Provenance System Overview

The Provenance Team:

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Provenance: time travel in DataONE

Goal: Enable and show reproducible science via
Tracking data inputs and outputs of analyses
Storing and document software
Showing data derivation history for objects

Provenance at-a-glance

New first-class objects in DataONE

Figures

Software

Extended Data Package with Provenance information

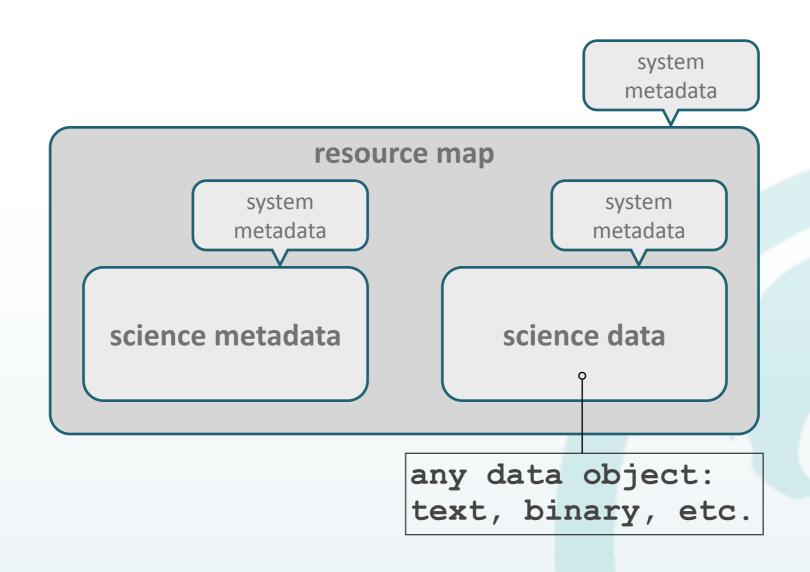
New Tools

Web user interface for browsing provenance

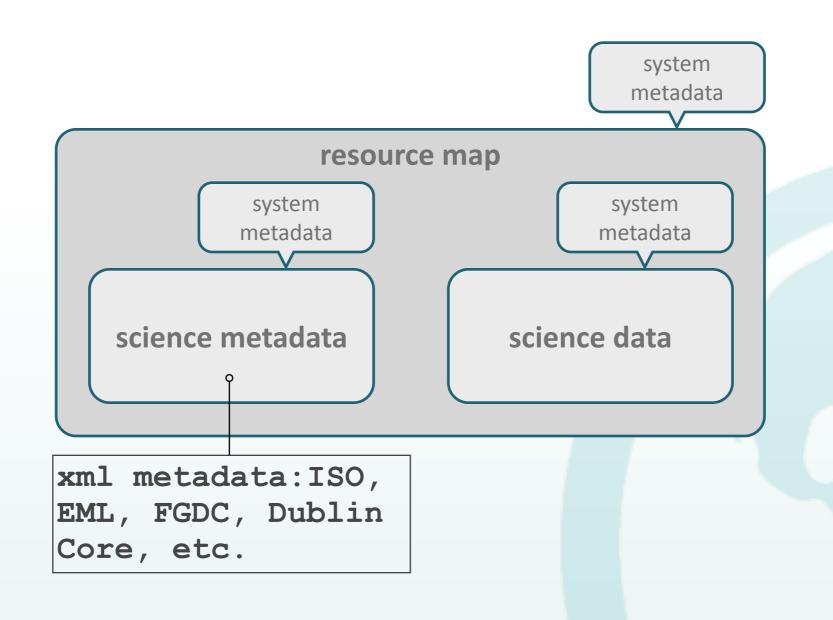
Matlab tool for generating provenance

{R tool for generating provenance}

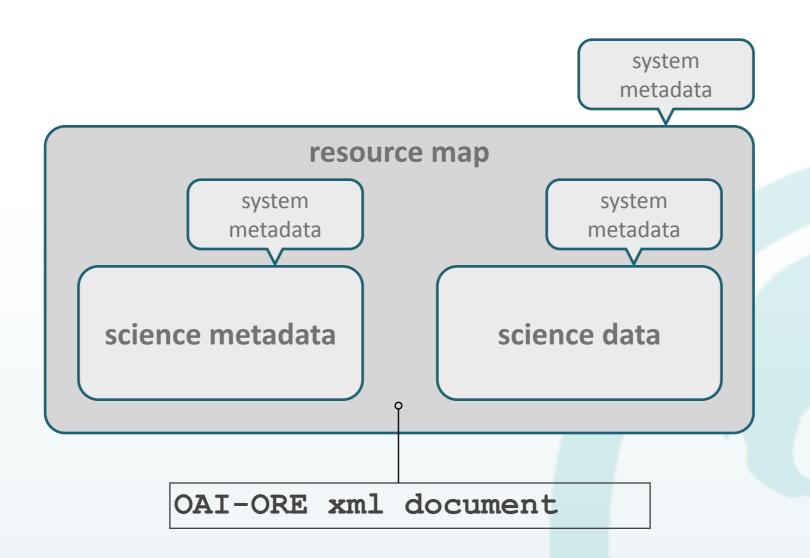
Data Package: Data



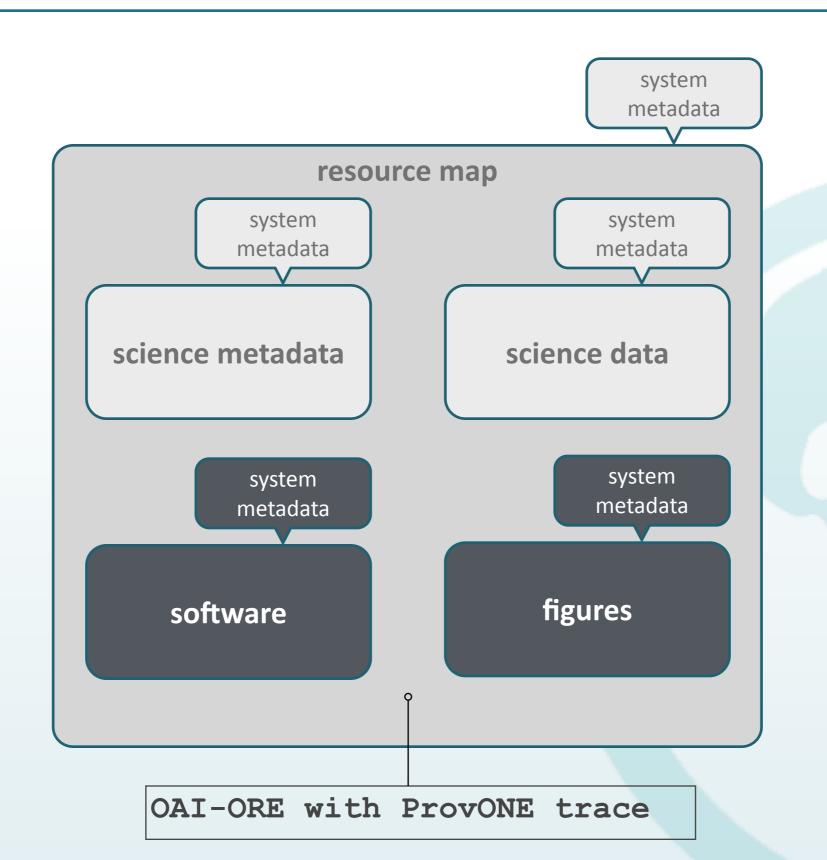
Data Package: Metadata



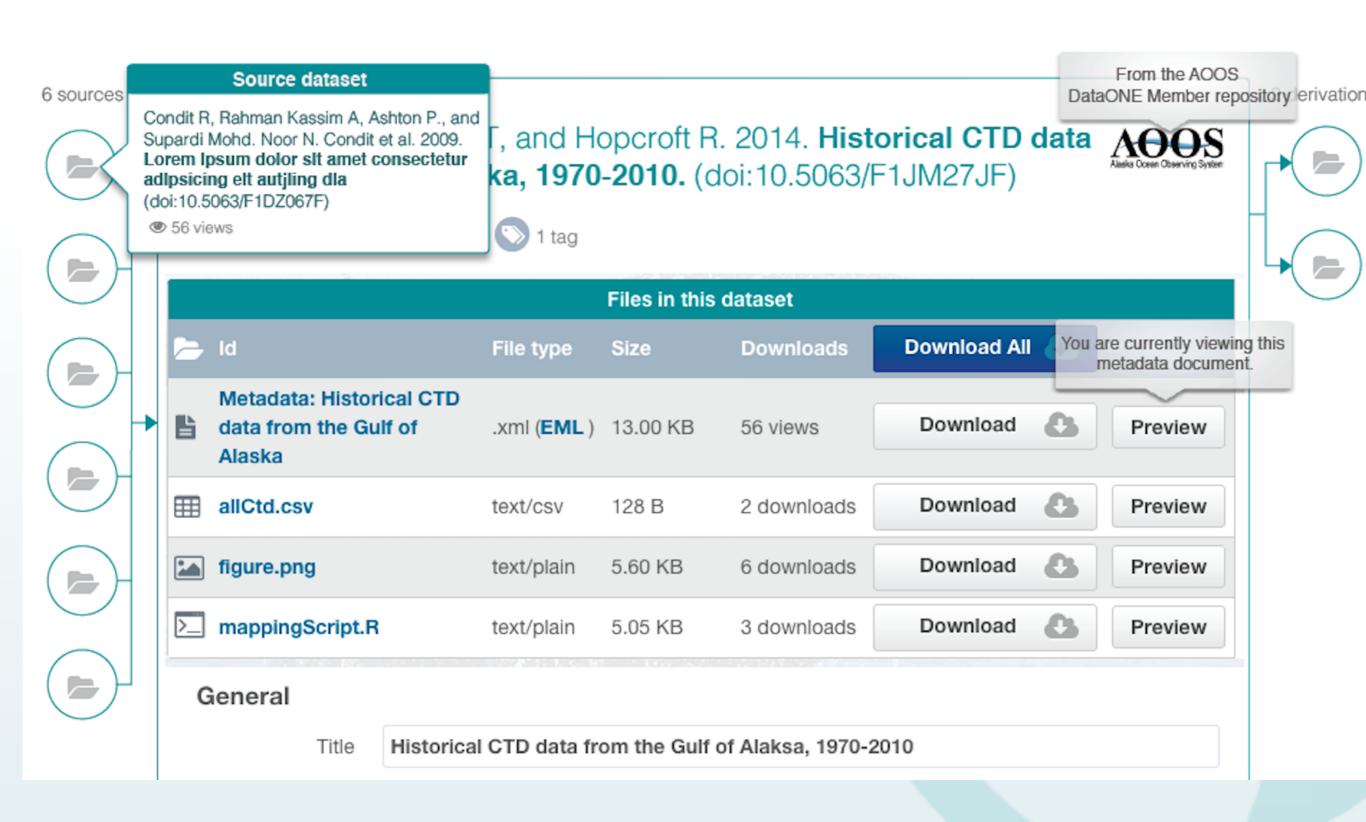
Data Package: Description



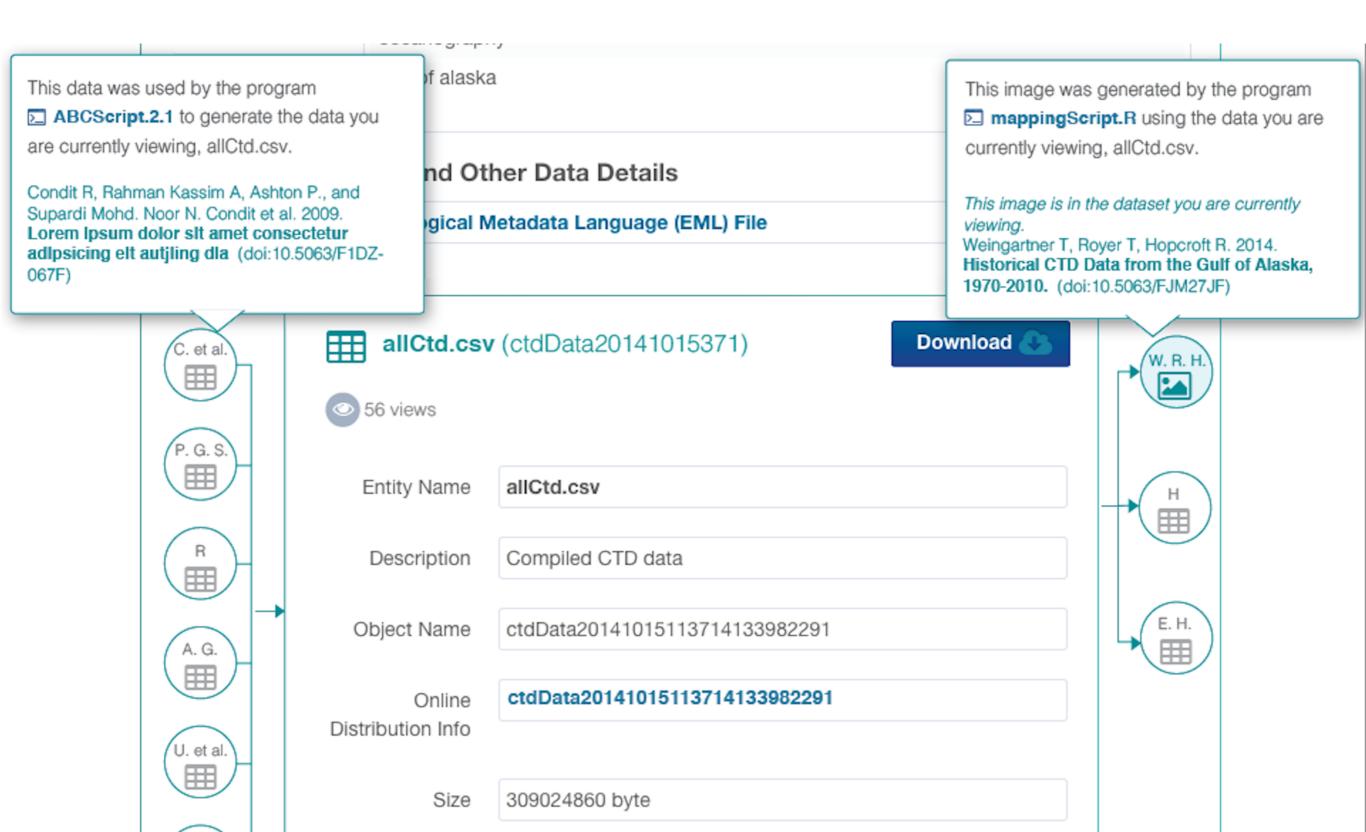
New objects, ProvONE trace



Provenance: Package



Provenance: Data



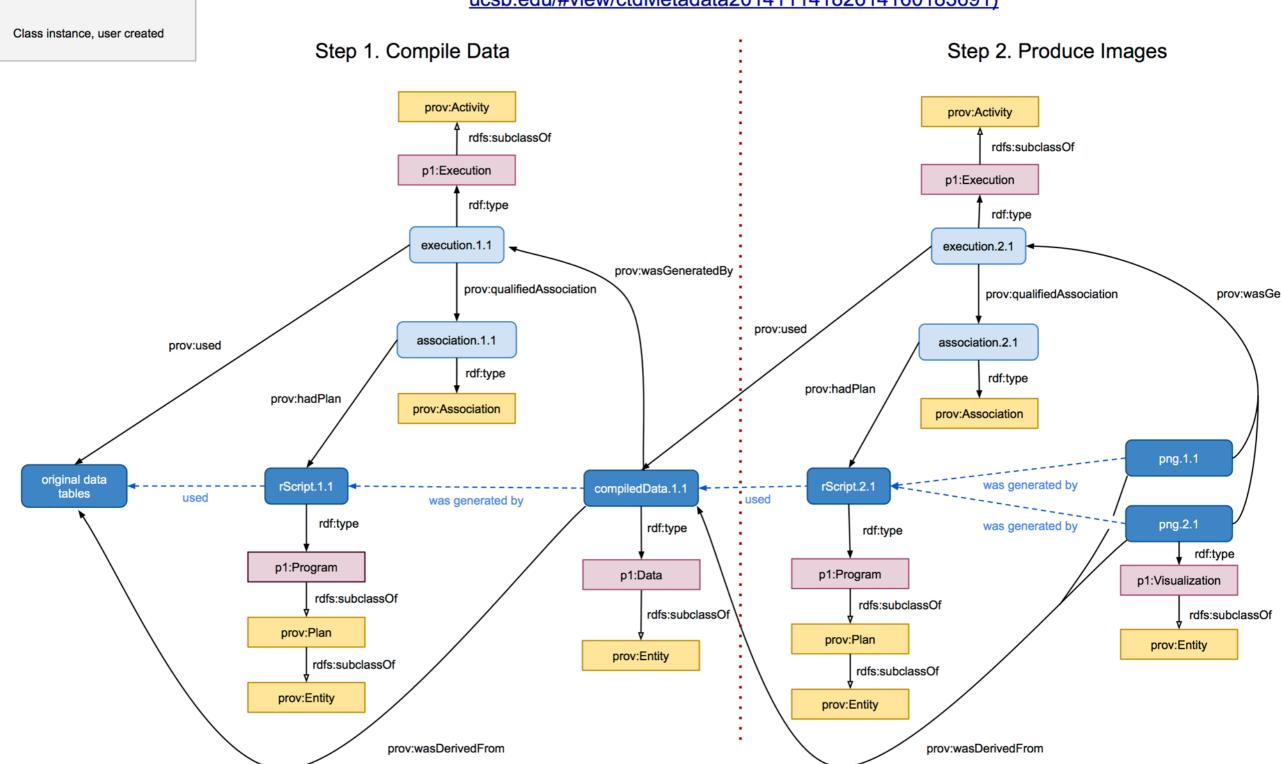
Provenance: Figures

Accuracy Assessment This data was used by the program mappingScript.R to generate the image Coverage you are currently viewing, figure.png. This data is in the dataset you are currently viewing. Method Weingartner T, Royer T, Hopcroft R. 2014. Historical CTD Data from the Gulf of Alaska, 1970-2010. (doi:10.5063/FJM27JF) **figure.png** (ctdlmage20141015371) Download W. R. H. 56 views Entity Name figure.png Description plot

PROV-O Class ProvONE Class Class instance, library created Class instance, user created

Example instance graph using the ProvONE model

Based on Couture J. Historical CTD data from the Gulf of Alaksa, 1970-2010 (https://dev.nceas.ucsb.edu/#view/ctdMetadata20141114182614160183691)



Provenance status (as of Jan 1, 2015)

Design documentation	Completed
Model	Drafted, getting feedback
Indexing and Search	In progress
Web display	In progress
Matlab toolbox	Not started