



How to Use LDAP

Version 1.0

Yeastar Information Technology Co. Ltd

Contents

1. What is LDAP?	3
2. Configure LDAP Server on MyPBX.....	4
3. Using LDAP in Yealink Phone.....	5
4. Using LDAP in Cisco SPA 50X IP Phone	11
5. Using LDAP in Zoiper Softphone	12
6. Using LDAP in Bria Softphone.....	13

1. What is LDAP?

LDAP stands for Lightweight Directory Access Protocol which is a client-server protocol for accessing a directory service.

The main idea of LDAP is to keep in one place all the information of a user (contact details, login, password, permissions), so that it is easier to maintain by network administrators. For example you can:

- use the same login/password to login on an Intranet and on your local computer.
- give specific permissions to a group of user. For example some could access some specific page of your Intranet, or some specific directories on a shared drive.
- get all the contact details of the people in a company on Outlook for example.

LDAP is used as a phone book on MyPBX so that you can search a key word from your IP phone. MyPBX support LDAP since firmware version x.19.0.23.

This article explains how to use your existing LDAP with different phones. The configuration settings you enter in your phone will alter wildly dependant on how your LDAP server is configured. In this guide, the LDAP settings on all kinds of IP phone are configured according to MyPBX LDAP default settings.

2. Configure LDAP Server on MyPBX

Check the option of "Enable LDAP", and use default configuration in the other fields. MyPBX acts as one LDAP server.

Default configuration as below:

Root Node: dc=pbx,dc=com
PBX Node: ou=pbx,dc=pbx,dc=com
User Name: cn=admin,dc=pbx,dc=com
Password: (fill in as required)

Then you can add contacts as required.

The screenshot displays the 'LDAP Server' configuration page. At the top, a status bar indicates 'LDAP is running'. Below this, the 'LDAP Settings' section includes a checked 'Enable LDAP' option and several input fields for configuration: 'Root Node' (dc=pbx,dc=com), 'PBX Node' (ou=pbx,dc=pbx,dc=com), 'User Name' (cn=admin,dc=pbx,dc=com), and 'Password' (password). A modal dialog box titled 'Add Contact' is open in the foreground, containing fields for 'Nick Name' (Bill), 'Email' (bill@yeastar.com), 'Department' (TS), 'First Name' (Billi), 'Family Name' (Gate), 'Office Number', and 'Mobile Number' (14586214458). The dialog has 'Save' and 'Cancel' buttons. In the background, the 'LDAP Phone Book' section is visible with 'Add Contact' and 'Delete the' buttons, and a table with columns for 'Total', 'Show', and 'View'.

Figure 1 Add Contacts in LDAP Server

3. Using LDAP in Yealink Phone

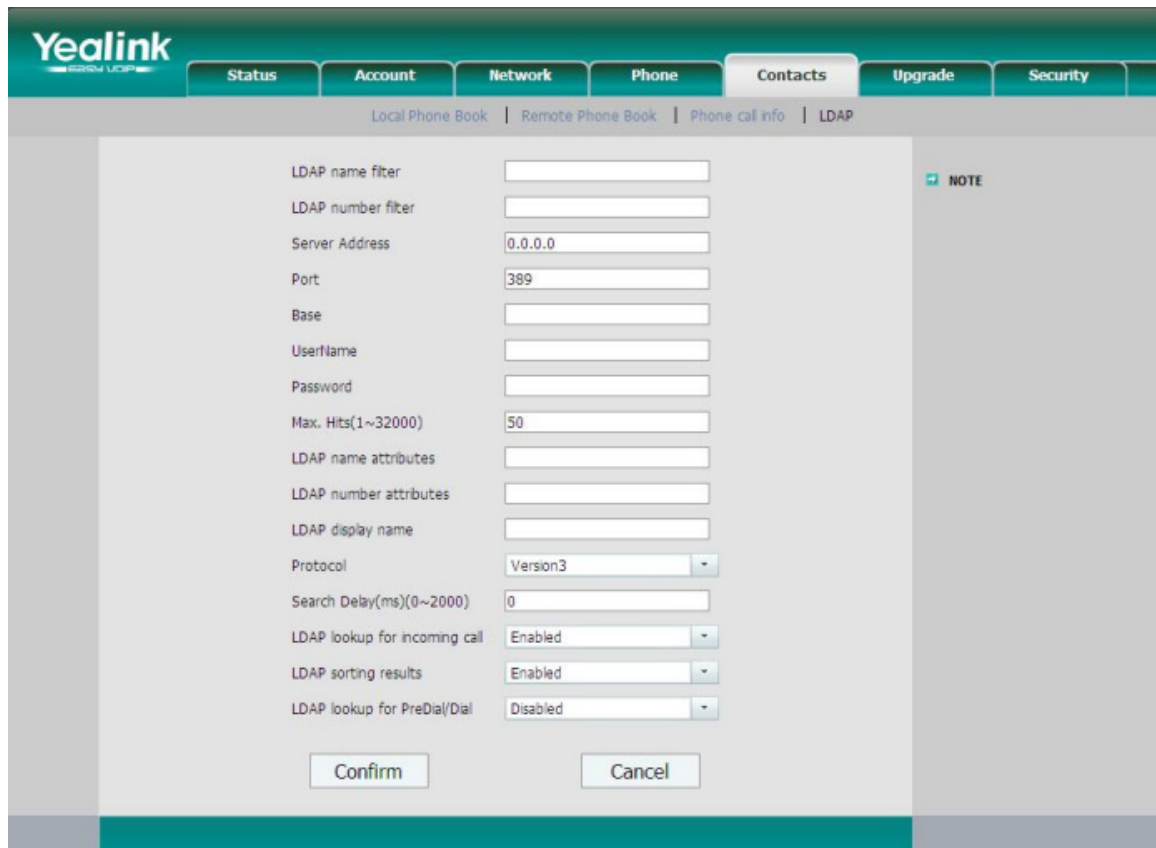
Here we take Yealink T-28 IP phone as an example.

Firmware version:

MyPBX: **x.19.0.23**

Yealink: **2.70.0.x**

Please note that LDAP Phonebook support on T28\T26\T22\T12, the version must be V51 (x.51.x.x) and higher, then access to the web UI→ Contacts→ LDAP page, you can find the configured option is like following picture.



The screenshot shows the Yealink web UI with the 'Contacts' tab selected. Underneath, the 'LDAP' sub-tab is active. The configuration page contains the following fields and options:

- LDAP name filter:
- LDAP number filter:
- Server Address:
- Port:
- Base:
- Username:
- Password:
- Max. Hits(1~32000):
- LDAP name attributes:
- LDAP number attributes:
- LDAP display name:
- Protocol:
- Search Delay(ms)(0~2000):
- LDAP lookup for incoming call:
- LDAP sorting results:
- LDAP lookup for PreDial/Dial:

At the bottom of the form, there are two buttons: 'Confirm' and 'Cancel'. A 'NOTE' icon is visible on the right side of the form area.

Figure 2 LDAP Setting Interface of Yealink Phone

Note : For higher firmware version, like 2.72.0.25, you need to enable LDAP first.

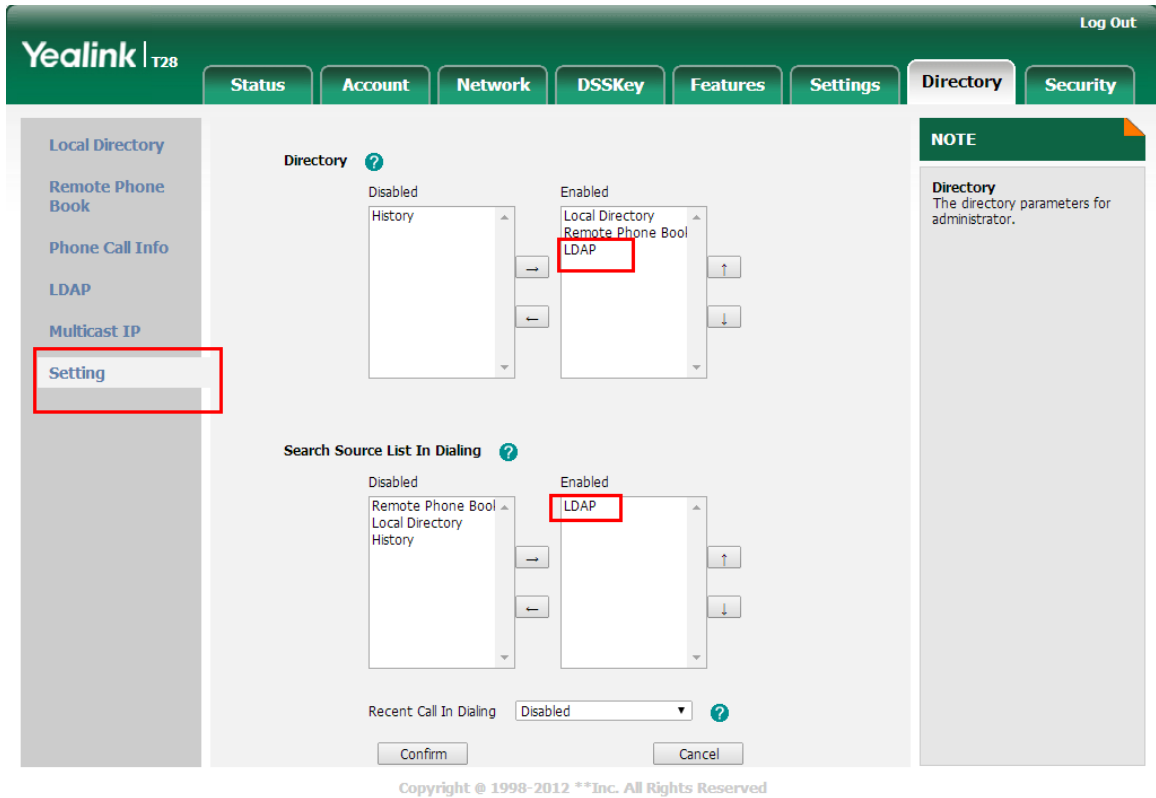


Figure 3 Enable LDAP in Yealink Phone of Later Versions.

And you could check the common attributes below.

Parameter	Value
givenName	First Name
sn	Last Name
cn	Nickname
telephoneNumber	Work Phone
homePhone	Home Phone
mobile	Mobile Phone
mail	E-mail
departmentNumber	Department

Figure 4 Fill the Corresponding Parameters in the Field

The example configurations are set according to MyPBX LDAP default settings. You can use the below settings as a starting point and adjust the filter and display attributes according to your needs.

LDAP Name Filter	((cn=%)(sn=%))			
LDAP Number Filter	((telephoneNumber=%)(homePhone=%)(mobile=%))			
Server Address	192.168.5.142 /the IP of MyPBX/			
Port	389			
Base	dc=pbx,dc=com			
User Name	cn=admin,dc=pbx,dc=com			
Password	***** /the password you have set on MyPBX/			
Max. Hits	50			
LDAP Name Attributes	cn sn displayName			
LDAP Number Attributes	telephoneNumber	homePhone	mobile	mail
	departmentNumber			
LDAP Display Name	%cn			

Protocol	Version 3
Search Delay(ms)(0~2000)	0
LDAP Lookup for Incoming Call	Enabled
LDAP Sorting Results	Enabled
LDAP Lookup for Pre Dial/Dial	Enabled

Note: "LDAP Lookup for Pre Dial/Dial" is removed in version 2.72.0.25
 After above configuration click the "confirm" button, and the LDAP will take effect.

Then configure the DSS Key for linking to the LDAP setting.

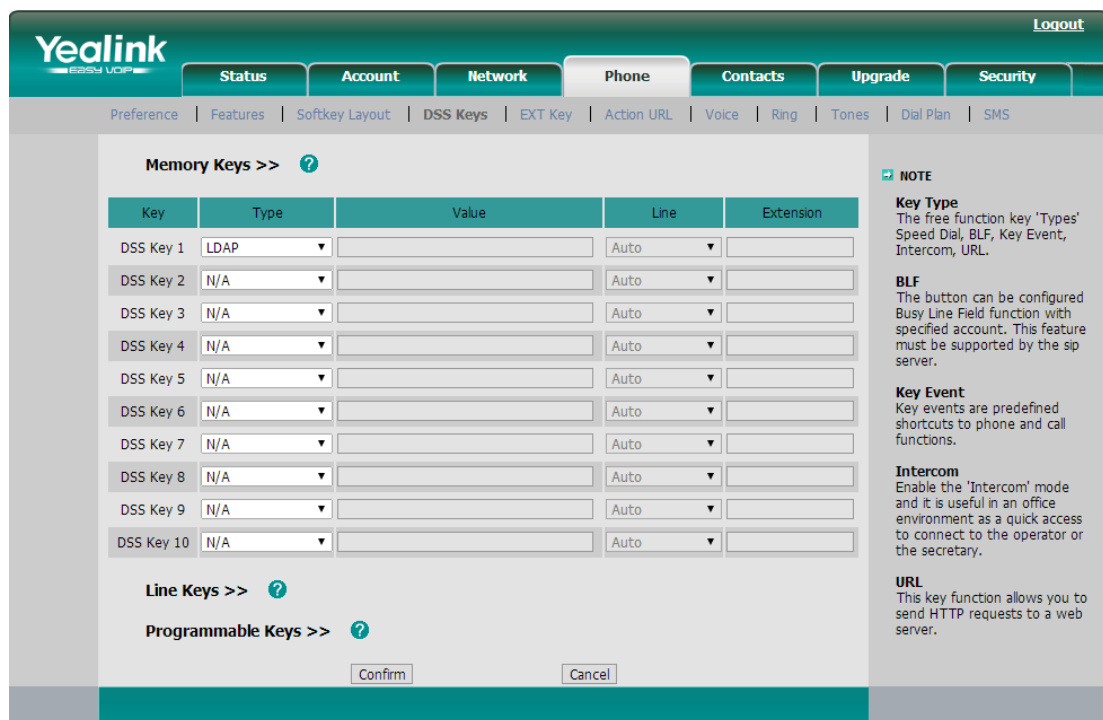


Figure 5 Enable LDAP in DSS Key

If you enable the "LDAP Lookup for Pre Dial/Dial", you can use LDAP feature either in Pre Dial/Dial page. And enter in the LDAP from Directory or by pressing DSS Key on the phone like the figure as below:

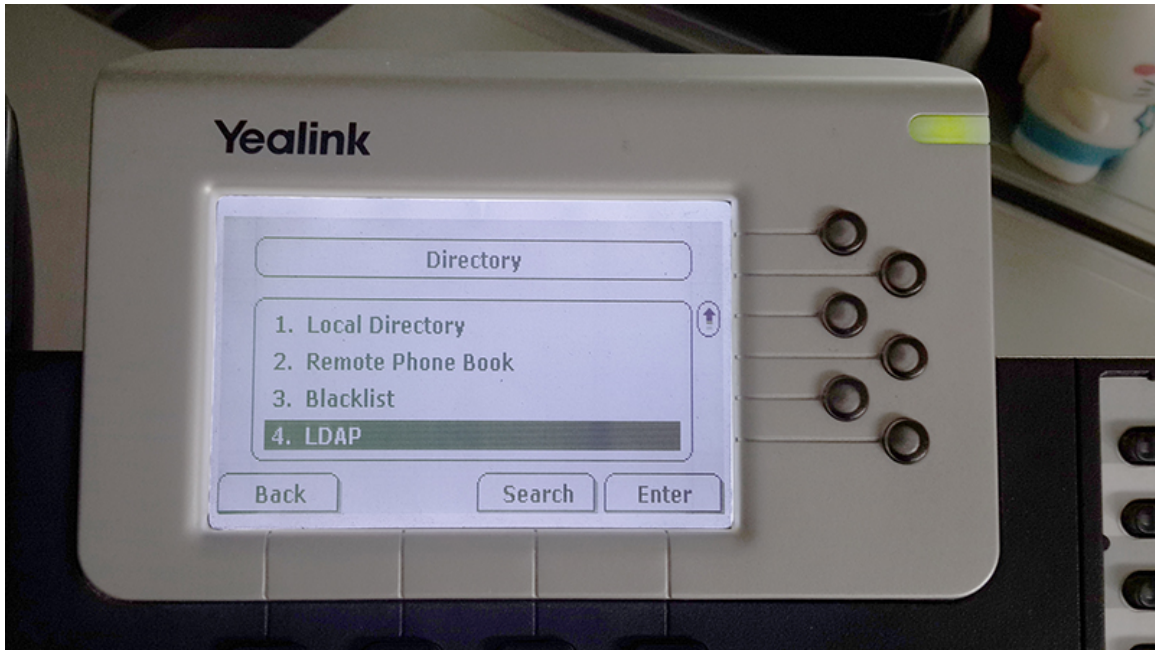


Figure 6 LDAP in the Directory of Yealink Phone

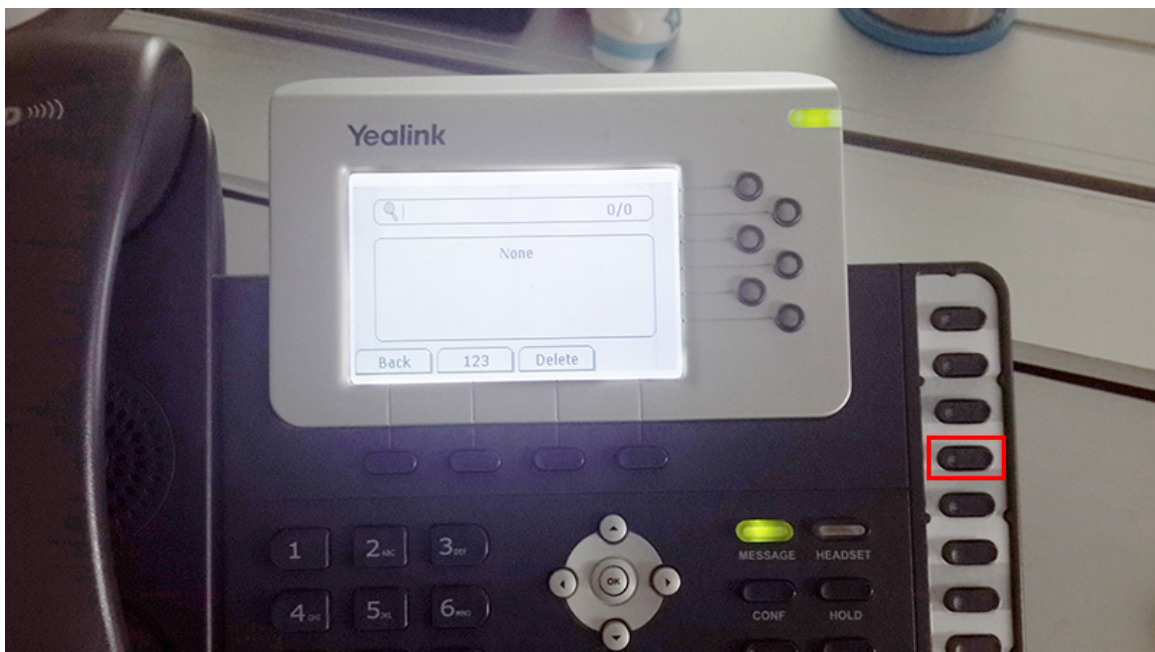


Figure 7 Enable LDAP via DSS Key

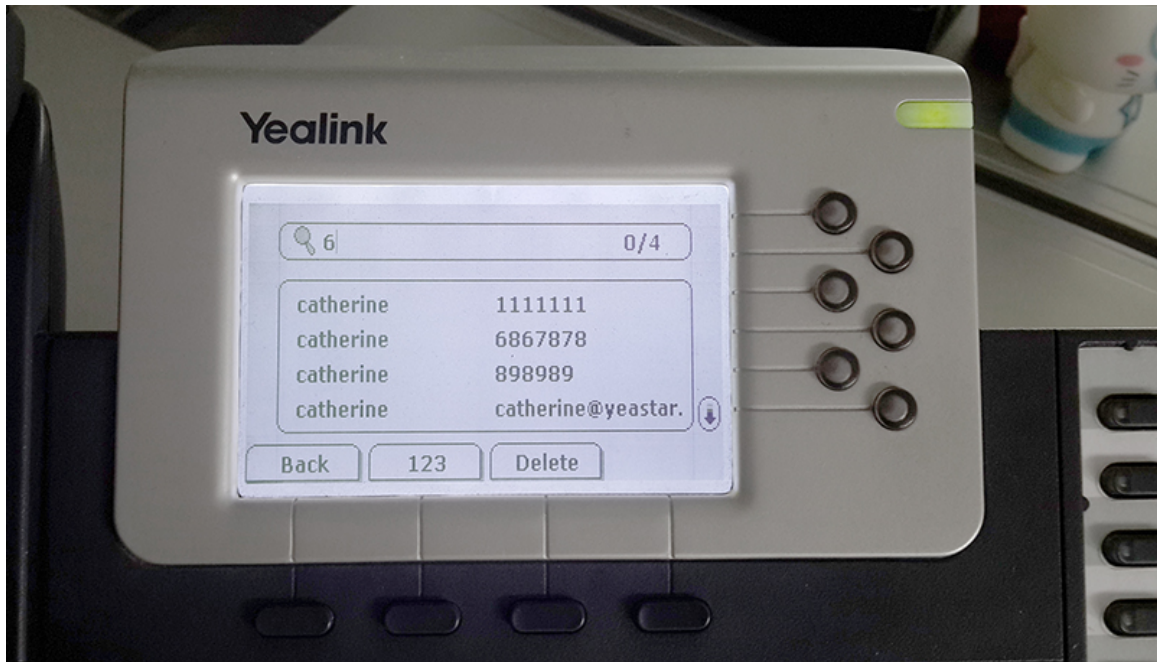


Figure 8 Search Result of LDAP

Note: there may be some difference among the different IP phones or softphones. The following examples are references.

4. Using LDAP in Cisco SPA 50X IP Phone

Configuration in Cisco SPA 50X(admin login in advanced mode):

LDAP Dir Enable: YES

LDAP Corp Dir Name: LDAP Test

LDAP Server: 192.168.2.127:389 (IP of MyPBX:389)

LDAP Auth Method: None

LDAP Client DN: dc=pbx,dc=com

LDAP Username: cn=admin,dc=pbx,dc=com

LDAP Password: ***** (the password set on MyPBX)

LDAP Search Base: dc=pbx,dc=com

LDAP Last Name Filter: sn:(sn=*\$VALUE*)

LDAP First Name Filter: cn:(cn=*\$VALUE*)

LDAP Search Item 3:

LDAP Item 3 Filter:

LDAP Search Item 4:

LDAP item 4 Filter: a=sn;a=cn;a=telephoneNumber,n=Phone,t=p;

LDAP Display Attrs:

LDAP Number Mapping:

Small Business Pro
cisco SPA502G Configuration Utility

User Login basic | advanced

Voice Call History Personal Directory Attendant Console Status

Info System SIP Provisioning Regional Phone User Attendant Console

Ext 1

Call Feature Sync Ext: Disabled

LDAP Corporate Directory Search

LDAP Dir Enable: yes

LDAP Corp Dir Name: LDAP Test

LDAP Server: 192.168.2.127:389

LDAP Auth Method: None

LDAP Client DN: dc=pbx,dc=com

LDAP Username: cn=admin,dc=pbx,dc=c

LDAP Password: *****

LDAP Search Base: dc=pbx,dc=com

LDAP Last Name Filter: sn:(sn=*\$VALUE*)

LDAP First Name Filter: cn:(cn=*\$VALUE*)

LDAP Search Item 3:

LDAP Search Item 4:

LDAP Display Attrs: a=sn;a=cn;a=telephoneNumber,n=Phone,t=p;

LDAP Number Mapping:

XML Service

XML Directory Service Name: Phonebook

XML Directory Service URL: http://192.168.2.124/cgi/autop?DownCfg=httpboot/phonebook/cisco/cisco.xml

XML Application Service Name:

XML Application Service URL:

Undo All Changes Submit All Changes

© 2009 Cisco Systems, Inc. All Rights Reserved. SPA502G IP Phone

Figure 9 Fill the Parameters in the Field on Cisco Phone

5. Using LDAP in Zoiper Softphone

Configuration in Zoiper:

LDAP server: 83.247.70.23 /the IP of MyPBX/

Password: ***** /the password you have set on MyPBX/

CN: cn=admin,dc=mypbx,dc=com

DN: dc=pbx,dc=com

Result limit: 0

Min Chars to Search: 1

Fields to Search: sn,gn

XMPP presence:

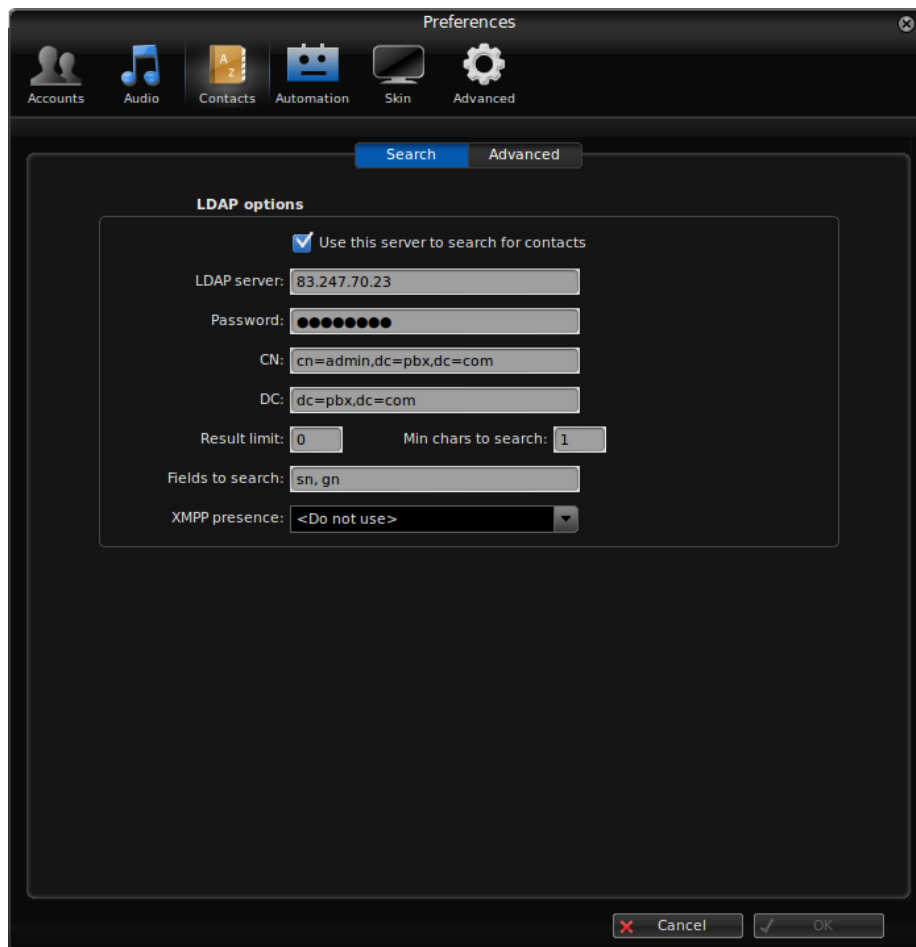


Figure 10 LDAP Option and Configuration in Zoiper

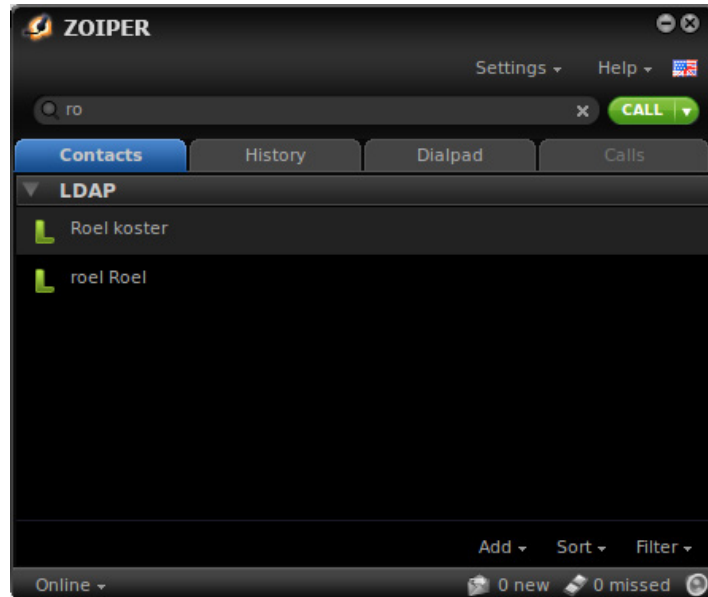


Figure 11 Search Result in Zoiper

6. Using LDAP in Bria Softphone

Configuration in Bria:

Server settings

Server: 192.168.1.120 /the IP of MyPBX/

Authentication method: Anonymous

User Name (dn): cn=admin,dc=originsystems,dc=co,dc=za

Credential: *****/the password you have set on MyPBX/

Root DN: dc=originsystems,dc=co,dc=za

Search expression:

Search options

Type to filter list

Search timeouts: 2000

Max results: 500

Update interval: 120

Attribute Mapping

Display name: cn

First name: givenName

Last name: sn

Job title: title

Department: department

Location: I

Work number: workNumber

Mobile number: mobile

Softphone: sipUri

Home number: telephoneNumber

E-mail: mail

Instant message: jid

Directory

Configure Directory

Directory type: LDAP

Server Settings Search Options Attribute Mapping

Server: 192.168.1.20

Authentication method: Anonymous

Username (dn=): cn=admin,dc=originsystems,dc=co,dc=

Credential:

Root DN: dc=originsystems,dc=co,dc=za

Search expression:

Directory

Configure Directory

Directory type: LDAP

Server Settings Search Options Attribute Mapping

Search on demand (requires pressing Search button)

Type to filter list

Search timeout: 2000 seconds

Max results: 500

Update interval: 120 minutes

Directory

Configure Directory

Directory type: LDAP

Server Settings Search Options Attribute Mapping

Display name: cn Work number: workNumber

First name: givenName Mobile number: mobile

Last name: sn Softphone: sipUri

Job title: title Home number: telephoneNumber

Department: department E-mail: mail

Location: l Instant Message: jid

Figure 12 Configuration in Bria

<End>