



Fostering resource integration: EarthCube Resource Registry

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What is the EarthCube Resource Registry?

A database of cyberinfrastructure resources with documentation focused on enabling EarthCube users and developers find, understand, get, and use those resources to increase research productivity

Resource focus: applications, reusable code components, ontologies, vocabularies, specifications (extending the GeoCODES dataset registry)

Why?

- Improve discovery of usable resources
- Enable seamless connection from discovery environment to working with the data or software.

Some usage scenarios:

- Identification of resources
- Systematic documentation of resource characteristics
- Identify gaps or duplicate resources
- Find tools, APIs, or data that can work with a given resource
- Support maturity assessment

The Registry should:

- Help researchers connect multiple data types and resources to address a specific research problem;
- Enable developers to learn about components they can reuse to increase development efficiency
- Enable discovery of components with a particular functionality, that can be used in an existing research workflow
- Provide a platform for resource producers to inform the community about products.
- Answer the question: "What has EC produced that is of use to my science?"

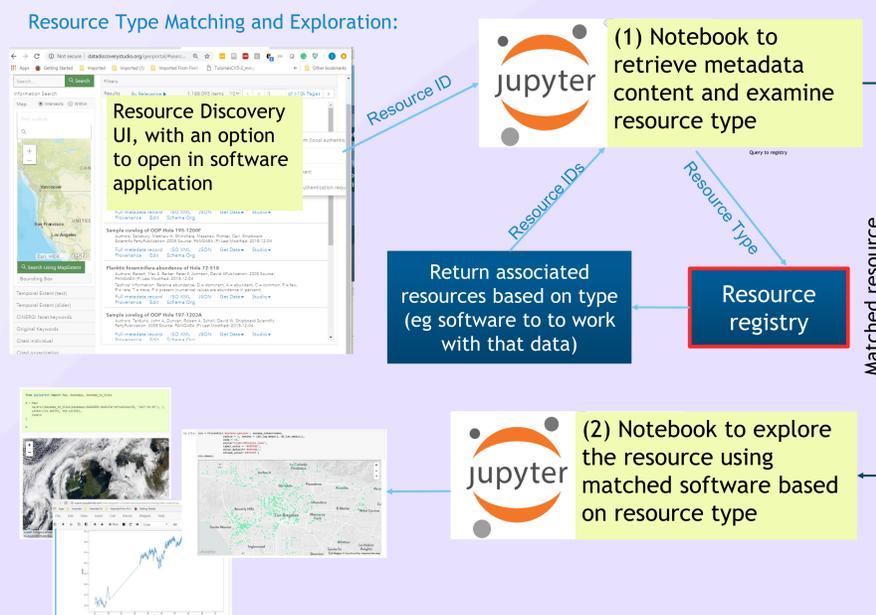
Links

- ✓ [SuAVE viewer](#) for EarthCube resources
- ✓ [Resource Registration Form](#) for submitting resources:
 - [Viewer for adding information](#)
 - [Edit view for modifying the form](#)
- ✓ [Resource Registry SPARQL endpoint](#) (username/password sent by email)
- ✓ [Documentation on mapping resource descriptions](#) to the registry ontology and JSON-LD serialization.
- ✓ [Controlled vocabularies Google Sheet](#) (one tab for each vocabulary)
- ✓ [EarthCube Resource Registry Presentation](#) - <https://drive.google.com/file/d/1dwiUtiAurFstWRSyI74UBoUsaJYIVvc>



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Link data and applications



Resource Types	Bundled Object Catalog Dataset Document Information Model	Interchange Format Interface Platform Repository Service	Software Specification UseCase
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Resource Registration Web Form

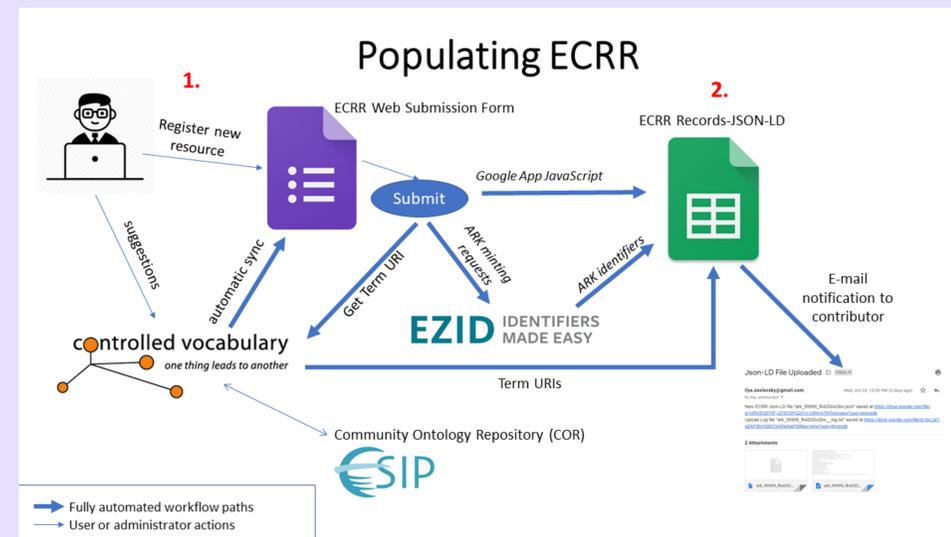
An [online form](#) generated using Google Forms to submit resource descriptions.

- a series of views
 - First views are for fields that apply to all resources.
 - User then identifies the kind of resource they are registering,
 - Subsequent views are specific to that resource.

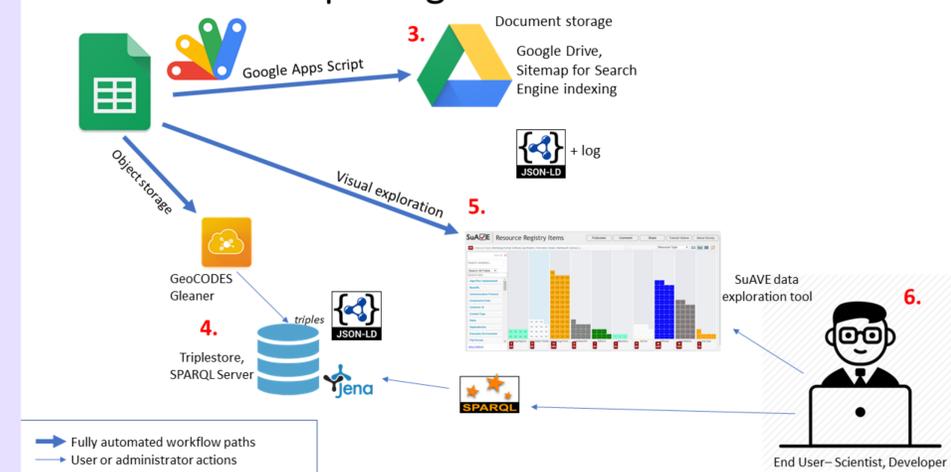
Required fields are indicated with a red asterisk (*)
A submitted resource is assigned an ARK URI identifier, Documentation is stored in the EarthCube registry, made available for browsing and discovery via the SuAVE viewer, and accessible via API.

Example controlled pick list

Workflow



Exploring ECRR Content



Browse and Search registry content: SuAVE Viewer

Example search for resources related to SPARQL