Indoor Location

draft-thomson-geopriv-indoor-location-00

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Problem

- Express location in a way that has greater local significance
- Express location with greater accuracy within the local domain

Design Principles

- Establish a reference location (geo-reference)
  - Geodetic (WGS84) mandatory
  - Civic is optional
- Allow the information to be used outside of the local domain
  - Provide a transformation to WGS84
  - Recommend that a WGS84 version is also provided, first
- (Optionally) attach coordinates to an image
  - Large number of use cases rely on maps for creation, management and display of data
  - Allow for scaling and rotation to suit local needs
- Decouple indoor coordinate specification from definition of reference point

Reuse existing tools

- The reference point establishes an origin for a new coordinate reference system (CRS)
- GML definition for a custom CRS
  - Use valid GML
  - Allow for flexibility
  - Be precise
- Costs of using GML are incurred by the specification, not the implementation
  - Templates make this easy to use

What does it look like?

TODO

- Open comments:
  - Use of image CRS rather than engineering CRS goes too far
  - Cartesian-ness of coordinate transformation
- The document lacks a worked example
- Sample implementation is needed
- No ASCII-art