The background features a blue gradient with decorative circuit-like lines in the corners. These lines consist of straight segments and small circles, resembling a network or data flow diagram. The lines are light blue and white, contrasting with the darker blue background.

A Web Services Network for Educational Data Exchange

California Electronic Transcript Workshop
April, 2014

- **44 Individuals from 33 Organizations**

CDS TASK FORCE

AAMC

AACRAO

AcademyOne

ACT

ASA

Apereo

BCCampus

Brigham Young University

Calif Community Colleges

California State University

Choice Solutions, Inc.

CommonApp

ConnectEDU

Credentials Solutions

ED.Gov

FCMAT

Georgetown Univ

OCAS

Oracle

OUAC

Parchment

Pearson

PESC

Phoenix

SFSU

SIF Association

Student Clearinghouse

SungardHE

Uleth

Usafunds

USC

UT-Austin

Xap

SPEEDE SERVER

- Operated by private non-profit NSC since October of 2013
- Vendors would rather NSC not be responsible for the SPEEDE servers
- No Service Level Agreements
- Remains a single point of failure
- Proprietary Security Features
 - No Transparency to user community
 - No Opportunity for Peer Review
 - Third party storage of Personally Identifiable Information

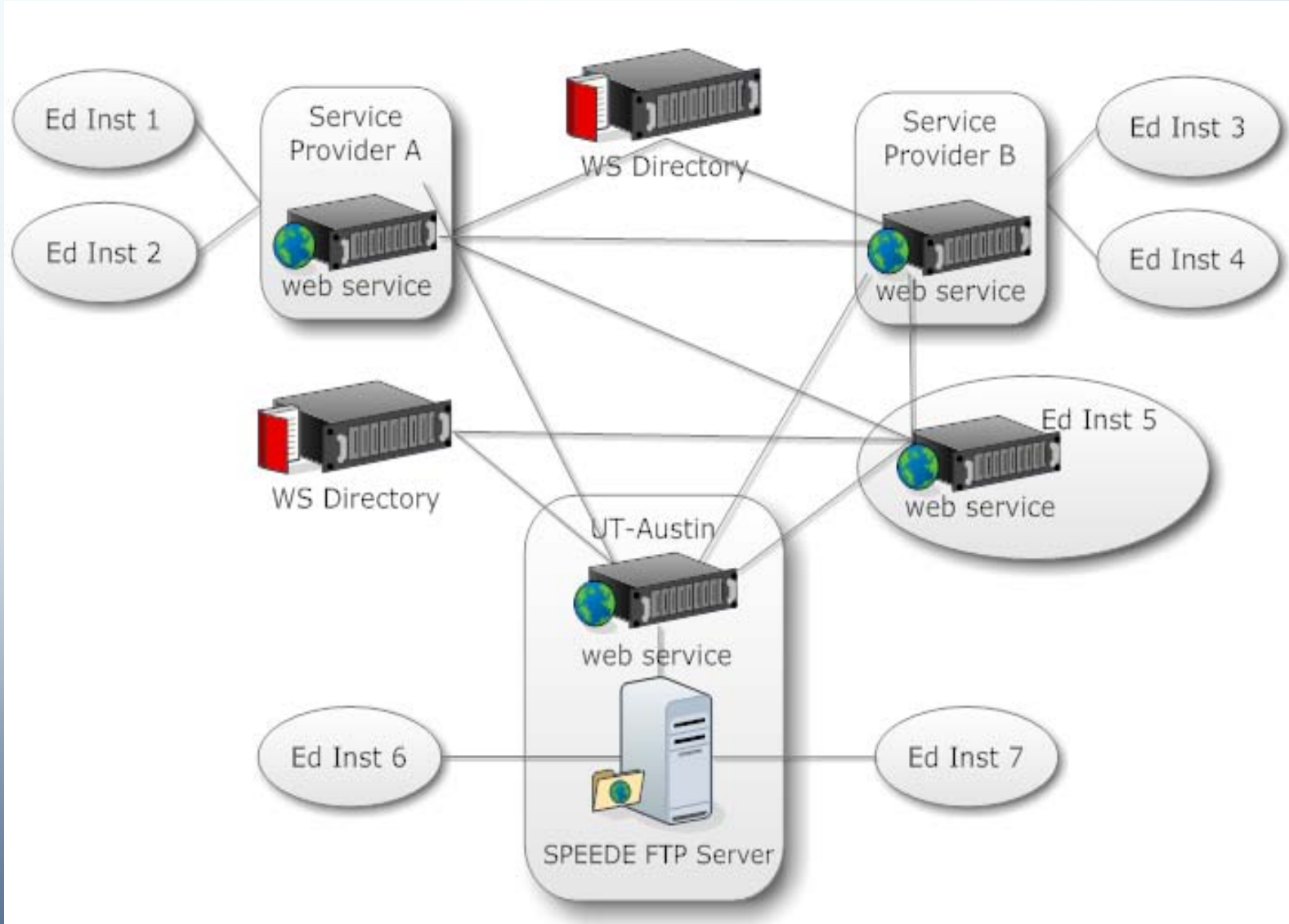
EDEXCHANGE

- **What is EdExchange**
 - Payload Agnostic Data Exchange Web Service
 - Open Source Security
 - Eliminates Single Point of Failure through Redundancy
 - Open Source Web Services
 - Available to Vendors and Institutions
- **Challenges to be Addressed**
 - Technical – retaining development resources

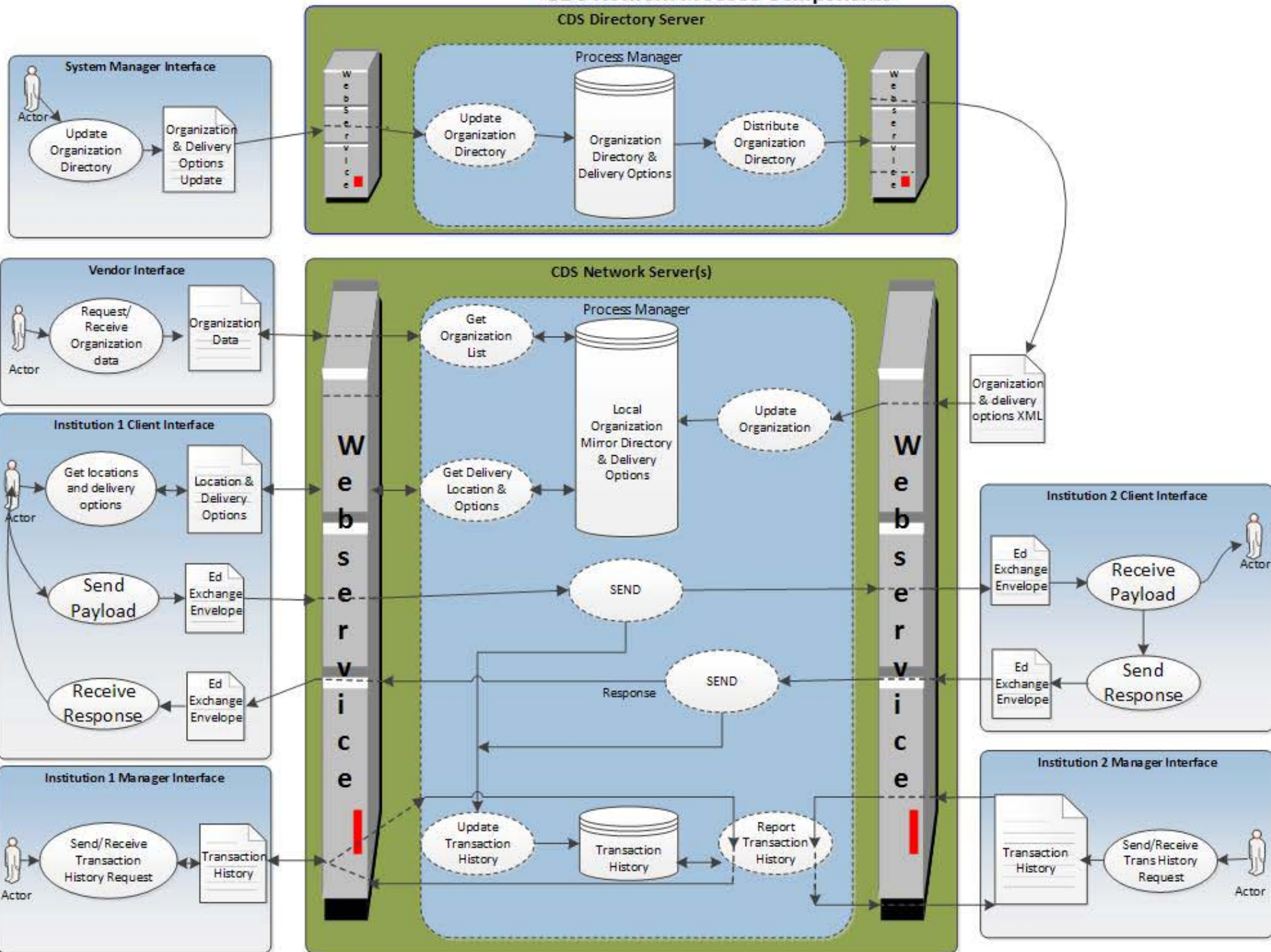
EDEXCHANGE

- The Apereo Foundation was formed by the merger of Jasig and the Sakai Foundation in late December 2012. Sakai and Jasig had been pioneers in the production and adoption of open source software for higher education for over ten years. Apereo takes this work further, providing a more rational and improved organisational framework for a range of projects and software communities serving higher education.
- The core mission of the Foundation - to "assist and facilitate educational organizations which collaborate to foster, develop, and sustain open technologies and innovation to support learning, teaching, and research" is amplified in the value of a common foundation page available from this site, and supported by a structured incubation process

EDEXCHANGE NETWORK



CDS Network Process Components



ACTIVITY

- **Biweekly meetings with steady progress**
- **Functional Specifications are basically complete for:**
 - **Network Server** – member transaction server
 - **Directory Server** – master for organization directory and delivery options
 - **XML Functionality** – Request/Response
 - EDexchange Envelope
 - Organizations
 - Delivery Options
 - Transaction History
- **Reviewed Open Source Consortiums**
 - Have submitted Incubation Proposal Application with Apereo, formally Jasig and Sakai

SPECIFICS

- Language – Java
- Framework – Apache CXF Web Services; Spring
- Deployment target – Tomcat
- Security – Spring
- Persistence layer – DataNucleus or Hibernate
- Database schema changes - Liquibase
- Build system – Maven
- Database – MySQL
- Development Environment - Eclipse (preference) or IntelliJ
- Source Control
 - GitHub Issue Tracking
- Documentation - Wiki

THOUGHTS ABOUT NEW FEATURES

- Transcript Views with Articulation (via ASSIST)
- Secure Messaging
- File Exchange (Attachments to Transcripts)
- Support for PESC ePortfolio/Transcript Format



THOUGHTS