

E-Rium: a Web Portal for Publishing & Accessing Observation Data from Geographically Distributed Sources

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E-Rium (or **Environment InformatoRIUM**) is a web portal that acts as a middleman between data providers and data consumers. In particular, E-Rium facilitates data providers, who have already published their data in term of Sensor Observation Service (SOS), to easily add their SOS services into the service catalog of E-Rium. It also enables data consumers, who need to make a meaningful use of data, to simply access data from a set of desirable services in the catalog and then to perform a basic data analysis by visualizing it via map, graph and table. Beside SOS, E-Rium has been designed to work with different kinds of services. It is currently applicable for our defined Standard Data Service (SDS). SDS specification and implementation is created to help data providers, who solely store data in databases with respect to their proprietary data models, to be able to publish their data (with less hassle) based on a standard data model and in term of web services.

In this talk, we will do a step-by-step demonstration on how E-Rium works starting from (i) deploying SDS. Here, the mapping between two data models, database and standard, along with the configuration are performed; (ii) registering services into the catalog. Here, two kinds of services, SOS and SDS, are registered; (iii) searching for desirable services in the catalog. Here, appropriate conditions are used to perform the service search; (iv) accessing data from services. Similarly, appropriate conditions are applied to gather data from both SOS and SDS in a onestop service manner; and finally (v) visualizing data via map, graph and table in a user-centric manner.