

ADVANCING STUDENT MOBILITY IN A DIGITAL WORLD

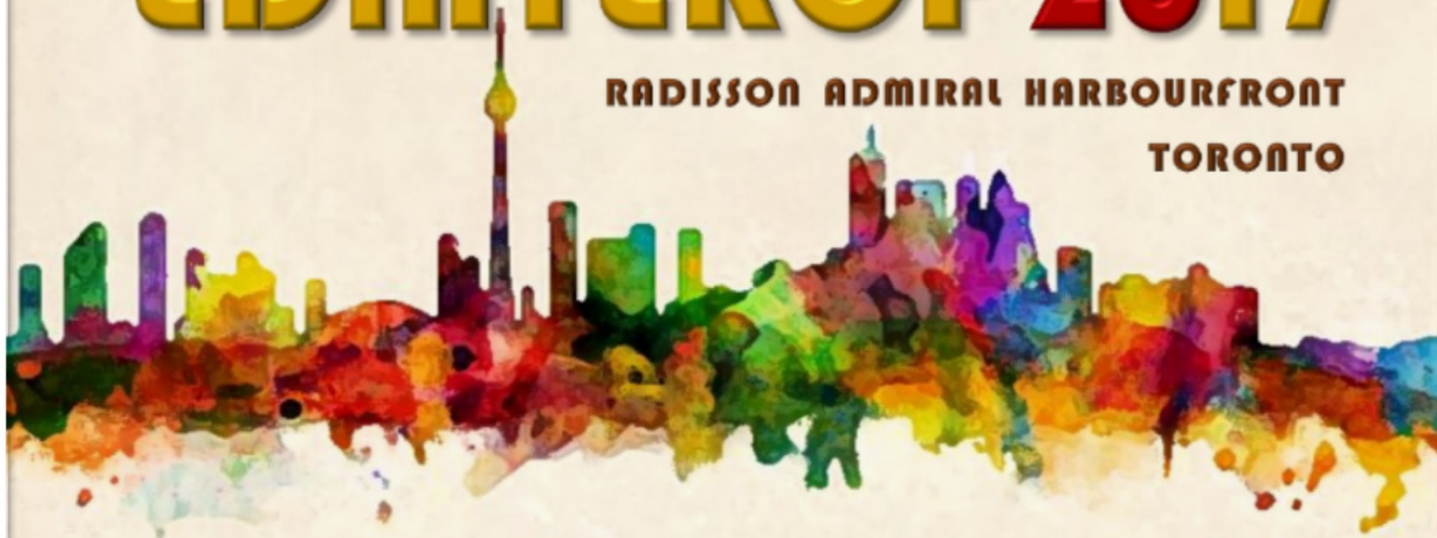


FALL 2017 DATA SUMMIT



EDiINTEROP2017

RADISSON ADMIRAL HARBOURFRONT
TORONTO



FALL 2017 SYMPOSIUM & DATA SUMMIT
OCTOBER 25-27, 2017 WWW.PESC.ORG

Welcome



THE PROGRAM

First Time Attendees

7.30am – 8.15am

Welcome to PESC!



THE PROGRAM

Wednesday

- **General/Plenary Sessions All Day**
- **Annual Fall Reception**

Thursday

- **General/Plenary Sessions in Morning**
- **Awards**
- **Breakouts in Afternoon**
- **PESC Member Meeting**

Friday

- **Breakouts in the Morning**



Michael D. Sessa, President & CEO, PESC

“Never doubt that a small group of thoughtful, committed, citizens can change the world. Indeed, it is the only thing that ever has.”

— [Margaret Mead](#)



Introductions

Introduce Yourselfes

- **Your Name**
- **Where You Are From**
- **What You Do**



What is PESC?

Academic Credentialing
& Experiential Learning

Canadian PESC User
Group (CanPESC)

Global Education Code
(GEO) Workgroup

Change Control Board
(CCB)

EdExchange (CDS)
User Group

Education Record User
Group (ERUG)

Seal of Approval Board
(SAB)

Technical Advisory
Board (TAB)

PESC Board
of Directors

PESC APPROVED STANDARDS

PESC MEMBERS



FALL 2017 DATA SUMMIT



PESC APPROVED STANDARDS

are available openly and free of charge, for the PK20 education community, a cornerstone principle of PESC, its Mission and Membership.

PESC APPROVED STANDARDS

are workgroup developed, approved, ratified, and maintained through a transparent, open, rigorous community-based collaborative process, including a formal public notification when development initiates, and a formal public comment period all governed by PESC Members.

PESC APPROVED STANDARDS

are used, implemented, adopted and integrated in applications, products and services; support a business process or transaction, and; can be implemented or used one independently from another.

PESC TECHNOLOGY

PESC Technology is community-sourced and driven by PESC serving as an incubator to pilot and launch data standards using an open, transparent and collaborative process; and serving as a data standards-development and data standards-setting body governing resource mapping and maintenance of education eco-system schemas, taxonomies and shared code sets in various technologies (EDI, XML, PDF, JSON, etc.).

ACADEMIC COLLEGE TRANSCRIPT

ACADEMIC EPORTFOLIO

ACADEMIC HIGH SCHOOL TRANSCRIPT

ACADEMIC RECORD

ADMISSIONS APPLICATION

COMMON CREDENTIAL

CORE MAIN

DATA TRANSPORT

EDI

EDUCATION COURSE INVENTORY

EDUCATION TEST SCORE REPORTING

FUNCTIONAL ACKNOWLEDGMENT

PDF ATTACHMENT

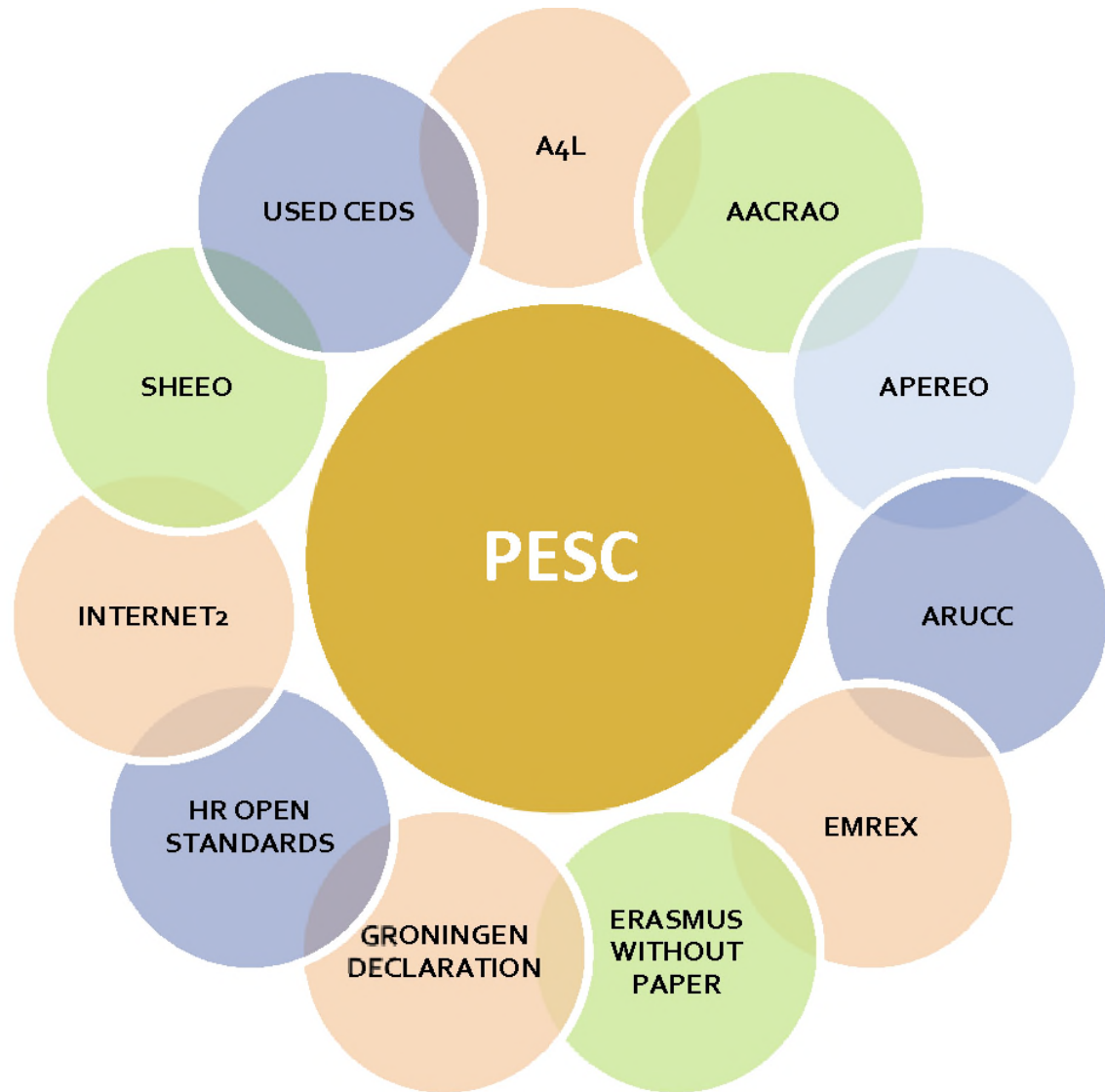
REQUEST - RESPONSE

STUDENT AID



PESC Partnership and Affiliations

- Access 4 Learning (PK12)
- American Association of Collegiate Registrars and Admissions Officers
- APEREO (Open Source)
- Association of Registrars of the Universities and Colleges of Canada
- EMREX (Europe)
- Erasmus Without Paper (Europe)
- Groningen Declaration Network
- HR Open Standards
- Internet2
- State Higher Education Executive Officers
- U.S. Department of Education's Common Education Data Standards Initiative



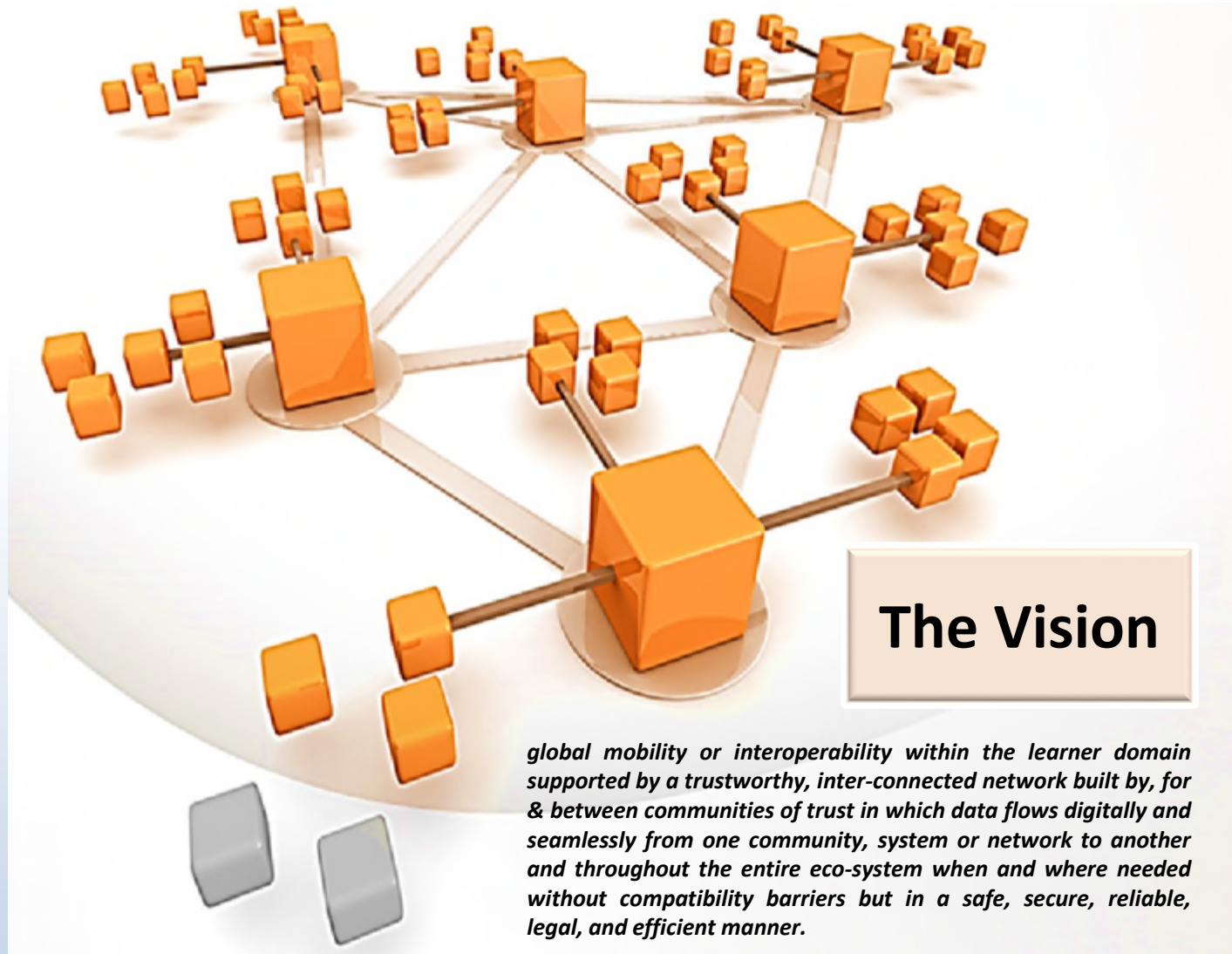


FALL 2017 DATA SUMMIT





FALL 2017 DATA SUMMIT



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FALL 2017 DATA SUMMIT



ANNUAL FALL RECEPTION | WEDNESDAY OCTOBER 25, 2017 | 6pm

1250 Connecticut Ave
NW Suite 200
Washington, D.C. 20036
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+1.202.261.6517 f



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ADVANCING STUDENT MOBILITY IN A DIGITAL WORLD



FALL 2017 DATA SUMMIT



Save the Date!



find us on [facebook.](#)

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ADVANCING STUDENT MOBILITY IN A DIGITAL WORLD



FALL 2017 DATA SUMMIT



What to Expect?

EDiINTEROP 2017
RADISSON ADMIRAL HARBOURFRONT
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OCTOBER 25-27, 2017 WWW.PESC.ORG



What to Expect?

- **Lots of information**
- **May be overwhelming**
- **Interactive sessions: Get involved by participating with delegates & presenters**
- **Feel free to ask questions**



About CanPESC: Relationships and National Projects

- **Membership:**
 - Across Canada
- **Relationships:**
 - CanPESC, PESC & ARUCC
- **National Projects:**
 - BC to Ontario
 - CanPESC Institutional Codes Survey



About CanPESC: Collaborations

- **National Collaborations:**
 - ARUCC Groningen Student Mobility Task Force
 - ARUCC PCCAT Transcript & Transfer Guide
- **PESC Groups:**
 - GEO Code
 - ERUG



More CanPESC Information

Contacts:

- Leisa Wellsman, Co-Chair (lwellsman@conestogac.on.ca)
- Cathy van Soest, Co-Chair (cathy@educationplannerbc.ca)

- <http://www.pesc.org/canadian-pesc-user-group.html>



CANADIAN PESC USER GROUP



AN OPEN, COLLABORATIVE GROUP
OF CANADIAN STAKEHOLDERS THAT ENSURES
PESC'S MISSION AND ALL PESC DELIVERABLES, INCLUDING
THE DEVELOPMENT AND RELEASE OF PESC APPROVED STANDARDS,
SUPPORTS AND INCORPORATES THE NEEDS AND INTERESTS
OF CANADIAN STUDENTS, INSTITUTIONS AND
CANADIAN-BASED STAKEHOLDERS



- **CanPESC** was formed in Fall 2011 to ensure that PESC's mission and deliverables support and include Canadian interests and needs, as well as to provide a Canadian voice within PESC.
- **CanPESC** is recognized as a unifier in the mission toward digitalization.
- **CanPESC** includes participation from almost every province and territory in Canada, many of whom are in this room.
- **CanPESC Member Recognition:** We are application service and trading hub leaders, IT experts, registrars, vendors and service providers
- Join **PESC** and Join **CanPESC!**



Thank You!

Welcome!

We hope that the program we have put together for the next two and a half days will intrigue you, excite you, educate you, and inspire you...



PROGRAM

Welcome & Introductions

8.30am – 9.00am

Welcome to PESC!



PROGRAM

Kathleen Massey

University of Lethbridge

Herman de Leeuw

Groningen Declaration Network

9.00am – 10.30am



PROGRAM

Romesh Vadivel

McGill University

Ricardo Torres

National Student Clearinghouse

11.00am – Noon



PROGRAM

Lunch

Noon – 1.30pm



PROGRAM

Chris Jagers

Learning Machine

Joellen Shendy

University of Maryland University College

1.30pm – 3.00pm



PROGRAM

Simone Ravaioli

Digitary

Rajeev Arora

Parchment

Matt Bemis

University of Southern California

James Kelly

Educational Credential Evaluators

3.30pm – 5.30pm



PROGRAM

Diploma Supplement

Simone Ravaioli
Digitary

3.30pm – 4.00pm



PROGRAM

Diploma Supplement

- **What is the diploma supplement, what's its history and why is it needed?**
- **When is the diploma supplement being implemented and where?**
- **What are the impacts of the diploma supplement regionally and worldwide?**
- **What's next?**



PROGRAM

PESC Global Education Organization

(GEO) Code

Rajeev Arora

Parchment

Matt Bemis

University of Southern California

James Kelly

Educational Credential Evaluators

4.00pm – 4.30pm



PROGRAM

PESC Global Education Organization (GEO) Code

- What is GEO Code?
- Proof of Concept
- Use of GEO Code – USC Pilot
- How to Participate

GLOBAL EDUCATION ORGANIZATION CODE



GEO CODE

A FREE, OPEN AND STANDARDIZED
ONLINE DIRECTORY OF
INSTITUTION CODES & IDENTIFIERS

FOR USE BY
EDUCATION INSTITUTIONS &
STAKEHOLDERS WORLDWIDE



**GLOBAL EDUCATION ORGANIZATION (GEO) CODE
TO ESTABLISH A FREE, OPEN AND STANDARDIZED ONLINE DIRECTORY
OF EDUCATION ORGANIZATION CODES AND IDENTIFIERS FOR USE
BY EDUCATION INSTITUTIONS AND STAKEHOLDERS WORLDWIDE**

PESC VISION

- **INITIATIVE LAUNCHED AT SPRING 2016 DATA SUMMIT IN DC**
- **HOSTED AND MANAGED UNDER PESC**
- **OFFER SERVICE TO THE EDUCATION COMMUNITY FREE OF CHARGE**
- **CROSSWALK/MAP BETWEEN GLOBAL CODES & NATIVE INSTITUTION CODES**
- **PARTNER WITH GRONINGEN DECLARATION NETWORK & AACRAO**

THE PLAN

GLOBAL EDUCATION ORGANIZATION CODE METHODOLOGY

➤ **TWO (2) DIGIT ISO COUNTRY CODE**

+

➤ **FIVE (5) DIGIT ALPHANUMERIC CODE**

PROOF OF CONCEPT

COUNTRIES INDEXED AND LISTED

- **ANTARCTICA**
- **AUSTRALIA**
- **BRAZIL**
- **CANADA**
- **CHINA**
- **FRANCE**
- **INDIA**
- **NEW ZEALAND**
- **POLAND**
- **PEOPLES' REPUBLIC OF CHINA,
PROVINCE OF TAIWAN**
- **UK**
- **USA**

PROOF OF CONCEPT

GUIDING PRINCIPLES

- 1. PROVIDE A UNIQUE INDEX VALUE**
- 2. GEO CODE: (2) DIGIT ISO COUNTRY CODE + (5) DIGIT ALPHANUMERIC CODE**
- 3. MINIMUM REQUIREMENTS: NAME AND LOCATION**
- 4. STATUS OF ACTIVE OR INACTIVE**
- 5. PROCESS FOR ADDITIONS AND EDITS**
- 6. NO IMPLIED VALIDITY, ACCREDITATION OR OFFICAL STATUS**

PROOF OF CONCEPT

GUIDING PRINCIPLES

- 7. NO REUSE OF GEO CODES**
- 8. INCLUDE DIPLOMA MILLS***
- 9. DATA SOURCES & WIKIPEDIA**
- 10. WEB SERVICE/SEARCH ENHANCEMENTS PLANNED**
- 11. GEO CODE TO BE ADDED TO PESC APPROVED STANDARDS**
- 12. 5-YEAR ROLLING REVIEW/MAINTENANCE PLANNED**

PROOF OF CONCEPT

- **IMPROVED DATA QUALITY AND INTEGRITY**
- **DECREASED RISK OF FRAUD AND ABUSE**
- **FASTER PROCESSING/DELIVERY OF STUDENT DATA**
- **FREE SERVICE BASED ON OPEN ARCHITECTURE**
- **CAN BE RECOGNIZED UNIVERSALLY (by institutions, vendors, etc.)**
- **INSTITUTIONS & ORGANIZATIONS ALREADY COMMITTED**


BENEFITS

UNIVERSITY OF SOUTHERN CALIFORNIA – A Case Study – the GEO code and its integration with EDI and USC

- Out of the 1300 codes provided by USC to IERF, currently more than 700 have been re-indexed to use the GEO codes.
- More than 2700 EDI transactions will be machine processed this year, with the majority coming from schools with the GEO code index.
- IERF has utilized the countries which have been indexed to convert their internal indices for inclusion in their EDI transmissions
- The pilot has also revealed the need for agencies and institutions to report omissions and corrections to the GEO code index
- The Pilot demonstrates a working solution for EDX trading partners to exchange data based on mutually agreed upon index values that are the GEO code.

- **WIDE VETTING OF INDEX METHODOLOGY**
- **BALANCED, WISE APPROACH IN GUIDING PRINCIPLES**
- **EASY ADDITION AND CORRECTION PROCESS**
- **CONTINUED PUBLICATION OF ADDITIONAL COUNTRIES**
- **USC STATISTICS: ANNUAL TRANSMISSION DATA**

PILOT

- 
- **USE THE LIST**
 - **CONTRIBUTE A LIST AND/OR SUBMIT IMPROVEMENTS**
 - **PARTICIPATE IN QUARTERLY COMMUNITY CALLS**
 - **ENDORSE OR PARTNER WITH PESCS**

PARTICIPATION

Global Education Organization PESC Code List

The form allows partners to suggest additions or corrections to the PESC Global Education Organization PESC Code list.

* Required

Email address *
Your email

Organization Name (English) *
Your answer

Organization Name (Local Language)
Your answer

Organization Address - Street Line 1
Your answer

Organization Address - Street Line 2
Your answer

19

Organization Address - State/Province *

Your answer

Organization Address - Postal Code *
Your answer

Organization Address - Country *
Choose

Organization Website
Your answer

Organization Phone
Your answer

Organization Email
Your answer

Organization Date/Year of Establishment
Your answer

20

Data Source - Your Name *
Your answer

Data Source - Your Organization *
Your answer

Data Source - Your phone *
Your answer

A copy of your responses will be emailed to the address you provided.

I'm not a robot

Submit

Your submission will be processed through Google Forms.

This form was created by PESC Global Education Organization. Terms of Service Additional Terms

Google Forms

21

ADDITIONS AND CORRECTIONS

- **PESC WORKGROUP NOW OPEN TO PUBLIC**
- **PARTNERSHIP WITH AACRAO & GRONINGEN DECLARATION NETWORK**
- **QUARTERLY CONFERENCE CALL MEETING @ FALL 2017 DATA SUMMIT**
- **PESC MEMBER STEERING COMMITTEE**
- **PESC WEBSITE WWW.PESC.ORG/GEO-CODE**

GOVERNANCE



PROGRAM

EdEXCHANGE

Rajeev Arora

Parchment

James Kelly

Educational Credential Evaluators

4.30pm – 5.30pm



PROGRAM

EdEXCHANGE

- **What is EdEXCHANGE?**
- **What is a directory server?**
- **Use of EdExchange – California Community Colleges & Parchment**
- **Next level and what to expect**

EDEXCHANGE

A NEUTRAL DATA
EXCHANGE PLATFORM
ENABLING THE ELECTRONIC
EXCHANGE OF STANDARDS-
BASED DIGITAL DOCUMENTS
AND DATA BETWEEN
ACADEMIC INSTITUTIONS &
THEIR SERVICE PROVIDERS.

ACHIEVED THROUGH
AN OPEN WEB SERVICES
ARCHITECTURE & ASSOCIATED
STANDARDS.

DESIGNED AS A
PEER-TO-PEER NETWORK
PROMOTING SECURE, RELIABLE,
& DIRECT CONNECTIONS
BETWEEN INSTITUTIONS
WHILE AVOIDING FILE-BASED
TECHNOLOGY.

A Quick History



- Common Data Services Task Force
- Proposed October 2011 by Tim Calhoun (California Community Colleges)
- Initial project, EdExchange

The Problem



- No consistent way to request & exchange documents between academic institutions
- Service provider exchange networks operate in isolation from one another
- Available legacy exchange built on legacy technology, storage of PII, and lacks confirmation of delivery

The EdExchange Solution



- Enables real-time open data exchange amongst academic institutions and their service providers
- Payload agnostic to support a multitude of documents, types of exchanges
- Community based solution based on standards, open source development

Directory Server



Purpose

- Secure repository of validated network endpoints servicing listed destinations

Functions

- Accept Delivery Options request
- Return Delivery Options report

Reference Implementation

- Java Server

Intended deployment

- To be operated by PESC



Network Server



Purpose

- Serve as an endpoint in the secure EdExchange network

Functions

- Lookup
- Send
- Receive

Reference Implementation

- Java Server

Intended Deployment

- Local to Vetted Institutions & Service Providers

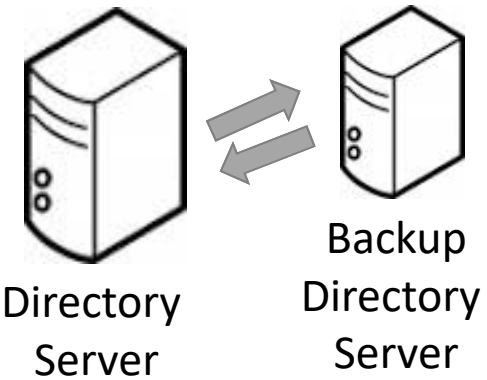


How it Works



How do I send an electronic transcript to _____?

EdExchange Server Host



College/Service Provider A



Network Server

College/Service Provider B



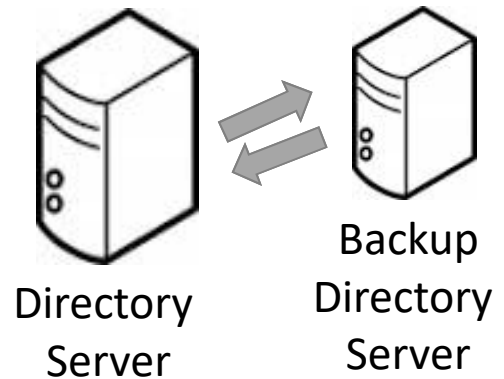
Network Server

How it Works



College A calls the EdExchange Directory Server with a Delivery Options Request

EdExchange Server Host



College/Service Provider A

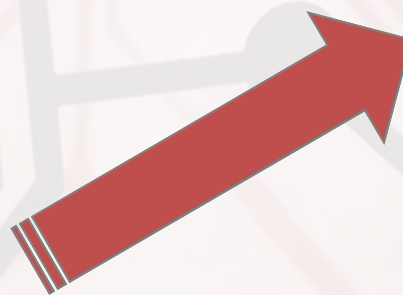


Network Server

College/Service Provider B



Network Server

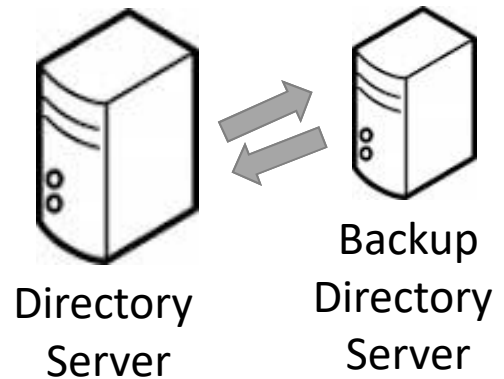


How it Works



Directory server responds with Delivery Options Report which contains validated network servers

EdExchange Server Host



College/Service Provider A



Network Server

College/Service Provider B



Network Server

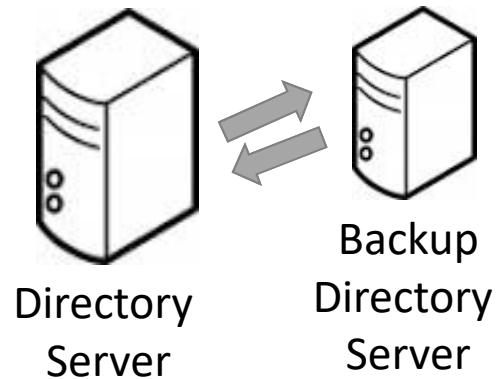


How it Works



Transcript placed in an
“EdExchange Envelope” and
delivered to appropriate
Network Server

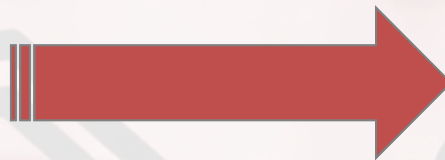
EdExchange Server Host



College/Service Provider A



Network Server



College/Service Provider B



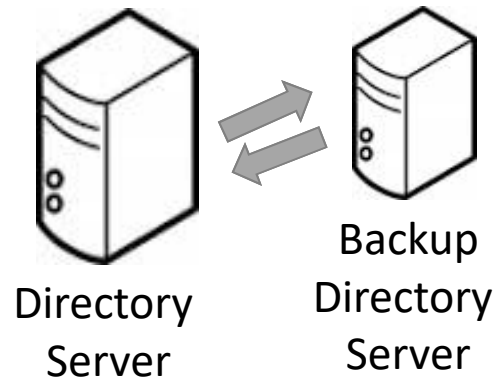
Network Server

How it Works



Confirmation placed in
“EdExchange Envelope” and
returned to senders
Network Server

EdExchange Server Host



College/Service Provider A



Network Server

College/Service Provider B



Network Server



EdExchange



- **Secure** Avoiding file based technologies keeps exchange of data between the sender and receiver
- **Reliable** EdExchange standard assures confirmation of delivery is received
- **Fast** Peer to peer architecture provides for a direct connection
- **Payload Agnostic** Supporting a variety of document types and transactions

Organization



Steering Committee

Steering Committee members include:

- Tuan Anh Do, PESC Board of Directors
- Rajeev Arora, SVP Products, Parchment
- Mark Cohen, Product Manager, California Community Colleges
- Doug Falk, VP & CIO, National Student Clearinghouse
- Jim Kelly, Senior Director of Technology, ECE
- Monterey Sims, Director of Admissions & Evaluation, University of Phoenix
- Jack Weber, Executive VP, Credentials Solutions
- Michael Sessa, PESC President & CEO

Pilot - *Launching now*



- Designed to collect best practices and organizational process feedback
- Who is involved so far?
 - California Community Colleges Tech Center
 - Credentials Solutions
 - Educational Credentials Evaluators
 - National Student Clearinghouse
 - Parchment
 - University of Phoenix

Production – 2018



- PESC to operate EdExchange, with oversight provided by Exchange Steering Committee
- EdExchange standard being completed, documenting
 - Network server (reference installation available), and
 - Protocols for lookup and exchange
- Directory eligible to PESC members as
 - Super-Users (Service providers or systems representing institutions on EdExchange), or
 - Users (Institutions directly represented on EdExchange)



PROGRAM

Annual Fall Reception PESC 20th Year Anniversary

6.00pm – 7.00pm



PROGRAM

Dr. Rob Fleming

BCCAT

Phil Belanger

CATNB

Lia Quickert

ONCAT

Heidi Emami

McGill University

Michael Ringuette

CICIC, CMEC

8.30am – 10.30am



PROGRAM

Distinguished Service Award

2016

ARUCC

Charmain Hack

Romesh Vadivel



FALL 2017 DATA SUMMIT



CATHY VAN SOEST

CO-CHAIR - MANAGER | EDUCATIONPLANNERBC TRANSCRIPT SERVICES

LEISA WELLSMAN

CO-CHAIR - ASSOCIATE REGISTRAR | RECORDS, REGISTRATION &
ENROLMENT REPORTING | CONESTOGA COLLEGE (FORMERLY MANAGER, APPLICANT SERVICES, OUAC)

BRIAN PATTON

MANAGER, APPLICATION SYSTEMS | OUAC - ONTARIO UNIVERSITIES' APPLICATION CENTRE

JOANNE DUKLAS

PRESIDENT | DUKLAS CORNERSTONE CONSULTING

RUTH BLADES

OPERATIONS MANAGER | NOVA SCOTIA COUNCIL ON ADMISSION & TRANSFER

SUSAN STEIN

EXECUTIVE DIRECTOR | ALBERTA POST-SECONDARY APPLICATION SYSTEM

ROMESH VADIVEL

ASSISTANT REGISTRAR & DIRECTOR | SERVICE POINT ENROLMENT SERVICES | MCGILL UNIVERSITY

JENNIFER KIM

DIRECTOR OF MEMBERSHIP SERVICES | PESC



PROGRAM

Herman de Leeuw

GDN

Dr. Rob Fleming

BCCAT

Michael Ringuette

CICIC, CMEC

Charmaine Hack

Ryerson University

11.00am – Noon



PROGRAM

Dr. Andrew Trnacek

Higher Education Services

Andy Dowling

Digitary

Noon – 1.30pm

Lunch



PROGRAM

Breakouts

Thursday 1.30pm – 5.30pm
Friday 8.30am – Noon



PROGRAM

PESC Member Meeting

Thursday 5.30pm – 6.30pm

ADVANCING STUDENT MOBILITY IN A DIGITAL WORLD

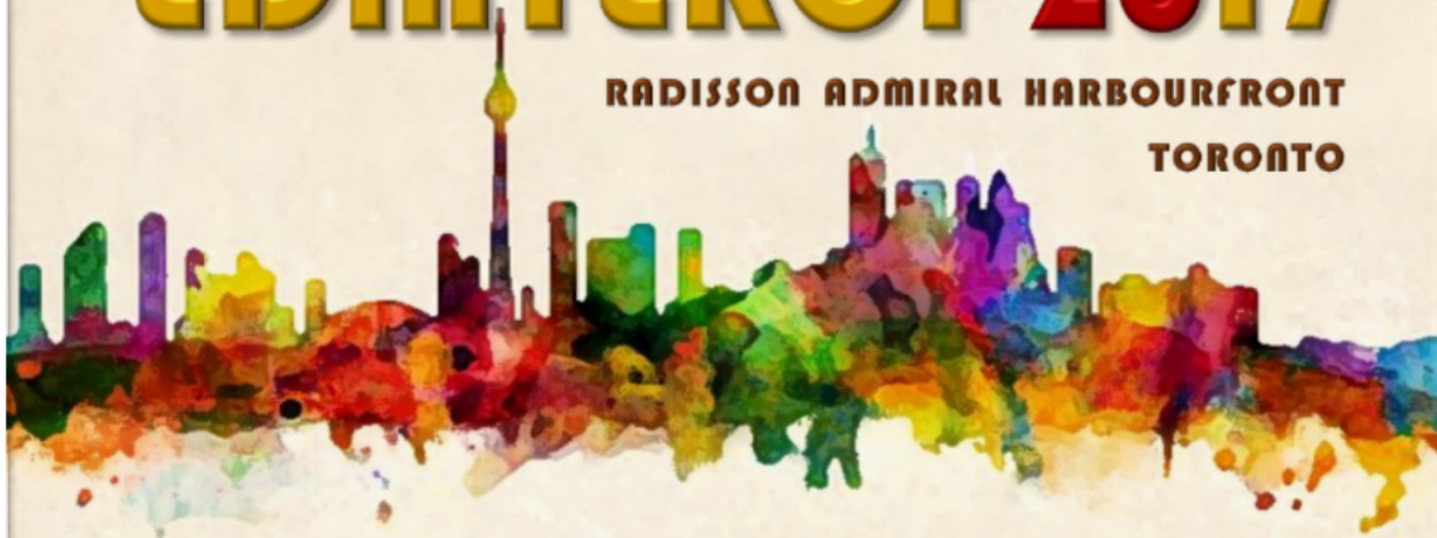


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Thank You!

PESC PESC PESC PESC PESC PESC PESC PESC PESC PESC PESC PESC PESC PESC