The EarthCube Council of Data Facilities (CDF) formed the Registry Working Group to review alignment of existing approaches to research facility description and discovery. The involved parties include the EarthCube CDF, Coalition for Publishing Data in the Earth and Space Sciences (COPDESS) and the Registry of Research Data Repositories (re3data).

The group is addressing:

- Formalizing a set of repository parameters of interest to CDF members.
- Reviewing the alignment of those parameters with re3data and COPDESS with the goal of schema extension. The plan is to leverage the re3data schema by means of community profile.
- Developing strategies for a more structured common approach for CDF members to express/expose this information.
- Developing a means to encode this schema in a machine readable format and bring forward a possible implementation for publishing and subscribing to this data.
- Demonstrating the use of schema.org for publishing and accessing this data and explore gaps in this approach and recommend solutions.
- Working with the re3data editorial board and governance on approaches to leverage re3data as a reference implementation for collecting and exposing this data.

By providing a common pattern for facilities to expose links to existing work already completed in service and resource description documents (SWAGGER, OGC, THREDDS, etc.), a broader audience can be achieved. Furthermore, facility description through approaches like the re3data schema registry enhance exposure.

Additionally, a lower barrier to entry, and a minimal maintenance burden are achieved through use of existing web-based architecture and best practices.

These approaches are done by the working group with the reference EarthCube architecture in mind. They are viewed as contributions along the path to addressing resource discovery and assessment goals of the architecture. The poster will provide an update on status and direction of the working group and provide an opportunity for community engagement.