



EduTech Deploys Federated Identity for Maximum Impact

Case Study:

EduTech, the organization that provides technology to 697 New York State school districts, was honored for their deployment of a set of federated identity applications that dramatically improve how educators and staff share, access and deploy information and resources across an entire technology ecosystem.

Background on EduTech

Educational Technology Services (EduTech) is one of 12 Regional Information Centers (RICs) in New York state that provides technology services to the 697 school districts in the state. EduTech is directly responsible for supporting the technology needs of 47 school districts in the Genesee Valley and Wayne Finger Lakes BOCES regions of NY state.

In addition to traditional hardware and software, EduTech supports a number of administrative (server-based) applications for student and financial applications. EduTech also provides Web-based courses for students and staff development, traditional technology workshops, Web-based tools for data analysis of student assessment results, and assistance in instructional- technology integration.



IDDY winners,
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EduTech

The Challenges

EduTech deploys a number of applications, one of which is called DataMentor. This application displays district-wide performance test results used by teachers and administrators to assess progress and delivers additional tools that educators use to advance their teaching. DataMentor needed a way for teachers and administrators to build their own assessments for evaluating progress and for exposing what topics they need to focus on.

EduTech wanted educators to be able to use single sign-on to seamlessly access all of the tools available to them across the ecosystem. The EduTech team recognized the value of delivering wider access to the siloed arsenal of valuable applications existing within the trusted network of Regional Information Centers. Once the RICs were federated and communicating, EduTech helped reduce hard costs by allowing the RIC's assets, including applications, to be securely shared.

To deploy federated identity across districts, EduTech knew a consortium or a trusted network had to be built amongst the Regional Information Centers to support all of the districts, including Buffalo and Syracuse, the two largest districts in the state. Furthermore, in NY state, all school districts must report testing results to a central data warehouse run by the State, posing a challenge for administrators looking to accurately assess data in real time to uncover areas where improvements are needed.

The Results

In New York state, many of the school districts use DataMentor as their IDM provider through a WebSphere portal. Others use a homegrown application built with open-source tools to create a place within the RIC for people to login, because a portal is simply too expensive for them. To support existing installs, EduTech also had to offer the option to use Cognos as a centralized authentication to DataMentor across the ecosystem.

Definition of Terms

Identity (n) 1. the most basic element in a high value relationship 2. the individual characteristics by which a person, business, business partner, government agency or other entity is recognized or known

Single sign-on (n) 1. having the capability of accessing an online system once and having that authentication honored by other system entities, often service providers 2. sometimes called SSO

Identity Provider (IdP) (n) 1. a service that authenticates identity; often a trusted party such as a bank, mobile operator, or an

Internet Service Provider (ISP)
Service Provider (SP) (n) 1. a federation partner that provides services to an end user; service providers typically do not authenticate users but instead request authentication decisions from an identity provider

Federation (n) 1. an association comprising of any number of service providers or organizations 2. a model based upon trust in which user identities and security are individually managed and distributed by the service providers or member organizations 3. where the individual organization is responsible for vouching for the identity of its own users and the users are able to transparently interact with other trusted partners based on this first authentication 4. resembles the credit card model in that vendors accept an individual's ability to pay and then that ability is authenticated/verified through a single location

Circle of Trust (n) 1. a trusted group of identity and service providers who share linked identities and have pertinent agreements in place 2. where an individual or a business inputs a password once and minimal necessary credentials are shared among the Circle of Trust's members 3. a step strongly linked to federation, where multiple entities are involved, and there are business, policy and technical relationships in place 4. also known as "trust circle"

Because federation uniquely identifies every user across the entire State system, a teacher or administrator who transfers to another district would continue to have access to authorized information, saving districts time and money. The educator's identity does not have to be recreated because he/she is already authenticated can access everything authorized when they need it, rather than having to contact numerous IT administrators to be productive.

Today, DataMentor is currently deployed to 80% of NY State's Education System and the decision to embrace and deploy federated identity management touched almost every teacher and administrator without them even knowing it.

QuizMaker is a home-grown application designed by one of EduTech's companion RICs, known as SCT, to help teachers target and build strengths in weak areas. SCT services nine districts in NY state, and QuizMaker was only available to the teachers in these districts. Once identity federation was deployed with PingFederate, everyone in the ecosystem had seamless access to QuizMaker.

Looking at ROI

The objective of the deployment of Federated Identity across the school ecosystem was to increase teacher and administrator access to tools and information, enhance teaching efforts, increase test scores and lower operational costs.

Once federation was deployed by EduTech, the State Department of Education had a big shift in their thinking on how identity is handled. Originally the State started creating one big portal, intending to own and offer all available applications district-wide. This approach dictated that the RICs would have to give up control or simply stop coordinating with the State, which would prevent easy access to State-owned testing results and limit success. The State recognized the value of federation, the partnerships it creates, and the financial and performance benefits of sharing information and applications.

The State Department of Education is now using identity federation to offer state-level services and applications to their RIC partners. Because of this, educators can be more successful and leverage tools that others have created and own. For the RICs, federated identity lowered their costs without forcing them to give up control. Everyone is able to tap into a much larger market and a much larger tool kit. The end result has been that test scores are moving higher and teachers are more successful in building student skills.

The Technology

Eductech deployed PingFederate from PingIdentity. PingFederate is a stand-alone federation server for enabling single sign-on to online services for employees, customers and business partners. It is designed to integrate and coexist with home-grown and commercial Identity Management deployments. As a result, enterprise-wide identity federation is achievable without requiring extensive upgrades to an entrenched Identity Management system.

According to Welch, its tightly integrated support for WS-Federation, SAML 1.0, SAML 1.1 and SAML 2.0 single sign-on functionality reduced redundant account maintenance, improved administrative efficiency, increased security and even brought about new revenue-generating opportunities for the RICs and the State. “We looked at other products, but our partners refused to support them. For this deployment to be successful, a solution had to support all federated identity standards. Once this was installed, people began to understand that they could still use all of the applications they were used to using including WebSphere and Windows. PingFederate was critically important to the success of this project. PingFederate’s ease of use removed the fear some people had and got the collaboration to happen,” she said.

What's Next

The deployment of PingFederate and federated identity initiated serious and productive conversations about collaboration across the entire NY education system. According to Welch, people recognized and experienced that data synchronization using the School Interoperability Framework (SIF) currently deployed is not all that is needed. They quickly recognized that with federation, people can now work together, share applications that enhance their work, and cross-pollinate ideas and skills . “Identity federation has built community and enabled conversations to happen that have never happened among groups and people who should be collaborating,” said Welch. “New possibilities and opportunities continue to open up.”

ABOUT THE LIBERTY ALLIANCE

Liberty Alliance is a global alliance of companies, non-profit and government organizations developing open standards for federated network identity, interoperable strong authentication and Web services. Liberty Federation and Liberty Web Services provide consumers and organizations with a more convenient, privacy respecting and secure way to control online identity information. The Liberty Alliance management board currently consists of representatives from AOL, Ericsson, Fidelity Investments, France Telecom, General Motors, HP, IBM, Intel, Novell, NTT, Oracle, RSA Security and Sun Microsystems. Membership in Liberty Alliance is open to all commercial and non-commercial organizations. A full list of members, as well as information about how to become a member, is available at www.projectliberty.org/membership.