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SELFIE – show and tell

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SELFIE – SHOW AND TELL

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2019-05-28



Géosciences pour une Terre durable

brgm

PREVIOUS WORK IN ELFIE

- Use Cases
 - Groundwater Information Network : groundwater monitoring
 - Surface – Ground water connexion
 - Hand-crafted JSON-LD files
 - Home brewed resolver on top of our URI pattern
- BLiV
 - ELFIE demos
 - [Surface-ground water networks interaction Demo](#)
 - [Ground water monitoring Demo](#)
- QGIS linked data
 - [QGIS GMLAS Toolbox](#)

SELFIE FROM DIFFERENT VIEWPOINT

Must have

● Semantic

- OGC UML -> ontologies +1: follow-up on ELFIE tests
- starting a schema.org group from ELFIEs ?
 - See what's done for example : [automotive \(gao\)](https://bioschemas.org/specifications/Taxon/automotive(gao)), <https://bioschemas.org/specifications/Taxon/geoscience/environmental> : picking terms from O&M, GSML, GWML, HY_Features

● URI

- Pattern (ex : no /info/ nor /data for data.geoscience.fr), just /id/ (and /def/ and /ncl/ and /api/)
- Resource model : (this feature linked to this one, this representation available) like NR-Can
- Resolving mechanism : Conneg revised (DXWG), Resolver technology (ours is home-cooked so far)
- Knowing what's available behind a URI (HTTP Option KO, Matrix available according to the ressource model, other ?): how to retrieve this and how will it be structured ?

SELFIE FROM DIFFERENT VIEWPOINT

Must have

- OGC APIs
 - WFS3
 - Geoserver / JSON-LD : on-going, [draft available here](#)
 - Semantic extension to the spec
 - ST API / JSON-LD : have a draft JSON-LD response to be proposed to the STApi SWG
 - URIs in OGC services
 - getFeature by ?URI? ;)
 - REST Apis where you filter by URI : lots of URL encode ...
- (future generation) Client side (hard to choose one)
 - QGIS GMLAS toolbox : enhance
 - BLiV : enhance
 - Jupyter notebook : Test QGIS GMLAS & BLiV spirit in

SELFIE FROM DIFFERENT VIEWPOINT

Must have

- Crawlers

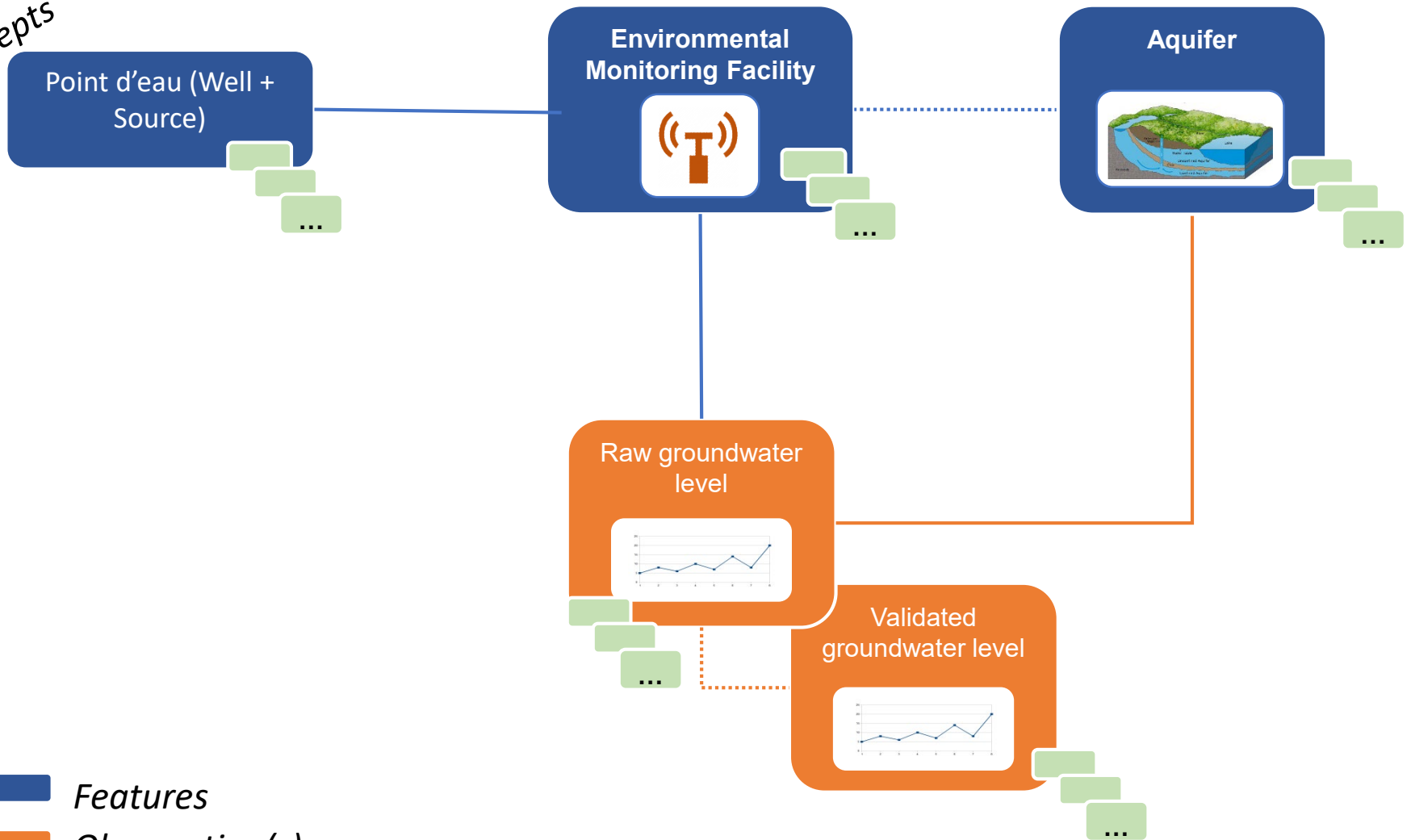
- Monitor, refine JSON-LD and associated vocabs to enhance indexing
- Is adding our ontologies enhancing indexing ?




- JSON-LD

- Metadata : JSON-LD : schema.org + DCAT on metadata
- Connect with search engines folks !

USE CASE 1: GROUNDWATER INFORMATION NETWORK

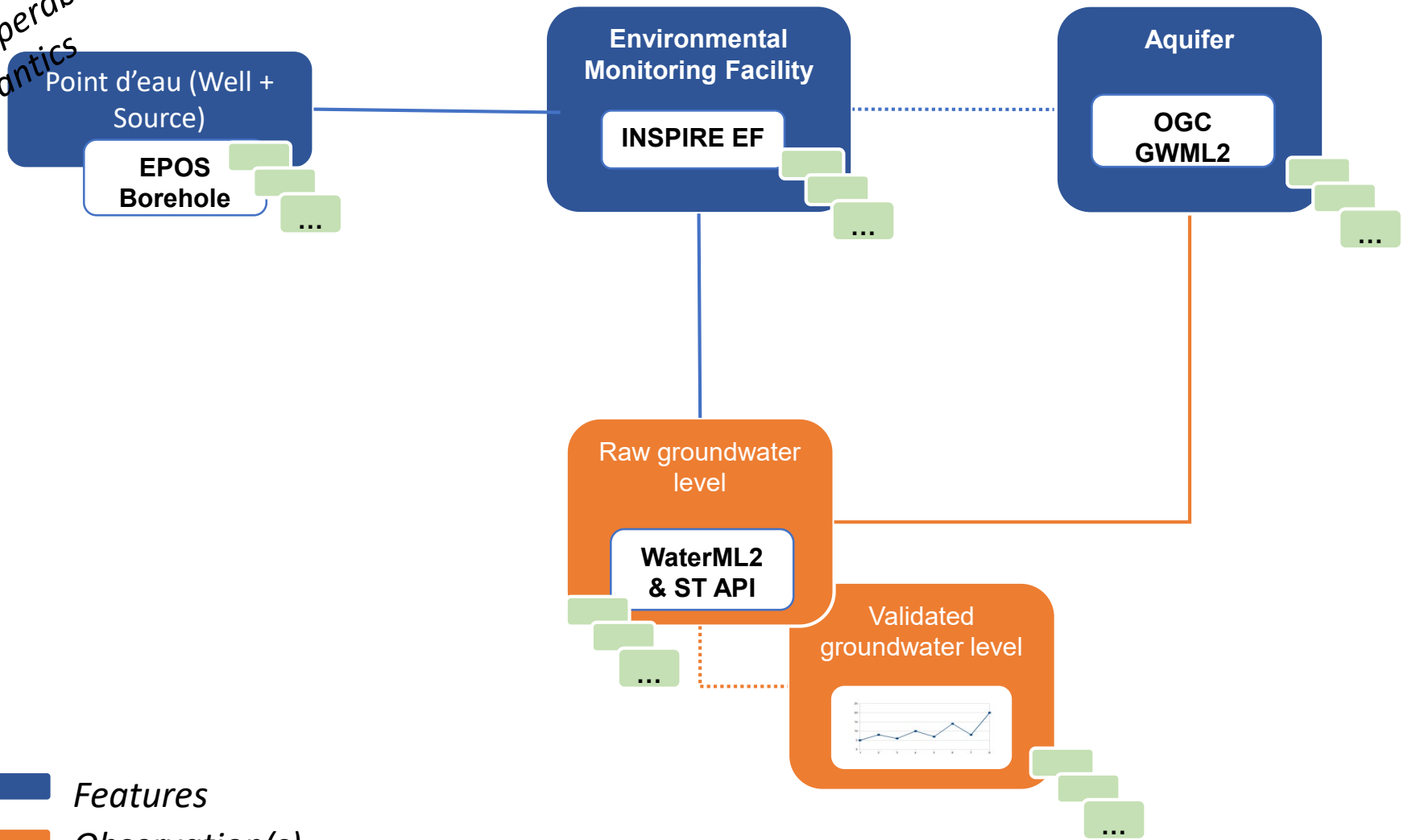
Concepts



-  *Features*
-  *Observation(s)*
-  *Register(s)*

USE CASE 1: GROUNDWATER INFORMATION NETWORK

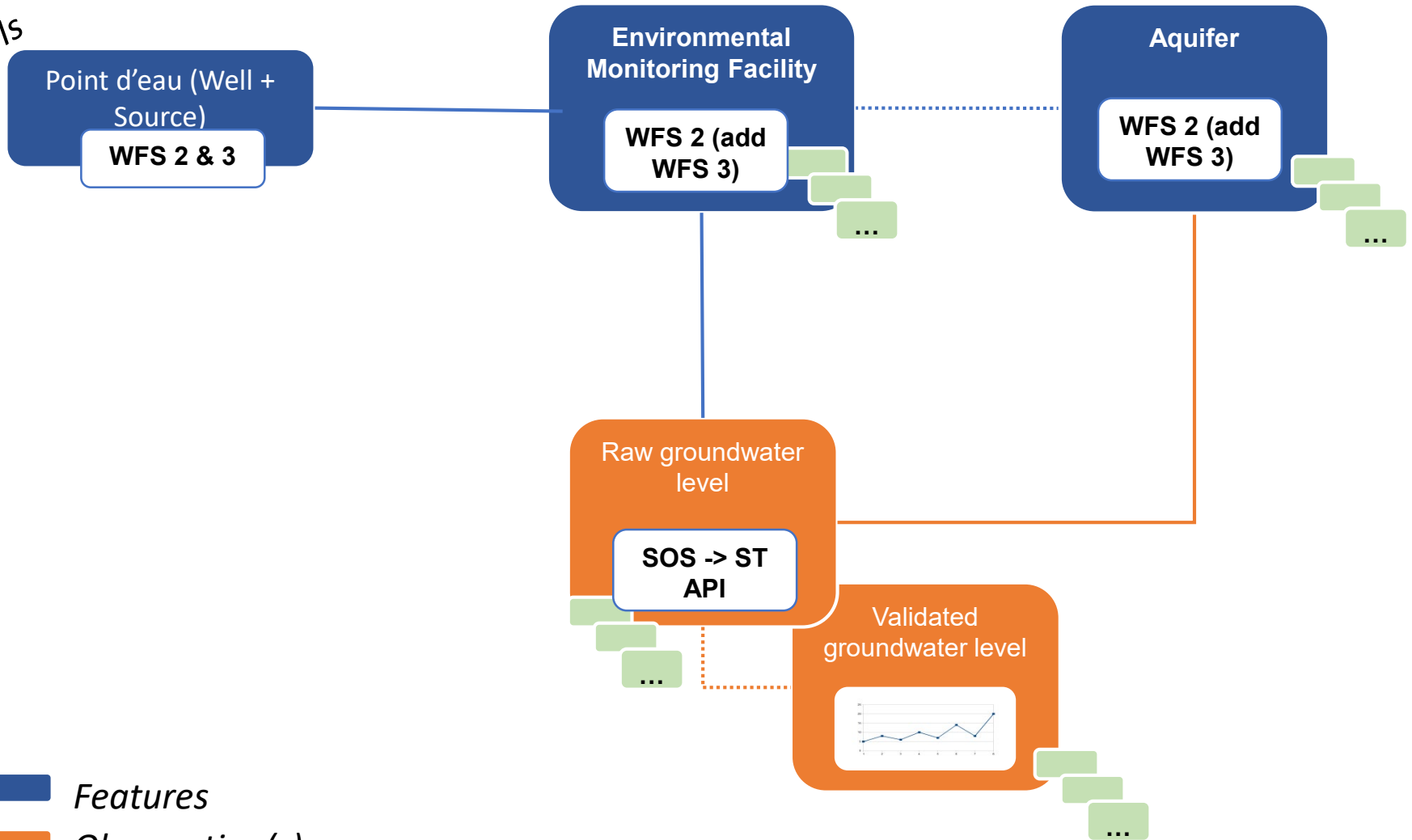
Interoperable
Semantics






- Features
- Observation(s)
- Register(s)

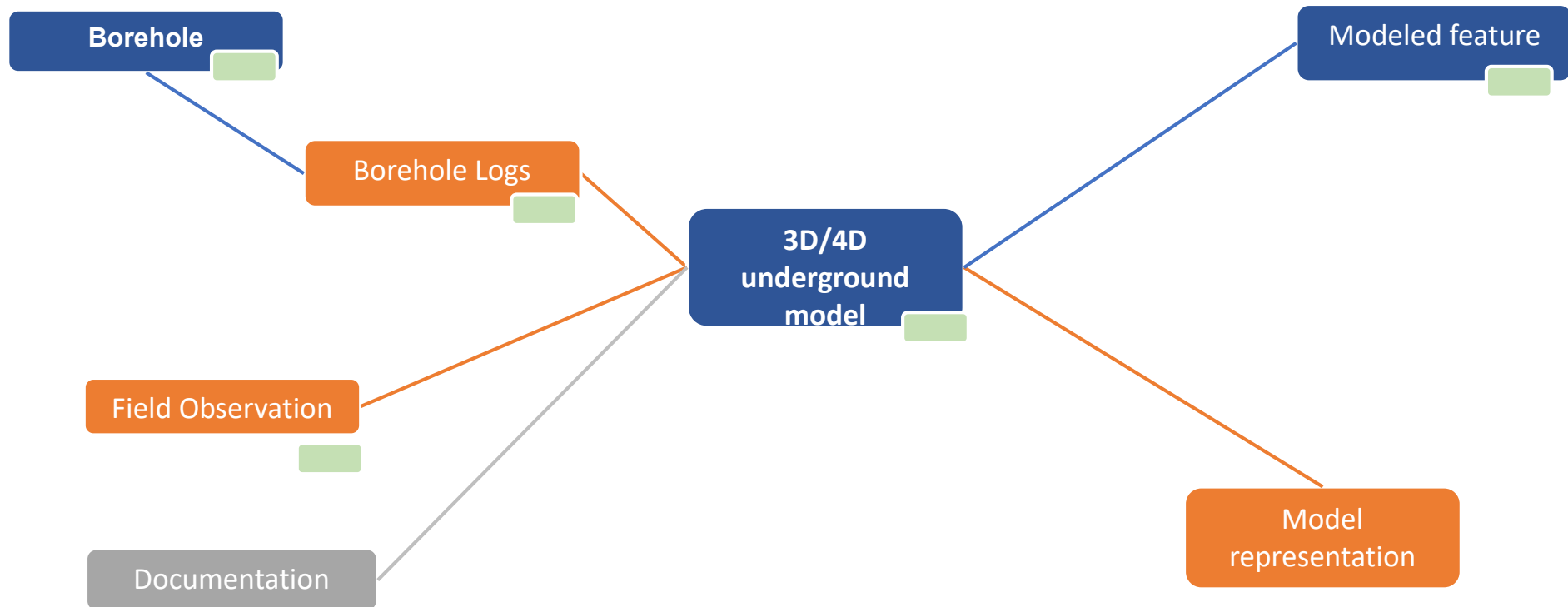
USE CASE 1: GROUNDWATER INFORMATION NETWORK

APIS



-  *Features*
-  *Observation(s)*
-  *Register(s)*

USE CASE 2: GEOLOGIC MODEL



 *Features*

 *Observation(s)*

 *Register(s)*

THANK YOU

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