

1 AAI Resource Registry Guide

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The figures in this guide may not look accurate to the real web pages because they often are simplified or not up to-date.

1. Description of the Resource Registry

The Resource Registry is a tool developed by SWITCH to manage information about Resources and Home Organizations participating in SWITCHaai, the so-called Federation Metadata. Its intended users are Resource and Home Organization administrators and its features include:

- **Federation Metadata can be generated**
Based on the information collected, the crucial Federation Metadata files for the Identity Providers as well as Service Providers get generated. Each Identity Provider needs to know all potential Service Providers with whom it should communicate and vice versa. Each Identity Provider has to maintain the Attribute Release Policy (ARP) configuration. The Resource Registry provides them tailored templates for the ARP.
- **Resources declare their Attribute Requirements**
Resource administrators specify the required attributes to provide for accessing the resource. In addition, desired attributes to get can be listed. Desired attributes should provide additional benefit to justify their use. The data protection principle counts: Process only data which is really necessary!
- **Resources declare the Intended Audience**
Resource administrators can also specify from which Home Organizations it will accept users. For example, a Resource is only of interest to medical students. Then, there is no point in adding that Resource to the metadata of the universities of applied sciences. However, it is still the duty of the Resource to configure its authorization rules properly!
- **Federation Members can control Resources in their Domain**
Each Resource needs to get approved before its entry gets activated in the Resource Registry. Each Federation Member approves Resources from its own domain and from the Federation Partners it sponsors. It delegates this control to one or more people who act as Resource Registration Authority administrators for the Federation Member. They are alerted by e-Mail, whenever approval is required for changes made to Resource Description in the Resource Registry.
- **Identity Providers declare which Attributes they support**
Not all of the attributes specified for SWITCHaai are mandatory to implement. The Identity Providers can document in their Resource Registry entry which ones are implemented and potentially available to Resources.

The Resource Registry is written in PHP using PEAR/QuickForm and MySQL.

2. Login

The Resource Registry is accessible via <https://aai-rr.switch.ch/> and requires a SWITCHaai enabled account. The first page presents you a short description of the Resource Registry and several login buttons. These login buttons are the entrance to the Resource Registry for different Federations. SWITCH operates at the time being two Federations, SWITCHaai and AAI Test.

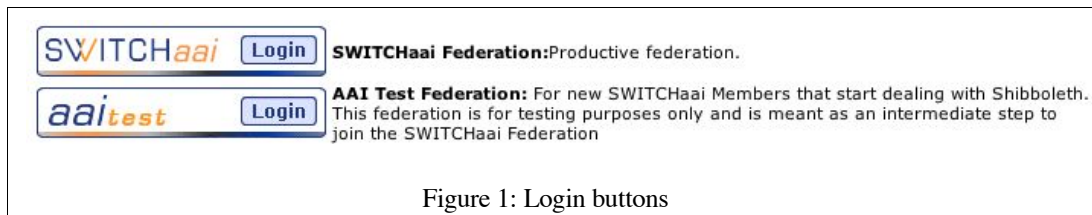


Figure 1: Login buttons

To log in you have to click on the login button that represents the Federation your Home Organization is part of. You then have to authenticate yourself at your Home Organization and are redirected back to the Resource Registry. Provided the Resource Registry receives all the required attributes from your Home Organization, you are logged in. The required attributes are:

- Given Name
- Surname
- E-Mail Address
- Unique Identifier
- Home Organization Name
- Home Organization Type

Note: If you log in via SWITCHaai or AAI-Test doesn't play a role, the Resource Registry works exactly the same.

When a user logs in the first time, a usage agreement (see Figure 2) has to be accepted for data privacy purposes. In order to send notification e-Mails at least given name, surname and e-Mail address have to be stored in the Resource Registry. Therefore, you have to agree that you allow the storage of this information.

User Information	
Given Name	Demouser2
Surname	SWITCHaai
Home Organization Name	aaitest.switch.ch
Home Organization Type	others
Affiliation	student
E-Mail	dummy@aaitest.switch.ch
Data protection	* <input checked="" type="checkbox"/> By checking this checkbox, you agree that an entry representing yourself will be added to the SWITCHaai Resource Registry database.
<input type="button" value="Submit"/>	
* denotes required field	

By pressing the submit button, you agree that an entry representing yourself will be added to the SWITCHaai Resource Registry database.

Figure 2: AAI-RR Data privacy agreement

Note: In case you just have set up your Home Organization but it is not yet registered in the Resource Registry, read in the section 'Home Organization administrator' how to register a Home Organization for the first time.

Note: To log out of the Resource Registry (and all other AAI-enabled applications), the easiest way is to close your web browser.

3. Configuration Sections

After log in you will come to a page that shows your configuration options. Depending on your role (see Chapter 4) you will see between two and four different colored sections, representing the different options you have.

General Information

- [List SWITCHaai Federations](#)
- [List approved Home Organizations](#)
- [List SWITCHaai Federation Partners](#)
- [List approved resources](#)
- [Search for specific resources](#)
- [List all users from aaitest.switch.ch](#)
- [List all attribute definitons](#)

Configuration Files

The following files are **directly generated by the Resource Registry**. This means that these files are as up-to date as possible. All files are unsigned, so download only via HTTPS. You can get signed files from the [AAI Metadata page](#). The files there are updated once a day provided a Resource Description or a Home Organization Description changes.

- Shibboleth 1.3
 - See the [Refreshing Federation Metadata](#) page for information on how to keep your metadata file up-to date.
 - Metadata file
 - [metadata.switchaai.xml](#) for SWITCHaai Federation
 - [metadata.aaitest.xml](#) for AAI-Test Federation
- Shibboleth 1.2
 - See the [Refreshing Federation Site File](#) page for information on how to keep your site and trust file up-to date.
 - Sites file
 - [sites.switchaai.xml](#) for SWITCHaai Federation
 - [sites.aaitest.xml](#) for AAI-Test Federation
 - Trust file
 - Can be downloaded from the [Metadata page](#) for all Federations.

Figure 3: General Information

Figure shows the general information and configuration section that provides general information and configuration files. All users of the Resource Registry have access to this section.

Figure 4 shows the Resource Admin options. Unless you already have registered a resource you cannot do anything except add a Resource Description.

Resource Admin Options

- [Add a Resource Description](#)

Figure 4: Resource administration options

When you have registered a resource the section looks like in Figure 5.

Resource Admin Options

- [Add a Resource Description](#)
- Approved Resource Descriptions:
 - 'Attributes Viewer 1.3' (AAI-Test)
 - [View Resource Description](#)
 - [Edit Resource Description](#)
 - [Submit Resource Description for deletion](#)
 - [Resource Administrators](#)

Figure 5: Resource Description options for one resource

Should you be a Home Organization administrator the corresponding options look like in Figure 6.

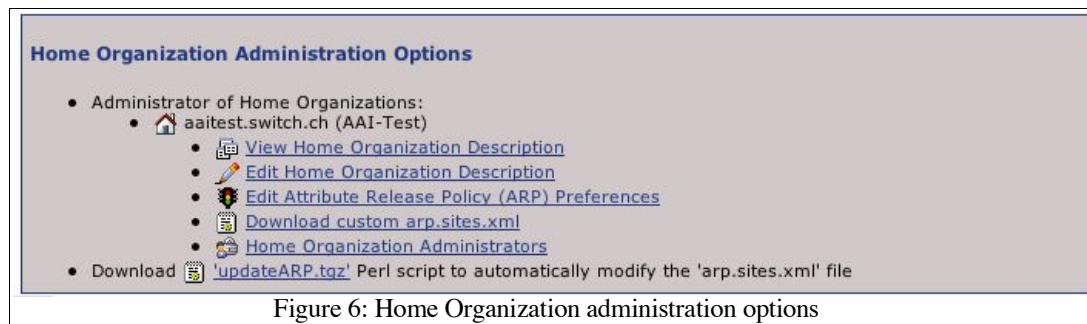


Figure 6: Home Organization administration options

The options for a Resource Registration Authority administrator look like in Figure 7.



Figure 7: RRA administration options

Note: You may not see all of the above administration options because you may not have sufficient rights. To get Home Organization administrator, you have to register a Home Organization or you have to be given that role by an existing Home Organization administrator. The same is true for a Resource Registration Authority (RRA) administrator. To become a Resource administrator one can register a resource and the administration rights are received after approval by an RRA administrator. Alternatively, the resource administration rights also can be granted by existing administrators of a resource.

4. Roles

Every user in the Resource Registry has one or more roles that grant certain rights. Currently, the following roles are defined:

- Resource Registration Authority administrator
- Resource administrator (minimum one per Home Organization)
- Home Organization administrator (minimum one per Home Organization)

When a user logs in for the first time he has no of the above roles assigned unless he was invited by an existing user. The rights of all roles can be passed to any other user with an AAI account, e.g. the administrator of Home Organization X can make any other user with an AAI account an administrator of X. Vice versa any Home Organization administrator can revoke rights for the Home Organization he has the rights for.

The screenshot displays a web interface for managing administration rights. It is divided into three main sections:

- Users with RRA rights:** A table listing three users: Lukas Hämmerle (switch.ch), Thomas Lenggenhager (switch.ch), and Valéry Tschopp (switch.ch). Each user has a dropdown menu set to 'Authorized'.
- Users from switch.ch without RRA rights:** A table listing four users: Olivier Jeger, Patrik Schnellmann, Christoph Witzig, and Fabio Vena. Each user has a dropdown menu set to 'Not authorized'.
- Delegate RRA rights with an invitation mail to any AAI user:** A section with instructions: 'Add comma- or space-separated e-mail addresses. You can use any email address as long as the recipient has an AAI account. Click on **Apply Changes** to send an invitation key to the recipient(s) or delegate the rights directly in case the user is already in the Resource Registry Database.' Below the instructions is a text input field containing 'kienholz@switch.ch'.

At the bottom of the interface, there are three buttons: 'Reset', 'Apply Changes', and 'Submit'.

Figure 8: Manage administration rights

Figure 9 illustrates, how to grant or revoke Resource Registry Authority rights to or from other users. In this situation a user is invited by manually entering his e-Mail address. Clicking on “Apply Changes” results in this user receiving an e-Mail that contains an invitation link. One should then see a page like shown in Figure 9, which shows that the invitation e-Mail was sent and invitation is pending. An invitation can also be revoked.

Users with RRA rights	
Lukas Hämmerle (switch.ch)	Authorized
Thomas Lenggenhager (switch.ch)	Authorized
Valéry Tschopp (switch.ch)	Authorized

Pending Admin Invitations	
kienholz@switch.ch	Pending

Users from switch.ch without RRA rights	
Olivier Jeger	Not authorized
Patrik Schnellmann	Not authorized
Christoph Witzig	Not authorized
Fabio Vena	Not authorized

Delegate RRA rights with an invitation mail to any AAI user
 Add comma- or space-separated e-mail addresses.
 You can use any email address as long as the recipient has an AAI account.
 Click on **Apply Changes** to send an invitation key to the recipient(s) or delegate the rights directly in case the user is already in the Resource Registry Database.

An invitation mail has been sent to the following users: kienholz@switch.ch

Figure 9: Invitation pending

In the following chapters the three administrator roles mentioned above are illustrated in greater detail.

5. Resource administrator

Unless you were invited as a Resource administrator, you find the Resource administrator options empty. So, the only option is to add a Resource Description. Clicking the link 'Add a Resource Description' one sees a page like the following.

 Basic Resource Information	Incomplete
 Multi-language Descriptions	Incomplete
 Contacts	Incomplete
 Keywords	Incomplete
 Assertion Consumer URLs	Incomplete
 Certificate Subject	Incomplete
 Required Attributes	Incomplete
 Intended Audience Settings	Incomplete

Figure 10: Resource Description sections

As you can see, the Resource Description contains several sections, each of them has to be visited at least once, not all of them require input. You cannot submit the Resource Description for approval until all of these sections are complete.

Basic Information

The Basic information mostly is for providing technical details. In Figure 11 you can see an example entry for this page:

The screenshot shows a web form titled "Basic Resource Description" with the following sections and fields:

- Basic Resource Information**
 - Federation**: SWITCHAai Federation
 - Home Organization**: aaitest.switch.ch (AAI-Test)
 - Main language**: English
 - Main Descriptive Name**: Test Resource
 - Main Description**: This is just a test resource for demonstration purposes
- Unique Identifier of the Resource**
 - providerId**: https://mytest.switch.ch/shibboleth
- Resource URIs**
 - homeURL**: https://mytest.switch.ch/
 - Error URL**: https://www.switch.ch/aai/error.html
- Resource Validity**
 - Valid from**: 10 October 2005
 - Valid until**: 11 October 2005

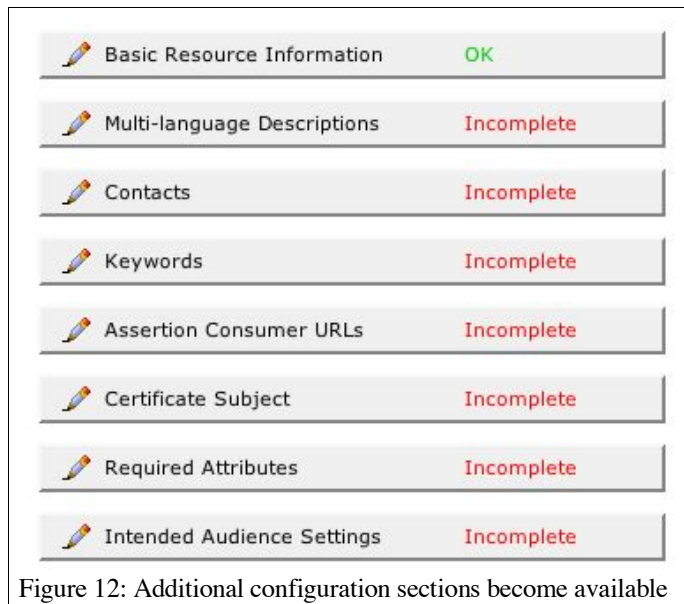
Buttons: Reset, Submit. Note: * denotes required field.

Figure 11: Basic Resource Description

Especially the *providerId* is of great importance because it is the identifier for a resource. Be sure to check that you insert the value that you configured in your *shibboleth.xml* file of your Shibboleth Service Provider.

If your resource is only temporary available or only after a date in the future, you can specify this in the resource validity section. The values there have an influence on the metadata and ARP files that are generated.

After this form was successfully submitted, one comes back to the page that contains all the sections of the Resource Description. As you can see, additional options are now available.



Multilingual descriptions

The multilingual language descriptions can be used to add a name and a description for the Resource in multiple languages.

Contacts

At least three contact names (administrative, technical and support) are needed for every Resource.

Keywords

If you would like, you can enter keywords that are related to the Resource. They can be used to search for specific Resources.

Assertion consumer URLs

In most cases you need only one consumer URL and this one is often generated automatically using data you entered for the Basic Resource Info.

Certificate Subject

If the certificate of the web server where Shibboleth is installed uses AlternativeSubjectNames you have to provide the common name of the certificate on the Certificate Subject form page.

Required attributes

The Required attributes section is very important because it affects the Attribute Release Policies (ARP) of all Identity Provider in the SWITCHaai Federation. On that page (see Figure 13), you have to declare which attributes your Resource really needs in order to work and which attributes are nice to have.

The screenshot displays two panels for configuring attribute requirements. The left panel, titled 'Attribute Requirements - SWITCHaai Scope', lists several attributes with their usage set to 'required' and a comment 'Is supposed to consume every attribute'. The attributes listed are: **swissEduPersonHomeOrganizationType** (red text), **mail** (orange text), **swissEduPersonGender** (green text), and **preferredLanguage** (green text). Below these are two more generic attribute rows with 'required' usage and empty comment boxes. The right panel, titled 'Attribute Requirements - local Scope', includes a note: 'Local/bilateral attributes can be defined by each Home Organization.' It contains three identical rows, each with a 'Select attribute ...' dropdown, 'required' usage, and an empty comment box.

Figure 13: Required attributes

The attributes on the right-hand side of the page are local attributes, that are not officially supported attributes in SWITCHaai but are used by some Home Organizations for internal or bilateral use only.

Resource Audience settings

The last part of a Resource Description concerns the audience settings of the Resource. Assume your Resource is an e-learning tool for medical students. In that case it makes no sense to allow users from a University of Applied Sciences or a Library to access your Resource. On the other hand you may want that SWITCH staff members can access the Resource for debugging or development purposes. So you probably would protect your Resource in the web server's configuration with something like:

```
AuthType shibboleth
ShibRequireSession On
ShibExportAssertion On
require homeOrganizationType university hospital
require homeOrganization switch.ch
```

Since only you know the configuration of your web server and its access rules, it is impossible for Home Organization administrators to know to which Resources their users have access to. Therefore, you should declare the intended audience. Refer to Figure 14 to see how this would look like.

HomeOrg Default Access

Step 1: Set type based default setting

HomeOrg Types

Universities	Allowed
Universities of Applied Sciences	Rejected
Hospitals	Allowed
Libraries	Rejected
Virtual Home Organizations	Rejected
Other	Rejected

HomeOrg Specific Access

Step 2: Set settings for specific Home Organizations. These settings have precedence over default settings. To define more than 5, fill in all available pop-ups and click on "Apply Changes" to display additional fields.

Specific HomeOrgs

1.	SWITCH Test Home Org	Allowed
2.	Choose a HomeOrg ...	Choose action ...
3.	Choose a HomeOrg ...	Choose action ...
4.	Choose a HomeOrg ...	Choose action ...
5.	Choose a HomeOrg ...	Choose action ...

Figure 14: Intended audience

These settings, as well as the “Required Attributes” have a direct influence on the ARP that is generated for the Home Organizations. In the ARP file of a Home Organization only Resources appear that grant access to users from that Home Organization or that type of Home Organization.

Submit for approval

✏ Basic Resource Information OK
✏ Multi-language Descriptions OK
✏ Contacts OK
✏ Keywords OK
✏ Assertion Consumer URLs OK
✏ Certificate Subject OK
✏ Required Attributes OK
✏ Intended Audience Settings OK

You have to submit this temporary Resource Description in order to make it active. The description will no sooner get active than the Resource Registry Authority Administrator approves it.

Figure 15: Completed Resource Description

Finally, if all sections were completed, the Resource Description has to be submitted before it gets active. One of the Resource Registration Authority (RRA) administrators that have the rights to approve Resource Descriptions for your Home Organization has to examine and approve it if it is compliant to the AAI Policy and the data protection law.

If you click on the button in the orange box, an e-Mail is sent to all RRA administrators with the request to approve your Resource Description. After a Resource is approved, it is listed in the metadata and ARP files. Furthermore, you also become the initial administrator of the Resource Description. This means that you can transfer this right to other users and of course you can modify the Resource Description. However, all changes have to be approved again by an RRA administrator.

All Resource administrators have equal rights, there is no master Resource administrator.

Your duty as a Resource administrator

It is essential that all Home Organizations have an up to-date description of all Resources. Therefore, a Resource administrator should update the Resource Description as soon as an important property has changed. This could e.g. be the web server's DNS name or the certificate or when the Resource requires additional attributes. For legal reasons every Home Organization needs at least one RRA administrator, whose task is to approve Resource Descriptions. This includes the approval or rejection of Resource Description creations and modifications. An RRA administrator basically has to check that all Resources that are operated within his Home Organization are operated in compliance with the SWITCHaai Service Agreement (see <http://www.switch.ch/aai/agreement/>).

Note: There will be a delay for changes to be applied. First due to the required approval of the RRA administrator and second due to the delay for metadata refresh at the Home Organizations.

6. Home Organization Administrator

When an organization wants to join the SWITCHaai Federation or the AAI Test Federation as a Federation Member, it has to set up a new Home Organization, also called Identity Provider. After this has been done, the Home Organization administrator has to register the Home Organization in order to provide the necessary (technical) information that require Resources to communicate with that Home Organization.

Bootstrapping a Home Organization Registration.

After setting up of your new Identity Provider you have to go to <https://aai-rr.switch.ch/> On this first page, you will find a special link that is intended for Home Organizations that were not yet registered.

If have not yet registered your Home Organization in the Resource Registry, you cannot log in yet. In that case, please fill out the [Home Organization description form](#) and submit it to the AAI-Team. You then will be granted access to the Resource Registry after we reconfigured it.

Figure 16: Bootstrapping procedure

Click on it and you will get to a page where you have to provide some technical details about your Home Organization.

General Information	
Home Organization Name *	<input type="text" value="Example Home Org Name"/> Usually the domain name of your organization, e.g. 'switch.ch', 'unizh.ch', 'zhwin.ch'
Federation *	<input type="text" value="AAI-Test Federation"/>
Technical Information	
Home Organization URN *	<input type="text" value="urn:mace:switch.ch:aaitest:example.ch"/> Use only properly registered URN values e.g. under the urn:mace hierarchy. Refer to the examples or to SWITCH MACE for further information. Examples: 'urn:mace:switch.ch:aaitest:dukono.switch.ch' (AAI-Test Federation), 'urn:mace:switch.ch:SWITCHaai:unizh.ch' (SWITCHaai Federation)
URL of Single Sign-on Handler *	<input type="text" value="https://aai-logon.example.ch/shibboleth-idp/SSO"/> In Shibboleth 1.1 this was called URL of Handle Service e.g. https://aai-logon.example.ch/shibboleth/HS In Shibboleth 1.3 it is the location of the Shibboleth SSO-Handler e.g. https://aai-logon.example.ch/shibboleth-idp/SSO
SSO Certificate Subject *	<input type="text" value="aai-logon.example.ch"/> The CN of the certificate, e.g. aai-logon.example.ch
URL of Attribute Query Handler *	<input type="text" value="https://aai-aa.example.ch/shibboleth-idp/AA"/> In Shibboleth 1.1 this was called URL of Attribute Authority, AAurl e.g. https://aai-aa.example.ch/shibboleth/AA In Shibboleth 1.3 it is the location of the SAMLv1_1 ArtifactQueryHandler e.g. https://aai-logon.example.ch:8443/shibboleth-idp/AA
AA Certificate Subject *	<input type="text" value="aai-aa.example.ch"/> The CN of the certificate, e.g. aai-aa.example.ch
Contact address	
Name *	<input type="text"/>
E-Mail *	<input type="text"/>
<input type="button" value="Reset"/> <input type="button" value="Submit to AAI-Team"/>	
* denotes required field	

Figure 17: Preliminary registration form

Fill in the required information and click on the submit button.

SWITCH then will use this data to allow you to access the Resource Registry via AAI. As soon as the Resource Registry has been configured to grant access to users of your Home Organization, you will be informed by an e-Mail with further instructions.

The first thing you see when you logged in via AAI in the Resource Registry usually looks like Figure 18.

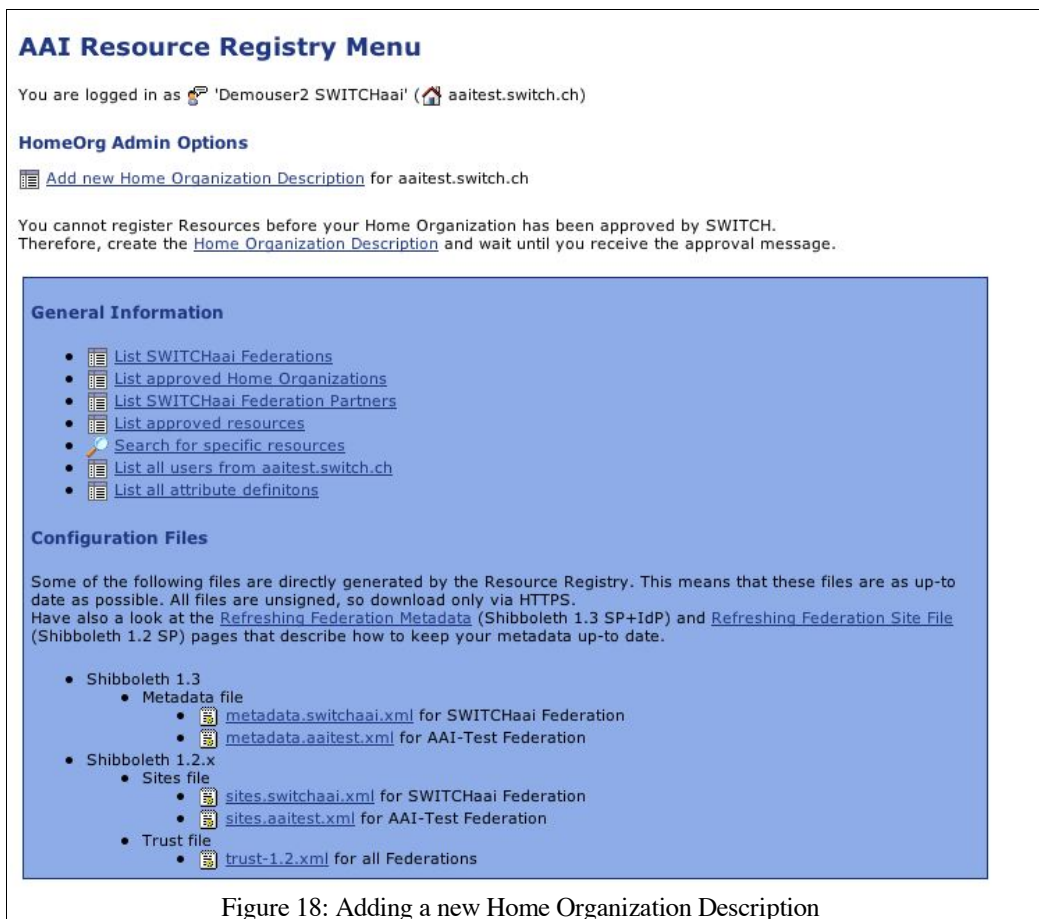


Figure 18: Adding a new Home Organization Description

At that point, the only thing you can do is download configuration files and get some general information about which Home Organizations/Resources are registered already.

Therefore, you first have to register your Home Organization by clicking the link “Add a Home Organization Description” on top of the page.

To register a new Home Organization you have to complete the form on the following page and finally submit it for approval (by SWITCH). The “Apply” button is used to save the form so that the data you inserted doesn't get lost when you quit your web browser.

Be sure that you use the same technical values for *providerID*, *SSO URL* and *AH URL* that you used to configure your Identity Provider.

At the bottom of the page you will have to declare which attributes that your Identity Provider can release. According to the AAI Attribute Specification (see http://www.switch.ch/aai/docs/AAI_Attr_Specs.pdf) your Identity Provider must be able to release the six mandatory (red colored) attributes. Additionally, the e-Mail address is also an often required attribute.

After you submitted your new Home Organization description for approval. SWITCH will examine the data and approve the description. Together with the approval you will get an e-Mail and you will be made the initial Home Organization administrator and Resource Registration administrator.

So when you log in to the Resource Registry after your Home Organization was approved, you should see something like the following.

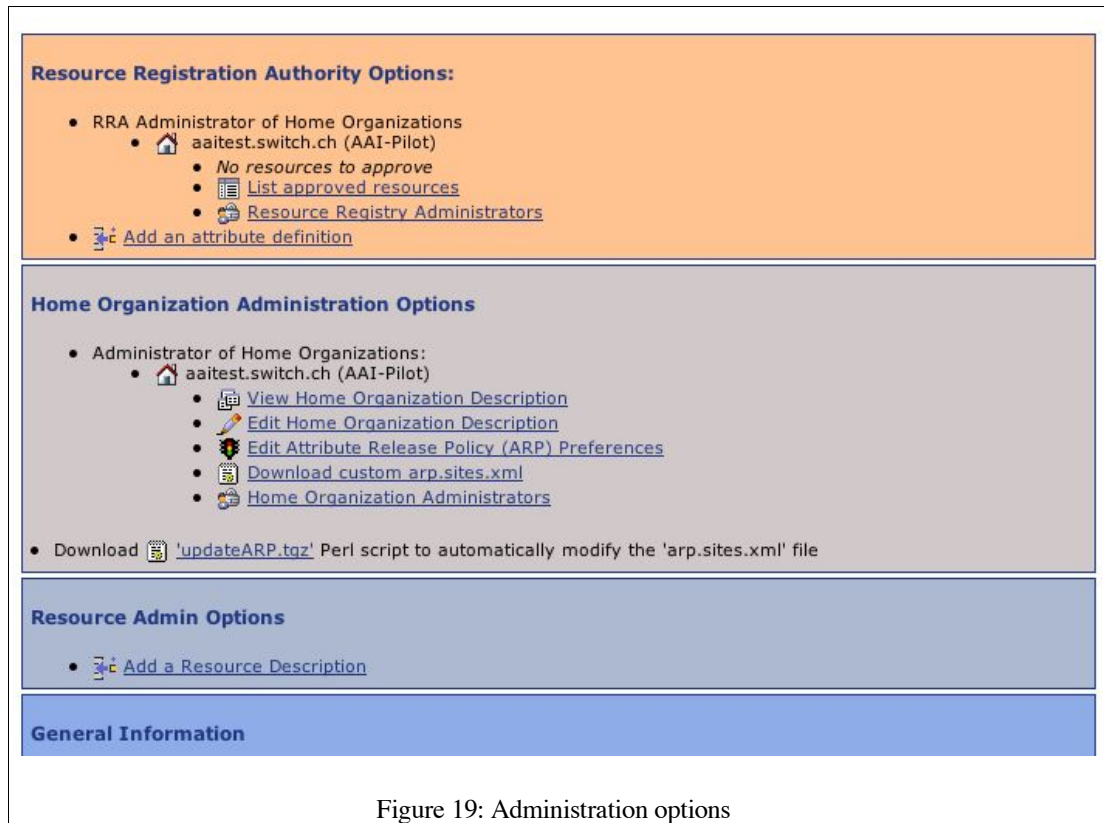


Figure 19: Administration options

As you can see you now have several options for your Home Organization Description.

- You can view the Home Organization Description
- You can change the description of your Home Organization.
- You can and should set the Attribute Release Policy preferences of your Home Organization (see Figure 20). Each resource administrator has to declare, which attributes that his resource requires to function properly. Additionally, the administrator can declare desired attributes, which are not necessarily needed but provide some nice-to have features. In the ARP preferences the Home Organization administrator then determines which attributes that shall be released to a resource if it is required or desired. It is strongly recommended to release all required attributes.
- The ARP preferences are then used to generate an ARP file custom-tailored for your Home Organization based on the attribute requirements and audience settings of the Resources. Although the ARP file is custom-tailored for a Home Organization, it is still rather general. You may further modify it by using the below-mentioned updateARP tool.
- You can transfer your administration rights for your Home Organization to other users that have an AAI account. All Home Organization administrators have equal rights, there is no master Home Organization administrator.

Attribute Name	Required Policy	Desired Policy
eduPersonAffiliation [mandatory] [info]	Release	Release
givenname [mandatory] [info]	Release	Release
surname [mandatory] [info]	Release	Release
swissEduPersonHomeOrganization [mandatory] [info]	Release	Release
swissEduPersonHomeOrganizationType [mandatory] [info]	Release	Release
swissEduPersonUniqueID [mandatory] [info]	Release	Release
mail [recommended] [info]	Release	Release
postalAddress [recommended] [info]	Release	Release
swissEduPersonStaffCategory [recommended] [info]	Release	Release
swissEduPersonStudyBranch3 [recommended] [info]	Release	Release
swissEduPersonStudyLevel [recommended] [info]	Release	Release
telephoneNumber [recommended] [info]	Release	Release
eduPersonEntitlement [optional] [info]	Release	Release
eduPersonOrgDN [optional] [info]	Release	Release
eduPersonOrgUnitDN [optional] [info]	Release	Release
employeeNumber [optional] [info]	Release	Don't release
homePhone [optional] [info]	Release	Release
homePostalAddress [optional] [info]	Release	Release
mobile [optional] [info]	Release	Release
ou [optional] [info]	Release	Don't release
preferredLanguage [optional] [info]	Release	Release
swissEduPersonDateOfBirth [optional] [info]	Release	Release
swissEduPersonGender [optional] [info]	Release	Release
swissEduPersonStudyBranch1 [optional] [info]	Release	Release
swissEduPersonStudyBranch2 [optional] [info]	Release	Release
uid [optional] [info]	Release	Release

Figure 20: ARP preferences

Read the following sections for a description of the Resource Registry administrator and the Resource administrator.

Your duty as Home Organization administrator

Since the metadata generated by the Resource Registry heavily relies on the descriptions of Resources and Home Organizations, you have to keep them as up to-date as possible. Otherwise problems may occur because third parties interacting with your Identity Provider may have outdated information. This means:

- If you move your Identity Provider (DNS changes), modify its certificate, provide additional attributes for your users, please update the Home Organization Description.
- Regularly update the metadata of your Identity Provider. There is a tool called “metadata-refresh” that can be used to automate it (see <http://www.switch.ch/aai/metadatarefresh.html>). We recommend to run this tool at least once a day.

Note: There will be a delay for changes to be applied, due to the delay for metadata refresh at the Service Providers.

- Regularly update your Identity Provider's ARP file. SWITCH has developed a tool called “updateARP” that downloads your custom-tailored ARP file and can even more customize it according to rules you can set in configuration file of updateARP. This tool is available at <https://aai-rr.switch.ch/download.php/updateARP.tgz>

Note: You don't have to restart your Identity Provider after updating the metadata or the ARP file. However, it takes about a minute until the Identity Provider notices that these files changed.

7. Resource Registration Authority Administrator

Your duty as Resource Registration Authority administrator

For legal reasons every Home Organization needs at least one RRA administrator, whose task is to approve Resource Descriptions. This includes the approval or rejection of Resource Description creations and modifications. An RRA administrator has to check that all Resources that are operated within his Home Organization are operated in compliance with the SWITCHaai Service Agreement (see <http://www.switch.ch/aa/agreement/>). This includes:

- The person that created or modified a Resource Description is indeed allowed to operate an AAI Resource in the name of your Home Organization.
- Every Resource has at least one contact person for administrative, technical and support inquiries.
- The Resource declares only as many attribute as *required* as are needed for its proper functioning and complies with the Swiss data privacy law.

In order to examine these checks, an RRA administrator can inspect and modify any Resource Descriptions that are related to the Home Organization he has RRA rights for.

Every time a Resource Description is submitted for approval, all RRA administrators of the Home Organization the Resource was submitted for receive a notification e-Mail. On login, an RRA administrator can see the Resource Descriptions that need to be approved.

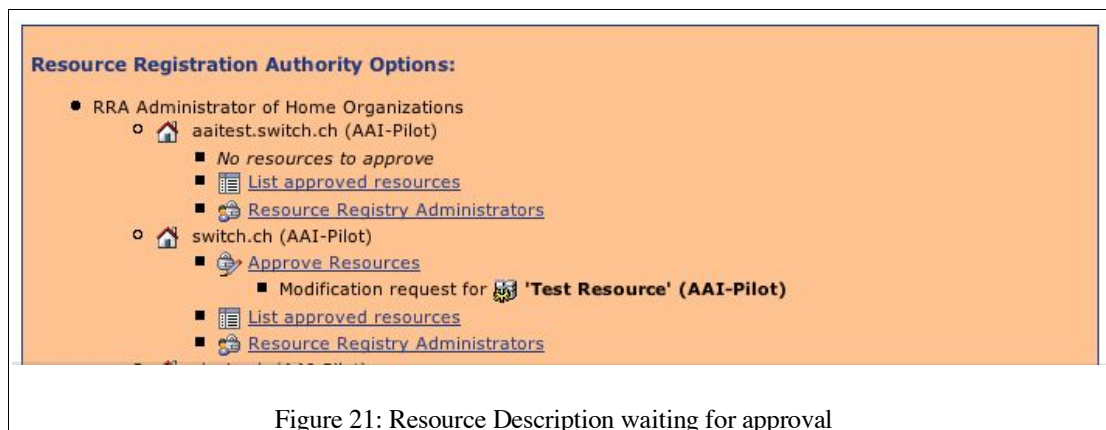




Figure 21: Resource Description waiting for approval


Clicking the 'Approve Resources' link then leads to a page like in Figure 22.

List of not yet approved Resources

Select the Resource to approve:

Resources waiting for approval

Test Resource (AAI-Pilot) [ view][ edit] Choose action... ▼

Request by  [Lukas Hämmerle](#)

SWITCH - The Swiss Education & Research Network

Approve resource modification request

Consequences of Resource Approval

Before you approve a resource, take a look at it by clicking on the "edit" link next to the resource name. Furthermore you should know that by approving this resource, you are responsible that the resource admins are aware of and know that they have to act according to the [AAI Service Agreement](#).

Figure 22: Approve a Resource Description

Figure 22 shows a Resource Description that has to be approved or rejected. Clicking on 'view' or 'edit' an RRA administrator can make changes before approving it.