


www.bentley.com

Bringing Order to Chaos: The Geospatial Managed Environment


Oscar Custers 

www.bentley.com

Bentley's vision and interpretation

Four pillars for Bentley Geospatial

1. Federated Data Management
2. Geospatial Managed Environment
3. Interoperability
4. Scalable architecture



www.bentley.com

What will we do?


- Market Position Bentley Geospatial
- Vision Bentley Geospatial Management
 - What is the vision?
- Demonstration & Reference
 - As per illustration



www.bentley.com

Federated Data Management


- Infrastructure assets are particularly difficult to manage
 - Because of long lifecycles (50 - 75 years). The assets are constantly being worked and re-worked with increasingly smaller budgets.
 - Disaster Management and Terrorism Prevention have put increased requirements on infrastructure asset management.
- The most detailed information on the asset lives in the Design Documentation that was used to build it.
- Design Documentation is still overwhelmingly "document" based - Maps, Models, Drawings, Specifications, Schedules - and often dispersed.
- Spans AEC, GIS, database, Microsoft, and other forms.





www.bentley.com


Vision & Interpretation



www.bentley.com

Federated Data Management

- A paradigm shift...
- A "tool" that spawned a change in the way people work everywhere
- Why spend time and money transforming information when you can index it for use in its native form?



WWW.BENTLEY.COM

Federated Data Management

- One holistic lifecycle for Integrated Data Management
 - Management and spatial indexing of (geo-) file formats
 - Storage of data in (enterprise) data stores
 - Control over workprocesses

BENTLEY

WWW.BENTLEY.COM

Scalable architecture (SDI)

- Solutions from 'small to large'
 - Windows client (desktop)
 - » Technically advanced, high precision design and GIS solutions (2D and 3D) for use at desktop and tablet Pc's
 - Database centric (two tier)
 - » Direct integration with data stores
 - Client/server (file based)
 - » 'Geospatial' data and workflow management at the server (Enterprise GIS)
 - Multi-tier
 - » Integration with enterprise systems, data stores, plotservices, and web publishing applications (E-GIS)

BENTLEY

WWW.BENTLEY.COM

Geospatial Managed Environment

- Supporting the entire Lifecycle
 - Editing Data
 - » Technically advanced, high precision 'engineering' solution for all departments in 2D and 3D (create, modify, analyse, plot, mobile management)
 - Management of Data & Applications
 - » Geospatial data management to support the cooperation between departments (manage, archive, exchange, integrate, datastores, workflow management)
 - Publishing/Use of Data
 - » Share (internal) and distribute (extern) of information by map plotserver- and webtechnology

BENTLEY

WWW.BENTLEY.COM

Desktop Applications

The Map Managerist Drawings

Move from desktop to enterprise applications

Improve Standards

More accurate drawings promotes better understanding and safety in the field

Build Smarter Software

Reduce development and maintenance costs

GeoGraphics features

Raster, Raster Mosaic

DGN XFM Datastore

BENTLEY

WWW.BENTLEY.COM

Interoperability

- In general
 - Support of (open) standards and technology
 - » PDF integration in 2D, 3D and animations
- At several levels
 - Between various (technical) disciplines
 - Within the entire organisation
 - » Integration with enterprise systems as SAP, ESRI ArcSDE, Oracle 9i and 10^g
 - Between organisations
 - » Exchange between open and closed formats (DGN XFM, DWG, MXD, GML, CityGML)
 - » Access to 'Open' Geospatial content by web-services (WMS, WFS, SOAP) and i.e. Google Earth (KML)

BENTLEY

WWW.BENTLEY.COM

Desktop Applications

Client tier

DGN XFM Datastore

local database

local Data store

PowerMap Field

PowerMap

Geospatial Extension

MicroStation

Land Management

MicroStation Map

Fiber

Cable

Gas

Electric

Water

Wastewater

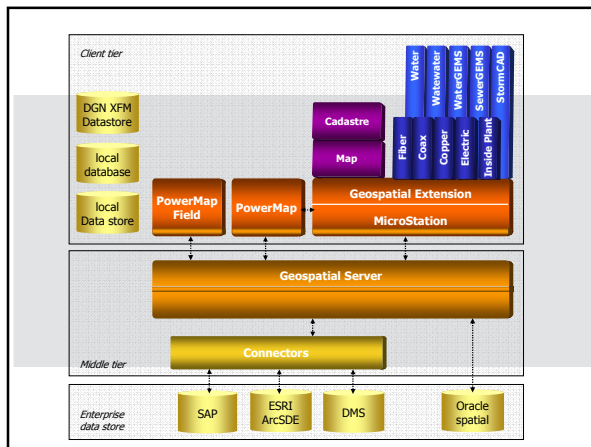
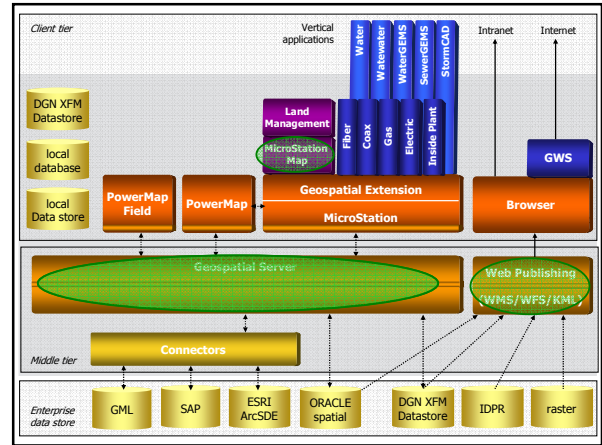
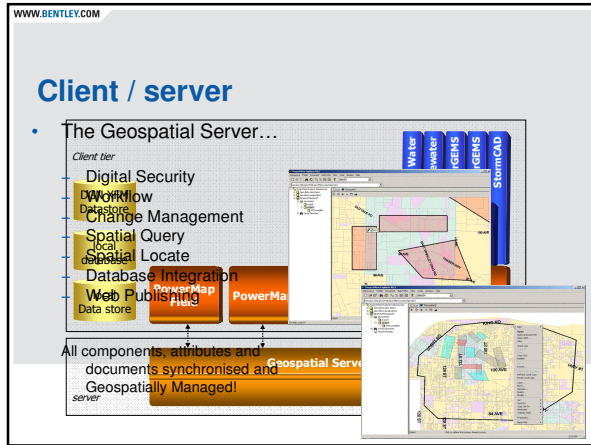
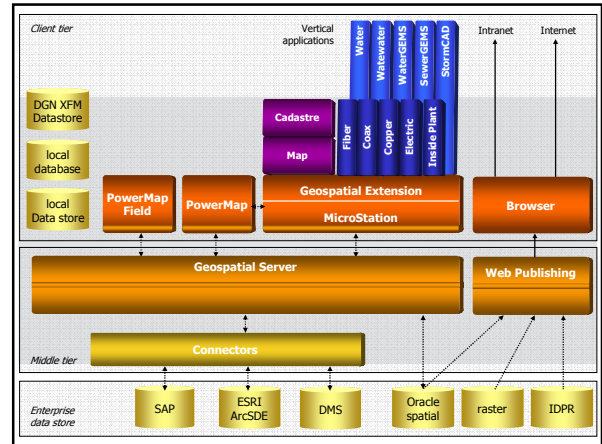
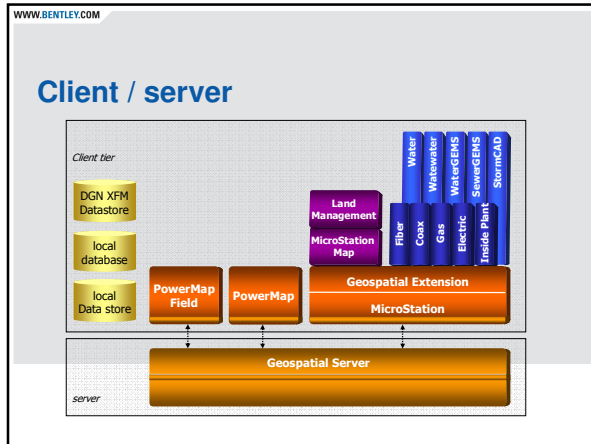
WaterGEMS

Electric

Inside Plant

StormCAD

BENTLEY



Bentley's vision and interpretation


Four pillars for Bentley Geospatial

1. Federated Data Management
2. Geospatial Managed Environment
3. Interoperability
4. Scalable architecture



BENTLEY

WWW.BENTLEY.COM


Any questions?



Contact: Oscar.Custers@Bentley.com



WWW.BENTLEY.COM



Thank You

