

# Idap-carddav server

- [Installation via Docker](#)

# Installation via Docker

## Beschreibung:

Ein ldap Server für Adressbücher mit carddav sync.

## Installation:

### Docker installieren

```
apt install docker.io docker-compose curl
```

### Nun Projektverzeichnisse erstellen

```
ldap-carddav-stack/  
├─ docker-compose.yml  
├─ .env  
├─ ldap-carddav/  
│ └─ conf.php # deine Konfiguration  
├─ Dockerfile # für ldap-carddav  
├─ ldap-carddav-data
```

```
mkdir -p /root/ldap-carddav-stack/ldap-carddav  
mkdir -p /root/ldap-carddav-stack/ldap-carddav-data
```

### Dockerfile erstellen zum image bauen

```
nano /root/ldap-carddav-stack/Dockerfile
```

### Inhalt

```
FROM debian:bullseye
```

```
ENV DEBIAN_FRONTEND=noninteractive
```

```
# Abhängigkeiten installieren
```

```
RUN apt-get update && apt-get install -y \
```

```
    apache2 \
```

```
    php \
```

```
    php-ldap \
```

```
    php-xml \
```

```
    php-mbstring \
```

```
    php-sqlite3 \
```

```
    sqlite3 \
```

```
    libapache2-mod-php \
```

```
    nano \
```

```
    curl \
```

```
    ldap-utils \
```

```
    composer \
```

```
    && apt-get clean
```

```
# ldap-carddav klonen
```

```
RUN git clone https://github.com/isubsoft/ldap-carddav.git /var/www/html/ldap-carddav
```

```
# Composer-Abhängigkeiten installieren
```

```
WORKDIR /var/www/html/ldap-carddav
```

```
RUN composer install
```

```
# Rewrite-Modul aktivieren
```

```
RUN a2enmod rewrite
```

```
# 000-default.conf ersetzen
```

```
RUN rm /etc/apache2/sites-enabled/000-default.conf && \
```

```
    echo '<VirtualHost *:80>\n\
```

```
    ServerAdmin admin@example.org\n\
```

```
    DocumentRoot /var/www/html/ldap-carddav\n\
```

```
\n\
```

```
    <Directory /var/www/html/ldap-carddav>\n\
```

```
        Options Indexes FollowSymLinks\n\
```

```
        AllowOverride All\n\
```

```
        Require all granted\n\
```

```
DirectoryIndex server.php\n\nRewriteEngine On\n\nRewriteCond %{REQUEST_FILENAME} !-f\n\nRewriteCond %{REQUEST_FILENAME} !-d\n\nRewriteRule ^(.*)$ server.php [QSA,L]\n\n</Directory>\n\n\n\nRedirect 301 /.well-known/carddav /server.php\n\n</VirtualHost>' > /etc/apache2/sites-enabled/000-default.conf\n\n# Apache starten\nCMD ["apachectl", "-D", "FOREGROUND"]\n\nEXPOSE 80
```

## Die .env Datei

```
nano /root/ldap-carddav-stack/.env
```

## Inhalt

```
LDAP_ORGANISATION=ExampleCorp\nLDAP_DOMAIN=example\nLDAP_TOP_DOMAIN=local\nLDAP_ADMIN_PASSWORD=admin
```

## Die compose Datei

```
nano /root/ldap-carddav-stack/docker-compose.yml
```

## Inhalt

```
version: '3.8'\n\nservices:\n  ldap:
```

image: osixia/openldap:1.5.0

container\_name: ldap

environment:

LDAP\_ORGANISATION: \${LDAP\_ORGANISATION}

LDAP\_DOMAIN: \${LDAP\_DOMAIN}.\${LDAP\_TOP\_DOMAIN}

LDAP\_ADMIN\_PASSWORD: \${LDAP\_ADMIN\_PASSWORD}

volumes:

- ./ldap\_data:/var/lib/ldap

- ./ldap\_config:/etc/ldap/slapd.d

ports:

- "389:389"

phpldapadmin:

image: osixia/phpldapadmin:0.9.0

container\_name: phpldapadmin

environment:

PHPLDAPADMIN\_LDAP\_HOSTS: ldap

ports:

- "6443:443"

carddav:

build:

context: .

dockerfile: Dockerfile

container\_name: ldap-carddav

ports:

- "80:80"

volumes:

- ./ldap-carddav/conf.php:/var/www/html/ldap-carddav/conf/conf.php:ro

- ./ldap-carddav-data:/var/www/html/ldap-carddav/data

depends\_on:

- ldap

environment:

- LDAP\_HOST=ldap

- LDAP\_BASE\_DN=dc=\${LDAP\_DOMAIN},dc=\${LDAP\_TOP\_DOMAIN}

- LDAP\_BIND\_DN=cn=admin,dc=\${LDAP\_DOMAIN},dc=\${LDAP\_TOP\_DOMAIN}

- LDAP\_BIND\_PASSWORD=\${LDAP\_ADMIN\_PASSWORD}

# - LDAP\_BASE\_DN\_SYNC=dc=\${LDAP\_DOMAIN},dc=\${LDAP\_TOP\_DOMAIN}

# - LDAP\_BIND\_DN\_SYNC=cn=shacker,dc=\${LDAP\_DOMAIN},dc=\${LDAP\_TOP\_DOMAIN}

# - LDAP\_BIND\_PASSWORD\_SYNC=1234

Container starten:

```
docker-compose up -d
```

## PHP File

```
nano /root/ldap-carddav-stack/ldap-carddav/conf.php
```

Version 1: Nur ein Adressbuch, für alle schreibend:

Inhalt

```
<?php

$config = [];

// === TEMP / DATA ===
$config['tmpdir'] = '%systempdir';
$config['datadir'] = '/var/www/html/ldap-carddav/data';

// === DATABASE ===
$config['sync_database'] = [
    'dsn' => 'sqlite:/var/www/html/ldap-carddav/data/cards.db',
    'username' => '',
    'password' => '',
    'options' => [],
    'init_commands' => []
];

// === LDAP SERVER CONFIG ===
$config['server']['ldap'] = [
    'host' => getenv('LDAP_HOST') ?: 'localhost',
    'network_timeout' => 10,
    'connection_security' => 'none'
];

// === LDAP AUTH ===
$config['auth']['ldap'] = [
    'base_dn' => getenv('LDAP_BASE_DN') ?: 'dc=example,dc=local',
    'bind_dn' => '%dn',
```

```
'bind_pass' => '%p',
'search_base_dn' => '',
'search_filter' => '(&(objectclass=inetOrgPerson)(uid=%u))',
'search_bind_dn' => getenv('LDAP_BIND_DN') ?: 'cn=admin,dc=example,dc=local',
'search_bind_pw' => getenv('LDAP_BIND_PASSWORD') ?: 'admin',
'scope' => 'list'
];
```

```
// === PRINCIPAL SEARCH ===
```

```
$config['principal']['ldap'] = [
    'base_dn' => getenv('LDAP_BASE_DN') ?: 'dc=example,dc=local',
    'search_base_dn' => '',
    'search_filter' => '(&(objectclass=inetOrgPerson)(uid=*))',
    'search_bind_dn' => getenv('LDAP_BIND_DN') ?: 'cn=admin,dc=example,dc=local',
    'search_bind_pw' => getenv('LDAP_BIND_PASSWORD') ?: 'admin',
    'scope' => 'list',
    'fieldmap' => [
        'id' => 'uid',
        'displayname' => 'cn',
        'mail' => 'mail'
    ]
];
```

```
// Hinweis: Die folgenden Einträge sind stark gekürzt. Siehe Original für volle Struktur.
```

```
// Du kannst z. B. $config['card']['addressbook']['ldap']['me'], ['global'], ['personal'] wie oben mit getenv() einbinden.
```

```
// Beispiel für ein Adressbuch-Eintrag mit bind_dn über ENV
```

```
$config['card']['addressbook']['ldap']['personal'] = [
    'name' => 'starface',
    'description' => 'Starface Kontakte',
    'user_specific' => true,
    'writable' => true,

    'group_LDAP_Object_Classes' => ['groupOfNames'],
    'group_required_fields' => ['cn', 'member'],
    'group_LDAP_rdn' => 'cn',
    'group_member_map' => [ 'MEMBER' => [ 'field_name' => 'member' ] ],

    'base_dn' => getenv('LDAP_BASE_DN') ?: 'dc=example,dc=local',
```

```

'filter' => '(objectClass=inetOrgPerson)',
'bind_dn' => getenv('LDAP_BIND_DN') ?: 'cn=admin,dc=example,dc=local',
'bind_pass' => getenv('LDAP_BIND_PASSWORD') ?: 'admin',
'scope' => 'sub',

'LDAP_Object_Classes' => ['inetOrgPerson'],
'required_fields' => ['cn','sn'],
'LDAP_rdn' => 'cn',

// Schreibrechte aktivieren
//"field_acl" => [
//  'eval' => 'w'
//  'list' => ['displayName', 'homePhone', 'telephoneNumber', 'facsimileTelephoneNumber', 'pager', 'mobile',
'homePostalAddress', 'preferredLanguage']
[] [] [] [] [] [] [] [] // leere Liste = alles erlaubt
// ],

// Vollständige Feldzuordnung für Outlook / CalDAV
'fieldmap' => [
  'FN' => ['field_name' => 'cn'],
  'N' => ['field_name' => [
    'last_name' => 'sn',
    'first_name' => 'givenName',
    'prefix' => 'personalTitle'
  ]],
  'EMAIL' => ['field_name' => 'mail'],
  'ORG' => ['field_name' => [
    'org_name' => 'o',
    'org_unit_name' => 'ou'
  ]],
  'TITLE' => ['field_name' => 'title'],
  'ROLE' => ['field_name' => 'employeeType'],
  'NICKNAME' => ['field_name' => 'displayName'],
  'PHOTO' => [[
    'field_name' => 'jpegphoto',
    'parameters' => [],
    'reverse_map_parameter_index' => 0,
    'decode_file' => true
  ]],
  'NOTE' => ['field_name' => 'description'],

```

```
'TEL' => [  
  [ // Fax number  
    'field_name' => 'facsimileTelephoneNumber',  
    'parameters' => [  
      ['TYPE' => ['fax']],  
      ['TYPE' => ['fax', 'work']],  
      ['TYPE' => ['work', 'fax']],  
      ['TYPE' => 'facsimile'],  
      ['TYPE' => ['voice', 'fax']],  
      ['TYPE' => ['fax', 'voice']],  
      null  
    ],  
    'reverse_map_parameter_index' => 0  
  ],  
  [ // Work number  
    'field_name' => 'telephoneNumber',  
    'parameters' => [  
      ['TYPE' => ['work']],  
      ['TYPE' => ['voice', 'work']],  
      ['TYPE' => 'work'],  
      ['TYPE' => 'voice'],  
      null  
    ],  
    'reverse_map_parameter_index' => 0  
  ],  
  [ // Home number  
    'field_name' => 'homePhone',  
    'parameters' => [  
      ['TYPE' => ['home']],  
      ['TYPE' => ['voice', 'home']],  
      ['TYPE' => 'home'],  
      null  
    ],  
    'reverse_map_parameter_index' => 0  
  ],  
  [ // Mobile number  
    'field_name' => 'mobile',  
    'parameters' => [  
      ['TYPE' => ['cell']],  
      ['TYPE' => ['voice', 'cell']],
```

```

        ['TYPE' => 'cell'],
        null
    ],
    'reverse_map_parameter_index' => 0
],
[ // Pager
    'field_name' => 'pager',
    'parameters' => [
        ['TYPE' => ['pager']],
        null
    ],
    'reverse_map_parameter_index' => 0
]
],
'NOTE' => [
    'field_name' => 'description',
    'parameters' => [],
    'reverse_map_parameter_index' => 0
],
'ADR' => [
    [
        'field_name' => [
            'po_box'    => 'postOfficeBox',
            'street'   => 'street',
            'locality' => 'l',
            'province' => 'st',
            'postal_code' => 'postalCode'
        ],
        'parameters' => ['TYPE' => 'work'],
        'map_component_separator' => ';',
        'reverse_map_parameter_index' => 0
    ],
    // Privatadresse
    [
        'field_name' => 'homePostalAddress',
        'parameters' => ['TYPE' => 'home'],
        'map_component_separator' => '$',
        'reverse_map_parameter_index' => 0
    ]
],
],

```

```
'LANG' => ['field_name' => 'preferredLanguage']  
]  
];
```

## Version 2, nur schreibend mit einer Gruppe

```
<?php  
  
$config = [];  
  
// === TEMP / DATA ===  
$config['tmpdir'] = '%systemtmpdir';  
$config['datadir'] = '/var/www/html/ldap-carddav/data';  
  
// === DATABASE ===  
$config['sync_database'] = [  
    'dsn' => 'sqlite:/var/www/html/ldap-carddav/data/cards.db',  
    'username' => '',  
    'password' => '',  
    'options' => [],  
    'init_commands' => []  
];  
  
// === LDAP SERVER CONFIG ===  
$config['server']['ldap'] = [  
    'host' => getenv('LDAP_HOST') ?: 'localhost',  
    'network_timeout' => 10,  
    'connection_security' => 'none'  
];  
  
// === LDAP AUTH ===  
$config['auth']['ldap'] = [  
    'base_dn' => getenv('LDAP_BASE_DN') ?: 'dc=example,dc=local',  
    'bind_dn' => '%dn',  
    'bind_pass' => '%p',  
    'search_base_dn' => '',  
    'search_filter' => '(&(objectclass=inetOrgPerson)(uid=%u))',  
    'search_bind_dn' => getenv('LDAP_BIND_DN') ?: 'cn=admin,dc=example,dc=local',  
    'search_bind_pw' => getenv('LDAP_BIND_PASSWORD') ?: 'admin',  
    'scope' => 'list'
```

```

];

// === PRINCIPAL SEARCH ===
$config['principal']['ldap'] = [
    'base_dn' => getenv('LDAP_BASE_DN') ?: 'dc=example,dc=local',
    'search_base_dn' => '',
    'search_filter' => '(&(objectclass=inetOrgPerson)(uid=*))',
    'search_bind_dn' => getenv('LDAP_BIND_DN') ?: 'cn=admin,dc=example,dc=local',
    'search_bind_pw' => getenv('LDAP_BIND_PASSWORD') ?: 'admin',
    'scope' => 'list',
    'fieldmap' => [
        'id' => 'uid',
        'displayname' => 'cn',
        'mail' => 'mail'
    ]
];

// Funktion einfügen oder inkludieren
function getWritableUserIdsFromLdapGroup(): array {
    $groupCN = getenv('LDAP_WRITE_GROUP') ?: 'write';
    $ldapDomain = getenv('LDAP_DOMAIN') ?: 'example';
    $ldapTopDomain = getenv('LDAP_TOP_DOMAIN') ?: 'local';
    $groupDN = "cn={$groupCN},dc={$ldapDomain},dc={$ldapTopDomain}";

    $ldap = ldap_connect('localhost');
    ldap_set_option($ldap, LDAP_OPT_PROTOCOL_VERSION, 3);

    $bindDN = getenv('LDAP_BIND_DN') ?: "cn=admin,dc={$ldapDomain},dc={$ldapTopDomain}";
    $bindPW = getenv('LDAP_BIND_PASSWORD') ?: 'admin';

    if (!@ldap_bind($ldap, $bindDN, $bindPW)) {
        error_log("⚠ LDAP Bind fehlgeschlagen mit DN: $bindDN");
        return [];
    }

    $results = ldap_search($ldap, $groupDN, '(objectClass=groupOfNames)', ['member']);
    if (!$results) {
        error_log("⚠ Konnte Mitglieder von Gruppe $groupDN nicht abrufen.");
        return [];
    }
}

```

```

$entries = ldap_get_entries($ldap, $results);
if (!isset($entries[0]['member'])) {
    return [];
}

$uids = [];
foreach ($entries[0]['member'] as $key => $dn) {
    if (is_numeric($key) && preg_match('/uid=([^\,]+)/i', $dn, $matches)) {
        $uids[] = $matches[1];
    }
}

return $uids;
}

// Benutzer-ID abrufen
$user = $_SERVER['PHP_AUTH_USER'] ?? null;

// Schreibrechte prüfen
$writeUsers = getWritableUserIdsFromLdapGroup();
$isWritable = in_array($user, $writeUsers);

// Hinweis: Die folgenden Einträge sind stark gekürzt. Siehe Original für volle Struktur.
// Du kannst z. B. $config['card']['addressbook']['ldap']['me'], ['global'], ['personal'] wie oben mit getenv()
einbinden.

// Beispiel für ein Adressbuch-Eintrag mit bind_dn über ENV
$config['card']['addressbook']['ldap']['personal'] = [
    'name' => 'starface',
    'description' => 'Starface Kontakte',
    'user_specific' => true,
    'writable' => $isWritable,

    'group_LDAP_Object_Classes' => ['groupOfNames'],
    'group_required_fields' => ['cn', 'member'],
    'group_LDAP_rdn' => 'cn',
    'group_member_map' => [ 'MEMBER' => [ 'field_name' => 'member' ] ],

```

```

'base_dn' => getenv('LDAP_BASE_DN') ?: 'dc=example,dc=local',
'filter' => '(objectClass=inetOrgPerson)',
'bind_dn' => getenv('LDAP_BIND_DN') ?: 'cn=admin,dc=example,dc=local',
'bind_pass' => getenv('LDAP_BIND_PASSWORD') ?: 'admin',
'scope' => 'sub',

'LDAP_Object_Classes' => ['inetOrgPerson'],
'required_fields' => ['cn','sn'],
'LDAP_rdn' => 'cn',

// Schreibrechte aktivieren
//"field_acl" => [
//  'eval' => 'w'
//  'list' => ['displayName', 'homePhone', 'telephoneNumber', 'facsimileTelephoneNumber', 'pager', 'mobile',
'homePostalAddress', 'preferredLanguage']
[] [] [] [] [] [] [] [] // leere Liste = alles erlaubt
// ],

// Vollständige Feldzuordnung für Outlook / CalDAV
'fieldmap' => [
  'FN' => ['field_name' => 'cn'],
  'N' => ['field_name' => [
    'last_name' => 'sn',
    'first_name' => 'givenName',
    'prefix' => 'personalTitle'
  ]],
  'EMAIL' => ['field_name' => 'mail'],
  'ORG' => ['field_name' => [
    'org_name' => 'o',
    'org_unit_name' => 'ou'
  ]],
  'TITLE' => ['field_name' => 'title'],
  'ROLE' => ['field_name' => 'employeeType'],
  'NICKNAME' => ['field_name' => 'displayName'],
  'PHOTO' => [[
    'field_name' => 'jpegphoto',
    'parameters' => [],
    'reverse_map_parameter_index' => 0,
    'decode_file' => true
  ]],
],

```

```
'NOTE' => ['field_name' => 'description'],
'TEL' => [
  [ // Fax number
'field_name' => 'facsimileTelephoneNumber',
'parameters' => [
  ['TYPE' => ['fax']],
  ['TYPE' => ['fax', 'work']],
  ['TYPE' => ['work', 'fax']],
  ['TYPE' => 'facsimile'],
  ['TYPE' => ['voice', 'fax']],
  ['TYPE' => ['fax', 'voice']],
  null
],
'reverse_map_parameter_index' => 0
],
[ // Work number
'field_name' => 'telephoneNumber',
'parameters' => [
  ['TYPE' => ['work']],
  ['TYPE' => ['voice', 'work']],
  ['TYPE' => 'work'],
  ['TYPE' => 'voice'],
  null
],
'reverse_map_parameter_index' => 0
],
[ // Home number
'field_name' => 'homePhone',
'parameters' => [
  ['TYPE' => ['home']],
  ['TYPE' => ['voice', 'home']],
  ['TYPE' => 'home'],
  null
],
'reverse_map_parameter_index' => 0
],
[ // Mobile number
'field_name' => 'mobile',
'parameters' => [
  ['TYPE' => ['cell']],
```

```

    ['TYPE' => ['voice', 'cell']],
    ['TYPE' => 'cell'],
    null
  ],
  'reverse_map_parameter_index' => 0
],
[ // Pager
  'field_name' => 'pager',
  'parameters' => [
    ['TYPE' => ['pager']],
    null
  ],
  'reverse_map_parameter_index' => 0
]
],
'NOTE' => [
  'field_name' => 'description',
  'parameters' => [],
  'reverse_map_parameter_index' => 0
],
'ADR' => [
  [
    'field_name' => [
      'po_box'    => 'postOfficeBox',
      'street'   => 'street',
      'locality' => 'l',
      'province' => 'st',
      'postal_code' => 'postalCode'
    ],
    'parameters' => ['TYPE' => 'work'],
    'map_component_separator' => ';',
    'reverse_map_parameter_index' => 0
  ],
  // Privatadresse
  [
    'field_name' => 'homePostalAddress',
    'parameters' => ['TYPE' => 'home'],
    'map_component_separator' => '$',
    'reverse_map_parameter_index' => 0
  ]
]

```

```
],  
  'LANG' => ['field_name' => 'preferredLanguage']  
]  
];
```

Nun noch die. env erweitern. write ist hier der gruppenname

```
...  
LDAP_WRITE_GROUP=write  
...
```

Nun noch wieder das Adressbuch mit syncdb.php löschen neu anlegen, siehe [hier](#)

## Aufrufen LDAP und co:

- **phpLDAPadmin:** <https://localhost:6443>  
Benutzername aus unserem Beispiel : cn=admin,dc=example,dc=local  
Passwort aus unserem Beispiel : admin



Authenticate to server ldap

**Login DN:**  
cn=admin,dc=example,dc=local

**Password:**  
.....

Anonymous

Authenticate

- **ldap-carddav WebDAV/CardDAV:** <http://localhost/ldap-carddav/>  
Die Benutzer dazu werden im LDAP Webgui angelegt, dazu ein ein eigenes Kaptitel

## Datenbank initialisieren

```
docker-compose exec carddav /bin/bash  
sqlite3 /var/www/html/ldap-carddav/data/cards.db < /var/www/html/ldap-carddav/sql/sqlite/ddl.sql  
php /var/www/html/ldap-carddav/src/App/syncdb.php init
```

Danach vom container wieder abmelden und chmod 777 über die card.db

```
chown www-data:www-data -R /var/www/html/ldap-carddav/data
```

## PHP ini Änderungen durchführen und neu mit der Datenbank synchronisieren:

Wenn die PHP geändert wird um zum Beispiel Felder hinzugefügt werden, muss die Datenbank neu initialisiert werden.

```
docker-compose exec carddav /bin/bash  
php /var/www/html/ldap-carddav/src/App/syncdb.php
```

Ausgabe:

Dort 0 Auswählen

```
Choose the entity you want to operate upon. Enter 0 for addressbook and 1 for user:
```

Nun mit 3 bestätigen

```
Enter the operation to perform on address book. Enter 0 to list, 1 to add, 2 to rename and 3 to delete:
```

Nun Adressbuchname eingeben:personal.

```
Enter name of the address book to delete:
```

Nun wurde das Buch gelöscht

```
Address book 'personal' has been deleted.
```

Nun kann ein neuer init stattfinden

```
php /var/www/html/ldap-carddav/src/App/syncdb.php init
```

Nun die Rechte neu setzen

```
chown www-data:www-data -R /var/www/html/ldap-carddav/data
```

Ausgabe:

```
Initializing sync database ...  
Address book 'personal' has been successfully added to sync database.
```

Address book(s) successfully imported.

Benutzer anlegen:

Im LDAP Webgui einloggen unter

https://<ip>:6443

**Authenticate to server ldap**

**Login DN:**  
cn=admin,dc=example,dc=local

**Password:**  
●●●●●●

**Anonymous**

**Authenticate**

Dort neues child Element anlegen...

**ldap**

schema search refresh info import export logout  
Logged in as: cn=admin,dc=example,dc=local

dc=example, dc=local (2)

Create new entry here

**dc=example**

Server: ldap Distinguished Name: dc=example,dc=local  
Template: Default

- Refresh
- Switch Template
- Copy or move this entry
- Rename
- Create a child entry**
- Hint: To delete an attribute, empty the text field and click save.
- View 2 children
- Hint: To view the schema for an attribute, click the attribute name.
- Show internal attributes
- Export
- Delete this entry
- Compare with another entry
- Add new attribute
- Export subtree

Vom Typ PosixGroup

**Templates:**

- Courier Mail: Account
- Courier Mail: Alias
- Generic: Address Book Entry
- Generic: DNS Entry
- Generic: LDAP Alias
- Generic: Organisational Role
- Generic: Organisational Unit
- Generic: Posix Group**
- Generic: Simple Security Object
- Generic: User Account
- Kolab: User Entry
- Samba: Account
- Samba: Domain
- Samba: Group Mapping
- Samba: Machine
- Sendmail: Alias
- Sendmail: Cluster
- Sendmail: Domain
- Sendmail: Relays
- Sendmail: Virtual Domain
- Sendmail: Virtual Users
- Thunderbird: Address Book Entry
- Default

mit dem namen users

**Create Object**

Server: **ldap** Container: **dc=example,dc=local**  
Template: **Generic: Posix Group (posixGroup)**

**New Posix Group (Step 1 of 1)**

**Group** alias, required, rdn

**GID Number** alias, required, hint, ro

**Users** alias, hint

Nun nochmals bestätigen

Do you want to create this entry?









| Attribute                           | New Value  | Skip                     |
|-------------------------------------|------------|--------------------------|
| <b>cn=users,dc=example,dc=local</b> |            |                          |
| <b>Group</b>                        | users      | <input type="checkbox"/> |
| <b>GID Number</b>                   | 500        | <input type="checkbox"/> |
| <b>objectClass</b>                  | posixGroup | <input type="checkbox"/> |

nun eine weitere elemt vom typ organizationRole mit den namen write anlegen

## Create Object

Server: **Idap** Container: **dc=example,dc=local**

### Select a template for the creation process

-  Courier Mail: Account
-  Courier Mail: Alias
-  Generic: Address Book Entry
-  Generic: DNS Entry
-  Generic: LDAP Alias
-  **Generic: Organisational Role**
-  Generic: Organisational Unit
-  Generic: Posix Group
-  Generic: Simple Security Object
-  Generic: User Account
-  Kolab: User Entry
-  Samba: Account
-  Samba: Domain
-  Samba: Group Mapping
-  Samba: Machine
-  ~~Sendmail: Alias~~
-  ~~Sendmail: Cluster~~
-  ~~Sendmail: Domain~~
-  ~~Sendmail: Relays~~
-  ~~Sendmail: Virtual Domain~~
-  ~~Sendmail: Virtual Users~~
-  Thunderbird: Address Book Entry
-  Default

nun den Namen vergeben

## Create Object

Server: **Idap** Container: **dc=example,dc=local**  
Template: **Generic: Organisational Role (organizationalRole)**

### New Organisational Role (Step 1 of 1)

**Role CN**

alias, required, rdn

write \*

runter scrollen bis create object

**State** alias

**Postal code** alias

**Postal Address** alias

**Registered Address** alias

Nun einen Benutzer anlegen vom typ inetOrgPerson

|   |   |
|---|---|
| <ul style="list-style-type: none"> <li><input type="radio"/>  Courier Mail: Account</li> <li><input type="radio"/>  Courier Mail: Alias</li> <li><input type="radio"/>  Generic: Address Book Entry</li> <li><input type="radio"/>  Generic: DNS Entry</li> <li><input type="radio"/>  Generic: LDAP Alias</li> <li><input type="radio"/>  Generic: Organisational Role</li> <li><input type="radio"/>  Generic: Organisational Unit</li> <li><input type="radio"/>  Generic: Posix Group</li> <li><input type="radio"/>  Generic: Simple Security Object</li> <li><input type="radio"/> <b>Generic: User Account</b></li> <li><input type="radio"/>  Kolab: User Entry</li> <li><input type="radio"/>  Samba: Account</li> </ul> | <ul style="list-style-type: none"> <li><input type="radio"/>  Samba: Domain</li> <li><input type="radio"/>  Samba: Group Mapping</li> <li><input type="radio"/>  Samba: Machine</li> <li><input checked="" type="radio"/>  Sendmail: Alias</li> <li><input checked="" type="radio"/>  Sendmail: Cluster</li> <li><input checked="" type="radio"/>  Sendmail: Domain</li> <li><input checked="" type="radio"/>  Sendmail: Relays</li> <li><input checked="" type="radio"/>  Sendmail: Virtual Domain</li> <li><input checked="" type="radio"/>  Sendmail: Virtual Users</li> <li><input type="radio"/>  Thunderbird: Address Book Entry</li> <li><input type="radio"/>  Default</li> </ul> |
|---|---|

Daten ausfüllen

## New User Account (Step 1 of 1)

Common Name ist der Anzeigename im Baum

**First name** alias

 Max

**Last name** alias, required

Mustermann

**Common Name** alias, required, rdn

Max Mustermann

**User ID** alias, required

mmustermann

Das ist der Benutzername, dieser heißt nach dem speichern User Name

**Password** alias, hint



••••


md5

••••

(confirm)

[Check password...](#)

**UID Number** alias, required, hint, ro

 1000

**GID Number** alias, required, hint

users

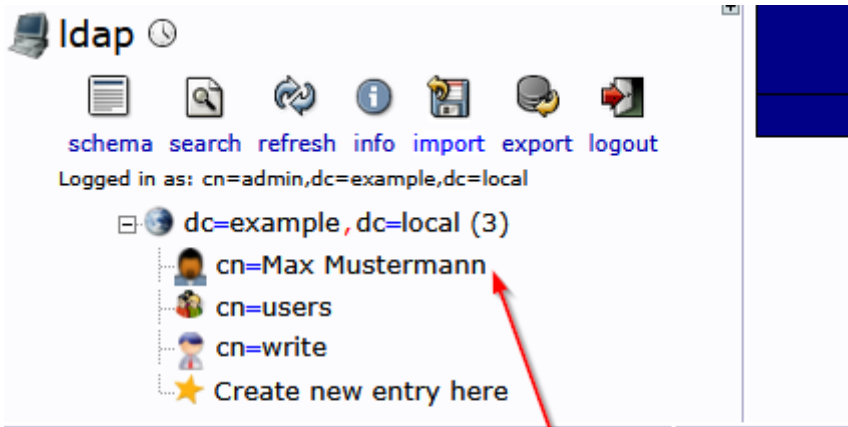
**Home directory** alias, required

/home/users/mmustermann

**Login shell** alias

Create Object

Nun sieht das ganz so aus:



Common name  
(Anzeigename)

Nun den benutzer im carddav Backend anlegen, nicht im Idap, das haben wir gerade getan.

```
docker-compose exec carddav /bin/bash  
php /var/www/html/ldap-carddav/src/App/syncdb.php
```

## Fehlersuche:

### Invalid Credentials:

Sollte Verbindung nicht zustande kommen, dann mal in die Apache2 log schauen.  
Im container anmelden

```
docker-compose exec carddav /bin/bash  
cat /var/log/apache2/error.log
```

Ausgabe:

```
[Sun May 18 09:28:57.236797 2025] [php:warn] [pid 13:tid 13] [client 172.0.0.2:61975] PHP Warning: ldap_bind(): Unable to bind to server: Invalid credentials in /var/www/html/ldap-carddav/src/DAV/Utility/LDAP.php on line 87  
[Sun May 18 09:28:57.237857 2025] [php:notice] [pid 13:tid 13] [client 172.0.0.2:61975] Could not establish bind connection to backend server in ISubsoft\\DAV\\Auth\\Backend\\LDAP::validateUserPass at line 65  
[Sun May 18 09:29:15.836070 2025] [php:warn] [pid 14:tid 14] [client 172.0.0.2:62681] PHP Warning: ldap_bind(): Unable to bind to server: Invalid credentials in /var/www/html/ldap-carddav/src/DAV/Utility/LDAP.php on line 87  
[Sun May 18 09:29:15.836147 2025] [php:notice] [pid 14:tid 14] [client 172.0.0.2:62681] Could not establish bind connection to backend server in ISubsoft\\DAV\\Auth\\Backend\\LDAP::validateUserPass at line 65  
[Sun May 18 09:31:28.821090 2025] [php:warn] [pid 9:tid 9] [client 172.0.0.2:62874] PHP Warning: ldap_bind(): Unable to bind to server: Invalid credentials in /var/www/html/ldap-carddav/src/DAV/Utility/LDAP.php on line 87  
[Sun May 18 09:31:28.821189 2025] [php:notice] [pid 9:tid 9] [client 172.0.0.2:62874] Could not establish bind connection to backend server in ISubsoft\\DAV\\Auth\\Backend\\LDAP::validateUserPass at line 65  
root@7dcf55307843:/var/www/html/ldap-carddav#
```

Testen der Daten

**Hinweis:** Paramter -w ist das Passwort aus der .env Datei für ldap

```
ldapwhoami -x -D "cn=admin,dc=example,dc=local" -w admin -H ldap://ldap
```

Ausgabe:

```
root@44a0bc55808:/var/www/html/ldap-carddav# ldapwhoami -x -D "cn=admin,dc=example,dc=local" -w admin -H ldap://ldap
dn:cn=admin,dc=example,dc=local
```

Testen ob ein Objekt sich ändern lässt

```
ldapmodify -x -D "cn=admin,dc=example,dc=local" -w admin -H ldap://ldap
```

Einfügen und dann strg+d drücken

```
dn: cn=shacker,dc=example,dc=local
changetype: modify
replace: mail
mail: test@example.org
```

Ein komplettes Objekt ausgeben

```
ldapsearch -x \
-D "cn=admin,dc=example,dc=local" \
-w admin \
-b "cn=Wolf, SDaniel,dc=example,dc=local" \
-LLL
```

Ausgabe:

```
dn: cn=Wolf\2C SDaniel,dc=example,dc=local
objectClass: inetOrgPerson
cn: Wolf, SDaniel
sn: Wolf
givenName: SDaniel
mail: daniel.wolf@test.de
```

Database readonly:

## Fehler aus der /var/log/apache2/error.log

```
attempt to write a readonly database, referer: http://192.168.0.231/server.php/addressbooks/mprangen/
[Thu Jul 31 19:11:24.152676 2025] [php7:notice] [pid 9:tid 9] [client 192.168.0.26:51450] Database query could
not be executed: ISubsoft\\DAV\\CardDAV\\Backend\\LDAP::fullSyncOperation at line no 1856, SQLSTATE[HY000]:
General error: 8 attempt to write a readonly database, referer:
http://192.168.0.231/server.php/addressbooks/mprangen/
[Thu Jul 31 19:12:16.335653 2025] [php7:notice] [pid 12:tid 12] [client 192.168.0.26:51452] Database query
could not be executed: ISubsoft\\DAV\\CardDAV\\Backend\\LDAP::fullSyncOperation at line no 1856,
SQLSTATE[HY000]: General error: 8 attempt to write a readonly database, referer:
http://192.168.0.231/server.php/addressbooks/mprangen/
[Thu Jul 31 19:12:18.828919 2025] [php7:notice] [pid 13:tid 13] [client 192.168.0.26:51453] Database query
could not be executed: ISubsoft\\DAV\\CardDAV\\Backend\\LDAP::fullSyncOperation at line no 1856,
SQLSTATE[HY000]: General error: 8 attempt to write a readonly database, referer:
http://192.168.0.231/server.php/addressbooks/mprangen/
```

Wenn syncdb.php ohne Probleme ausgeführt werden kann, liegt es nicht an Dateirechten bei root, sondern bei www-datat user.

wir werden das Verzeichnis nochmal neu mit rechten vergeben.

## In den Container einloggen

```
docker-compose exec carddav /bin/bash
```

## Dnn rechte vergeben

```
chown www-data:www-data -R /var/www/html/ldap-carddav/data
```

Ansonsten schauen wir uns mal an mit welchen umser der apache2 ausgeführt wird

```
ps aux | grep apache

root      1  0.0  0.0  2480  580 ?      Ss   19:32   0:00 /bin/sh /usr/sbin/apachectl -D FOREGROUND
root      8  0.0  1.4 206336 28308 ?      S    19:32   0:00 /usr/sbin/apache2 -D FOREGROUND
www-data  9  0.0  1.1 208744 23500 ?      S    19:32   0:00 /usr/sbin/apache2 -D FOREGROUND
www-data 10  0.0  1.1 208876 24056 ?      S    19:32   0:00 /usr/sbin/apache2 -D FOREGROUND
www-data 11  0.0  1.1 208876 23536 ?      S    19:32   0:00 /usr/sbin/apache2 -D FOREGROUND
www-data 12  0.0  1.1 208876 23556 ?      S    19:32   0:00 /usr/sbin/apache2 -D FOREGROUND
www-data 13  0.0  0.4 206376  9264 ?      S    19:32   0:00 /usr/sbin/apache2 -D FOREGROUND
root     42  0.0  0.0   3240   648 pts/0  S+   19:38   0:00 grep apache
```

