

Sensor Data Management based upon the OGC Sensor Things API

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The management of sensor data is one of the base services for all kind of applications related to acquiring, storing, retrieving and analysing data. Because of this broad scope of applications, it is crucial that the service programming interface is easy to use, yet powerful and flexible, technically state of the art and standardized. With the Sensor Things API, the Open Geospatial Consortium (OGC) created such a standard and the rapid acceptance by the sensor community shows that it meets their needs.

OGC, as one of the major international standards developing organization, plays an important role in the description of sensors with spatial reference. The SensorThings API is an OGC standard applying long-term established concepts in sensor data description, while using modern technologies for efficient interfaces. The interface is REST based, the data payload is encoded in JSON and the data access protocol is based on OData.

In the talk I will introduce the SensorThings API standard and demonstrate the FROST-Server, which is a standard compliant implementation and available as open source software. I will also touch on the work in progress on using the SensorThings API as INSPIRE-compatible service.