

# Migrating an IdP to Global Research and Scholarship



## Deprecated

Note that this page has been deprecated. The information it contains is no longer current.

InCommon no longer certifies IdPs that release R&S attributes only locally, although some IdPs do still retain that legacy certification, so this document has been retained to illuminate the differences between global and InCommon-only R&S certifications.

All IdPs are encouraged to certify for global R&S; see [How to Apply for the Research and Scholarship \(R&S\) Entity Category](#) for more information.

## Migrating an IdP to the Global Research & Scholarship Category

This topic is for operators of existing Research & Scholarship (R&S) IdPs, that is, IdPs that have declared their support for the Research & Scholarship category.

All R&S SPs registered by InCommon meet the requirements of the international [REFEDS Research & Scholarship Entity Category](#) specification. More importantly, InCommon imports the metadata of R&S SPs from other federations. Consequently, R&S IdP operators should plan their migration strategy to global R&S.

Basically, the operator of an existing R&S IdP has two options:

1. Release attributes to **all** R&S SPs, including R&S SPs in other federations
  - See below: [Configuring an IdP to Release Attributes Globally](#)
2. Release attributes to R&S SPs registered by InCommon only
  - See below: [Configuring an IdP to Release Attributes Locally](#)

These two mutually exclusive options are discussed in the following sections.



## Your action is requested but NOT REQUIRED

The actions documented here are NOT REQUIRED. If you choose to take no action, *nothing will break*. We do, however, strongly encourage you to *perform exactly one of the actions* documented on this page.

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## The R&S Migration Process

To support the R&S category, either globally or locally, the operator of an existing R&S IdP follows this simple 3-step process:

1. Review the authoritative [REFEDS Research & Scholarship Entity Category](#) specification
  - a. The requirements for an R&S SP have changed slightly (a [gap analysis](#) has been prepared for your convenience)
  - b. The requirements for an R&S IdP have **not** changed
2. Configure your IdP to release attributes to R&S SPs, either globally or locally (see subsequent sections)
3. [Declare your IdP's ability to support R&S](#) by submitting a short form



R&S IdPs that support global R&S are shown in green on the [Entity Categories info page](#).

Once the R&S declaration form has been submitted, your metadata will be updated to reflect your IdP's attribute release policy.



#### FAQ: When should I migrate to global R&S?

Since all R&S SPs have a [multivalued R&S entity attribute](#) in InCommon metadata (for backwards compatibility), R&S IdP operators can migrate to global R&S at any time.

## Reconfiguring Your IdP



#### Shibboleth IdP V2 has reached end-of-life

As of July 31, 2016, Shibboleth IdP V2 is **unsupported software**. You should [upgrade to Shibboleth IdP V3](#) as soon as possible!

## Use of the Legacy R&S Tag

If you support R&S today, and you have not already performed the migration steps documented on this wiki page, your IdP is likely configured with a policy rule that releases attributes to R&S SPs tagged with the legacy `incommon.org` R&S tag, something like this:

#### A Shib IdP V2 rule that relies on the legacy `incommon.org` R&S tag

```
<afp:PolicyRequirementRule xsi:type="saml:AttributeRequesterEntityAttributeExactMatch"
  attributeName="http://macedir.org/entity-category"
  attributeValue="http://id.incommon.org/category/research-and-scholarship" />
```

Continued use of the `incommon.org` R&S tag in this manner is discouraged.



#### An IdP configuration **SHOULD NOT** rely on the `incommon.org` R&S tag in SP metadata

Use of the legacy `incommon.org` R&S tag to configure attribute release policy at the IdP is **deprecated**. Eventually this tag will be removed from all SP metadata (although a timeline for doing so has not yet been determined).

Although we have no immediate plans to remove that tag from SP metadata, we reserve the right to do so in the future. We will of course let you know in advance if and when this happens but in the meantime we ask that you remove the legacy `incommon.org` R&S tag from your IdP configuration. Doing so now prevents you from having to do so at a later time.

## Configuring an IdP to Release Attributes Globally

This section is for existing R&S IdPs that want to *support global Research & Scholarship* by releasing attributes to **all** R&S SPs, including R&S SPs in other federations.



#### Release the Essential Attribute Bundle to ALL SPs

If your IdP releases the [Essential Attribute Bundle](#) to all SPs (not just R&S SPs), and your deployment of `eduPersonPrincipalName` is non-reassigned, no further configuration is required. Please [declare your IdP's ability to support global R&S](#) now.

To support R&S globally, an R&S IdP should be configured with a policy rule that releases the [R&S Attribute Bundle](#) to **all** R&S SPs, including R&S SPs in other federations. An instance of Shibboleth IdP V2 may be configured as follows:

#### A Shib IdP V2 rule that releases attributes to ALL R&S SPs

```
<afp:PolicyRequirementRule xsi:type="saml:AttributeRequesterEntityAttributeExactMatch"
  attributeName="http://macedir.org/entity-category"
  attributeValue="http://refeds.org/category/research-and-scholarship" />
```

An instance of Shibboleth IdP V3 is configured similarly:

### A Shib IdP V3 rule that releases attributes to ALL R&S SPs

```
<afp:PolicyRequirementRule xsi:type="saml:EntityAttributeExactMatch"
  attributeName="http://macedir.org/entity-category"
  attributeValue="http://refeds.org/category/research-and-scholarship" />
```

Note that the above configurations recognize the refeds.org R&S entity attribute value. For more detailed information about configuring an IdP for R&S, consult the [R&S IdP Config](#) topic.

## Configuring an IdP to Release Attributes Locally

This section is for existing R&S IdPs that want to continue to release attributes to R&S SPs *registered by InCommon only*.



### Release the Essential Attribute Bundle to all SPs registered by InCommon

If your IdP releases the [Essential Attribute Bundle](#) to all SPs registered by InCommon (not just R&S SPs registered by InCommon), and your deployment of eduPersonPrincipalName is non-reassigned, no further configuration is required.

An IdP that supports R&S locally is configured with a policy rule that releases the [R&S Attribute Bundle](#) to R&S SPs registered by InCommon only. To do this *without relying on the legacy incommon.org R&S tag* (a practice that is **deprecated**), an instance of Shibboleth IdP V2 leverages the [Registered By InCommon Category](#) as follows:

### A Shib IdP V2 rule that releases attributes to R&S SPs registered by InCommon

```
<afp:PolicyRequirementRule xsi:type="basic:AND">
  <basic:Rule xsi:type="saml:AttributeRequesterEntityAttributeExactMatch"
    attributeName="http://macedir.org/entity-category"
    attributeValue="http://refeds.org/category/research-and-scholarship" />
  <basic:Rule xsi:type="saml:AttributeRequesterEntityAttributeExactMatch"
    attributeName="http://macedir.org/entity-category"
    attributeValue="http://id.incommon.org/category/registered-by-incommon" />
</afp:PolicyRequirementRule>
```

An instance of Shibboleth IdP V3 leverages either the `registered-by-incommon` entity attribute (as above) or the `<mdrpi:RegistrationInfo>` element in metadata directly, as shown in the following example:

### A Shib IdP V3 rule that releases attributes to R&S SPs registered by InCommon

```
<afp:PolicyRequirementRule xsi:type="basic:AND">
  <basic:Rule xsi:type="saml:EntityAttributeExactMatch"
    attributeName="http://macedir.org/entity-category"
    attributeValue="http://refeds.org/category/research-and-scholarship" />
  <basic:Rule xsi:type="saml:RegistrationAuthority"
    registrars="https://incommon.org" />
</afp:PolicyRequirementRule>
```



### Expanding your attribute release policy

Note that the `registrars` XML attribute in the preceding example takes a space-separated list of registrar IDs, which is most flexible. You could easily expand your attribute release policy by adding other registrar IDs to the list.

For more information about configuring an IdP for R&S, consult the [R&S IdP Config](#) topic in the wiki.

## Frequently Asked Questions

### What do you mean by “multivalued R&S entity attribute?”

Please visit the [R&S Entity Metadata](#) wiki page. There you will find an example of a multivalued R&S entity attribute for R&S SPs.

## Why do all R&S SPs have a multivalued R&S entity attribute in metadata?

Every R&S SP has a multivalued R&S entity attribute in metadata so that R&S IdPs can migrate to global R&S at any time without loss of interoperability. Eventually the legacy `incommon.org` R&S tag in SP metadata will be removed.

## Why is it necessary to remove the legacy `incommon.org` R&S tag from SP metadata?

The Research & Scholarship category is now an international standard. The legacy `incommon.org` R&S tag is only relevant inside the InCommon Federation. In order to interoperate with international partners, the legacy `incommon.org` R&S tag must be replaced with the new `refeds.org` R&S tag, which is the only R&S entity attribute value recognized by R&E federations worldwide.

## When will the legacy `incommon.org` R&S tag be removed from SP metadata?

We have no definite plans to remove the legacy `incommon.org` R&S tag from SP metadata. We will monitor the progress of the Research & Scholarship category in the InCommon Federation and make a determination at a later time. In the meantime, it is RECOMMENDED that all IdPs remove all references to the legacy `incommon.org` R&S tag from their configurations.



### Exporting the R&S entity attribute

The legacy `incommon.org` R&S entity attribute value

<http://id.incommon.org/category/research-and-scholarship>

in SP metadata is **not** exported to eduGAIN. Only the `refeds.org` R&S entity attribute value

<http://refeds.org/category/research-and-scholarship>

in SP metadata is exported to eduGAIN! That is, R&S SPs exported to eduGAIN have a single-valued R&S entity attribute in metadata (since backwards compatibility is not an issue outside of the InCommon Federation).

## When will the `incommon.org` R&S tag be removed from IdP metadata?

As long as there are IdPs that want to restrict attribute release to R&S SPs registered by InCommon, the legacy `incommon.org` R&S tag will remain in IdP metadata. Note well: From a global perspective, *you do not support R&S unless you recognize the `refeds.org` R&S entity attribute value in SP metadata.*

## When should I migrate to global R&S, that is, when should I reconfigure my IdP to release attributes to all R&S SPs globally?

You can reconfigure your IdP whenever you're ready. If you are certain you want to support global R&S, then by all means *reconfigure your IdP now.*

## If I reconfigure my IdP to recognize the `refeds.org` R&S tag, will my IdP start releasing attributes to SPs outside InCommon?

If your IdP recognizes the `refeds.org` R&S tag in SP metadata, it will automatically release attributes to all R&S SPs, including R&S SPs from other federations. That's precisely what it means to support global R&S.

## I don't want to release attributes to R&S SPs from other federations. How do I prevent that from happening?

If you don't want to release attributes to R&S SPs from other federations, don't change your attribute release policy to recognize the `refeds.org` R&S entity attribute value. Simply continue to recognize the legacy `incommon.org` R&S entity attribute value as you do now, or better yet, *reconfigure your IdP to release attributes to R&S SPs registered by InCommon without relying on the legacy `incommon.org` R&S tag.*

## If I don't release attributes to global R&S SPs, why do I have to touch my IdP config at all?

You are not required to touch your IdP config, at least not at this time. The suggested actions are NOT REQUIRED.

That said, we encourage you to reconfigure your IdP as documented. If you do, and we decide to remove the legacy `incommon.org` R&S tag from SP metadata at some later date, you'll be all set. In any case, we won't do anything without giving everyone ample lead time.