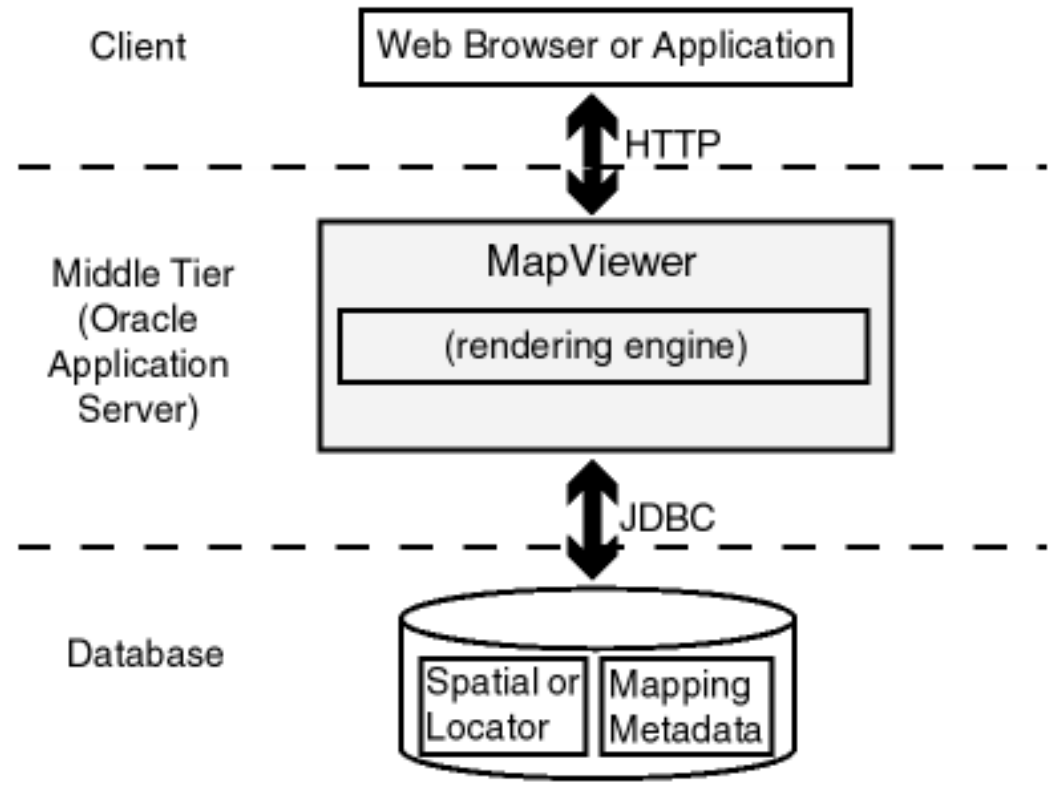


Figure 1-2 MapViewer Architecture





# Map Data Source Configuration

```
<map_data_source name="Arthur_Map"  
    jdbc_host="hostname"  
    jdbc_sid="//servicename"  
    jdbc_port="1521"  
    jdbc_user="Username"  
    jdbc_password="!Password"  
    jdbc_mode="thin"  
    number_of_mappers="3"  
    allow_jdbc_theme_based_foi="true"  
    editable="true"  
  
/>
```



# Map Data Source Configuration

```
<mds_config>  
  <data_source name="Arthur_Map">  
    <allow_predefined_themes>true</allow_predefined_themes>  
    <allow_dynamic_themes>true</allow_dynamic_themes>  
    <allow>  
      <theme>*</theme>  
    </allow>  
  </data_source>  
</mds_config>
```





# Database – Stuff to know about

- MDSYS Schema
- SDO\_GEOMETRY type
- Spatial Index
- Spatial Reference System Identifier (SRID)
- USER\_SDO\_EDIT\_SESSIONS (sdedefinition.sql)
- USER\_SDO\_GEOM\_METADATA
- USER\_SDO\_MAPS / THEMES / STYLES / CACHED\_MAPS



# Database Other stuff to know about

- [Spatial and Graph Developer's Guide](#)
- SDO\_GEOM Package
- Appendix B Oracle Locator



# Free map sources

- US Census Bureau

<https://www.census.gov/geo/maps-data/data/tiger-line.html>

- Natural Earth

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

- Open Data Portals

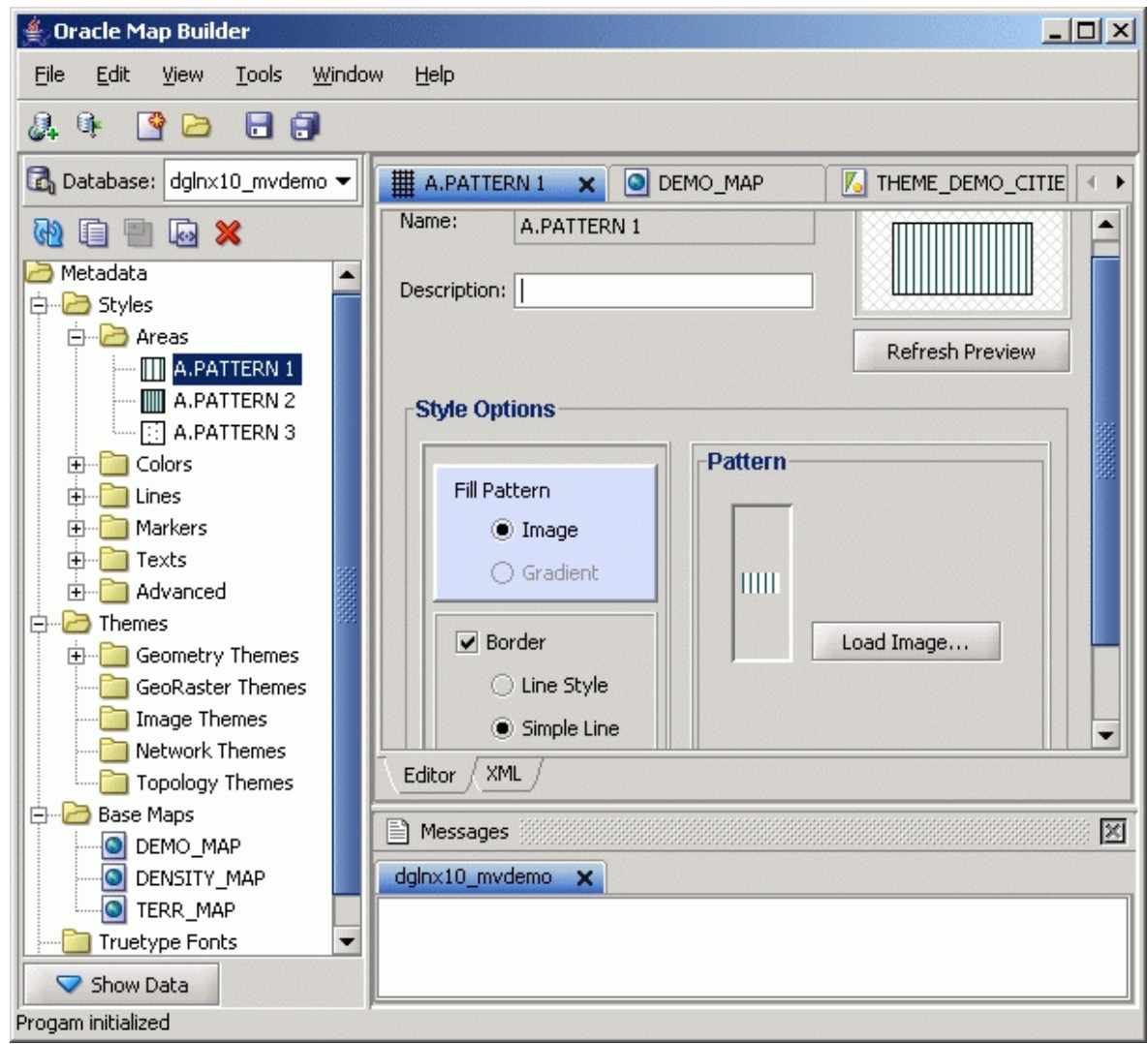
<https://data.cityofchicago.org/browse?limitTo=blob&tags=shapefiles&utf8=%E2%9C%93>

- MapCruzin

<http://www.mapcruzin.com/download-free-arcgis-shapefiles.htm>



# Map Builder





# Map Editor

ORACLE® MapViewer 11g Editor

The screenshot displays the Oracle MapViewer 11g Editor interface. The main window is titled "Map Canvas" and shows a map of the United States with Alaska highlighted in green. A tooltip over the highlighted area displays the coordinates  $-98.61652$   $90.27811$ . The interface is divided into several panels:

- Left Panel (Data Layer):** Titled "STATES\_SE", it contains a "Data Layer" section with a star icon and a list of layers: "STATES" and "STATES\_328". Each layer has a checkmark in the first column and empty checkboxes in the others. Below this are "Rendering Properties" and "Labeling Properties" sections.
- Map Canvas:** The central area showing the map. It includes a navigation toolbar on the left and a status bar at the bottom with "Tool: Feature selection" and "Selected: 0".
- Right Panel (Tools):** Titled "Tools", it contains a list of tool categories: "Feature", "Drawing Tools", "Vertex Tools", "Grouping Tools", "Geometry Tools", and "Transformation".



# OBIEE Integration

ORACLE® Business Intelligence

## Administration

### Manage Map Data

Manage map components and associate geographic layers to BI data

Layers Background Maps Images

Name	Description	Location
US_COMB_STAT		Arthur_Map_L/US_COMB_STAT
US_REGIONS		Arthur_Map_L/US_REGIONS
US_STATE_EDIT		Arthur_Map_L/US_STATE_EDIT



# Finding SRID

## Prj2EPSG

Prj2EPSG is a simple service for converting **well-known text** projection information from **.prj files** into standard **EPSG codes**.

Paste a WKT definition or type keywords below:

or **upload a .prj file:**  No file chosen

<http://prj2epsg.org/search>



# Conclusions

- **Maps are Easy!**
- You already own everything you need to use them!
- Map Data is Available **Free!**
- If you want help VlamiS can get you up and running in a week.





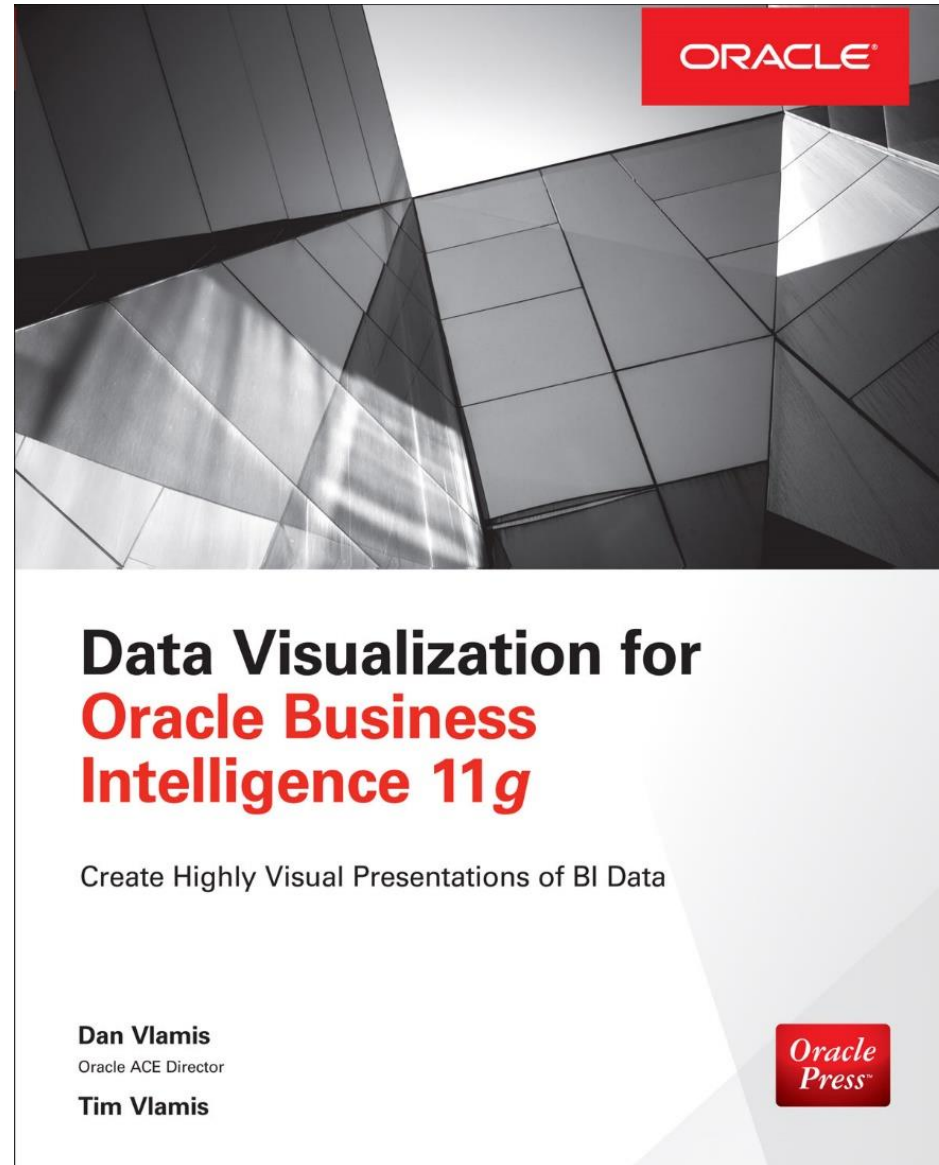
# Oracle Cloud Test Drive

- **Free** to try Oracle BICS, Oracle Advanced Analytics
- Go to [www.vlamiS.com/tdcloud](http://www.vlamiS.com/tdcloud)
- Runs on Oracle Cloud
- Test Drives for:
  - Oracle BICS
  - Oracle Advanced Analytics (initially Oracle Data Mining)
  - More test drives to be added
- Once sign up, you can access for 24 hours
- Click by click script included, but can go “off road”
- Faster and easier than official Oracle “trial web account”



# Drawing for Free Book

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or fill out card





# Thank You!

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For more information go to [www.vlomis.com](http://www.vlomis.com)