# Migrating an SP to Global Research and Scholarship

## Migrating an SP to the Global Research and Scholarship Category

This topic is for owners of existing Research & Scholarship (R&S) SPs.

R&S IdPs in the InCommon Federation are currently in the process of migrating to global R&S. Likewise new R&S IdPs will be encouraged to support global R&S as well. More importantly, InCommon will soon begin importing the metadata of R&S IdPs from other federations. In anticipation of these events, existing R&S SP owners should begin to develop a migration strategy for global R&S.

Since all R&S SPs in the InCommon Federation now meet the requirements of the international REFEDS Research & Scholarship Entity Category specifica tion, R&S SPs have a multivalued R&S entity attribute in InCommon metadata. In that sense, all R&S SPs have successfully migrated to global R&S. However, if an R&S SP deployment depends on the R&S entity attribute in IdP metadata, then additional migration steps may be required since the entity attributes in IdP metadata will change as IdPs declare their support for global R&S.

For example, a small number of R&S SP deployments are known to filter IdP metadata such that R&S IdPs are the only IdPs exposed on the SP's discovery interface. Such an SP is dependent upon the R&S entity attribute in IdP metadata.

> ⚠ If your SP deployment depends on the R&S entity attribute in IdP metadata, please read on. Otherwise there is nothing further you need to do to migrate to global R&S.

An SP deployment that depends on the R&S entity attribute in IdP metadata almost certainly recognizes the legacy incommon.org R&S entity attribute value:

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

Such an SP may also want to recognize the refeds.org R&S entity attribute value

```
http://refeds.org/category/research-and-scholarship
```

since IdPs that support global R&S will carry the latter in their metadata. Indeed, R&S IdPs from other federations will carry the refeds.org R&S tag exclusively.

> ⛔ **An R&S IdP carries a single-valued entity attribute in its metadata**
>
> An R&S IdP will carry either the incommon.org R&S tag or the refeds.org R&S tag but **not both**. An SP that depends on the R&S entity attribute in IdP metadata must take this fact into account.

To configure an instance of Shibboleth SP 2.5 (and later) to *restrict its discovery interface to R&S IdPs*, add the following `DiscoveryFilter` to your `MetadataProvider`:

**Show only R&S IdPs on the discovery interface**

```
<!--
    As the refeds.org R&S tag becomes more prevalent, the
    order of the attributes should be reversed for efficiency.
-->
<DiscoveryFilter type="Whitelist" matcher="EntityAttributes">
  <saml:Attribute
      Name="http://macedir.org/entity-category-support"
      NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
    <saml:AttributeValue>http://id.incommon.org/category/research-and-scholarship</saml:AttributeValue>
  </saml:Attribute>
  <saml:Attribute
      Name="http://macedir.org/entity-category-support"
      NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
    <saml:AttributeValue>http://refeds.org/category/research-and-scholarship</saml:AttributeValue>
  </saml:Attribute>
</DiscoveryFilter>
```

The above configuration requires Shibboleth SP v2.5 (or later). Be aware that filtering entity metadata from the discovery interface is not the same as filtering the metadata in the first place. If the latter is really what you want to do, replace the `<DiscoveryFilter>` with an identical `<MetadataFilter>` as in the previous example.

See the Shibboleth Metadata Config topic for a complete example of a `MetadataProvider`. The above `DiscoveryFilter` element may be added to that `MetadataProvider`.