SimpleSAMLphp

making things simple

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University of Málaga

Melbourne
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Outline

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SimpleSAMLphp
a definition (sort of)

What is SimpeSAMLphp?

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a definition (sort of)

What is SimpeSAMLphp?

It is a **simple** application

SimpleSAMLphp
a definition (sort of)

What is SimpeSAMLphp?

It is a **simple** application
that implements **SAML**

SimpleSAMLphp
a definition (sort of)

What is SimpeSAMLphp?

It is a **simple** application
that implements **SAML**
in **PHP**

SimpleSAMLphp
simple means easy

SimpleSAMLphp is easy to

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SimpleSAMLphp is easy to

- install

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- install:
  just drop a folder into an Apache 2 server with PHP 5.2

SimpleSAMLphp is easy to

- install:
  just drop a folder into an Apache 2 server with PHP 5.2
- integrate

SimpleSAMLphp is easy to

- install:
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- integrate
- maintain

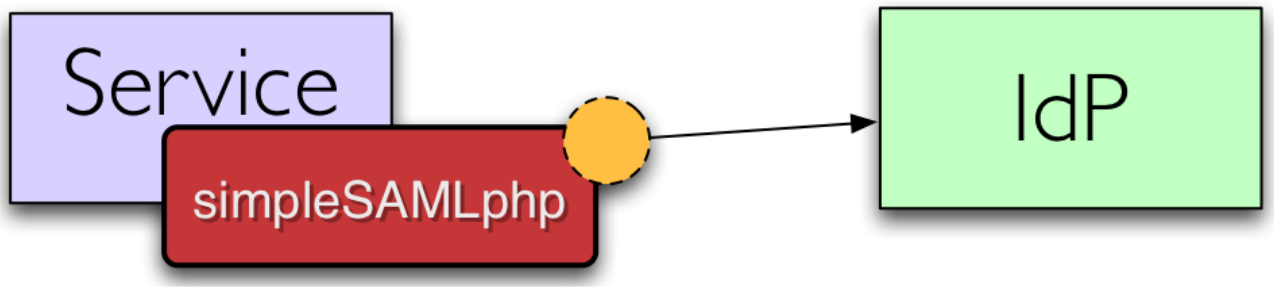
SimpleSAMLphp is easy to

- install:
  just drop a folder into an Apache 2 server with PHP 5.2
- integrate
- maintain
- develop for

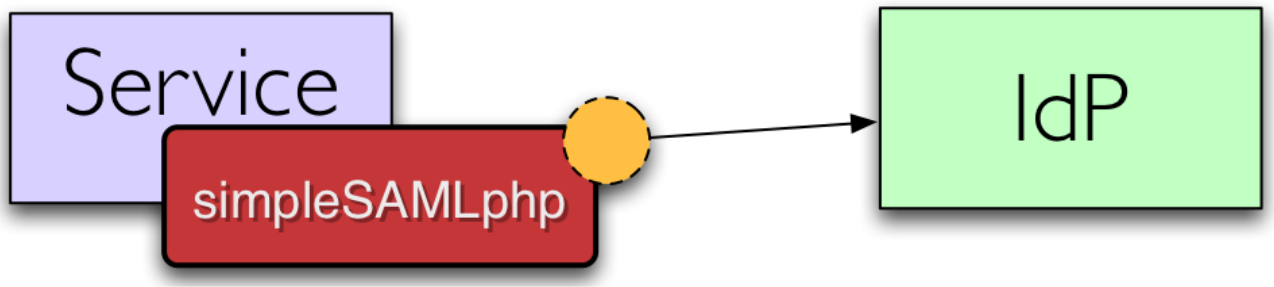
Use cases
Federating an application

SimpeSAMLphp for integrating applications into a federation

SimpeSAMLphp for integrating applications into a federation



SimpeSAMLphp for integrating applications into a federation



Example: conecting a wiki to the federation

Use cases
Setting up an Identity Provider

SimpeSAMLphp as the federation Identity Provider

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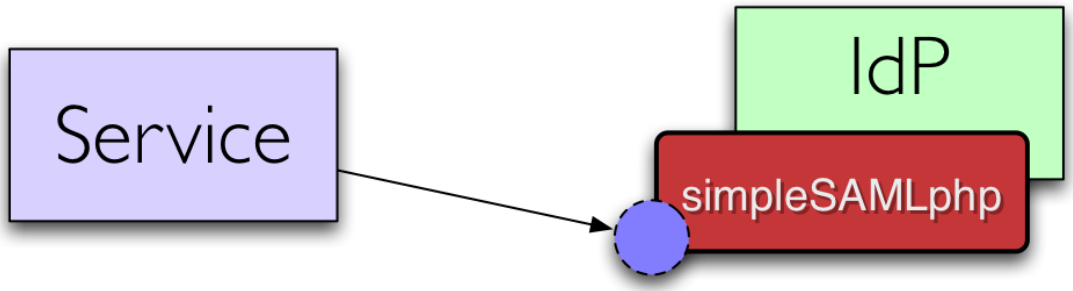
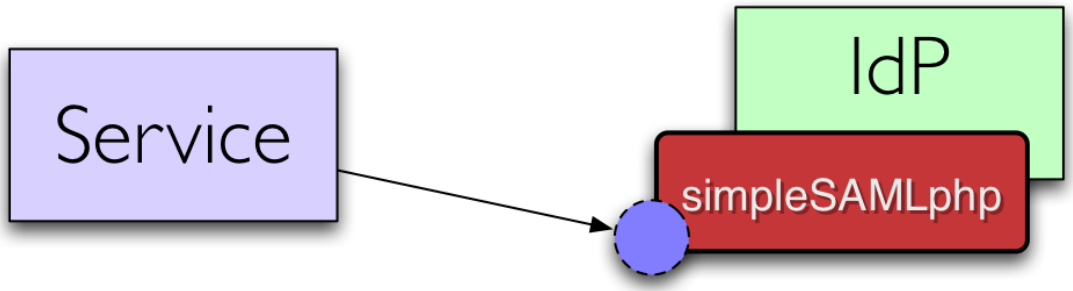
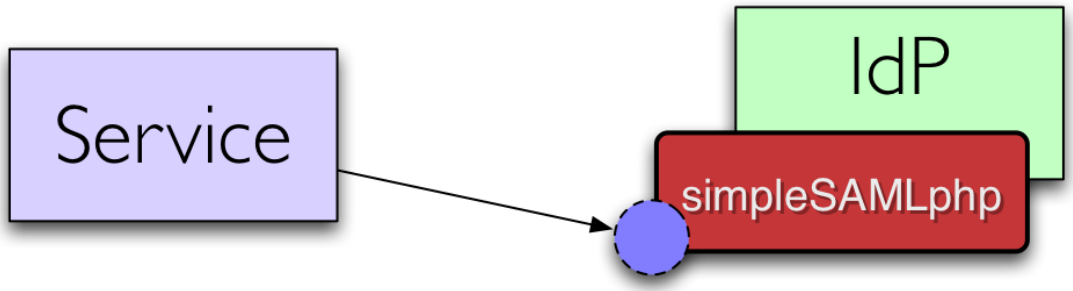


SimpeSAMLphp as the federation Identity Provider



For example:

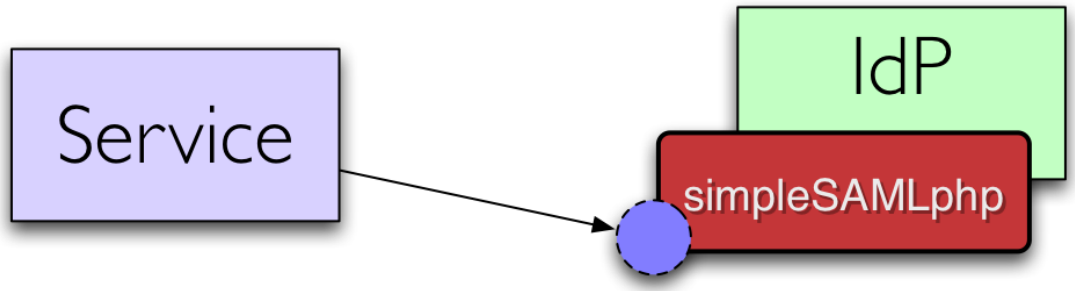
SimpeSAMLphp as the federation Identity Provider



For example:

+ The University of Málaga IdP

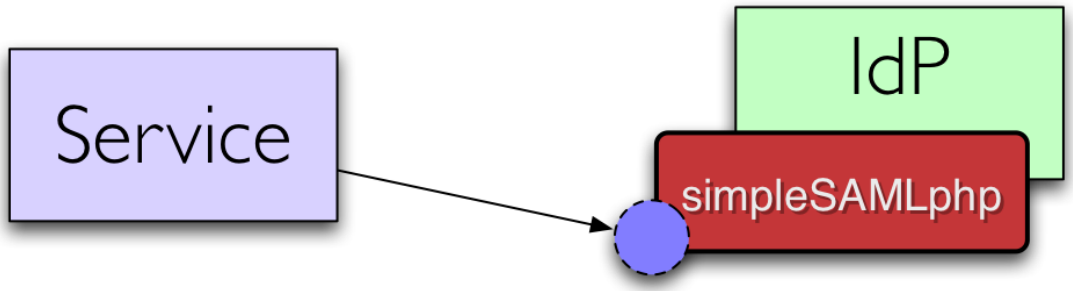
SimpeSAMLphp as the federation Identity Provider



For example:

- The University of Málaga IdP
- The wayf.dk danish federation

SimpeSAMLphp as the federation Identity Provider



For example:

- The University of Málaga IdP
- The wayf.dk danish federation
- An American University connecting to Google Apps

Use cases
Bridging protocols

SimpeSAMLphp can bridge disparate protocols

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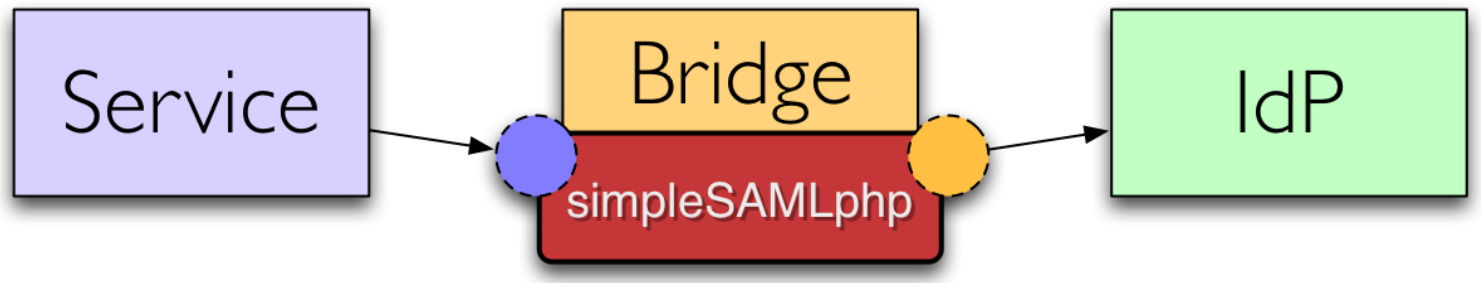
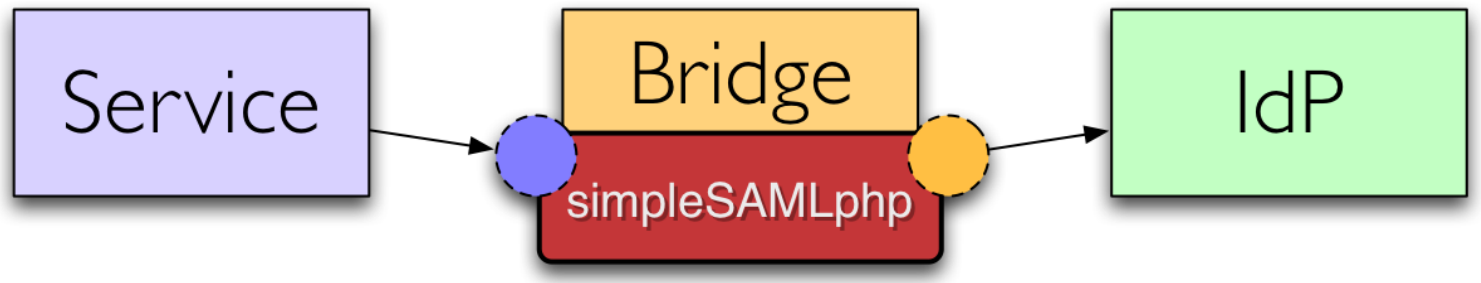


SimpeSAMLphp can bridge disparate protocols



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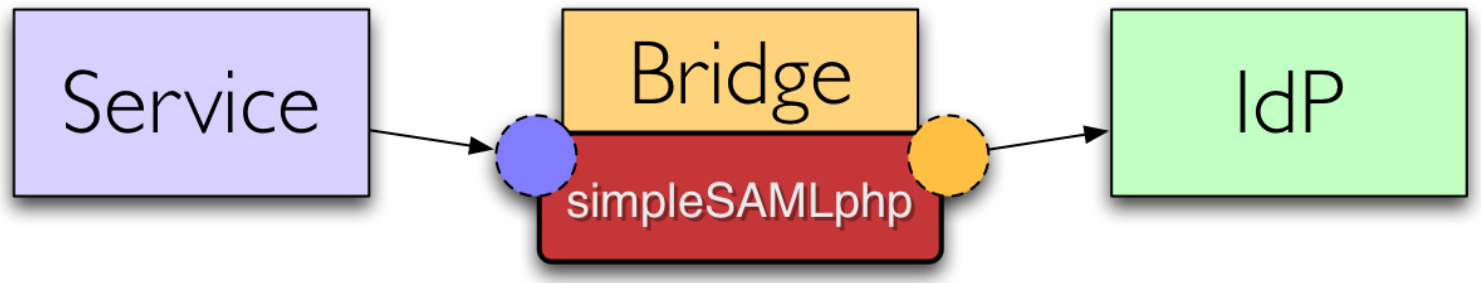

For example:

Shibboleth $\longleftrightarrow$ SAML 2.0

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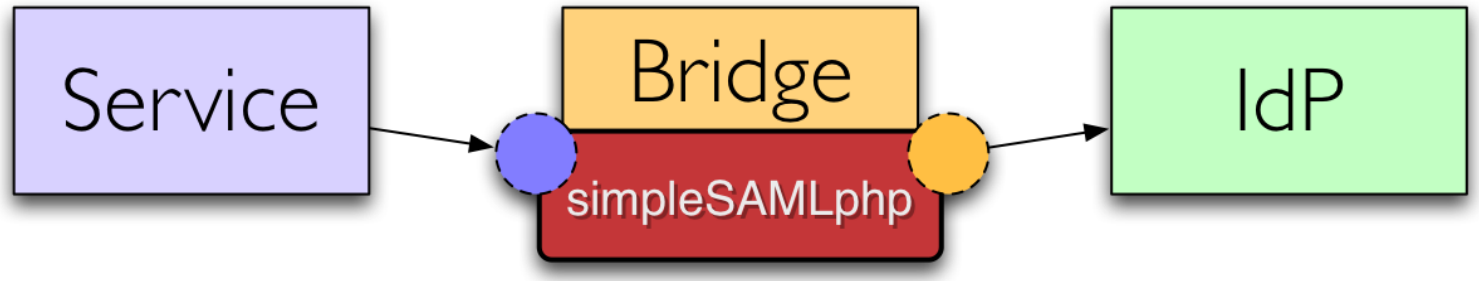

For example:

$$\text{Shibboleth} \longleftrightarrow \text{SAML 2.0}$$
$$\text{OpenID} \longrightarrow \text{SAML 2.0}$$

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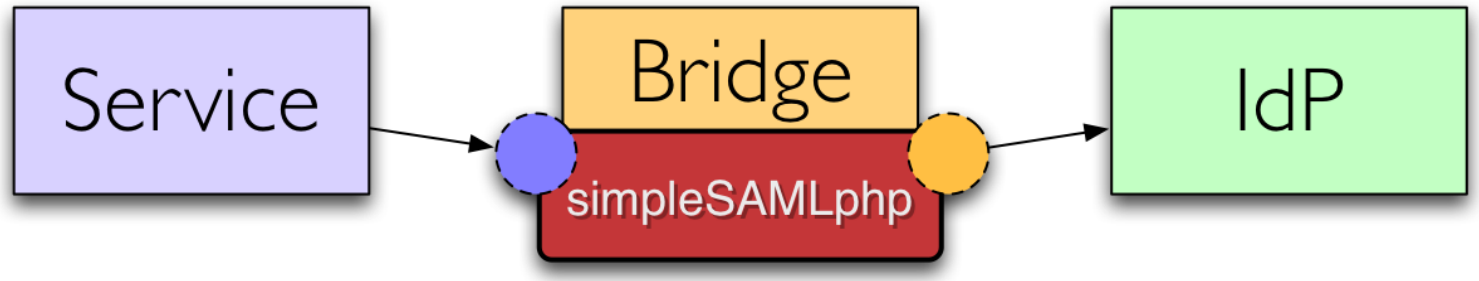

For example:

Shibboleth	$\longleftrightarrow$	SAML 2.0
OpenID	$\longrightarrow$	SAML 2.0
PAPI	$\longleftrightarrow$	SAML 2.0

Lotsa protocols

simpleSAMLphp *is* multiprotocol

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SimpleSAMLphp version 1.2 can communicate with

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In the not so distant future:

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- OAuth

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Abstraction layers
Abstraction is good, but moderately

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- code becomes more complex, therefore, more difficult to read and trace

So, SimpleSAMLphp has a few carefully selected layers

Authentication mechanisms

you know were your people is

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SimpleSAML provides an extension mechanism that allows it to authenticate from

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- LDAP, various flavours

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Authentication mechanisms
you know were your people is

SimpleSAML provides an extension mechanism that allows it to authenticate from

- LDAP, various flavours
- CAS
- PostgreSQL
- RADIUS
- PKI
- self registration

Session management

SimpleSAMLphp inherits sessions from PHP

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Session storage is also extensible:

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and allows for:

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- Single Log Out

Session management
SimpleSAMLphp inherits sessions from PHP

Session storage is also extensible:

- PHP sessions
- memcache

and allows for:

- Single Sign On
- Single Log Out
- attribute caching

Shall we use a framework?
or we better have more developers

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Why doesn't SimpleSAMLphp use a framework?

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+ There are many good PHP frameworks

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Why doesn't SimpleSAMLphp use a framework?

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Therefore SimpleSAMLphp does not use frameworks so it is simple to deploy and develop for

Can it grow?
SimpleSAML can cover almost any need

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Scaling is *simpler* for simple products

Can it grow?
SimpleSAML can cover almost any need

Scaling is *simpler* for simple products

from simple

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to not so simple

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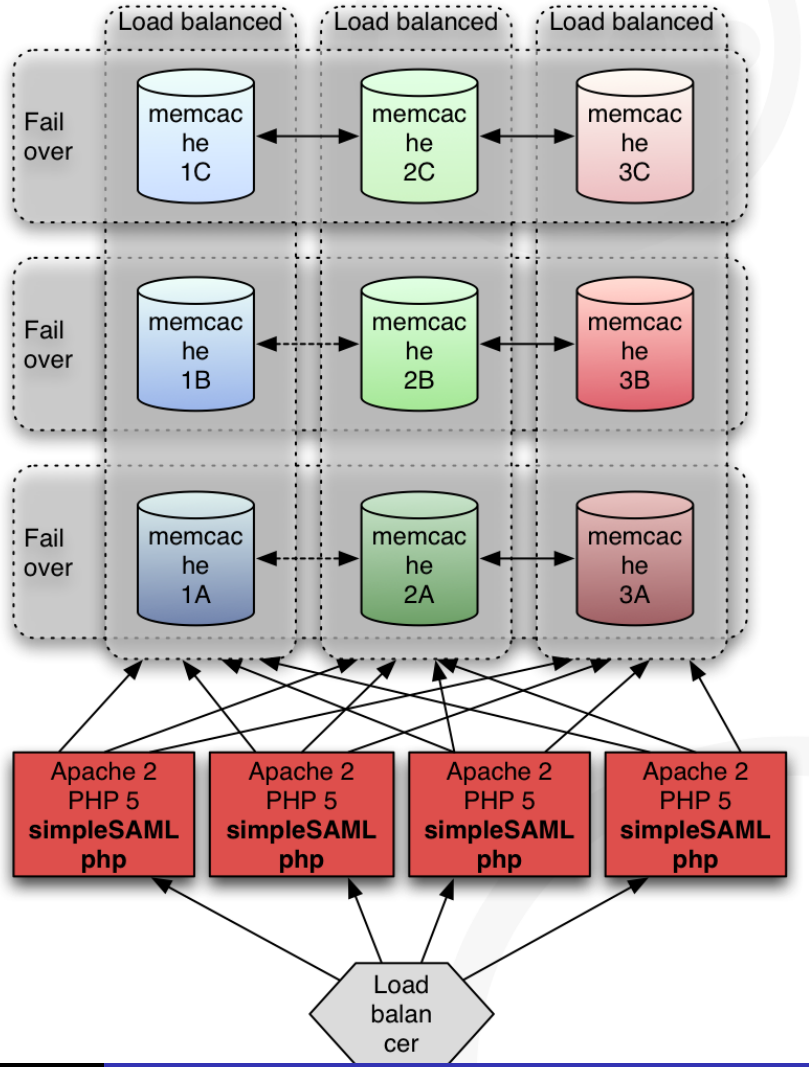

XML Protocols
simplifying complexity

SimpleSAMLphp handles XML with its usual simplicity

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- Text templates for sending

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- Text templates for sending
  simple to fill with attributes and parameters

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- Text templates for sending
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- XPath for receiving

SimpleSAMLphp handles XML with its usual simplicity

- Text templates for sending
  simple to fill with attributes and parameters
- XPath for receiving
  flexible and effective, take what you need, ignore the rest

Metadata management

SimpleSAMLphp simplifies metadata management

SimpleSAMLphp metadata management is really modern

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- IdPs and SPs produce their metadata *on the fly*

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- IdPs and SPs produce their metadata *on the fly*
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Metadata management
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SimpleSAMLphp metadata management is really modern

- IdPs and SPs produce their metadata *on the fly*
- Pre-installed metadata for some federations
- Dynamic metadata are in the pipeline

Community
users are developers

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SimpleSAMLphp is an OpenSource project, thus

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SimpleSAMLphp is an OpenSource project, thus

- Everybody can participate

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SimpleSAMLphp is an OpenSource project, thus

- Everybody can participate
- Users help other users

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Community
users are developers

SimpleSAMLphp is an OpenSource project, thus

- Everybody can participate
- Users help other users
- Users can influence development
- Many of us have contributed to some extent

Who is using it?
SimpleSAMLphp extends like a bush fire

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SimpleSAMLphp users number grows daily

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Summary

SimpleSAMLphp

- is simple to use and deploy

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- allows for fast federation building

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- http://rnd.feide.no/simplesamlphp

Hard work
let's get our hands dirty

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What will we try to achieve today?

Hard work
let's get our hands dirty

What will we try to achieve today?

- Install simpleSAMLphp

Hard work
let's get our hands dirty

What will we try to achieve today?

- Install simpleSAMLphp
- Get an IdP running

Hard work
let's get our hands dirty

What will we try to achieve today?

- Install simpleSAMLphp
- Get an IdP (or many) running

Hard work
let's get our hands dirty

What will we try to achieve today?

- Install simpleSAMLphp
- Get an IdP (or many) running
- Write an authentication module

Hard work
let's get our hands dirty

What will we try to achieve today?

- Install simpleSAMLphp
- Get an IdP (or many) running
- Write an authentication module
- Set up some simple services

Hard work
let's get our hands dirty

What will we try to achieve today?

- Install simpleSAMLphp
- Get an IdP (or many) running
- Write an authentication module
- Set up some simple services
- Build one federation

Hard work
let's get our hands dirty

What will we try to achieve today?

- Install simpleSAMLphp
- Get an IdP (or many) running
- Write an authentication module
- Set up some simple services
- Build, at least, one federation

Hard work
let's get our hands dirty

What will we try to achieve today?

- Install simpleSAMLphp
- Get an IdP (or many) running
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- Set up some simple services
- Build, at least, one federation
- Set up a more complex service

Hard work
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- Install simpleSAMLphp
- Get an IdP (or many) running
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- Build, at least, one federation
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- Modify attributes on the fly

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- Protect a non PHP app

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