

FAQ - Online Directories Corporate (LDAP)

Valid for:	N610	N670	N870	N870E	Embedded Integrator	Virtual Integrator
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Online directories


You can set up up to ten corporate directories in LDAP format for the phone system and make one of them available to the registered handsets. Use the handset settings to specify which keys are to call up the directory.

LDAP

If you wish to use a company LDAP directory, you must activate it on the Web configurator or via auto provisioning

Settings Online Corporate

LDAP directory


	Name	Server url
1	 LDAP 1	
2	 LDAP 2	
3	 LDAP 3	
4	 LDAP 4	
5	 LDAP 5	
6	 LDAP 6	
7	 LDAP 7	
8	 LDAP 8	
9	 LDAP 9	
10	 LDAP 10	

The page lists the available LDAP directories.

Name	The name that you have defined for the directory is displayed, or the default name (LDAP 1 - LDAP 10). It can be edited.
Server url	If the directory is configured, the server URL is displayed.

Access to the LDAP data server



Click on  next to the name of the LDAP directory you want to edit and the LDAP configuration page is opened.

The directory is provided via an LDAP server. You need the server address, the server port and the access data for the directory that you wish to use.

Access to the LDAP data server

Directory name ?

GC LDAP - RD

☒ Enable directory

Server address ?

ldap.PBX.com

Server port ?

389

LDAP Search base (BaseDN) ?

ou=RD,dc=pbx

Username ?

PBX\ldapuser1

Password ?

.....

Secure LDAP

None ▼

Search in LDAP database

Parameter	
Directory name	Enter a name in the field (max. 20 characters). This is the name under which the directory will be displayed on the handsets. Mark the Enable directory option, so that the directory is displayed on the telephones.
Server address	The URL of the LDAP server.
Server port	The port the LDAP server expects database requests (Default: 389)
LDAP Search base (BaseDN)	The LDAP database is hierarchical in design. With the LDAP Search base (BaseDN) parameter, stipulate in which area the search should begin. Default: 0, the search starts at the upper area of the LDAP database.
Username	If you want to define access data that have to be used by all users: Enter the access data for the LDAP directory in the Username and Password fields (max. 50 characters each).If you want to use individual access data for each handset, the access data is to be set during the handset configuration.
Password	
Secure LDAP	No security or SSL/TLS can be used.

Search in LDAP database

Filters

Using the filters, you can define criteria against which specific entries can be searched in the LDAP database. One filter consists of one or more search criteria. A search criterion contains the query for an LDAP attribute.

Example: sn=%

The sn attribute stands for surname. The percent sign (%) is a place holder for the user entry.

Rules for defining filters:

- Multiple criteria can be connected using logical AND (&) and/or OR (|) operators.
- The logical operators "&" and "|" are placed before the search criteria.
- The search criterion must be placed in brackets and the whole expression must be terminated with a bracket again.
- AND and OR operations can be combined.

Examples:

AND operation	(& (givenName=%) (mail=%)) Searches for entries in which the first name and mail address begin with the characters entered by the user.
OR operation	((displayName=%) (sn=%)) Searches for entries in which the display name or surname begins with the characters entered by the user.
Combined operation	((& (displayName=%) (mail=%%))(& (sn=%) (mail=%%))) Searches for entries in which the display name and mail address or the surname and mail address begin with the characters entered by the user.

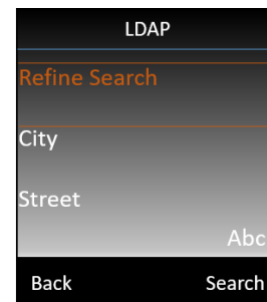
Additional filters

You can set two additional filters that will be offered to the user in order to specify the search more detailed.

- In the additional name fields enter the attribute name.
- In the corresponding value fields enter the attribute values.

Example:

Additional filter #1 name	City
Additional filter #1 value	((l=%%))
Additional filter #2 name	Street
Additional filter #2 value	((street=%%))



In addition to the fields defined in the Name filter parameter, the City and the Street fields are provided to the user. The user input for City is passed to the LDAP server in the l attribute, the user input for Street is passed in the street attribute.



If you do not want to offer the additional search fields, just remove the filter#1 and filter#2 name. Then you will not see them in your handset search window

Display format

In the Display format field you can stipulate how the search result is to be displayed on the handset.

- Enter combinations of different name and number attributes and special characters. You can select common formats from the attributes that are listed in the Configuration of directory items section of the page.

For the attribute values to be shown for the required attribute, the attribute name must be preceded by a percent sign (%).

Example:

Data of a directory entry on the LDAP server:

displayName:	Peter Black
givenName:	Peter
sn:	Black
telephoneNumber:	0891234567890
mobile:	012398765432

Attribute definition in the Web configurator:

Display format	%sn, %givenName; %telephoneNumber/%mobile
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The entry is shown on the handset as follows:

Black, Peter; 0891234567890/012398765432

Enable list mode

- Define what should be initially shown, when the user opens the LDAP directory.

Activated	A list of all entries of the LDAP directory is shown.
Not activated	An editor is opened first that allows the user to select a specific search area within the LDAP database and thereby to reduce the number of entries.

☒ Enable list mode

Name filter

(sn=%)

Number filter

((telephoneNumber=*)(mobile=*)(homeph

Additional filter #1 name

City

Additional filter #1 value

((l=*))

Additional filter #2 name

Street

Additional filter #2 value

((street=*))

Display format

%displayName


Max. number of search results

50

Filter	
Name filter	<p>The name filter decides which attribute is used for the search.</p> <p>Example:</p> <p>(displayName=%). The percent sign (%) is replaced by the name or part of the name entered by the user. If a user enters the letter "A", for example, all entries in which the attribute displayName begins with "A" are searched for in the LDAP database. If the user then enters a "b", entries are searched in which the displayName begins with "Ab".</p>
Number filter	<p>The number filter stipulates the criteria for the automatic completion of telephone numbers.</p> <p>Example:</p> <p>((telephoneNumber=%)(mobile=%)). The percent sign (%) is then replaced by the part of the telephone number entered by the user. When dialling, if a user enters the numbers "123", for example, all telephone numbers that begin with "123" are searched for in the LDAP database. The telephone number is completed with the addition of information from the database.</p>
Additional filter #1 name	Enter the name of an additional attribute that will be offered to the user in order to specify the search more detailed.
Additional filter #1 value	Enter the value for the attribute entered in the corresponding name field.
Additional filter #2 name	Enter the name of an additional attribute that will be offered to the user in order to specify the search more detailed.
Additional filter #2 value	Enter the value for the attribute entered in the corresponding name field.
Display format	<p>In this field you can stipulate how the search result is to be displayed on the handset.</p> <p>Enter combinations of different name and number attributes and special characters. You can select common formats from the attributes that are listed in the Configuration of directory items section of the page.</p>
Max. number of search results	Enter the maximum number of search results that is to be returned by one search operation.

Configuration of directory items

For each field of a directory entry that should be displayed on the handsets enter the name of the corresponding LDAP attribute. Multiple attributes can be separated by commas.

First name	<input type="text" value="givenName"/>
Surname	<input type="text" value="sn"/>
Phone (home)	<input type="text" value="homePhone"/>
Phone (office)	<input type="text" value="telephoneNumber"/>
Phone (mobile)	<input type="text" value="mobile"/>
E-mail	<input type="text"/>
Fax	<input type="text"/>
Company	<input type="text"/>
Street	<input type="text"/>
City	<input type="text"/>
Zip	<input type="text"/>
Country	<input type="text"/>
Additional attribute	<input type="text"/>
<input type="checkbox"/> Additional attribute can be dialled 	

Field of a directory entry	Attribute name in the LDAP database
First name	givenName
Surname	sn, cn, displayName
Phone (home)	homePhone, telephoneNumber
Phone (office)	telephoneNumber
Phone (mobile)	mobile
E-mail	mail
Fax	facsimileTelephoneNumber
Company	company, o, ou
Street	street
City	l, postalAddress
Zip	postalCode
Country	friendlyCountryName, c
Additional attribute	user-defined

- For each field of a directory entry that should be displayed on the handsets enter the name of the corresponding LDAP attribute. Multiple attributes can be separated by commas.

Examples:

- Mark the check box Additional attribute can be dialed, if an additional attribute is defined and it is a phone number

Lookup caching policy

You can change the Lookup caching policy, see this wiki page: [FAQ - Lookup caching](#)

Auto-provisioning

Parameter	Value	Description
LDAPDir.0.DirName	Max. 20 characters	Directory name: Enter a name in the field . This is the name under which the directory will be displayed on the handsets
Netdir.<x>.Activated 0 = LDAP 1, 7 = LDAP 2, 8 = LDAP 3, 9 = LDAP 4, 10 = LDAP 5, 11 = LDAP 6, 12 = LDAP 7, 13 = LDAP 8, 14 = LDAP 9, 15 = LDAP 10	0 = Off 1 = On	Enable directory:
LDAPDir.0.ServerURL	IP address/ DNS name	Server address: Enter the URL of the LDAP server
LDAPDir.0.ServerPort	1 - 65535 (Default: 389)	Server port: Enter the port the LDAP server expects database requests
LDAPDir.0.BaseDN	Default: 0, the search starts at the upper area of the LDAP database.	Search base (BaseDN): The LDAP database is hierarchical in design. With the LDAP Search base (BaseDN) parameter, stipulate in which area the search should begin.
LDAPDir.0.Username	max. 254 characters	Username: Enter a global username for the user access to the LDAP director.
LDAPDir.0.Password	max. 254 characters	Password: Enter a global password for the user access to the LDAP directory.
LDAPDir.0.TlsMode	0 = Off 1 = 2 =	Secure LDAP:
Search in LDAP database		
LDAPDir.0.StartWithList	0 = Off 1 = On	Enable List mode: Define what should be initially shown, when the user opens the LDAP directory
LDAPDir.0.NameFilter	((cn=*)(sn=*))	Name filter: The name filter decides which attribute is used for the search.
LDAPDir.0.NumberFilter	((telephoneNumber=*)(mobile=*))	Number filter: The number filter stipulates the criteria for the automatic completion of telephone numbers.
LDAPDir.0.AdditionalFilter1Name		Additional filter #1 name: Enter the name of an additional attribute that will be offered to the user in order to specify the search more detailed.
LDAPDir.0.AdditionalFilter1		Additional filter #1 value: Enter the value for the attribute entered in the corresponding name field.
LDAPDir.0.AdditionalFilter2Name		Additional filter #2 name: Enter the name of an additional attribute that will be offered to the user in order to specify the search more detailed.
LDAPDir.0.AdditionalFilter2		Additional filter #2 value: Enter the value for the attribute entered in the corresponding name field.
LDAPDir.0.DisplayName		Display format: In this field you can stipulate how the search result is to be displayed on the handset.

LDAPDir.0. MaxNrOfSearchEntries	50	Max. number of search results:
	Configuration of directory items	
LDAPDir.0.ItemFN		First name
LDAPDir.0.ItemLN		Surname
LDAPDir.0.ItemPH		Phone (home)
LDAPDir.0.ItemPO		Phone (office)
LDAPDir.0.ItemPM		Phone (mobile)
LDAPDir.0.ItemEM		E-mail
LDAPDir.0.ItemFX		Fax
LDAPDir.0.ItemCP		Company
LDAPDir.0.ItemST		Street
LDAPDir.0.ItemCT		City
LDAPDir.0.ItemZP		Zip
LDAPDir.0.ItemCO		Country
LDAPDir.0.ItemAA		Additional attribute
LDAPDir.0. IsAdditionalAttributeDialable	0 = Disabled 1 = Enabled	Additional attribute can be dialed:
	Other	
LDAPDir.0.BlankFilter		<p>If "BlankFilter" is empty, LDAP requests will work as previous - no changes.</p> <p>If "BlankFilter" is filled:</p> <p>a) we will use text from "BlankFilter" as a default filter for LDAP queries instead of "objectClass"</p> <p>b) we will send request for detail of entries using new filter instead of "objectName". New filter will be created with attributes received from first query - this will be attributes from "DisplayName". Example: "DisplayName"="%cn, %sn", LDAP filter for detailView will be "(&(cn=<received_cn>)(sn=<received_sn>))"</p>