OwnCloud

OwnCloud is a software i have been passively monitoring for some time now. evey once in a while i've installed it on my intranet server and tried out if it was ready for me to switch to it.

they have reached version 8 now (as of Mach 2015) and it has reached a state where i think i can use it as my primary file sharing solution internally in our household. It allowes me to store and manage my own data as well as my whifes data on our server at home. we can then acess it through the internet through a ssl encrypted link from anywhere and it also features a nice android app to keep some of your data even synced on your tablet and phone.

since I use linux and my whife uses windows, we appreciate the availability of a cross platform sync client. On my workstation at home i will mount my owncloud account through davfs2 which allowes me to access the “live” data. on my notebook and on my whifes notebook we are going to use the owncloud client which will synchronize the main part of our data. to access bulk data like pictures and stuff we can still use a webdav mount on either windows or linux which is available when online.

last but not least owncloud 8 features a fabulous web interface. it could still use some extra work in many places, but whatever feature is there works and whatever is missing is coming soon as they are under heavy development and release fast.

I think the project itself should be on pretty solid ground as it already has a huge user base throughout schools and universities.

So here are some things i have learned so far about using owncoud: By the way, i am running ubuntu on both my server and my desktops (xubuntu on the desktop side to be preceise) and my whifes notebook runs windows 7. we have android devices. whatever grows on trees is found only in our garden ;)

installation

that's very simple, just go to onwcloud.org and follow the installation instructions. for most distributions including ubuntu they hav a nice repo which can be added to your apt-sources. by using their own repo you make sure you are always running the latest security patches which is important for an application like this!

php-apcu

there seem to be some issues with the version of php-apcu that ubuntu 14.04 is currently using. owncloud 8 makes heavy use of it and therefore crashes about every hour or so when copying files because of that. the only thing that helps is to restart apache. a fix for this will soon be in the offical owncloud installation as they have added a version check and will only use php-apcu in versions they consider stable. until then, the easiest fix is to simply remove it and when you install new stuff, make sure it's not installed again on your system. this is only a temporary workaround until the version check is in their debian package

davfs2 mounts

locks

once you have installed davs2, make sure you disable the file locking mechanism. you can do this by editing `/etc/davfs2/davfs2.conf` and seting `use_locks 0` if you don't do this, all files created will just be empty hulls with no data inside

fstab

here's a line how you can use it in `/etc/fstab` to automount a webdav directory locally:

```
https://yourserver/remote.php/webdav       /home/psuter/data       davfs
uid=psuter,gid=psuter   0       0
```

passwords

since you will need a password you might want to save this information for mount to automatically mount your share on boot. you can do this by editing the file `/etc/davfs2/secrets` https://yourserver/remote.php/webdav youruser yourpassword make sure you edit the file as root and make sure the file is set to mode 0600 so it is readable only to root. after all it contains your password in clear text which is bad enough, so we don't want anybody else but root to read that.

Migrate Data

in order to migrate my data, i mounted my owncloud account through webdav as described above and then rsynced my data from its previous directory to webdav. make sure you have enough free space to do that in your owncloud data directory. the main advantage of rsync vs. cp is, that rsync allows to resume your copy process. this saved me from going nuts when i did not know about the apcu bug mentioned above.

one important thing thouhg: owncloud will not retain file change dates. it will set the file creation and change date to the current time when you ran the rsync. therefore, time checks should be disabled in rsync in order to do your sync. further more, since you are syncing this only once (at least i did) in order to speed things up, it is good enought to just compare file sizes in order to figure out if a file has been fully copied or not when you resume your sync process. so here is the rsync command i've used to do my migraton:

```
rsync -vrx --size-only /local/source/ /mnt/webdav/target/
```

it is not advisale to use this line if you plan to keep your local and webdav storage synced for a while because it will not detect if a file is modified but the size remains the same. for exmaple, if you correct a typo in a text file by changing a letter, this won't recoginze that!

Re-Share as samba mount

some devices in my network, like my HP OfficeJet MFP device need samba shares. My OfficeJet can scan to network shares, but they need to be windows shares. in order for such devices in my local network, i have created a user account like “local” to whom i can share directories i want my devices to access. so i have a “Scanned Documents” folder which is shared to “local”. on the server i then set up a local webdav mount for that user to say `/mnt/local` and share that mount via samba. this works perfectly and now my scanner can scan right into my owncloud directory which i then share with my whife. isn't that great :)

Android Webdav Clients

there seems to be a problem with many Android WebDAV clients when using mutliple Apache VirtualHosts on the same IP while using SSL encryption. FolderSync for example always reports “Not Found” when testing a connection.

In my Apache logs i found that the request for /remote.php/webdav went to my default VirtualHost rather than to the one i used for owncloud, so it seems that after checking the SSL cert there is no header information anymore containing the FQDN so that it can be used to redirect the reuqest to the right virtualhost.

some symlinking fiext the problem:
Here is the situation.
`DocumentRoot` of my owncloud installation: `/var/www/owncloud`
`DocumentRoot` of my default virtual host: `/var/www/pub`
URL of owncloud: `https://owncloud.mydomain.com/`

i then created a symlink in the default DocumentRoot to link to the owncloud root:

```
ln -s /var/www/owncloud /var/www/pub/owncloud
```

and a symlink within owncloud back to itself, so that even with the correct http header it will reach itself through the same url:

```
ln -s /var/www/ownlcoud /var/www/owncloud/owncloud
```

now i simply use `https://owncloud.mydomain.com/owncloud/remote.php/webdav` as my server's url and it all works :)