OGC-Khronos ISG Sprint Demo Event:

Ecere corporation

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OGC

Focus during the sprint

- Server component (GNOSIS Map Server)
  - GNOSIS Data Store
    - San Diego CDB imported from CDB
  - 3D Tiles Generation on-the-fly
    - Implemented support for exporting textures to glTF
    - Implemented caching to address performance issue
    - On-going work developing support for multi-resolution
    - Used in ISG Sprint by *Steinbeis* and *InfoDao* clients

  - Tiles API approach also supported (vector, elevation and coverage tiles)
  - Individual models and textures available (referenced from points vector tiles)
- Client Component (GNOSIS Cartographer)
  - Used in 3DC&T Pilot to access variety of 3D Tiles contents via GeoVolumes API & Tiles API
  - Improvements in ISG Sprint, but only tested with local store as we focused on Server

Proposed API for updating 3D data

- GeoVolumes API
  - Bridge between OGC API (Common) and 3D Tiles / i3s Bounding Volume Hierarchy
- Uploading new 3D models
  - POST to **`{collectionId}/models`**
- Instantiating new model with point
  - POST to **`{collectionId}/items`** *(Features – Transactions)*

- *Coverages – Transactions* for elevation data
- Cached 3D Tiles invalidated and re-generated
- Possibility to generate Change Sets (delta updates)

Questions and Answers

Thank you.