Business Drivers

Commercial and Government Variances
Commercial
- Profits
- Products and Services – enhancements versus new
Government
- Public Service
- Corporate Performance Management (CPM)

There is an overlap between Commercial and Government. It is satisfying customer needs.
Sound ICT Infrastructure Management Practises
Strategically “best practise” for effective long term deployment of spatial data.
Maximises the exploitation potential of spatial information to reap the benefits.
Provides the scalable platform for downstream business process improvements.
Enhances the value of decision support systems
Supports Customer Initiatives
Better service to the customer

*Remember, information locked away is a waste of time and effort. Systems must have open doors.*
Open Systems

Do they exist?

Spatial world has evolved, have we?

Database storage and management is a quantum leap forward from proprietary formats and systems

Oracle Spatial

Open GIS Consortium (OGC) Standards help
Case Study - BCC

- Involved in the design and implementation of a Spatial Data Store (SDS) in Brisbane City Council (BCC)

- Purpose; to provide an open, standard, flexible and scalable spatial system for managing all of Council’s spatial/map based information

- Why Oracle? Consistent with Corporate ICT Architecture

- The following details are based on this project which completed May 2004.
Facts and Figures

- Brisbane City Council (BCC) in the fastest growing area of Australia
- Population Growth – 80,000 per year
- Current Population > 1mil
- Rateable Properties > 380,000
- Services include – transport, sewer, water
- 50 million patrons per year on buses and ferries
- 14,000 km of sewer and water pipes
- 5,300 km of roads
- Budget – AU$1.6 billion
- $50+ million investment in spatial information
Business Drivers in BCC

- Enabler of Business Process Improvement
- Enabler of Commercial Activities
- Supporting Customer Initiatives
- Sound IT Infrastructure Management Practices
- Positions Council Strategically for effective long term deployment of spatial data
- Provides support for Regional Collaboration - 13 Councils in South East Queensland - 1.8m People
- Business Units wanted wider Deployment of Spatial data and tighter integration with Business Systems
Key Principles & Objectives

- Provide on-demand access by SQL enabled business systems
- Provide a "self serve" spatial search engine
- Eliminate replicated data to proprietary formats
- Compliance with global spatial data standards (OGC)
- Compliance with Open technology standards
- Deliver to multiple vendor spatial applications
- Available 24 hour, 7 day a week system
Data Modelling

- Logical Data Model
- Consistent Naming Conventions
- 2 Dimensions only
- Spatial Accuracy
- “Plain English”
- No Codelists
- Read Only
- All Data Distributed via Views
- Oracle Modeller
Interoperability - FME

- So what linked the source GIS information to the Oracle system? FME.
- Data / Geometry Integrity
- Remodelling on the fly
- Manipulation is the Key
- Repeatability
- Administration
- Scripting versus Programming- Lower total cost
- Flexibility, Formats Supported
Constraints

- Oracle Geometry Types
- Styles / Symbology
- Reloads versus Incremental Updates
- OGC ?
- Oriented Points
- Oracle Versions
- Proprietary Impediments Unacceptable
Issues

- Interpretation of Open Standards varied between vendors
- Peer Reviews – recommend 3
- Desktop Client Applications Performance
- Geometry Integrity
- Symbology (consistency / integrity)
What was the Road Ahead?

- Migrate Customers from a map to an Information culture
- Increase awareness of Spatial Concepts to mainstream ICT
- Implement additional Business Focused Initiatives
- Upgrade maintenance system database to Oracle 9i
- Implement Oracle Incremental Replication from Maintenance System to Delivery System (SDS)
Thank you

Questions, comments, challenges?

Acknowledgements:
Brisbane City Council, Oracle, Gartner, Safe Software
Bob Peters, Phil Grue and
the (BCC) Spatial Data Store Project Team