

Authentication

Version: 1.0 (October 2022)

Audience: Discovery services, scholarly collaboration platforms, publishers and publishing platform providers

Contributors: GetFTR User Experience (UX) Steering Group

Please note that these guidelines are subject to change and we are also looking to follow feedback from integrators. As it is an ongoing iterative process we are always learning how to best implement the user experience across multiple platforms. You can get in touch here <https://www.getfulltextresearch.com/register-your-interest/> or through the **'contact'** link on the website.

Authentication

The following authentication routes can be implemented by the integrator:

- 1) **Deferred Authentication (federated authentication provided by institution):** integrator implements institution lookup, user searches, and the institution provides authentication when the first article link is clicked on.
- 2) **Authentication (federated authentication provided by integrator):** scholarly collaboration platform / discovery service implements institutional lookup and

authentication, using a Service Provider (SP) such as Shibboleth, either before or after a user performs a search.

3) **Authentication (institution remembered or pre-defined)**: if the user is already authenticated then they do not need to re-authenticate.

An alternative implementation is to leverage the work done by SeamlessAccess.org to enable **Single Sign On**. Users will be able to sign in using their institutional credentials, and will not be asked for them again for all Seamless Access-enabled sites.

4) **No Authentication**: Open Access and free articles do not require the user to select an institution or authenticate.

Deferred authentication (federated authentication provided by publisher)

This section describes the expected experience for a user who has not previously authenticated and whose institution (the Identity Provider (IdP)) is not known.

At this stage an entitlements check is made for the DOI(s) and institution but the user does not authenticate until the first Get Full Text (GetFTR) article link is clicked on.



Access PDF via institution

Button example

It is recommended that a tooltip is included on this button explaining to the user that **“access to this PDF requires confirmation”** as they might still not have access after they have selected their institute and authenticated.

If the institution is already set for example, under a profile page, then it is recommended to display the institution name on the button itself instead of the wording 'institution', as a display of trust that the user is from where they stated. In the case that this name is quite long it can be truncated providing it is clear which institution it is referring to.

[Access PDF via University of Oxfo...](#)

Button example with institution explicitly stated and truncated

Step 1: user performs a search and clicks on 'Access PDF via institution' (alternatively with the institution name stated) under each search result / abstract page, or a 'Find your institution' button displayed at the top of the page, (either before or after performing a search)

JOURNAL ARTICLE

Interaction design: beyond human-computer interaction

[Henderson, A, Smith J et. al](#) [See more](#)

Interaction Design Journal (2002), 19(7), 465-470

[Access PDF via institution](#)

Citation block example - unverified user

JOURNAL ARTICLE

Interaction design: beyond human-computer interaction

| *title block - links to abstract page*

Henderson, A, Smith J et. al [See more](#)

Interaction Design Journal (2002), 19(7), 465-470

DOI: [10.1235/512987.584930](#)

[Access PDF via institution](#)

| *Call To Action button opens up institution selector*

*Citation block **annotated example** - unverified user*

Interaction design: beyond human-computer interaction

Henderson A

Ubiquity, vol. 2002, issue March (2002) p. 2

[Access PDF via institution](#)

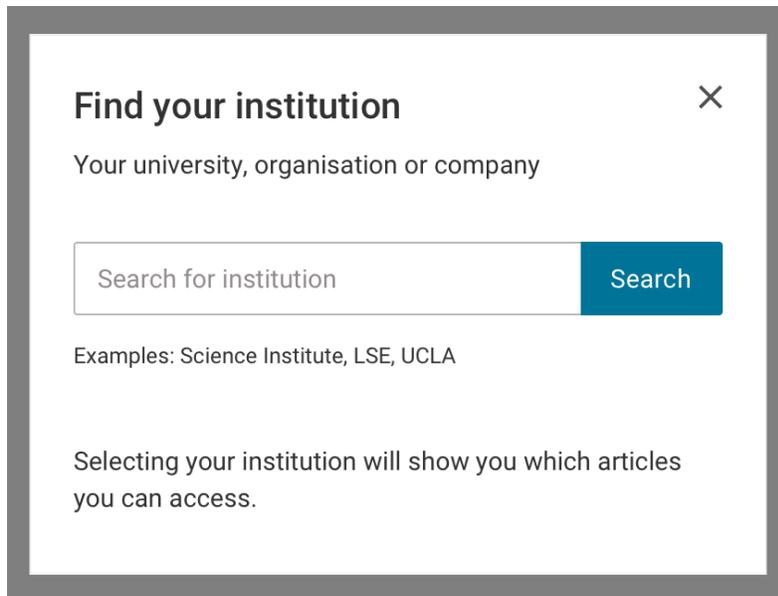
Example call to action button in the search results, this would display under each search listing

Select your institution to see which articles you can access

[Find your institution](#)

Example 'Find your institution' button for institutional lookup

Step 2: user inputs their institution



The screenshot shows a modal window titled "Find your institution" with a close button (X) in the top right corner. Below the title is the instruction "Your university, organisation or company". A search input field contains the placeholder text "Search for institution" and a blue "Search" button is positioned to its right. Below the search field, there are examples: "Examples: Science Institute, LSE, UCLA". At the bottom, a paragraph states: "Selecting your institution will show you which articles you can access."

Example of institutional selector

- Provide clear instructions on what to search for by labeling the search box for example; **“Find your institution”**, **“Add your institution”**, or **“Change your institution”** if they have already selected one. Including descriptive text below the heading is also recommended.
- Provide labeling that is available to assistive technology. Users need to be aware of control labels, headings, tips, and other content using screen readers. We recommend complying with the most current version of [WCAG Accessibility guidelines at the AA level: WCAG 2.1](#), or its subsequent versions.
- On page load, bring keyboard focus into the search field so that users can start typing and searching without additional hand movements or clicks.
- Provide type-ahead in the search field; users expect to see results when they type.
- Provide support for searching institution abbreviations, e.g., UCLA.
- Providing support for deriving institution from entered email domain is *optional*.

Search results display

Find your institution ×

Your university, organisation or company

Examples: Science Institute, LSE, UCLA

Selecting your institution will show you which articles you can access.

	UCL University College ucl.dk	>
	UCL (University College London) ucl.ac.dk	>

Example of a modal with drop-down suggestions

- Limit the number of displayed search results to what will fit in the visible frame. Users should not have to scroll through a list. If the number of matches from type ahead is too large to have reasonable confidence of a relevant match displaying near the top of the list (e.g., greater than 10), wait for users to type more characters before displaying the matches, or display a 'Show more results' option as in the example above.

- Display institution domain, in addition to the institution name, to show users that they will be taken to a different site. Let users know where they can find the list of institutions.
- Support accessibility by providing full keyboard support to navigate to the search result and select it. Provide a visible “on focus” style for all elements so that users know when elements are in focus. Provide information about the number of search results to assistive technology. Users need to be able to learn about dynamically changing results using a screen reader. (e.g., “Five institutions found matching New York. Use Up and Down arrows to move through results.”)

Error handling

Below is an example of how a search interface could handle errors and provide feedback to a user.

Find your institution ×

Your university, organisation or company

dghs Search

Examples: Science Institute, LSE, UCLA

Selecting your institution will show you which articles you can access.

No matching institutions found

- Try entering an institution name, abbreviations, or your institution email
- Try accessing through your library website
- Contact your librarian

Example of feedback to the user

- When there are no matches, provide a helpful message instructing users on next steps that may lead to success.

! Important: Assistive technology needs to be aware of the message. Users need to be able to learn that no matches are found using a screen reader.

Step: 3 The button changes to 'View PDF' or the link is displayed with the embellished result (see [placement of indicator](#))

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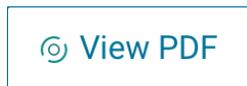
DOI: [10.1235/512987.584930](#)



| *Call To Action changes to 'View PDF'*

Annotated example of the call to action button 'View PDF' with the filled in icon if the user is entitled to the article

If the user is not entitled and the publisher has provided an Alternative Version (AV) then the below should be implemented instead.



'View PDF' example if the user is not entitled and the publisher has provided an alternative version

Step 4: Authentication

When the user clicks on the button or link for an article, which is not Open Access or a free article, they are then taken to an authentication page provided by the institution.

If the user authenticates and they are not entitled and no Alternative Version (AV) has been provided then **'Get PDF'** with no indicator is displayed instead. Alternatively if this is a text link then there would be no indicator next to the title. This would follow the

existing route of hitting a paywall for that article on the publisher's site. Please see the ['No state'](#) for further details.

Authentication (federated authentication provided by integrator)

This section describes the expected experience for the user who has performed an institutional lookup and authentication on the integrators platform using a service such as Shibboleth, or OpenAthens, either before or after performing a search.

Step 1: user selects their institution using institutional lookup, either before or after performing a search. If using [SeamlessAccess](#) Single Sign On (SSO) then this is via an 'Access through your institution' button.

An example of Seamless Access being used in practice can be found here: <https://bestpractice.bmj.com/login> which uses [OpenAthens Wayfinder](#)

Step 2: user inputs their institution

Find your institution ×

Your university, organisation or company

Examples: Science Institute, LSE, UCLA

Sign in via your institution to see which articles you can access.

Example of institutional selector

Search results display

Find your institution ×

Your university, organisation or company

Examples: Science Institute, LSE, UCLA

Sign in via your institution to see which articles you can access.

	UCL University College ucl.dk	>
	UCL (University College London) ucl.ac.uk	>

Example of a modal with drop-down suggestions

Please note the change of wording to 'Sign in via your institution to see which articles you can access'.

Step: 3 The user authenticates via their Institution Identity Provider (IdP) using a SAML based Service Provider (SP) such as Shibboleth or OpenAthens.

Step: 4 The search results are embellished with their access (see [placement of indicator](#))

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| *Call To Action changes to 'View PDF'*

Annotated example of the call to action button 'View PDF' with the filled in icon if the user is entitled to the article

Authenticated (institution remembered or pre-defined)

This section describes the expected experience for a user whose institution is known (remembered or pre-defined). If the user is already authenticated then they do not need to re-authenticate.

Step 1: Display the institution provider with an option to change / remove this affiliation

Your institution: University of Oxford

Change your institution

Your institution: University of Oxford [Remove](#) | [Change](#)

Examples of institution display

If using Seamless Access then the instructions on how to display the seamless access button can be found on the site here: <https://thiss.io/integration/>

Users should have the opportunity to find another institution (e.g., if they have multiple Identity Providers (IdPs), or have moved to a new institution) or to remove or change the previously used institution.

Step 2: Active session with Identity Provider (IdP)

If users still have an active session with their Identity Provider (IdP), they should be able to by-pass the institution login step and gain immediate access to the full article / other resource, if available through their institution. They should be able to instantly see the results embellished with their access.

In this scenario, if using [Seamless Access](#) single sign on (SSO), when a user accesses a second Service Provider (SP) page (e.g. on another publisher's site), that SP uses the known institution to direct authentication calls to the correct Identity Provider (IdP), without requiring the user to re-identify their institution to the new provider. If users no longer have an active session with their IdP, they will be redirected to their institution login page and asked to re-authenticate.

Interaction design: beyond human-computer interaction

Henderson A

Ubiquity, vol. 2002, issue March (2002) p. 2

 [View PDF](#)

Example of a search result for a full text article which the user has access to