# Ticket: ownCloud Setup

1 second ago

## Setting up ownCloud

As an initial task, we set up another service that we provide to users over the next two weeks. For this we will use the locally hosted cloud solution ownCloud and integrate it into our existing system environment.

You can find more information on ownCloud here (we are working with version 8.1):

General Manual: https://doc.owncloud.org/

User Manual: <a href="https://doc.owncloud.org/server/8.1/user\_manual/">https://doc.owncloud.org/server/8.1/user\_manual/</a>

Administrator Manual: https://doc.owncloud.org/server/8.1/admin manual/

## **Database Setup**

On the db server create a new user as well as a database for ownCloud, and grant the necessary privileges on that database.

```
CREATE USER owncloud@'%' IDENTIFIED BY 'someReasonablyComplexPassword';
CREATE DATABASE owncloud;
GRANT ALL PRIVILEGES ON owncloud.* TO owncloud@'%';
```

Ensure that you can connect to the database from the app machine before continuing.

#### ownCloud Installation

Now you are ready to install ownCloud on the app machine. Ensure the app machine has the latest updates.

ownCloud has been removed from the standard Ubuntu repository to avoid potential security issues associated with delayed updates. We will thus use a freely available community version, but will need to add an entry to the apt sources, confirm its key, and update the repository sources.

```
echo 'deb http://download.opensuse.org/repositories/isv:/ownCloud:/community/xUbuntu_15.04/ /' >> /etc/apt/sources.list.d/owncloud.list

wget http://download.opensuse.org/repositories/isv:ownCloud:community/xUbuntu_15.04/Release.key

sudo apt-key add Release.key
```

sudo apt-get update

Now you should be able to install ownCloud using

sudo apt-get install owncloud

## **Database Configuration**

- 1. Open your browser at 'http://(hostname or IP of app machine)/owncloud'.
- 2. Click on 'Storage & Database'.
- 3. Select 'MySQL/MariaDB', enter created username, password and db host as configured during the database setup.
- 4. Enter an admin username and password of your choice. Leave the data folder unchanged (this is where ownCloud stores individual created files).
- 5. Confirm your selection. This creates the admin user (Remember the credentials!) and writes the base configuration. If you get the configuration wrong or want to inspect it, have a look at the file '/var/www/owncloud/config/config.php'. You can simply delete it in case you want to start over (if you got the configuration settings wrong).

Log into ownCloud and make yourself familiar with the environment and functionality.

### LDAP Setup

In a proper system environment you would want to maintain user information (as opposed to server admin information) in one place. In our case this is the ad machine. All users of ownCloud should authenticate against the active directory setup we created earlier this semester. To do this, perform the following steps.

- 1. Create a new Active Directory user for ownCloud, e.g. 'owncloud'. Make this user a domain admin. The distinguished name of this user would be CN=owncloud, CN=Users, DC=directory, DC=micro-agents, DC=net
- 2. Activate the LDAP plugin: Log into ownCloud as the admin user. At the top left there is a pull down menu. Select 'Apps' from it. From the apps under 'not enabled', find the 'LDAP user and group backend' and activate it.
- 3. Let's configure it. Back in the main screen, click on the admin user on the top right and select 'Admin'. In the admin page, move to 'LDAP'.
  - Server tab: The host is your AD server. It will probably auto-detect the port, but just in case
    it is 389. The user DN is the DN for the user we just created, the base DN is
    'DC=directory,DC=micro-agents,DC=net'.
  - Users tab: Set 'Only these object classes' to 'user'.
  - Login Filter tab: Edit the raw filter and substitute 'samaccountname=%uid' with read 'userprincipalname=%uid'
  - Group filter: You shouldn't have to touch this.

- Advanced tab: Tick the Case Insensitive LDAP server box and the Turn off SSL validation box. Under 'Directory Settings' set the User Display Name Field to 'name'. Set the Base User Tree to 'OU=OwnCloud Users, DC=directory, DC=micro-agents,DC=net'
- Expert tab: Set the Internal Username field to 'userprincipalname'.

This is pretty much it. Ensure that it works by using the test functionality available as part of this plugin and validate the configuration by clicking on 'Continue' (it will tell you if the configuration works). The ownCloud documentation is a good starting point.

https://doc.owncloud.org/server/8.1/admin\_manual/configuration\_user/user\_auth\_ldap.html

Once this is done, and any AD user created in the ownCloud Users OU will get an ownCloud login. Their login name is their AD userprincipal name, which will look like 'bobtheuser@directory.micro-agents.net'.

Without saying, ensure that you update the other systems to accommodate this new service.