



United States
Environmental Protection
Agency

Moving at the Speed of Government: VIVO Implementation at EPA's Office of Research and Development

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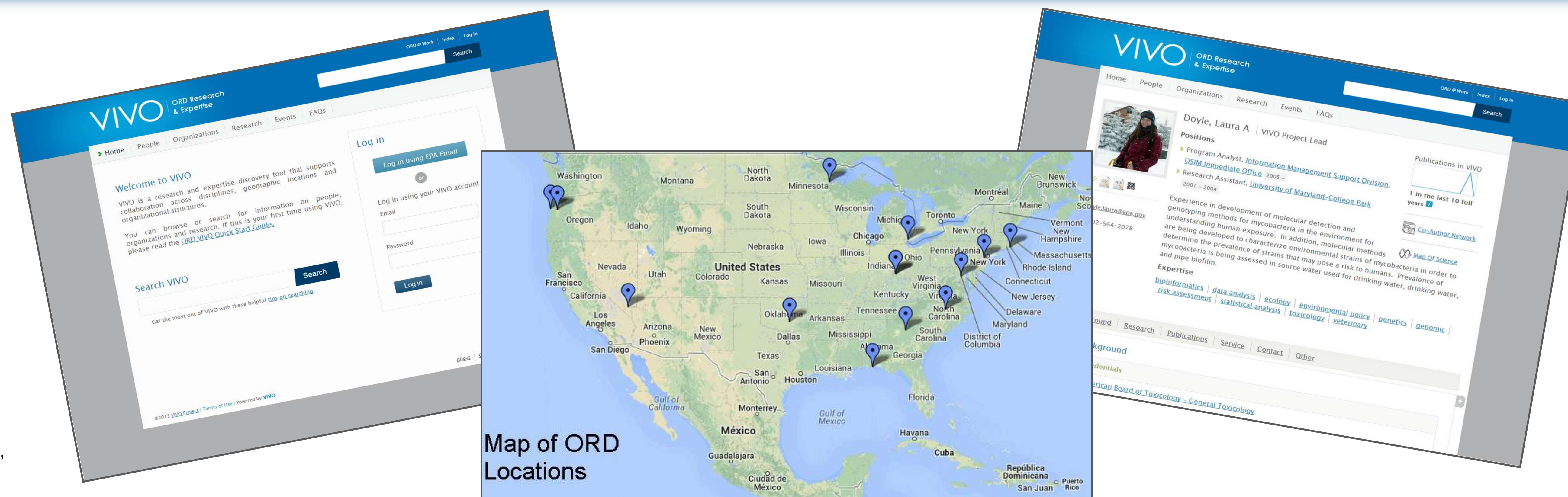
Introduction

With more than 1,900 federal staff across 13 locations, EPA's Office of Research and Development (ORD) relies on geographically dispersed teams to identify, understand, and solve current and future environmental problems.

We needed a searchable database cataloging the skills and expertise of ORD federal staff to promote integrated, transdisciplinary research across disciplines, geographic locations, and organizational structure.

We chose VIVO which gives us:

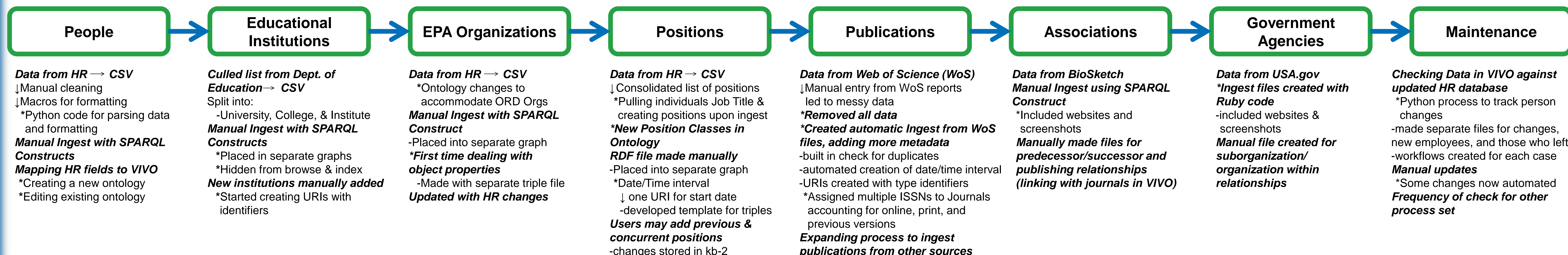
- an expertise location system to help with workforce planning and scientific collaboration
- an option to connect with other systems and pull in pre-existing data
- a place for 'elusive' early career data (past employment, training, etc.) and more readily available current data



EPA Theme

- Customized color scheme:
 - 'header-background' images changed to light blue
 - 'search-field-and-button' and 'search-interior-pages' images changed to dark blue
 - background changed to dark grey (in 'wilma.css'; line 56)
- Added "ORD Research & Expertise" to 'VIVO-logo.png'
- Added a link to the ORD intranet home page at the top right (in 'identity.ftl'; line 38)
- Updated home page text:
 - introductory text on home page (in 'page-home.ftl'; line 46)
 - link to search tips below search (in 'page-home.ftl'; line 63)
- Added FAQs menu page (via Site Admin)
- Implemented Lightweight Directory Access Protocol (LDAP) authentication for user login

Data Ingest

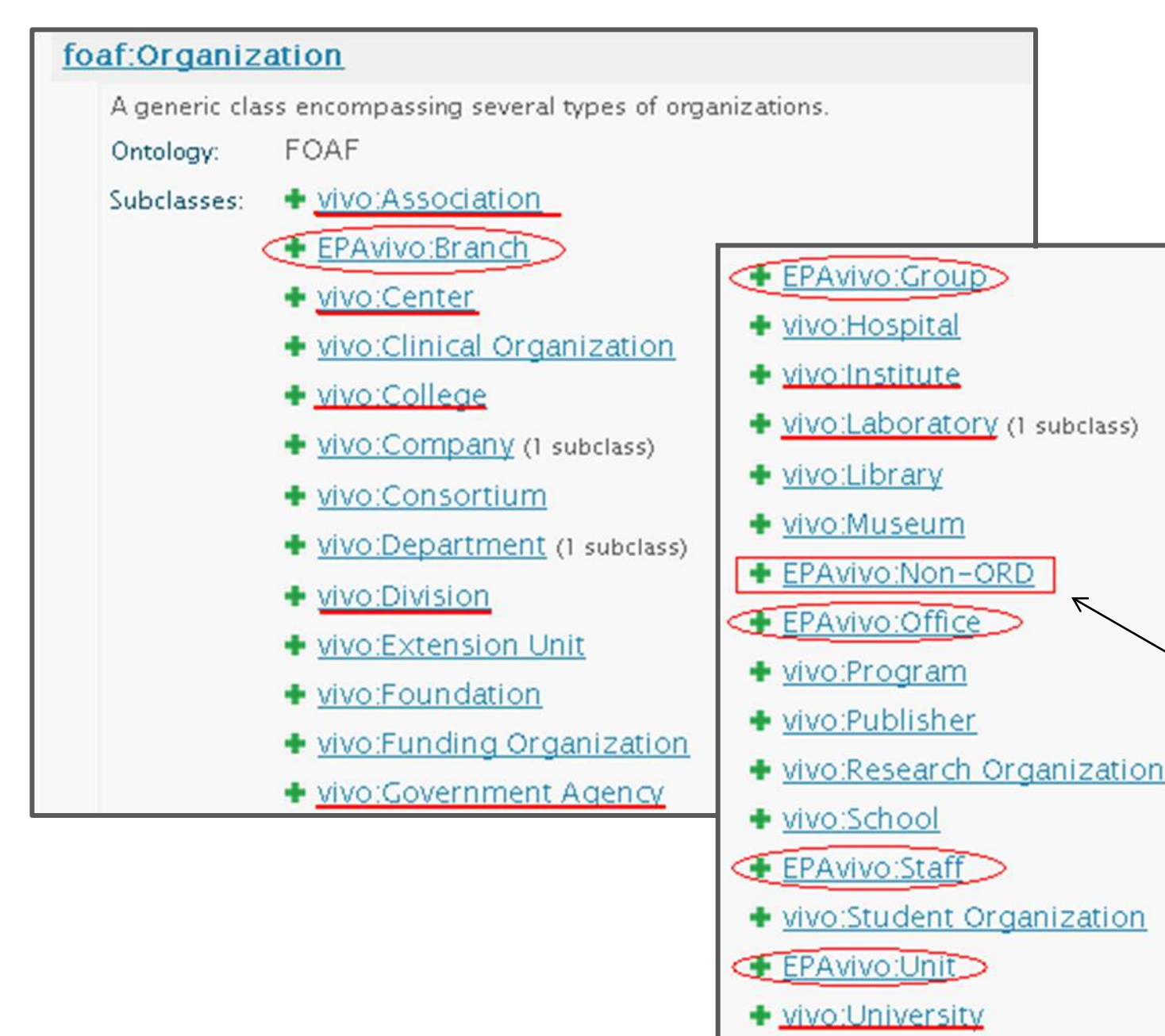


EPA Ontology

The core ontology sets were descriptive and flexible enough to handle most of the data but there were areas where customization was required. This led to the creation of EPAvivo.

We added data properties for Human Resources (HR), identification, and curation purposes. Examples include: HR ID; Organization ID; Position Curated; and Web of Science ID field, which we use as an alternate identifier for journal articles.

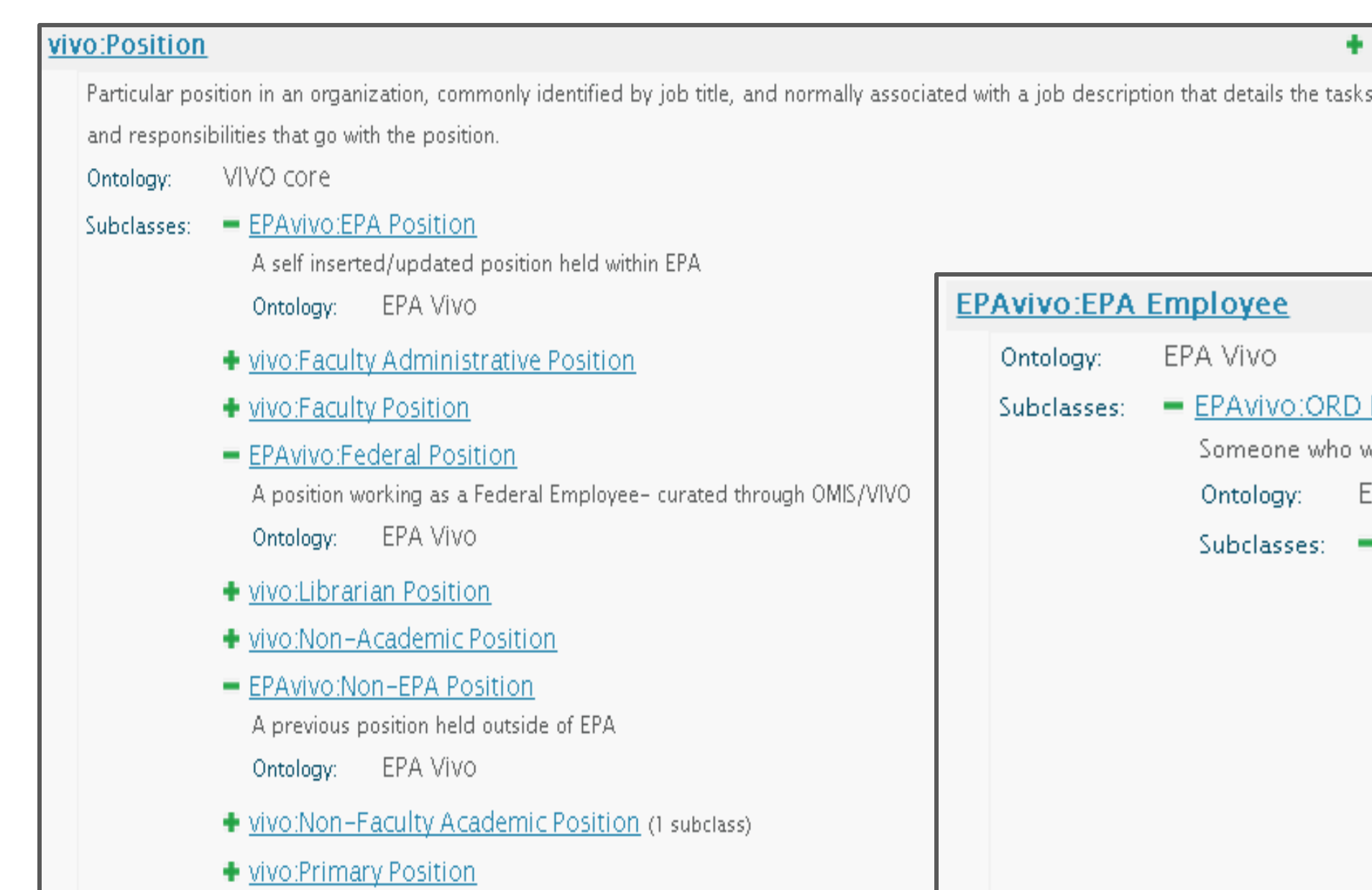
We also customized visibility and editing levels of properties holding HR data. VIVO is not the definitive source for this information, but its presence allows for identification of individuals as well as the aggregation of expertise based on this data.



EPA Organizations created to supplement existing ontologies

Relevant organizations used from the VIVO ontology

Non-ORD class created for use when a person creates a Non-EPA position on their page



EPA Employee: encompasses employees throughout the agency – allows for future expansion of VIVO outside of ORD

Federal Employee: new classes can be added at this level in the future to accommodate non-federal employees working at EPA (e.g. new class: Contractor)

ORD Employee: subclasses correlate with appointment types used in HR system - these are the classes to which individuals are assigned