

# LDAP Directory Manager

## Definition

The **LDAP Directory Manager** allows you to integrate Joget with your existing AD/LDAP server.

As opposed with the earlier version, the enhanced LDAP Directory Manager implements all methods on the Joget Directory Manager class. In other words, it has been made possible to list and navigate through user, department and group entities in Joget itself.

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## General

The screenshot shows a 'Plugin Configuration' dialog box with a title bar containing a close button. The main content area is titled 'Configure LDAP Directory Manager' and includes a breadcrumb trail: 'Configure LDAP Directory Manager > User > Employment > Group > Department > Grade > Admin Role > Advanced'. Below the breadcrumb, there are four input fields, each with a red asterisk indicating it is required: 'URL \*' (with a subtext 'eg. ldap://ldapServer:port'), 'Admin Username (Principal) \*', 'Admin Password (Credential) \*', and 'Root DN \*'. At the bottom of the dialog, there are navigation buttons: '< Prev' and 'Next >' on the left, and 'Test Connection' and 'Submit' on the right.

Figure 1: Configure LDAP Directory Manager



### Important

Do not lock yourself out when you are configuring any Directory Manager plugin. Keep your browser session open and perform actual test in other machine/browser so that in case of any wrong configurations used, you can still continue to make amends.



### User License

User license determines how many eventual users (sorted alphabetically) from your LDAP/AD can login to the system. Make sure that you configure the plugin accordingly.

## Sample Configuration

Configure LDAP Directory Manager

Name	Value
URL	<ul style="list-style-type: none"> <li>• ldap://IP_ADDRESS:389</li> <li>• ldaps://IP_ADDRESS:636</li> </ul>
Admin Username (Principal)	cn=admin,dc=joget,dc=org
Admin Password (Credential)	admin
Root DN	DC=joget,DC=org



#### Administrative Access

In case you have a misconfiguration and cannot login, you can make use of the credential set above ( **Admin Username (Principal)** & **Admin Password (Credential)** ) to login as the administrator.


## User

Name	Value
User Base DN	<p>User Base DN</p> <div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <p> <b>Tips</b></p> <p>If you set the "User Base DN" to your LDAP Root DN, it means that the search will start from the Root DN until it finds all the results that matched the search filter.</p> <p>So, setting the "User Base DN" precisely is very important as it will decide where the search is starting from. It will save all the unnecessary search between the Root DN to your "User Base DN".</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p><b>Root DN</b></p> <p>DC=joget,DC=org</p> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p><b>Under the Root DN, you have the following DN:</b></p> <p>DC=HR,DC=joget,DC=org  DC=Product Department,DC=joget,DC=org  DC=Operation,DC=joget,DC=org  DC=Users,DC=joget,DC=org</p> </div> <p>If your users are all under "DC=Users,DC=joget,DC=org", you should set this to "User Base DN".</p> <p>By doing this, it will not go through all the other entries and its child entries before reaching "DC=Users,DC=joget,DC=org".</p> </div>

User Import Search Filter	<p>(objectClass=person)</p> <div style="border: 1px solid #ccc; padding: 10px; margin-bottom: 10px;"> <p><b>i</b> <b>Tips</b></p> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <p><b>Value</b></p> <pre>(&amp;(objectClass=person)( (cn=admin)(cn=cat)(cn=jack)(cn=john)(cn=jackie)))</pre> </div> <p>This mean all the LDAP entries which have "objectClass" attribute equals to "person" and "cn" attribute equals to either "admin", "cat", "jack", "john" or "jackie" are Joget users.</p> <p>So, when a login is performed by "admin", the search filter will add additional filter and become "(&amp;&amp;(objectClass=person)( (cn=admin)(cn=cat)(cn=jack)(cn=john)(cn=jackie)))(cn=admin)".</p> <p>You will notice an extra (cn=admin) is added to the search filter to make sure it return only the "admin" user.</p> </div> <div style="border: 1px solid #ccc; padding: 10px;"> <p><b>i</b> <b>User License</b></p> <p>User license determines on how many eventual users (sorted alphabetically) from your LDAP/AD can log in into the system. You can make use of this attribute to control amount of users returned from your LDAP.</p> </div> <p>Please refer to other <a href="#">LDAP Search Filter syntax</a>.</p>
Attribute Mapping - Username	cn
Attribute Mapping - First Name	givenName
Attribute Mapping - Last Name	sn
Attribute Mapping - Email	mail
Attribute Mapping - Status	
Attribute Mapping - Time Zone	8
Attribute Mapping - Locale	en_US

## Employment

Name	Value
Attribute Mapping - Employee Code	
Attribute Mapping - Job Title	
Attribute Mapping - Report To	
Map To "Report To" Entry Attribute	
Attribute Mapping - Groups	

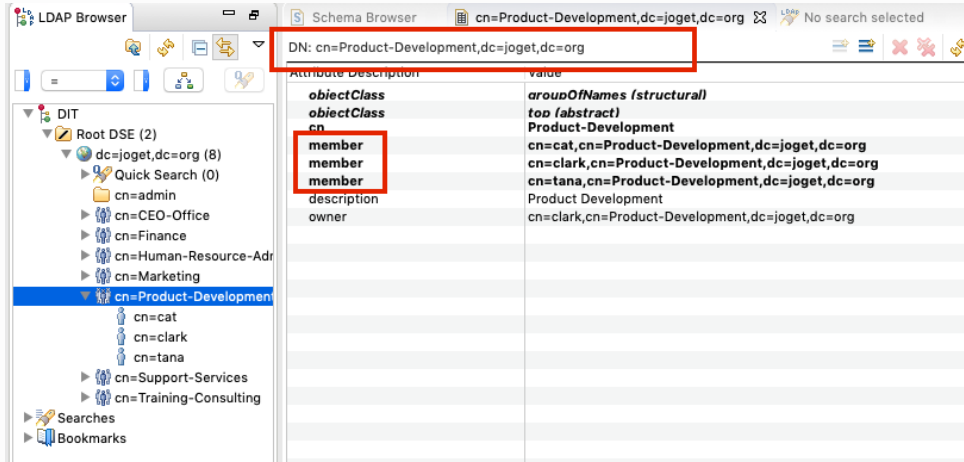
Map To LDAP Group Entry Primary Attribute	dn  <div style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;">  <b>DN</b>  <p>A distinguished name (usually just shortened to “DN”) uniquely identifies an entry and describes its position in the DIT. ... DNs are comprised of zero or more comma-separated components called relative distinguished names, or RDNs.</p> <table border="1" style="margin: 10px auto;"> <thead> <tr> <th>Directory Service</th> <th>DN Entity Name</th> </tr> </thead> <tbody> <tr> <td>OpenLDAP</td> <td>entryDN</td> </tr> <tr> <td>Microsoft AD</td> <td>distinguishedName</td> </tr> </tbody> </table> </div>	Directory Service	DN Entity Name	OpenLDAP	entryDN	Microsoft AD	distinguishedName
Directory Service	DN Entity Name						
OpenLDAP	entryDN						
Microsoft AD	distinguishedName						
Attribute Mapping - Departments							
Map To LDAP Department Entry Primary Attribute	dn						
Attribute Mapping - Grade							
Map To LDAP Grade Entry Primary Attribute	dn						

## Group

Name	Value
Group Base DN	
Group Import Search Filter	(objectClass=groupOfNames)  Please refer to other <a href="#">LDAP Search Filter syntax</a> .
Attribute Mapping - ID	cn
Attribute Mapping - Name	description
Attribute Mapping - Description	description
Attribute Mapping - Users	member
Map To LDAP User Entry Primary Attribute	dn

## Department

Name	Value
Department Base DN	
Department Import Search Filter	(objectClass=groupOfNames)  Please refer to other <a href="#">LDAP Search Filter syntax</a> .
Attribute Mapping - ID	cn
Attribute Mapping - Name	description
Attribute Mapping - Description	description
Attribute Mapping - HOD	owner

Attribute Mapping - Users	<p>member</p> <div data-bbox="337 205 375 239" style="float: left; margin-right: 5px;"> </div> <p><b>Tips</b></p> <p>If the department object itself contains the users that belong to the department, define the attribute name here. For example, in the figure below, we can define "member" as the value here. There's no need to define anything else in "Employment" tab earlier for this case.</p>  <p>The screenshot shows the LDAP Browser interface. The left pane shows the directory tree with 'cn=Product-Development' selected. The right pane shows the schema details for the selected entry. The 'DN: cn=Product-Development,dc=joget,dc=org' is highlighted in red. The 'member' attribute is highlighted in red in the table below.</p> <table border="1" data-bbox="667 384 1349 779"> <thead> <tr> <th>Attribute Description</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td><b>objectClass</b></td> <td><b>groupOfNames (structural)</b></td> </tr> <tr> <td><b>objectClass</b></td> <td><b>top (abstract)</b></td> </tr> <tr> <td><b>cn</b></td> <td><b>Product-Development</b></td> </tr> <tr> <td><b>member</b></td> <td><b>cn=cat,cn=Product-Development,dc=joget,dc=org</b></td> </tr> <tr> <td><b>member</b></td> <td><b>cn=clark,cn=Product-Development,dc=joget,dc=org</b></td> </tr> <tr> <td><b>member</b></td> <td><b>cn=tana,cn=Product-Development,dc=joget,dc=org</b></td> </tr> <tr> <td>description</td> <td>Product Development</td> </tr> <tr> <td>owner</td> <td>cn=clark,cn=Product-Development,dc=joget,dc=org</td> </tr> </tbody> </table>	Attribute Description	Value	<b>objectClass</b>	<b>groupOfNames (structural)</b>	<b>objectClass</b>	<b>top (abstract)</b>	<b>cn</b>	<b>Product-Development</b>	<b>member</b>	<b>cn=cat,cn=Product-Development,dc=joget,dc=org</b>	<b>member</b>	<b>cn=clark,cn=Product-Development,dc=joget,dc=org</b>	<b>member</b>	<b>cn=tana,cn=Product-Development,dc=joget,dc=org</b>	description	Product Development	owner	cn=clark,cn=Product-Development,dc=joget,dc=org
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Map To LDAP User Entry Primary Attribute	dn																		

## Grade

Name	Value
Grade Base DN	
Grade Import Search Filter	Please refer to other <a href="#">LDAP Search Filter syntax</a> .
Attribute Mapping - ID	
Attribute Mapping - Name	
Attribute Mapping - Description	
Attribute Mapping - Users	
Map To LDAP User Entry Primary Attribute	


## Admin Role

Name	Value
Admin Role Base DN	
Admin Role Import Search Filter	(&(objectClass=person)(cn=admin)) Please refer to other <a href="#">LDAP Search Filter syntax</a> .
Attribute Mapping - Users	cn
Map To LDAP User Entry Primary Attribute	dn

## Advanced

Name	Value

Result Size Per Paged Search	100
Debug Mode	Checked

 **Tips**

The Debug Mode is highly recommended to be turned on when configuring the LDAP plugin for the first time.

When debug mode is on, you can find all the **search queries** performed by the directory manager. They will all be logged into the log file. From there, you can observe the search filter string and improve the accuracy and performance of the lookup.