

ORACLE®

S P A T I A L

May 2012
Oracle Spatial User Conference

A horizontal banner with a red background featuring a faint, stylized map pattern. The text "Oracle Spatial User Conference" is written in large, white, sans-serif font across the center of the banner.

Oracle Spatial User Conference

May 23, 2012
Ronald Reagan Building and International Trade Center
Washington, DC USA



Jayant Sharma

Director, Product
Management



Oracle MapViewer in Applications and Tools



Program Agenda

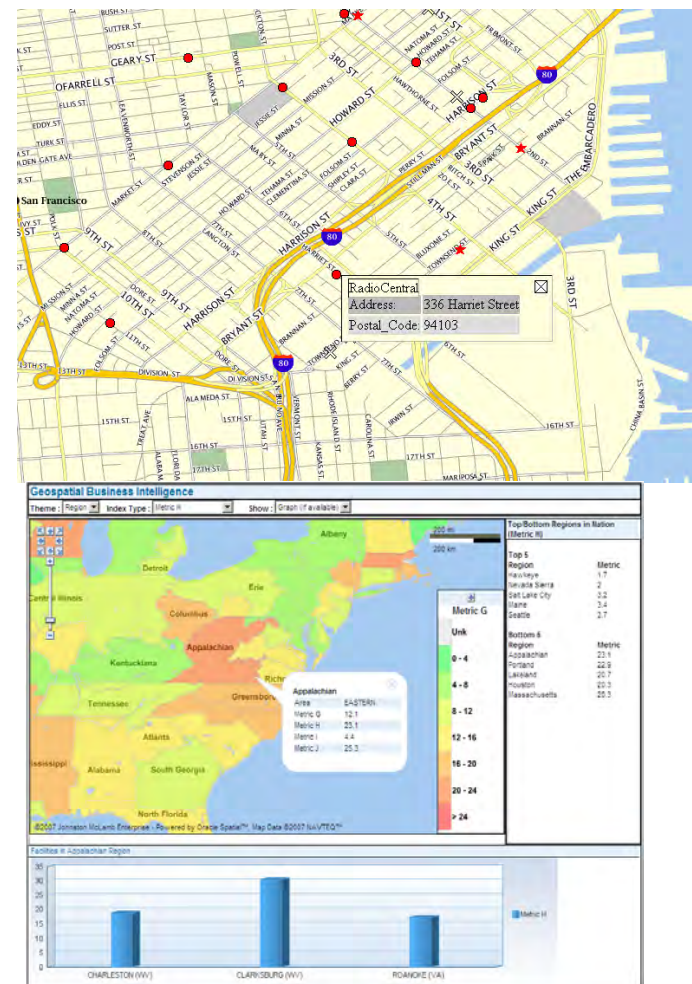
- MapViewer Overview
- Maps in Applications
- Maps and Development Tools



Oracle MapViewer

A standard feature of all Oracle Fusion Middleware editions

- Standards-based J2EE and Java Server Faces component
 - XML/HTTP, Java/AJAX
- Publish spatial data to the web
- Map and feature cache provides smooth scroll (pan, zoom)
- Rich Java, XML, JavaScript APIs provide client side interactivity
- Centrally managed map definitions, symbology, and styling rules



Map-Enriched Business Applications

Geospatial Operations and Workforce Management - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://208.224.173.7:7777/addr/locint.jsp

Latest Headlines Johnston McLamb Int...

Geospatial Operations and Workforce Management

Facility Type: Museum On right click show: Police within 2 mi. radius Clear Selections

Search Results: Driving Directions

Remove Routes

Directions to Navy Museum

1. Start out on 7TH ST SE (Going South) (0.7 miles) (1.8 minutes)
2. Turn RIGHT onto M ST SE (Going West) (0.1 miles) (0.2 minutes)
3. Turn LEFT onto ISAAC HULL AVE SE (Going South) (0.2 miles) (0.6 minutes)
4. Turn LEFT onto SCARD ST SE (Going East) (0.1 miles) (0.2 minutes)

Directions to Marine Corps Museum

1. Start out on 7TH ST SE (Going South) (0.6 miles) (1.4 minutes)
2. Turn LEFT onto VIRGINIA AVE SE (Going East) (0.0 miles) (0.1 minutes)
3. Stay STRAIGHT to go onto RAMP (Going East) (0.0 miles) (0.1 minutes)
4. Turn RIGHT onto 8TH ST SE (Going South) (0.0 miles) (0.0 minutes)

Police Hospital University School Museum Recreation Library Judicial

©2007 Johnston McLamb Enterprise - Powered by Oracle Spatial™, M

| Last Name | First Name | Job Class | Job Category |
|--------------|------------|--------------|--------------|
| Douglas | Robert | Carrier | FT |
| Paul | Joseph | Clerk | FT |
| Hopkins | Marlene | Clerk | FT |
| Lindsey | Maria | Clerk | FT |
| Atkins | Melvin | Clerk | FT |
| Wiles | Edward | Mail Handler | FT |
| Hairston | Charles | Clerk | FT |
| Williams | Irene | Clerk | FT |
| Garnett | Eugenia | Clerk | FT |
| Wellington | Virginia | Clerk | FT |
| Stringfellow | Juan | Clerk | FT |
| Brown | Anthony | Clerk | FT |
| Thomase | Shirley | Clerk | FT |
| Done | | | |

View By: Assigned

Number: 15428, 15442, 15446, 15432, 15434, 15582, 15572, 15568, 15574, 15450, 15449, 15636, 15638, 15512, 15514, 15635, 15516

Overview: Number 12419, Summary street light hit by car, Problem, Resolution, Task Number 15635, Status

Plan Board Gantt Map

Auto Schedule Goto...

Record 1/1 <OSG>

Warning: Alert Window

Geospatial Operations and Complement Management

Facility Type: School On right click show: Police within 2 mi. radius Clear Selections

Search Results: Driving Directions

ST PETER'S INTERPARISH SCHOOL
422 3RD ST SE
WASHINGTON, DISTRICT OF COLUMBIA 20003

PEABODY ELEMENTARY SCHOOL
425 C ST NE
WASHINGTON, DISTRICT OF COLUMBIA 20002

BRENT ELEMENTARY & MAGNET SC
330 D ST SE
WASHINGTON, DISTRICT OF COLUMBIA 20003

VAN NESS ELEMENTARY SCHOOL
1150 5TH ST SE
WASHINGTON, DISTRICT OF COLUMBIA 20003

HOWARD ROAD ACADEMY CHARTER
701 HOWARD RD SE
WASHINGTON, DISTRICT OF COLUMBIA 20020

HINE JUNIOR HIGH SCHOOL
335 8TH ST SE
WASHINGTON, DISTRICT OF COLUMBIA 20003

KEY ACADEMY
770 M ST SE
WASHINGTON, DISTRICT OF COLUMBIA 20003

EMERSON PREPARATORY SCHOOL
Employee counts by class/category

| Class/Category | Count | Total |
|----------------|-------|-------|
| Casual | 2 | 0 |
| Admin | 40 | 58 |
| PT Flexible | 3 | 2 |
| Executive | 2 | 0 |
| PT Regular | 0 | 0 |
| Relief | 26 | 1 |
| Maintenance | 0 | 0 |
| Temp Emerg | 0 | 0 |
| Nurse | 0 | 0 |
| Temp | 0 | 12 |
| Teacher | 71 | 73 |

Police Hospital University School Museum Recreation Library Judicial

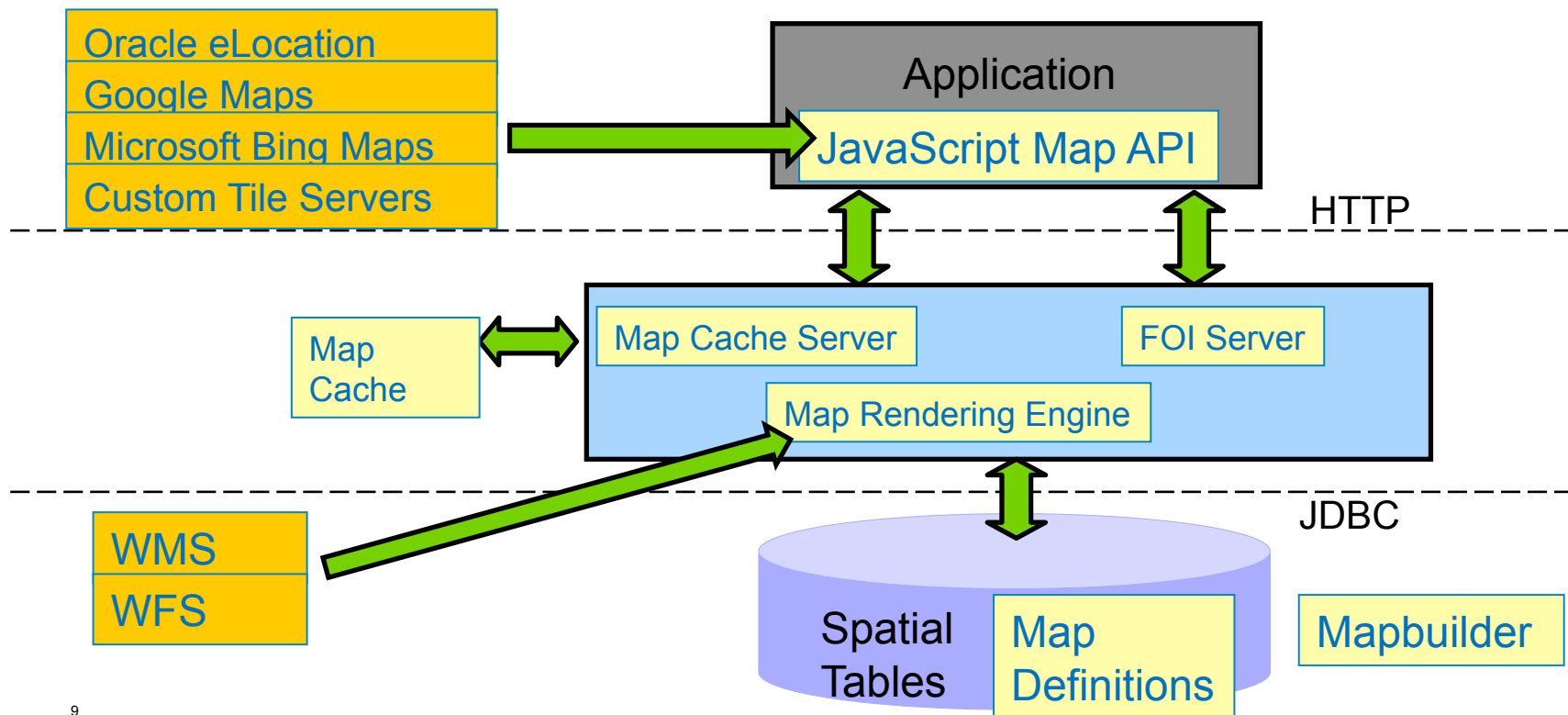
©2007 Johnston McLamb Enterprise - Powered by Oracle Spatial™, Map Data ©2007 NAVTEQ

Longitude, Latitude: -77.015, 38.914

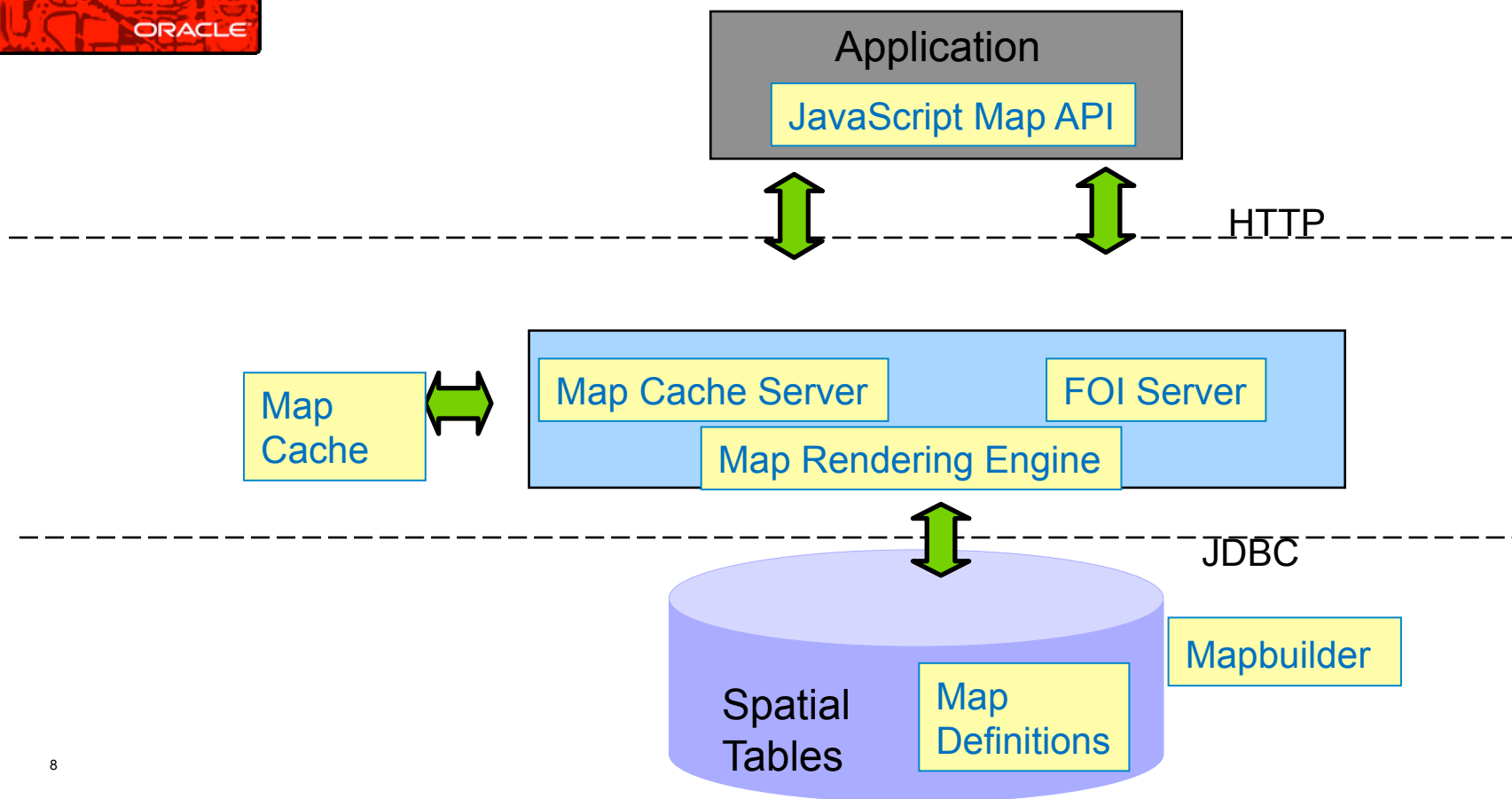
| Last Name | First Name | Job Class | Job Category | Years of Service |
|-------------|------------|--------------|--------------|------------------|
| Santino | Williamae | Distribution | FT | |
| Carthen | Binh | Teacher | FT | |
| Rai | Chancely | Distribution | FT | |
| Petrie | Durand | Distribution | FT | |
| Simino | Marquetta | Distribution | FT | |
| Bothwell | Patroclus | Teacher | FT | |
| Ponteocorvo | Oi Yeung | Distribution | FT | |
| Troxel | Lucious | Distribution | FT | |
| Mcnicke | Jillena | Distribution | FT | |
| Luckman | Yana | Distribution | FT | |
| Mandeville | Lars | Teacher | FT | |
| Belpedio | Marylyn | Distribution | FT | |
| Macmally | Annessa | Teacher | FT | |

Geocoding
Spatial searches
Routing
Mapping

Integrating External Data Sources



MapViewer Architecture





MapView in applications & tools

- Enterprise Applications
 - Transportation
 - Utilities
 - Comms
 - Healthcare
- Development Tools
 - JDeveloper
 - APEX
 - WebCenter
 - SQLDeveloper
- Business Intelligence/Analytics
 - OBIEE
 - CEP

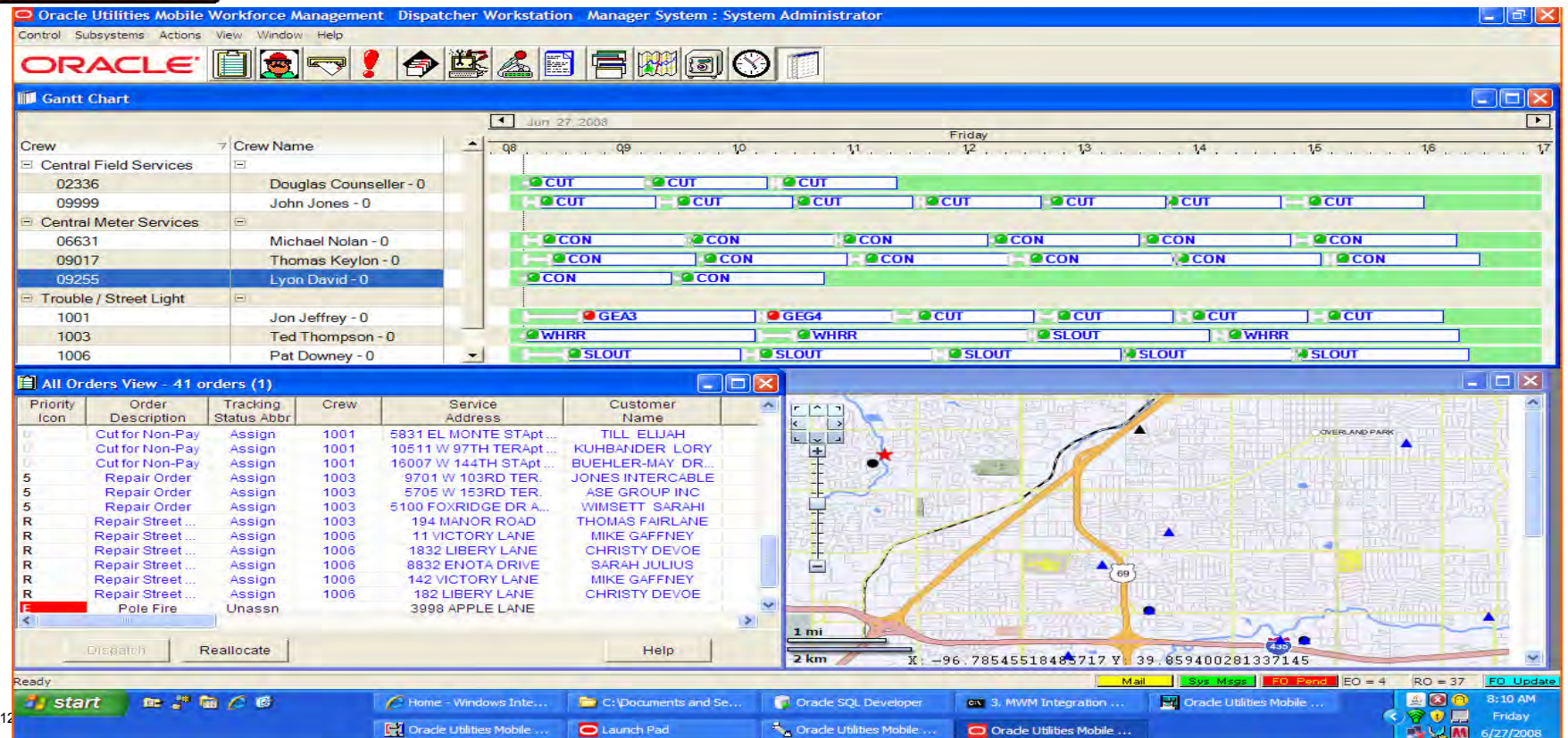
三



Oracle Spatial
User Conference
2012

ORACLE

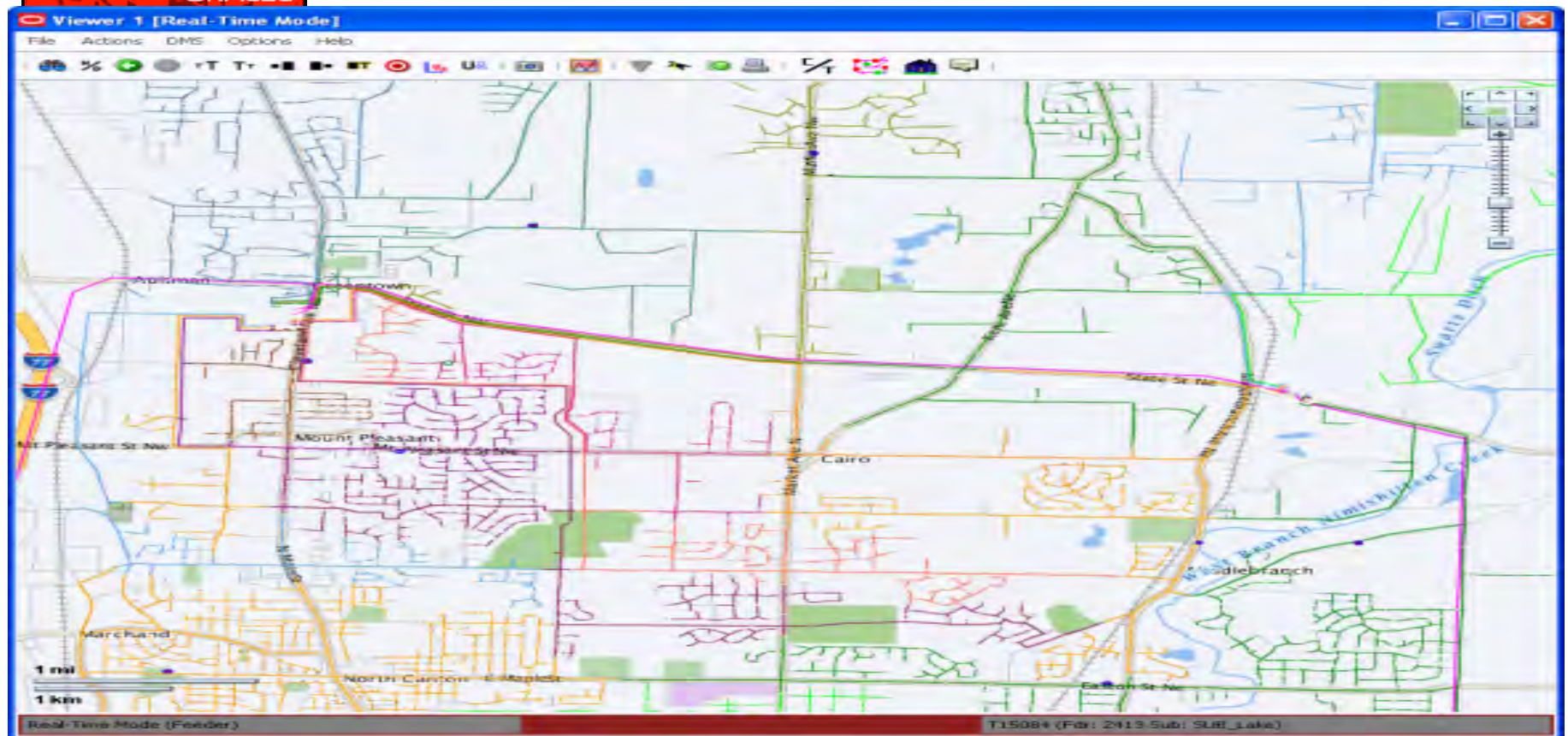
Utilities Mobile Workforce Mgmt



Oracle Spatial
User Conference
2012

ORACLE

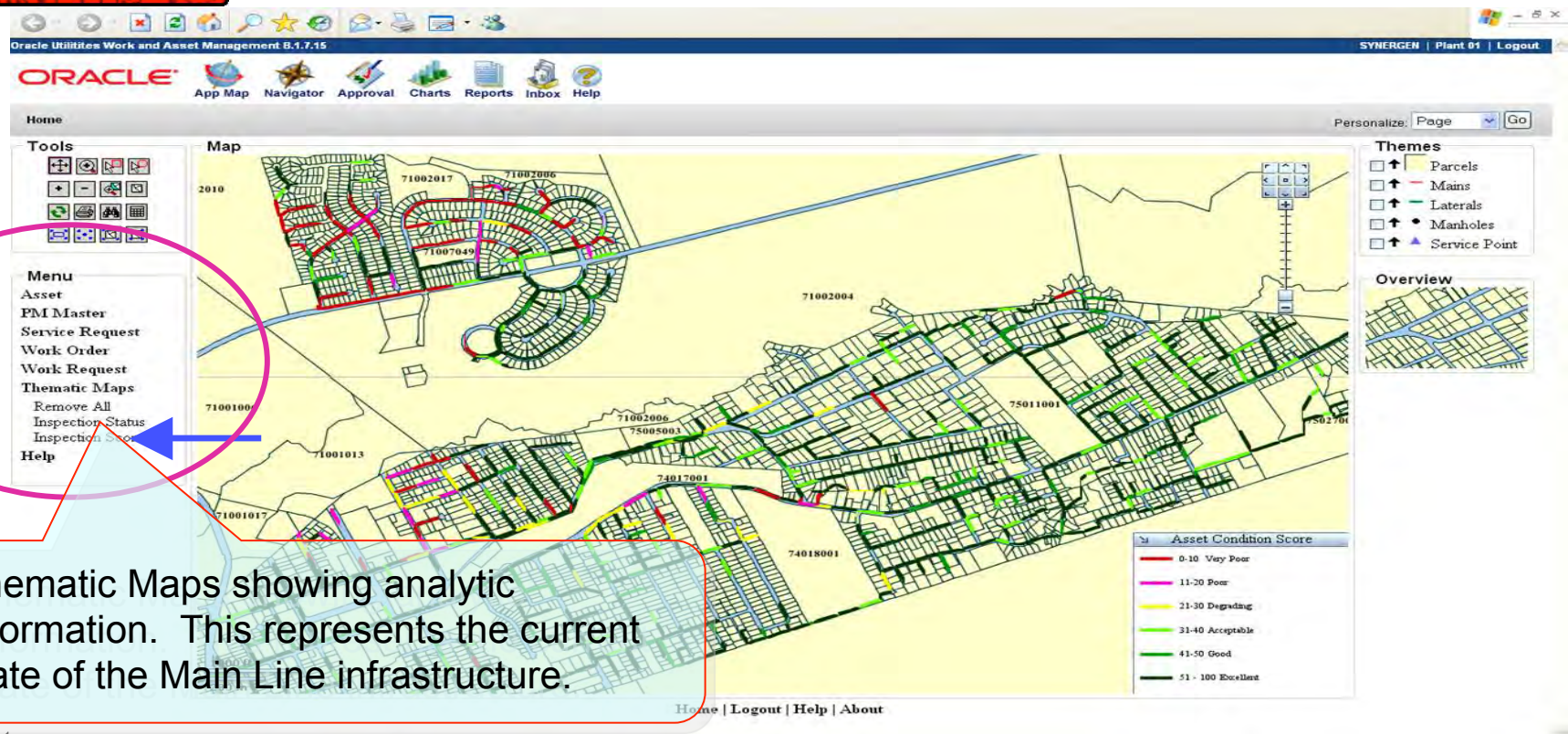
Utilities Network Mgmt System



Oracle Spatial
User Conference
2012

ORACLE

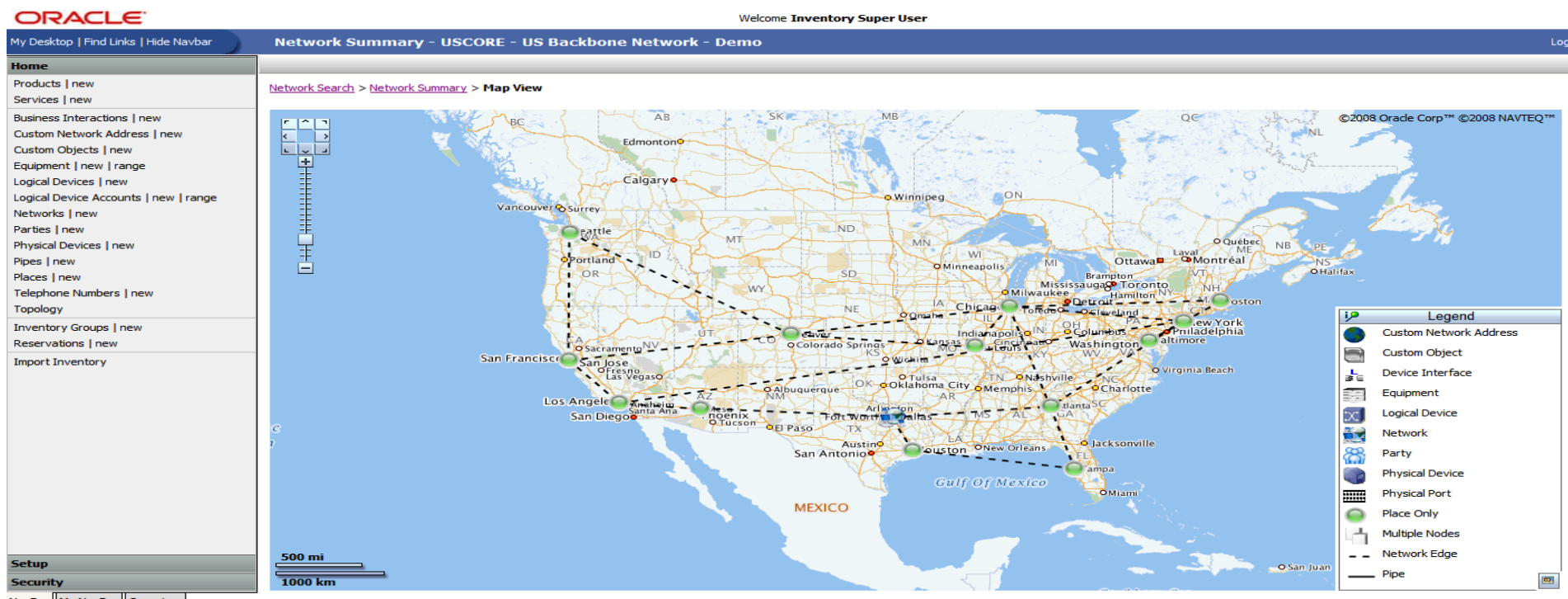
Utilities Work & Asset Management



Thematic Maps showing analytic information. This represents the current state of the Main Line infrastructure.

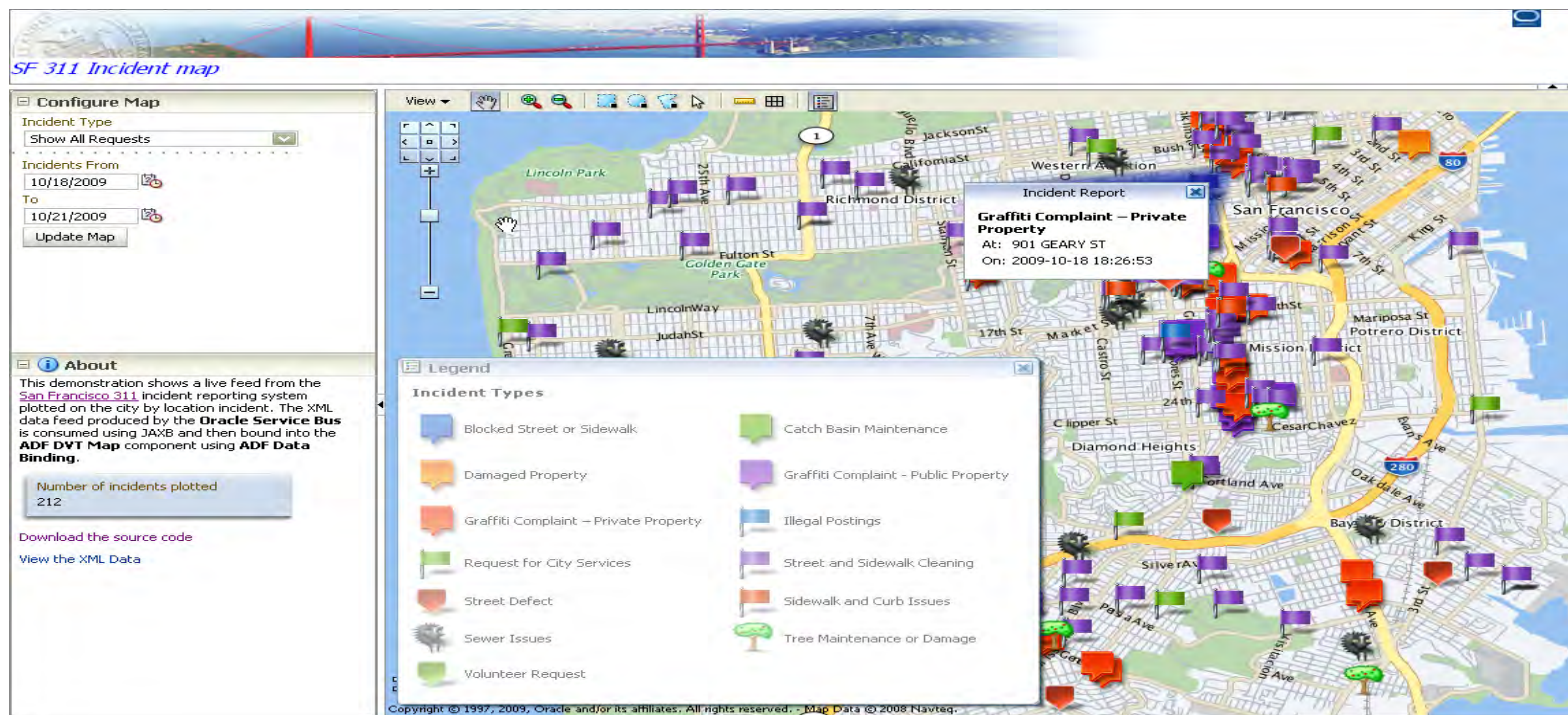


Comms: Unified Inventory Mgmt





Develop Applications with JDeveloper



Maps in Application Express

Abmelden |

Auswertungen **Auswertungen** | Räumliche Abfragen

Karte

Kartengröße: 500 x 400 Pixel
Adresse: Riesstr. 25, München [Adresse suchen](#)

[Kundenselektion starten](#) [Selektionen aufheben](#) [Entfernungen messen](#) [Sync Bericht - Karte: EIN](#)

Kunden

Ab Umsatz: 0

| Name | Umsatz | Flag |
|--|--------|--------|
| Fritz Muster | 2000 | MEDIUM |
| Mike Müller | 0 | MEDIUM |
| Freie Tanke | 4876 | HIGH |
| Vowereit | 2000 | HIGH |
| Eifel Power II | 2000 | MEDIUM |
| Carsten Czarski | 500 | MEDIUM |
| Marhoul | 4798 | MEDIUM |
| Tankstelle Lichtenrade | 6587 | MEDIUM |
| Carsten C. | 9000 | LOW |
| Karl Hunsrück | 10000 | HIGH |
| Tankstelle Schönefeld | 4598 | MEDIUM |
| Klaus Weber | 9000 | MEDIUM |
| Tankstelle Dreieck Havelland | 7896 | MEDIUM |
| Patenge | 7598 | MEDIUM |
| Der Säubrenner | 100 | LOW |

1 - 15 [Next >](#)

Bundesländer

| Bundesland | Kunden |
|---------------------------------|--------|
| Bavarn | 1 |
| Berlin | 5 |
| Brandenburg | 16 |
| Hessen | 2 |
| Niedersachsen | 2 |
| Rheinland-Pfalz | 15 |
| Saarland | 3 |
| Sachsen-Anhalt | 1 |

1 - 8

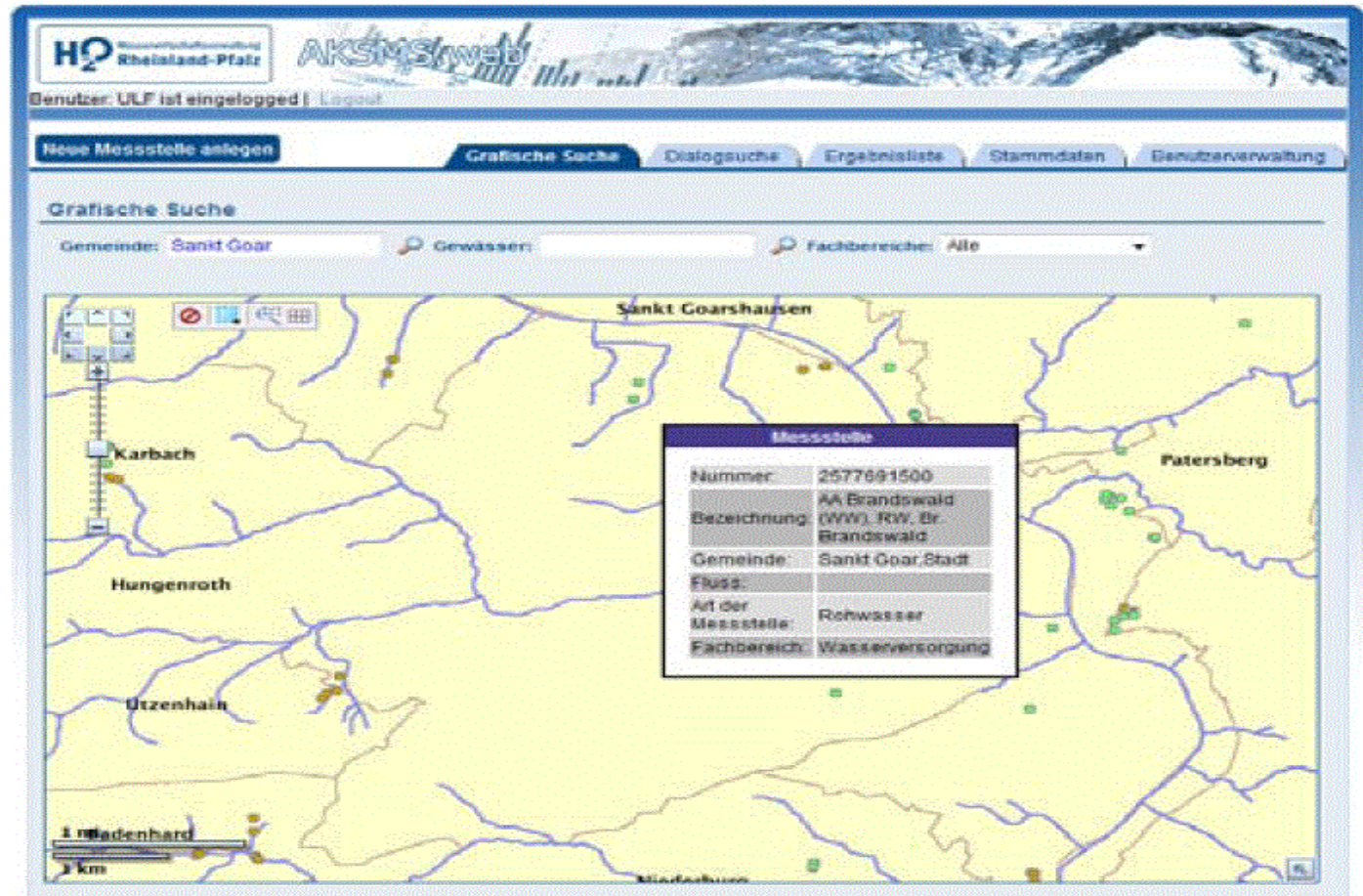
Hinweise

- Rechte Maustaste in der Karte: *Reverse Geocoding*
- Anmeldung mit **scott/tiger** vs. **admin/oracle**
- Kartengröße ändern mit der Auswahlliste
- Sync zwischen Karte und Bericht ein- und ausschalten

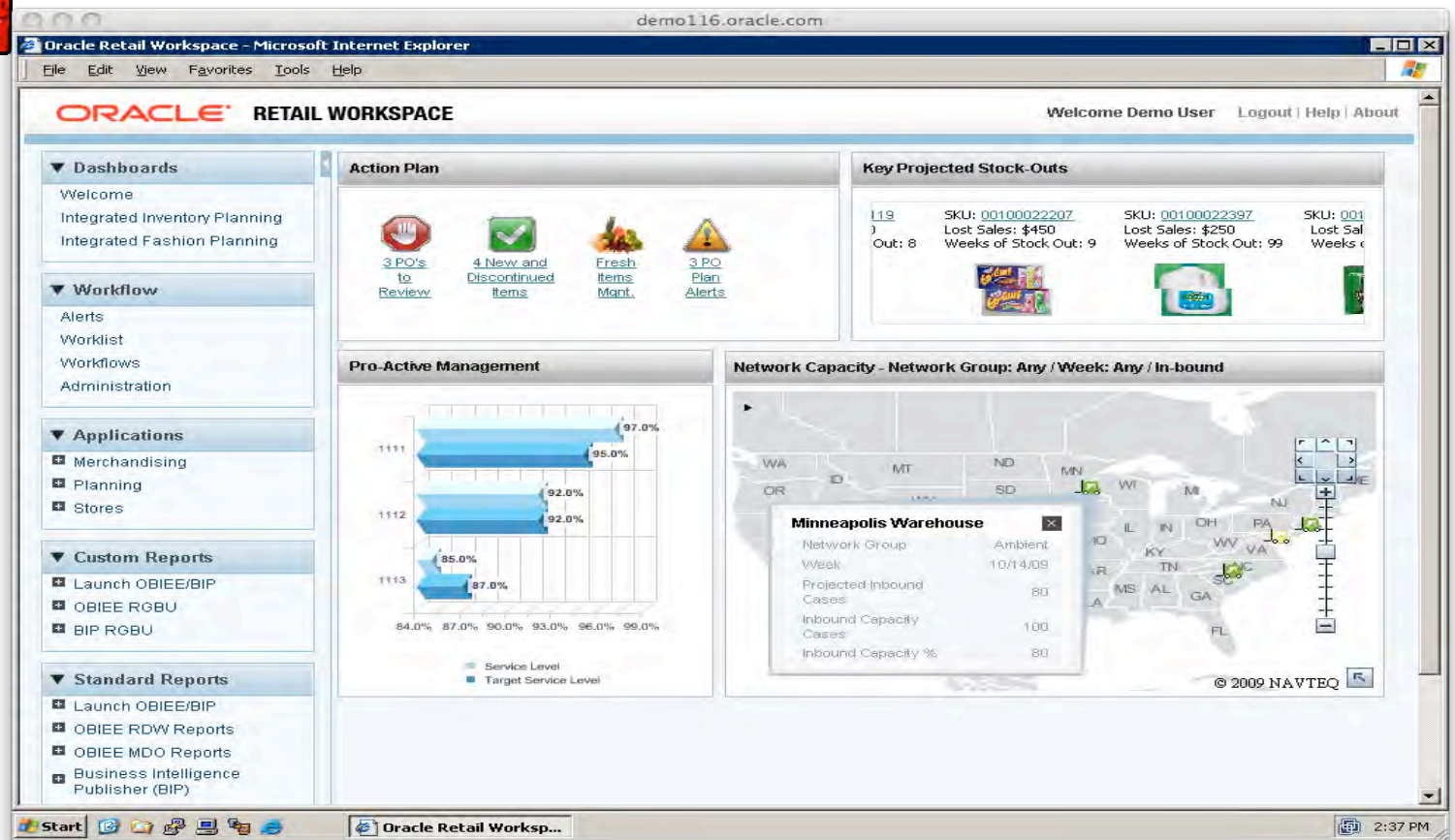
Oracle Spatial
User Conference
2012

ORACLE

Application Express & MapView



Maps in WebCenter



Mapviewer integration in SQLDeveloper

Oracle SQL Developer : Table MVDEMO.COUNTIES_3785@local_mvdemo

File Edit View Navigate Run Versioning Tools Help

Connections Reports local_mvdemo COUNTIES_3785

Columns Data Constraints Grants Statistics Triggers Flashback Dependencies Details Partitions Indexes SQL

Sort.. Filter: STATE_ABRV in ('MA', 'NH')

| | GEOM | COUNTY | FIPSSTCO | STATE | STATE_ABRV | FIPSST | LANDSQMI | TOTPOP | POPPSQMI |
|----|----------------------|------------|----------|---------------|------------|--------|-----------|---------|-----------|
| 1 | [MDSYS.SDO_GEOMETRY] | Barnstable | 25001 | Massachusetts | MA | 25 | 395.6931 | 186605 | 471.59 |
| 2 | [MDSYS.SDO_GEOMETRY] | Berkshire | 25003 | Massachusetts | MA | 25 | 931.2187 | 139352 | 149.6446 |
| 3 | [MDSYS.SDO_GEOMETRY] | Bristol | 25005 | Massachusetts | MA | 25 | 555.9423 | 506325 | 910.7504 |
| 4 | [MDSYS.SDO_GEOMETRY] | Dukes | 25007 | Massachusetts | MA | 25 | 103.8018 | 11639 | 112.127 |
| 5 | [MDSYS.SDO_GEOMETRY] | Essex | 25009 | Massachusetts | MA | 25 | 497.9831 | 670080 | 1345.5869 |
| 6 | [MDSYS.SDO_GEOMETRY] | Franklin | 25011 | Massachusetts | MA | 25 | 702.0253 | 70092 | 99.6424 |
| 7 | [MDSYS.SDO_GEOMETRY] | Hamden | 25013 | Massachusetts | MA | 25 | 618.4111 | 456310 | 737.8745 |
| 8 | [MDSYS.SDO_GEOMETRY] | | | | | 25 | 528.937 | 146568 | 277.0988 |
| 9 | [MDSYS.SDO_GEOMETRY] | | | | | 25 | 823.4033 | 1398468 | 1698.3984 |
| 10 | [MDSYS.SDO_GEOMETRY] | | | | | 25 | 47.7736 | 6012 | 125.8433 |
| 11 | [MDSYS.SDO_GEOMETRY] | | | | | 25 | 399.5351 | 616087 | 1542.0078 |
| 12 | [MDSYS.SDO_GEOMETRY] | | | | | 25 | 660.4726 | 435276 | 659.0366 |
| 13 | [MDSYS.SDO_GEOMETRY] | | | | | 25 | 58.5084 | 663906 | 11347.164 |
| 14 | [MDSYS.SDO_GEOMETRY] | | | | | 25 | 1512.9023 | 709705 | 469.1013 |
| 15 | [MDSYS.SDO_GEOMETRY] | | | | | 33 | 401.2495 | 49216 | 122.6567 |
| 16 | [MDSYS.SDO_GEOMETRY] | | | | | 33 | 933.7529 | 35410 | 37.9222 |
| 17 | [MDSYS.SDO_GEOMETRY] | | | | | 33 | 707.3505 | 70121 | 99.1318 |
| 18 | [MDSYS.SDO_GEOMETRY] | | | | | 33 | 1800.3398 | 34828 | 19.3452 |
| 19 | [MDSYS.SDO_GEOMETRY] | | | | | 33 | 1713.208 | 74929 | 43.736 |
| 20 | [MDSYS.SDO_GEOMETRY] | | | | | 33 | 876.333 | 336073 | 383.499 |
| 21 | [MDSYS.SDO_GEOMETRY] | | | | | 33 | 934.3618 | 120005 | 128.4351 |
| 22 | [MDSYS.SDO_GEOMETRY] | | | | | 33 | 695.1132 | 245845 | 353.6757 |

Geometry Context Dialog

Geometry Context

| Column | Value |
|------------|----------------|
| ORA_ROWSCN | 11691077947000 |
| COUNTY | Hillsborough |
| FIPSSTCO | 33011 |
| STATE | New Hampshire |
| STATE_ABRV | NH |
| FIPSST | 33 |
| LANDSQMI | 876.333 |
| TOTPOP | 336073 |
| POPPSQMI | 383.499 |

Close

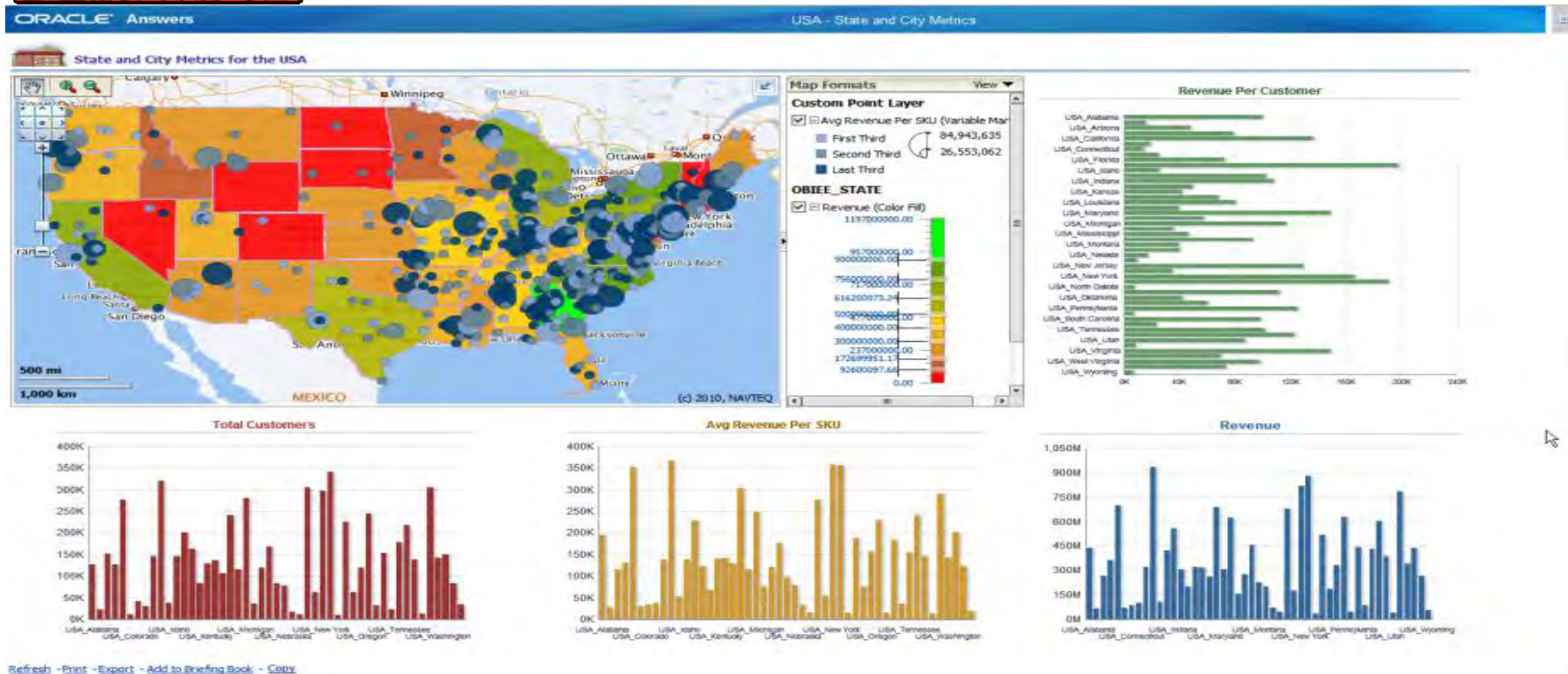
Messages - Log

Map Query List

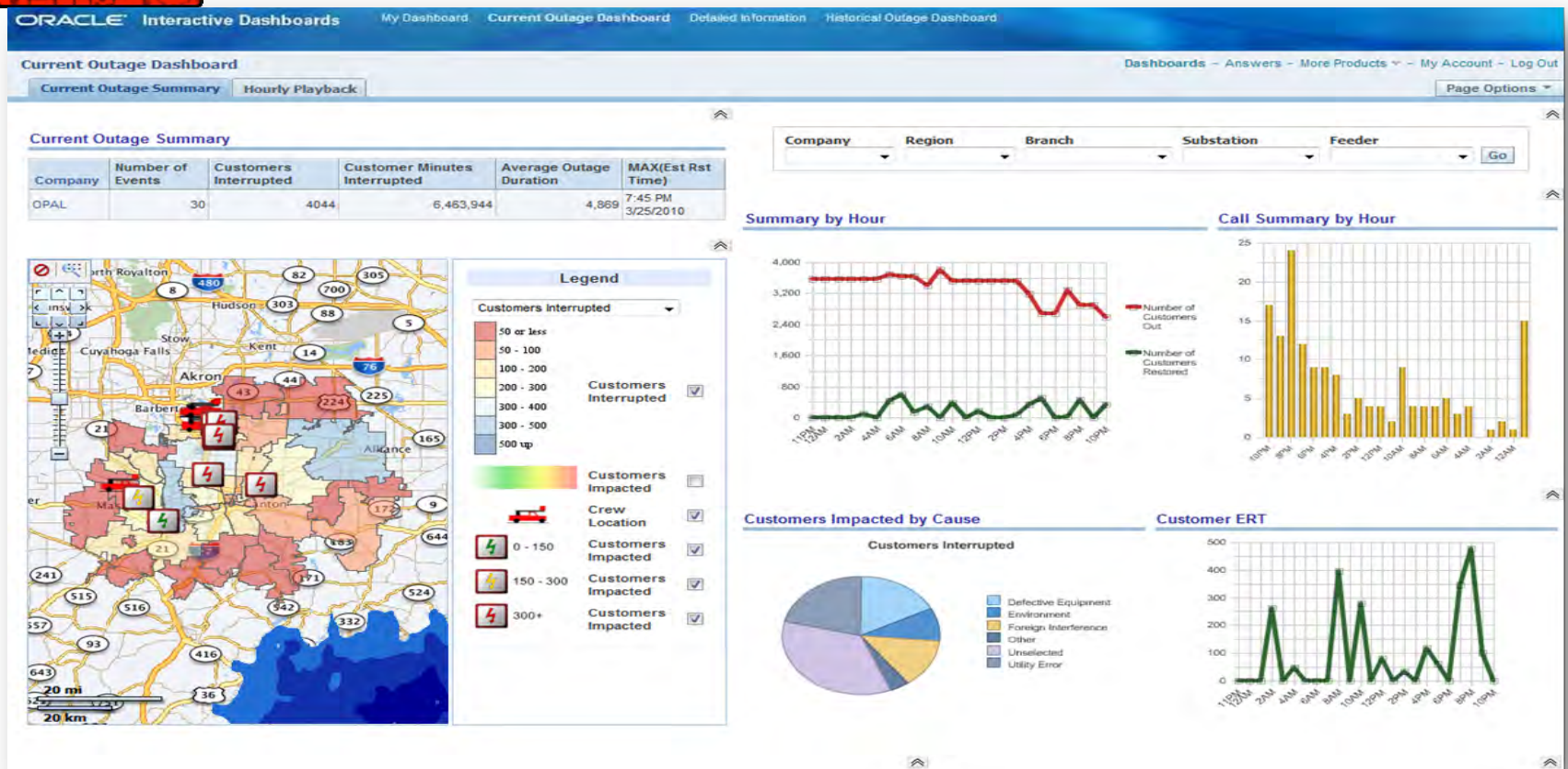
- GEOM

Editing

Map views in Oracle BI Suite



Utilities BI





Complex Event Processing Tracking Moving Objects

C:\my_data\p4\sandbox\cep\ocep103g\poc\leads\firecontrol\MapsFlexClient\bin-debug\MapsFlexClient - Microsoft Internet Explorer

Address C:\my_data\p4\sandbox\cep\ocep103g\poc\leads\firecontrol\MapsFlexClient\bin-debug\MapsFlexClient.html

Refresh Mark

Oracle Complex Event Processing (CEP) - Location Tracking POC

Lat:53.4376 Lng:-2.9694

Map data ©2009 Tele Atlas - Terms of Use

Zones

| Id | LastUpdated | Name | Pver | Gver | Sides | Lat | Lng |
|----|-----------------|-----------------|------|------|-------|---------|---------|
| 1 | 00-Jan 24:00:00 | Everton | 3 | 3 | 9 | 53.4392 | -2.9673 |
| 2 | 00-Jan 24:00:00 | This is Anfield | 1 | 1 | 89 | 53.4317 | -2.9609 |

Alerts

| Resource | Zone | Type | EventId | LocationEvent |
|----------|------|------|---------|---------------|
| B | 1 | NEAR | 2 | 4 |
| A | 1 | NEAR | 1 | 3 |

Matches

| Resource | Zone | Type | EventId | LocationEvent |
|----------|------|------|---------|---------------|
| B | 1 | NEAR | 2 | 4 |
| A | 1 | NEAR | 1 | 3 |

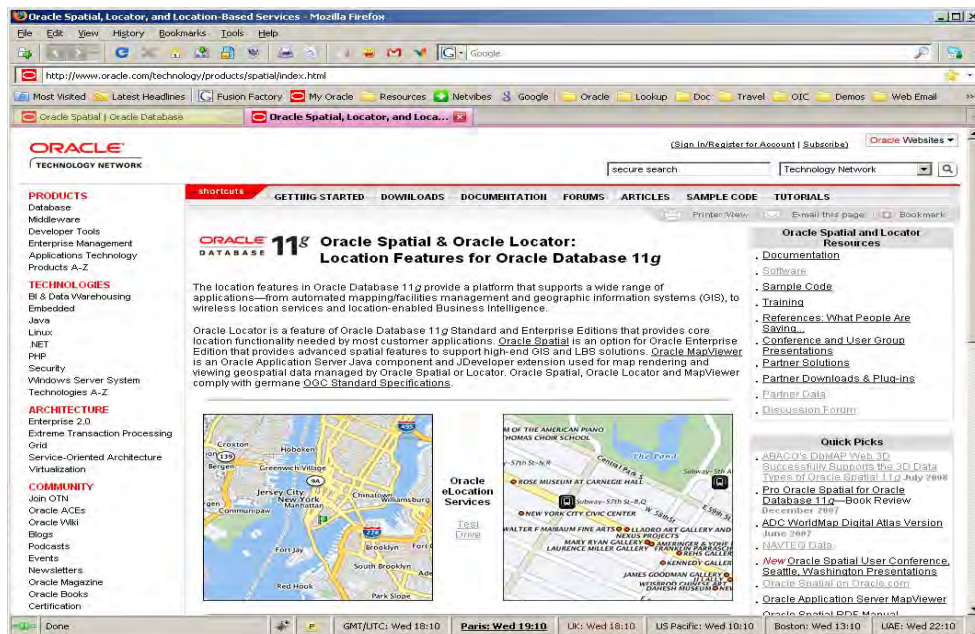
Resource Events

| Id | ExtTime | IntTime | EventId | Lat | Lng |
|----|--------------|--------------|---------|---------|---------|
| C | 00-Jan 24:00 | 15-Jan 20:46 | 5 | 53.4376 | -2.9694 |
| B | 00-Jan 24:00 | 15-Jan 20:46 | 4 | 53.4395 | -2.9668 |
| A | 00-Jan 24:00 | 15-Jan 20:46 | 3 | 53.4383 | -2.9651 |
| A | 00-Jan 24:00 | 15-Jan 20:46 | 2 | 53.4382 | -2.9634 |
| B | 00-Jan 24:00 | 15-Jan 20:46 | 1 | 53.4389 | -2.9701 |

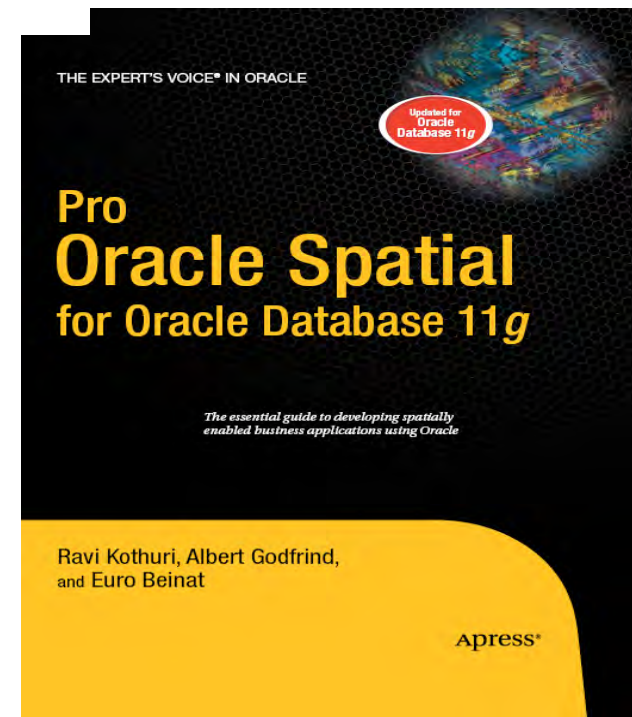


Resources

<http://www.oracle.com/technetwork/database/options/spatial>



Examples, white papers, downloads, discussion forum, sample data



Q&A