“Fra MicroStation till Google Earth Samarbejdspartnere”

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Google and Google Earth

• Does this company need any introduction?
• Who has not heard of, seen or used its Google Earth or Google Maps products?
Bentley’s Google integration

- Bentley is keen on Google integration
- First tools early 2006
- Today’s focus on:
  - MicroStation KML export
  - GWP Google integration (using WMS)
- Other integration options
  - SKP referencing and editing
  - 3D Warehouse integration
- Future developments
MicroStation KML export
Using the \textit{V8i} Geographic tools in MicroStation
From a desktop perspective...

MicroStation → KML/KMZ files → Google Earth

Desktop

Data Files
Data Files w/ Database Linkages
Spatial Databases
Web Services
From a server perspective...

Desktop

Spatial Server

Data Files
Data Files w/ Database Linkages
Spatial Databases
Web Services
Proprietary GIS Databases

Google Earth
KML/KMZ export
Google Earth – MicroStation

- 2D and 3D data creation in MicroStation
  - High fidelity, accuracy, up-to-date
  - Rich data syntax, transparency, display order
- Export to KML/KMZ file
  - Available to a wider audience
- Including Geo-referencing and angle
  - Interactive referencing
  - Co-ordinate system based referencing
- ‘Static’ publishing model
Web publishing integration
Using Geo Web Publisher
From a web publishing perspective

- Desktop
- Spatial Server
- Interoperability Connectors

- Data Files
- Data Files w/ Database Linkages
- Spatial Databases
- Web Services
- Proprietary GIS Databases

- Google Earth
Publishing into Google Earth
Google Earth as a publishing client

- Google Earth configured as a Bentley Geospatial Web Publishing client
- GWP “streams” data into Google Earth
  - Dynamic layer publishing
  - WMS server based
  - Two-way interaction
- ‘Dynamic’ publishing model
Other integration options
Exploring Sketchup integration, 3D Warehouse
Google SketchUp integration

- SketchUp is Google’s design tool
  - Simple yet powerful 3D design tool
  - Creates SKP files
  - MicroStation can reference/edit SKP files

- 3D Warehouse is a Google facility
  - To search, share and store 3D Models
  - In SKP and KML format
  - MicroStation can interact with the Google 3D Warehouse
Further developments

2D Mesh ups and beyond
Where will Bentley go from here?

- MicroStation V8i has geo-coordination
  - Platform becomes geospatial
  - Will provide accurate Google integration for all

- Integration with Google Maps
  - Create Mash ups
  - Use GWP or GWS as the Bentley data server
Shall we give it a try?
Questions?

question  afhøre (fx witnesses), afhøre (fx witnesses), betvivle (fx witnesses), diskussion (fx witnesses), drage i tvivl (fx I do not question his motives), emne (fx I do not question his motives), pinligt forhør (glds), sag (glds), spørge (vb), spørge (vb), spørgsmål (sb), spørgsmål (sb), tortur (sb), tvivl (fx there is some question about his qualifications), tvivl (fx there is some question about his qualifications), undersøge (fx there is some question about his qualifications)