On the Faceting and Linking of PROV for Earth Science Data Systems [1]

Submitted by hook on Wed, 2015-12-23 18:04 **Event:** <u>Winter Meeting 2016</u> [2] **Abstract:**

Faceted search has yielded powerful capabilities for discovery of information by applying multiple filters to explore information. This is often more effective when the information is decomposed into faceted components that can be sliced and diced during faceted navigation. We apply this approach to the representation of PROV for Earth Science (PROV-ES) to facilitate more atomic units of provenance for discovery. Traditional bundles of PROV are then decomposed to enable finer-grain discovery of provenance. Linkages across provenance components can then be explored across seemingly disparate bundles. We will show how mappings into this provenance approach can be used to explore more data life-cycle relationships from observation to data to findings. We will also show examples of how this approach can be used to improve the discovery, access, and transparency of NASA datasets and the science data systems that were used to capture, manage, and produce the provenance information.

Collaboration Area: <u>Cloud Computing</u> [3]

Data Preservation [4] Discovery [5] Documentation [6] Preservation and Stewardship [7] Semantic Web [8] Author(s):

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