NC State's Membership in the InCommon Federation

Earlier this year the university was accepted into the InCommon Federation – an identity federation created to support a common framework for trustworthy shared management of access to online resources in support of education and research in the United States. NC State joined a rapidly growing organization of over 160 Higher Education institutions (116), government and nonprofit laboratories, research centers and agencies (6) and sponsored partners (42) that server a community of over 3.6 million users [August, 2009].

The InCommon Federation enables participants to make appropriate decisions about the release of identity information and the control of access to protected online resources. Membership is open to accredited two- and four-year degree-granting academic institutions and their sponsored partners.

InCommon leverages Security Access Markup Language (SAML)-based authentication and authorization systems using Shibboleth to enable collaborations among its participants. "It allows us to use our own local campus authentication and identity attributes to access member services of a federation that we're participating in, without having to create new accounts and passwords; and in some cases without having to exchange personally identifiable information (PII)," said Mark Scheible, manager of OIT Security and Compliance - Identity and Access Management.

Basically, NC State faculty, staff and students can access federated online services by visiting a member's Web site, selecting North Carolina State University from a drop down menu, and logging in to our own login page using their campus credential (Unity ID and password), Scheible said. Shibboleth, which provides single sign-on, allows each federation participant to act as an identity credential provider for its own users, while also trusting the user authentication process of other member institutions when granting access to any services it chooses to offer.

Because of NC State's participation in InCommon, Scheible said any NC State student should now be able to access, at no fee, professional-level developer and designer tools and training from the Microsoft's DreamSpark program. The site currently includes sixteen applications including Visual Studio Professional Edition, Microsoft Expression Studio, Windows Server Standard Edition and Microsoft SQL Server Developer Edition. In the near future, InCommon will be used to provide access to the National Student Clearinghouse, which handles multi-campus student enrollment and degree verification and records transfers among participating colleges and universities, he said.

NC faculty and staff can also continue their collaboration and research with participating universities and with organizations such as the National Science Foundation (NSF) and the National Institutes of Health (NIH), who recently joined InCommon to streamline access to their online services. To view a list of participating organizations, visit the InCommon Federation web site.

In addition to the InCommon Federation, NC State is also participating in the UNC Identity Federation and the NC Trust pilot federation. Created by the UNC General Administration (GA), the UNC Identity Federation is using Shibboleth to support a growing number of system-wide applications such as interinstitutional course registration that allows students to enroll easily in classes offered at institutions other than their home institution. The NC Trust pilot federation was initiated by MCNC in November 2007, to explore the use of K20 federated access to online resources in the state of North Carolina. The university is also exploring the use of Shibboleth for authentication and access to internal campus web resources.