LDAP Directory Manager

- Introduction
- Cautions And Warnings
    - Configure LDAP Directory Manager
    - Users
    - Employment
    - Group
    - Department
    - Grade
    - Admin Role
    - Advanced
- Configuring The User Import Search Filter
- Related Documentation

Introduction

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

Cautions And Warnings

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.

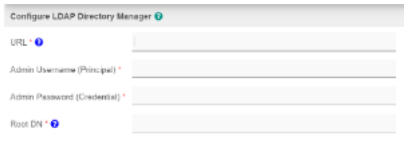
User license determines how many eventual users (sorted alphabetically by username in ascending order) from your LDAP/AD who can login to Joget. Make sure that you configure the plugin accordingly.

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.

The LDAP Directory Manager has a **Debug Mode** (option in the last tab) which is highly recommended to be turned on when configuring the LDAP plugin for the first time or when you are having issues. When debug mode is on, you can find all the search queries performed by the directory manager. They will all be logged into the joget.log files. From there, you can observe the search filter string and improve the accuracy and performance of the lookup. You can remove the debug checkbox once everything is running well.

LDAP Directory Manager Properties

Configure LDAP Directory Manager

Name	Value	Screen (Click to view)	
URL	• ldap://IP_ADDRESS:389 • ldaps://IP_ADDRESS:636		
Admin Username (Principal)	LDAP username with read permission to LDAP/AD. Example: cn=admin,dc=joget,dc=org		
Admin Password (Credential)	admin	Figure 1: Configure LDAP Directory Manager	
Root DN	DC=joget,DC=org		

Users

Name	Value	Screen (Click to view)

User Base DN	User Base DN
	
	Tips
	
	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.
	
	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".
	
	Root DN
	
	`DC=joget,DC=org`
	
	Under the Root DN, you have the following DN:
	
	`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`
	
	If your users are all under "DC=Users,DC=joget,DC=org", you should set this to "User Base DN".
	
	By doing this, it will not go through all the other entries and it's child entries before reaching "DC=Users,DC=joget, DC=org".

User Import Search Filter	(objectClass=person) **Tips** **Value** `(&(objectClass=person)(|(cn=admin)(cn=cat)(cn=jack)(cn=john)(cn=jackie)))` 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. So, when a login is performed by "admin", the search filter will add additional filter and become "(&(& (objectClass=person)(|(cn=admin)(cn=cat)(cn=jack)(cn=john)(cn=jackie)))(cn=admin))". You will notice an extra (cn=admin) is added to the search filter to make sure it return only the "admin" user. **User License** 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. Please refer to other LDAP Search Filter syntax.
Attribute Mapping - Username	cn
Attribute Mapping - First Name	givenName
Attribute Mapping - Last Name	sn

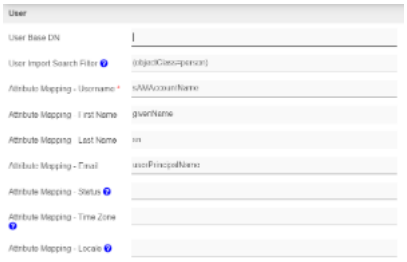


Figure 2: Users Properties

Attribute Mapping - Email	mail
Attribute Mapping - Status	
Attribute Mapping - Time Zone	8
Attribute Mapping - Locale	en_US

User

Employment

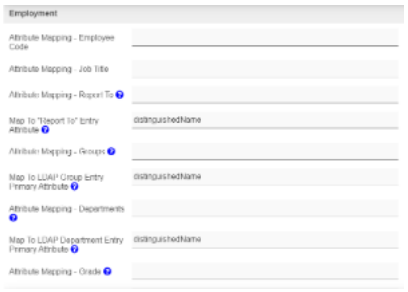
Name	Value	Screen (Click to view)
Attribute Mapping - Employee Code		
Attribute Mapping - Job Title		
Attribute Mapping - Report To		
Map To "Report To" Entry Attribute		
Attribute Mapping - Groups		
Map To LDAP Group Entry Primary Attribute	dn **DN** A distinguished name (usually just shortened to "**DN**") 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. **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	

Figure 3: Employment Properties

Group

Name	Value	Screen (Click to view)
Group Base DN		

Group Import Search Filter	(objectClass=groupOfNames) Please refer to other LDAP Search Filter syntax.
Attribute Mapping - ID	cn
Attribute Mapping - Name	description
Attribute Mapping - Description	description
Attribute Mapping - Users	member
Map To LDAP User Entry Primary Attribute	dn

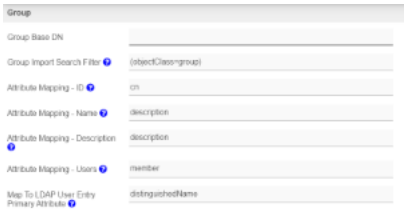


Figure 4: Group Properties

Department

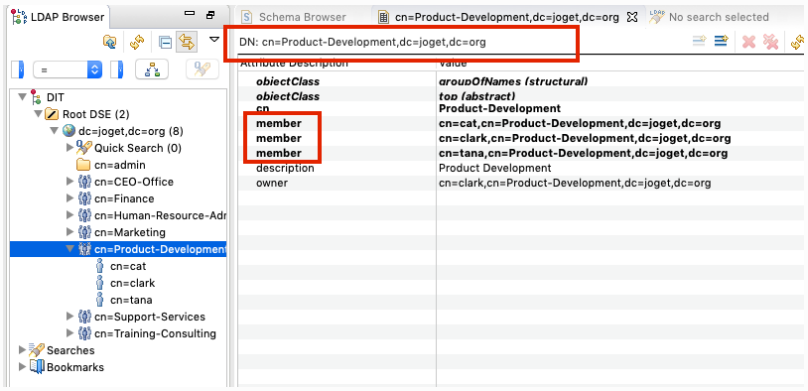
Name	Value	Screen (Click to view)
Department Base DN		
Department Import Search Filter	(objectClass=groupOfNames) Please refer to other LDAP Search Filter syntax.	
Attribute Mapping - ID	cn	
Attribute Mapping - Name	description	
Attribute Mapping - Description	description	
Attribute Mapping - HOD	owner	
Attribute Mapping - Users	member **Tips** 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. 	

Figure 5: Department Properties

Map To LDAP User Entry Primary Attribute	dn

Grade

Name	Value	Screen (Click to view)
Grade Base DN		
Grade Import Search Filter	Please refer to other LDAP Search Filter syntax.	
Attribute Mapping - ID		
Attribute Mapping - Name		
Attribute Mapping - Description		
Attribute Mapping - Users		
Map To LDAP User Entry Primary Attribute		

Figure 6: Grade Properties

Admin Role

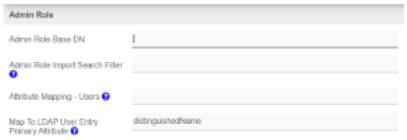
Name	Value	Screen (Click to view)
Admin Role Base DN		
Admin Role Import Search Filter	(&(objectClass=person)(cn=admin)) Please refer to other LDAP Search Filter syntax.	
Attribute Mapping - Users	cn	
Map To LDAP User Entry Primary Attribute	dn	

Figure 7: Admin Role Properties

Advanced

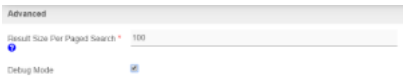
Name	Value	Screen (Click to view)
Result Size Per Paged Search	100	
Debug Mode	Click checkbox to enable helpful debugging messages in your Joget logs.	

Figure 8: Advance Properties

Configuring The User Import Search Filter

The following articles might be useful to you to understand how to filter users based on the groups in LDAP:

- https://flylib.com/books/en/1.434.1/optimizing_search_performance.html
- https://stackoverflow.com/questions/9890049/ldap-query-to-list-all-users-of-a-certain-group
- https://stackoverflow.com/questions/17664101/ldap-list-all-users-in-specific-groups
- https://stackoverflow.com/questions/48361525/ldap-query-to-retrieve-members-of-a-group
- LDAP Search Filter Syntax: https://docs.microsoft.com/en-us/windows/desktop/adsi/search-filter-syntax

You can use the pipe symbol '|' to denotes 'OR' and include a second (or more) search parameters, for example:

(|(objectClass=person)(objectClass=user))

Related Documentation

Sync LDAP User Directory Manager