CEDS & the SIF Specification
Objective
Agenda

CEDS Ontology

A4L & CEDS Presently

A4L & CEDS Future

To do:
- Wake up
- Make coffee
- Drink coffee
- Make more coffee
What is an Ontology

Ontology – A set of concepts and categories in a subject area or domain that shows their properties and the relations between them. – Oxford Languages

W3C Web Ontology Language – a Semantic Web language designed to represent rich and complex knowledge about things, groups of things, and relations between things. – W3C
What is an Ontology

Subject  Predicate  Object
What is an Ontology

Duane has Email Address
What is an Ontology

First Name - Duane
Last or Surname - Brown

Work - Duane.Brown@AEMCorp.com
What is an Ontology

Subject - Person
Predicate - Has Name
Object - Name

Predicate - Has Email Address
Object - Email Address

Name
First Name - Duane
Last or Surname - Brown

Email Address
Work - Duane.Brown@AEMCorp.com
Agenda

CEDS Ontology
A4L & CEDS Presently
A4L & CEDS Future

To do:
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Element Development (Transportation, Listed Status, Student Permissions)
Global ID Reference
Privacy Obligations Document
Agenda

- CEDS Ontology
- A4L & CEDS Presently
- A4L & CEDS Future

To do:
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Discussion – CEDS over the SIF Infrastructure
CEDS over the SIF Infrastructure

**INFRASTRUCTURE**

The ‘HOW’

Defines the transport and messaging functionality over the “wire” where payloads are securely exchanged.

- In use globally
- Completely independent of the data model, can carry any data model
- Incorporates marketplace utilized REST technology
- Middleware Broker is optional, not required
- Increased scalability
CEDS over the SIF Infrastructure

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Defines the transport and messaging functionality over the “wire” where payloads are securely exchanged.

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CEDS over the SIF Infrastructure

- Ontology can be represented in JSON, JSON-LD, and XML
- The value of JSON-LD (URL could be the SIF Endpoint based off SIF API namespaces)
- What would need to take place to move CEDS over SIF Infrastructure
  - Create the endpoints using the CEDS ontology
  - Common set of objects based off business use cases
  - Required SIF metadata
    - RefId (CPSI CEDS OSC ticket)
      - ReferenceIdentifier = RefId (synonym or CEDS technical name)
    - Other required SIF metadata?
  - Extension of the CEDS ontology released by SIF (or) work through the OSC to codify what would be an extension into CEDS
- Opportunity for new market areas?
  - CTE
  - Early Childhood
  - Workforce
1. **Service Name (Object Name):** For any Service/Object, its name MUST be defined and unique within the current scope.
   1. Example JSON: `{"StudentPersonal":{}}`

2. **Resource Name (ID):** Where a Service/Object can be found MUST be specified. We suggest using version one of the universally unique identifiers (UUID) scheme:
   1. Example JSON: `{"StudentPersonal":{"RefId":"e199fd0e-cbf5-11ec-9d64-0242ac120002"}}`
   2. Example Path: `/StudentPersonals/e199fd0e-cbf5-11ec-9d64-0242ac120002`

3. **Collections:** The standardized infrastructure can move actual data with each service call:
   1. Example JSON: `{"StudentPersonals":{"StudentPersonal":{}}}`
   2. Example Path: `/StudentPersonals`

4. **Binary Data:** The standardized infrastructure is designed to move text but can include a picture, but it should be Base64 Encoded and included in a data element along with the rest of the document and its metadata:
   1. Encoded Example: `VGhpcyBpcyBub3QgYSBwaWN0dXJlIQ==`

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**Flexibility**

What *might* that look like?
Privacy
The result of common expectations!

Here is the data we will give you and details on how we want it treated

Here is how we have treated the data and details on how we can prove it to you
## Scalability

Twenty-five years of lessons learned.

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<th>Records /Second</th>
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Note that these load test results were achieved using Cedar Labs technology. Real-world results may vary, depending on the capabilities of the technology implemented in your use case.
Questions

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CEDS Open Source Community Lead