

Data Standards United (DSU): The CEDS Ontology Project

Ontology Introduction, I of II

An ontology serves to define entities and the connections between them. In education, we categorize Organizations into types such as a K12 School, a Postsecondary Institution, or an Early Learning Program. We can also describe the relationship that exists between a Person and that Organization such as Enrollment, Assignment, or Employment.

The CEDS Ontology builds on the CEDS Integrated Data Store model by not only demonstrating relationships exist between elements through Primary and Foreign Key relationships, but by providing definitions and meaning about those relationships through Object Properties.

Ontology Introduction, II of II

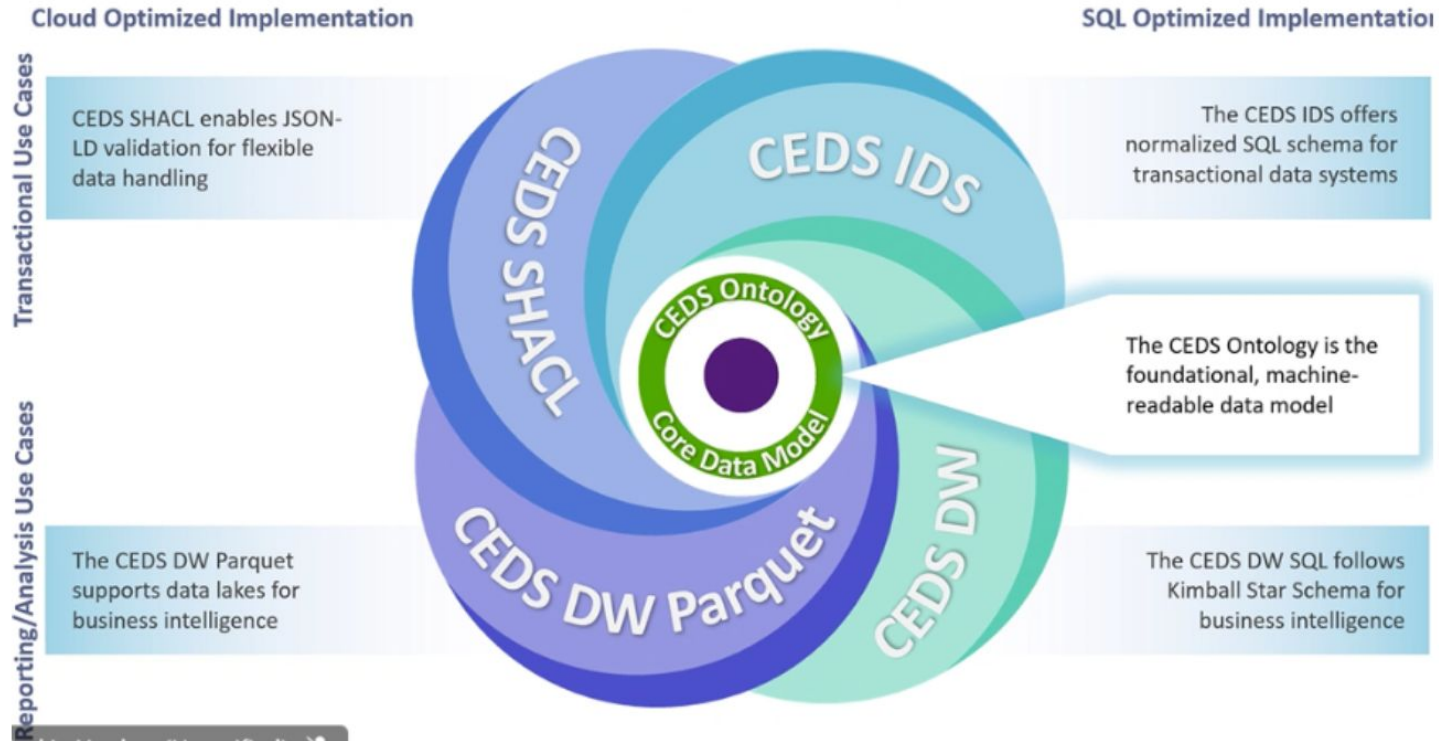
The purpose of the Ontology is to describe CEDS at the most granular level possible. From this machine-readable understanding, additional resources can be created such as JSON, JSON-LD, XML, and a host of other machine-readable standards.

It will also become easier to link CEDS to other ontologies and standards using equivalencies (an indication when one standard's element is equivalent to another standard's element) making translation a much more intuitive machine-readable process. We can now indicate where CEDS ends and another standard begins, enabling the adoption of multiple standards in the same ecosystem.

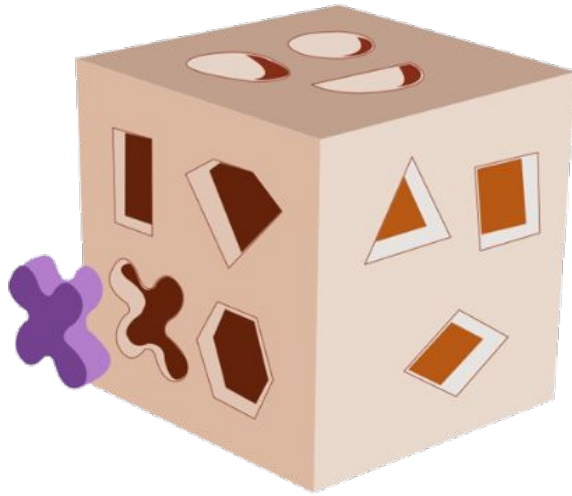
Foundational Components of an Ontology



CEDS Ontology

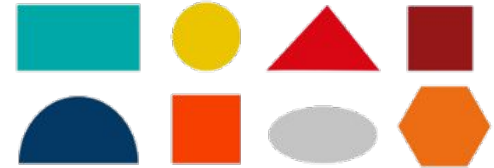


**THIS DATA
IS VALIDATED**

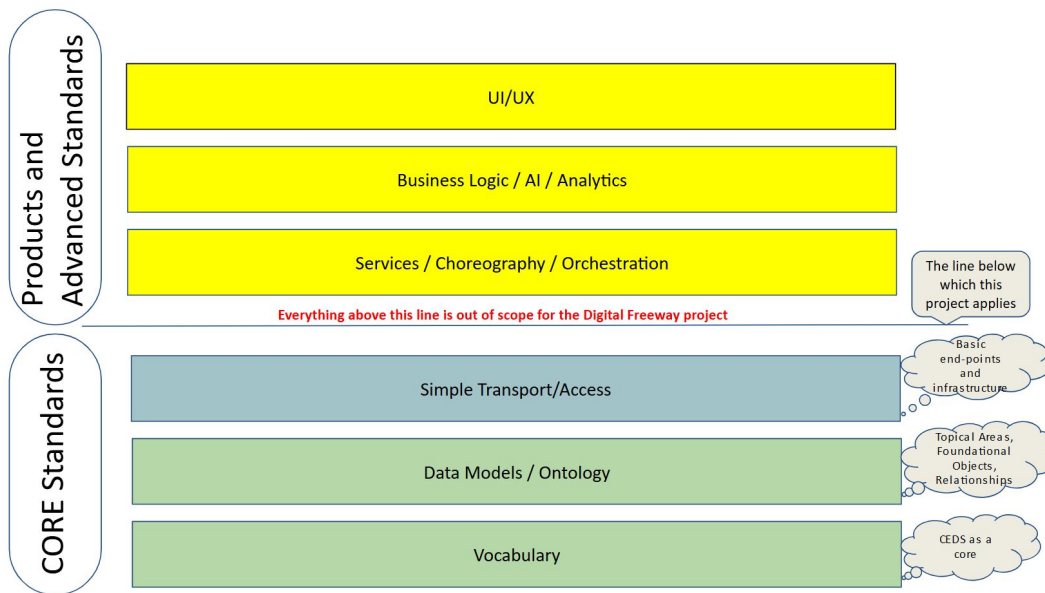


**The Shapes
Constraint
Language
(SHACL)**

validates the data



Where Does the Transport Standards/Infrastructure Live



Key:

Yellow = Out of Scope

Blue = Phase II

Green = Phase I

NOTE: Core standards need to be designed to support products and advanced standards