



The Spatial Data Management Company

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## Customer Testimonials

“Open Spatial Solutions comprising of **Munsys** and **Enlighten** build on the strength of risk averse technologies from Autodesk and Oracle. These Solutions improve the management of Infrastructure Asset Data and provide a Unified User Interface that Integrates with Mission Critical Corporate Systems.

Enlighten applications such as *enTrace* (Network Tracing) provide valuable information of properties affected by planned and unplanned shut downs for regulatory reporting. Enlighten provides a complete ‘Asset Decision Support System’ that delivers information to the fingertips of crews in the field that pinpoints leak isolation which enables crews to quickly attend to repairs.

These are some of the reasons why our customers (now including over 40% of Victorian Urban Water Utilities) have chosen the Open Spatial Solution. Our customers range from large urban water Authorities and Councils to small regional councils. Here is what they say about our Solutions, our Staff and our Company...”

***“Open Spatial assisted in delivering the accuracy we require!”***

Suzanne McFarlane  
Geospatial Services Co-ordinator  
**Barwon Region Water Corporation**

***“Open Spatial delivers Innovative Solutions to our changing business needs!”***

Eamonn Tobin  
Executive Manager Information Systems  
**North East Water**

***“Open Spatial exceeded our expectation when they delivered our GIS Solution!”***

Chris Buck, Assets & Maintenance Planner  
**Westernport Water**

***“We were first in Victoria, we took a calculated risk, Open Spatial returned our investment within 6 months!”***

Noel Squires, Manager Information Systems  
**Goulburn Valley Water**

***“The Open Spatial Munsys Solution has nearly halved the time required to capture as constructed information!”***

Graeme Anthonsen  
Manager Asset Information – Engineering  
**City West Water**

# Enlighten – Browser Based Spatial Distribution

## Enterprise access to Corporate and Spatial Data

Enlighten is a browser based application that delivers spatial and corporate data with advanced spatial analysis to every desktop. When used in association with Munsys, Enlighten delivers spatial information from a Single Authoritative Data Source used by both Editors and Viewers.

This improves the timeliness to access asset and other spatial information, to the widest array of users within the organisation.

Spatial data in a variety of different formats is rendered through the Enlighten application to the browser using Autodesk MapGuide®.

## Advanced Spatial Analysis

Enlighten utilises the advanced spatial capabilities found within Oracle Locator/Spatial such as Buffers, Thematics, Within Distance, Touching Neighbours and Nested Conditional Analysis. This replaces advanced functionality expected from a desktop application with a convenient and easy to use Browser Application.

*“Our aim is to provide an environment that serves complex spatial analysis from an highly efficient database environment to any viewer demanded by your business.”*

## Secure User Access

Enlighten has a comprehensive application and data security model for configuration of user and group profiles with pre-determined access controls based on:

- Layers of Spatial Data
- Function Control
- Accessible Searches
- Viewable Forms
- Editable Attribute Data
- Database Column Level Control

## Spatially Enable Corporate Data

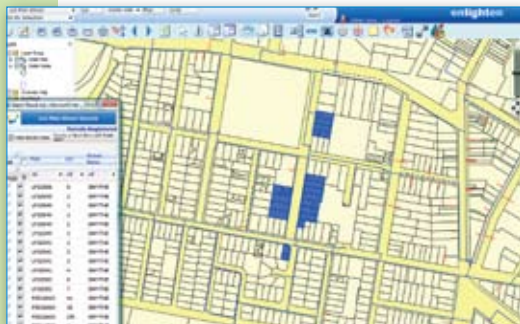
It is not unusual to find Asset data held in one database and Customer data held quite separately in another. Linking them via a common location can create powerful business intelligence. Enlighten provides a unique method of relating tables and their content to one another; this is referred to as Table Relationships. This unique way of relating information to each other simplifies the way in which you manage these relationships and associating this data to spatial features to be presented to the end user.

This means that a table in Microsoft SQL Server that contains your Customer Information can be linked to a table in Oracle that contains your Asset data and displayed against the spatial feature to which it has been associated. Enlighten has been seamlessly integrated with numerous billing, property and records management systems.

## Configurable Searches and Forms

Search definition within Enlighten is simple. The user nominates the data source, and points to the table and columns that will participate in the search. Searches are linked to spatial layers to automatically display the associated spatial information.

Enlighten Searches exploit the cross database Table Relationships to access disparate data across corporate systems. This means that a search can be setup to reference an attribute table in a corporate system to retrieve a spatial feature on the map (e.g. a search can be setup on all meters from a particular manufacturer



## Industry standard environment

- Microsoft® .NET
- Autodesk MapGuide®
- Internet Explorer
- ODBC/OLE compliant
- Oracle® Locator/Spatial

## Spatial data formats

- ESRI® .shp
- MapInfo® .tab, mid/mif
- Intergraph® .dgn
- Oracle® Locator/Spatial
- plus many other formats through the FME Data Provider for Autodesk MapGuide®

with a specific model number. The result expected is a selection of parcels where these meters are located).

Information forms can be configured to contain data that can be securely accessed by different user profiles.

## Plotting and Previewing

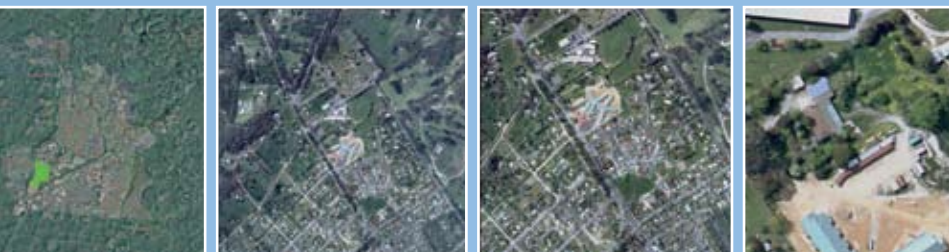
Enlighten *enPlot* provides a sophisticated plotting application from the Browser. Plot requests are made through a configured Plot Application that relies on the production of the plot from a server side engine that delivers the requested plot in PDF format to the user through a Browser.

*enPlot* supports the production of A4 – A2 Plots directly through the Browser. With the appropriate configuration this can be extended to A1 – A0 plotting directly from the Browser. The delivery of all plots through PDF provides an easy preview of the information before being committed to paper.

Templates are created as enhanced metafiles (.emf) and can be built using industry standard graphical user interfaces like MS Visio®. These templates include the ability to define the format of the plot including the position and size of the scale bar, north arrow and legend.

## Lower Cost of Ownership

Enlighten runs on any device capable of running Microsoft Explorer (from version 6.0). Its database driven spatial analysis minimises and eliminates the need to purchase specialised geospatial software for the desktop. This provides your organisation with a Unified User Interface that is convenient, easy to use and sufficiently powerful to meet the needs of most sophisticated users.



# Munsys – Spatial Data Management Suite

## CAD and GIS Working as One

When infrastructure managers integrate CAD and GIS, the accurate information captured in design drawings is often lost during transfer to the Corporate GIS. Users become concerned about accuracy and currency of the data and duplicated effort is expended in attempting to synchronise two systems. This results in a loss of confidence in the combined information.

The aim of Munsys is to promote an environment where CAD and GIS work as One. Primarily, Munsys solves the traditional problem of integrating data created in AutoCAD® design software, with Corporate GIS data, based on Oracle, in compliance with Open Geospatial standards.

*Engineers access accurate design information using familiar tools and the identical information is available to GIS applications from ESRI, Intergraph, and MapInfo for analysis and visualisation.*

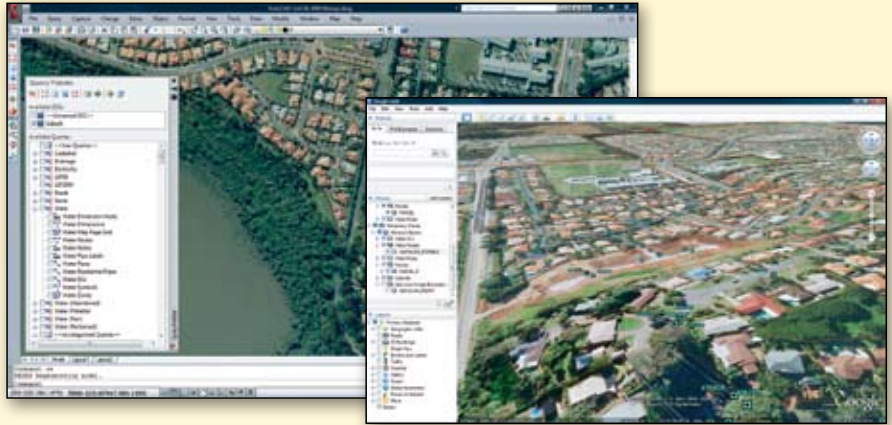
With multi-user access to a single seamless database, Munsys enables consistent data standards to be implemented for all CAD and GIS applications. Your chosen best of breed applications share the same high quality information without duplication.

*“Munsys ensures efficient, high precision data maintenance, capture, display and printing.”*

## Secure Administration and Reporting

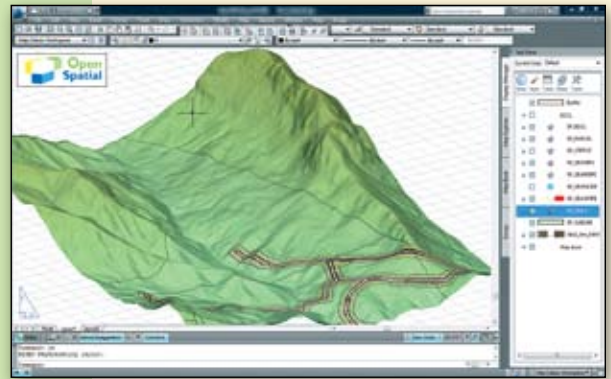
The Munsys Management Console is a “DBA in a Box” enabling even novice database users to manage an Oracle based Munsys solution.

- Progress monitoring of asset mapping including spatial and attribute edits
- Detailed system reports to assess usage and performance or to see where additional training may be required
- Vastly improved Data integrity by adhering to pre-defined business rules
- Enhanced Data security by defining user privileges in the database.



The **Munsys** product suite addresses key organisational needs that includes system administration, asset capture and management for

- Cadastre
- Drainage
- Electricity
- Roads
- Wastewater
- Water



## Efficient Capture of Spatial Information

Munsys also contains efficient data capture applications specific to the business needs of Utilities, Local and Central Government agencies. These specific business applications employ a World Best Practice approach for the systematic capture of data like Cadastre, Sewer, Water, Roads, Gas and Electricity Networks and their associated information.

The aim of our engineering business solutions is to provide a rules-based environment that extends the reliance of the business on system controlled configurable rules, thereby reducing risk when managing knowledge transfer.

## Proven Enterprise Integration

Locating your assets is only one part of an integrated asset management system. Linking location with other corporate systems will boost return on investment.

Munsys mapping and attribute data stored in Oracle tables have been seamlessly integrated with numerous asset management and financial systems running on diverse platforms.

## Rapid Productivity

Munsys implementations have been rapidly deployed by customers worldwide.

Whether your engineers, drafters, GIS staff are trained on AutoCAD or not, you can expect to have them fully operational on Munsys in two to five days.

With proven extensible data models, included “in the box”, and rules-based QA through integrity checking, customers large and small can confidently start capturing/maintaining asset information from day one.

Pre-existing digital data can be effortlessly migrated to Oracle in an Open Geospatial compliant format.

Munsys customers typically report a 30% to 60% increase in productivity within months of implementation.



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## Company Profile

Open Spatial Australia is a Spatial Data Management specialist company, delivering solutions to Utilities, Local and Central Government. Specialist Solutions focusing on bridging the gap between CAD and GIS and spatially enabling mission critical corporate data. Our Solutions solve business problems faced by Infrastructure Asset Managers and help achieve significant improvements in Asset Management and Data Quality.

Our basic tenet is that spatial data isn't "special" and that it should co-exist with your organisation's mission critical corporate data. We achieve this by employing Open Geospatial compliant technologies through partnerships with Oracle and Autodesk.

Open Spatial Australia is an Australian owned and operated company, Australians proudly delivering world-class solutions.

## Our Solution

### The Database

Open Spatial Applications store all their spatial data in Oracle Locator/Spatial. The spatial functionality found today in Oracle delivers most of the analytics used in our applications. The Database becomes an important facet and a foundation of our Solution and is much more than a data repository.

Our main objective in using an open database is to promote a Single Authoritative Source of CAD, GIS and Location based data. This approach adopts industry best practices for managing corporate data and reduces or eliminates the need to transform data from one vendor's spatial format to another.

The co-existence of spatial data in the same repository as other corporate data, allows our applications to spatially enable corporate data, creating intelligence that has never before been available.

### Web Distribution of Spatial Data

Open Spatial has developed a browser-based product (Enlighten) to deliver vector and raster data to users through a browser. The underlying technology used by Enlighten is Autodesk MapGuide® and Oracle. These technologies are highly scalable and impose minimum impact on network bandwidth, making it an ideal solution for both Indoor and Outdoor staff.

Enlighten provides a comprehensive user security module that controls the access of spatial layers and the creation of a tailored environment to each business function. It also provides a user definable environment to create searches and forms that incorporate data from third party corporate applications without the need to replicate that data in a traditional GIS manner.

Enlighten delivers the spatial analysis, thematic mapping and cartographic options that are needed by end users and power users of Utilities, Local and Central Government Agencies.

### CAD and GIS Working as One

Most traditional GIS applications are not built to cater to the engineering requirements and exacting standards expected by most CAD users, this creates downstream problems when needing to import CAD data into a GIS. Precision, accuracy and content can be lost.

***“Open Spatial exceeded our expectation when they delivered our GIS Solution!”***

Chris Buck  
Assets & Maintenance Planner  
**Westernport Water**

Open Spatial's purpose-built Rules-Based Infrastructure Asset Management application, Munsys is used to create, share and protect both CAD and GIS data in the same environment. Munsys eliminates the need to import CAD data and risk losing precision, accuracy and information rich in engineering content. Both CAD and GIS data Working as One in Oracle a common spatial and corporate data repository.

## Spatial Business Solutions

Open Spatial delivering business solutions to the following spatial challenges:

- Data Quality Improvement
- Outsourced Data Capture
- Managing Vertical Topology
- Network Topology Management
- Cadastral Management
- Drainage Asset Management
- Water/Sewer Asset Management
- Spatial Data Accuracy Improvement
- Predictive Asset Criticality
- Dynamic Network Assets
- Automated As-Built