Evolving Identity & Access Management at ACS

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ACS Overview

- ACS is the world’s largest scientific society with nearly 157,000 members.
- ACS is a major publisher of journals in chemistry and related sciences.
- ACS is a major provider of scholarly research and discovery tools.
- **Customer authentication largely reflects these three organizational pillars.**
Password Proliferation

THE PROBLEM WITH
Password Proliferation

60% of people say they cannot memorize all of their passwords.

61% of consumers reuse passwords among multiple websites.

Generally Speaking...
44% of consumers change their passwords only once a year.

Even Worse...
Most organizations are working across multiple applications, each requiring its own password.

- Has caused considerable frustration as users have dozens of passwords to manage.
- Has weakened security as passwords are reused across sites.
- Does nothing to discourage password sharing.
ACS Enterprise-wide IAM Initiative

- Launched an initiative in late 2014 to streamline the customer authentication experience and provide seamless customer access across product lines.
  - Modernizing underlying identity management technology.
  - Streamlining user experience for customer login and profile management.

Gartner

Consumer Identity and Access Management Is a Digital Relationship Imperative

30 December 2015   Go0293444
Analyst(s): Mary Ruddy | Lori Robinson

Summary

Digital business is expanding the need for customer-facing identity and access management. CIAM capabilities — including user registration, social login and user profile management — can enable you to provide a secure, unified and business-enhancing customer experience across multiple channels.
ACS Shibboleth Support

• ACS journals provide limited support for Shibboleth.
RA21 Initiative

RA21: Resource Access in the 21st Century

What is RA21?

Resource Access for the 21st Century (RA21) is an STM initiative aimed at optimizing protocols across key stakeholder groups, with a goal of facilitating a seamless user experience for consumers of scientific communication. In addition, this comprehensive initiative is working to solve long standing, complex, and broadly distributed challenges in the areas of network security and user privacy. Community conversations and consensus building to engage all stakeholders is currently underway in order to explore potential alternatives to IP-authentication, and to build momentum toward testing alternatives among researcher, customer, vendor, and publisher partners.

• ACS was a founding partner of the STM RA21 initiative and fully embraces its principle goals:
  – Seamless user experience for researchers across varied systems.
  – Effective solution regardless of researcher’s starting point, location, or device.
  – Consistent with emerging privacy regulations; avoid creation of yet another ID.
  – Supporting mechanisms for detecting fraud.
RA21 Initiative

- Core components of new resource access framework:
  - Federated user authentication.
  - Improved WAYF discovery with a consistent user experience across participating publisher sites.
  - Standard taxonomy for attribute exchange.
    - Faculty/Staff/Student roles. Emeritus/retired vs. active faculty.
    - Department codes to facilitate more granular usage reporting.
    - Contract ID for subscribed services.
  - Mechanism for sharing potentially compromised user accounts.
Compromised Credentials

- A significant black market exists for the sale of compromised university credentials.
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VIP2 外文生物学+外文综合+国外大学图书馆
VIP3 外文有机合成+外文综合+国外大学图书馆
VIP4 外文法律理工+外文综合+国外大学图书馆
VIP2 VIP3 VIP4 赠送中文资源

本馆资源
- 本馆直接美国华盛顿大学/英国牛津大学/美国坦普大学
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- Reaxys、Nature、Google学术、ACS等上千种数据库

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Compromised Credentials

• Federated trust frameworks offer great promise for ease of access, but also some inherent risk.

“A Security Incident Response Trust Framework for Federated Identity (Sirtfi)
Authors: T. Barton, J. Basney, D. Groep, N. Harris, L. Johansson, D. Kelsey, S. Koranda, R. Wartel, A. West
Editor: H. Short

“Since one user credential may have access to SPs at multiple organisations, it presents a way to leverage a compromise at one organisation into an attack on others. The global scale of the overall federated access management system also poses a new challenge to ability to respond to security incidents.”

2017 Timeline

January-February: Call for pilot participation and survey on identity management capabilities.
March-September: Conduct pilots.
October-December: Access results, draft recommended best practices.
For more information

RA21: Resource Access in the 21st Century

http://www.stm-assoc.org/standards-technology/ra21-resource-access-21st-century/

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