OdA v2.0

OdA 2.0 Administration Guide
# Table of Contents

1. **Introduction** .................................................................................................................. 4

2. **Preferencias (Preference) Menu** ................................................................................. 5
   2.1 Modifying the Header Image ....................................................................................... 5
   2.2 Modifying Data on the Website ................................................................................... 6
   2.3 Modifying the Web Background on the Homepage ..................................................... 6
   2.4 Modifying the list of file extensions that can be uploaded ........................................... 6
   2.5 Enabling Web Security ............................................................................................... 6

3. **Navigación (Navigation) Menu** ................................................................................... 7
   3.1 Creating a new Navigation Category .......................................................................... 7
   3.2 Modifying the Order of a Category .............................................................................. 8
   3.3 Deleting a Category ..................................................................................................... 8

4. **Contenido (Content) Menu** .......................................................................................... 9
   4.1 Text Pages .................................................................................................................. 9
      4.1.1 Creating a new Textpage ..................................................................................... 9
      4.1.2 Modifying a Textpage .......................................................................................... 10
      4.1.3 Adding Content on a Textpage ............................................................................. 10
      4.1.4 Managing Content on a Textpage ....................................................................... 10
      4.1.5 Deleting a Textpage .............................................................................................. 10
   4.2 Resource Bank ............................................................................................................... 10
      4.2.1 Navigating the Resource Bank ............................................................................. 11
      4.2.2 Creating a Folder ................................................................................................... 11
      4.2.3 Uploading a new File ............................................................................................ 11
      4.2.4 Choosing a File ...................................................................................................... 12
      4.2.5 Copying a File ........................................................................................................ 12
      4.2.6 Pasting a File .......................................................................................................... 12
      4.2.7 Deleting One or Several Files ................................................................................ 12

5. **Usuario (User) Menú** .................................................................................................. 12
   5.1 Log of Changes ............................................................................................................ 12
   5.2 Users ............................................................................................................................ 13
      5.2.1 Creating a new User ............................................................................................... 14
      5.2.2 Modifying Registered Users .................................................................................. 14
      5.2.3 Modifying Administrator’s DOs ............................................................................. 14
      5.2.4 Deleting Registered Users .................................................................................... 15

6. **Objetos Digitales (Digital Object) Menu** ................................................................. 15
   6.1 Data Model ................................................................................................................... 15
      6.1.1 Creating new Attributes in the Data Model ........................................................... 16
      6.1.2 Modifying an Attribute in the Data Model ............................................................. 18
      6.1.3 Deleting an Attribute from the Data Model ............................................................ 19
6.2 Digital Objects

6.2.1 Creating a Digital Object

6.2.2 Modifying a Digital Object

6.2.3 Copying or Duplicating a Digital Object

6.2.4 Adding a Resource to a Digital Object

6.2.5 Modifying a Resource in a Digital Object

6.2.6 Deleting a Resource from a Digital Object

6.2.7 Assigning an Icon to a Digital Object

6.2.8 Visibility and arrangement of Resources in a Digital Object

6.2.9 Deleting a Digital Object

7 Mantenimiento (Maintenance) Menu
1 Introduction

The OdA 2.0 application allows creating a website and associated repository to store, manage and publish collections of Digital Objects (henceforth DO). Examples of websites created using OdA include Learning Object (LO) repositories and Academic Virtual Museums.

In OdA, a DO is a unit of information that represents a physical or conceptual “object”. In OdA, the information that makes up a DO is organized in three sections: data, resources and metadata. The data section includes all attributes and values that characterize the object. For example, if in an Academic Virtual Museum a DO represents an archaeological pot, its colour and size, as well as short text description of the pot, could be part of the DO’s data. The resource section contains the set of digital files that make up the core of the DO, for example, several digital photos of the pot and one or more pdf files describing its use and manufacturing processes. The resources of a DO can be shared with other DOs in the same collection or repository, for example, many pots in the repository can share the same pdf file describing its manufacturing process. A DO may also have another DO as a resource, which means that more conceptual and complex DOs can be created from simpler ones; also, a DO can have a whole website as a resource. Finally, the third section is that of metadata. Metadata are data about data, that is, the attributes and values that document and classify the DO. For example, the creation date of a DO and the name of its creator could be part of its metadata. In general, metadata provide contextual information about the DO or meta-information (not information about the “object itself” but about the DO).

This document describes the menus and actions needed to create and manage a DOs’ collection using the OdA application. The administration and management of an OdA website is conducted through the application’s backoffice. This option is only accessible to users with privileges of superadministrator or administrator, with important restrictions for the latter.
2 Preferencias (Preference) Menu

This menu allows both setting the preferences of the home page of the OdA website and other OdA 2.0’ optional features.

![Preference options](image)

2.1 Modifying the Header Image

In the ‘Datos del Contenedor’ (Data about the Repository) section in the preference menu, select the image clicking on ‘Seleccionar Imagen’ (Select Image) and choose an image
from the resource bank (see ‘use of the Resource Bank, Section 4.2). For the correct visualization of the header image, it should be 1152 pixel wide. For changes to be effective, click on the ‘Guardar’ (Save) button. The image can be deleted clicking on the icon.

2.2 Modifying Data on the Website
The data of the website can be edited by simply changing the "Descripción" (Description) and "Palabras Claves" (Keywords) fields in the data section of the website. For changes to be effective, click on the ‘Guardar’ (Save) button.

2.3 Modifying the Web Background on the Homepage
Go to the ‘Diseño de Página’ (Page Layout) section and select an image from the resource bank (see use of resource bank, on page 10) by clicking on “seleccionar imagen” (Select Image) in that section. For changes to be effective, click on the ‘Guardar’ (Save) button. The picture can be deleted by clicking on the icon (this feature has no effect in the current version).

2.4 Modifying the list of file extensions that can be uploaded
Go to the ‘Extensión de Archivos’ (File Extension) section. This section shows a list of allowed extensions. One can add more extensions or delete existing ones.
- An extension is added by simply typing the extension without the dot in the ‘Agregar Extensión’ (Add Extension) field and clicking on "Agregar" (add).
- An extension is deleted by simply clicking on , which is located to the right of the extension to be deleted.

2.5 Enabling Web Security
This option forces all users who wish to view the OdA website and DO collection to log in through their username and password. This means that access to the whole repository is private. To enable Web Security, one must go to the ‘Seguridad Acceso Web’ (Web Security Access) section, check ‘Habilitar Seguridad Web’ (Enable Web Security) and save. To disable security, it suffices to uncheck and save.
It is also possible to define a mixed access to the OdA repository with public and private DOs, data and metadata. To do so, security must be disabled; the privacy of the DOs will be set independently for each DO and specific data and metadata (see section 6.2.1)
3 Navegación (Navigation) Menu

This menu allows setting up the categories or options for the top and left navigation menus on OdA’s homepage. The following screen shows an example of a list of categories making up the top and left menu on OdA’s homepage. Note that it is also possible to create navigation hierarchies or trees.

![Gestión de Oda 2.0](image)

Figure 3 – Setting the Navigation Menu

3.1 Creating a new Navigation Category

Click on ‘Nuevo’ (New) in the navigation menu. Fill in the fields with the desired values and click ‘Guardar’ (Save).

![Gestión de Menús](image)

Figure 4 – Navigation category template
<table>
<thead>
<tr>
<th>CAMPO</th>
<th>TIPO</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visible</td>
<td>check</td>
<td>If activated, the navigation category is visible to all users. If disabled, the category will only be visible to registered users.</td>
</tr>
<tr>
<td>Nombre (Name)</td>
<td>Text</td>
<td>Category name. Required field.</td>
</tr>
<tr>
<td>Tooltip</td>
<td>Text</td>
<td>Category description.</td>
</tr>
<tr>
<td>Navegación Padre (Parent Navigation)</td>
<td>option</td>
<td>Place of the category in the category hierarchy. It may be in the root (- main-) category or be a child category of another category.</td>
</tr>
<tr>
<td>Tiene Contenido (Has content)</td>
<td>option</td>
<td>Indicates whether the category has a special type of content - No.: it only shows the image and/or below text. - Sí: choice of different content types for a category.</td>
</tr>
<tr>
<td>Tipo de Contenidos (Content Type)</td>
<td>option</td>
<td>Visible only when the ‘Tiene Contenido’ (Has Content) option is ‘Sí’ (Yes) Content types are: - Ninguno (None): to the first of the internal sections (of the navigation menu). - Páginas (Pages): to a web page created in the content menu (see content menu). - Url: external link. - Acceso a Base de Datos (Database Access): access to DOs in sequential order. - Clasificación de la base de datos (Database Classification): Access to DOs hierarchically grouped into classes and subclasses according to the Data Model. - Búsqueda (Search): Access to the global search menu. - Mantenimiento (Maintenance): Password-secured access to the maintenance menus or back office described in this document.</td>
</tr>
</tbody>
</table>

Click ‘Guardar’ (Save) to create the new category.

3.2 Modifying the Order of a Category

The order of each category in the menu can be altered by clicking on the up or down arrows 🚪. 🚪.

3.3 Deleting a Category

There are two possible ways to delete a category:

- From the list, click on the ‘delete’ icon 🚪.
- Within the category (click on the category name), by clicking on the 🚪 Eliminar icon.
4 Contenido (Content) Menu

This section allows managing the OdA’s web pages and Resource Bank (not to be confused with the DOs’ resources). This section is divided into two: ‘páginas de texto’ (text pages) and ‘banco de recursos’ (resource bank).

**4.1 Text Pages**

In this subsection you can manage those text web pages that can later be viewed through the categories created in the navigation menu (see section 3, ‘Menú de Navegación’ [Navigation Menu]). The list of already created pages is displayed. Possible actions on a text page are creating a new one, deleting or modifying it.

---

### 4.1.1 Creating a new Textpage

Click on ‘Nuevo’ (New) from the text page submenu. Fill in the fields and save.

<table>
<thead>
<tr>
<th>Datos de Sección</th>
<th>TIPO</th>
<th>OBSERVACIONES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Título (Title)</strong></td>
<td>text</td>
<td>Text page’s name. <em>Required field.</em></td>
</tr>
<tr>
<td><strong>Documento (File)</strong></td>
<td>file</td>
<td>A file can be added to the page by simply clicking on ‘seleccionar documento’ (select file) and choosing a file from the resource bank (see use of Resource Bank, page 10).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adding content to the text page. Images, text or HTML code can be added.</td>
</tr>
</tbody>
</table>

It is necessary to save changes for the creation of the page to be effective.
4.1.2 Modifying a Textpage
To modify the contents of a page it suffices to click on the name of the page one wishes to modify or on the icon. Once inside, one can modify the page attributes, as well as add or manage its contents.

4.1.3 Adding Content on a Textpage
You can add content on a page in various ways:

- By selecting a file from the creation or modification of the page. To do this, click on ‘seleccionar documento’ (choose file) and choose a file from the Resource Bank.
- By clicking on the icon and selecting the ‘Imagen’ or ‘Texto’ content type. To add an image, click on ‘Seleccionar Imagen’ (Select Image) and choose an image from the Resource Bank (see use of the Resource Bank in subsection 6.2). When adding text type content, a text editor allows customizing the text, attaching images or directly incorporating HTML code.

4.1.4 Managing Content on a Textpage
Content management allows the modification of the order of appearance of content as well as its elimination. The order of appearance can be changed by simply clicking on the icons to raise or lower the content position. To remove content, simply click on the icon.

4.1.5 Deleting a Textpage
To delete a textpage, click on the icon of the page you wish to delete.

4.2 Resource Bank
In the Banco de Recursos (Resource Bank) subsection, you administrate all the files used to build OdA’s web pages. Files that are part of the DOs’ resources section are not part of the Resource Bank.
4.2.1 Navigating the Resource Bank

The home directory is: download/bancorecursos.
It is possible to order the files in resource bank by name, size or modification date, by clicking on the corresponding column header.
To access a folder, just click on the folder icon or name.
To go up the directory path, click on the icon, located to the left of the directory path.

4.2.2 Creating a Folder

Click on the icon, enter the folder name in the new window and click OK.

4.2.3 Uploading a new File

Click on ‘examinar’ (browse) and select the file. It should be noted that only files with allowed extensions can be uploaded. Allowed extensions are defined in the preferences section (see section 2, Preference menu). There is also a maximum size allowed by default, which depends on the configuration of the web server. This size can only be changed by the server administrator (see installation instructions). Zip files may be uploaded (if this extension is included in the preferences section) and the application will decompress the file respecting its internal organization.
4.2.4 Choosing a File

To select one or several files, activate the checkbox on the left hand side. If we click on the file name, the resource bank will show a description of the file on the right hand side and, if the file is an image, this will be pre-viewed.

4.2.5 Copying a File

To copy one or multiple files just select them and click on the icon.

4.2.6 Pasting a File

To paste one or more previously copied files, just click on the icon.

4.2.7 Deleting One or Several Files

To delete one or more files, it is necessary to select the files to be deleted and click on the icon. To delete just one file, it suffices to click on the icon in the deletion column. One can also delete folders once they have been emptied of all their contents.

5  Usuario (user) Menú

This menu allows managing user data and tracing the actions carried out by users. At the same time, it is divided into two submenus, ‘usuarios’ (users) and ‘log de modificaciones’ (log of changes).

5.1 Log of Changes

The ‘log de modificaciones’ (Log of Changes) submenu serves to keep track of DOs; it can display a list of the modifications made on the objects by registered users. The meaning of “Type” is M = modified object; C = created object; and B deleted object.
5.2 Users

The ‘usuarios’ (users) sub-menu allows the management of all users by showing a list of all the users registered in OdA. Possible actions include creating, modifying and deleting users.
5.2.1 Creating a new User

To create a new user, go to Mantenimiento->Usuario. Click on ‘Nuevo’ and fill in the following fields:

<table>
<thead>
<tr>
<th>FIELD</th>
<th>TYPE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nombre</td>
<td>Text</td>
<td>New user’s first name. <em>Required field.</em></td>
</tr>
<tr>
<td>Apellidos</td>
<td>Text</td>
<td>New user’s surname.</td>
</tr>
<tr>
<td>Correo</td>
<td>Text</td>
<td>New user’s mail.</td>
</tr>
<tr>
<td>Login</td>
<td>Text</td>
<td>New user’s login name. <em>Required field.</em></td>
</tr>
<tr>
<td>Password</td>
<td>Text</td>
<td>New user’s password. <em>Required field.</em></td>
</tr>
</tbody>
</table>

User’s role. Select one of the following roles:

- ‘Superadministrador’: User with privileges to manage the OdA website, all the repository contents, DOs and users. It can create confidential or private DOs and attributes only accessible to this type of user.

- ‘Administrador’: User with privileges to create and modify his/her DOs and inspect all DOs except private or confidential ones.

- ‘Usuario’: User with privileges to inspect all DOs except private or confidential ones. *Required field.*

5.2.2 Modifying Registered Users

User data can be modified: First name, surname, email, Login, Password, Repeat Password, Role and DOs with editing privileges. Just click on the user’s login icon 🪔.

5.2.3 Modifying Administrator’s DOs

When modifying a user, if he/she has Administrator’s role, the superadministrator can modify the list of DOs on which the user has editing privileges. Whenever a user with administrator privileges creates a DO, he/she has editing privileges on this DO. It should be noted that a DO can be created by duplicating a pre-existing DO (see section 6.2); in this case the administrator must enter the DO’s template and click on save for the duplicated DO to be incorporated into the list of DOs on which the administrator has editing rights.

To modify the lists of DOs on which the user has editing privileges, the field “‘Objetos de aprendizaje con permisos de edición’” *(Learning Objects with editing privileges)* must be
changed. This is a list of DOs, in which the user has permissions to modify its information content. Only a superadministrator can modify this list. In this list are the I.D.s of the objects that a specific user has created, as well as those for which a superadministrator has given him/her permissions. To add a new digital object to this list, just write the object I.D.

5.2.4 Deleting Registered Users

To delete a user, simply click on the delete icon and confirm. Only a super administrator can delete users.

6 Objetos Digitales (Digital Object) Menu

All the components of a Digital Object (DO), as well as the DOs themselves are managed from this menu. The menu consists of two submenus, ‘Objetos’ (Objects) and ‘Modelo de Datos’ (Data Model).

IMPORTANT: OdA 2.0’s Data Model allows great flexibility in the way the superadministrator user can define the Data (attributes-values and parent-child relations) that make up the Data Model of the repository, and in the way users can navigate through the defined Data Model structure. On the other hand, this flexibility can lead to build not very coherent Data Models, in which the navigation through the repository information or the presentation of the DO’s information may not be as initially expected. Therefore, the superadministrator should be especially aware of the implications of the properties of parent-child dependency, visibility and attribute values of the desired Data Model. For instance, if an attribute is defined as 'no visible' (not visible) users other than Superadministrators will not see this attribute or the subtree with its child-attributes in the navigation tree (even if the latter are supposed to be visible); also, if an attribute is defined as having value and being extensible, not giving value to this attribute in a DO will imply that this attribute and its children may not appear in the navigation tree, or with their full dependency in the DO’s record.

6.1 Data Model

With his submenu one can create and manage the Data Model of the repository that will be a superset of the Data Model of all the DOs in the collection. A DO is composed of three parts or sections: data, metadata and resources.

- ‘Modelo de Datos’ (Data): This part defines the attributes or properties of the DOs in a collection. Initially, within the general Data Model, there are two mandatory attributes which appear by default: ‘Descripción’ (Description) and ‘Tipo’ (Type). The superadministrator can change the properties of these attributes (except the property ‘tipo: texto’ (text) for description and ‘vocabulario controlado’ (controlled vocabulary) for type, i.e. these attributes can be renamed, have their dependency changed, etc. But they cannot be deleted. VERY IMPORTANT: the application uses these two attributes to build the lists of DOs resulting from searches, classified access, etc. If the 'Descripción' attribute (or whatever it has been renamed) is not given a value, the object may NOT APPEAR in the content listings (search results, listing of sequential access, etc.).
‘Modelo de Metadatos’ (*Metadata Model*): The set of attributes or properties that can be used to describe and classify the DOs in the repository. It has a similar purpose to that of the card documenting each book in a library.

‘Modelo de Datos de los Recursos’ (*Resource Data Model*): The attributes that describe each DO’s resource (a resource can be a digital file or an address or url). As these attributes are not properties of the DO but of their resources, these attributes will not appear in the classified access to DOs or in the search box (they are unaffected by the navigable feature).

All the attributes and values of each DO can be used as search fields as well as to create a classified access which may allow browsing the collection (as noted above, the elements of “the resource data model” are not a property of DOs and are therefore not used in the search or in the navigation).

6.1.1 Creating new Attributes in the Data Model

To create the Data Model of the DOs in a collection, it is necessary to create each of the attributes of the model and set their properties. To create a new attribute, click on ‘Nuevo’ (*New*) and fill in the following fields:
Figure 10 – Edition of an attribute in the Data Model
6.1.2 Modifying an Attribute in the Data Model

To modify an attribute it suffices to click on the attribute’s name or the icon. The fields ‘name’, ‘visible’, ‘navigable’, and ‘extensible’ can be changed. One can also change the attribute’s dependence or dependency, i.e., the attribute’s parent can be modified; one can even change the adscription of an attribute from the Data Model to the Metadata Model and vice versa. **IMPORTANT:** An attribute must not be changed from the Resource Data
Model to the Data Model or to the Metadata Model or vice versa, since the different nature of these data (the same object can have zero or more resources) makes the result of these changes unpredictable.

6.1.3 Deleting an Attribute from the Data Model

To delete an attribute, one must click on the attribute’s name or on the icon and, once within the attribute, click on the delete icon. Should any objects in the collection have values in that attribute, a warning message would be shown. **VERY IMPORTANT WARNING:** This option can lead to the destruction of a lot of information with a single click; if one keeps deleting, the attribute and its values will be deleted from **ALL** the objects in the collection.

6.2 Digital Objects

This submenu displays a list of the Digital Objects in the collection.

**Figure 11 – Digital Object Submenu.** Administrator and Superadministrator views; the latter including a check that indicates whether the object is private (confidential information visible only to the Superadministrator).
6.2.1 Creating a Digital Object

To create a new Digital Object (DO), click on the icon. 
- In the DO creation template, fill in the values of the desired attributes. In the case of a controlled type attribute one can either choose among the existing vocabulary terms or add new terms by selecting the ‘otro’ (other) option. A text field will appear just below, so the new term can be entered.
- It is possible to add resources to the DO (see 6.2.4).
- Superadministrator users can control the visibility, or confidentiality of the DO by means of the ‘Privado’ (Private) and ‘Público’ (Public) attributes. 
- If the ‘Privado’ attribute is checked, the DO becomes confidential and only superadministrator users can see it.
- If ‘Público’ is checked, the DO becomes visible to all users.
- If neither attribute is checked, the DO will only be visible to registered users (user type, administrator type and Superadministrator type).

Administrator users can only control the ‘Público’ attribute (‘Privado’ does not appear in the template). For the object to be correctly created, it is necessary to save.
6.2.2 Modifying a Digital Object

To modify a Digital Object, it suffices to click on the identifier or on the icon. Once the Digital Object template has been loaded, one can modify or assign new values to the object, add resources, etc.

6.2.3 Copying or Duplicating a Digital Object

In the list of Digital Objects, click on the icon in the ‘duplicar’ (duplicate) column of the object to be copied. The new Digital Object will possess the same values and resources as the original object. **WARNING:** it is recommended to enter the duplicated DO immediately after its creation, and click on save to update all the DOs lists in the repository; also, the DO created in this fashion, although identical to the original, has no icon; an icon can be added to the new object (recommended) by accessing it and choosing one of its resources as icon, or by uploading a new resource and choosing it as icon (see section 6.2.7)

6.2.4 Adding a Resource to a Digital Object

It is possible to add different types of resources to a DO. A DO can be regarded as the collection of resources making it up plus the data and metadata describing it. One must first go to the DO template by clicking on the identifier or on the icon of the desired object. The second thing to do is go to the bottom section of the DO template, where the different types of resources that we can add (by clicking on the link of the resource type) are shown:

Figure 12 – Virtual Object Creation Template. Administrator and Superadministrator view. Note that there are two checks in the Superadministrator view, i.e. ‘Público’ and ‘Privado’.
• New “own” resource:
   This type of resource is used to add a file to the set of files that intrinsically constitute the DO. To do this, click on ‘examinar’ (browse) and choose a file. To add an “own” resource, the file to be uploaded must have an allowed extension. The list of allowed extensions has been previously defined by a Superadministrator from the ‘Preferences’ menu. It can also have a limitation in its maximum size, defined on the web server hosting the OdA repository.

• Existing DO:
   This type of resource is a reference to an already existing DO from the collection. To add an existing DO as resource, click on the ‘Objeto Digital Existente’ (Existing Digital Object) link. In the new window, go through the list and choose the desired DO by clicking on the identifier.

• New existing resource:
   This type of resource is a reference to a resource from another already existing DO from the collection. To add this type of resource, click on the ‘Nuevo recurso existente’ (New Existing Resource) link. In the new window, go through the list and select the desired DO by clicking on its identifier to see its associated resources. Choose the resource by clicking on the ‘seleccionar’ (choose) link in the ‘Listado de Recursos’ window.

• Load Zip:
   This resource type allows adding several “own” resources at once using Zip compressed files. To do this, click on ‘examinar’ (browse) and choose a file with a Zip extension. When changes are saved, the Zip files are unpacked and become “own” resources. The files inside the Zip may not correspond to the list of allowed extensions. WARNING! This can have negative consequences. Zip compression type is the only one supported. The Zip file should not include folders; it should be a plain list of files whose extensions appear on the list of allowed extensions.

• Load HTML Zip:
   This resource type allows adding single HTMLs as well as whole web pages compressed into a Zip file. In this case the Zip contents may include a folder with
the resources used by the HTML page (or pages), which must appear in the first level.

6.2.5 Modifying a Resource in a Digital Object

To modify an existing resource in a DO, go to the DO’s template and modify the resource values. Finally, click on save to reflect the changes. It is also possible to modify the order of appearance and visibility of resources.

6.2.6 Deleting a Resource from a Digital Object

To remove an existing resource from a DO, go to the DO’s record and click on the 'eliminar' (delete) link of the resource to be deleted. **IMPORTANT**: if this resource is referenced from other DOs as an Alien Resource, the application produces the I.D. of the Digital Objects referencing it and requests confirmation to delete it. **WARNING**: It does not delete the references to this resource in other objects (see section 7).

6.2.7 Assigning an Icon to a Digital Object

To assign an icon to a DO, go to the DO’s record and click on the ‘icono’ link of the resource whose image is to become the DO’s icon. It is strongly recommended assign an icon to all DOs.
Figure 15 – Icon selection

If the object already has an assigned icon, this can be removed either by selecting another resource as icon or by clicking on the ‘Icono Actual’ (Current icon) link.

6.2.8 Visibility and arrangement of Resources in a Digital Object

DO's resources can be made visible or hidden by activating or deactivating the ‘Visible’ option, to the right of the 'Icono' link (Figure 15).

IMPORTANT: ‘Non-visible’ resources can only be viewed by superadministrator users. An administrator user with permission to edit a DO can edit all the resources of this DO, including the non-visible ones, even if he/she can only see those resources marked as "Visible" in the presentation Object.

Additionally, the order of appearance of the resources can be established by selecting, to the right of the "Visible" option, the number of position a given resource should occupy in the list of resources (Figure 15).

6.2.9 Deleting a Digital Object

A DO can be removed in several ways:
- From the list of DOs, by clicking on the delete icon.
- By accessing the record of the DO to be deleted and clicking on the ‘eliminar’ (remove) icon.

IMPORTANT: If the DO that we wish to delete is being used as a resource by other DOs, the application will display the I.D. of the DOs referencing it and request confirmation to delete it. WARNING: resources referencing the Object deleted from other objects are not deleted (see section 7).

7 Mantenimiento (Maintenance) Menu

This menu displays a list of all the resources of all Digital Objects (DO) in the repository, highlighting in red those which are:
- Broken links: references to files that have been deleted (resources or DOs)
- Orphans: files that are in the system but which are not referenced by any DO.
To delete one or several resources, just tick them and click on ‘eliminar seleccionados’ (delete selected ones). They can also be deleted one by one by clicking on the icon.

**VERY IMPORTANT:** This menu is for low-level maintenance of the application; it should therefore be handled with care: when a resource is deleted, no second confirmation is requested.

![Figure 16 – Maintenance Menu](image-url)