Technical Advisory Board

JSON Task Force

JavaScript Object Notation (JSON)

- In use by most RESTful web services
- Can be marshaled and un-marshaled directly with JavaScript
- All major programming languages provide JSON conversion to internal data structures and back.
- JSON Schema standard supported by third party tools (e.g., XMLSpy®)
- JSON and JSON-LD used for defining data standards (HR Open, Credential Transparency Description Language, Schema.org)
- JSON output provided as an option in Ed-Exchange

JSON Task Force

- Formed at the Spring Summit 2017
- Met weekly for a year
- Partnered with A4L in October 2017
- Created a mission statement:
  - The mission of the JSON task force, a partnership between A4L and PESC, is to provide design rules for XML and JSON that promote expression of comparable semantics, simplicity of translation, and ease of implementation. The goal is to provide the education community with a choice of exchange formats that are aligned with technology trends, but provide continuing support for existing community standards.

Phased Approach

- Develop XML Schema aware JSON and a set of reference tools supporting the JSON creation (e.g., JAXB, MOXy)
- Offer a schema aware translation service to translate between JSON and XML (EdExchange)
- Develop standards using JSON Schema that will have comparable structure to XML Schema aware JSON
- Determine the value of JSON-LD for unifying education standards
- Provide web service definition (Open API) for accessing different objects in PESC Standards using JSON

Task Force Accomplishments

- Developed design rules for XML to reduce differences between JSON and XML
- Developed rules for XML Schema aware JSON that make JSON consistent for programmers (reduce type and existence checking)
- Published Schema Aware JSON specification that included the rules above with A4L
- Created JSON Schema for College Transcript using XML subset schema and XMLSpy® XML to JSON Schema conversion

Next Steps

- Complete creation of PESC JSON Schema standards.
- Work with Credential Engine to determine how to effectively use JSON-LD with PESC Standards:
  - GeoCode
  - Privacy
  - Common Credentials
  - ePortfolio
- Develop pull model for information in PESC format (Web Service Definition)

Agenda

- Demonstration of College Transcript JSON Schema and issues remaining
- JSON-LD Discussion: Making data discoverable
- Full exchanges vs. partial exchanges

Questions