



The RA21 logo consists of the text 'RA21' in a white, bold, sans-serif font, with a stylized arrow pointing from the 'A' to the '2'. The entire logo is set against a teal rectangular background.

THE SOLUTION FOR IDP DISCOVERY AND THE EXPLORATION OF THE NEXT BIG THING

Ralph Youngen, *American Chemical Society, Co-Chair RA21 Initiative*
Laura Paglione, *Spherical Cow Group, RA21 Technical Advisory Committee*

Background

For the past 20 years, scientific publishers have relied upon IP address recognition as the primary means of authorizing access to scholarly resources.

- In the 1990s, if you were on the Internet you were physically connected to a campus/corporate network.
- IP recognition is no longer a satisfactory solution.
 - Access to scholarly resources is increasing off-campus or on mobile devices.
 - Corporate customers have difficulty providing accurate IP addresses or deliberately mask their IP addresses.

Background (cont.)

Shibboleth is widely deployed and supported by scientific publishers.

- Most scientific publishers have enabled Shibboleth as a means of providing access off a campus/corporate network.

An Example – American Chemical Society

- Publishes 50+ scientific research journals.
- Has supported SAML via Shibboleth for a decade.
- Has seen sharp increase in off-network access in the past several years (e.g. mobile devices).
- Member of 12 R&E federations.

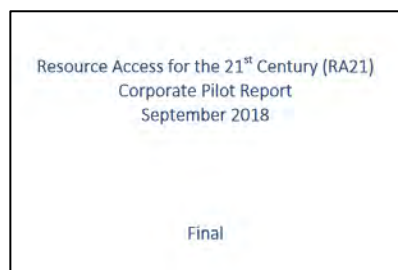
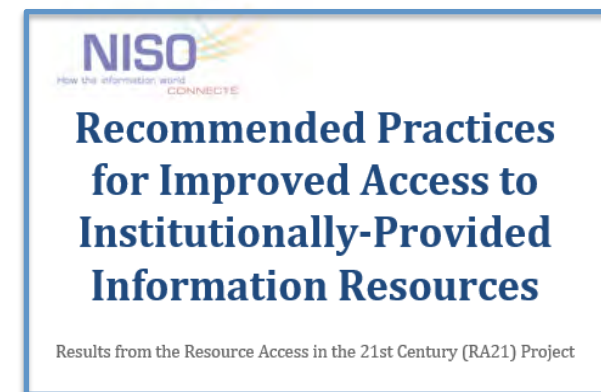
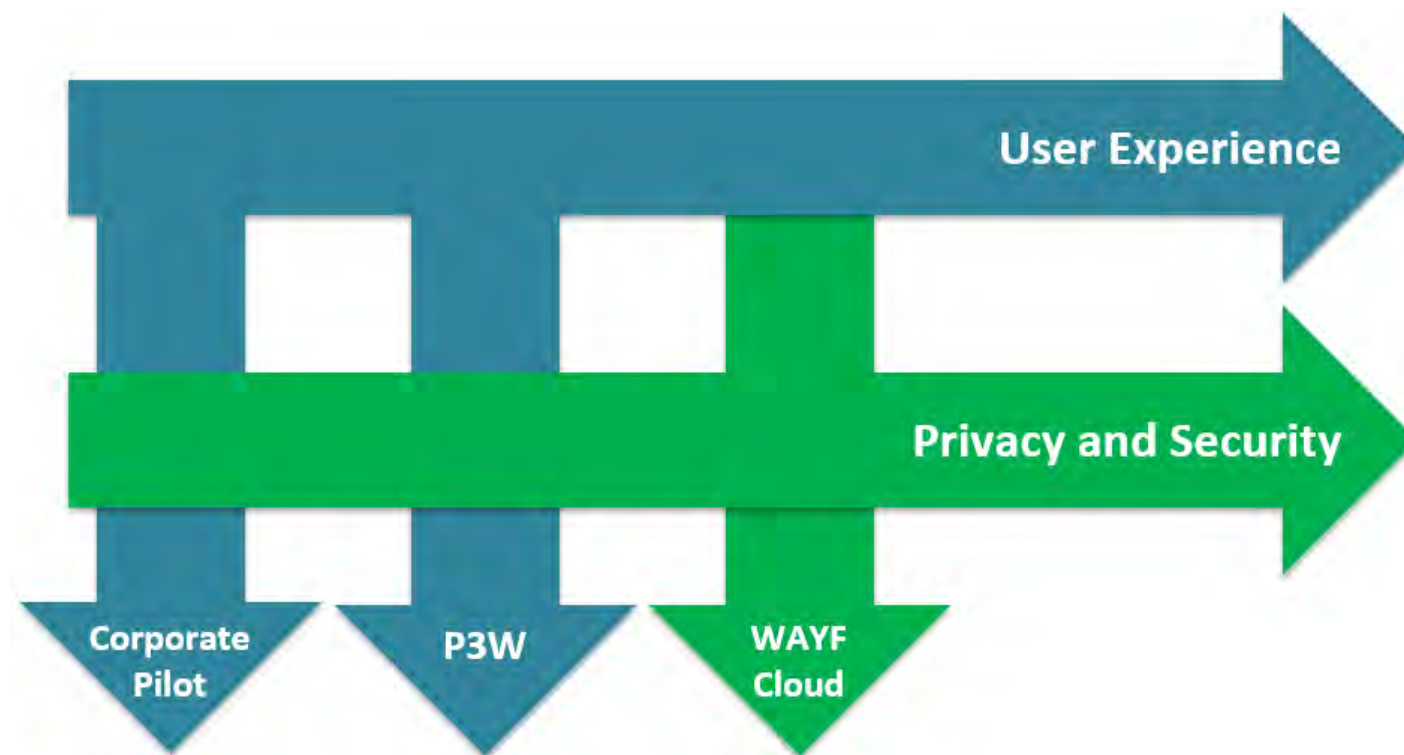
<1% of article downloads in September 2018 were attributed to SAML federated access.

ACOnet Identity Federation (Austria)
Chinese - CSTCloud ID (CAoS)
German Higher Education (DFN-AAI)
India: INFLIBNET Access Management Federation (INFED)
Ireland - Edugate Federation
Italy - IDEM GARR
RCTSaai - Portuguese Federation
Slovenia - ArnesAAI Slovenska izobraževalno raziskovalna federacija
Spain: Instituciones académicas (RedIRIS: SIR)
Swiss Higher Education (SWITCHaai)
UK Higher Education
US Higher Education (InCommon)

Access to scholarly information services, especially off-network, needs to be fixed

- Federated authentication using SAML (“Shibboleth”) solves most of the problem
 - Multilateral trust
 - Mature technology
 - Widely deployed and supported by scholarly information providers
 - Widely adopted and deployed by academic institutions
 - Widely deployed by corporate customers
- **HOWEVER:** The Where Are You From (WAYF) user experience for SP-initiated discovery is abysmal.
 - Especially when multiple SPs are involved in a single user session.

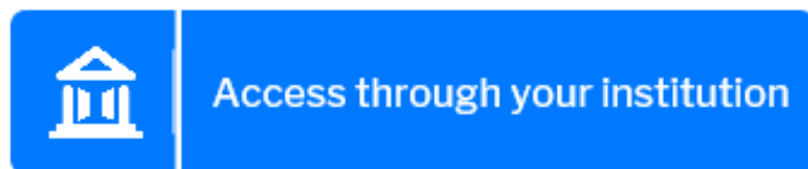
RA21 Results from Pilots and Work Streams



Corporate Pilot report was published in September 2018.
Academic Pilot technical report was published in July 2018.
- P3W architecture was selected.

RA21's Use Experience: "Access through your institution" Button that will Persist the User's IdP Choice

Visit to first
participating SP



Access to ACS Publications

Find Your Institution
Your university, organization or company

Examples: Science Institute, Lee@uni.edu, UCLA

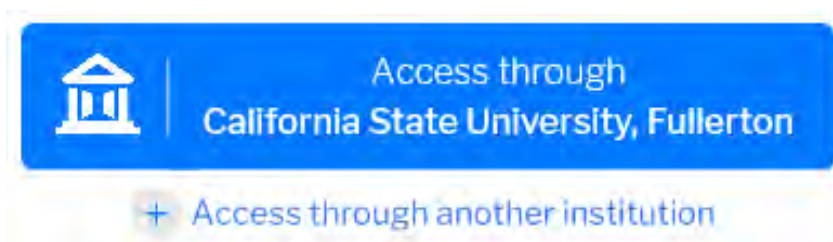
California State University, Fullerton
fullerton.edu

Central or Local IdP Discovery



IdP choice persisted in
local browser storage

Subsequent
visits to any
participating SP



RA21 User Experience

The screenshot shows the Taylor & Francis Online interface. At the top, there's a blue header with the Taylor & Francis logo and navigation links for Log In, Register, and Cart. Below this, the journal information for 'Journal of Macromolecular Science, Part B: Physics' is displayed. A search bar is located on the right. The main content area features the article title 'Supramolecular Block Copolymers under Thermodynamic Control' by Beatrice Adelizzi et al. It includes citation information, publication date, and a DOI link. Metrics for Article Views (381), Altmetric (8), and Citations (3) are shown. There are links for 'Rights & Permissions', 'Access through Johns Hopkins', and 'Access through another institution'. A 'Get e-Alerts' button is also present. A red arrow points from the 'RA21' label to the 'Access through Johns Hopkins' button.

Taylor & Francis Online

Log In | Register | Cart

Journal
Journal of Macromolecular Science, Part B
Physics
Volume 6, 1972 - Issue 1

Enter keywords, authors, DOI etc. This Jour... Advanced search

ACS Publications
Most Trusted. Most Cited. Most Read.

Search text, DOI, authors, etc.

My Activity | Publications

RETURN TO ISSUE | < PREV ARTICLE NEXT >

Supramolecular Block Copolymers under Thermodynamic Control

Beatrice Adelizzi, Antonio Aloï, Albert J. Markvoort, Huub M. M. Ten Eikelder, Ilja K. Voets, Anja R. A. Palmans* and E. W. Meijer*

Cite This: *J. Am. Chem. Soc.* 2018, 140, 23, 7168-7175
Publication Date: May 7, 2018
<https://doi.org/10.1021/jacs.8b02706>
Copyright © 2018 American Chemical Society

Article Views: 381 | Altmetric: 8 | Citations: 3
LEARN ABOUT THESE METRICS

Share | Add to | Export

RIGHTS & PERMISSIONS | ACS AuthorChoice

Access through Johns Hopkins

Access through another institution

Login with ACS ID | Purchase >

Supporting Info (1)

<https://achstag.literatumonline.com/jacs>

Get e-Alerts

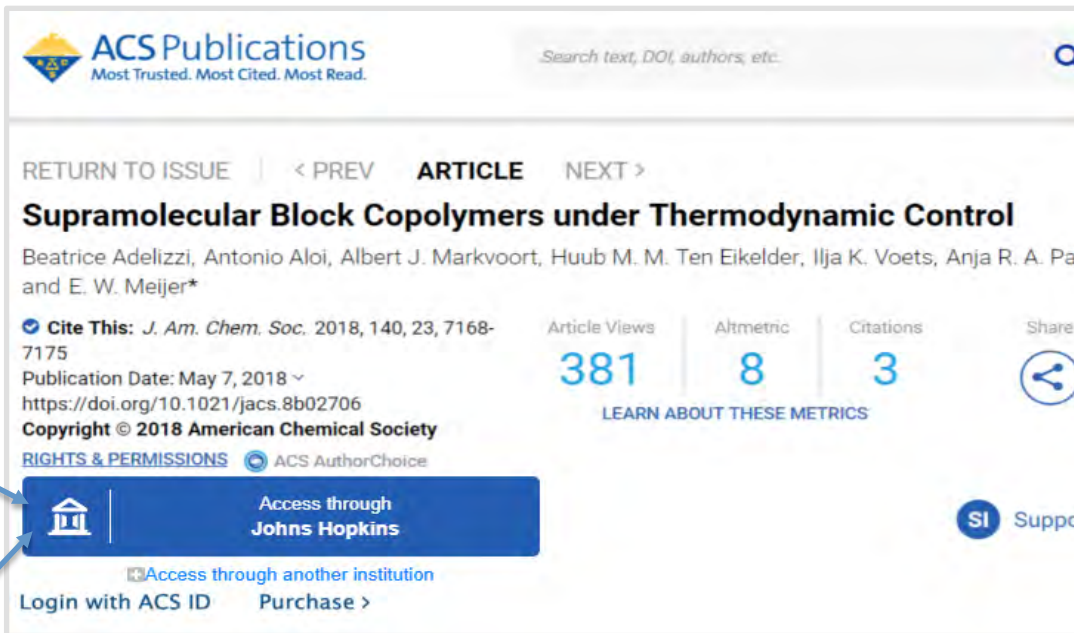
structural properties with the phase behavior in the presence of high molecular weight polymers in solution has not been given sufficient attention. The present work is intended to fill this gap in view of the current efforts to develop novel drug encapsulating and targeted delivery devices.

Access through Johns Hopkins

Access through another institution

Login with personal account | Restore content access

RA21 Architecture



Krakenjs/zoid
framework

Running on a common,
trusted domain
(seamlessaccess.org)

A cross-domain component toolkit, supporting:

- Render an iframe or popup on a different domain, and pass down props, including objects and functions
- Call callbacks natively from the child window without worrying about post-messaging or cross-domain restrictions
- Create and expose components to share functionality from your site to others!
- Render your component directly as a React, Vue or Angular component!

It's 'data-down, actions up' style components, but 100% cross-domain using iframes and popups!

Introducing zoid — cross-domain, React-like components using iframes



Daniel Brain [Follow](#)

Nov 27, 2016 · 8 min read

This article is part of a series on [PayPal's Cross-Domain Javascript Suite](#).

This is the second part in a series about how at PayPal, we're going all-in on our cross-domain javascript component platform. We want to build our products and experiences so they can live seamlessly inside our merchants' sites, and zoid is the next piece of that puzzle.

Building a coalition to take the project forward

RA21

**THE COALITION FOR
SEAMLESS ACCESS****STM**The global voice of
scholarly publishing**INTERNET²****NISO**
How the information world
CONNECTS**ORCID**Connecting Research
and Researchers**GÉANT****IFLA**International Federation of
Library Associations and Institutions

(Early Discussions)

Proposal: Coalition will jointly take project forward under a lightweight structure

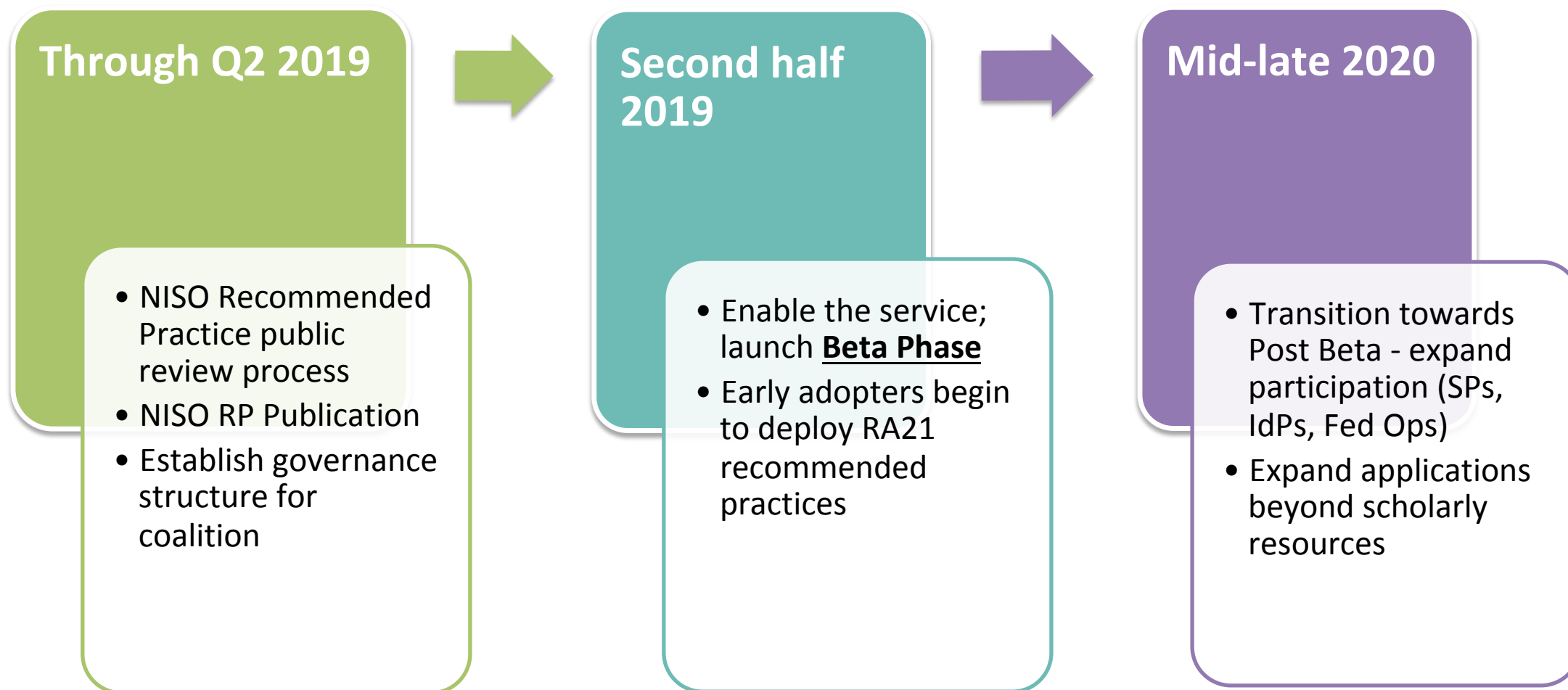
- Coalition Partners to sign lightweight MoU
- Avoids overhead of creating a new single-purpose non-profit entity

Organization	Role
STM	Secretariat Publisher Outreach Further UX Development
NISO	Library Outreach
GEANT/Internet2 (via SUNET)	Technical Development 24x7 Operations
ORCID	Community engagement
IFLA	tbd (early discussions)

Coalition for Seamless Access: Draft mission/purpose statement

The Coalition for Seamless Access exists to foster a seamless experience when using **scholarly collaboration tools, information resources, and shared research infrastructure**. The Coalition promotes digital authentication leveraging an existing single-sign-on infrastructure through one's home institution, while maintain an environment that protects personal data and privacy. **The Coalition aims to enable simple, trusted use of scholarly resources and services anytime, anywhere, and on any device.**

RA21/Seamless Access: Roadmap and Timeline



Seamless Access Beta Phase

- Commencing mid-2019, duration 6-12 months
- Goals:
 - Test feasibility and strength of coalition.
 - Implement production-quality, production-scale services
 - Including support from publisher platform providers
 - Encourage broad adoption of NISO Recommended Practices
 - Early adopters across multiple use cases
 - Implementation testing and reporting against success criteria
 - End-user testing via coordination from libraries and publishers
 - Research to:
 - Confirm value to users and adopters
 - Identify risks (if any) to adopters

Beta Implementation: Central Infrastructure and Services

- SUNET (via funding from GEANT) has been identified as the home for identity provider persistence service and a central discovery service for the Beta Phase

Criteria

- Perceived as neutral by publishers, librarians, federation operators, etc.
- Capable of supporting 24/7 infrastructure
- Experienced running high availability critical infrastructure
- Willing and able to support a global model
- Financially sustainable long-term

Expectations of Beta Implementors

- 1 Implement the Access Button and IdP persistence service on your sites per the RP guidelines
OR
Encourage your hosting provider to do so
- 2 Be prepared to share aggregate data about success metrics (being developed), e.g.
 - Access success rates
 - User satisfaction with access processes
 - Reduction in support tickets



Photo by [Elia Clerici](#) from [Pexels](#)

AN OPPORTUNITY!
The next big thing?

Big step forward in
Where Are You From
(WAYF)
user experience!

- A significant, yet limited challenge
 - Likely to increase participation
- ➔ Time to tackle new challenges



Embrace all the variety in the community

- Federations beyond academia
 - Corporate research
 - Citizen participation in research
 - Scholarship beyond university / K-12
- What are the rules for engagement?

Attribute Release

- Privacy-honoring / regulation-compliant
- Research & scholarship authoritative information
Core competitive advantage over other SSOs!
 - Affiliation
 - Individual role
 - Status
 - Research field
 - Assurance Level
- Enable access to privileged scholarly resources
- Make research logistics easier



Attribute Release

Non-trivial effort

- Privacy-honoring / regulation-compliant
- Research & scholarship authoritative information
Core competitive advantage over other SSOs!

- | | |
|-------------------|-----------------------------|
| • Affiliation | ← Persistent Global Org IDs |
| • Individual role | ← Agreement on definitions |
| • Status | ← Agreement on meaning |
| • Research field | ← Standard ontology |
| • Assurance Level | ← Protocol for exchange |

- Enable access to privileged scholarly resources
- Make research logistics easier

Simplify

AAI is complicated,
but can be less-so

- Lower implementation variability to increase interoperability
- Reduce mis-configuration risk through more controlled choice
- More -aaS options enables lower-resourced to participate
- Highly-skilled workforce declining – who will maintain this complexity?
- Increase participation by those unwilling to learn *everything*



Next big
thing?



QUESTIONS?