3D TILES AND OGC’S 3D PORTRAYAL SERVICE STANDARD

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CESIUM BOF,
SIGGRAPH JULY 2016

Cesium BoF - Siggraph
Anaheim, USA, July 2016
ABOUT ME

• Computer scientist

• At Fraunhofer IGD since 2013

• Focus on:
  • Visualization of geoinformation
  • Data processing

• Editor of OGC’s 3D Portrayal service
Fraunhofer IGD (as of 2016)

180 Employees (FTE)

€15 Mio Budget

4 Locations
Darmstadt, Rostock, Graz and Singapore

12 R&D-Departments
for the applied research and the utilization of research results in the economy

The world's leading institute for applied research in Visual Computing

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MANY DATA PROVIDERS
NON INTEROPERABLE FORMATS

www

Request

Data Provider1

Data Provider2

Data Provider3

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NON INTEROPERABLE FORMATS

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OPEN GEOSPATIAL CONSORTIUM’S 3D PORTRAYAL SERVICE STANDARD

Goal: Interoperability!

Unified access to:
- Spatial queries
- Layers
- Metadata
- Styling
- And more..

Data Provider 1
Data Provider 2
Data Provider 3

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TECHNOLOGY STACK

Data

Serving

Visualization

Modded GeoRocket
- Open source
- Fast spatial queries
- Web Service architecture
- Supports
  - Amazon S3
  - HDFS
  - Etc.

CESIUM

3D Tiles

3D Portrayal Service

3D Portrayal Service

CESIUM

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Visualization

Geometry

3D Portrayal Service

3D Portrayal Service

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TECHNOLOGY STACK

**Data**
- 3D Tiles

**Serving**
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**Visualization**
- 3D Portrayal Service

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Data

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Serving

Visualization

Geometry Information Styling

3D Portrayal Service

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Demo

- Cutting of Tiles to requested BoundingBox
- Adding styling information to server side
- Add Demo to Sandcastle!
ROAD MAP

Demo

- Cutting of Tiles to requested BoundingBox
- Adding styling information to server side
- Add Demo to Sandcastle!

OGC

- 3D-Tiles as OGC community standard
THANK YOU FOR YOUR ATTENTION