

Oracle Spatial User Conference, March 8, 2007
Introductory Remarks - Jim Steiner, Sr. Director, Server Technologies, Oracle

Good Morning--

I'm Jim Steiner, Sr. Director in Oracle Server Technologies and it is my pleasure and privilege to welcome you to our 3rd Annual Oracle Spatial User Conference.

It is great to see such a large and enthusiastic group here today. Before I make a few introductory remarks, I want to thank some people and make some introductions.

First, I'd like to thank the GITA Team -- Henry Rosales, Angie Murgel, Kathryn Henton – for doing such a great job managing this event. As well as Jean Ihm from Oracle.

I also want to thank all of our speakers and especially our sponsors without whom we really would not be here today:

- NAVTEQ and GE for last night's great opening reception
- Autodesk, our luncheon sponsor
- As well as LizardTech, Ionic, DigitalGlobe, Manifold, and 1Spatial

I want to thank Joe Seppi, from the NA Oracle Spatial SIG for helping with the Agenda and Kevin Kelley, SIG chairman for all of his assistance over the past year. If you have any questions about the SIG, I encourage you to talk to any of the Board Members who are acting as moderators for the sessions and to attend the SIG meeting.

I'd also like to introduce my colleagues from Oracle. I encourage you to seek them out and talk with them about your ideas and concerns.

Xavier Lopez, Jayant Sharma, Siva Ravada, David Lapp, Steve Garth, Pat Shuff, Andy Zetlan.

Lastly, before I start my remarks, some quick logistics:

- For those of you who may have printed out the agenda off the web. Please double-check in advance. A few speakers switched rooms due to Internet connectivity needs.
- Please make sure you attend our lunch session – we will be announcing this year's Oracle Spatial Excellence – OZZIE – Award winners.
- Immediately following lunch, there will be a NA Oracle SIG meeting in Room A and an International attendees meeting in Room B.

So let me get started. This morning you are going to get a unique opportunity to see from a technical perspective *what* Oracle plans to deliver in the future with our Oracle Spatial offering as well as the new “Oracle Maps” MapViewer that we've just recently shipped in our Fusion Middleware Application Server 10.1.3.

What I'd like to do is to take a few minutes to discuss our direction, to give you a bit of **why** we are doing what we doing, how we see the market developing and the unique role Oracle has played and will continue to play as we move forward.

To begin with, I'd like to talk about the world in which we live and how that influences our direction. As the Geospatial division of the world's largest enterprise software company, Oracle Spatial has a distinct role and orientation.

We are at the intersection of four communities – Oracle and the IT community, the Open Source community, the Commercial applications community and, of course, the Geospatial community:

1. The first community is Oracle and the IT technology world: We are literally an integral component of the most widely used information technology platform on the planet – and we both exploit and enhance the infrastructure available for some of the world's most essential – and a few, from a Geospatial perspective, fairly trivial – software applications. This means when mind-blowing, world-changing technology revolutions occur – Object-Relational systems, “Internet Computing”, Clusters and Grids, SOA and Web2.0 – Oracle's Spatial technologies are not “applications” that might or might not support these, but are an essential element driving these new revolutions.

And it also means that when simple maps can add meaning and value to a Java IDE or a DBA console or an application UI, then we are both obliged and pleased to enable these powerful solutions, even if they may not stretch the limits of geospatial science.

Being part of Oracle also means an unwavering commitment to standards and open systems – this is at the core of Oracle's existence and philosophy. Arguably, no other company on the planet has been as aggressive and committed to supporting open standards as Oracle – whether SQL (the start of it all for us), UNIX, JAVA, W3C and the internet standards, ISO or the organization of which we are founding members, the Open Geospatial Consortium. And we fully understand the essential role standards play both for our customers, partners and Oracle's success. Larry Ellison has often stated the view that **NO BROAD-BASED ADOPTION OF SOFTWARE TECHNOLOGY HAS EVER OCCURRED WITHOUT MEANINGFUL, WIDELY IMPLEMENTED STANDARDS AND ORACLE OWES ITS SUCCESS TO RECOGNIZING THIS AND AGGRESSIVELY PROMOTING STANDARDS-BASED PRODUCTS.**

2. The second community is the Open Source community. Oracle is a huge participant in the Open Source movement. We develop the “Sleepycat” BDB, and innoDB—the underlying storage for most MYSQL users. We have commercially-supported implementations of many Apache products, most notably the Oracle HTTP server, but also numerous Apache “mods”; and most recently we've contributed ADF Faces

to apache --- we are Board Members of the Eclipse foundation and contribute to Eclipse – most recently the Java Persistence Framework for Oracle TopLink. Oracle may have done more to prove and support the validity of commercial LINUX than any other vendor. We offer commercial quality versions of J2EE and we incorporate Open Source technologies in virtually all of our products and contribute to Open Source actively. In the case of our MapViewer, Oracle’s ADF “geomap” component supports open source Eclipse as well as Oracle’s JDeveloper IDE.

3. The third community we participate in is the Commercial Applications community. Oracle is now the world’s second largest application software vendor – the number 1 in Retail, Banking, Government, and many other vertical segments. It should be no secret that we wish to be the world’s #1 application software vendor by using Oracle DB and Middleware technology to build a new generation of applications in ways that others cannot. Every day – and because we develop products around the globe, every night – we get more knowledge, share more expertise and explore the possibility of how geospatial technology can be seamlessly applied to the operational workflow of the products produced by our Oracle Applications business units.

You may have noticed Oracle has acquired a few companies over the past few years. We are in a unique position to provide spatial analysis, visualization, and Web Services, in applications as diverse as Business Intelligence, Asset Management, Retail, and CRM – whatever solution space it might be.

These applications with geospatial capabilities are NOT what any of their users would consider GIS applications; these are business solutions that “GET IT” -- that understand the essential value that Geospatial analysis can bring, but only in the context of their business environment.

4. AND OF COURSE, OUR “DAY JOB” – the fourth community, the Geospatial community, in which we have diligently worked for over a decade to bring innovation, quality, simplicity and professionalism – and in which – with the help of our PARTNERS and customers -- we humbly believe we are one of the driving forces.

What drives our direction in this GEOSPATIAL community? How do we decide what to invest in and what to develop?

- FIRST: I’ve mentioned Standards. I said earlier that we have an unwavering commitment to standards – we do. So as relevant new standards emerge – and as we work with others to develop these new standards – we are committed to their implementation.
- SECOND: Our customers’ and partners’ requirements. We are privileged to be contributors to many of the world’s most innovative and demanding geospatial applications and solutions. The biggest, nastiest, most complex defense, emergency response, CRM, ERP, EAM, utilities, infrastructure development and management,

energy, commercial and government mapping and cadastral applications depend upon systems that are built using Oracle Spatial technologies.

And these customer and partner requirements are essentially intertwined with the THIRD motivator. Because it is our customers and partners who ask us to solve really tough problems.

So here it is (and I know this will sound a bit over the top)...

- **THIRD:** We use our unique skills and technology infrastructure to solve data management problems we believe **NO ONE ELSE ON THE PLANET CAN SOLVE**. That is really what it is all about. This is how we can uniquely add value to our customers and partners.

What kinds of things do I mean by this? Well, things like applying Oracle Database and Application Server benefits to fundamental data management challenges:

- **Managing huge volumes of what is essentially machine generated data**
- **Removing scalability boundaries**
 - Raster Images: Single images < 1 TB; Logical datasets ~ 1 Petabyte
 - Network Data Model: Billions of Nodes/Links; millions of graphs
 - Point Clouds: Terabytes of point data to be indexed and analyzed
 - Topology: data validation for seamless national datasets
 - Geocoding, Routing, Mapping: single dataset for all functions for telco, call center, telematics applications, ITS
- **Enabling seamlessly-integrated operational systems**
 - Spatial analysis, attributes, visualization as part of workflow, Complex Event processing, application development, BI, SOA
- **Implementing common user management, administration, security**
 - Security is an essential aspect of everything we do and we are uniquely positioned to apply security to a generation of geospatial applications that cannot be secured by powering down the workstation and locking the door as you leave the room. We understand and our customers live daily with the full knowledge that “An online world is a ‘vulnerable’ world.”

And the advances on the horizon driven by the geospatial community provide more opportunities and challenges for us.

We know that more, richer, and more readily available data – including much more broadly available Raster and 3D datasets and are being made available every day due to the dramatic reduction in the cost of collecting, creating and distributing this data.

And just as Oracle realized that we could provide more spatial capabilities to our customers at lower cost (in the case of our “Locator” feature, no cost) without compromising our business viability, we expect that the smart data providers

understand that the revenue to be derived from new data products and offerings will allow for much broader distribution at much lower cost of “today’s” data products. If the Internet mapping sites have taught us anything, it is that you can make it up in volume.

We finally see the reasonably priced, broadly available geospatial infrastructure accompanied by broad adoption by the elusive “mainstream” taking hold; 5 or more years ago I remember being at a conference where every telco vendor was struggling to figure out the value of a location, how to share location, and how to make money on the location. I went home delighted that we did business with people in uniforms who had their own position acquisition technology and figured we could wait for the commercial guys to sort things out. They have.

So now the geospatial community has:

- readily available position acquisition
- free and commercial online mapping and location services
- low cost location aware devices
- event and process-based location-enabled applications

But the big driver for us comes back to Better Information and Fusion. It’s not taking GIS to the Enterprise. It is bringing together, within the context of the workflow – the service – the application – and the analysis, all of the semantically relevant information – Geo, business, document, realtime – from the enterprise and beyond.

What has been lacking to bring this better information and the fusion of Geo and other context-based relevant data has been a platform. In the same way that non-GIS Web Portals and Web Services standards were the transformational platforms for consumer mapping services, the BI system and Asset Management system will be the platform for the geo-enabled business application. Oracle sees Service Oriented Architecture services and BI as part of every application and geospatial technology as an integral part of these systems.

So now you know what makes Oracle Spatial run and where:

- Fusion
- Standards
- Addressing the needs of our partners
- Helping Oracle become the #1 application company
- Security. An online world is a “vulnerable” world.
- BI integration built-in. Not an “after the fact” warehouse. Not just process automation, but BI.
- SOA as an element of every system; not an add on.
- Delivering and exploiting the IT and Geo infrastructure to lower cost, ease development and spread the “goodness” of geospatial technology.

And finally...

- Solving our customers' problems

I would be remiss if I ended without saying a few words about some of the really important developments of the past year from my perspective in the Oracle Spatial community:

- Oracle Maps and the role this plays in Oracle BI, FMW, WebCenter
- the NAVTEQ Agreement to provide worldwide map boundary data with all Oracle products
- this week's announcement by GE of a new portfolio of products based on Oracle products
- the production "go-live" of two of the world's largest, most critical land management systems: the 2010 Census MAF/TIGER modernization and the UK Ordnance Survey Mercury 2 system
- and lastly, the way that people like QPC and Guy Carpenter are solving really complex, interesting business problems being in the insurance industry using some of our technologies.

I believe I'm right on time for the next session.

Thank you and enjoy the day!