

SciENCv-OpenRIF Integration

Enhancing SciENCv through semantic research profile integration



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What is SciENcv?

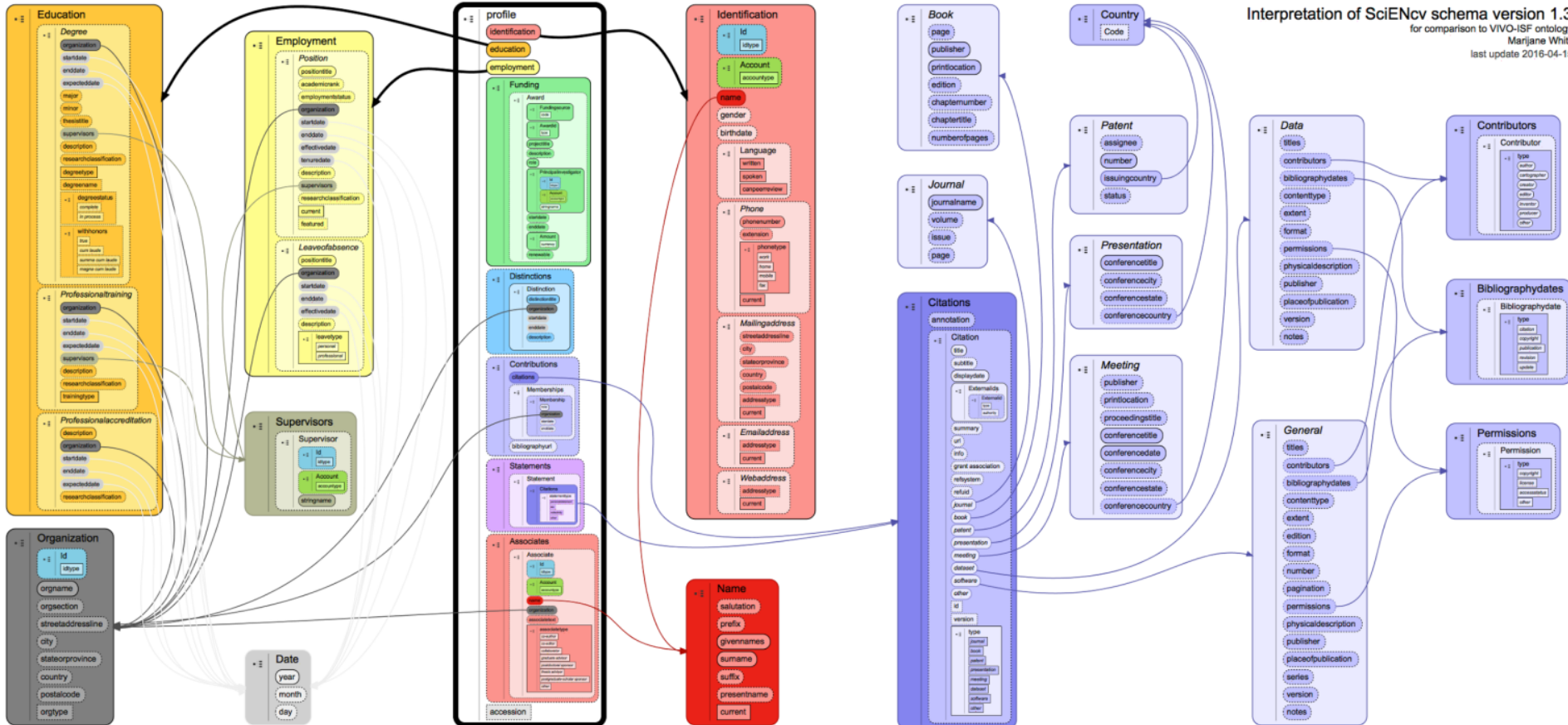
- ▶ US Federal “Science Experts Network Curriculum Vitae”
- ▶ Online system for simplifying the creation of researcher professional profiles (aka biosketches) that are required when applying for federal funding
- ▶ Researcher curated and controlled
 - ▶ Researchers own the data
 - ▶ Researchers control what data are public
 - ▶ Researchers edit and maintain the information
 - ▶ Includes expertise, employment, education, and professional accomplishments
- ▶ Leverages data from myNCBI and eRA Commons
- ▶ Includes links to ORCID
- ▶ Biosketch structure is defined by an XSD Schema; profiles can be downloaded in XML format

What are the goals of SciENCv?

- ▶ Eliminate the need to repeatedly enter biosketch information
- ▶ Reduce administrative burden associated with federal grant submission and reporting requirements
- ▶ Create a repository of researcher profile data
- ▶ Allow researchers to describe their varied scientific contributions in their own language

What are the goals of the integration?

- ▶ Create and evaluate interoperability between the SciENCv schema and the VIVO-ISF ontology
- ▶ Facilitate generation and consumption of standard, compliant data
- ▶ Expand the role of SciENCv in exchanging data within the research landscape
- ▶ Broaden the definition of researcher impact by facilitating the emergence of new standards relating to the contribution and attribution of researchers to software, datasets, and a variety of other scholarly products

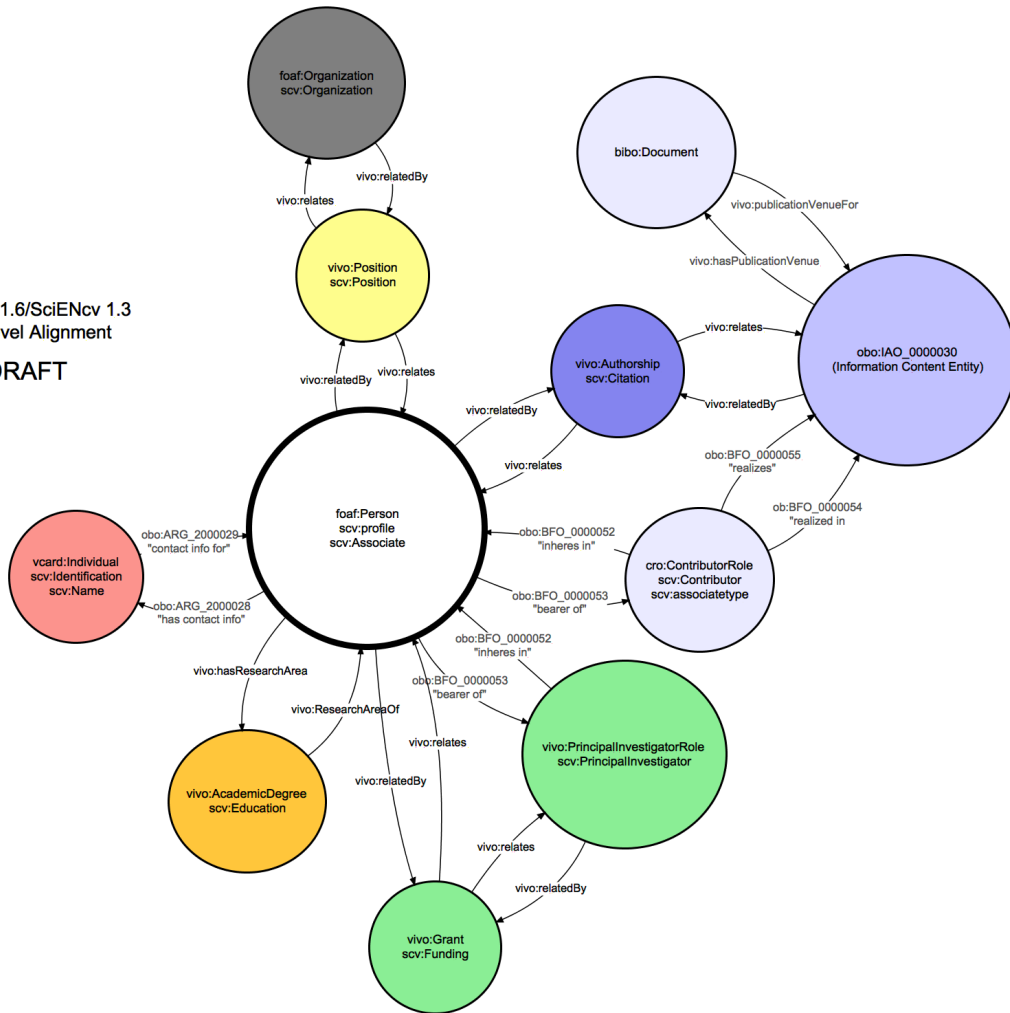


How is the integration being accomplished?

- ▶ Align the SciENCv XML Schema to the VIVO-ISF ontology and transform SciENCv data
 - ▶ XSLT file (OHSU)
 - ▶ XSLT has been used to map around a half-dozen data models to older versions of VIVO-ISF for harvesting, see <https://wiki.duraspace.org/display/VIVO/XSLT+Mapping> for details
 - ▶ In progress
 - ▶ Programmatic mapping to CTSASearch database schema (University of Iowa)
 - ▶ Currently capable of ingesting SciENCv data from an XML dump
- ▶ Use CTSASearch to validate the data model alignment
 - ▶ CTSASearch ingests VIVO-ISF, ORCiD, PubMedCentral, Medline, and more, leveraging curated institutional data
 - ▶ Iowa's premium ORCiD membership allows for monthly data refreshes
 - ▶ On-Demand pull for updates or new SciENCv users
- ▶ Evaluate exchanged profiles with end users
 - ▶ Compiling competency questions
- ▶ Push VIVO-ISF data into SciENCv

VIVO-ISF 1.6/SciENcv 1.3
High-Level Alignment

DRAFT



What are the benefits of the integration?

SciENcv-OpenRIF interoperability will:

- ▶ Support improved research profiling analytics across a much wider set of data sources
- ▶ Improve researchers' ability to describe their contributions in a more effective and specific manner