



TIPT How to Guide

Configure LDAP with tags on a handset

Dependencies

- Handset must have V4.x firmware loaded so appropriate template support is available. *Note:* VVX500 will be available in April 2014¹
- LDAP Server that has been tested with Polycom's Corporate Directory feature.

Custom Tags Required at the Group / Device Level

Custom TAG	Permitted Value	Default Value	Usage
LDAP_ENABLE	0 (no) 1 (yes)	0	If 0, the corporate directory feature is disabled. If 1, the feature is enabled.
LDAP_ADDRESS	dotted-decimal IP address or hostname or FQDN		The IP address or hostname of the LDAP server interface to the corporate directory.
LDAP_LABEL_x	UTF-8 encoded string X – can be 1,2 or 3		The label when data is displayed – i.e. Last Name
LDAP_NAME_x	UTF-8 encoded string X – can be 1,2 or 3		The name of the parameter to match on the server – i.e. cn (common name)
LDAP_TYPE_x	UTF-8 encoded string X – can be 1,2 or 3	last_name	Defines how parameter is interpreted by the phone
LDAP_BASE_DN	UTF-8 encoded string		This is the starting point for making queries on the LDAP server
LDAP_FILTER_PREFIX	UTF-8 encoded string	"(objectclass=person)"	Filter string for search queries
LDAP_USER	UTF-8 encoded string		The user name used to authenticate to the LDAP server
LDAP_PASSWORD	UTF-8 encoded string		The password used to authenticate to the LDAP server
LDAP_PORT	0, Null, 1 to 65535	0	The port that connects to the server if a full URL is not provided.
LDAP_SCOPE	one, sub, base	sub	The type of search that is performed. i.e. is search recursive
LDAP_TRANSPORT	TCP, TLS, Null	TCP	Specify whether a TCP or TLS connection is made with the server, if a full URL is not provided.

The following screen shot is an example of the above TAGS as configured in Broadsoft.

Tag Name	Tag Value
%LDAP_ADDRESS%	10.100.100.25
%LDAP_BASE_DN%	OU=XXXXXXXXXX,DC=qldlab,DC=com
%LDAP_ENABLE%	1
%LDAP_FILTER_PREFIX%	(objectclass=person)
%LDAP_LABEL_1%	FullName
%LDAP_LABEL_2%	mail
%LDAP_LABEL_3%	BusinessPhone
%LDAP_NAME_1%	displayName
%LDAP_NAME_2%	email
%LDAP_NAME_3%	telephoneNumber
%LDAP_PASSWORD%	XXXXXXXXXX
%LDAP_PORT%	389
%LDAP_SCOPE%	sub
%LDAP_TYPE_1%	last_name
%LDAP_TYPE_2%	email
%LDAP_TYPE_3%	phone_number
%LDAP_USER%	LDAP

¹ All new handsets introduced onto the platform after April 2014 with firmware V4.x and above will have a template that will support this functionality i.e. VVX310, VVX410 and VVX600



High level Overview of LDAP protocol packet exchange once configured:

The following WireShark extract shows the exchange between the TIPT handset and the Directory Server. **Note:** Additional packets containing response data and acknowledgements between the client and server have been removed for ease of viewing.

No.	Time	Source	Destination	Protocol	Length	Info
81	2014-03-20 15:13:20.850575	10.100.100.199	10.100.100.25	LDAP	118	bindRequest(1) "cn=LDAP,OU=LyncUsers,DC=qldlab,DC=com" simple
82	2014-03-20 15:13:20.853079	10.100.100.25	10.100.100.199	LDAP	80	bindResponse(1) success
83	2014-03-20 15:13:20.854745	10.100.100.199	10.100.100.25	LDAP	115	searchRequest(2) "<ROOT>" baseobject
84	2014-03-20 15:13:20.855869	10.100.100.25	10.100.100.199	LDAP	846	searchResEntry(2) "<ROOT>" searchResDone(2) success [1 result]
85	2014-03-20 15:13:20.857096	10.100.100.199	10.100.100.25	LDAP	65	unbindRequest(3)
3176	2014-03-20 15:24:25.545536	10.100.100.199	10.100.100.25	LDAP	118	bindRequest(1) "cn=LDAP,OU=LyncUsers,DC=qldlab,DC=com" simple
3177	2014-03-20 15:24:25.548362	10.100.100.25	10.100.100.199	LDAP	80	bindResponse(1) success
3178	2014-03-20 15:24:25.550341	10.100.100.199	10.100.100.25	LDAP	251	searchRequest(2) "OU=LyncUsers,DC=qldlab,DC=com" wholeSubtree
3179	2014-03-20 15:24:25.551536	10.100.100.25	10.100.100.199	LDAP	277	searchResEntry(2) "CN=John. S. Davidson,OU=LyncUsers,DC=qldlab,DC=com"

Bind Request: The function of the Bind Operation is to allow authentication information to be exchanged between the client and server. This packet will contain the LDAP server name and the LDAP Version.

Bind Response: consists of an indication from the server of the status of the client's Bind Request for authentication.

Search Request: used to identify entries in the Directory Server that the request is based upon. Contains the Search Base Details (Base Object i.e. OU=People, ...) The attributes to be retrieved and the search filter or "Assertionvalue:valueinsearchdialogbox"

Search Result Entry: A search result entry is an entry returned as part of a Search Request. It will contain at least the DN of the entry, and may contain zero or more attributes. The attributes returned will relate to the "retrieve attributes" settings configured.

Unbind Request: The LDAP unbind operation is used to indicate that the client wants to disconnect from the server. An unbind request does not contain any elements, and the server will not send a response to an unbind request.

How to access information via LDAP through the Corporate Directory

- Select the Directory menu option / or key depending on handset type.
- Then option 2 – Corporate Directory
- Then search based on the appropriate criteria as configured through previous options.



Example of Quick Search screen on IP550 handset