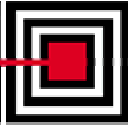




PESC Technical Advisory Board

Current Activities



Technical Advisory Board

- The Technical Advisory Board is responsible for updating and maintaining all technical specifications and for providing guidance on technical and architectural issues related to electronic standards and higher education.
- The TAB maintains the “PESC Guidelines for XML Architecture and Data Modeling”.
- Meetings are held on most Thursdays at 3PM ET.
- Any PESC member is invited to participate.

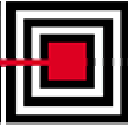


TAB Team

- Co-chairs:
 - Gideon Sanstra (SunGard Higher Education)
 - Michael Morris (ACT, Inc.)
- Chairman Emeritus:
 - Steve Margenau
- PESC Board Liaison:
 - Russ Buyse (Pearson)
- Active Participants:
 - Tuan Ahn Do (SF State)
 - Jeff Funck (AES)
 - Tim Cameron (PESC)
 - Paul Fawver (TG)
 - Kumar Shunmuham (FSA Contractor)
 - Sebastian Baba (Ontario College Application Services)

TAB Current Initiatives

- Single File Schemas
- Schema Component Architecture
- PESC and SIF Alignment
- Common Data Standards Adoption



Single File Schemas

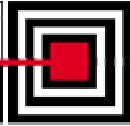
- Contains only those components (elements, groups, and types) that are needed for a specific message standard
- Provides faster and more convenient validation of messages (instance documents)
- Eliminates need for old versions of core and sector library to be distributed
- Provides a transition to component assembly using Registry and Repository

Single File Schema Creation

- The TAB has developed a transform program (using XSLT) that assembles a single file schema from the root element definition schema and any imported schemas (e.g., sector and core schemas).
- The standard development process would not change except for an additional step of creating the single file schema.
- Core and sector libraries would still be maintained but only the latest version needs to be made available during development.
- The transformed schema components would contain a version attributes expressing the origin namespace of the component (which includes version).

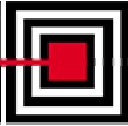
Schema Size (Lines)

Schema	Standalone	Root Level	Sector	Core	Combined	Savings	Percent
ETSR (extension converted)	5407	20	1967	10114	12101	6694	44.68%
Recruitment and Enrollment	6461	43	1274	10898	12215	5754	52.89%
Admission Application	6289	29	877	10646	11552	5263	54.44%
IPED 4 Year graduation	198	34	586	10646	11266	11068	1.76%
High School Transcript (extension converted)	4715	30	1052	10898	11980	7265	39.36%



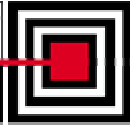
Component Architecture: XML R&R

- The XML Registry and Repository (R&R) contains PESC as well as FSA XML components and schemas.
- A new version of the XML R&R was released into production at the end of September.
- Components (global elements, groups and types) are associated with metadata that is fully searchable.
- The applications (message standards) that use specific component are also identified.



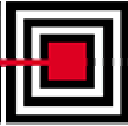
Component Architecture: R&R Features - Search

- Provides identification of components matching any property (name, description, business term, object class, property, enumerated list values, etc.)
- Encourages reuse by identifying components that match the elements needed for a message



Component Architecture: R&R Custom Schema Creation

- User selects components to include in new schema.
- R&R creates a file that includes selected component and ALL DEPENDENT components
- Selection of a single complex types in a sector library can bring in hundreds of components into the schema.
- Developer only needs to add the root element and new types not in the repository.
- Created components do not have a namespace prefix but do include version comments.

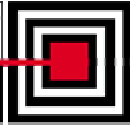


Component Architecture: Next Steps

- Develop a project plan for implementation of component approach
- Determine and document procedures needed to develop schemas from the R&R
- Determine if new features are required from the R&R to support this procedure
- Modify Architecture and Policy and Procedure Manual to cover changes
- Get PESC Board approval of detailed implementation

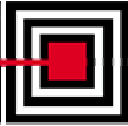
SIF and PESC Alignment

- Objective: Determine technical areas for collaboration
- Ron Kleinman, CTO of SIFA presented SIF System Architecture to TAB
- Discussed SIF Web Service approach and implications for PESC
- Reviewed SIF schema approach and discussed implications for PESC



Common Data Standard Adoption

- Objective: Adopt CDS without disrupting current PESC applications
- Provided input on the rules for the creation for code sets(enumerated lists)
- Explored methods for :
 - Element mapping
 - Choice structures
 - Substitution groups
 - Transform tools



The TAB Challenge

- “There is always a well-known solution to every human problem-- neat, plausible, and wrong.”
-- H.L. Mencken
- “There are no solutions...there are only trade-offs.”
--Thomas Sowell