Topic 4

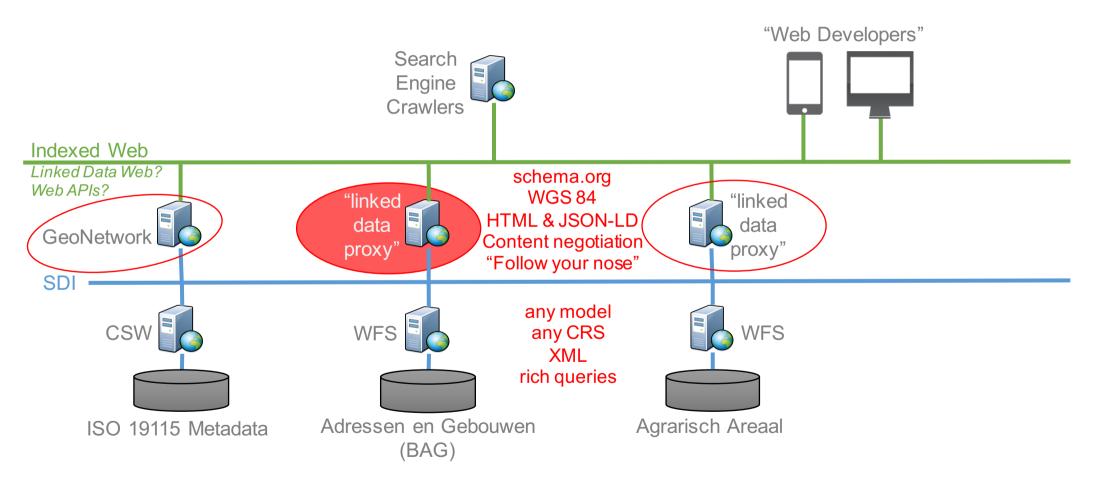
Spatial data on the web using the current SDI



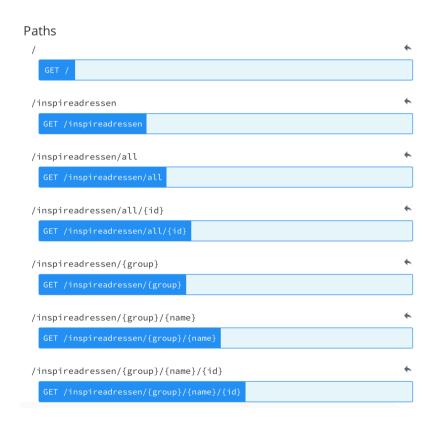




Data discovery, data access



Current design thoughts – URIs of the API



- Root is landing page for the dataset
- One landing page per feature type (layer)
- "all" for paged collections of references to all features of the type
- "woonplaats" and "postcode" as additional groupings (requires configuration of the proxy)
- The same address will appear as
 - .../all/{id}
 - .../woonplaats/Valkenswaard/{id}
 - .../postcode/5554TW/{id}

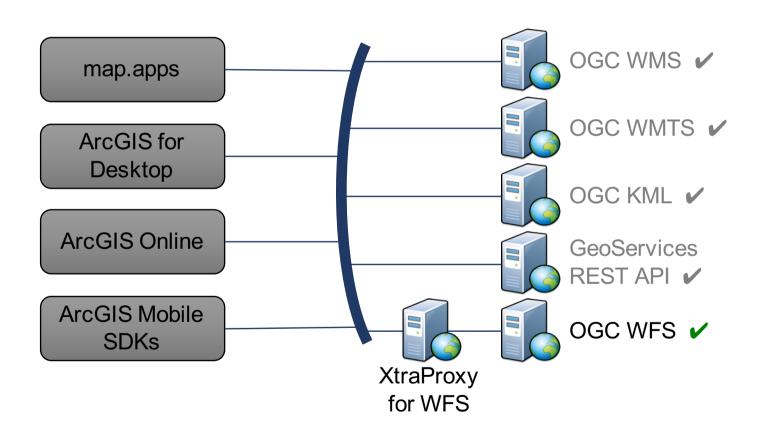
linked using sameAs

• ...

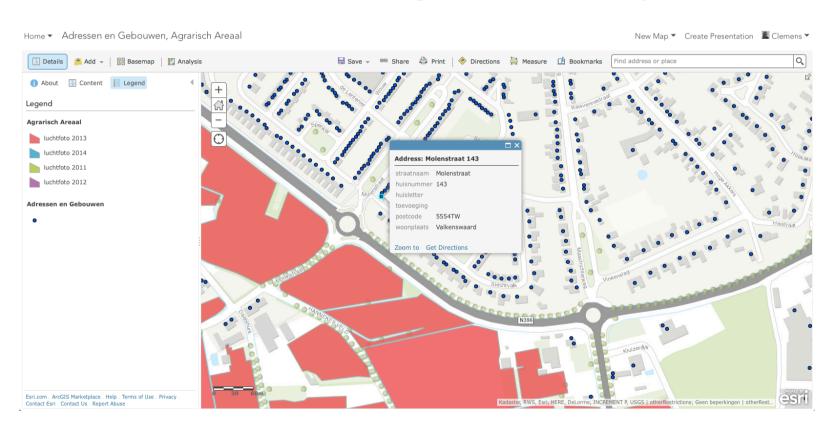
Current design thoughts – Mapping to schema.org

Path	Туре	Remarks
/	Dataset	From capabilities and metadata; links to feature types and metadata
/{featuretype}	Dataset, hydra:Collection (?)	From capabilities, schema, configuration and queries; links to groupings, first features, other pages; same as "/all&page=1"
/{featuretype}/all	Dataset, hydra:Collection (?)	From capabilities, schema, configuration and queries; links to groupings, n features, other pages
/{featuretype}/{grouping}	Dataset, hydra:Collection (?)	From capabilities, schema and configuration; links to n elements, other pages
/{featuretype}/{grouping}/{element}	Dataset, hydra:Collection (?)	From capabilities, schema, configuration and queries; links to groupings, n features, other pages
/{featuretype}/all/{id}	Place, CreativeWork (?), hydra:Resource (?)	From queries; links to same feature with other URIs, back links to datasets; later additional links

The "linked data proxy" will be based on core modules of our XtraProxy for WFS product, providing a GeoServices REST Feature Service as transparent proxy on top of a WFS



The two Web Feature Services in ArcGIS Online, accessed through XtraProxy



Current status

→ Demo

Research issues / For discussion

- Conflicts between design for indexing (SEO), Web APIs and Linked Data?
 - Potential approach: pure schema.org JSON-LD annotations in HTML and use of sitemaps for paged collections; more complex and complete representations in JSON-LD representation
 - In general: Focus of topic is indexing, so this will take priority if there is a conflict
- Search engines do not really seem to support Place and Dataset in their indexing based on the documentation (subject to verification)
- How to provide API information? Swagger, Hydra, ...?
- WFS capabilities and CSW metadata not always consistent
 - We will use the capabilities as the main source
- Not all WFS support paged access

• ...