Introduce Exor
Asset Management and Linear Referencing
Taking the “G” out of GIS with Oracle Spatial
User Experience
Case Study: ACT Urban Services
Summary
Illustrate the value of incorporating Oracle Spatial as part of an overall business information system for asset management decision making.
About Exor
Exor Corporation

- Yes – ‘Ex Oracle’
- Management buy-out from Oracle UK in 1995
- We develop network modelling and linear asset management software solutions
- Background in Highways Management
- 200 customers world-wide - Large UK customer base, dominant in Australasia and the US
- Aided in the design of linear referencing for Oracle Spatial
- Oracle’s chosen solution partner for linear asset management
- Linear extensions to Oracle EAM Product
- Offices in UK, USA, Australia, Hong Kong and NZ
Exor’s Purpose

“to deliver quality products focusing on **Spatial** and **Linear**-based Asset Management that meet our user’s and the market requirements in a timely manner.”
Our Customers include:
Asset Management Concepts
Asset Management?

. . being aware of all tangible items you have under your responsibility (your assets) and doing what is necessary to take care of them in the most prudent manner...
Asset Management Objectives

Taking care …………

- Improve Safety of Asset
- Improve Condition of the Asset
- Minimise Effects on the Environment
- Improve Availability and Accessibility of the Asset
- Improve Customer Service
- Minimise Long term costs
- Justify and then utilise funding

Do all this and comply with Government Legislation
Asset Management Fundamentals

- What Assets do we have?
- Where are they?
- What condition are they in?
- How much money have we spent on them?
- What (level of) service is being provided?
- Is the Customer/Investor/Stakeholder/Regulator satisfied with the Service?
- What is necessary across the business to maintain/improve the service?
- How can I plan and operate my business more effectively

Wide subject (LOS, Lifecycle, Performance Management, Investment Management, Service Delivery, KPI’s, Safety)
Asset Management Decision Making

Investment Decisions

- Performance Rating
- Condition Indices
- Cost Analysis

Asset Register
Asset Condition
Works Management
Data Supply Chain

Source ➔ Manufacture ➔ Distribute ➔ Customer

Data
Doing things right

Integration

Information
Doing the right thing

Asset Register
Work
Condition
Finance & HR
But Networks are more complex

- Transportation / Utilities, are unique
- We deal with interconnected assets
- The connection is the major asset
- Things happen ‘along’ other things
- Business Data are associated with Linear networks
Linear Referencing

Route 1  Route 2
Maintenance Sections

(x,y)

Network Elements
Asset Definition e.g. Surface Type

Asset Life (Condition)

Consolidation

Maintenance Spent
Asset Management Decision Making

Investment Decisions

- Performance Rating
- Condition Indices
- Cost Analysis

Linear Referencing System

- Asset Register
- Asset Condition
- Works Management
Creating Information for Decisions

- Decision-making dashboard
- Linear Cost Analysis
- Performance Monitoring
- Linear Referencing Hub
- Asset Register
- GIS/CAD
- Service Levels
- Condition
- Work

- exor
Taking the “G” out of GIS
Is GIS user-centric or inward facing?

- The history of GIS is inward focused
  - Building GIS applications with GIS tools
  - GIS Departments collating data for years
  - Separate proprietary GIS datasets
  - Private GIS datasets
  - GIS Departments - GIS is so special!

- Ask and you shall receive
  - Ask for GIS functionality and you’ll get desktop mapping
Take the “G” out of GIS

- It’s about business applications that:
  - Use maps as background information
  - Use maps for location
  - Use maps as part of a wider business process
  - Just calculate something in the background.

- Users don’t need to know about GIS anymore, just the business process they are using

- Now just part of a mainstream IS, less geography
Why Oracle Spatial is important

- Spatial data just another database feature
- Oracle Spatial installed, supported, enhanced like any other database functionality set
- A growing industry to support spatial decisions
- Embedding is maps now easy, and not restricted to specialised GIS toolsets
- Growing list of clients to support Oracle Spatial. Users can take their pick.
- Enterprise architecture, server based.
Powers Users
Operational Users
Field Users

[Images of handheld devices with screenshots showing a list of structures to inspect and a map interface.]
ACT Urban Services Case Study
ACT: Asset Manager
## ACT: Enquiry Manager

### Screen Shot

The image shows a software interface titled "ACT: Enquiry Manager". The interface includes a form for recording and managing enquires, with fields for various details such as date, description, and action remarks. Next to the form, there is a map showing a geographical area with various points of interest marked. The map is interactive, allowing for detailed viewing and navigation. The interface also features toolbars with icons for file, edit, record, query, and help, indicating various functionalities available to the user.
Complete Solution

- Exor is a web and map based
- Plus field / office / external reporting systems

- All components supplied and supported by Exor (includes Oracle Database, Oracle Spatial, Oracle Application Server)
- Ongoing support and enhancements
Practical Example

Use Locator to search addresses, assets, networks, events, etc. Users start with maps!
Practical Example

Find street address on form or map
Create defect referenced to asset
Practical Example

1. Business process generates Works Orders,
2. Sends SMS to Contractor to resolve
Summary
Asset Management Demands Data

- Asset location and referencing
- Asset Maintenance
- Asset Planning – additions / deletions
- Contract Management
- Public Enquiries
- Traffic Counts / Traffic Statistics
- Utility / Event Access and Permitting
- Bridge Safety - Wooden Bridges
- Asset Valuation
- Optimised Renewal Decision Making, etc
Value of Information Access

- More people want access to more information
- We’re not all the same
  - Engineers
  - Other staff – call centre officers
  - Stakeholders
  - Public
How

- Innovative software tools
- Business applications that address users needs
- Business managers understanding what users need and delivering to that.
Benefits

- Dramatic improvement in information access
  - Access for all users, configurable to needs
  - Maps-based means easier to interpret

- Savings in information management costs
  - Corporate information management

- Better asset management through empowered decision making
  - Designed for management decision making
Thank you