

EXPT 7

Aim: Installation and configuration of storage virtualization using own cloud- configure the user management. Configure the security groups wrt user management.

Objective: To understand how to install, configure, create, manage user and group of user accounts.

Theory: Storage as a service (SaaS) is a business model in which a company leases or rents its storage infrastructure to another company or individuals to store data. Small companies and individuals often find this to be a convenient methodology for managing backups, and providing cost savings in personnel, hardware and physical space.

A company providing SaaS may be called a storage service provider (SSP). Storage as a service can also be referred to as hosted storage.

OwnCloud: It is an open-source software, first developed in 2010, that allows you to run a personal cloud file storage service. It has features that are comparable to other cloud storage services such as Dropbox.

The OwnCloud server software can be installed free of charge on Linux, and the client software can be installed on computers running Windows, OS X, or Linux. Mobile apps are also available for Android and iOS.

Features:

- Encryption & security
- Virtual data rooms with secure view
- Ransomware protection
- Collaborative editing of office documents
- Document classification
- File firewall enterprise

User management:

On the User management page of your ownCloud Web UI you can:

- Create new users.
- View all of your users in a single scrolling window.
- Filter users by group.
- See what groups they belong to.
- Edit their full names and passwords.
- See their data storage locations.
- View and set quotas.
- Create and edit their email addresses.

The user administration displays all users in a table format. The group filters on the left sidebar lets you quickly filter users by their group memberships and create new groups

Click the gear icon on the lower left sidebar to set a default storage quota, and to display additional fields: Show storage location, Show last log in, Show user backend, Send email to new users, and Show email address.

User accounts have the following properties:

- **Login Name (Username)**
The unique ID of an ownCloud user, and it cannot be changed.
- **Full Name**
The user's display name that appears on file shares, the ownCloud Web interface, and emails. Admins and users may change the Full Name anytime. If the Full Name is not set it defaults to the login name.
- **Password**
The admin sets the new user's first password. Both the user and the admin can change the user's password at anytime.
- **Groups**
You may create groups, and assign group memberships to users. By default new users are not assigned to any groups.
- **Group Admin**
Group admins are granted administrative privileges on specific groups, and can add and remove users from their groups.
- **Quota**
The maximum disk space assigned to each user. Any user that exceeds the quota cannot upload or sync data. You have the option to include external storage in user quotas.

Granting Administrator Privileges to a User

ownCloud has two types of administrators: Super Administrators and Group Administrators. Group administrators have the rights to create, edit and delete users in their assigned groups. Group administrators cannot access system settings, or add or modify users in the groups that they are not Group Administrators for. Use the dropdown menus in the Group Admin column to assign group admin privileges.

Managing Groups

You can assign new users to groups when you create them, and create new groups when you create new users. You may also use the Add Group button at the top of the left pane to create new groups. New group members will immediately have access to file shares that belong to their new groups.

Setting Storage Quotas

Click the gear on the lower left pane to set a default storage quota. This is automatically applied to new users. You may assign a different quota to any user by selecting from the Quota dropdown, selecting either a preset value or entering a custom value. When you create custom

quotas, use the normal abbreviations for your storage values such as 500 MB, 5 GB, 5 TB, and so on.

Deleting users

Deleting a user is easy: hover your cursor over their name on the Users page until a trashcan icon appears at the far right. Click the trashcan, and they're gone. You'll see an undo button at the top of the page, which remains until you refresh the page. When the undo button is gone you cannot recover the deleted user.

Conclusion: Thus we have successfully configured storage virtualization using ownCloud.

The screenshot displays the ownCloud web interface. On the left is a sidebar with navigation options: 'All files', 'Favorites', 'Shared with you', 'Shared with others', 'Shared by link', 'Tags', and 'Deleted files'. The main area shows the 'root' directory with a table of contents. The table has columns for 'Name', 'Size', and 'Modified'. It lists folders 'Documents' and 'Photos', and files '6.png', 'abc.txt', 'ownCloud Manual.pdf', and 'test'. Each entry includes a share icon, a user name, and a modification timestamp. A summary row at the bottom indicates '2 folders and 4 files' with a total size of '4.6 MB'.

Name	Size	Modified
Documents	35 KB	7 days ago
Photos	663 KB	7 days ago
6.png	43 KB	a day ago
abc.txt	< 1 KB	5 days ago
ownCloud Manual.pdf	3.9 MB	7 days ago
test	< 1 KB	a day ago
2 folders and 4 files		4.6 MB

Personal - ownCloud - Mozilla Firefox

Personal X Gmail - E Starred - cloud cor expt 6 - C expt 7 - C Lesson a W CCL_LAB CCL_LAB +

192.168.37.22/owncloud

Personal root

Personal info

Sessions

App passwords

Sync clients

Activity

Federated Cloud

You are using 5.1 MB of Unlimited

Profile picture

Full name

root

Email

Your email address

For password recovery and notifications

Groups

You are member of the following groups:

admin

Password

.....

New password

Change password

Language

192.168.37.22/owncloud/index.php/settings/personal#clientsbox Help translate

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Sessions

These are the web, desktop and mobile clients currently logged in to your ownCloud.

Browser	Most recent activity	
Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:72.0) Gecko...	seconds ago	
Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:68.0) Gecko...	seconds ago	
Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:68.0) Gecko...	a minute ago	
Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:72.0) Gecko...	a minute ago	
Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:68.0) Gecko...	a minute ago	

App passwords

An app password is a passcode that gives an app or device permissions to access your ownCloud account.

App name

Create new app password

Users - ownCloud - Mozilla Firefox

192.168.37.22/owncloud/index

Users

+ Add Group

		kamlesh TCS	.....	Groups	Create	
Everyone	25	.....	D17A_B	no group	1 GB	
Admins	1	.....	D17A_C	no group	1 GB	
D17A_A	10	.....	D17A_A	no group	Default	
D17A_B	7	.....	D17A_B	D17A_B	Default	
D17A_C	2	.....	D17A_B	no group	Default	
group1	2	.....	admin	no group	Default	
CMPN	1	.....	no group	no group	1 GB	
D17A	1	.....	D17A_A	no group	10 GB	
d17a_c	1	.....	D17A_A	D17A_A	Unlimited	
groupTest		.....	D17A_A	no group	Default	
		.....	group1	no group	1 GB	
		.....	group1	group1	1 GB	
		.....	D17A_B	D17A_B	Default	
		.....	no group	no group	Default	

Default
Unlimited
1 GB
5 GB
10 GB
Other ...
Unlimited

Files - ownCloud - Mozilla Firefox

192.168.37.22/owncloud/index.php

Files

All files

Upload

Folder

Text file

			Size	Modified
			35 KB	7 days ago
			663 KB	7 days ago
6.png	rishikeshk		43 KB	a day ago
new file to	abc.txt	user2	< 1 KB	5 days ago
ownCloud Manual.pdf			3.9 MB	7 days ago
test	dkhlani		< 1 KB	a day ago
2 folders and 4 files			4.6 MB	

Deleted files

Settings

Files - ownCloud - Mozilla Firefox

192.168.37.22/owncloud/index.ph

Files

All files

Deleted files

Settings

Documents

Photos

6.png

abc.txt

exp7

ownCloud Manual.pdf

test

2 folders and 5 files

4.6 MB

Name	Size	Modified
Documents	35 KB	7 days ago
Photos	663 KB	7 days ago
6.png	43 KB	a day ago
abc.txt	< 1 KB	5 days ago
exp7	< 1 KB	seconds ago
ownCloud Manual.pdf	3.9 MB	7 days ago
test	< 1 KB	a day ago

Activity - ownCloud - Mozilla Firefox

192.168.37.22/owncloud/inc

Activity

All Activities

Activities by you

Activities by others

Favorites

Comments

Shares

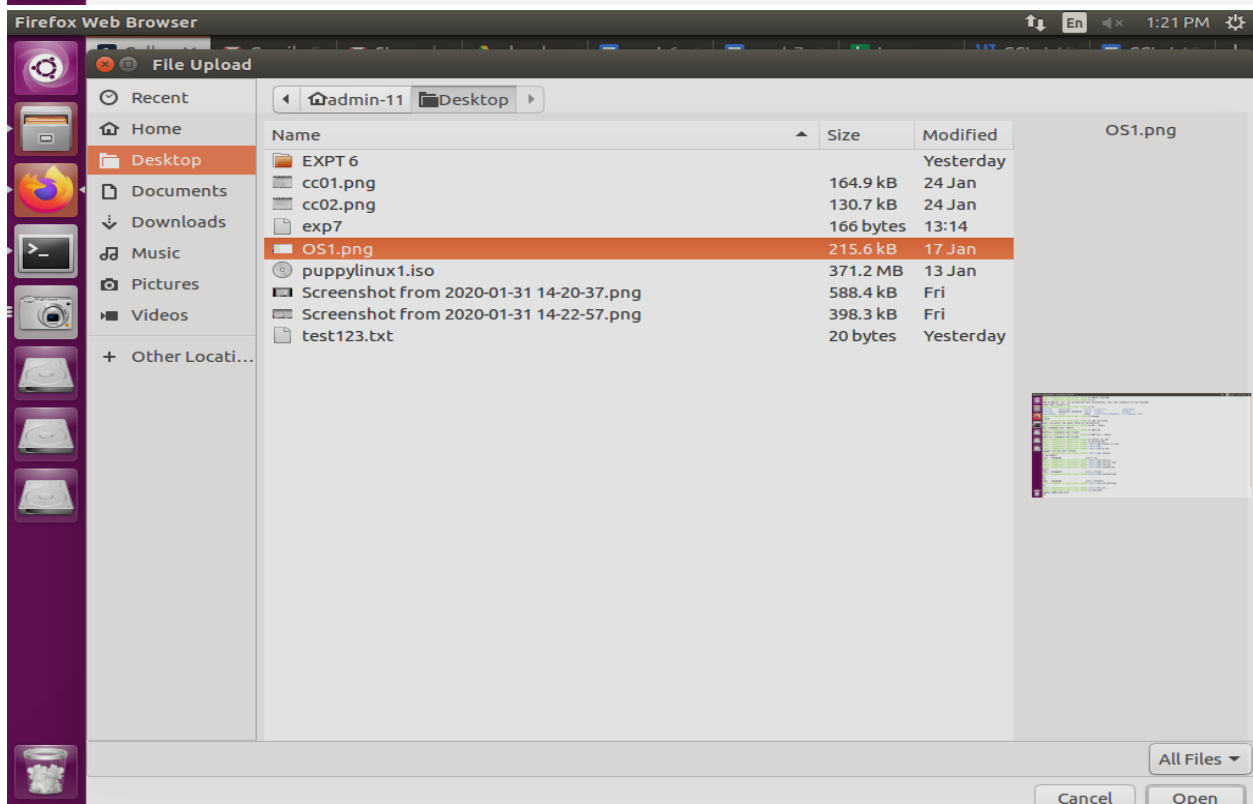
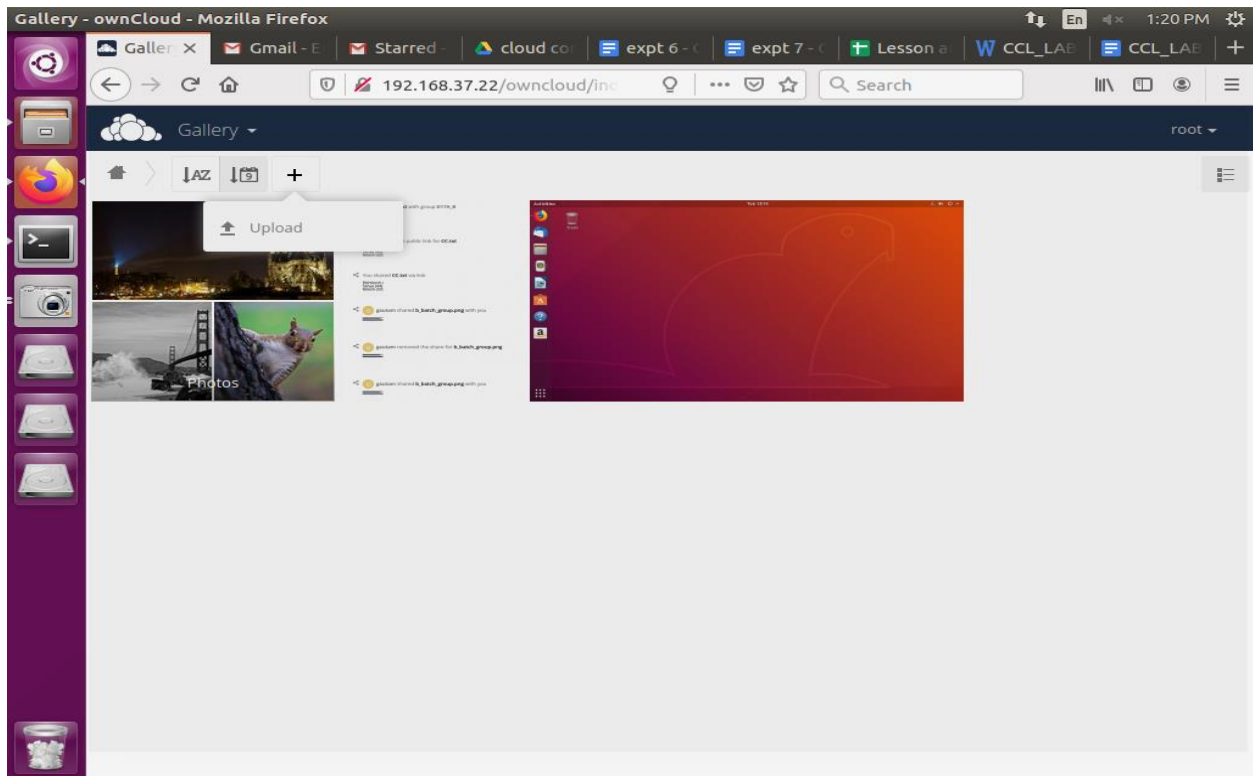
You shared Photos with Manali

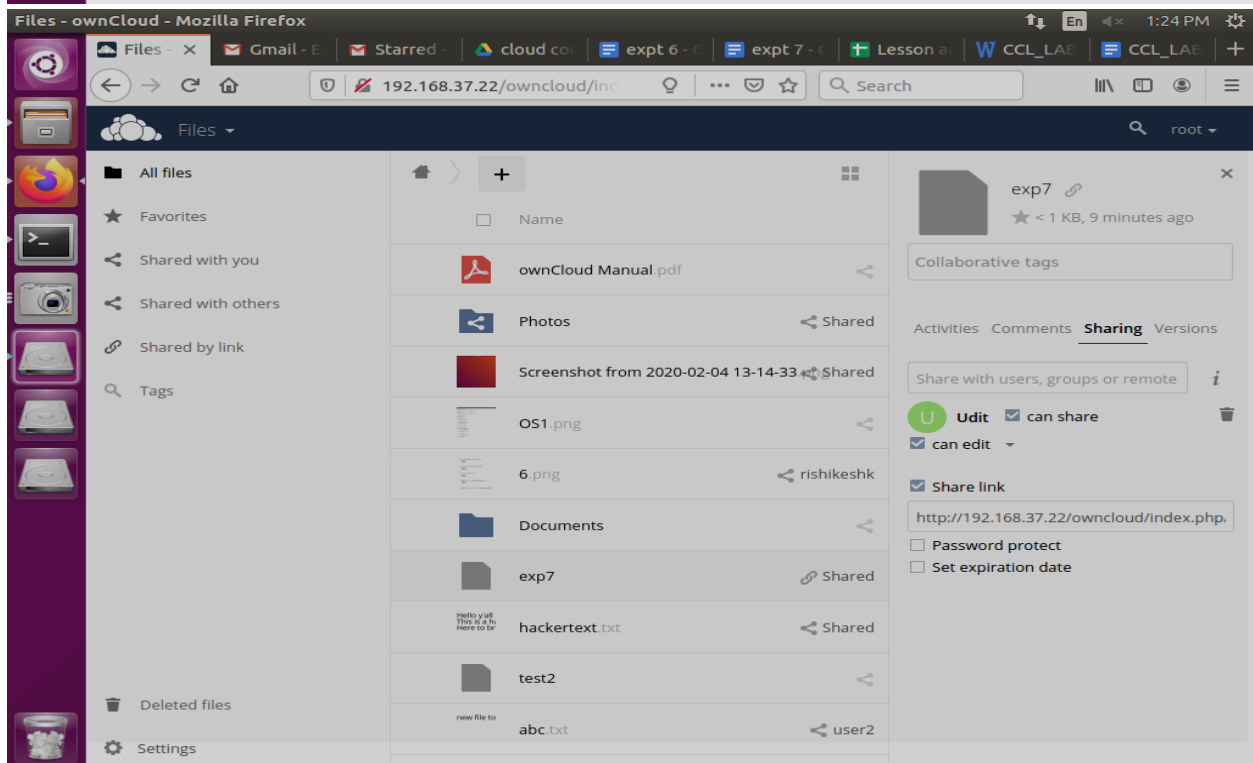
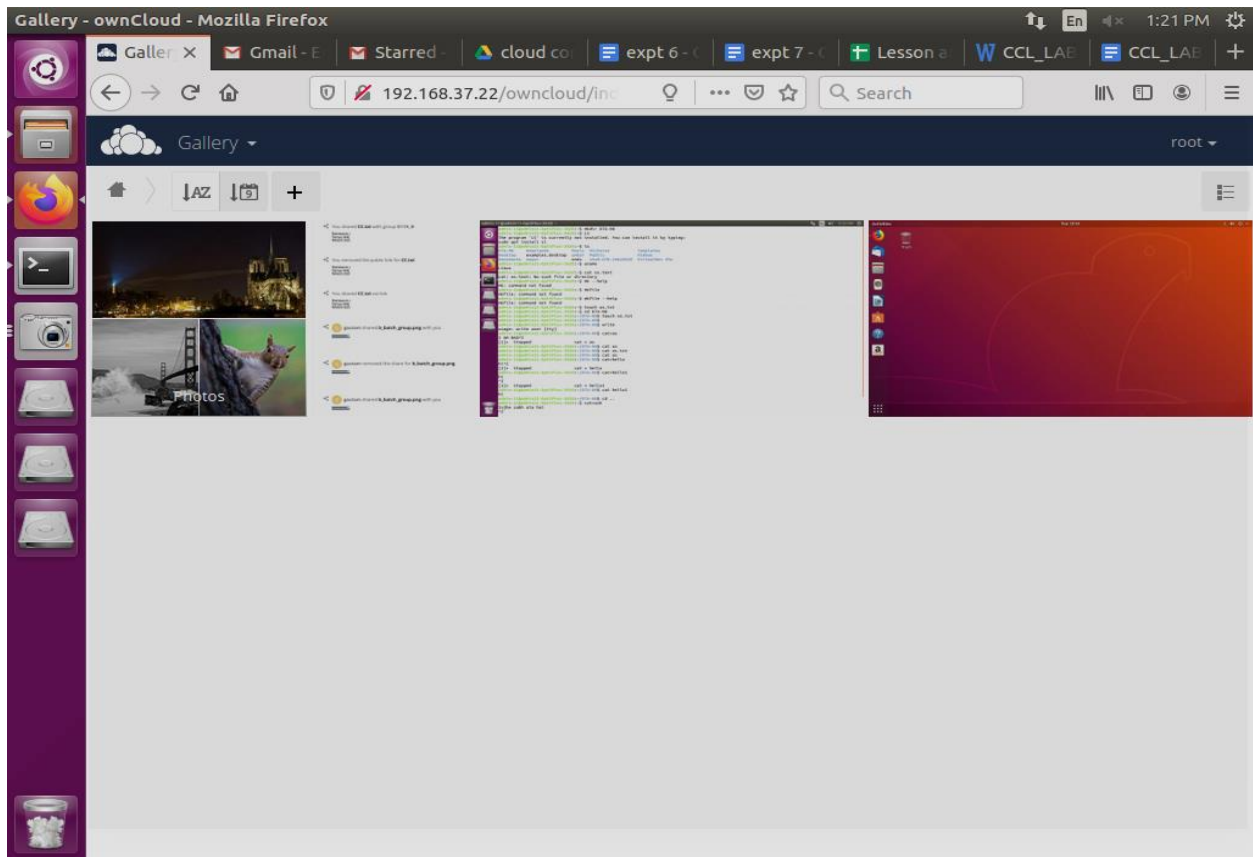
You created hackertext.txt

You shared Photos with ketaki

You created exp7

No more events to load





Apps - ownCloud - Mozilla Firefox

Apps - X Gmail - E Starred - cloud co expt 6 - expt 7 - Lesson a W CCL_LAE CCL_LAE +

192.168.37.22/owncloud/inc expt 6 - Google Docs Search

Apps root

Enabled

Not enabled

Developer documentation

Deleted files 0.9.0

by Bjoern Schiessle (AGPL-licensed)

✓ Official

Show description ...

Disable

Federation 0.1.0

by Bjoern Schiessle (AGPL-licensed)

✓ Official

Show description ...

Disable

First run wizard 1.1

by Frank Karlitschek, Jan-Christoph Borchardt (AGPL-licensed)

✓ Official

Show description ...

Disable ☐ Enable only for specific groups