



LDAP Quick Start Manual

Version: 1.1
Release date: 2014-02-22

© 2011 - 2014 Fanvil Co., Ltd.

This document contains information that is proprietary to Fanvil Co., Ltd (Abbreviated as Fanvil hereafter).
Unauthorized reproduction or disclosure of this information in whole or in part is strictly prohibited.

Specifications are subject to change without notice.

Liability Disclaimer

Fanvil may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked as reserved or undefined. Fanvil reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information. The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request. Contact your local Fanvil sales office or your distributor to obtain the latest specification and before placing your product order.

fanvil file, forbidden to steal!

Table of Contents

Table of Contents	3
1 Revision History	4
2 Introduction	5
2.1 Overview.....	5
2.2 Target Audience.....	6
2.3 Glossary.....	6
2.4 Reference.....	7
3 The Model of LDAP Information	8
3.1 The Information structure of a LDAP Directory.....	8
3.2 The objectClass and Attribute of LDAP.....	8
4 How to Use LDAP in Fanvil's Phone	10
4.1 Overview.....	10
4.2 Configure and Run A LDAP Client.....	10
5 Applicable Models	12

1 Revision History

Revision history:

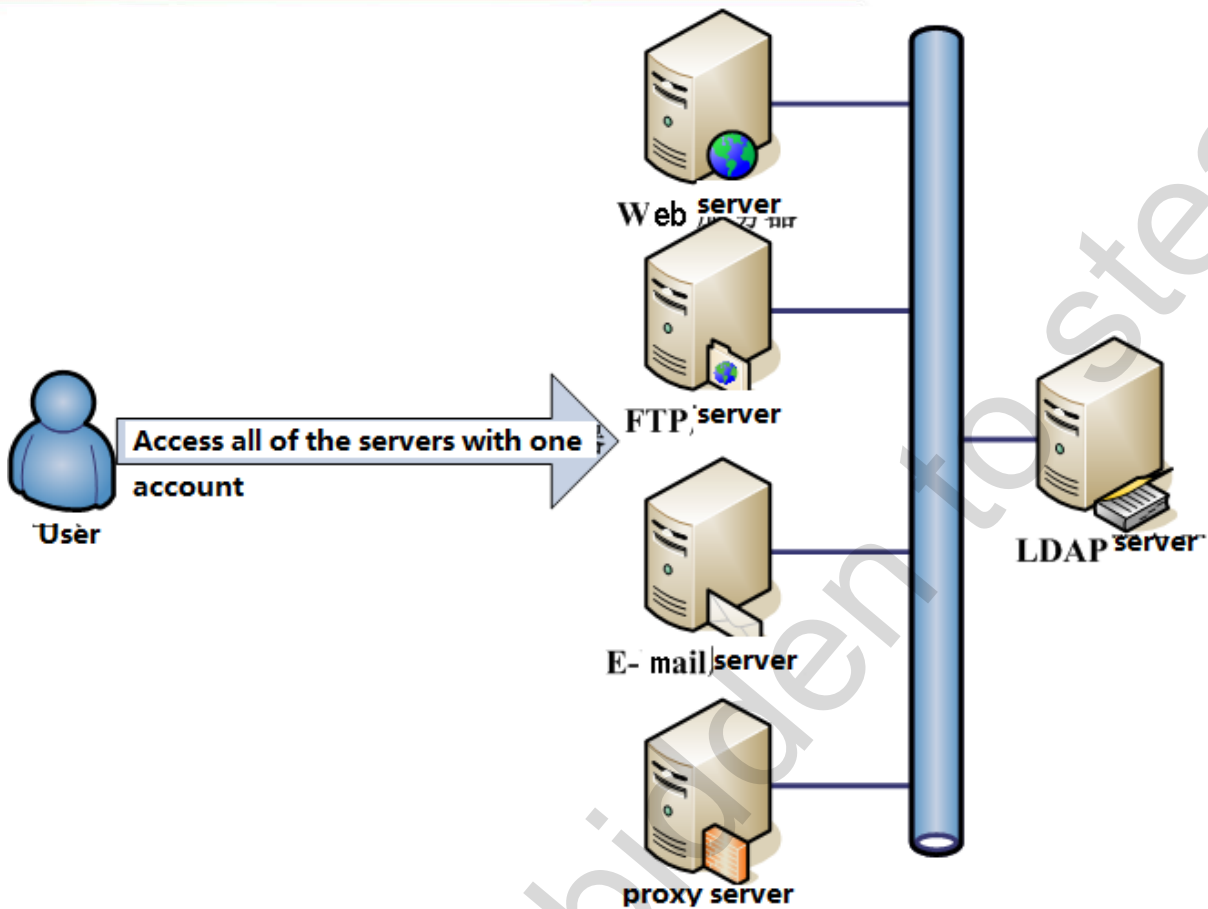
Revision	Author	Date	Description
1.0	Yuxiang Guo	2014-01-20	Initial version
1.1	Yonglong Zhao	2014-02-22	Review and translation to English

2 Introduction

2.1 Overview

LDAP (Lightweight Directory Access Protocol) is a X.500-based Directory Access Protocol Standard and is extendable according the demand. LDAP is stored as a information directory which there is only one unique group or group in the directory and several devices or applications may share a directory between each other.

LDAP defines the operation which is used to communicate with directory service, how to find out an entry from a directory, how to describe an entity and security features which are used to directory accessing verification and to control the entity accessing in the directory. The directory service is a special kind of database which is optimized for accessing, scanning and searching. A directory has descriptive, attribute-based information and supports complex filter capability. A directory generally does NOT support complex transaction management which is supported by general database for large updating operation. The updating of a directory general is very simple. A directory could store plain text, binary picture and so on, such as a contact list, personal information, a WEB link or a JPEG picture. So you may access those information stored in a directory by LDAP run on TCP/IP.



2.2 Target Audience

This document is useful for operator who wants to use LDAP directory.

2.3 Glossary

c	Country	For example "CN" or "US"
dc	Domain Component	For example dc= winline,dc=com
o	Organization	For example "Winline"
Ou	Organization Unit	An OU could be included in another OU. For Example "Sale"
uid	User Id	For example

		“Tomas”
cn	Common Name	For example “Thomas Johansson”
sn	Surname	For example “Tomas”
dn	Distinguished Name	Every entity has a DN, for example: “uid=tom,ou=test,dc= winline,dc=com”
rdn	Relative dn	A RDN is unrelated with a directory tree struct, For example: “uid=tom” or ”cn= Thomas Johansson”

2.4 Reference

1. http://wenku.baidu.com/link?url=brydQRx82r5-GrGiY10z_TWpXH97udnb0FvgmTPBUwja3s4SUBAcclpYuom5Xbpl2Foae9pno9pdKGwaD3sOgYIOe-jGgAasHwRRq-0Bda
2. <http://linux.chinaunix.net/techdoc/net/2007/01/20/948652.shtml>

3 The Model of LDAP Information

3.1 The Information structure of a LDAP Directory

The information stored in a LDAP directory is organized as a tree structure. The information is stored in a data structure Entries. An entry is a attribute with a DN (Distinguished Name), a DN, as a reference of an Entry, likes a keyword used in the relative database. An attribute is composed by a Type and single or several value(s). The information is stored in LDAP as a tree structure, A country (c=CN) or domain (dc=com) general is defined at the root of the tree, then there would be organizations or organization units defined at the leaf node. Figure-3.1 indicates the system structure of LDAP.

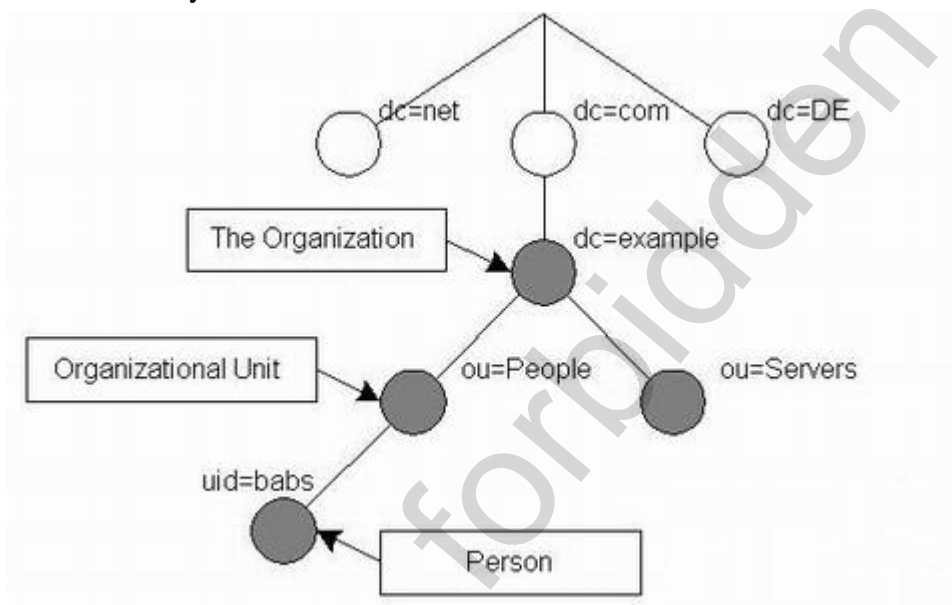


Figure-3.1 the system structure of LDAP

3.2 The objectClass and Attribute of LDAP

ObjectClass, used to control an item and which attributes are supported by LDAP, defines rules which an item must follow and defines which attributes an item must have or may have.

An item in LDAP must have an objectClass which must have at least a value. Each values is used as a template which the data is stored with, a template must include the optional attributes and required attributes of an item.

The objectClass is distinguished strictly by their levels. The toppest level is top and alias, for example: an organizationalPerson is slaved person which is slaved to top.

There are 3 types of objectClass and are listed below:

- Structural: for example person and organizationUnit
- Auxiliary: for example extensibleObject;
- Abstract: for example top. An abstract objectClass can't be used directly.

The required attributes of common objectClasses are listed below.

- Account: userid.
- organization: o.
- dcobject: dc.
- person: cn and sn.
- organizationalPerson: the same as person.
- organizationalRole: cn.
- organizationUnit: ou.
- posixGroup: cn, gidNumber.
- posixAccount: cn, gidNumber, homeDirectory, uid, uidNumber.

An attribute may be assigned with a value, the common attributes are listed below:

- c: country.
- dc: domain Component, a part of a domain
- givenName: the first name
- l: a location, for example a name of city or a geographical area
- mail: the address of a E-Mail
- o: organizationName, the name of an organization
- ou: organizationalUnitName, the name of an unit of an organizational
- cn: common name, the name of an object, a CN must be a full name if it is a human's name.
- sn: surname, the last name of a human.
- telephoneNumber: telephone number which should be prefixed with the country and area code.
- uid: userid which generally is a user's logon name.

4 How to Use LDAP in Fanvil's Phone

4.1 Overview

The features supported by LDAP phonebook are listed below:

- Up to 4 LDAP ports may be configured.
- Full directory accessing
- Remote calling part's phone number searching and updating in screen when user has a call.
- Customized attributes names of phonebook, such as display name, phone number, mobile number and home number.
- Multi-authentications to logon to LDAP server, NONE, Simple, Digest-MD5 or CRAM-MD5

4.2 Configure and Run A LDAP Client

LDAP is configured via WEB page PHONE->Remote Contact-LDAP Settings. Figure-1 shows the detail configuration items.

The screenshot shows the 'LDAP Settings' configuration page. At the top, there is a dropdown menu for 'LDAP' set to 'LDAP 1'. Below this, the configuration is organized into two columns. The left column contains: 'Display Title' (text input), 'Server Address' (text input), 'Authentication' (dropdown menu set to 'None'), 'Username' (text input), 'Search Base' (text input), 'Telephone' (text input with 'telephoneNumber' entered), and 'Other' (text input with 'home' entered). The right column contains: 'Version' (dropdown menu set to 'Version 3'), 'Server Port' (text input with '389' entered), 'Line' (dropdown menu set to 'AUTO'), 'Password' (text input), 'Enable Calling Search' (checkbox), 'Mobile' (text input with 'mobile' entered), and 'Display Name' (text input with 'cn' entered). At the bottom center of the form is an 'Apply' button.

Figure-4.1 LDAP Configuration Page

1. Select which port will be configure (LDAP 1-LDAP4)
2. Set the title display in the LCD LDAP list.
3. Select the version of LDAP, it general is Version 3.
4. Configure the server address or domain and server port which default is 389.
5. Select the authentication to access to the server, available value is None, Simple, CRAM-MD5 or Digest-MD5.
6. Configure the calling line that will be used to make a call.
7. Configure the username and password to access the server, the username/password should be empty if the authentication is set to None.
8. Configure the search base which the level the searching starts.
9. Set Enable Calling Search if you want to search the remote part number in LDAP server when you have a call. The name will be displayed if the servers return a valid result.
10. Configure the attribute names of Telephone, Mobile, Other, Display Name. Those attributes will be parsed and display in the contact list.

Figure-4.2 shows an exactly configuration.

LDAP Settings	
LDAP: LDAP 1	
Display Title	Fanvil LDAP
Server Address	192.168.1.3
Authentication	None
Username	cn=Manager,dc=winline
Search Base	dc=winline,dc=com
Telephone	telephoneNumber
Other	home
Version	Version 3
Server Port	389
Line	AUTO
Password
Enable Calling Search	<input checked="" type="checkbox"/>
Mobile	mobile
Display Name	cn
Apply	

Figure-4.2 an example of LDAP Configuration

A user may access the LDAP server and download the contact list by selecting desired LDAP port.

1. Press DIRECTORY key and use arrow UP/DOWN key to highlight LDAP and press OK key or softkey Enter to enter LDAP list
2. Use arrow key UP/DOWN to select desired LDAP and press OK key or softkey Enter to access this LDAP port.
3. The screen will promote "Downloading" while the directory is downloading
4. The directory list will be display in the screen if a valid result is given.

User may make a call from the contact list; add a contact to phonebook or black list.

5 Applicable Models

- C60/C60P/C62/C62P/C66/C66P
- E58/E58P/E62/E62P/E66/E66P
- F58/F58P/F62/F62P/F66/F66P
- C58/C58P
- C52/C52P
- E52/E52P
- F52/F52P