

LUMA: User's guide



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version 0.1 – 30/03/2011



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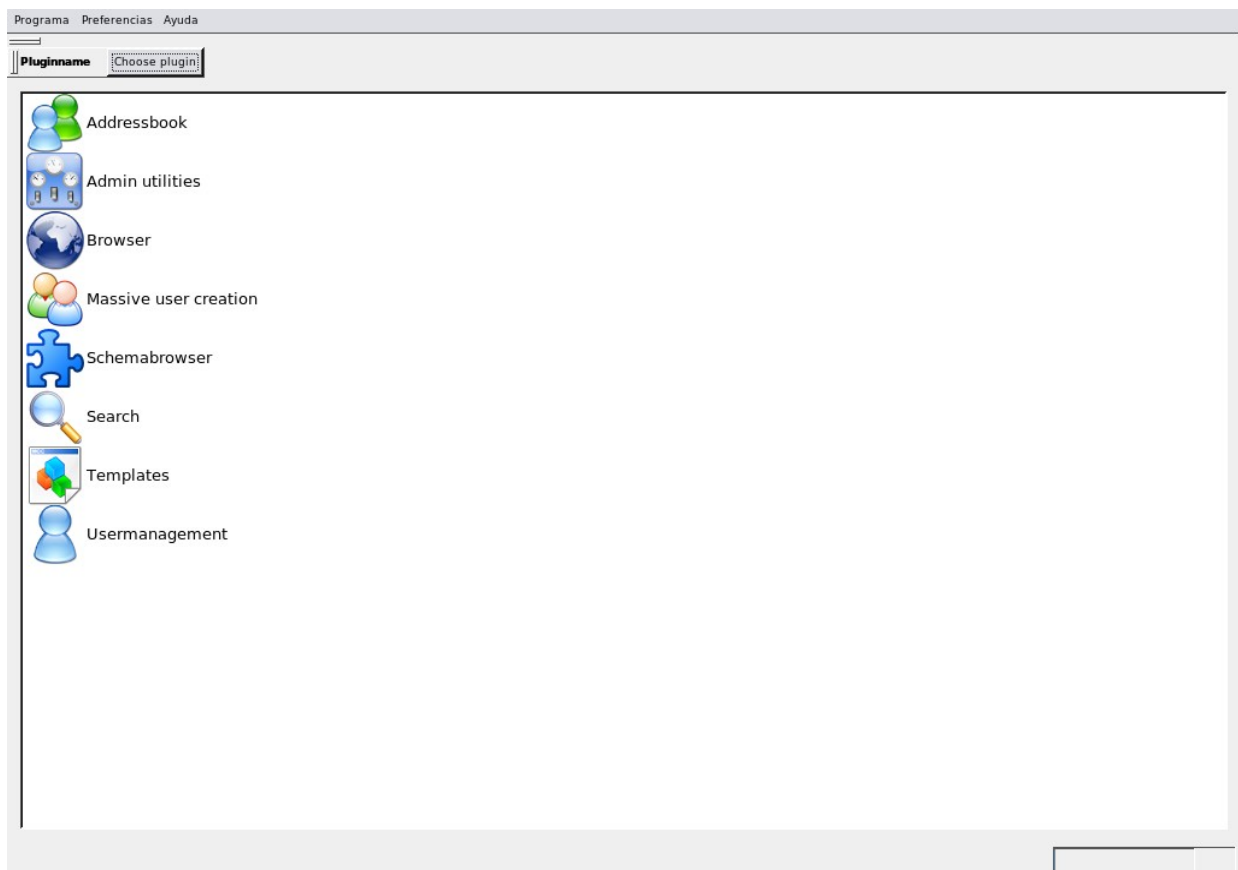
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1 Introduction

Luma is graphical browser, editor and other utilities for LDAP directories.

Created by Wido Depping and can be downloaded freely from <http://luma.sourceforge.net/>. **Luma** is organized by plugins that cover different functions:

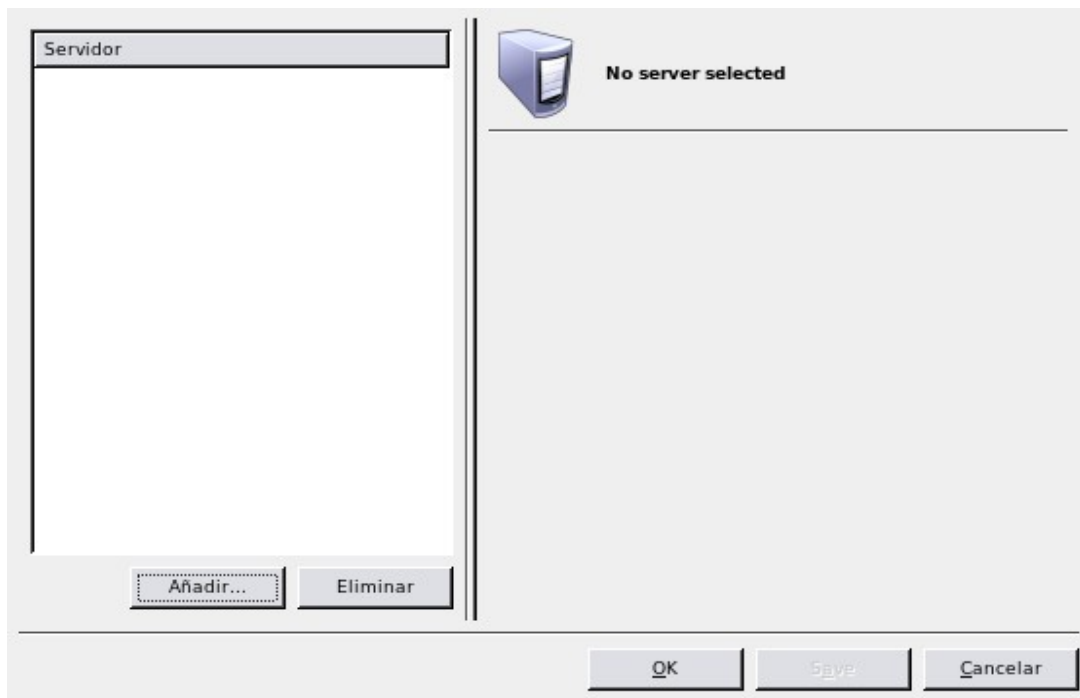
- Addressbook.
- Admin utilities.
- Browser.
- Massive user creation.
- Schemabrowser.
- Search.
- Templates.
- Usermanagement.



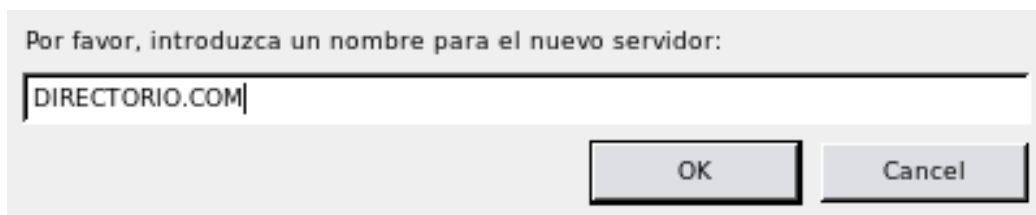
2 Settings

Edit server list

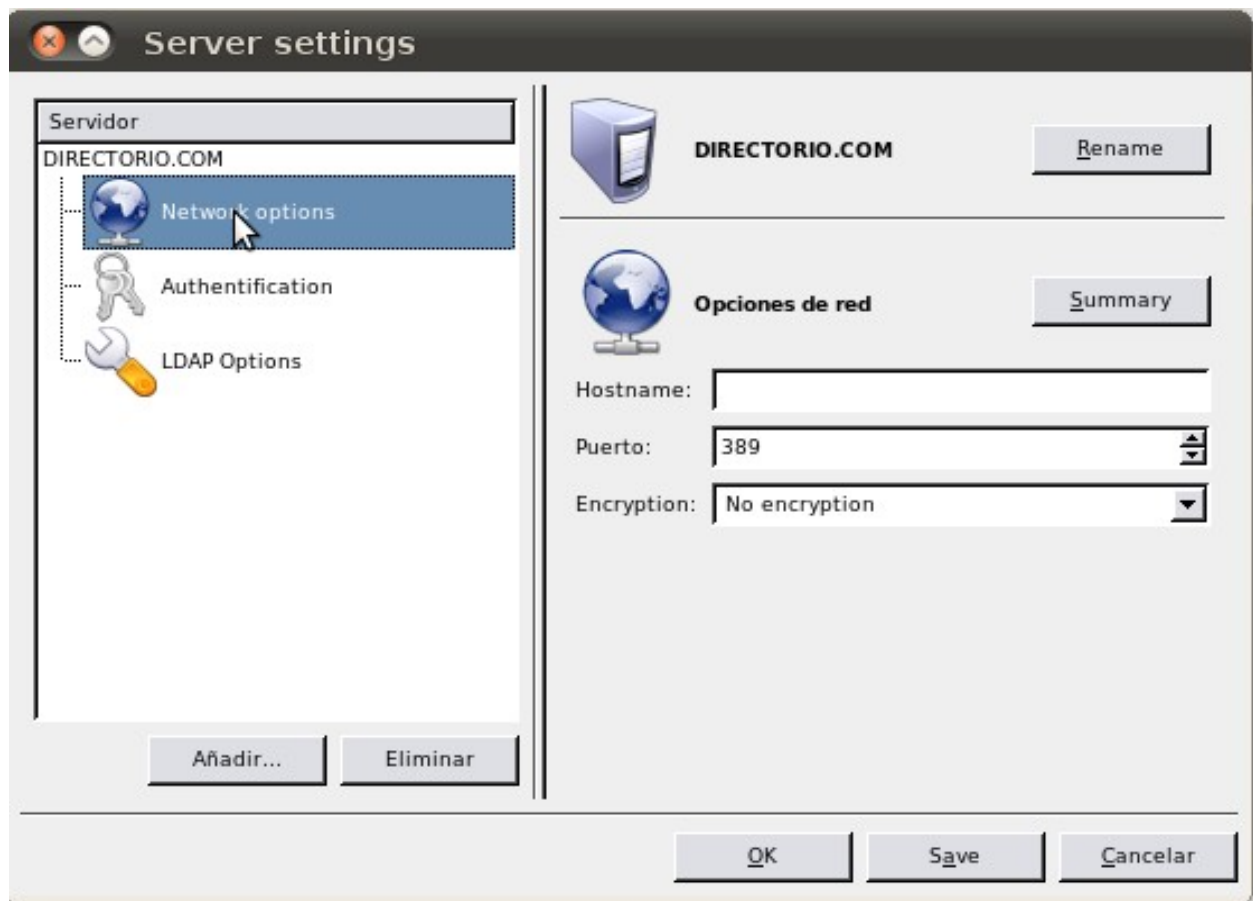
The first step to start using the tool should be to configure the connection to LDAP servers to which you want to access. In the top menu select **Settings** → **Edit Server List**, or press the keyboard combination **CTRL + E**, with which to access the following form:



Clicking the **Add...** button at the bottom of the list on the left, the application will ask a name for the new server..



Then, will appear the options for setting all parameters as required.

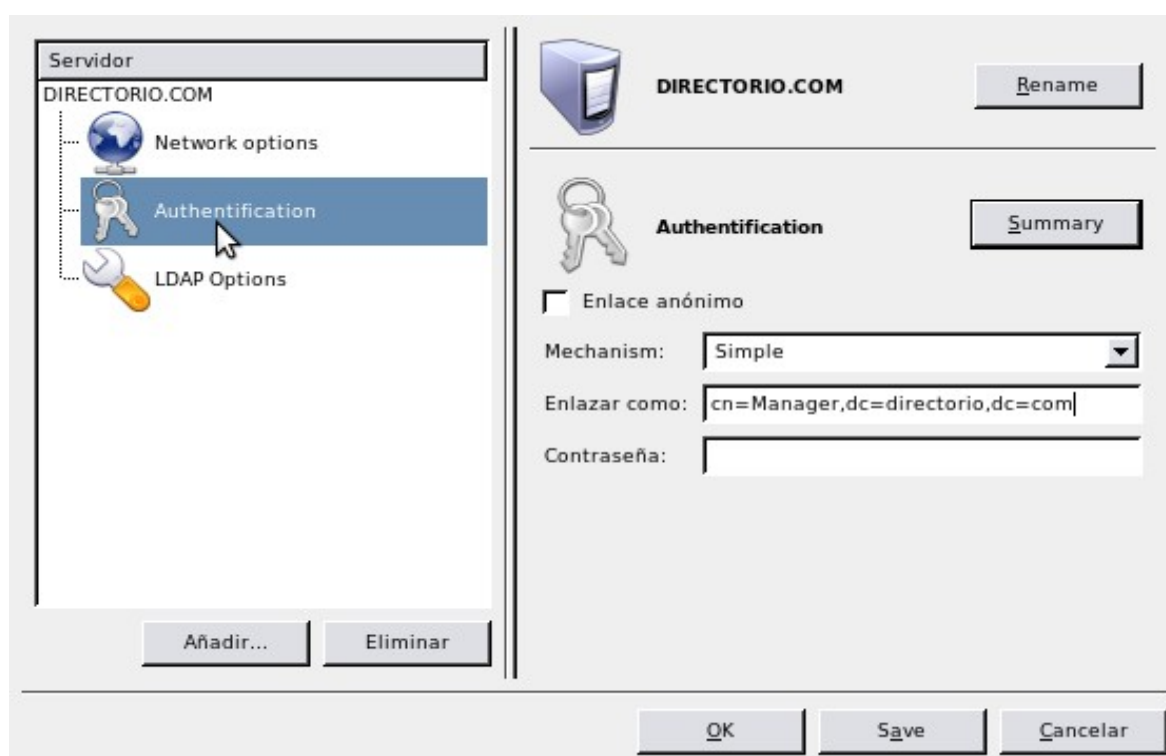


The first set of parameters relates to the network settings, including:

- **Hostname:** Name or IP address of LDAP server.
- **Port:** Through which communication occurs. In most cases will be in the 389 or 636, the latter in the case of using SSL.
- **Encryption:** Encryption type (if used) with which to perform the communication.
 - **No encryption**
 - **TLS (Transport Layer Security)**
 - **SSL (Secure Socket Layer)**

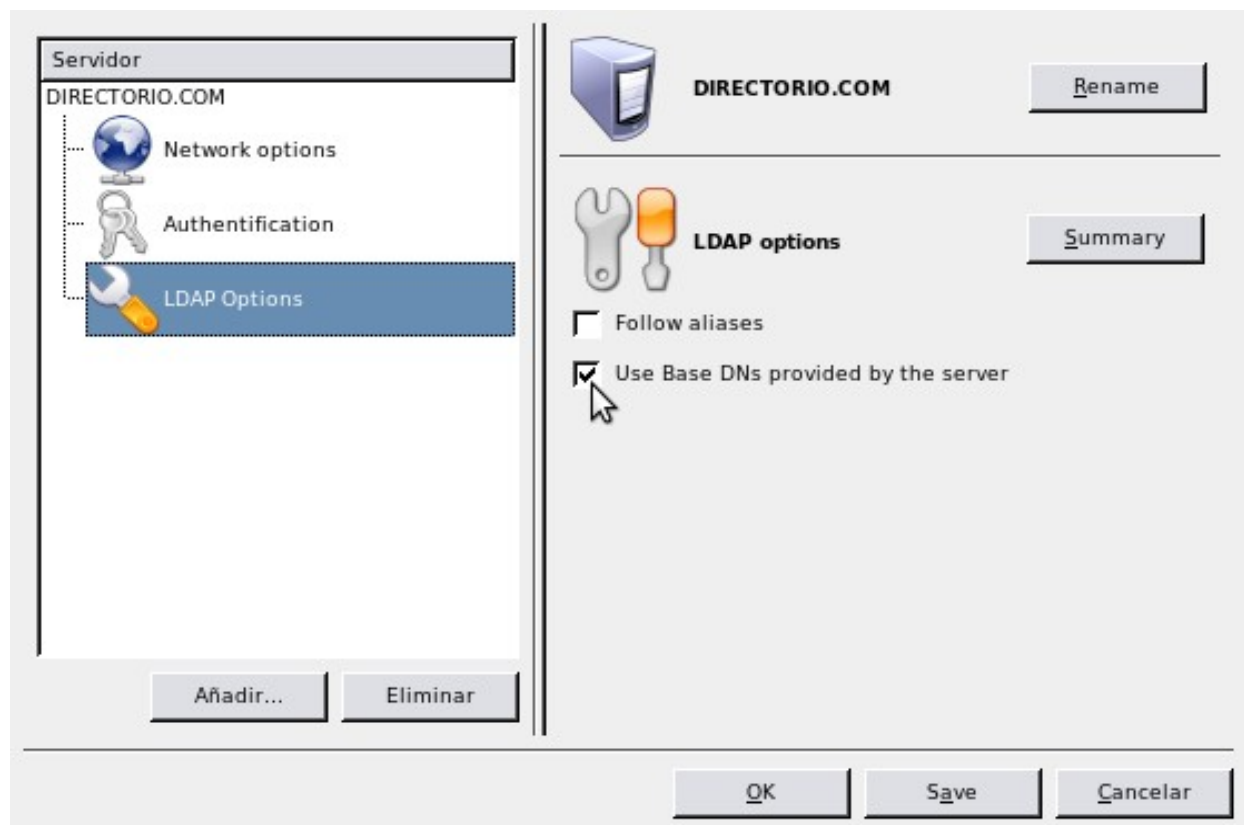
Following, have to configure the authentication data to establish the

connection.

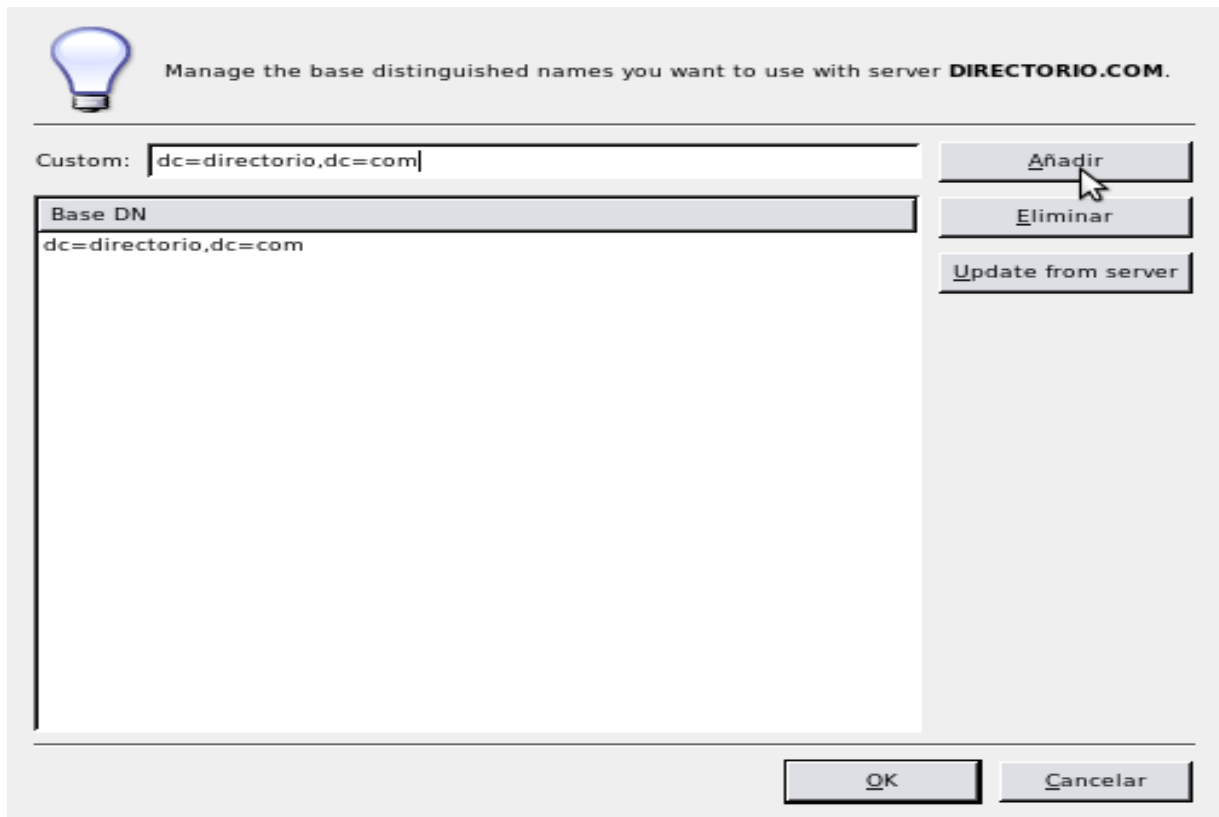


You can choose between anonymous or authenticated connection, in the latter you need to specify the authentication mechanism with username and password.

In LDAP options can be set the possibility of further possible references to other LDAPs. It also specifies the DN suffix or base directory, with the possibility of limiting access to it.



When defining the base DN or suffix, It's possible to obtain it automatically from the server, or enter them manually.

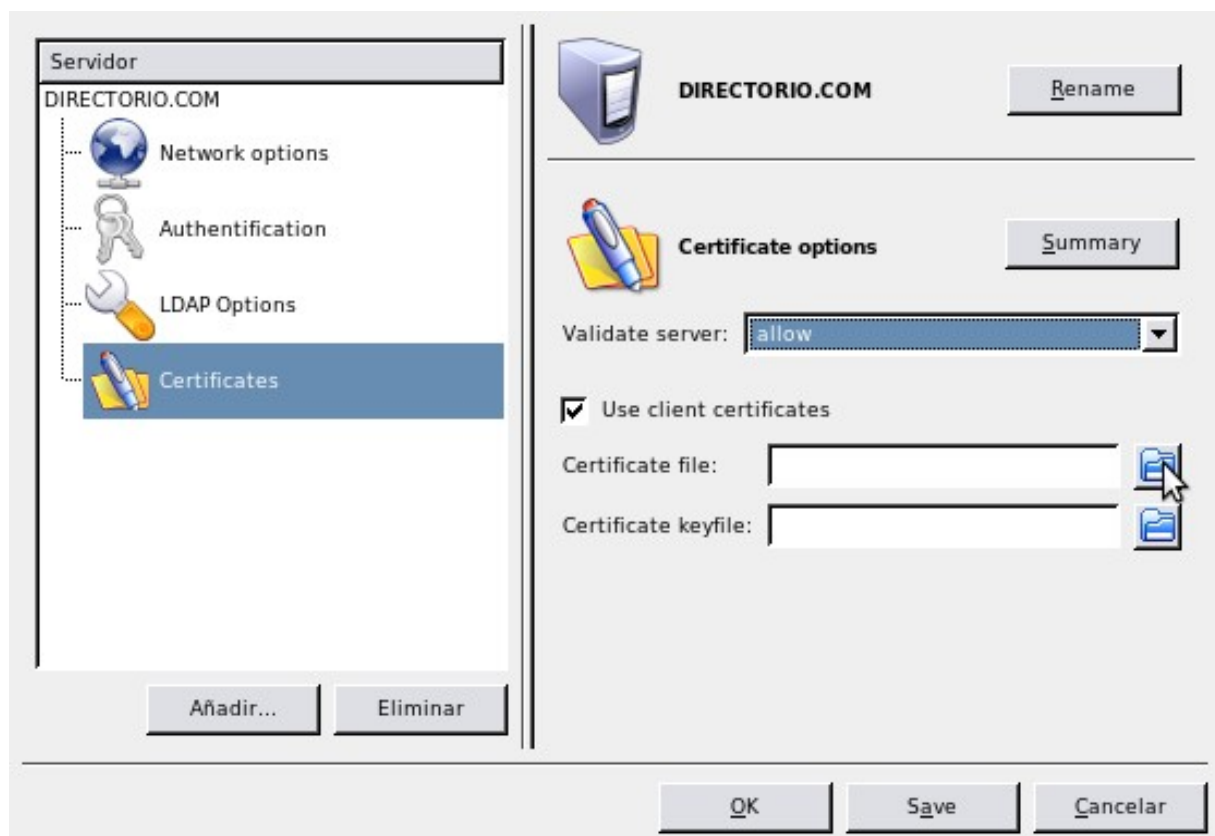


The screenshot shows a web interface for managing base distinguished names (DN) for a server named **DIRECTORIO.COM**. The interface includes a lightbulb icon and the title "Manage the base distinguished names you want to use with server **DIRECTORIO.COM**." Below the title, there is a "Custom:" label followed by a text input field containing "dc=directorio,dc=com". To the right of this field are three buttons: "Añadir", "Eliminar", and "Update from server". Below the input field is a table with a header "Base DN" and a single row containing the value "dc=directorio,dc=com". At the bottom of the interface are "OK" and "Cancelar" buttons.

Base DN
dc=directorio,dc=com

In the case of encryption is selected - TLS or SSL - in network settings, then enable a more apartado where you can configure the client certificate.

- **Certificate file.**
- **Certificate keyfile.**

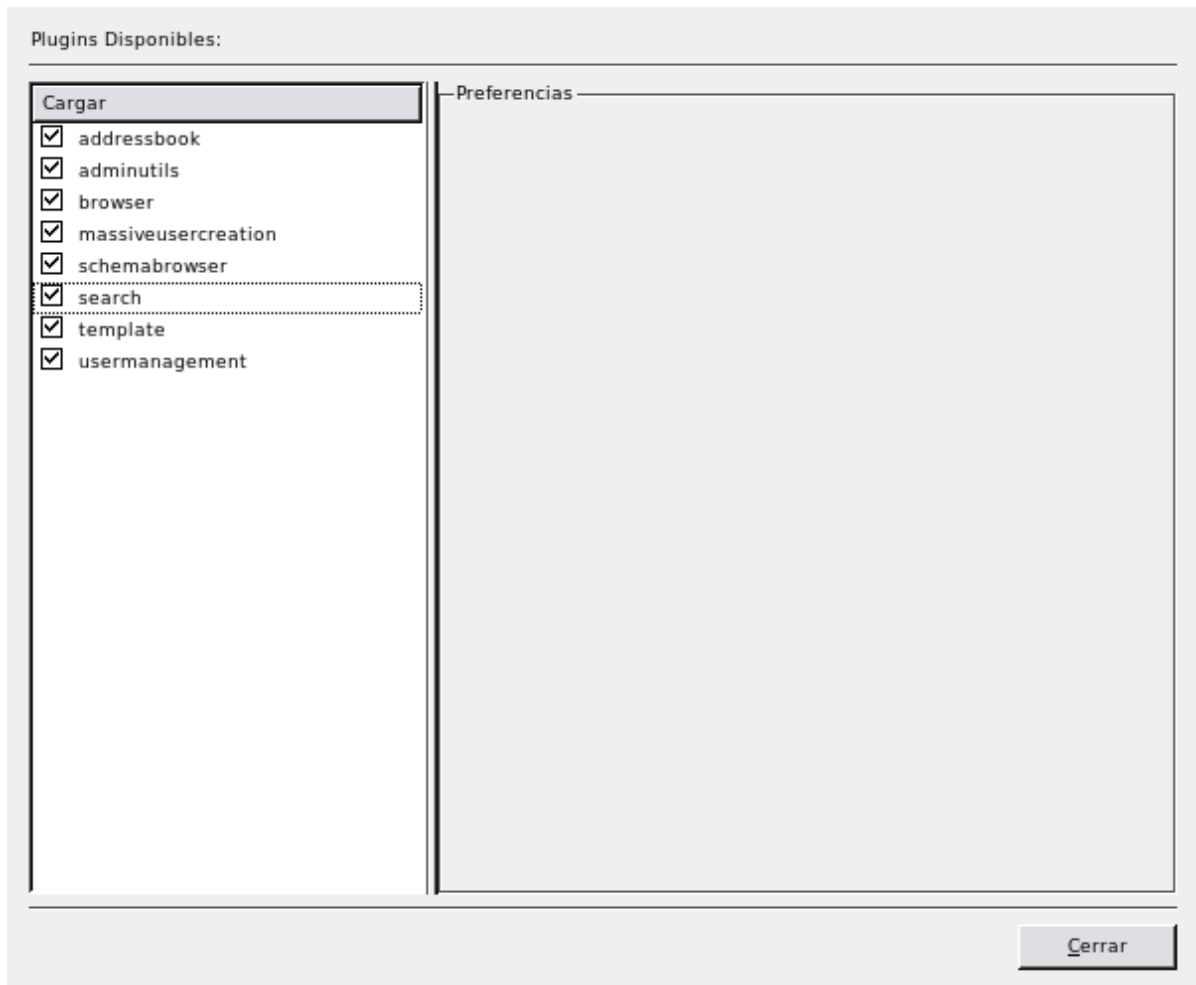


Config directories

In those servers have configuration directory **cn=config**, instead of the traditional **slapd.conf** file, it will be possible to access such information in the same way you do with the data. This requires creating a new server configuration, with the same server, but indicating **cn=config** as much as Base DN as login user, along with your password.

Plugins

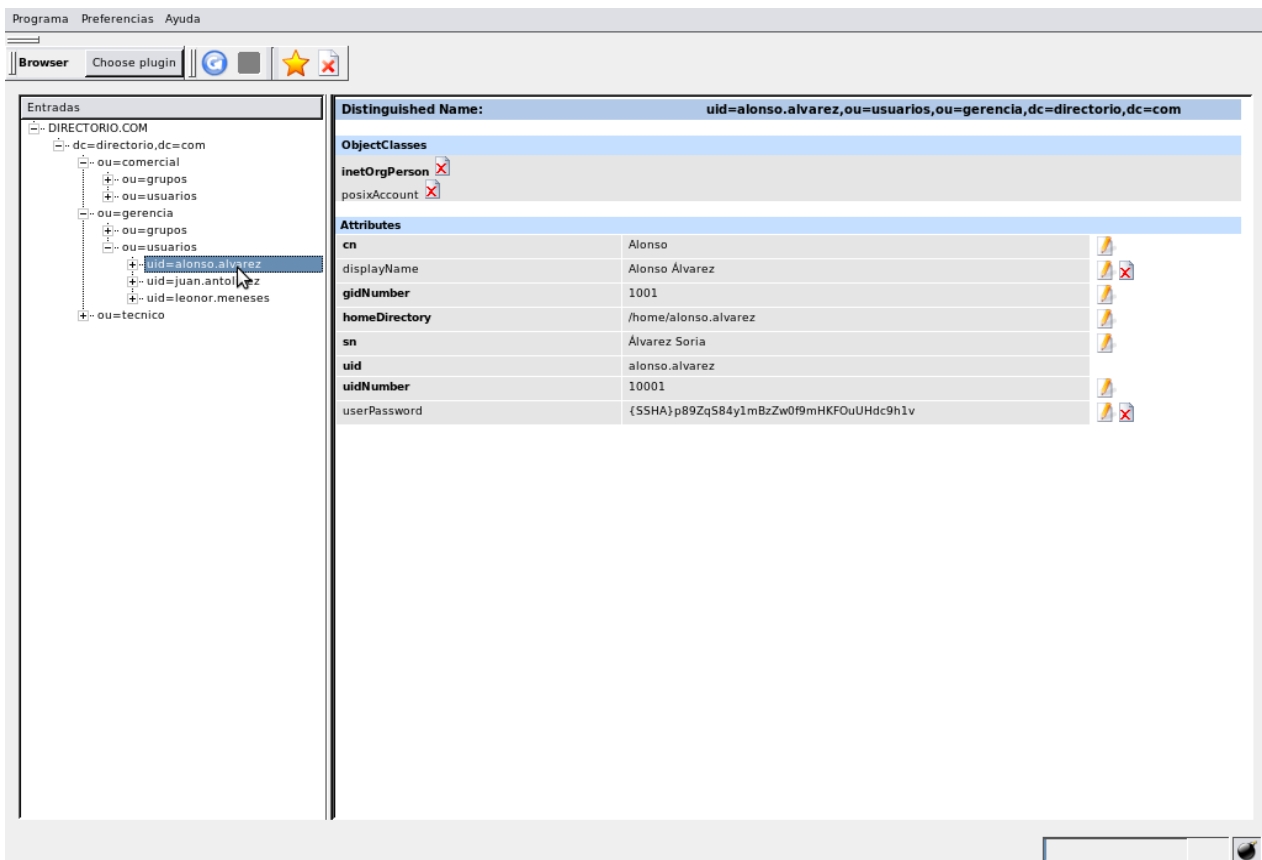
Through the menu **Settings** → **Configure Plugins...** or by **Ctrl + C** allows the selection of those modules that wish to have available within the application, and some specify certain configuration parameters thereof.




3 Browser



The fundamental component of the application is undoubtedly the

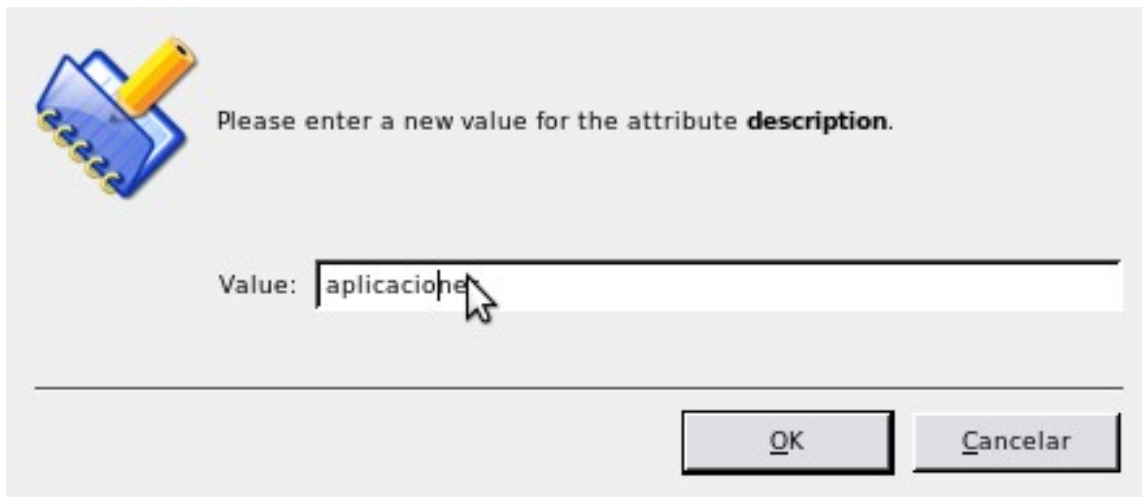
browser. Through it we have a complete view of the structure and contents of the directory, and the provision of tools for editing and exporting information.







The navigation screen is divided into two parts:


- On the left tree representation appear in the directory with its root (base DN or suffix) at the top. In principle, the tree appears fully retracted and as it expands by the different branches will display the directory contents. It is important to notice that once displayed a branch or entry, this information will not remain in real time and detect possible changes that could be done on the server unless the user manually refresh the option through recharge button 

- On the right side of the screen content (attributes and object classes) entry is selected in the tree. To the right of the editable attribute values may appear in editing buttons  and/or delete . In the first of the options will display a small form attribute editing.



The dialog box has a light gray background. In the top-left corner is an icon of a blue notepad with a yellow pencil. To the right of the icon, the text reads: "Please enter a new value for the attribute **description**." Below this text is a text input field. To the left of the input field is the label "Value:". The input field contains the text "aplicacione" and a mouse cursor is positioned at the end of the text. At the bottom right of the dialog box are two buttons: "OK" and "Cancelar".

Once editing is done, then press OK and the change will be reflected in the editor, but does not effect the operation on the directory until you click the save button . The same happens when you press delete , it disappears in the graphical tree but the attribute editor will not be removed from the directory until you click save . If, however, before saving, you want to cancel the operation - whether to keep or delete - it can be done using the refresh button .

To insert new attributes should be pointed on the entry at the tree and click the right mouse button. Select **Add** → **Attribute** in pop-up menu, or press the button .

Seleccione Atributo



Por favor, seleccione un atributo que desee añadir a la actual entrada.

Por defecto, sólo los atributos que están permitidos por el actual objectclasses son mostrados. Si desea añadir un atributo que esté permitido por otro objectclasses, por favor, active esta funcionalidad abajo.

Atributo:

☐ Use binary

☐ Activar tod

audio

audio
businessCategory
carLicense
cn
departmentNumber
description
destinationIndicator
employeeNumber
employeeType
facsimileTelephoneNumber

Help

< Back

Next >

Finish

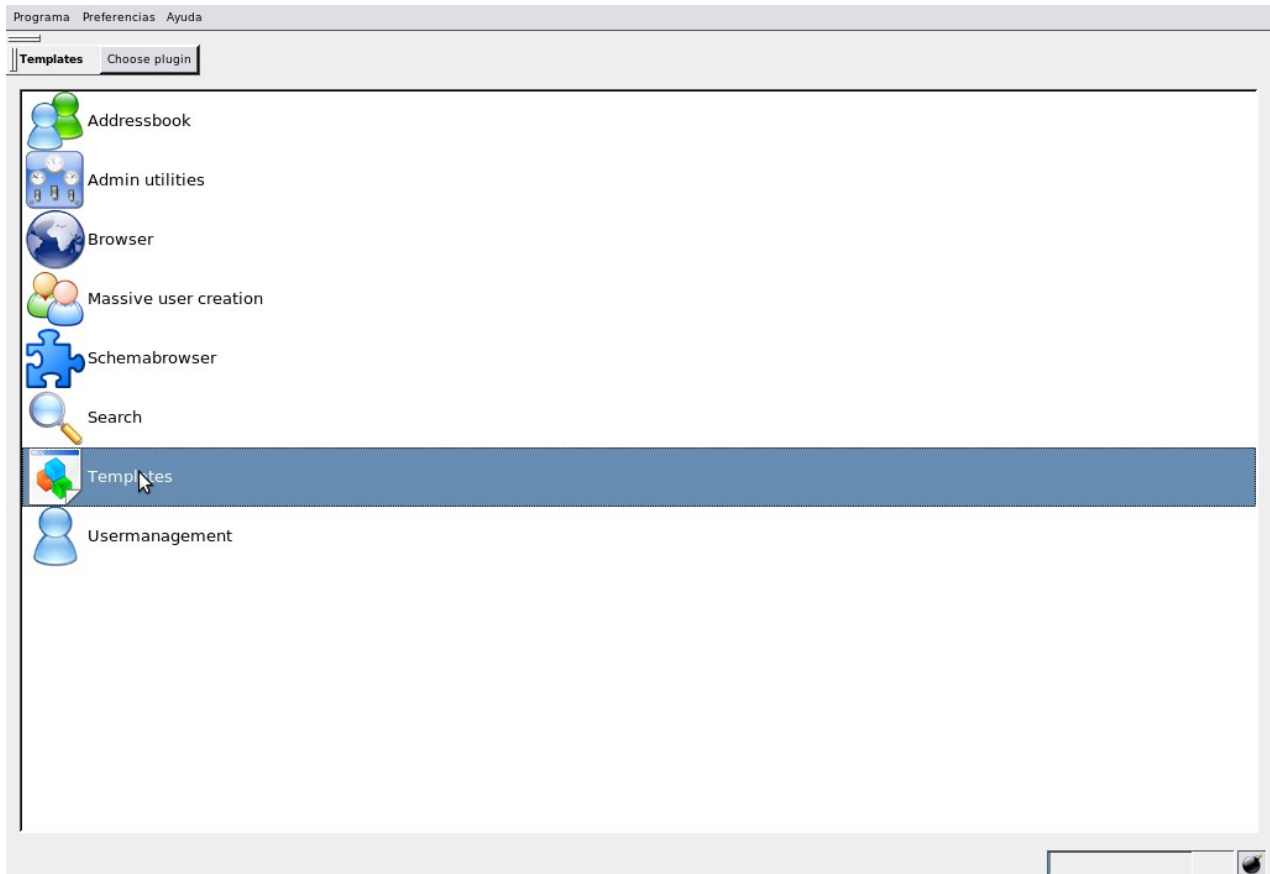
Cancel

Then you will see a dropdown with the attributes available to the objectClass that implements the input. If you want to include an attribute that is contained in an object class that no implements the input but is included in the server directory schema, we must check the "***Enable all attributes wich are allowed by the server.***". Keep in mind that if you need to implement a new class of object, it will include all required attributes in addition to the attribute is selected. Once selected attribute

is highlighted in red on the detail of the entrance waiting to be edited and saved.

Templates

Before you can enter new entries in the directory is necessary to define templates.



Programa Preferencias Ayuda

Templates Choose plugin

Templates

Nombre
USUARIO

Name: USUARIO
Server: DIRECTORIO.COM
Description: Plantilla para gestionar usuarios

Objectclasses


Nombre	Añadir...	Eliminar
inetOrgPerson		
organizationalPerson		
person		
posixAccount		

Atributos

Nombre	Obligado	Único	Binario	Default value	Añadir...	Eliminar
cn	✓	✗	✗			
displayName	✗	✓	✗			
gidNumber	✓	✓	✗			
homeDirectory	✓	✓	✗			
sn	✓	✗	✗			
uid	✓	✗	✗			
uidNumber	✓	✓	✗			
userPassword	✗	✗	✓			

Añadir... Guardar
 Duplicate... Delete...

A template is a mold which defines the attributes that will be needed at the time of create an entry. To create a new template, first is to assign it a name, link it to one of the servers configured and optionally write a brief description of their duties.

 Please choose a template name, a description and a server with which the template is associated.

Template name: GRUPO

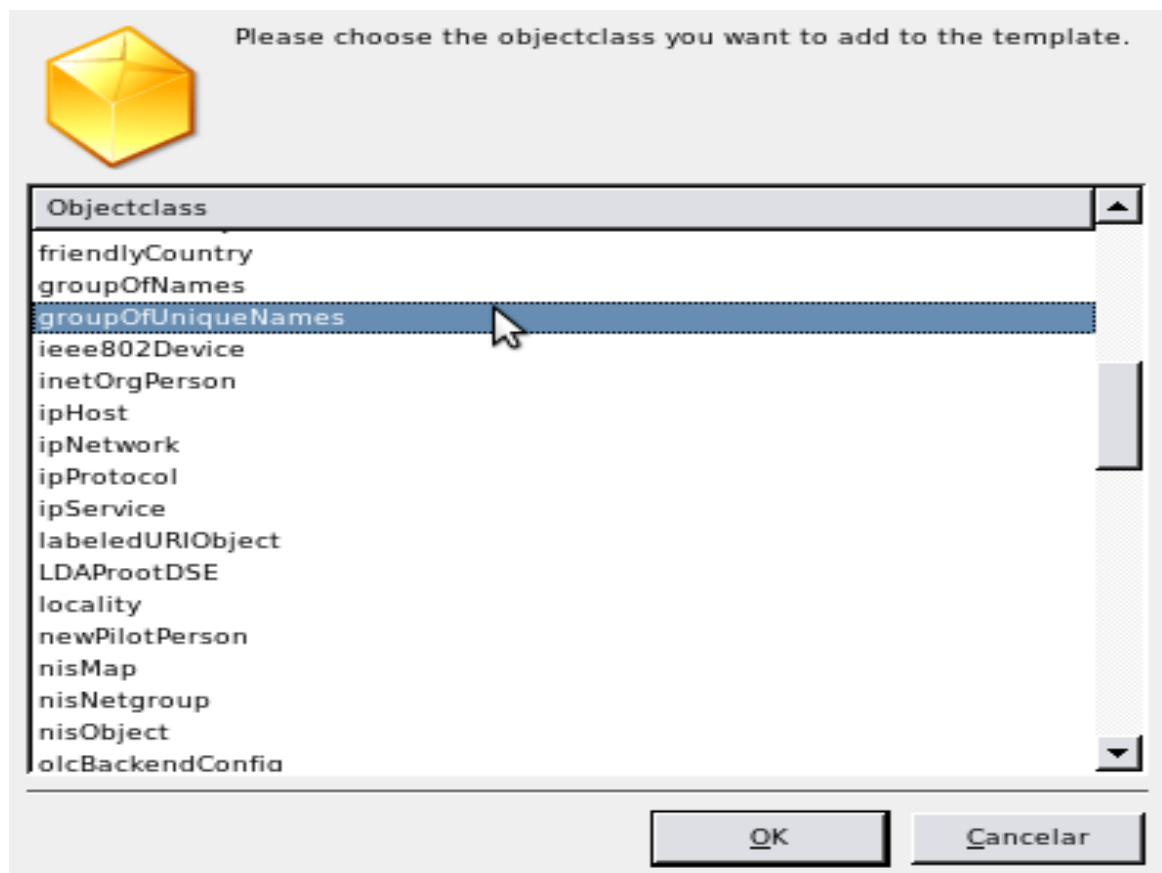
Servidor: DIRECTORIO.COM

Description: Grupo de usu

Please supply a template name.

OK Cancelar

Pressing the **OK** button, the template appears in the list, but not saved until you press the **Save** button. The next step is to select the object classes that provide the attributes you want in the template. With the selected template, on the right side sections, appear object class (objectClasses) at the top, and attributes in the bottom. Before adding attributes, logically, you must select at least one object class.



After selecting the object class, in the list of attributes will appear those required in the implementation of that class. In the list of attributes appear, addition the name, shows whether the attribute is mandatory, if has unique value, if is binary and if you have assigned a default value. The latter value can be modified by clicking the mouse.

Name: GRUPO
Server: DIRECTORIO.COM
Description: Grupo de usuarios

Objectclasses

Nombre
groupOfUniqueNames

Añadir...
Eliminar

Atributos

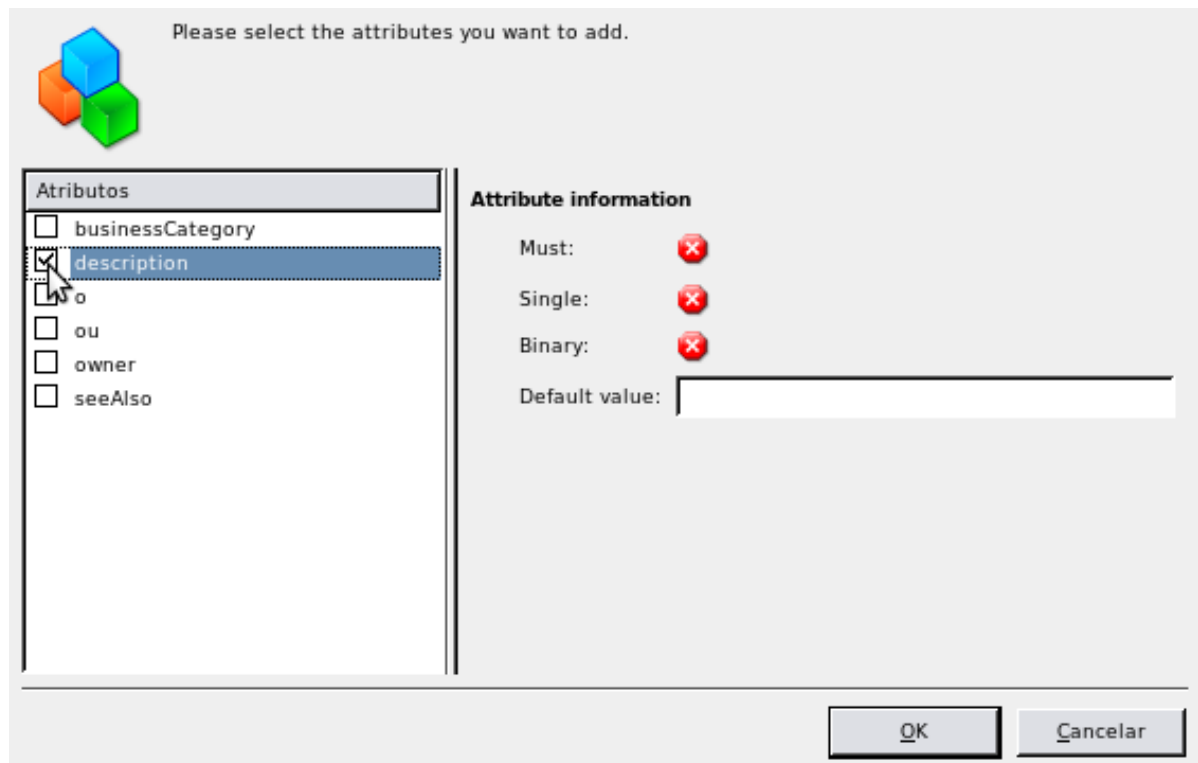
Nombre	Obligado	Único	Binary	Default value
cn	✓	✗	✗	
uniqueMember	✓	✗	✗	

Añadir...
Eliminar

Atributos

Nombre	Obligado	Único	Binary	Default value
cn	✓	✗	✗	valor por defecto
uniqueMember	✓	✗	✗	

To continue adding attributes need to press the button **Add...** and then a form will appear with the list and attribute information available.



Please select the attributes you want to add.

Atributos

- ☐ businessCategory
- ☒ description
- ☐ io
- ☐ ou
- ☐ owner
- ☐ seeAlso

Attribute information

Must: ☐

Single: ☐

Binary: ☐

Default value:

OK Cancelar

Once completed to define the template with all object classes and attributes, it is necessary to save all by pressing the **Save** button.

You can create new templates based on other already created with option **Duplicate...** that creates a copy of the selected template and will serve to be modified and adapted to new needs.

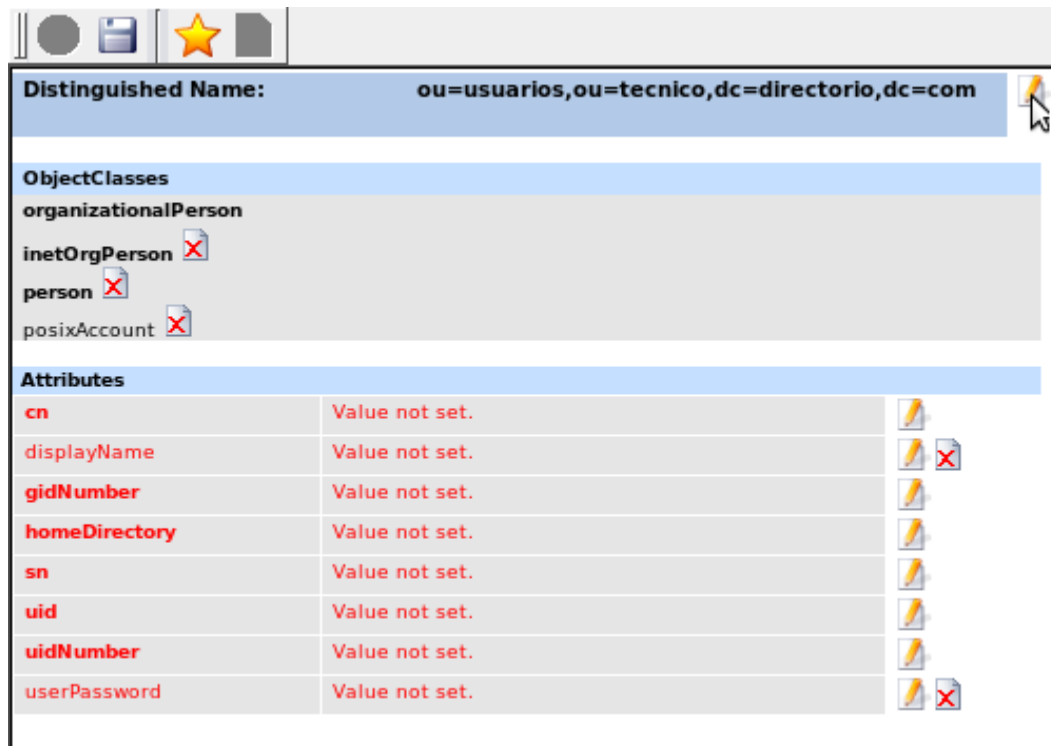
News entries

With templates already defined for the server, the process to register new entries is as follows:

1. Click with the right mouse button on the father of the new entry.
2. In the popup menu, select the **Add... → <Template Name>**. In the bottom of the menu are available all the templates you previously defined.



3. The screen for selected template will appear showing the information of the new entry divided into three parts.



Distinguished Name: ou=usuarios,ou=tecnico,dc=directorio,dc=com

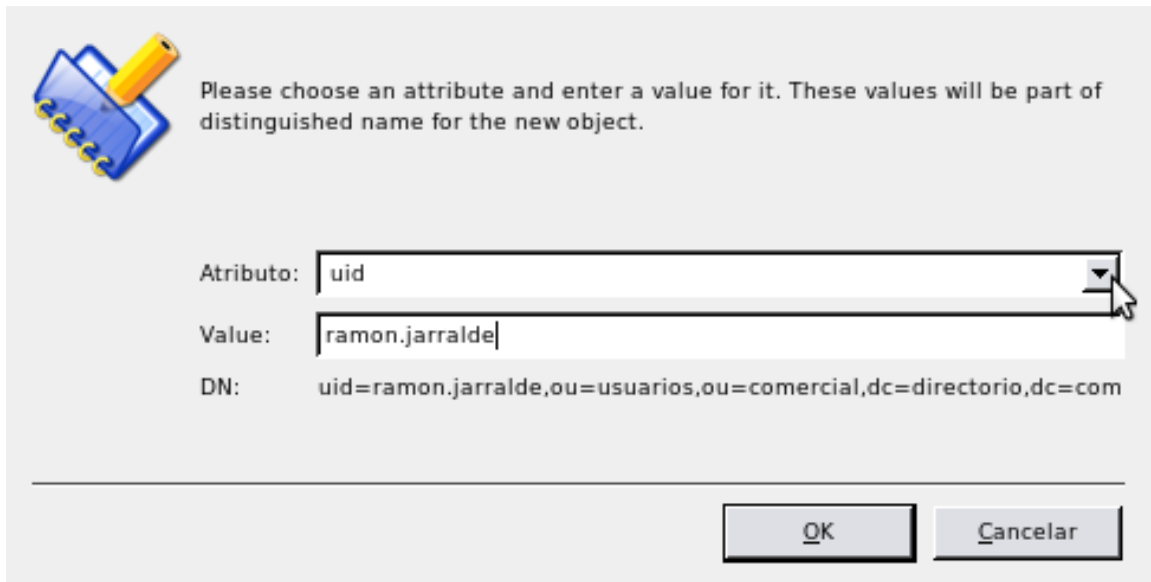
ObjectClasses

- organizationalPerson
- inetOrgPerson
- person
- posixAccount

Attributes

Attribute	Value
cn	Value not set.
displayName	Value not set.
gidNumber	Value not set.
homeDirectory	Value not set.
sn	Value not set.
uid	Value not set.
uidNumber	Value not set.
userPassword	Value not set.

1. **Distinguished Name (DN).** It will be necessary to select one of the attributes - along with its corresponding value - from the entry, to be able to distinguish uniquely within the directory.



Please choose an attribute and enter a value for it. These values will be part of distinguished name for the new object.

Atributo: uid

Value: ramon.jaralde

DN: uid=ramon.jaralde,ou=usuarios,ou=comercial,dc=directorio,dc=com


OK Cancelar

2. **Objectclasses.** Shows the object classes that implement the input and corresponding to the attributes defined in the template. You can delete classes, although it should be noted that this might entail the removal of some attributes likewise.

3. **Attributes.** Displays the repertoire of attributes defined in the template and that they can add new ones by pressing



Add attribute... You can select attributes outside of the object classes defined in the template and will be included in the new entry. We must be careful to attribute-value pair

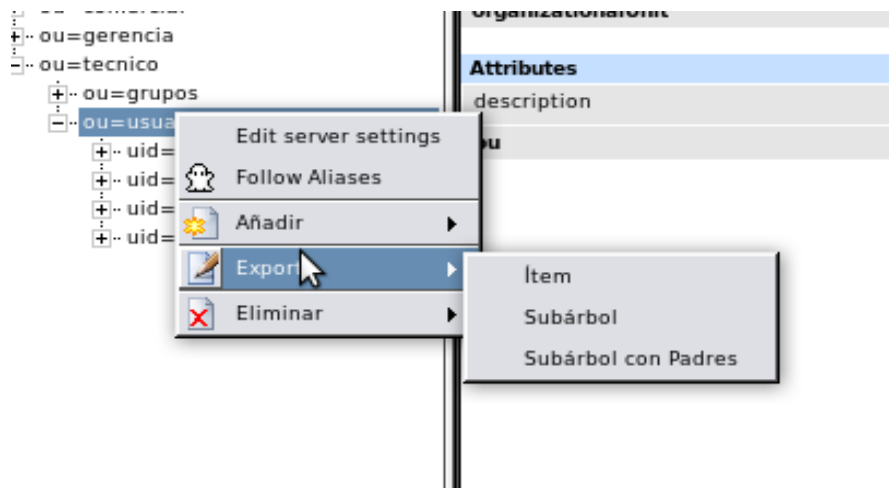
must match that specified in the definition of DN, and finally, press the save button  for save the changes in the directory.

Data export

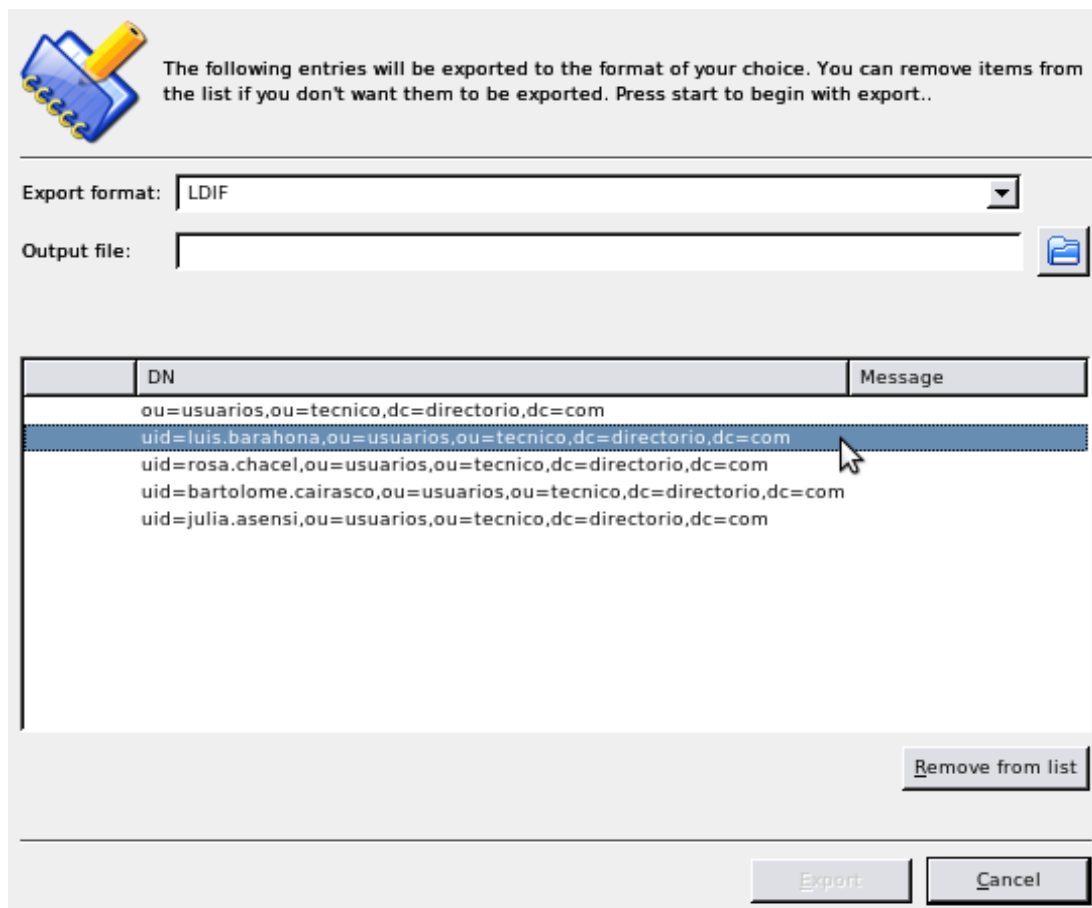
The export option is used to generate data files in LDIF or DSML formats, which can contain a whole directory, individual entries or those branches you select.

To perform an export must be placed on the entrance from which you wish to export and press the right mouse button, then a popup menu where the **Export** option, which in turn offers three alternatives:

- **Item**: only selected entry.
- **Subtree**: selected entry along with their daughters.
- **Subtree with parents**: selected entry along with their parent and daughters.



Once selected, a screen appears which requests the format (LDIF or DSML) that you want to export, the location and file name and, finally, allows exclude from a list those entries that are not want to export, pressing the ***Remove from list***.



The screenshot shows a window for configuring an export. At the top left is an icon of a blue notepad with a yellow pencil. To its right is the text: "The following entries will be exported to the format of your choice. You can remove items from the list if you don't want them to be exported. Press start to begin with export..". Below this is a section with two fields: "Export format:" with a dropdown menu set to "LDIF", and "Output file:" with a text input field and a folder icon button to its right. Below these fields is a table with two columns: "DN" and "Message". The table contains five rows of LDAP entries. The second row is highlighted with a blue background. A mouse cursor is pointing at the second row. Below the table is a button labeled "Remove from list". At the bottom right are two buttons: "Export" and "Cancel".

Export format: LDIF

Output file:

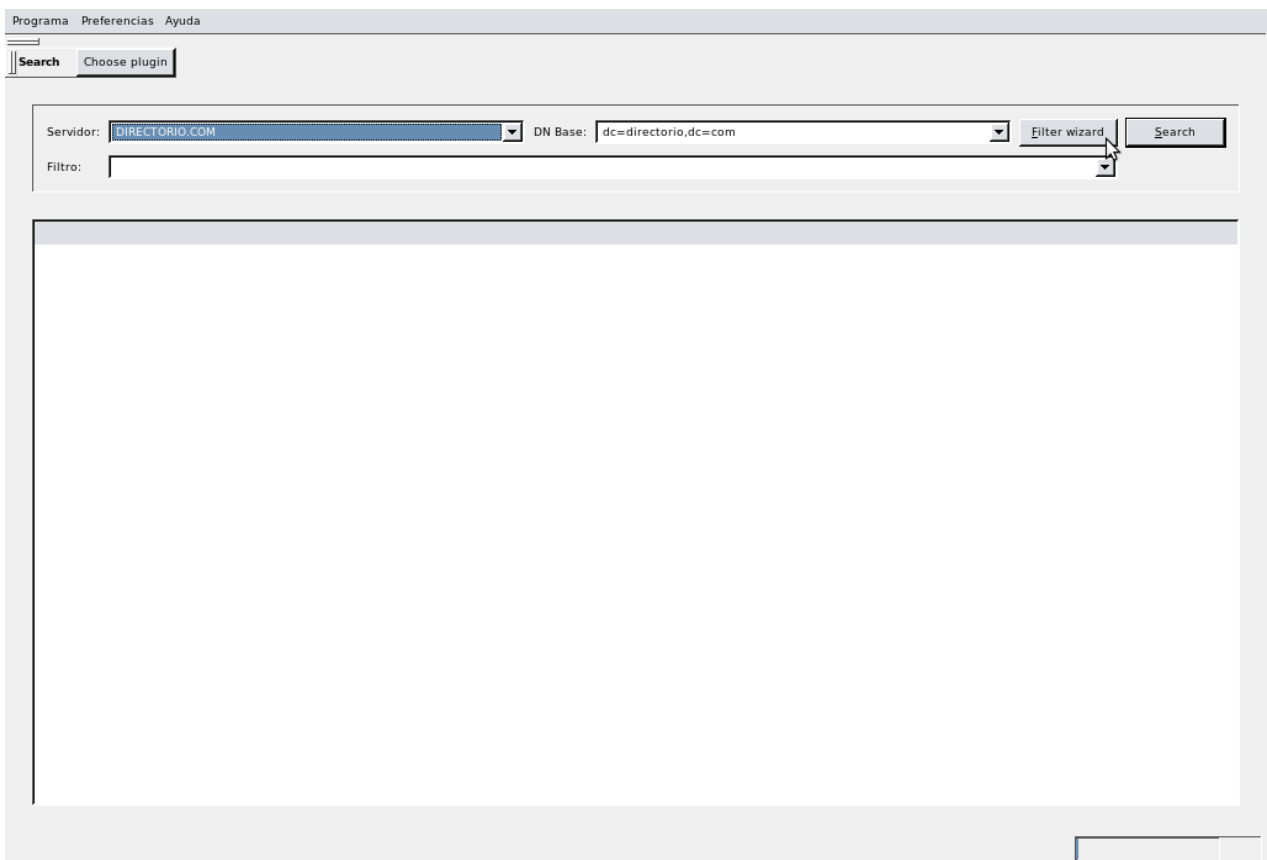
DN	Message
ou=usuarios,ou=tecnico,dc=directorio,dc=com	
uid=luis.barahona,ou=usuarios,ou=tecnico,dc=directorio,dc=com	
uid=rosa.chacel,ou=usuarios,ou=tecnico,dc=directorio,dc=com	
uid=bartolome.cairasco,ou=usuarios,ou=tecnico,dc=directorio,dc=com	
uid=julia.asensi,ou=usuarios,ou=tecnico,dc=directorio,dc=com	

Remove from list

Export Cancel

4 Searchs

This module is used to define search operations on directories.



It is need to select the server and base DN (the system proposes the suffix by default) to search. The user must also define the search filter, either directly on the box labeled **Filter**, either through a wizard accessing by clicking **Filter wizard**.

The screenshot shows a 'Filter bookmarks' dialog box. At the top, there is a 'Filtro:' dropdown menu. Below it are two buttons: 'Add current filter' and 'Eliminar'. The 'Search Criteria' section has two radio buttons: 'Clase de Objeto' (selected) and 'Atributo'. Next to 'Atributo' is a dropdown menu with 'ou' selected. Below this is a comparison operator dropdown set to '= (igual)' and a text input field containing 'tecnico', followed by an 'Añadir' button. The 'Concatenation' section has a dropdown menu with 'y' selected and another 'Añadir' button. The 'Current filter' section shows a text box containing '(ou=tecnico)'. At the bottom right, there are 'Ok' and 'Cancelar' buttons. A mouse cursor is visible near the bottom right.

In the wizard filter is necessary to select the search criteria: class object or attribute and the type of comparison to the value of search. If more than one criterion at concatenate them with logical operators (and, or, not). It is possible to store the filters for future searches.

Then of defining filters, there is only click the **Search** button and the search results are displayed in the list at the bottom of the screen.

5 Admin utilities

This plugin include two tools:

- **Passwords:** To encrypt passwords, either by entering the string, or by generating a random. The hash methods available are: plaintext (cleartext), crypt, MD5, SHA, SMD5, SSHA.
- **Date / Time:** Allows conversions to UNIX format time.

6 Schema browser

Allows browse through the directory schema, including object classes, attributes, LDAP syntax and rules.

7 Addressbook

Allows use an LDAP directory as an address book, providing entries for those people and providing a useful interface for querying and maintaining contact information (phone, address, e-mail ...)

8 Massive user creation

Its usefulness lies in being able to set the parameters needed to launch automatic processes to create multiple users.

9 User management

Interfaz amigable para el mantenimiento de cuentas de usuario. Es mucho más ágil que hacerlo desde la función del navegador.

10 About this user's guide

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