GeoSciML compliant web services

The BCGS has a suite of services that make use of GeoSciML. These services include the BCGS Geoscience Application Database Environment (GODE), which is available as a web service, and the BCGS Geoscience Operational Database Environment (GODE), which is available as a web service. These services provide access to BCGS data in a standardized and interoperable format, making it easier for users to integrate BCGS data with other geoscience data from different sources.

EarthResourceML

EarthResourceML is a standard for exchanging digital geoscientific data, including geological and mineral resource data. It is based on the OGC (Open Geospatial Consortium) GeoSciML standard, which provides a framework for exchanging geoscientific data in a standardized and interoperable format. EarthResourceML extends GeoSciML by adding specific elements and attributes to represent geological and mineral resource data.

Data delivery on MapPlace 2 web services

The BCGS provides EarthResourceML-compliant web services through the MapPlace 2 web service, which delivers geoscientific data in a format that can be easily integrated with other geoscientific data services. These services are designed to provide a seamless and consistent way for users to access BCGS data, making it easier to use BCGS data in a variety of applications.

Implementation at the BCGS

For public viewing, we have mapped our data models to the GeoSciML and EarthResourceML standards. Users are able to access BCGS geofeatures through various web services, such as WMS, WCS, and WFS. These services provide access to BCGS data in a standardized and interoperable format, making it easier for users to integrate BCGS data with other geoscience data from different sources.

Discussion

Specifications and vocabularies

The implementation of GeoSciML and EarthResourceML standards requires the development of specific specifications and vocabularies to represent geological and mineral resource data. These specifications and vocabularies are needed to ensure that BCGS data can be integrated with other geoscience data from different sources.

Limits

Although GeoSciML is useful, the technical capability to develop sophisticated information services is limited by the standards required. There are many challenges in exchanging any data at feature or property level, and these challenges are exacerbated by the need to represent heterogeneous data.

Summary

The British Columbia Geological Survey is adopting the international geoscience standard GeoSciML and its companion standard EarthResourceML to deliver our bedrock geology and mineral occurrence data. These standards are available to the public and will be used to exchange and share geoscientific data with other geoscience agencies. The British Columbia Geological Survey will continue to deliver these standards to MapPlace 2, the Survey's geospatial web service.

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References