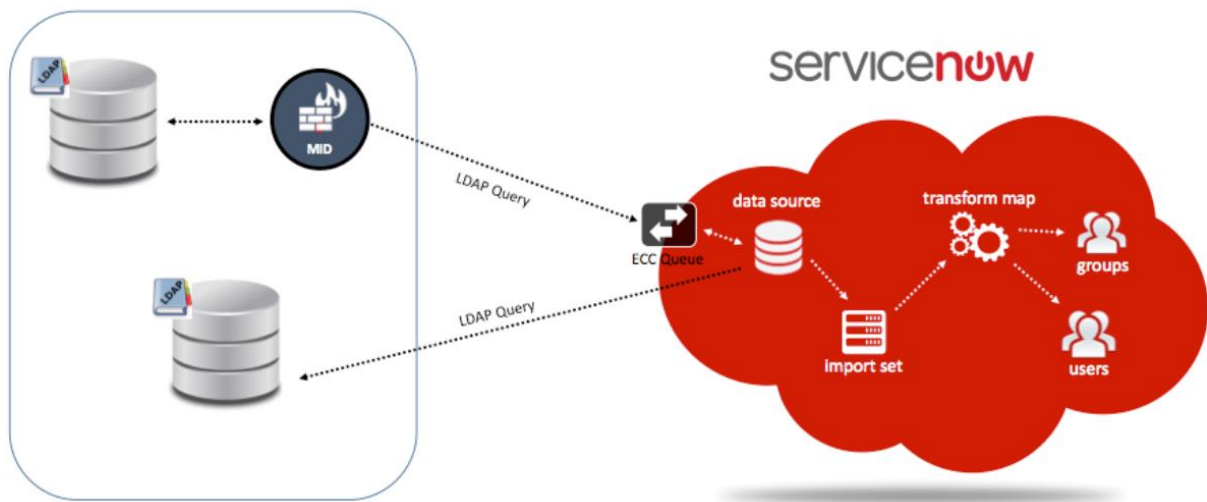


LDAP Integration

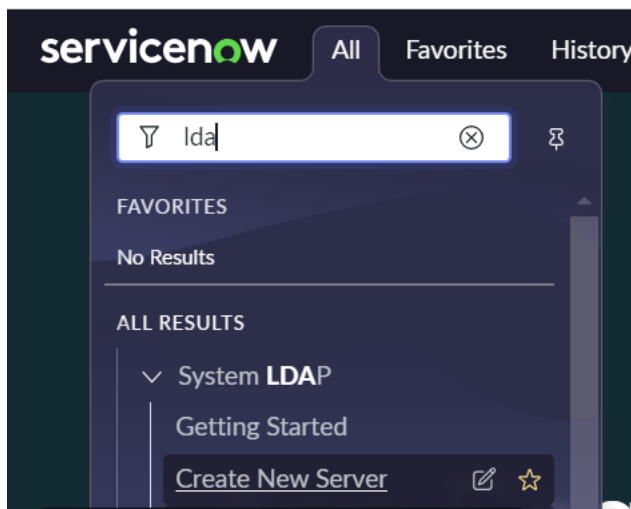
LDAP stands for **Lightweight Directory Access Protocol**. It is a vendor-neutral, industry-standard application protocol used to access and manage directory information services and provides a means to manage user and group membership stored in Active Directory.



- An LDAP integration allows your instance to use your existing LDAP server as the master source of user data.

Now lets to practical

- Login to PDI and search LDAP
- Click on create new server



- A form is open

New LDAP Server

Create a new LDAP server record

Provide the basic information below and we will create the LDAP configuration records to get you started.

Type of LDAP server

☒ Active Directory
 ☐ Other

Server name

More information

Server URL

More information

Starting search directory

More information

- Select LDAP server Active Directory and Give server name

Create a new LDAP server record

Provide the basic information below and we will create the LDAP configuration records to get you started.


Type of LDAP server

☒ Active Directory
 ☐ Other

Server name

More information


- Now in google search for online LDAP Tester


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Q

Online LDAP Test Server



- Now in form give server url copy from online LDAP test server

Here are the credentials for an Online LDAP Test Server that you can use for testing your applications that require LDAP-based authentication. Our goal is to eliminate the need for you to download, install and configure an LDAP sever for testing. If all you need is to test connectivity and authentication against a few identities, you have come to the right place. If you find this useful or would like us to enhance/modify this test LDAP server, please leave a comment.

LDAP Server Information (read-only access): Server: ldap.forumsys.com Port: 389 Bind DN: *cn=read-only-admin,dc=example,dc=com* Bind Password: *password*

All user passwords are *password*. You may also bind to individual Users (uid) or the two Groups (ou) that include: *ou=mathematicians,dc=example,dc=com*

- *riemann*

➤ Paste in form

Create a new LDAP server record

Provide the basic information below and we will create the LDAP configuration records to get you started.

Type of LDAP server

- ☒ Active Directory
☐ Other

Server name

▶ More information

Server URL

▶ More information

➤ Now provide Starting search directory

Here are the credentials for an Online LDAP Test Server that you can use for testing your applications that require LDAP-based authentication. Our goal is to eliminate the need for you to download, install and configure an LDAP sever for testing. If all you need is to test connectivity and authentication against a few identities, you have come to the right place. If you find this useful or would like us to enhance/modify this test LDAP server, please leave a comment.

LDAP Server Information (read-only access): Server: *ldap.forumsys.com* Port: 389 Bind DN: *cn=read-only-admin,dc=example,dc=com* Bind Password: *password*

All user passwords are *password*. You may also bind to individual Users (uid) or the two Groups (ou) that include: *ou=mathematicians,dc=example,dc=com*

- *riemann*

➤ Click on submit

LDAP Server LDAP Integration

Enter a Login distinguished name

Name:

Active: ☒

Application: Global

Login distinguished name:

Login password:

Starting search directory:

MID Server:

LDAP Server URLs

URL	Order	Active	Operational Status
ldap://ldap.forumsys.com	100	true	true

Attributes:

Make sure to specify which LDAP Attributes to import to avoid exceeding the row size limit during the import process

Advanced Options

➤ Now give login distinguished name

LDAP Server LDAP Integration

Enter a Login distinguished name

Name:

Active: ☒

Application: Global

Login distinguished name:

Login password:

Starting search directory:

MID Server:

➤ Now give login password

LDAP Server LDAP Integration

Enter a Login distinguished name

Name:

Active: ☒

Application: Global

Login distinguished name:

Login password:

Starting search directory:

MID Server:

LDAP Server URLs

➤ Now save the form

LDAP Server LDAP Integration

Enter a Login distinguished name

Name:

Active: ☒

Application: Global

Login distinguished name:

Login password:

Starting search directory:

MID Server:

LDAP Server URLs

Save

Insert

Insert and Stay

Analyze Access

Show File Properties

Move to Application...

Configure

Export

View

Create Favorite

Copy URL

Copy sys_id

Show XML

History

Reload form

➤ Now it will test and give successfully message.

- Now understand few field on the form means
- Connect timeout

Advanced Options

Connect timeout

A LDAP connection timeout happens when the client loses connection to the LDAP server due to exceeding the time limits of InitRecvTimeout or MaxConnIdleTime parameters.

- Read timeout
- Read timeouts cover the amount of time it takes to actually receive the response back from the server

Advanced Options

Connect timeout
 Read timeout

- SSL
- It is used to secure communication between LDAP clients and LDAP servers

Advanced Options

Connect timeout
 Read timeout
 SSL ☐

- Listener
- The "Listen Interval" defines how often to transform.
 "So, the Listener interval is actually just the frequency at which the transform takes place. The updates will still come in real time. They build up an import set, then after the interval, that import set is transformed. Listener is a push service. We do not pull those updates, those get pushed to us by your server.
 If you want your LDAP changes coming in just once a day, or just once every 6 hours or so, then you should actually turn off the listener, then let the LDAP Refresh scheduled job run.

The scheduled job runs once a day (by default). If you want it to run more often than that, then you can change the repeat interval on it.

Listener ☒

- Listen interval
- The "Listen Interval" defines how often to transform. "So, the Listener interval is actually just the frequency at which the transform takes place. The updates will still come in real time.

Listener ☒

Listen interval

- Below you will see users and groups

LDAP OU Definitions					
Server = LDAP Integration					
Name	RDN	Query field	Table	Filter	
Groups	CN=Users	sAMAccountName	Group [sys_user_group]	(objectClass=group)	
Users	CN=Users	sAMAccountName	User [sys_user]	(&(objectClass=person)(sn=*))(!&(objectClass=computer))(!&(objectClass=group))	

- Open users

LDAP OU Definition Users

Name:

RDN:

Query field:

Filter:

Application:

Active: ☒

Server:

Table:

Update Delete

Related Links

[Test connection](#)

[Browse](#)

Data Sources	
Name	Import set table name
LDAP Integration/Users	ldap_import

- Now remove otb filter which come by default

LDAP OU Definition Users

Name:

RDN:

Query field:

Filter:

Application:

Active: ☒

Server:

Table:

Update Delete

- Give filter (uid=e*)
- And save
- Now after saving click on browse

LDAP OU Definition Users

Name: Users

RDN:

Query field: sAMAccountName

Application: Global

Active: ☒

Server: LDAP Integration

Table: User [sys_user]

Filter: (uid=a*)

Update Delete

Request an LDAP Browse on the current OU definition

Browse

Name	Import set table name
LDAP Integration/Users	ldap_import

1 to 1 of 1

- You will see get only those user who start with e click on LDAP Nodes

LDAP Browse

Filter: (uid=e*)

RDN:

Filter

LDAP details for:

Distinguished Name:

Search

LDAP Nodes

- uid=einstein
- uid=euler
- uid=euclid

Attribute Name

Attribute Value

LDAP Browse

Filter: (uid=e*)

RDN:

Filter

LDAP details for:

Distinguished Name:

Search

Attribute Name

Attribute Value

- Now click on user and see all details

LDAP Browse

Filter: (uid=e*)

RDN:

Filter

LDAP details for: uid=einstein

Distinguished Name: uid=einstein,dc=example,dc=com

Search

LDAP Nodes

- LDAP Nodes
 - uid=einstein
 - uid=euler
 - uid=euclid

Attribute Name	Attribute Value
cn	Albert Einstein
dn	uid=einstein,dc=example,dc=com
mail	einstein@ldap.forumsys.com
objectClass	inetOrgPerson
objectClass	organizationalPerson
objectClass	person
objectClass	top
sn	Einstein
source	ldap:uid=einstein,dc=example,dc=com
telephoneNumber	314-159-2653
uid	einstein

- Now go back to previous page
- Now open below data source

LDAP OU Definition Users

Name: User

RDN:

Query field: sAMAccountName

Filter: (uid=e*)

Application: Global

Active: ☒

Server: LDAP Integration

Table: User [sys_user]

Update Delete

Related Links

[Test connection](#)

[Browse](#)

Data Sources

Name: Search

LDAP target = Users

Name	Import set table name
LDAP Integration/Users	ldap_import

1 to 1 of 1

- It will re direct to data source table

Data Source LDAP Integration/Users

* Name: LDAP Integration/Users

Import set table label:

* Import set table name: ldap_import

* Type: LDAP

LDAP target: Users

Use Batch Import: ☐

Application: Global

Update Delete

Related Links

[Test Load 20 Records](#)

[Load All Records](#)

[Run Point Scan](#)

Transforms (1) Robust Transformer

Order: Search

Table Transform Maps

Name	Source table	Target table	Run business rules	Order	Active	Updated
LDAP User Import	label [ldap_import]	User [sys_user]	true	100	true	2011-04-11 16:17:55

1 to 1 of 1

- Click on load all records

Progress

Name	ImportProcessor
State	Complete
Completion code	Success
Message	Processed: 3, inserts 3, updates 0, errors 0, empty and ignored 0, ignored errors 0 (0:00:01.442)

Next steps...

- [Import sets](#) Go to the import sets for this data load
- [Loaded data](#) Go to the newly imported data inside the staging table: ldap_import
- [Create transform map](#) Create a transform map for the newly staged data
- [Run Transform](#) Transform a loaded import set using an existing transform map
- [Import log](#) View the import log

➤ Now click on create transform map

Table Transform Map
New record

* Name: LDAP Data

* Source table: LDAP Integration/Users [ldap_import]

Active: ☒

Run business rules: ☒

Enforce mandatory fields: No

Copy empty fields: ☐

Create new record on empty coalesce: ☐

Created:

* Target table: User [sys_user]

Order: 100

Run script: ☐

Submit

➤ Provide name and target table

• Click on Auto Map Matching Fields

Field Maps (1) Transform Scripts

Source field	Target field	Coalesce
u_source	source	false

1 to 1 of 1

➤ Now I want to map other fields click on mapping assist

Update **Copy** **Delete**

Related Links

- [Auto Map Matching Fields](#)
- [Mapping Assist](#)
- [Validate Coalesce Fields](#)
- [Transform](#)
- [Index Coalesce Fields](#)
- [Run Point Scan](#)

Field Maps (1) Transform Scripts

➤ Now I did mapping

Mapping Assist **Save** **Cancel**

Source: LDAP Integration/Users

- cn
- mail
- objectclass
- sn
- source
- telephonenumber

Add **Remove**

Field Map

Source	Target
cn	Name
uid	User ID
mail	Email

Remove **Add**

Target: User

- Country code
- Date format
- Default perspective
- Department
- Employee number
- Enable Multifactor Authenti...
- Failed login attempts
- Federated ID
- First name
- Code...

Save **Cancel**

➤ Click on save

➤ Click on transform

Table Transform Map

LDAP Data

Update

Copy

Delete

Create new record on empty coalesce fields

Update

Copy

Delete

Related Links

[Auto Map Matching Fields](#)
[Mapping Assist](#)
[Validate Coalesce Fields](#)
[Transform](#)
[Index Coalesce Fields](#)
[Run Point Scan](#)

Field Maps (4)

Transform Scripts

Source field	Target field	Coalesce
u_uid	user_name	false
u_source	source	false
u_mail	email	false
u_cn	name	false

1 to 4 of 4

Specify Import set and Transform map

Import set

ISET0010002 - ldap_import (2024-03-21 09:34:30)

Available maps

LDAP User Import - sys_user

Add

Remove

Selected maps, run in order

LDAP Data - sys_user

Transform

➤ Click on Transform

Progress

Name

Transforming: ISET0010002

State

Complete

Completion code

Success

Message

Transformation complete

Next steps...

ISET0010002

Go to the import sets for this data load

Transform history

Show the transform history, related errors and log

Import log

View the import log

➤ Now go to user table and check

All							
	User ID	Name	Email	Source	Password	Active	Created
	euclid	Euclid	euclid@ldap.forumsys.com	ldap:uid=euclid,dc=example,dc=com	*****	true	2024-03-21 09:34:30
	einstein	Albert Einstein	einstein@ldap.forumsys.com	ldap:uid=einstein,dc=example,dc=com	*****	true	2024-03-21 09:34:30
	euler	Leonhard Euler	euler@ldap.forumsys.com	ldap:uid=euler,dc=example,dc=com	*****	true	2024-03-21 09:34:30
	charlie.whitherspoon	Charlie Whitherspoon	charlie.whitherspoon@example.com		*****	true	2006-02-01 00:00:00

➤ You get user

Requirement for LDAP

- Sever Details
- DN

- Password
- Filter

For more check below links

https://support.servicenow.com/kb?id=kb_article_view&sysparm_article=KB0961314