

A horizontal rectangular banner with a red background. The background features a faint, light-colored map of a city area, with labels for "Rosslyn", "Radnor Heights", "Washington", and "National Mall".

Oracle Spatial and Graph User Conference

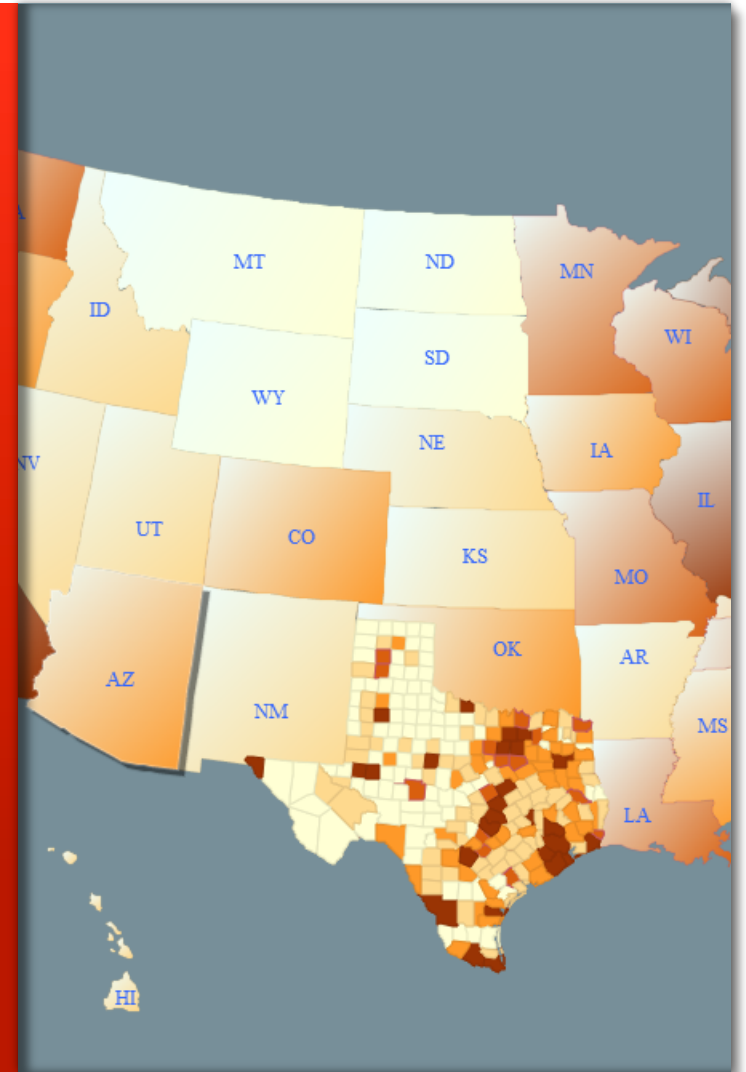
May 22, 2013

Ronald Reagan Building and International Trade Center
Washington, DC USA



Building Applications with Oracle MapViewer

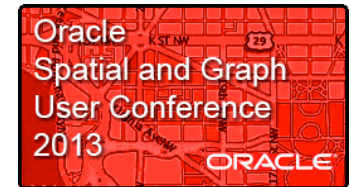
LJ Qian (lj.qian@oracle.com)
Director, Software Development



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. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.



Program Agenda



- What is MapViewer
- Getting started
- Managing mapping metadata with Map Builder
- Introducing the new HTML5 API
- The MVDEMO samples application



What is MapViewer?



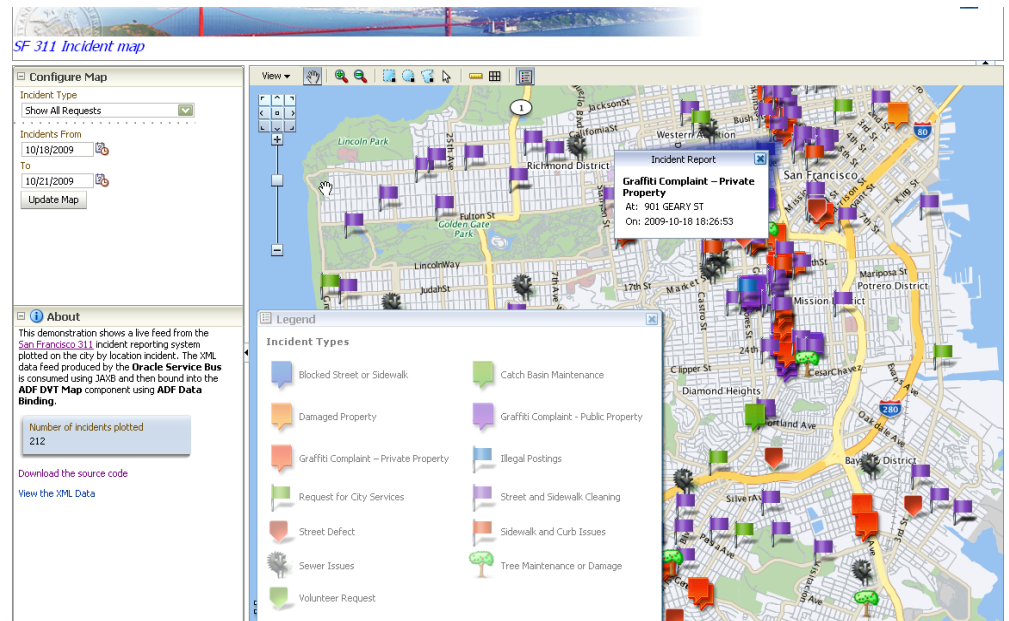
ORACLE

What is MapViewer



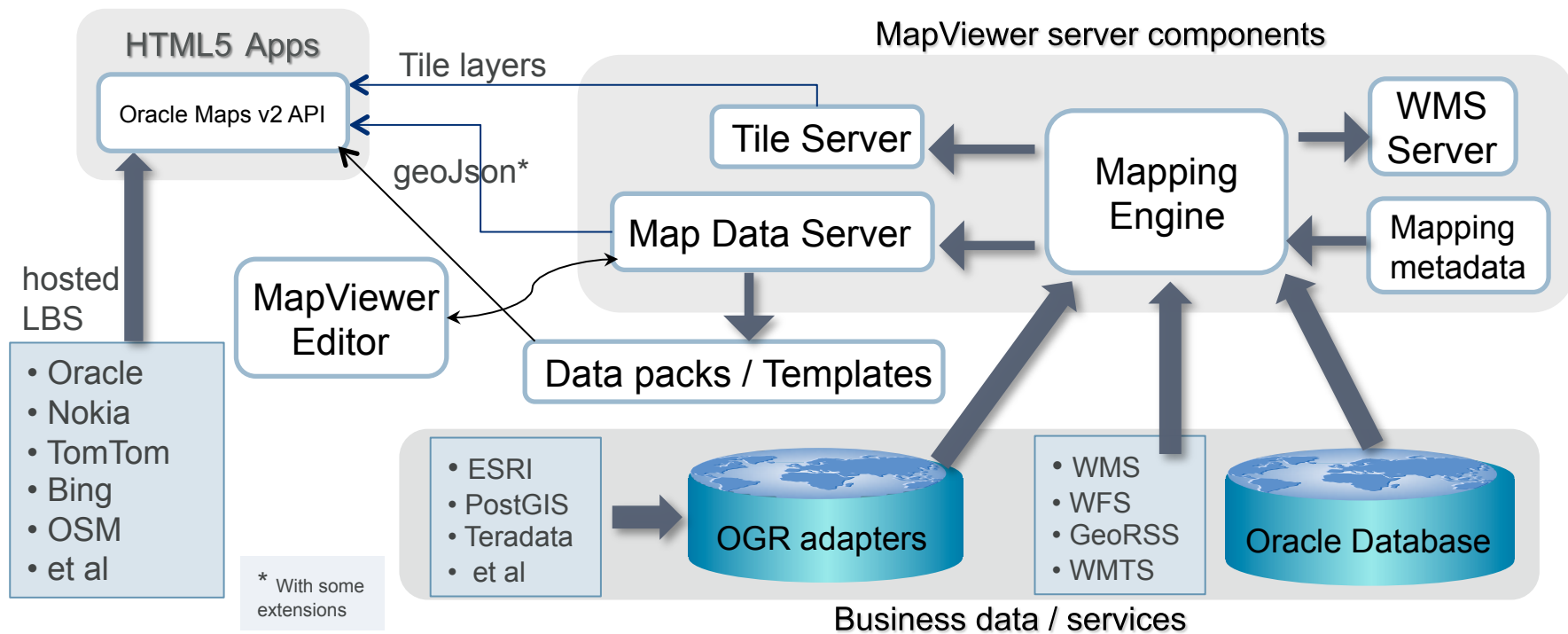
Overview

- 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
- Comes with a companion desktop Map Builder tool



MapViewer Architecture

As of version 11.1.1.7.x



MapViewer Architecture

Components explained



- Mapping engine: queries geospatial data & metadata; renders maps
- Mapping metadata: styles, themes, base maps, tile layers, tile server tasks
- Tile server: generates and serves map tiles; can pre-fetch / refresh / invalidate batches of tiles
- Map Data Server: streams geoJson data to html5 clients; supports the Editor
- WMS Server: responds to WMS requests
- V2 API: the new HTML5 based JavaScript mapping API
- Templates: prepackaged map data **files**; readily consumed by V2 API
- MapViewer Editor: a Java applet; edits spatial data with workspace and versioning support



Getting started

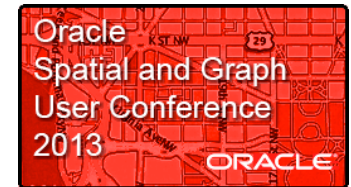


ORACLE



Getting started

With the MapViewer quickstart kit



- Download the latest quick start kit
- Download the latest MVDEMO sample data set
- Import the sample data into an Oracle database
- Create the data source 'mvdemo' in MapViewer Admin console
- Run the tutorials and demos
- Download link (search for keywords 'MapViewer, OTN'):
<http://www.oracle.com/technetwork/middleware/mapviewer/downloads/index.html>



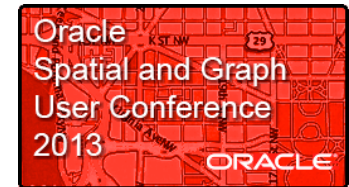
Managing Mapping Metadata with Map Builder



ORACLE

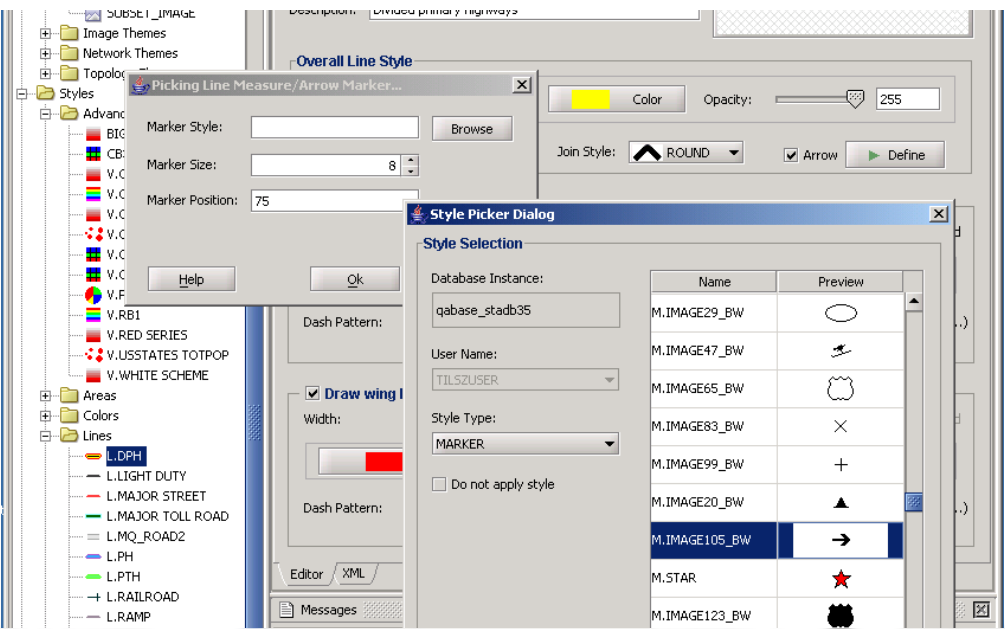
Map Builder

A companion desktop map authoring tool



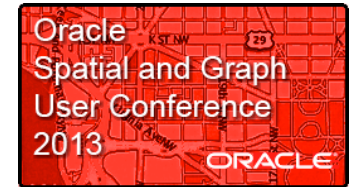
Manages metadata

- Styles: map symbols, patterns
- Themes: layers with styling rules
- Tile layers
- Base maps



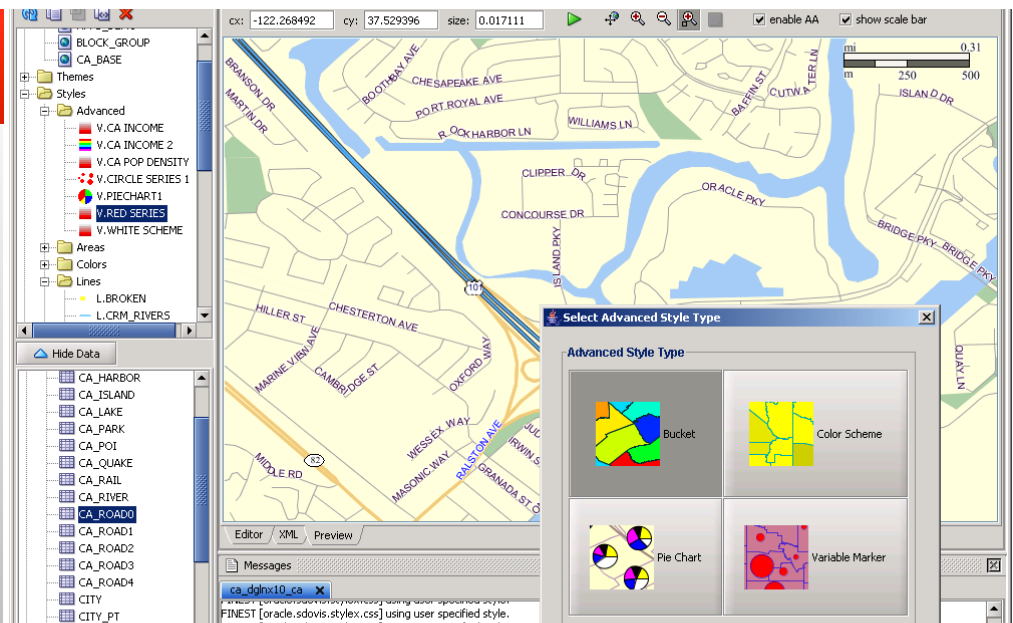
ORACLE

Map Builder



Many utility functions

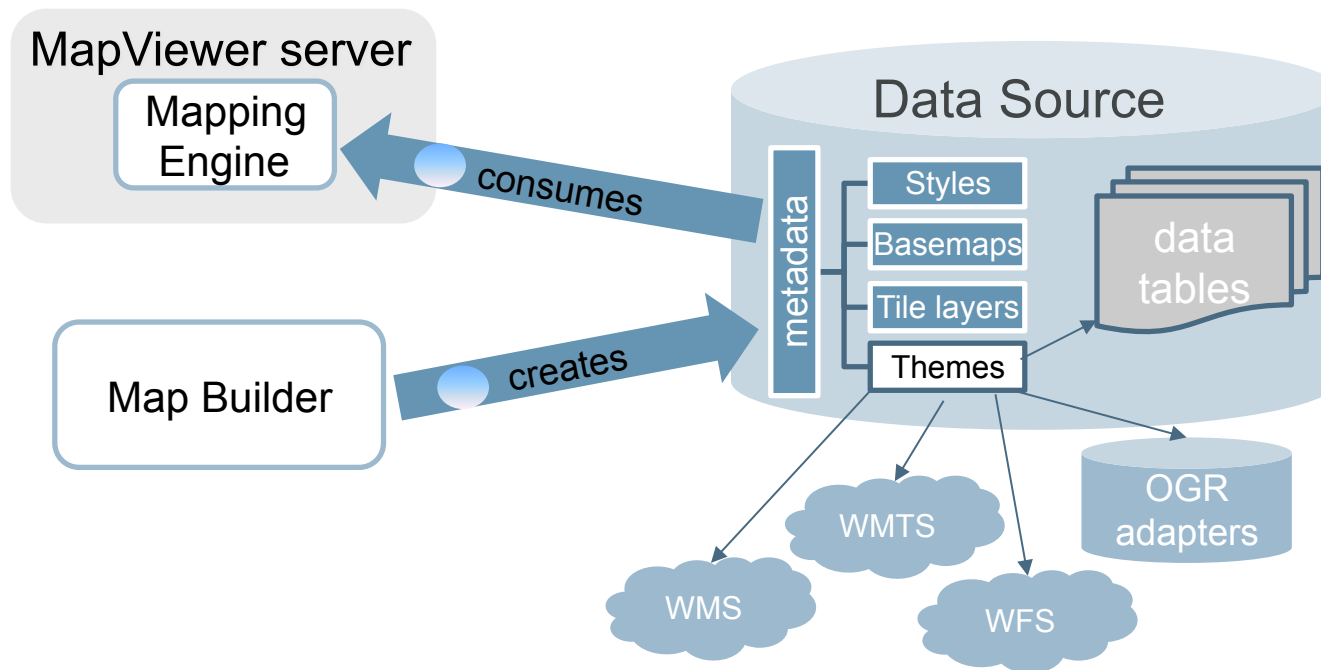
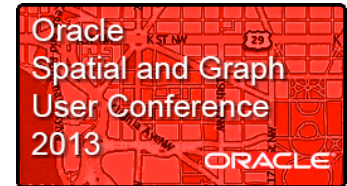
- Browse your geospatial data
- Import ESRI shape files
- Import raster data
- Create map tile layers visually
- Import/export metadata



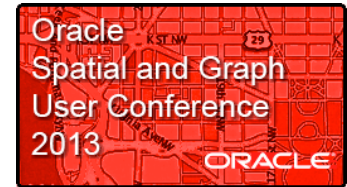
ORACLE

MapViewer & Map Builder

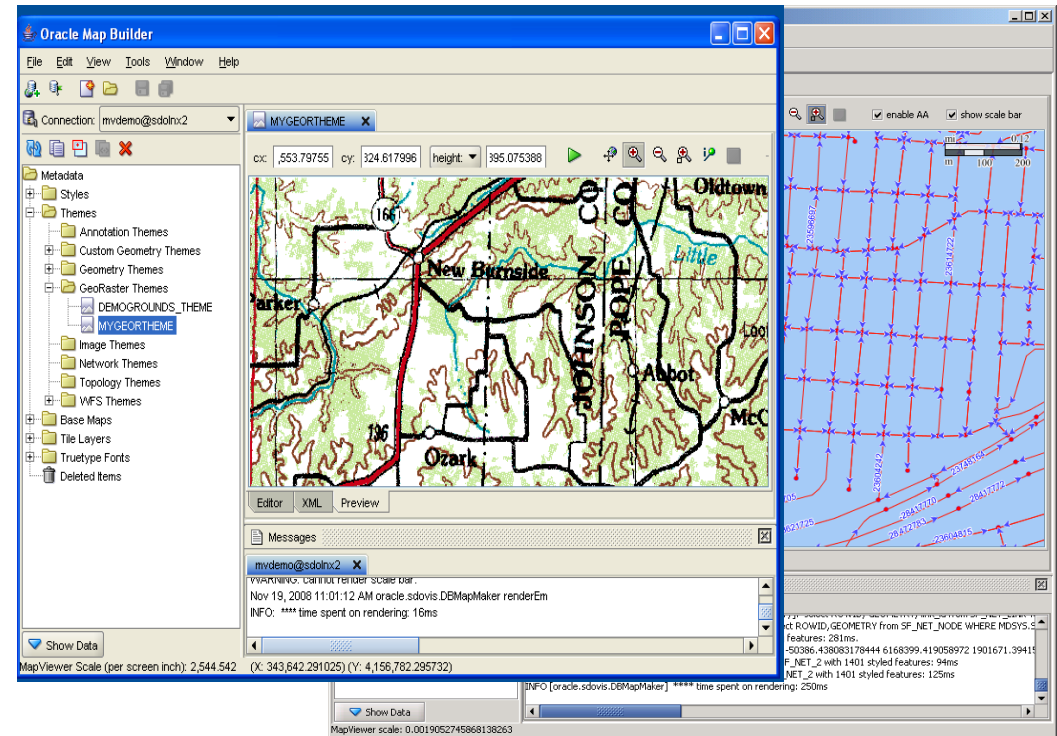
How they work together



Managing Metadata with Map Builder



- Launches from a single JAR file
- `java -jar mapbuilder.jar`
- Connects to databases directly
- Reads/writes metadata from/to DB



ORACLE



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

Using Map Builder

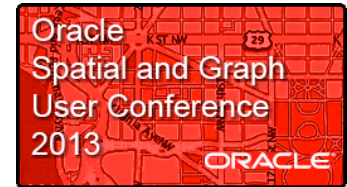


Introducing the new HTML5 API

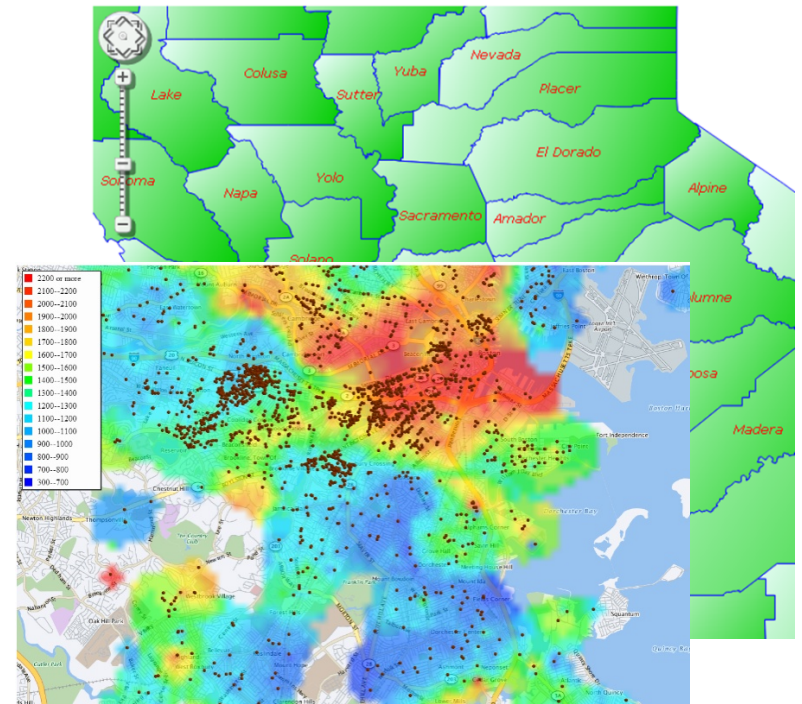


ORACLE

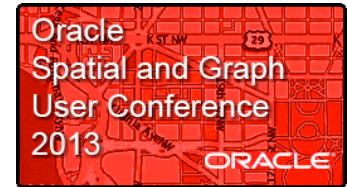
Introducing new V2 (HTML5) API



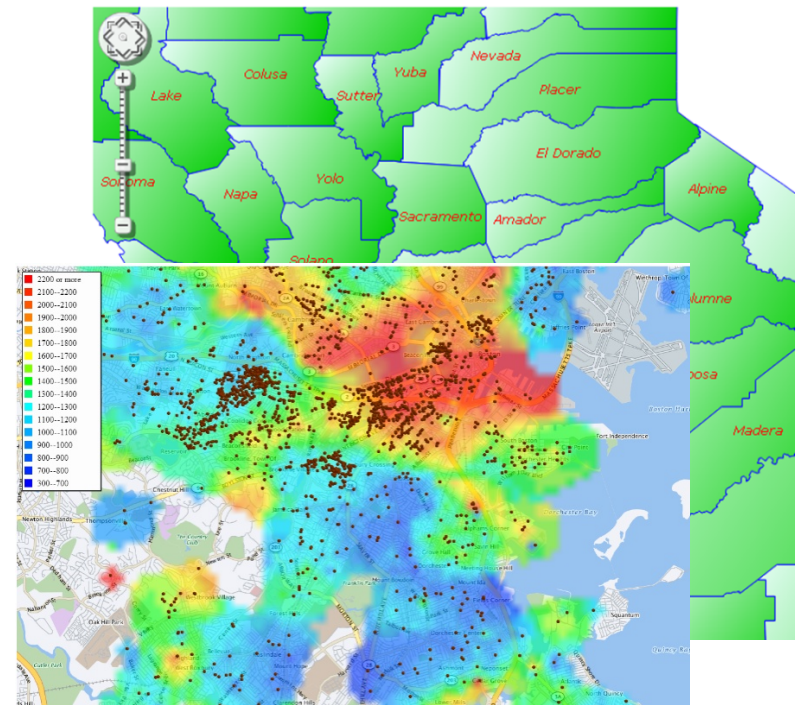
- V1 (FSMC) JS API will continue to be supported
- V2 should be used for most MapViewer applications



Introducing new V2 (HTML5) API



- Written from ground up
- Uses Canvas/SVG
- Browser renders JSON data with many effects and animations
- Supports all existing MapViewer metadata
- Comes with a rich set of tutorials
- Natively supports Nokia, TomTom, Bing, OSM and other map services




ORACLE

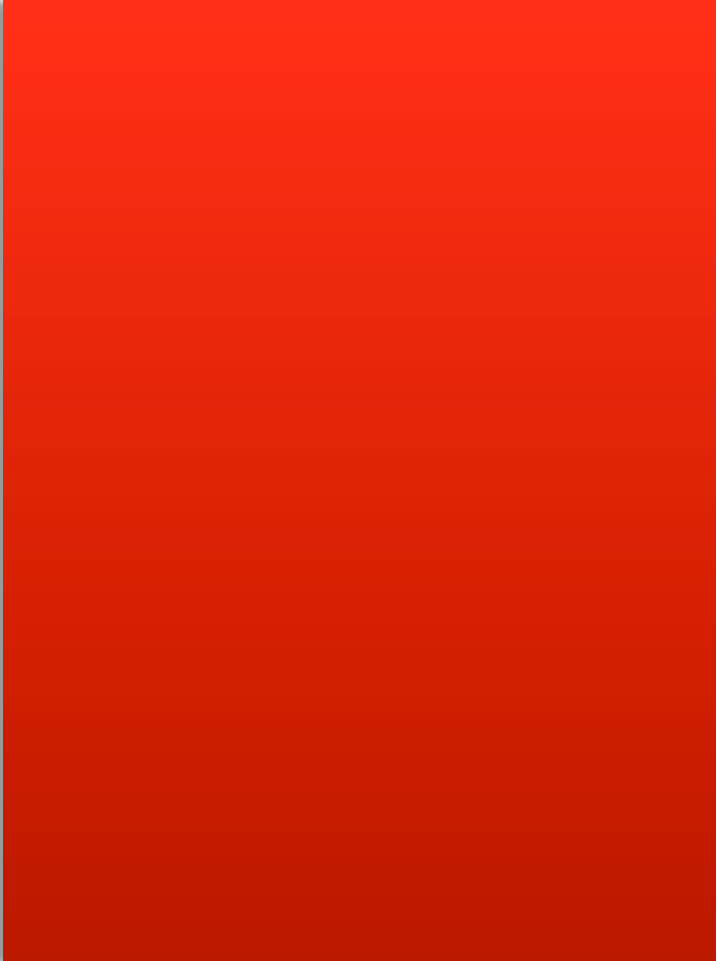


D E M O N S T R A T I O N

The new HTML5 API



The MVDEMO samples app

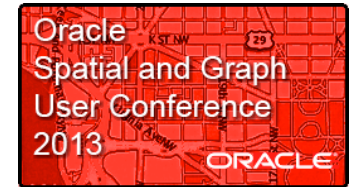


ORACLE

The MVDEMO samples app

Overview

- A separately deployed JEE app
- Requires MapViewer in the same domain
- Requires the new MVDEMO sample data set
- Content: JS & Java API docs, Demos, Tutorials, Sample REST/XML requests

A screenshot of a web browser showing the Oracle MapViewer 11g Samples console. The browser address bar shows "localhost:8080/mvdemo/". The page title is "ORACLE MapViewer 11g Samples". The page content includes a "Welcome to Mapviewer Console" section, a "Getting started" section with a list of instructions, a "Demo Setup" section with a list of tasks, and a "What is Oracle Maps" section with a list of links to tutorials and API references.

← → ↻ 🏠 localhost:8080/mvdemo/

ORACLE MapViewer 11g Samples

Home Requests Demos API

Welcome to Mapviewer Console

Your MapViewer server is now running and you can start viewing your Oracle Spatial managed data. MapViewer is a core Server. It provides powerful geospatial data visualization services.

Getting started

Here are a few things that can get you started.

- Use MapBuilder to import some spatial data into an Oracle database that you have access to.
- Create a data source so that MapViewer can connect to the database. Please log into the Admin page to do so.
- Use the JView demo to quickly view your spatial data. You can find it under the Demos tab.
- Start developing your first MapViewer applications.

Demo Setup

Perform the following tasks as listed below in order to run the 50+ examples in this tutorial. These steps prepare the demo sample data set, and create a MapViewer data source named "MVDEMO".

- First confirm that the required database views exist. If the database version is 10gR2 (10.2.x.x) or later then the USER_SDO_MAPS, USER_SDO_THEMES, and USER_SDO_STYLES views should exist. If the user_sdo_cac but the rest do then execute the mcsdefinition.sql script as a DBA or SYS user. The script is located in the Map directory, i.e. \$MAPVIEWER_HOME/web/WEB-INF/admin/mcsdefinition.sql, where \$MAPVIEWER_HOME is the MapViewer instance. For example, with a standalone OC4J instance this may be /oc4j_10135/jee/home/applicat deployed in Oracle Weblogic Server the full file path may be something like /private/software/Middleware/user_projects/domains/home/applications/mapviewer.ear/web_war/WEB-INF/admin/ database-wide one time task. To check whether your db has been configured with these views, just log in as at "desc user_sdo_cached_maps". If it returns the descriptive information about the view user_sdo_cached_maps tl
- Drop the DB user 'mvdemo', if it exists and contains only previously imported demo data for MapViewer. If you ha schema, you should make a backup copy before dropping the user. Now recreate this 'mvdemo' db user. Or just for this tutorial, if you intend to keep the existing 'mvdemo' user. Now unzip the new demo dataset (mvdemo.zip).

What is Oracle Maps

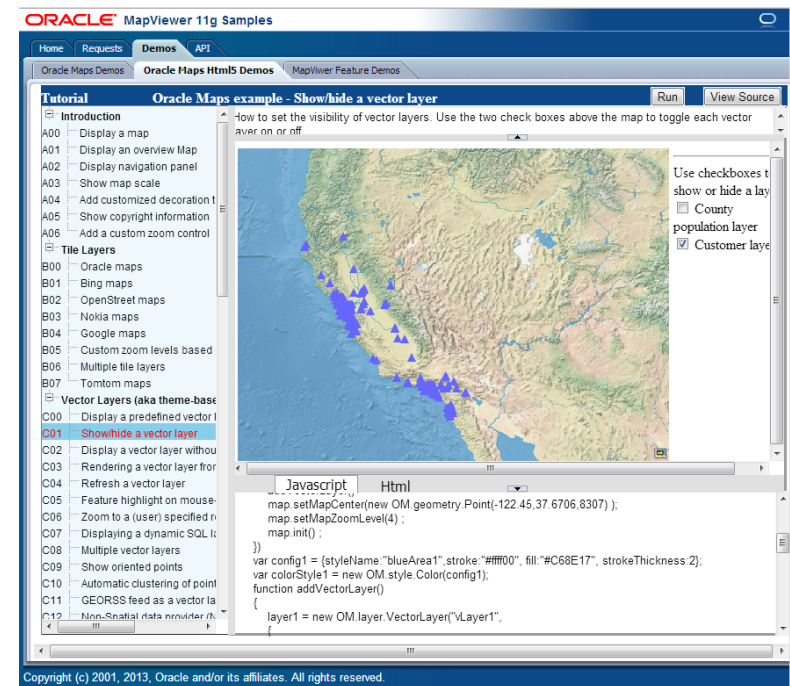
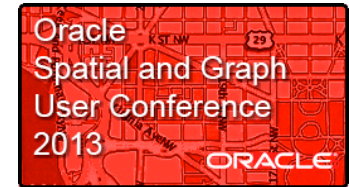
Oracle Maps is a new feature of MapViewer. It consists of a free scrolling AJAX-based web mapping interface, a flexible server-side map image caching engine and a Feature of Interest (FOI) server.

- [Oracle Maps Tutorial](#)
- [Oracle Maps API Reference](#)
- [Oracle Maps V2 tutorial \(HTML5\)](#)
- [Oracle Maps V2 API Reference \(HTML5\)](#)

The MVDEMO samples app

The new HTML5 tutorials

- A rich set of V2 API tutorials
- Modify and run tutorial code on the fly, fiddler-style
- Great for learning the new API

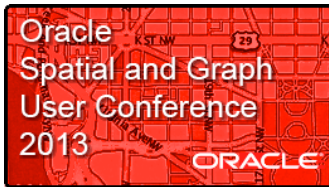




D E M O N S T R A T I O N

The MVDEMO app

Q & A



Resources

- **Oracle Technology Network**

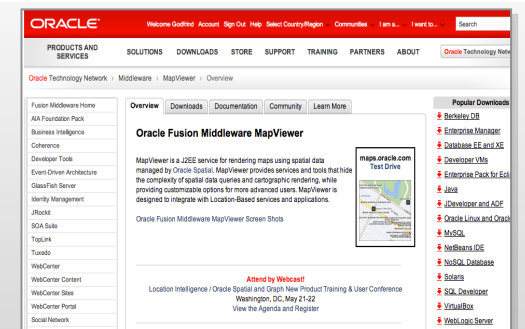
Get software downloads, sample code, tech info, updates, documentation, partner resources

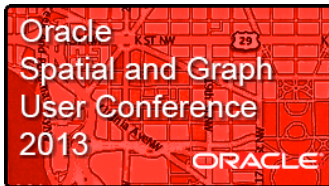
- **Oracle Spatial and Graph**

www.oracle.com/technetwork/database-options/spatialandgraph/overview/spatialfeatures-1902020.html

- **Oracle Fusion Middleware MapViewer**

www.oracle.com/technetwork/middleware/mapviewer/





Communities & Certification

- **Communities:** Stay connected and exchange knowledge with the community of users and experts
 - User Groups Worldwide
 - North American IOUG S&G SIG:
<http://www.ioug.org/p/cm/ld/fid=148&gid=439>
 - Technology blogs, social networking groups
 - **OTN Spatial or MapViewer > [Community Tab](#)**
- **Partner Specialization & Individual Certification for Spatial**
 - Credentials for individuals & official partner specialization program through Oracle PartnerNetwork
 - Exam information, training, business/competency requirements for partners, webcast
 - www.oracle.com/technetwork/database-options/spatialandgraph/learnmore/spatial-partners-423197.html
 - Speak with an specialization committee member at the Oracle table today

Specialized
Oracle PartnerNetwork

- ✓ 40+ Product Specializations
- ✓ Recognized by Oracle
- ✓ Preferred by Customers

Differentiate Yourself

ORACLE
partner.oracle.com
or call 1.800.323.SELL

Copyright © 2008, Oracle. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.



MapViewer in Action

Oracle eLocation Services

<http://maps.oracle.com>





More Information ...

<http://www.oracle.com/technetwork/middleware/mapviewer>

The screenshot shows the Oracle Technology Network page for Oracle Fusion Middleware MapViewer. The page has a red header with the Oracle logo and navigation links. The main content area is titled "Oracle Fusion Middleware MapViewer" and includes a description of the service, a "Test Drive" button, and a list of popular downloads. A sidebar on the left contains a list of Oracle products and services. The page also features a "Popular Downloads" section on the right with a list of software products.

ORACLE Welcome Godfrind Account Sign Out Help Select Country/Region Communities I am a... I want to... Search

PRODUCTS AND SERVICES SOLUTIONS DOWNLOADS STORE SUPPORT TRAINING PARTNERS ABOUT Oracle Technology Network

Oracle Technology Network > Middleware > MapViewer > Overview

Fusion Middleware Home
AIA Foundation Pack
Business Intelligence
Coherence
Developer Tools
Event-Driven Architecture
GlassFish Server
Identity Management
JRockit
SOA Suite
TopLink
Tuxedo
WebCenter
WebCenter Content
WebCenter Sites
WebCenter Portal
Social Network

Overview Downloads Documentation Community Learn More

Oracle Fusion Middleware MapViewer

MapViewer is a J2EE service for rendering maps using spatial data managed by Oracle Spatial. MapViewer provides services and tools that hide the complexity of spatial data queries and cartographic rendering, while providing customizable options for more advanced users. MapViewer is designed to integrate with Location-Based services and applications.

Oracle Fusion Middleware MapViewer Screen Shots

maps.oracle.com Test Drive

Attend by Webcast!
Location Intelligence / Oracle Spatial and Graph New Product Training & User Conference
Washington, DC, May 21-22
[View the Agenda and Register](#)

Popular Downloads

- Berkeley DB
- Enterprise Manager
- Database EE and XE
- Developer VMs
- Enterprise Pack for Eclipse
- Java
- JDeveloper and ADF
- Oracle Linux and Oracle VM
- MySQL
- NetBeans IDE
- NoSQL Database
- Solaris
- SQL Developer
- VirtualBox
- WebLogic Server