

THE V8 GENERATION

create manage publish



Bentley Systems
13 December
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OpenGIS
MEMBER



Agenda

- Overview
- Create
- Demonstration

Overview

Corporate Highlights

Long history and established track record

- 18-year history of revenue growth and profitability
- 2001 revenues of \$202.6 million
- 1,200+ employees, 70 offices, 38 countries
- Large, entrenched, and diverse customer base with over 315,000 registered licenses of MicroStation

Bentley's Commitment

Solutions to GeoSpatial content

- Re-Use of different formats, databases without conversion and loss of intelligence
- Create, edit, design and maintain maps and models with efficient tools. Fast, versatile and productive
- Manage information, projects, access and digital rights
- Publish the right information to the right place at the right time

GeoSpatial Product Positioning

Create:

- MicroStation V8
- MicroStation GeoGraphics

Manage:

- ProjectWise

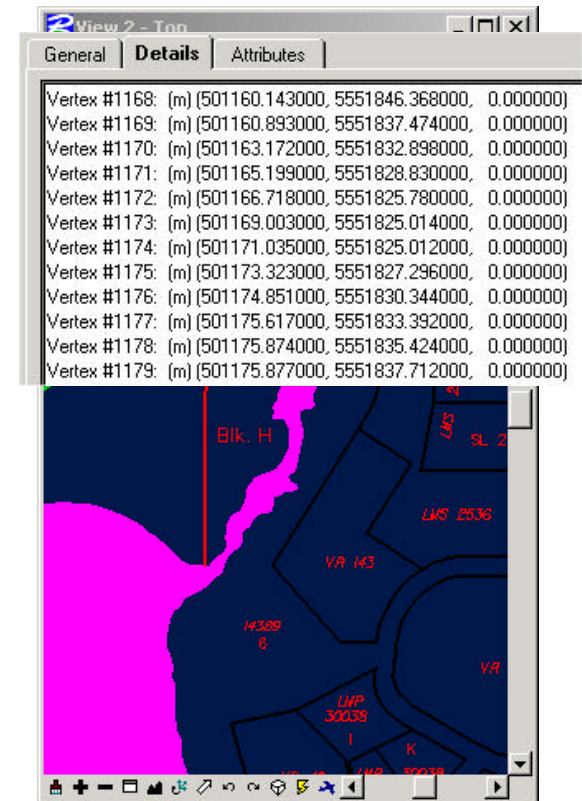
View/Publish:

- Bentley View/GeoOutlook
- Bentley Publisher
- Digital InterPlot

Create

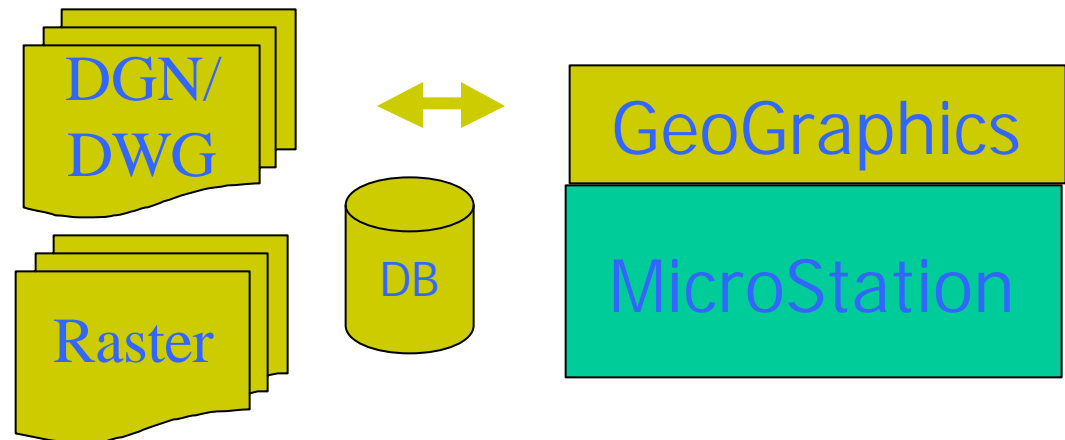
MicroStation GeoGraphics V8

- Best Geo-Engineering platform
- No limits on:
 - Number of levels
 - File size
 - Number of reference files
 - Size of the element
- Raster Manager
- Reads and writes DWG without conversion



MicroStation GeoGraphics V8

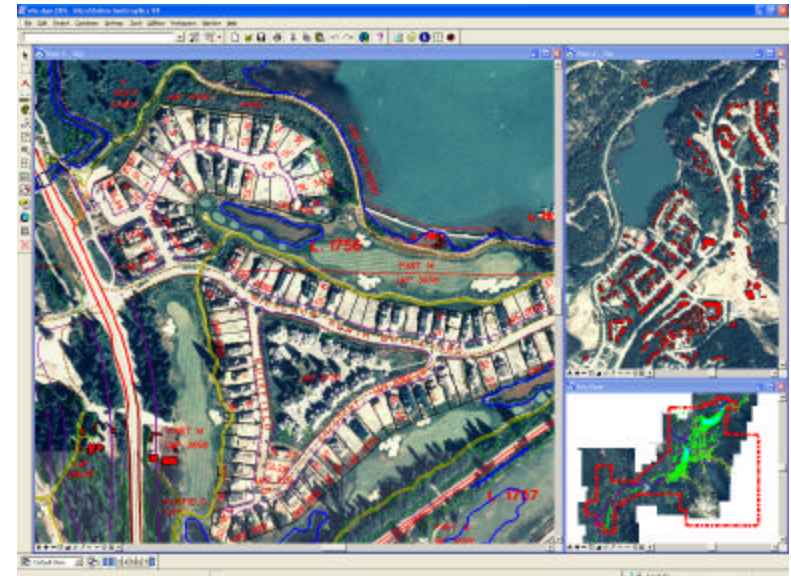
- GIS platform on top of MicroStation
- MGE Model Supported
- Supports Cad Neutral Files + Rasterdata + database
- Classification on Category/Features
- Intelligent data
- Map management
- Import/Export
- 2D&3D support
- ...



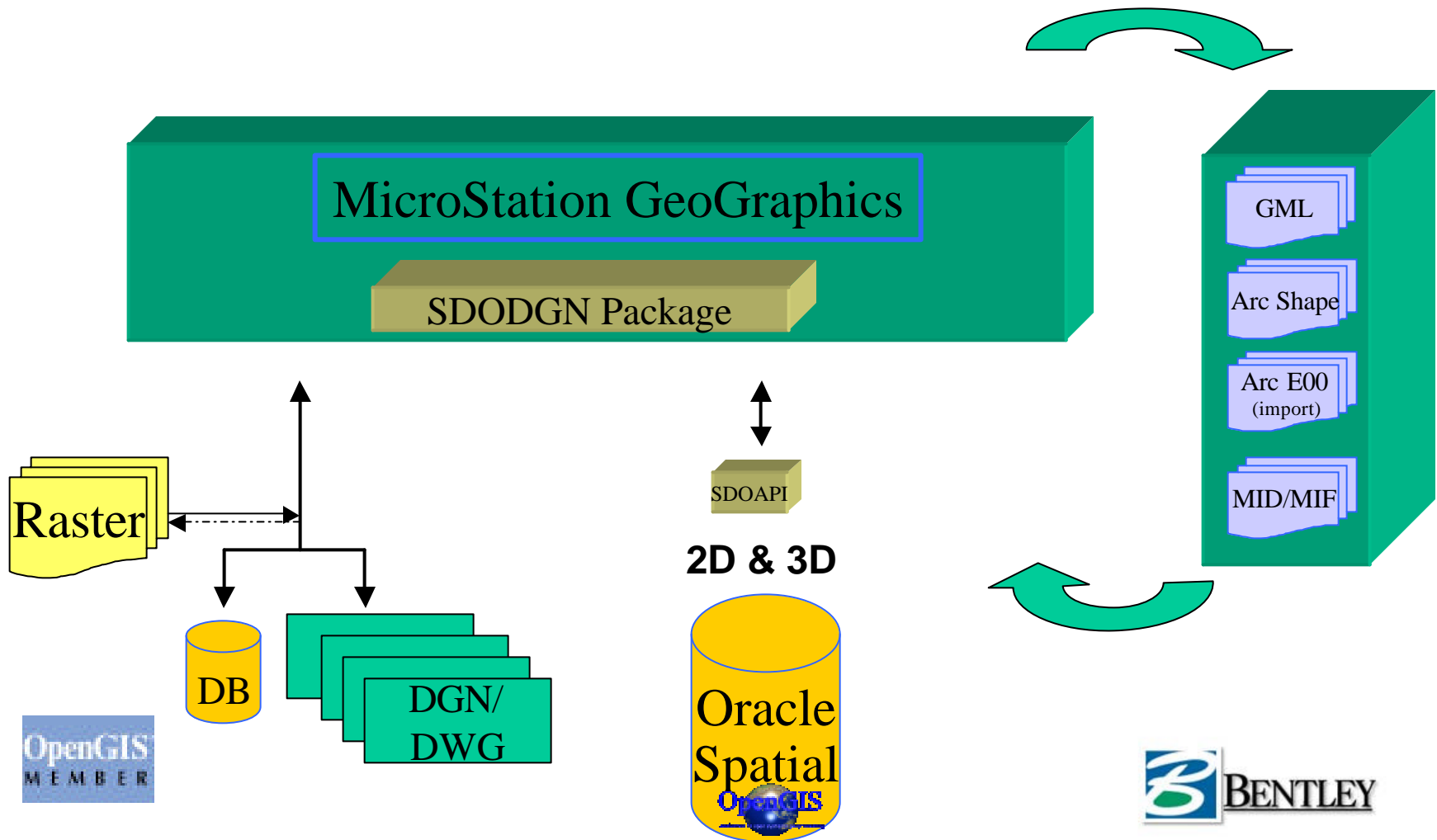
MicroStation GeoGraphics V8

GeoSpatial:

- Oracle 8 & 9i Support
 - » Locator for Standard Edition
 - » Spatial for Enterprise Edition
- GML



MicroStation GeoGraphics V8



Demonstration

FME conversion dialog box GML translation

GML to GG Translation

Original XML Dataset: ...

XML Map File: ...

Destination GG Design File: ...

Datasource Server Type: ▼

Database Server Name for GG Database:

Database Username:

Database Password:

Seed File: ...

Output Units: ▼

Compute Optimal Seed File Parameters: ▼

Feature table name:

Category table name:

Previous OK Cancel



FME conversion GML to GeoGraphics log file

```
relay2002b\gmlToGG.log
-----
Features Written Summary
-----
ADMINISTRATIEFGBIED (ADMINISTRATIEFGBIED)          2
GEBOUW (GEBOUW)                                     616
GEOGRAFISCHGEBIED (GEOGRAFISCHGEBIED)              4
INRICHTINGSELEMENT                                  63
SPOORBAANDEEL (SPOORBAANDEEL)                       2
TERREIN (TERREIN)                                    427
WATERDEEL (WATERDEEL)                                144
WEGDEEL (WEGDEEL)                                   1324
-----
Total Features Written                               2582
-----
Translation was SUCCESSFUL (2519 feature(s)/25083 coordinate(s) output)
FME Session Duration: 7276.4 seconds
Stopping Translation...

Translation Stopped.

Translation complete
```

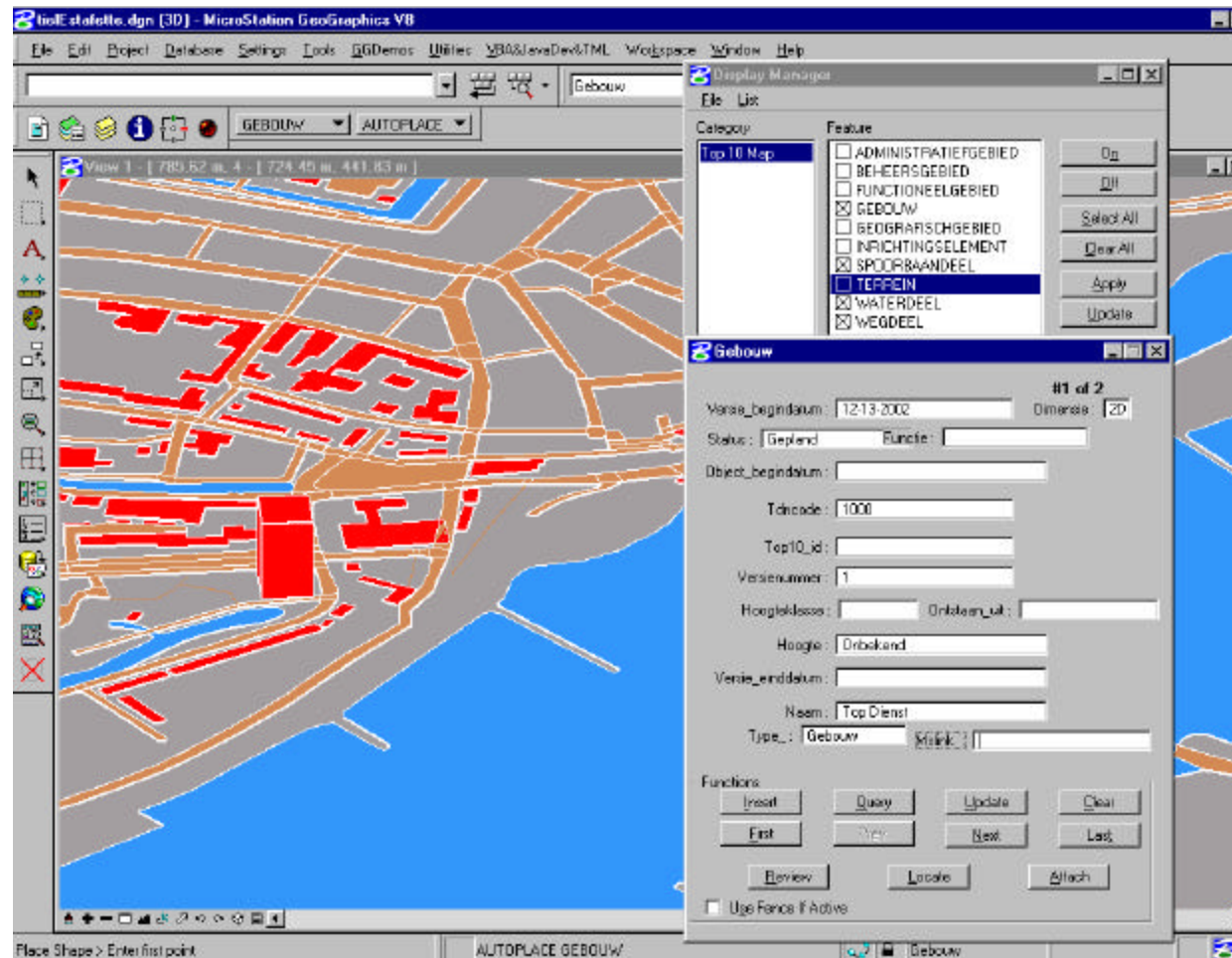



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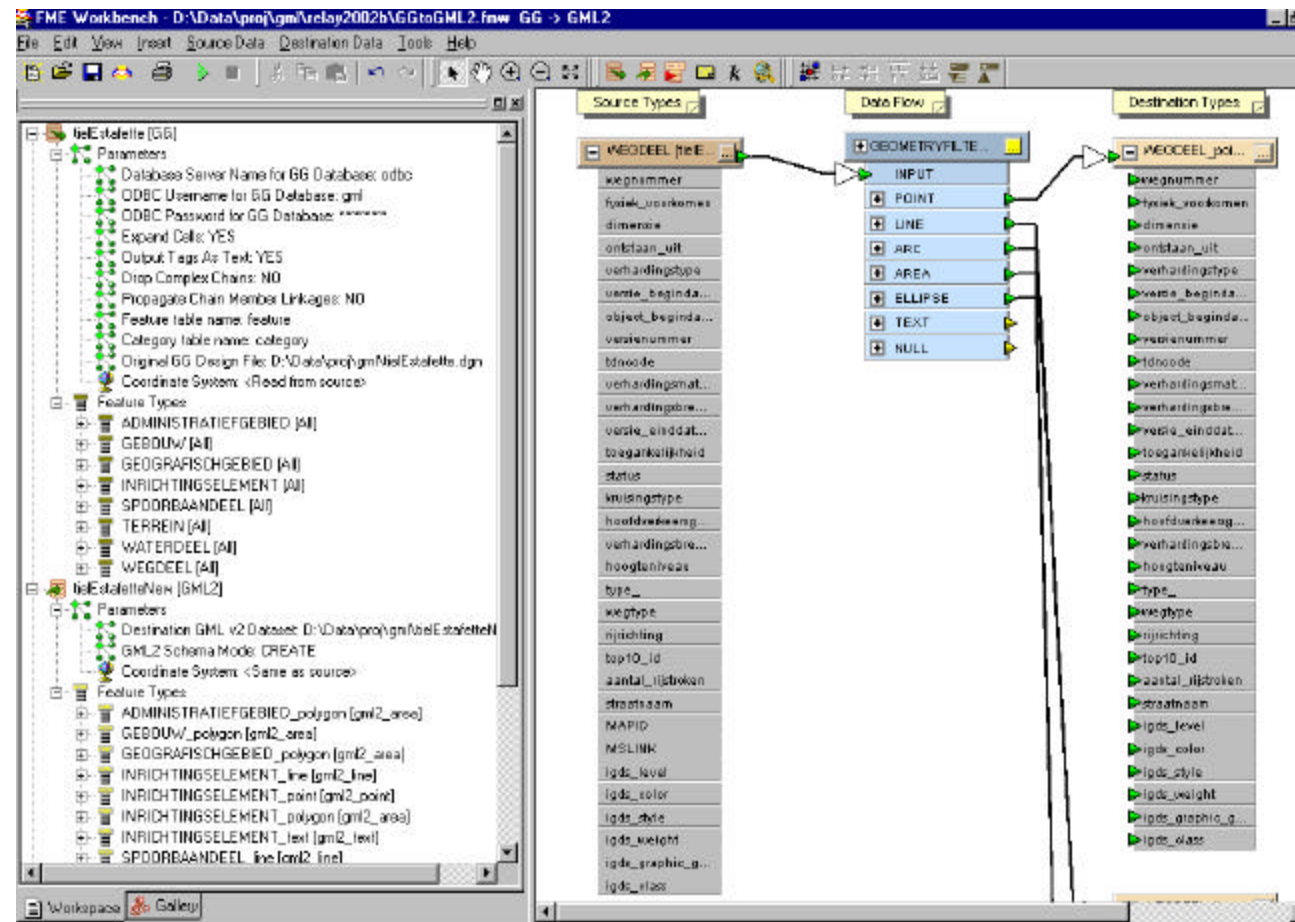
Result in MicroStation GeoGraphics V8



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FME Workbench dialog box



New GML validated and viewed with Spy XML

The screenshot shows the XML Spy application interface. The main window displays a GML document structure for a polygon object. The tree view shows the following elements:

- gml2:GEBOUW_polygon**
 - gml2:versie_be... 13-12-2002
 - gml2:status
 - gml2:dimensie
 - gml2:functie
 - gml2:object_be...
 - gml2:ldneede 1000
 - gml2:ontstaan...
 - gml2:top10_id 1000
 - gml2:versienu... 1
 - gml2:hoogtekle...
 - gml2:hoogte Onbekend
 - gml2:versie_ein...
 - gml2:naam Top Dienst
 - gml2:type_ Gebouw
 - gml2:igds_level 2
 - gml2:igds_color 3
 - gml2:igds_style 0
 - gml2:igds_weig... 0
 - gml2:igds_grap... 0
 - gml2:igds_class 0
 - gml2:polygonProperty
 - gml2:Polygon
 - srsName
 - gml:outerBoundaryIs
 - gml:LinearRing
 - gml:coor... (selected)

178272.257,326613.519,175
245.535
178299.108,326646.069,175
284.234
178323.627,326648.53,175
90.81
178312.872,326615.098,175
241.971
178272.257,326613.519,175
245.535

The right-hand side of the application shows the 'Elements' and 'Attributes' panels. The 'Elements' panel lists 'gml:coord' and 'gml:coordinates'. The 'Attributes' panel lists 'gid', 'srsName', and 'xs:type'. The 'Entities' panel shows a list of entities including 'amp', 'apos', 'gt', 'lt', and 'quot'.



New GML file viewed with FME Viewer

FME Universal Viewer - [View 0 (tielEstafetteNew.gml)]

File View Window Help

Viewspace

- View 0
 - Dataset: GML2 (tielEstafetteNew.gml)
 - SPOORBAANDEEL_line
 - SPOORBAANDEEL_poly
 - WEGDEEL_line
 - WATERDEEL_line
 - WEGDEEL_point
 - WATERDEEL_polygon
 - WATERDEEL_point
 - TERREIN_polygon
 - WEGDEEL_polygon
 - GEOGRAFISCHGEBIED
 - GEBOUW_polygon
 - ADMINISTRATIEGEBIED

Attribute Table:

Attribute ...	Attribute Value
dimensie	2D
fid	
fme_geom...	fme_polygon
fme_type	fme_area
functie	Overig
gml2_type	gml2_area
hoogte	Onbekend
hoogteklas...	Laagbouw
igds_class	0
igds_color	3
igds_graph...	0
igds_level	2
igds_style	0

Coord Dimension: 3D
of Coords: 5

Bounding Cube:
min x: 158359.512, max x: 158366.617
min y: 432771.869, max y: 432777.927
min z: 97.446, max z: 97

Coordinate Listing:

- (158366.617, 432771.869)
- (158396.918, 432777.927)
- (158389.813, 432813.468)
- (158359.512, 432807.41)

Ready

Coord Sys X: 158935.2390, Y: 432688.0309