

# **AMS II**

## **Access Management System for language archive resources in IMDI-corpora**

**Version 1.4.8.6**

This manual was last updated on 2012-11-19

The latest version can be found at: <http://tla.mpi.nl/tools/tla-tools/ams/>

Micha Hulsbosch (December 2008)

Francesca Bechis (July 2012)

Jeroen Geerts (October 2012)



The Language Archive, MPI for Psycholinguistics, Nijmegen, The Netherlands

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# Chapter 1. Introduction

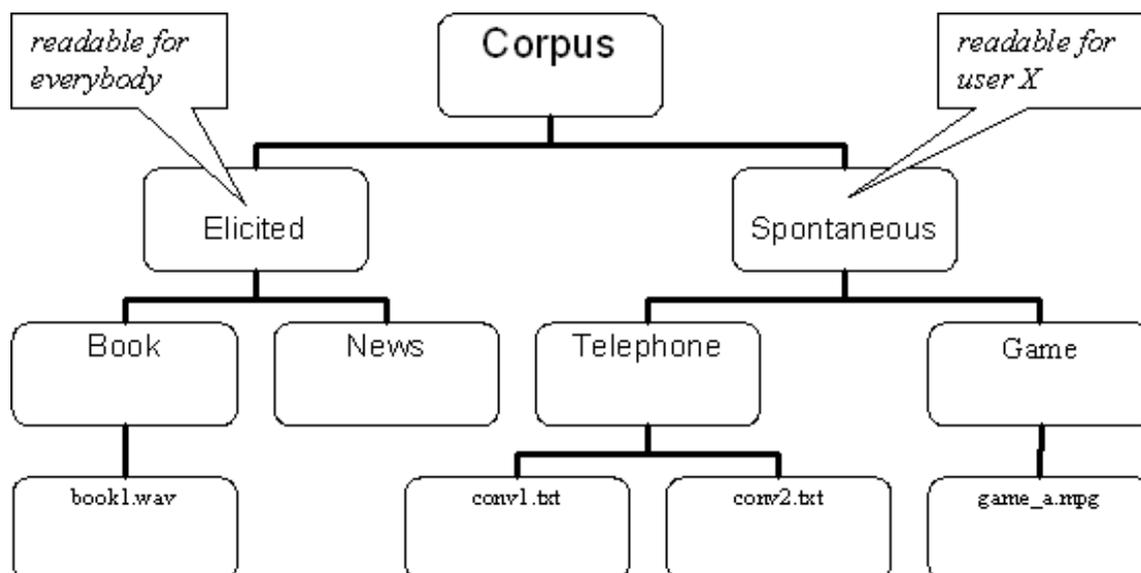
The **Access Management System** (AMS) allows you to manage the access rights to electronic language resources in within ASV [<https://corpus1.mpi.nl/ds/asv>] TLA [<http://tla.mpi.nl>] framework. These resources consist of Info files, annotation or text files, images, audio or video files that have been uploaded with LAMUS [<http://tla.mpi.nl/tools/tla-tools/lamus>] into a corpus. By setting access rights you can either allow or deny access to resources for individual users or groups of users. In any case, the metadata itself will always be accessible, as required by the Open Archive Initiative [<http://www.openarchives.org/>].

AMS was developed at the Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands.

## 1.1. Main Concepts

### 1.1.1. The corpus tree

The main concept underlying AMS is the corpus tree. The corpus consists of nodes and arcs that form a tree-like structure representing the corpus hierarchy. Each node can group other nodes on the basis of, e.g., the geographical region, the discourse genre, the sex or age of the speaker, the dialect of the speaker, the source/target language etc. The lowest level in the hierarchy consists of the actual resources (see Section 1.1.1.2). Consider the following example:



**Figure 1.1. Corpus tree example**

The node labeled 'Corpus' is the top node. The nodes labeled 'Elicited' and 'Spontaneous' are subnodes. These subnodes are sometimes called 'children' of the node above them, in this case the top node 'Corpus'. The nodes 'Book' and 'News' are children of the node 'Elicited' and grandchildren of 'Corpus'. Similarly, the nodes 'Telephone' and 'Game' are children of 'Spontaneous' and also grandchildren of 'Corpus'. The nodes labeled with filenames like `book1.wav` and `game_a.mpg` are at the lowest level and represent the resources.

By using this hierarchical data representation you can specify access rights in the form of rules (see Section 1.1.2) for a certain branch of the tree. A branch consists of a node plus all of its descendants. Therefore, a rule does not only apply to an individual node, but also to all of its descendants. Since a node groups children, grandchildren and other descendants, a branch is called *domain* in AMS.

To see how rules apply to a domain, consider Figure 1.1 again. Suppose we set the access rights for the *domain* 'Elicited' to something like 'readable by everybody'. This means that all the resources in the domain of the node 'Elicited' are 'readable by everybody': i.e. the (only one in this case) resources present in this domain - `book1.wav` - can be accessed by everybody. Another example concerns the domain 'Spontaneous'.

Suppose we want only some, specific user to be able to access this domain: what we have to do is to set the rule 'readable by user X'. In this way, the resources `conv1.txt`, `conv2.txt` and `game_a.mpg` will be readable only by user X.

### 1.1.1.1. Corpus and session nodes

Nodes like 'Book', 'Telephone' and 'Game' in Figure 1.1 are called **session nodes**. They group all resources that are part of a meaningful unit of analysis. Nodes like 'Corpus', 'Elicited' and 'Spontaneous' are called **corpus nodes**. They group session nodes or other corpus nodes, giving the archive its tree-like structure.

### 1.1.1.2. Resources

*Resources* is a common name for all kinds of files that can be associated to session nodes. The resources are the very content of the corpus. Resources can be of the following types (with their respective formats):

- Images, e.g. JPEG
- Video files, e.g. MPEG
- Audio files, e.g. WAV
- Annotations/Text, e.g. EAF
- Info files (all kind of files), e.g. PDF

### 1.1.1.3. Colour coding reference

ASV uses a colour coding reference to represent the access rules that have been set to the various corpora, nodes and resources. This colour coding scheme is as follows:

- Green circle: This node or resource is openly available.
- Yellow circle with black dot: This node or resource is accessible to registered users of the archive.
- Orange circle with diagonal line: Access to this node or resource can be requested.
- Red circle with cross: Access to this node or resource is prohibited.

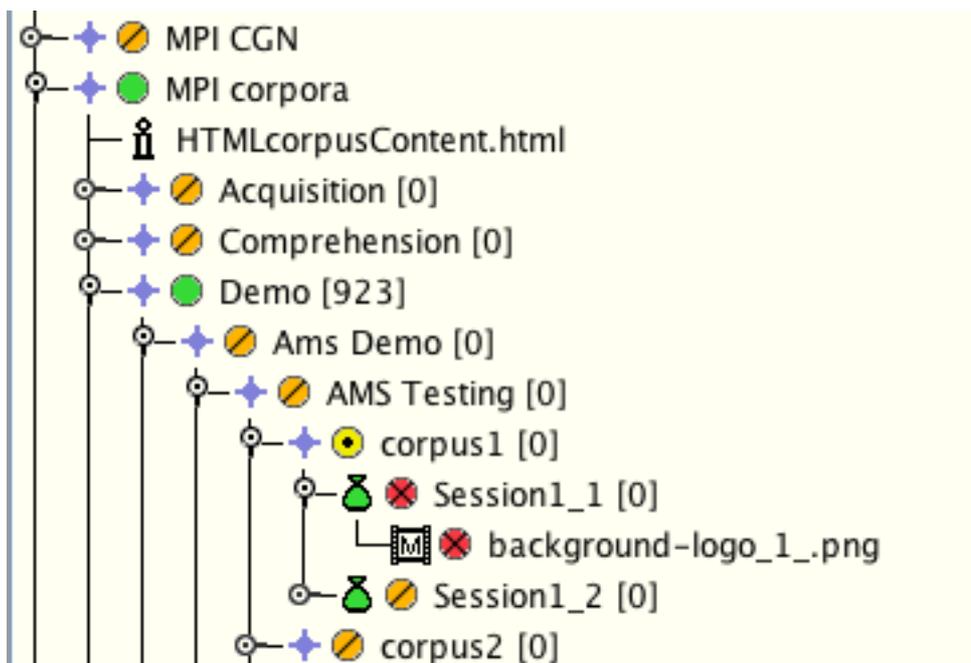


Figure 1.2. Colour coding reference

In the example shown here, you can see that access to the node 'Demo' is openly available, whereas the node 'corpus1' is only accessible to registered users of the archive. Access to the node 'Session1\_1' and the resource 'background-logo\_1.png' is prohibited. These access-rules can all be set with AMS.

## 1.1.2. AMS rules

In AMS, the access rights of a certain domain are expressed by one or more rules. A rule gives an individual user, or all users from a group, the permission to open, download, and/or read all resources of a certain type within a domain. A rule can also deny that permission. A rule contains the following elements:

- a user or a group to which the rule applies;
- the type of resource;
- the permission or denial to access the node;
- a priority of access;
- an expiration date (optional);

When there is a rule on a certain node (in which case that rule applies to the entire domain of that node), it is also possible to create a rule on a descendant of that node. In this case, there would be two rules applying to the domain of the descendant (the latter created plus the one already applying to the parent node). Depending on the elements of these rules one of them is considered the 'strongest' and enforces its access rights. More on the calculation of the strongest rule as well as other topics can be found in Chapter 3.

## 1.1.3. Licenses

If necessary you can request a user to accept a license agreement before he/she can access resources in a part of the corpus tree. This agreement usually contains arrangements on ethical codes and on the responsibility for data use. More about licenses can be found in Section 3.4.

## 1.1.4. Roles

Roles are preconfigured templates that define in what way a user can manage the corpus. This encompasses access rights, rights to change the content of the nodes, and the right to pass on all of these privileges. Here is a list of the roles:

### **Archive Manager**

The role of Archive Manager can be assigned to each user. This means that all possible rights are granted to this user, such as accessing all resources and changing access rules. An archive manager can, in turn, appoint other archive managers. It goes without saying that this possibility should be used with care. It is the only role that is not bound to a domain.

### **Domain Curator**

A domain curator:

- is bound to a domain (i.e. he/she has power over a node and its descendants).
- can set and revoke rules on all of the nodes within that domain.
- can create, remove and alter users and groups. [Note: altering and removing only works for those users/groups which have been created by the domain curator him/herself].
- can delegate his/her rights (except the delegation right itself) to a Domain Manager.

A domain can only have one Domain Curator.

## Domain Manager

A Domain Manager, like the Archive Manager, can appoint other Domain Managers. This is the only difference from a Domain Curator, which means that, like the him/her, a Domain Manager can (for a given domain) set and revoke reading rules, create users/groups and edit them.

## Domain Editor

In contrast with the roles described above, a Domain Editor can add and/or remove corpus nodes and/or resources (again: for a specific domain). This right is closer related to LAMUS than to AMS itself. Therefore, one generally combines the role of Domain Editor with that of Domain Manager or Domain Curator. In this way one user can, at the same time, upload information in the corpus, change such information and, afterwards, set the access rights.



### Note

The domain-based roles (curator, manager, editor) can only be accessed and set via the **Node Authorization Management**, as they are dependant on a certain domain. The Archive Manager role applies to the whole corpus and can be thus selected when creating or editing a user/group.

## 1.2. Getting started

To start AMS first open the ASV via <http://corpus1.mpi.nl/ds/asv> [[http://corpus1.mpi.nl/ds/imdi\\_browser/](http://corpus1.mpi.nl/ds/imdi_browser/)]. Select the corpus node for which you want to create or revoke a rule and select **manage access**. You will subsequently be asked to enter a username and password. After entering these you will see the Node Authorization Overview (see Figure 1.4).

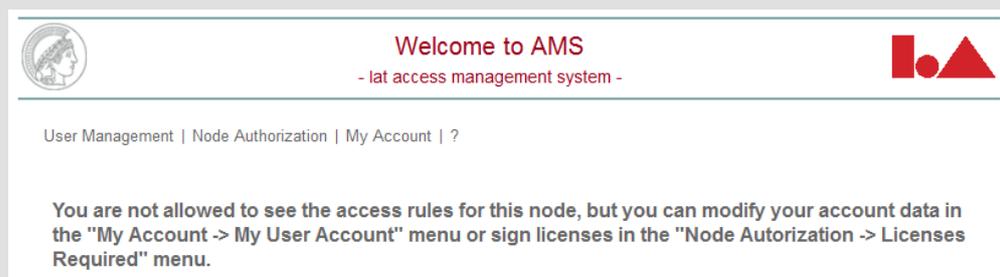
Beneath the welcome text you find the AMS menu bar containing the menu headings

- **User Management** (see chapter 2 below)
- **Node Authorization** (see chapters 3 and 4 below)
- **My Account**
- **?**: under this heading you can see the current version of the application (in this case ams II: version 1.4.6.2), and/or select the option **Manual & Help**, which will redirect you to the online manual.



### Note

Mind that to be able to see the following options (adding/editing rules, etc.), and to work with them, you need to have access to the nodes. If you do not have such access, this page is what you get:

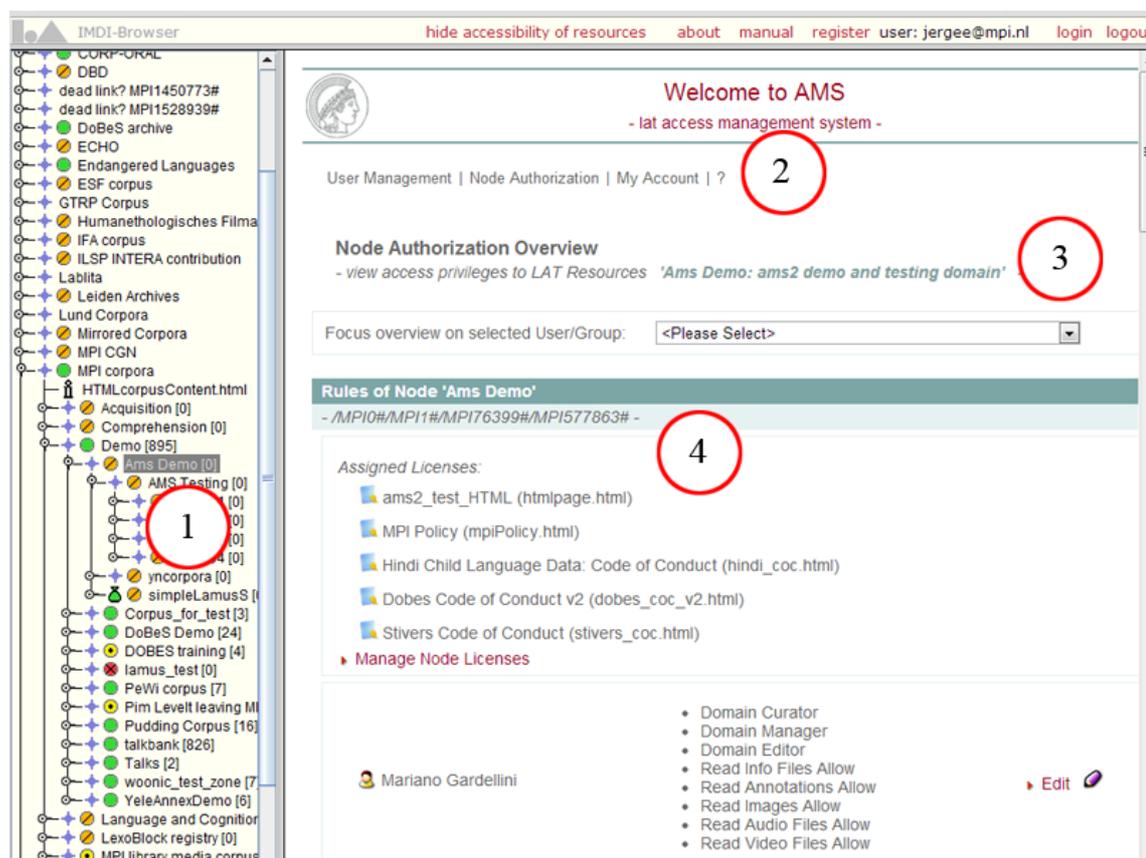


**Figure 1.3. No Access**

Beneath the menu bar some information about the selected node is displayed:

- The name and title of the currently selected node (in this case "LAMS Demo" / "Lams Demo Title").
- All active rules for this node and its parent, grandparent and other ancestors, in bottom-up order (here "LAMS Demo" and its parent "Demo". For each rule the user/group and the granted permissions are shown).

From this point you can create/edit users and/or groups of users (more about user management in Chapter 2) or you can create/edit access rules (more about rules in Chapter 3).



The Node Authorization Overview with the corpus tree (1), the AMS menu (2), name and title of the current node (3) and all active rules (4).

### Figure 1.4. AMS introduction screen

The Node Authorization Overview with the corpus tree (1), the AMS menu (2), name and title of the current node (3) and all active rules (4).

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# Chapter 2. User management

When granting access rights to a part of the corpus you obviously need to point out to whom these rights should be given. Unless you intend to open resources for the whole world it will be necessary to appoint a user or a group of users that should receive the access rights. This chapter describes how to create and modify users and groups.



## Note

In order to create or edit a user, or a group of users, you need to have the role of Archive Manager, Domain Curator or Domain manager.

## 2.1. Creating a new user

To create a new user click User Management > Create New User in the AMS menu bar. A new page will appear as shown in Figure 2.1.

### 2.1.1. Entering user data

The first step is to fill in the required fields in the **User Data** section. Choose an appropriate Hosting Institution for the new user. The 'UID Domain' field is changed accordingly. Enter a unique user name in the 'User Name' (UID) field.



## Note

If the chosen Hosting Institution is NOT the default (in the example in Figure 2.1 the default is MPI for Psycholinguistics) the username to be used when logging in is *User Name + @ + UID Domain*. In our example that would be *John Doe@mpi.nl* (if MPI for Psycholinguistics were not the default).

In the 'Archive-wide Roles' field (last field of the section) you can decide if the new user should become an Archive Manager by ticking the checkbox (remember that you can do this only if you are an Archive Manager yourself). Save the user data by clicking on the Save button at the left bottom corner of the page. The creation of the new account will be confirmed with a message like User "John Doe" has been saved.

**User Data**

- modify user core data -

1

Hosting Institution	<input type="text" value="MPI for Psycholinguistics"/>	▼
User Name (UID)	<input type="text" value="John Doe"/>	
UID Domain	<input type="text" value="mpi.nl"/>	
First Name	<input type="text" value="John"/>	
Last Name	<input type="text" value="Doe"/>	
eMail	<input type="text" value="jdoe@mpi.nl"/>	
Organization	<input type="text" value="MPI for Psycholinguistics"/>	
Password	<input type="password" value="••••••••"/>	
Repeat Password	<input type="password" value="••••••••"/>	

Archive-wide Roles	<input type="checkbox"/> Archive Manager
--------------------	--

---

**User Groups**

- assign & revoke User to/from Groups -

Please save the new User initially before you assign him to Groups

Group Name		Group Name
<input type="checkbox"/> (none) ((none)@mpi.nl)	3	<input type="checkbox"/> Andes_group (Andes_group@mpi.nl)
<input type="checkbox"/> (none)-PROD ((none)-PROD@mpi.nl)		<input type="checkbox"/> annex_all (annex_all@mpi.nl)
<input type="checkbox"/> ac-Stoll (ac-Stoll@mpi.nl)		<input type="checkbox"/> annex_demo (annex_demo@mpi.nl)
<input type="checkbox"/> akhoe_group (akhoe_group@mpi.nl)		<input type="checkbox"/> asleep-tofa (asleep-tofa@mpi.nl)
<input type="checkbox"/> Amanda_group (Amanda_group@mpi.nl)		<input type="checkbox"/> asleep1 (asleep1@mpi.nl)

1 2 3 4 5 6 7 8 9 10 11

▶ Save

2

▶ New
▶ Cancel

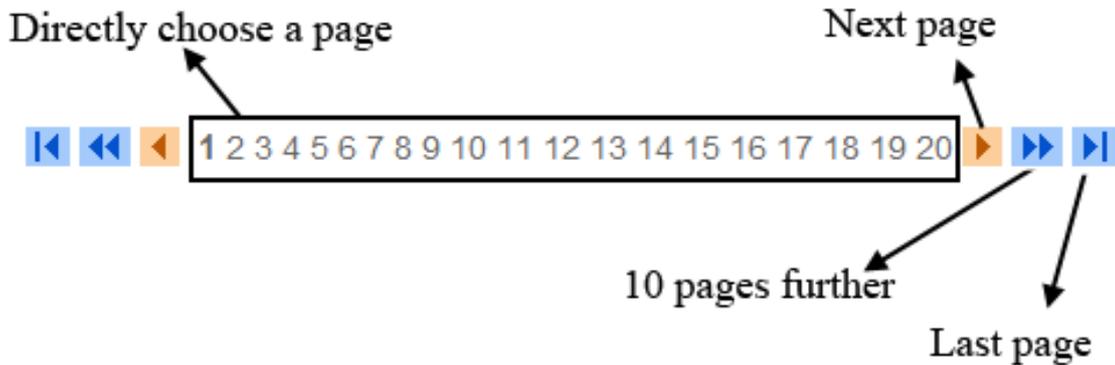
**Figure 2.1. Creating a new user**

To create a new user first enter the user data (1), then click on Save (2) and finally select the groups you want the user to be added to (3) and click on Save again.

## 2.1.2. Adding a new user to groups

The second - optional - step is to add the newly created user to a group. In the **User Groups** section you will find a list of all the existing groups. All the groups to which the user belongs will be listed first. If you want the new user to be added to one of them, tick the checkbox next to it and confirm by clicking on 'Save'. Note that if you have not yet saved the 'User Data' information, the checkboxes cannot be ticked.

If the group to which the new user has to be added is not currently displayed, navigate through the group enumeration as shown in Figure 2.2. Alternatively, you can enter a string in the textfield in the lower right corner of the page and click **Filter groups**. As a result, the list is reduced to only those groups whose names (partially) match the string in the textfield.



**Figure 2.2.** Navigating through a list

To create another user click on **New** (to the right of 'Save') and go through the same steps as described in Section 2.1.1 and Section 2.1.2.

## 2.2. Editing an existing user

Changing the properties of existing users can be achieved via User Management > Edit User. This will show a list of all users. Look up a user in this list using the navigation shown in Figure 2.2. Alternatively, you can enter a string in the textfield in the lower right corner of the page and click Filter users. As a result, the list is reduced to only those users whose names (partially) match the string in the textfield. Click on the ID of a user to change its profile [Remember that only the person that has created the user can edit it. If you are not such person, this message will appear above the User Data: *"Please note: This user is administrated (AMS-)externally, therefore you cannot modify his data."*]. The page that appears is similar to that in Figure 2.1. Now you can:

- change all the fields except for 'Hosting Institution', 'User Name (UID)' and 'UID Domain', and confirm these changes by clicking on Save.
- delete the selected user by clicking on **Delete** in the bottom right corner.



### Note

First of all, you can delete only the users you created yourself.

Secondly, when you delete a user, all its data are removed including access rules. Restoring such data is not possible!

- change the group membership of the user by (un)checking the boxes before the group names in the 'User Groups' section. Remember to confirm these changes by clicking on 'Save'.

## 2.3. How do I change my Password

To change the user password, first login to AMS, then go to **My Account**, choose **My User Account**, here you have the possibility to change your password and all the other data of your account.

## 2.4. Creating a new group

A group is a collection of users. A rule for a group applies to all members of that group. Using groups saves you the hassle of setting rights for all individual users. One user can belong to multiple groups.

New groups can be created via **User Management > Create New Group**, which will result in a page like Figure 2.3. Here you can enter an **ID** (a short identifier that cannot be changed afterwards) and a **Name** (a more extensive description of the group). Click on 'Save' to store the new group or on 'New' to create another one.

**LAT Group**  
- manage LAT Groups -

**Group Data**  
- modify group core data -

Hosting Institution	MPI for Psycholinguistics <input type="checkbox"/>
ID (group identifier)	<input type="text"/>
Name	<input type="text"/>

▶ Save      ▶ New      ▶ Cancel

2007 www.mpi.nl

**Figure 2.3. Creating a new group**

After clicking on 'Save' you will be able to select those users you want as members of this newly created group. This is done in the section **Members** where you can check the users you need [Note that this section becomes visible only after saving the new group]. Navigate through the list of members as shown in Figure 2.2. Alternatively, you can enter a string in the textfield in the lower right corner of the page and click **Filter users**. As a result, the list is reduced to only those users whose names (partially) match the string in the textfield.

## 2.5. Editing an existing group

A group can be edited via **User Management > Edit Group**. First select a group in the list. To find a group, navigate through the list of groups as shown in Figure 2.2. Alternatively, you can enter a string in the textfield in the lower right corner of the page and click **Filter groups**. As a result, the list is reduced to only those groups whose names (partially) match the string in the textfield.

Now change the group name and/or add/remove members/admins by (de)selecting the checkbox in front of the names of the users (use the navigation and filter to find users). Finally click **Save** to save the changes [Note: only those who have created the group, plus the 'admins', are allowed to edit a group. The same applies to the delete function].

If you want to remove the group instead of changing it, click on **Delete** in the bottom right corner of the page.



### Note

When you delete a group, all its data are removed including access rules. Restoring the data is not possible!

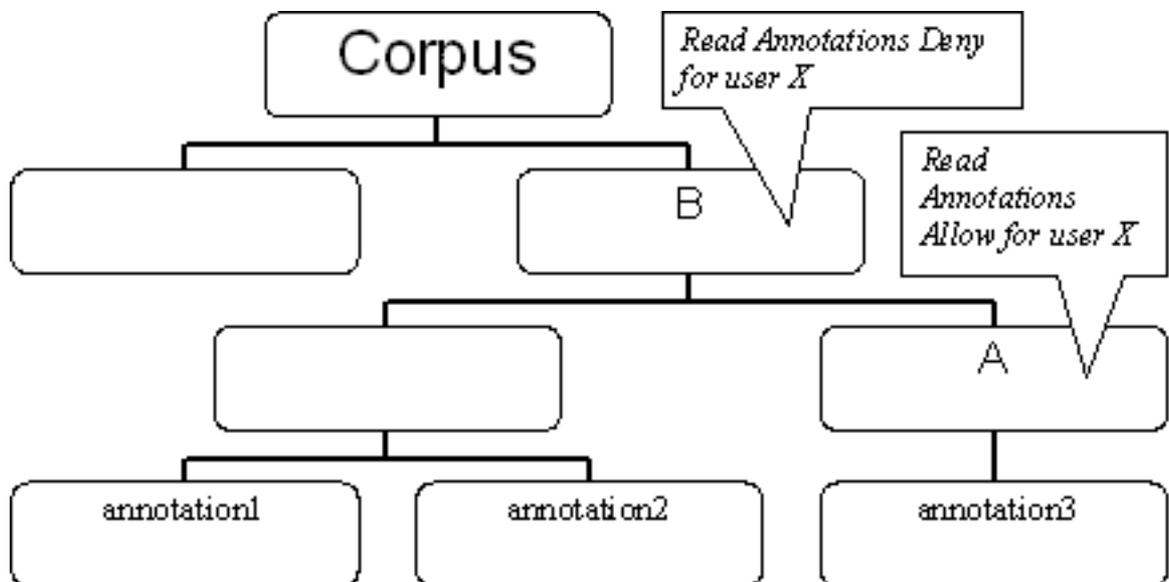
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# Chapter 3. Rules

## 3.1. Basic principles

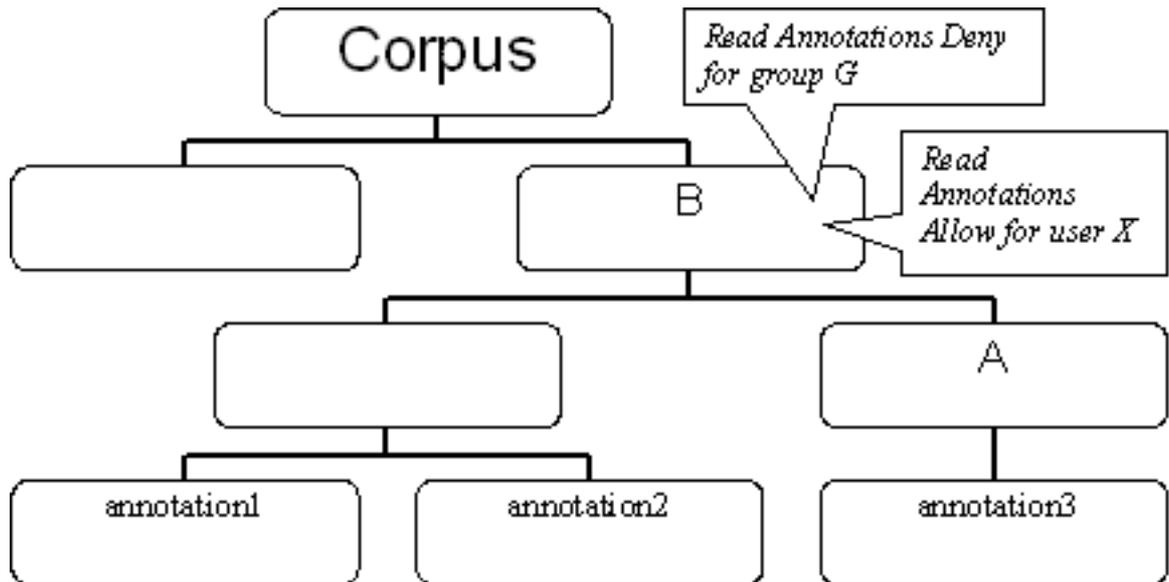
Before creating or editing rules, we will take a closer look at the principles behind the access policies in AMS. This is quite important given the possible confusion coming up when there is more than one rule applying to a certain domain. There are two situations in particular that are potentially confusing:

1. Suppose that node A has a rule allowing user X to read annotation files. That means that user X is allowed to read all annotation files in the domain of node A (i.e. annotation3 in Figure 3.1). Now say that one of the ancestors of node A, specifically node B, has a rule denying user X to read annotation files. That means that user X is not allowed to read any annotation file in the domain of node B. If we consider that the domain of node A is in fact part of the domain of node B, we see that the rules of both nodes are in conflict.



**Figure 3.1.**

2. Suppose that a node has two rules (see Figure 3.2). One rule allows user X to read annotation files. The other rule denies group G to read annotation files. Consider user X to be a member of group G. That means that the two rules concern user X, one allowing and the other denying user X to read annotation files. Again, the two rules are in conflict.



**Figure 3.2.**

Only rules that apply to the same resource type (like the annotations in the examples above) can conflict. If two rules do not apply to the same resource type they cannot conflict.

The fact that rules may conflict raises the question of how AMS determines whether a user is allowed to read or to open a resource. To be able to answer this question we state the following basic principles:

- A rule either allows or denies the access to a resource for a specific user or for all the members of a group.
- To calculate the access rights of a resource all rules in the path are taken into consideration.
- A rule can have the following priority levels:
  - Highest
  - High
  - Normal



### Note

Only users with the Archive Manager role can use the highest level of priority when adding and editing rules.

Now that we have seen what basic principles are involved in the calculation of the access rights, we state the principles of the calculation itself. These principles are applied by AMS in the same order as we show them here:

1. The priority principle: The highest priority of the considered rules is determined, and all rules with a priority lower than that are outvoted.
2. The closeness principle: From the nodes in the path that have at least one rule, only the rule from the node which is closest to the resource is kept. All other rules are outvoted. Consider for example the path A-B-C-D-resource (top down). If both node A and node C have a rule, only the rule on C is kept. The rule on node A is outvoted.

3. The constraint principle: If a) there is more than one rule applying to the same resource type, and b) the rules have equal priority, equal closeness and c) they are conflicting (at least one is denying and one is allowing a user to read a resource), access to the resource is denied. So denial outvotes permission.

To sum up, AMS first selects rules with the highest priority. Then, it selects rules on nodes closest to the resource from the remaining rules. Finally, it looks whether one of the remaining rules denies access to the resource. By applying the calculation principles in this way, AMS avoids conflicting situations as described at the beginning of this section.

### 3.1.1. Examples of access rights calculation

The following three situations exemplify how the access rights are calculated from all considered rules:

#### Example 1

Consider the following path with the nodes listed in top down order and their corresponding rules:

Node A: Top Node	Rule 1: <i>Read Annotation Files Allow</i> (normal priority) for user X
Node B	Rule 2: <i>Read Annotation Files Deny</i> (normal priority) for user X
Node C: Resource - annotation file <code>test.txt</code>	-

Both rules concern the reading of annotation files by user X and both rules have the same priority. This results in a conflict. In this example rule 1 allows user X to read the annotation file `test.txt` on node C, whereas rule 2 denies the file to be read by user X. Since both rules have the same priority, AMS cannot make a choice based on the priority principle. Therefore, AMS applies the closeness principle, according to which only rules from nodes that are closest to the resource are weighed heavier. Applying this principle results in the outvoting of rule 1 leaving only rule 2. Since rule 2 denies reading annotation files, AMS also denies user X to read the annotation file `test.txt`.

Putting rule 2 on node A and rule 1 on node B results in the discarding of rule 2 based on the closeness principle. The remaining rule 1 results in AMS allowing user X to read the annotation file `test.txt`.

#### Example 2

Now focus on this second path:

Node A: Top Node	Rule 1: <i>Read Annotation Files Allow, highest priority</i> for user X
Node B	Rule 2: <i>Read Annotation Files Deny, high priority</i> for user X
Node C	Rule 3: <i>Read Annotation Files Deny</i> (normal priority) for user X
Node D: Resource - annotation file <code>test.txt</code>	-

One of the three rules in this example allows user X to read the annotation file `test.txt`, while the other two deny reading the file. Moreover, all three rules have a different priority level. Applying the priority principle results in the outvoting of rule 2 and 3 because only rule 1 has the highest priority found in the three rules. The final result is that AMS allows user X to read the annotation file of node D.

#### Example 3

A slightly more complicated example is the following path:

Node A: Top Node	Rule 1: <i>Read Annotation Files Deny, high priority</i> for user X
------------------	---

Node B	Rule 2: <i>Read Annotation Files Deny, high priority</i> for user X
	Rule 3: <i>Read Annotation Files Allow, high priority</i> for group G - user X is a member of group G
Node C	Rule 4: <i>Read Annotation Files Deny</i> (normal priority) for user X
Node D: Resource - annotation file <code>test.txt</code>	-

Applying the priority principle discards rule 4 because the highest priority level is *high* and rule 4 has a lower priority level. This leaves rule 1, 2 and 3. Applying the closeness principle discards rule 1 leaving rule 2 and 3. Since we are interested in the access rights of user X and user X is a member of group G rule 2 and 3 are still in conflict. So, AMS applies the constraint principle. This means that if there is still a rule denying the right to read a resource, that rule is applied to calculate the final access right.

### 3.1.2. Forcing export

As far as access rights calculation is concerned, you may need to use the option **Force export**.

After submitting a workspace in Lamus, AMS is automatically triggered in order to recalculate the previously set access rights. However, it may happen that, for some reason, AMS does not manage to trigger such recalculation, leaving the user without access.

By selecting the option **Force export**, located under **Add new rules** (see image below), you manually initiate the recalculation of the access rights. This *should* help you solve some of the access-related problems.

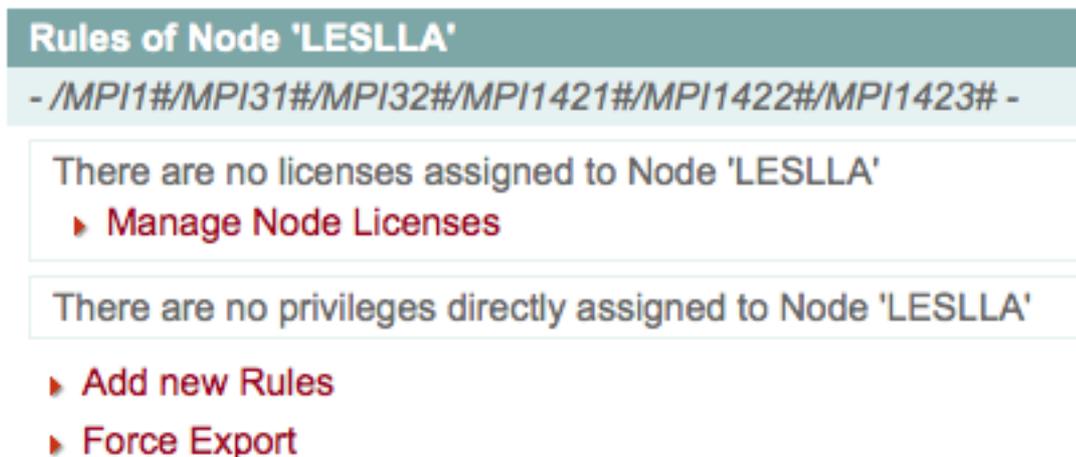


Figure 3.3. Force export

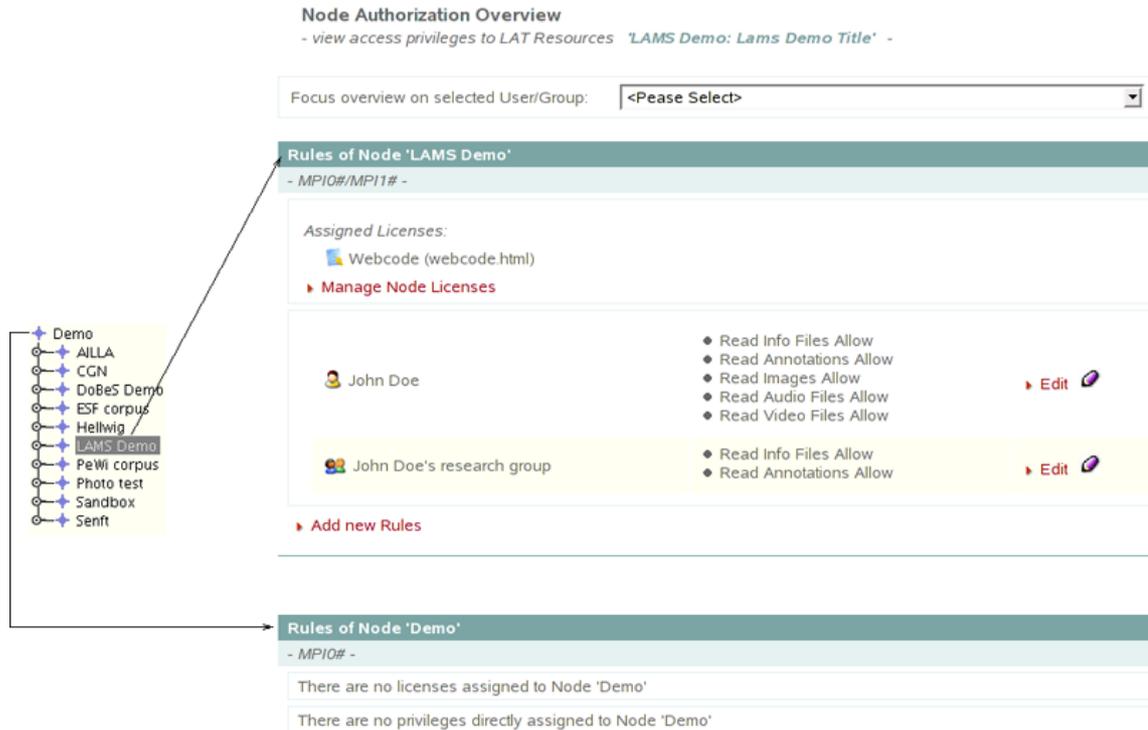
## 3.2. Checking existing rules

Before creating and editing rules, we first take a look at how existing rules are displayed in AMS.

### 3.2.1. All rules of a node

As we saw in Section 1.2 you start AMS by selecting a node in ASV and clicking **manage access** in the context menu. The page that now appears contains the **Node Authorization Overview**. If you are working in a different part of AMS, this overview can also be displayed by clicking **Node authorization > Overview** in the AMS menu.

The Node Authorization Overview shows the rules of all the nodes in the path from the selected node to the top node of the corpus tree in a bottom-up fashion. In the example shown in Figure 3.4, only the active node - LAMS Demo - contains rules: one for the user (marked by the icon ) John Doe and one for the group () John Doe's research group. If you let your mouse cursor hover over a user or group icon, some details for these items will be displayed, namely **ID**, **Name**, **eMail** and **Organization** in case of a user; **ID**, **Name**, and **Members**, in case of a group. For both the user and the group the existing rules are displayed in a bullet point list on the right of their names.



The screenshot shows the 'Node Authorization Overview' interface. At the top, it says 'Node Authorization Overview - view access privileges to LAT Resources LAMS Demo: Lams Demo Title'. Below this is a dropdown menu for 'Focus overview on selected User/Group' set to '<Please Select>'. The main content is divided into two sections: 'Rules of Node LAMS Demo' and 'Rules of Node Demo'. The 'LAMS Demo' section shows 'Assigned Licenses' including 'Webcode (webcode.html)' and a 'Manage Node Licenses' link. It lists two entities: 'John Doe' and 'John Doe's research group'. For 'John Doe', the rules are: Read Info Files Allow, Read Annotations Allow, Read Images Allow, Read Audio Files Allow, and Read Video Files Allow. For 'John Doe's research group', the rules are: Read Info Files Allow and Read Annotations Allow. Each entity has an 'Edit' button. The 'Rules of Node Demo' section shows 'There are no licenses assigned to Node Demo' and 'There are no privileges directly assigned to Node Demo'. A tree view on the left shows the hierarchy: Demo (expanded) with children: AILLA, CGN, DoBeS Demo, ESF corpus, Hellwig, LAMS Demo (selected), PeWi corpus, Photo test, Sandbox, and Senft.

Figure 3.4. Overview of the rules for the selected node

Besides the access rules, Figure 3.4 also shows that a license, called 'Webcode', has been linked to node 'LAMS Demo'. More about licenses can be found in Section 3.4.

### 3.2.2. All rules of a node for a specific user or group

To be able to manage access rules more easily, AMS enables you to narrow the list of rules of a node to only those rules that concern a specific user or group. To do so, select a user or a group from the drop down list next to *Focus overview on selected User/Group*. Then click on 'View' next to *View effective privileges on selected User* or click **Node authorization > Effective User Privileges** in the AMS menu [Note: mind that in the drop down list you first get the users - from A to Z - and then the groups - from A to Z]. A list of all resources will appear. Depending on the rights a user has, a green tick representing allowed access () or a red cross representing denied access () will be displayed for each resource. Both read and write access rights are shown. The latter can only be obtained by users with the Domain Editor role.

## 3.3. Managing rules

### 3.3.1. Adding rules

As we saw in Section 1.1.4 only Archive Managers, Domain Curators and Domain Managers can add, edit or revoke rules. For this reason, make sure you have an appropriate role for the considered domain when

carrying out the steps indicated in this section. Also make sure you have agreed on the node licenses (see Section 3.4), as not doing so might prevent you from setting up new rules.

To add a rule carry out the following steps:

1. Select a domain, i.e. a node, from the corpus tree in ASV.
2. Click on **Manage access**. The page that now appears is the Node Authorization Overview (see also Figure 1.4).
3. Click on *Add new Rules* (at the end of the section **Rules of Node** + *[name of the node]*). The page that now appears is the Node Authorization Management.
4. Select a user or a group from the dropdown menu in the section *Rule Settings*. This section has two additional boxes: **Specify Rules** and **Assign Roles**.



### Note

If you had already selected a user or group in the Node Authorization Overview, it is not necessary to select a user or group in the Node Authorization Management.

## Specify Rules

The following steps are for specifying rules:

5. Specify a rule for one or more of the following resource types by selecting the appropriate checkboxes under the **Rule** column:
  - Info files (all kind of files), e.g. PDF
  - Annotations/Text files, e.g. EAF
  - Images, e.g. JPEG
  - Audio files, e.g. WAV
  - Video files, e.g. MPEG
6. Allow or deny the reading of the resource by selecting the appropriate option from the dropdown menu in the **Type** column.
7. If you have the Archive Manager role, a **Priority** dropdown menu will be shown as well next to each of these resource types. See Chapter 4 for an explanation on this.
8. Optionally you can specify an expiration date - on which the rule will be deactivated (**Expires on** (optional) column). Click on the  icon to get a small calendar for the selection of a day.
9. If you are an Archive Manager or Editor, you will also see a 'Forbidden Access' rule. This rule can only be applied to the group 'Everybody'. It has the purpose of blocking the access to a certain branch and it has higher priority than the normal "deny" rules. Only the Archive Managers and Domain Managers/Editors/Curators will have access to a branch where the access is forbidden. More info about the group 'Everybody' can be found in Section 3.3.3).

## Assign Roles

If you are an Archive Manager or a Domain Curator the **Assign Roles** boxes will be activated. This allows you to appoint a user/group as Domain Curator/Manager/Editor. Only the possibilities that come with your privileges are available, the other ones are grayed out.

10. Check the roles you wish to assign to the selected user/group.
11. Optionally, roles can be time-limited using an expiration date as well.
12. As for the Domain Editor role, a maximum storage space for resources must be assigned.
13. Click on *Save* or discard the settings using the *Cancel* button on the bottom of the screen.

When saved, the new rules/roles will be displayed next to the users they are assigned to.

### 3.3.2. Editing and Revoking rules

Editing and revoking rules can be done in much the same way as adding rules. Besides the possibility to click *Edit Node Rules* in the Node Authorization Overview it is also possible to click on *Edit* on the right of an existing rule. This shows the Node Authorization Management where you can edit and revoke rules. Revoking is done by deselecting the checkbox of an existing rule and clicking on *Save*.

### 3.3.3. Special groups: *Everybody* and *Registered Users*

There are two special groups in the list of users and groups: *Everybody* and *Registered Users*. The difference between the two is that 'Everybody' includes both unregistered and registered users while 'Registered Users' only contains registered users.

A rule for 'Everybody' outvotes any other rule in a domain, regardless of the priority, and all users are a member of the group 'Everybody'. The implications are as follows: suppose a rule states that access to a resource type in a certain domain is denied for user X and another rule states that access is allowed for the same resource type in the same domain for 'Everybody'. Since a rule for 'Everybody' outvotes all other rules within its domain, the 'Everybody' rule is effective and access is allowed for everybody including user X despite a rule denying him/her access. The same holds in the opposite case: a rule stating that 'Everybody' is denied access will always result in denying access to each individual user despite the allowing access rules that might exist.

A rule for 'Registered Users' is very much the same as for 'Everybody'. The only difference is that a rule for 'Everybody' also outvotes licenses, whereas a rule for 'Registered Users' does not. To put it another way, if there is a license set for a resource (see also Section 3.4), together with a rule saying that access is allowed for 'Everybody', the license does not have to be accepted first. If, by contrast, the allowing rule applies to 'Registered Users', the license does need to be accepted first.

## 3.4. Licenses

A license is a text a user should agree upon before being able to access certain resources. It always applies to a domain, i.e. to a node and to all its descendants.

### 3.4.1. Accepting licenses

The first time you want to access a resource to which a license applies, you have to accept that license explicitly. To do so, click on the button *Manage Access Rights* from the context menu and then go to *Node Authorization > Licenses Required*. An overview of all licenses that apply to the resource you are interested in will be displayed. Click on the  icon to read the license agreement text.

To accept a license, click on *Accept* next to the eye icon (or under the license agreement text). The accepted licenses will now be marked with a  icon.



### Note

If you accept a license, you accept it for all the domains for which the license is set.

It is possible to have more than one license assigned to the nodes within a domain. You can accept each of these licenses once you come across a resource for which a license that you have not accepted yet is set. However, it may be useful to accept all licenses that are assigned to the nodes within a domain at once. To do so, click on the button **Manage Access Rights** from the context menu. If you now select **Node Authorization > Licenses Required** in the AMS menu, you will see not only the licenses assigned to the selected node, but also the licenses assigned to all the nodes in the domain of the node, i.e. all nodes that are below the selected node in the tree.

To view all the licenses you have accepted so far, click **My Account > My Accepted Licenses** in the AMS menu. This overview shows the licenses and the date and time you have accepted it. You can also view the license by clicking  **View**. The overview is independent of the selected node.

## 3.4.2. Linking a license to a node

Similarly to setting up rules for a node, click on the button **Manage Access Rights**. Now select **Node Authorization > Node License Assignment**; a list with all existing license agreements will appear. Check the boxes in front of one or more licenses and click on **Save**. Only users that have accepted the license can access the resources in the domain of this node. By deselecting and saving the changes a license requirement can be revoked.



### Note

At the moment the list of licenses is fixed. In future versions of AMS it will be possible to specify your own.

## 3.4.3. Adding/Editing a license

You may also want to add a license to a node, or to edit an already existing one (in this case 'edit' means change the license name, or replace the current license file with another one). As you did in the previous two cases, click on the button **Manage Access Rights > Node Authorization**. Now choose the last option of the menu, **Add/Edit a license**.



### Note

Only Archive Managers are able to see, hence to use, this option. It is hidden for the other users.

Once you click on it, a page will appear showing a list of the available licenses (see first figure below). On the right of each license you can click either on **Edit license**, or on **View**. The former opens up another page which allows you to change the license name and/or its file (see second figure below). For the latter, see 'Accepting Licenses' section above. Besides the option 'Edit license' next to the license itself, you can also choose the option **Add/Edit a license** below the list of licenses: the way of functioning is practically the same.



**Welcome to AMS**  
- lat access management system -



User Management | Node Authorization | My Account | ?

**License management page**

**License Management**  
*Edit or add a license*

**List of the available licenses**

Hindi Child Language Data: Code of Conduct	 Edit license	 View
Dobes Code of Conduct v2	 Edit license	 View
Stivers Code of Conduct	 Edit license	 View
MPI Policy	 Edit license	 View
ams2_test_license	 Edit license	 View

License file

License name

 Add/Edit a license

**Figure 3.5. Add/Edit a license**



**Welcome to AMS**  
- lat access management system -



User Management | Node Authorization | My Account | ?

**License management page**

**License Management**  
*Edit or add a license*

You can now change the license name and/or its file. The current license file is: ams\_test\_license.htm

**List of the available licenses**

ams2_test_license	 View
-------------------	--

License file

License name

 Add/Edit the license

**Figure 3.6. Edit License**

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# Chapter 4. Advanced usage and administration

This chapter is intended to give some explanation about miscellaneous features.

## 4.1. Mailing

To send an e-mail to a user click on User Management > Edit User and click on the envelope/e-mail address of a user. Now you can enter a Subject and a message. After writing a message, click Send to send the e-mail.

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# Appendix A. Example use case of roles

To illustrate the typical use of roles we will now describe an example setup. It features some frequently encountered user types and the roles that fit within their profiles.

## A.1. Corpus manager

A corpus manager is responsible for the whole corpus. As such, he/she has full read and write access to all nodes and their resources, and can delegate rights to other users.

**Roles:** Archive Manager

## A.2. Researcher

The prototypical researcher is responsible for building a subcorpus and therefore has all rights on it. Later on, he/she can appoint assistants to help with changing the content and granting access rights.

**Roles:** Domain Curator + Domain Editor (for the specific subcorpus)

## A.3. Research team

Multiple researchers want to share a corpus, so that they can simultaneously access and change it.

**Roles:** one Domain Curator + a Domain Manager for each subcorpus, to be assigned to a group to which all team members belong

## A.4. Research assistant

The assistant of the researcher can grant or deny access to all nodes of the relevant subcorpus. If necessary he/she can also make changes to the corpus.

**Roles:** Domain Manager (+ Domain Editor if changing the corpus is required)

## A.5. Interested colleague

A colleague asks a certain researcher to get read access to a non-public part of his/her corpus.

**Roles:** none, a username and password for the colleague is required (which can be created by a Domain Manager or Curator).

Of course, there must be some rules allowing this user to read some of the resources.

## A.6. Accidental visitor

A visitor wants to access a publicly open part of the corpus.

**Roles:** none, even obtaining a user name is not necessary.

The domain must be open for *everybody*.