

Use a semantic registry for data-types?

<http://registry.it.csiro.au/data-type>

- REST API (Linked Data)
- RDF storage layer, content negotiation for output (JSON, XML, CSV, RDF)
- Fine-grained versioning
- Explicit status flag

Some datatyping initiatives

- schemas for (mostly) tabular data

Simon Cox
CSIRO Land and Water
Melbourne

<http://people.csiro.au/Simon-Cox>



Older

Earth Science Markup Language - [ESML](#)(2004)

XML, [SourceForge](#), no longer active



Ecological Metadata Language - EML (2003)



XML, used in [DataONE](#) - generated by [Morpho](#), stored in [Metacat](#)

W3C - CSV on the Web

https://www.w3.org/2013/csvw/wiki/Main_Page



Metadata about CSV files

- includes data typing for values in columns
- datatypes based on XML Schema
 - can have (URL) identifiers
 - additional JSON & XML datatypes
 - include support for international formats for dates & numbers

To support transformation of CSV to JSON, RDF

<http://ruby-rdf.github.io/presentations/Tabular-Data-on-the-Web/assets/player/KeynoteDHTMLPlayer.html#10>

Open Knowledge - data packages

<http://data.okfn.org/doc/data-package>

To create a Data Package, place a file named **datapackage.json** in the top-level directory of your set of data files.

Leverages **JSON Table Schema**

<https://docs.google.com/presentation/d/18ojy57pQPaDZKjuyQlhHyYMLF-qrEYdUDwquDDNW458>



What is the distinction between 'datatype' and
'dataset metadata'?