SeamlessAccess.org

Delivering a simpler, privacy-preserving access experience
1. Background
• The Resource Access in the 21st Century project (RA21) initiated in 2016, jointly sponsored by STM and NISO.
  • Stakeholders from the publishing, library, software, and identity management communities; input from 60 organizations.
• Identified that Federated Identity Management (FIM) held the most promise for a robust, scalable solution for remote access to scholarly content.
• RA21 conclusions were published as a NISO Recommended Practice, June 2019.
What is SeamlessAccess.org?

- The operational successor to the RA21 project.
- Deliverables: an operational service + best practices / standards
- Community-driven effort to enable seamless access to information resources, scholarly collaboration tools, and shared research infrastructure.
- 5 founding organizations (to date): the National Information Standards Organization (NISO), GÉANT, Internet2, ORCID, and the International Association of STM Publishers.
Why Are We Here?

- Improve remote access scenarios
  - Increase in off-campus access
  - Faulty use case assumptions

- Improve usability via a secure, single sign-on solution

- Support personalized user services (more later)

- Enhance user privacy (more later)
Security Concerns / Workflow Issues

- IP Authentication is less secure than federated authentication
- One compromised user = blocked access for entire institution
- Increasing number of subscribers using paid security services (e.g. Zscaler) to deliberately mask IP addresses
When is Seamless Access?

- **Piloting phase RA21**
  - December 2016 – June 2019

- **SeamlessAccess Beta Phase Operational**
  - July 2019 – June 2020

- **Full service operational**
  - July 2020 - onwards
Who are SeamlessAccess?

- A dedicated implementation team including:
  - Project Director
  - Publisher Outreach
  - Technical support from SUNET (with funding from GÉANT)
  - Library Outreach
  - User Experience
  - An outreach committee including 6 librarians

- A governance committee with representatives from across the stakeholder groups
- A working group on attribute release including leading librarians
Implementers

In Progress

• ACS
• Atypon
• DARIAH
• Elsevier
• O’Reilly
• Silverchair
• Taylor & Francis
• Wiley

Integrated

• Springer Nature
• TENET
2. Data Privacy
What are ‘Attributes’?

- Used in Federated Identity Management to pass data about an authenticated user
- Shared by the Identity Provider (IdP, e.g. academic institution) with a Service Provider (SP, e.g. publisher)
What are ‘Attributes’?

| Anonymous session ID          | ● Unique for every visit  
|                              | ● Real identity unknown (anonymous)  
|                              | ● No personalization possible  
| Pseudonymous ID               | ● Unique ID for every **person**  
|                              | ● Real identity unknown (pseudonymous)  
|                              | ● Personalization possible  
| Organizational                | ● Home organization, Entitlements, Role, Department, Location etc  
| Personal                      | ● Name, email address  

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**Why are Attributes important?**

Attributes give both sides greater control:

<table>
<thead>
<tr>
<th>Access control</th>
<th>e.g. only allow users who are full-time staff</th>
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<tbody>
<tr>
<td>Cost control</td>
<td>e.g. only allow users with a certain role, or from a certain department</td>
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| Risk control         | e.g. avoid the need for  
|                      |  i. users to separately register a username / password and  
|                      |  ii. 3rd parties to store credentials |
How does Attribute Release work?

- Attribute release is fully under control of the IdP.
- An IdP can opt to share a set of Attributes with an SP after a user is authenticated.
- Attribute release is configured by the IdP for each category of SP (or at the individual SP level).
  - E.g. research; vendors; library resources.
- Any special needs must be agreed with the IdP in advance.
# Publishing Use Cases

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Attributes</th>
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</thead>
<tbody>
<tr>
<td>Users access full-text articles with no options for personalization</td>
<td>● Anonymous token</td>
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<tr>
<td>Users get content recommendations in UI based on prior history</td>
<td>● Pseudonymous ID</td>
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<tr>
<td>Faculty have the ability to purchase ebooks using library funds</td>
<td>● Pseudonymous ID</td>
</tr>
<tr>
<td></td>
<td>● User role</td>
</tr>
<tr>
<td>Clinicians receive email confirmation of Continuing Education credits received</td>
<td>● Pseudonymous ID</td>
</tr>
<tr>
<td></td>
<td>● User email address (with user consent)</td>
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</tbody>
</table>
3. What will users experience?
How federated access works now

Find your partner institution:

Boston College

CONTINUE
Authentication experience difficult to understand
Welcome to SeamlessAccess.org

We offer seamless access.
You get research as it should be.

Seamless Access is the new, convenient way to access digital scholarly content and services that builds on the guidelines resulting from the Resource Access in the 21st Century (RA21) initiative. It sets a standard for digital authentication based on a single sign on through your own home institution.
Live Demos:

RA21 demo site
SeamlessAccess at Springer Nature
GetFTR
thank you!