

V3ct3D

Structuring project

École nationale des sciences géographiques

09 december 2016

Processing chain md => pdf

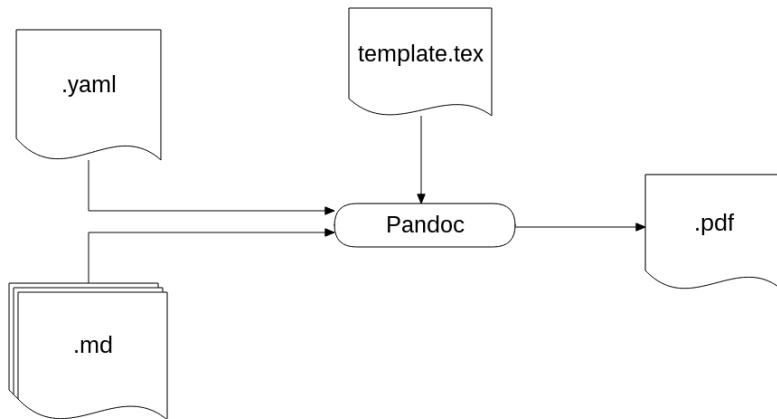


FIGURE: Processing chain

Use case diagramm

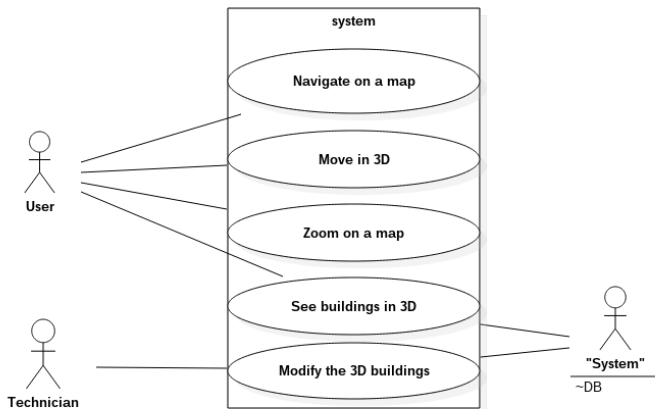


FIGURE: Use case diagram

Personal report - Hugo BALTZ

Computer skills

- ▶ Pandoc
- ▶ Markdown
- ▶ UML diagrams
- ▶ 3D-Viewer

Social skills

- ▶ Organization
- ▶ Relationships
- ▶ Communication
- ▶ Efficiency

Production chain : global

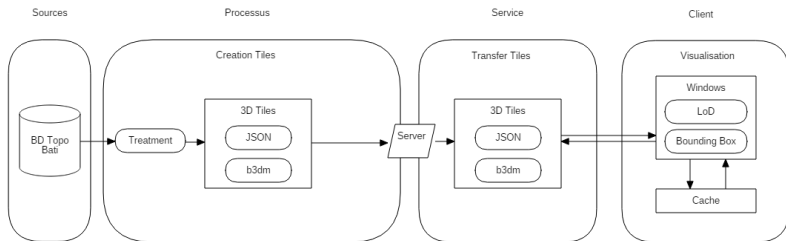


FIGURE: Production chain

Personal report - Julie MARCUZZI

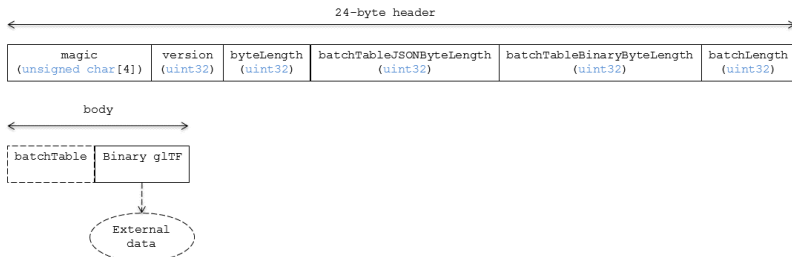
- ▶ Learn Markdown methods
- ▶ UML diagrams
- ▶ Communication
- ▶ Discover Cesium, file format & library

b3dm *Batched 3D Model*

OGC is considering a proposed work item for 3D Tiles as a Community

The Batched 3D Models is an initial tile format proposed by **Open Geospatial Consortium (OGC®)** for **buildings**, terrain, massive models, etc. and the transfer of **3DTiles**.

A tile is composed of two sections : a **header** immediately followed by a **body**, i.e. Binary glTF.



glTF *GL Transmission Format*

Used by 3DTiles

.gltf (JSON)

Node hierarchy, materials, cameras

.bin

Geometry: vertices and indices
Animation: key-frames
Skins: inverse-bind matrices

.glsl

Shaders

.png

.jpg

...

Textures

* Providing an efficient, extensible, interoperable format for the transmission and loading of 3D content. * Able to faithfully

Personal report

- ▶ Rediscovery of **Cesium** & Node js
- ▶ Discovery of streams (WMTS) and **file transfers** (gltf, b3dm ...) + library js like OpenLayers
- ▶ Knowledge about **Markdown**
- ▶ Curious and Analytical mind