

Discovery Service Options

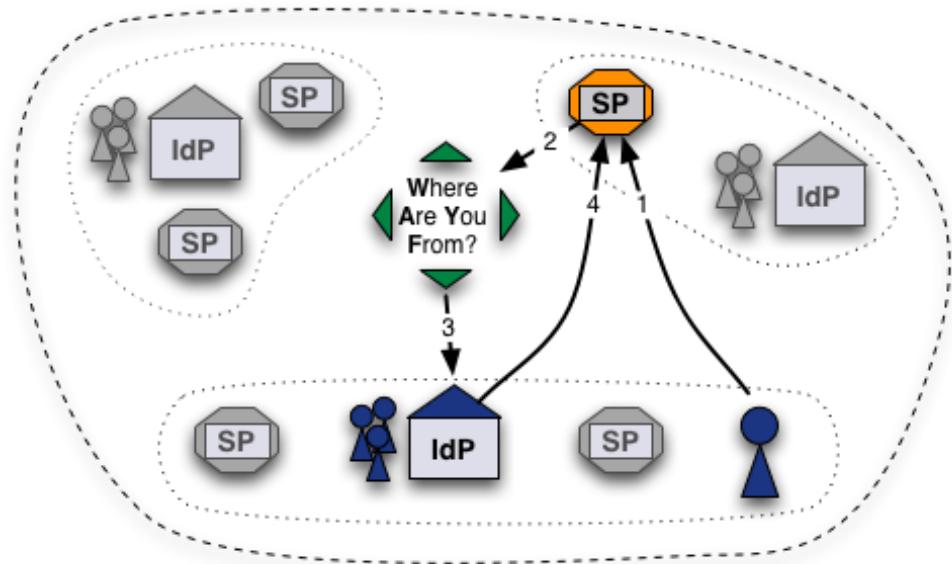


SWITCH

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No Central WAYF for Interfederation

- The classic way: One WAYF per Federation



WAYF achieves high availability through redundancy and IP Anycast.

Alternatives to Central WAYF

- Direct Login URLs
- SWITCH Embedded WAYF
- Shibboleth Embedded Discovery Service



Solution 1: Direct Login URLs

- A separate login link for a specific IdP
- 1 click direct redirect to IdP without going via WAYF
- Useful when only users of few IdPs use resource

Login links:

[Login via SWITCH \(SWITCHaai\)](#)

[Login via Munich University of Technology](#)

[Login via Eindhoven University of Technology](#)

Composing Login URLs

Required information

Service Provider Session Initiator Handler URL

Session Initiator /Login /DS

Since Shibboleth 2.5 the default Session Initiator is `/Login`, for older version you might have to use the `/DS` Session Initiator.

Enter the hostname of your SWITCHaai or AAI Test service and select one of the matching entries from the auto-completion feature.

Examples for valid Service Provider Session Initiator handler URLs are

`https://myhost.example.com/Shibboleth.sso/Login` or

`https://otherhost.example.com/Shibboleth.sso/DS`.

Service Provider Target URL

Specify here the URL of the web page that the user shall be redirected after authentication. This is usually a Shibboleth protected page. If you don't have such a page yet, use

`https://your.example.com/Shibboleth.sso/Session` provided you are using a Service Provider 2.x.

This page then will display all available attributes and other session information.

Identity Provider entityID

Enter the entityID of the Identity Provider. Entity IDs are

`https://aaı-login.example.com`

`https://aaı.example.org`

University of Bern (SWITCHaai)

`https://aaı-idp.unibe.ch/idp/shibboleth`

University of Bern Test IdP (AAI Test)

`https://aaı-login.test.unibe.ch/idp/shibboleth`

Initiation Type Service Provider

By default, the authentication process is initiated by the Service Provider. Identity Provider-initiated URLs work only with Shibboleth Identity Provider 2.3 or newer. They can be useful in specific use-cases but are generally not recommended to use.



<https://www.switch.ch/aaı/guides/discovery/login-link-composer/>

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Solution 2: Embedded WAYF

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WAYF

Bibliotheks-Login

Bibliothekskunden

ausser Angehörige der ETH Zürich / EPF Lausanne

Benutzer- oder Ausweisnummer

Passwort

Anmelden

[Passwort vergessen?](#)

[Neu registrieren](#)

Benutzerinnen und Benutzer mit einem in anderen [IDS-Verbünden](#) gültigen Benutzerausweis melden sich bitte mit ihrem üblichen Login an.

Angehörige der ETH Zürich / EPF Lausanne

Enter the name of the organisation you are affiliated with...

[Passwort vergessen?](#)

OLAT login

Please select your university.

You will be redirected for authentication.

SWITCH

Login



SWITCHaai Login

Studierende / Mitarbeitende von Schweizer Hochschulen (ausser HFT und BFH-Externe):

Login with:

> AAI

> SWITCH

Link

Login

(Link)

Login Übrige (einschl. HFT und BFH-Externe, nicht aai)

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Embedded WAYF

SWITCH
WAYF

Enter the name of the organisation you are affiliated with...

Last used

University of Basel

EPFL - EPF Lausanne

> SWITCH

Universities

EPFL - EPF Lausanne

ETHZ - ETH Zurich

Universita della Svizzera Italiana

University of Basel

University of Bern

University of Fribourg

University of Geneva

University of Lausanne

University of Liechtenstein

University of Lucerne

University of Neuchâtel

University of St. Gallen

University of Zurich

University Hospitals

CHUV - University Hospital Lausanne

HUG - Univ. Hospitals of Geneva

Inselspital - University Hospital Bern

University Hospital Zurich

From other federations

Dalarna University

Esslingen University of Applied Sciences

Zu

Universities

ETHZ - ETH Zurich

University of Zurich

University Hospitals

University Hospital Zurich

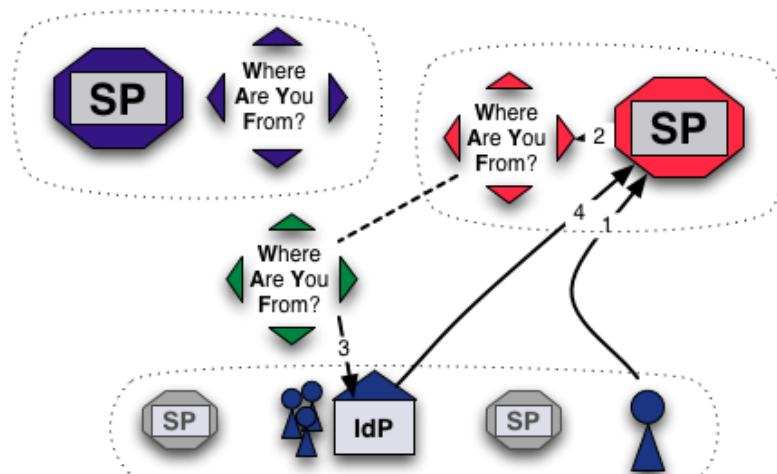
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Embedded WAYF

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WAYF

- Embed WAYF on Web Application
- customize look and feel
- still transparently uses central WAYF



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More information about the Embedded WAYF:



<https://www.switch.ch/aai/guides/discovery/embedded-wayf/>

Generate the Embedded WAYF code for your SP:



https://rr.aai.switch.ch/gen_embedding_code.php



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Configuration

Configuration Example of Embedded WAYF

```
// Example of how to add Identity Provider from other federations
var wayf_additional_idps = [
    {name:"Esslingen University of Applied Sciences",
     entityID:"https://idp.hs-esslingen.de/idp/shibboleth",
     logoURL:"https://www2.hs-esslingen.de/favicon.ico"
    },
    {name:"Dalarna University",
     entityID:"https://login.du.se/idp/shibboleth",
     logoURL:"https://login.du.se/duse-logo-16x16.png"
    }
];
```



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Configuration Example of Embedded WAYF

```
// EntityIDs of Identity Provider that should not be shown at all  
// [Optional, commented out by default]  
  
var wayf_hide_idps = new Array ("https://idemfero.units.it/idp/shibboleth",  
"https://idp.it.su.se/idp/shibboleth");  
  
// Categories of Identity Provider that should not be shown  
// Possible values  
// are:"university","uas","hospital","library","vho","others","all"  
  
var wayf_hide_categories = new Array("library","vho","others","hospital");
```

Enable JSON Discovery feed to use local metadata of SP



In shibboleth2.xml:

```
<Sessions lifetime="28800"  
         timeout="3600"  
         relayState="ss:mem"  
         checkAddress="false"  
         consistentAddress="true"  
         handlerSSL="true"  
         cookieProps="https">  
...  
<!-- JSON feed of discovery information. -->  
<Handler type="DiscoveryFeed" Location="/DiscoFeed"/>  
</Sessions>
```

JSON Discovery feed example



JSON result of an example discovery feed:
<https://sp.example.org/Shibboleth.sso/DiscoFeed>

```
[  
  { "entityID": "https://shibboleth-idp.uni-goettingen.de/uni/shibboleth" ,  
    "DisplayNames": [  
      { "value": "Georg-August Universität Göttingen" , "lang": "de" } ,  
      { "value": "Georg-August University Göttingen" , "lang": "en" }  
    ]  
  } ,  
  { "entityID": "https://login.ntua.gr/idp/shibboleth" ,  
    "DisplayNames": [  
      { "value": "National Technical University of Athens" , "lang": "en" } ,  
      { "value": "Εθνικό Μετσόβιο Πολυτεχνείο" , "lang": "el" }  
    ]  
  } ,  
]
```

Configuration (3)



Configuration Example of Embedded WAYF

```
// Whether to load Identity Providers from the Discovery Feed provided by  
// the Service Provider.  
// IdPs that are not listed in the Discovery Feed and that the SP therefore is  
// not able to accept assertions from, are hidden by the Embedded WAYF  
// IdPs that are in the Discovery Feed but are unknown to the SWITCHwayf  
// are added to the wayf_additional_idps.  
// The list wayf_additional_idps will be sorted alphabetically  
// The SP must have configured the discovery feed handler that generates a  
// JSON object. Otherwise it won't generate the JSON data containing the IdPs.  
// [Optional, default:false]  
  
var wayf_use_disco_feed = true;
```

MetadataFilter Example



In shibboleth2.xml:

```
<MetadataProvider type="XML" .....>

    <MetadataFilter type="Whitelist">
        <Include>https://idp.nordu.net/idp/shibboleth</Include>
        <Include>https://idp.ids-mannheim.de/idp/shibboleth</Include>
        <Include>https://shibboleth.fhwn.ac.at/idp/shibboleth</Include>
        <Include>https://idp.it.su.se/idp/shibboleth</Include>
        <Include>https://tumidp.lrz.de/idp/shibboleth</Include>
    </MetadataFilter>

</MetadataProvider>
```

Solution 3: Embedded Discovery Service



- Requires the Discovery Feed provided by the SP
- Embed the DS directly into the service
- Search-as-you-type or select from list
- JavaScript, CSS and HTML only
- developed and maintained by the Shibboleth team
- download from

<https://shibboleth.net/downloads/embedded-discovery-service/latest/>

- Documentation can be found at:

<https://wiki.shibboleth.net/confluence/display/EDS10/Embedded+Discovery+Service>

Embedded Discovery Service



A screenshot of the AAI Attribute Viewer interface. At the top, it says "AAI Attribute Viewer" and has the "SWITCH" logo. Below that, a message states: "The AAI Attribute Viewer displays all attributes that are available about an AAI user. All user information is stored 10 days in a log file before it is automatically deleted." Another message says: "Please select your Home Organization and log in to see the AAI attributes that are available for you." A section titled "Use a suggested selection:" shows logos for VHO, WSL, and SWITCH. Below that, a search bar contains "swi" and a dropdown list of organizations: FHNW - University of Applied Sciences Northwestern Switzerland, HES-SO : University of Applied Sciences Western Switzerland, HSR - Hochschule für Technik Rapperswil, PHZ - University of Teacher Education Central Switzerland, SNSF - Swiss National Science Foundation, SUPSI - University of Applied Sciences Southern Switzerland, SWITCH, VHO - Virtual Home Organization, and WSL - Swiss Federal Institute for Forest, Snow and Lands. A "Continue" button is visible to the right of the dropdown.

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Embedded WAYF vs Embedded DS

Properties	Login Link	Embedded WAYF 	EDS 
Independent from central server	✓		✓
Display only “valid” IdPs for SP		(✓)	✓
Search as you type feature		✓	✓
Show Home Org Logo	(✓)	✓	✓
Very easy deployment	✓	✓	✓
Can be used with old SPs (<2.4)	✓	(✓)	
Categories supported	(✓)	✓	
Uses cached recent IdP selection across different services		✓	

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When to use what ?

Numbers of IdPs	Login Link(s)	Embedded WAYF	EDS
1 - 5	✓	✓	✓
1 - 500		✓	✓

To mention: Disco Juice

- Very comprehensive Discovery Service
- Well suited for services with users from many IdPs
- Search-as-you-type only
- Uses Geo IP and metric to guess user's IdP
- Based on PHP and JS

 <http://discojuice.org/>

