



Seafile

Seafile 2019 & Future Development

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Seafile Overview

Seafile Cloud Storage



Collaboration

✓Collaborative Editing

✓File Locking

Full Platform

✓Windows, Mac, Linux

✓Web, Android, iOS

Reliable

✓Reliable file syncing

✓Data integrity check

✓Used by millions

Integration

✓LDAP, Shibboleth, OAuth

✓Restful API

Usability

✓Drive Client

✓Windows Experience

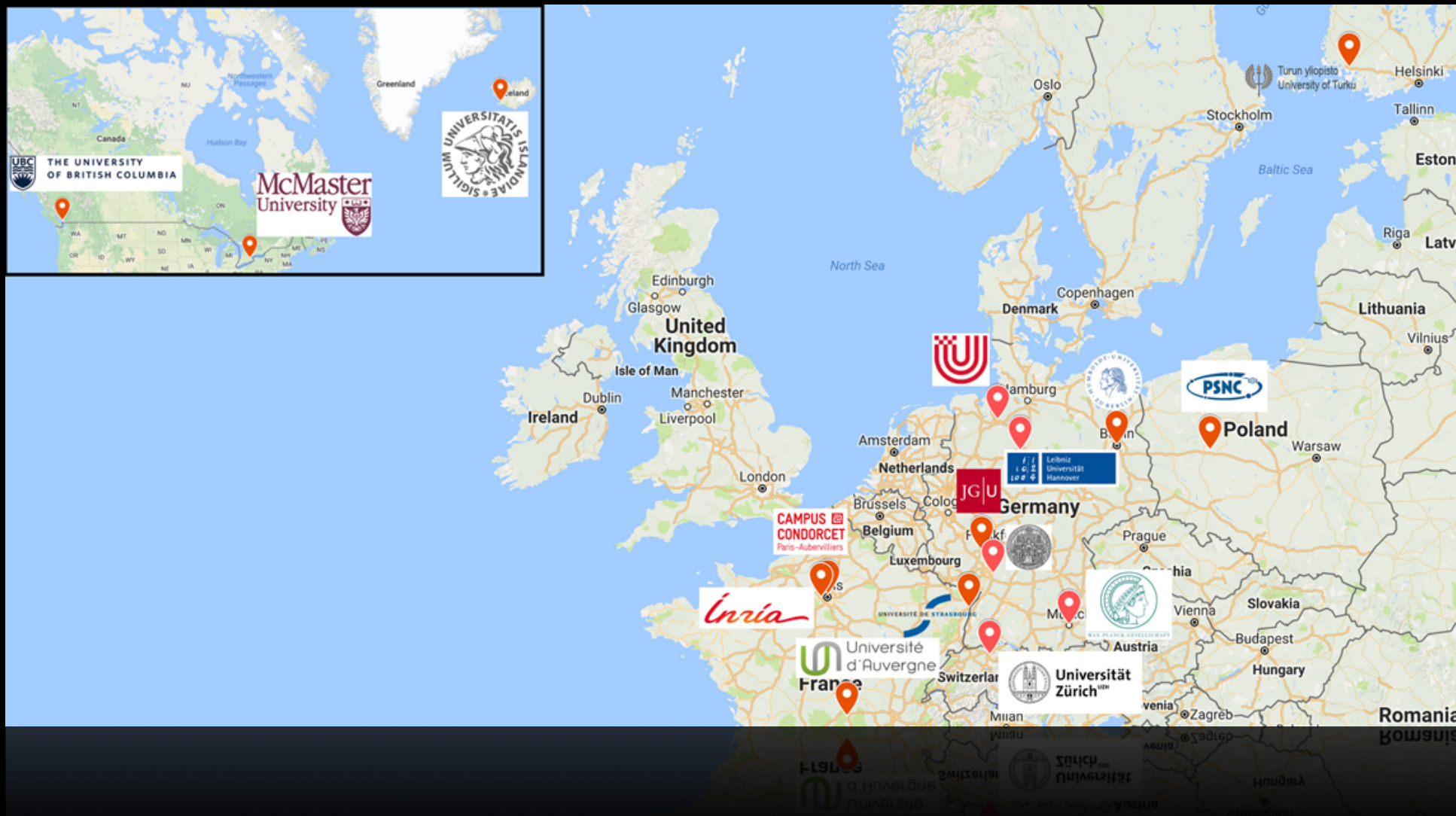
High Performance

✓Sync 10k small files per minute

✓Low server loads

Seafire Educational Users

- Europe
- Canada
- China



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2019 Development Summary

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Major Releases
version 7.0 and 7.1

8

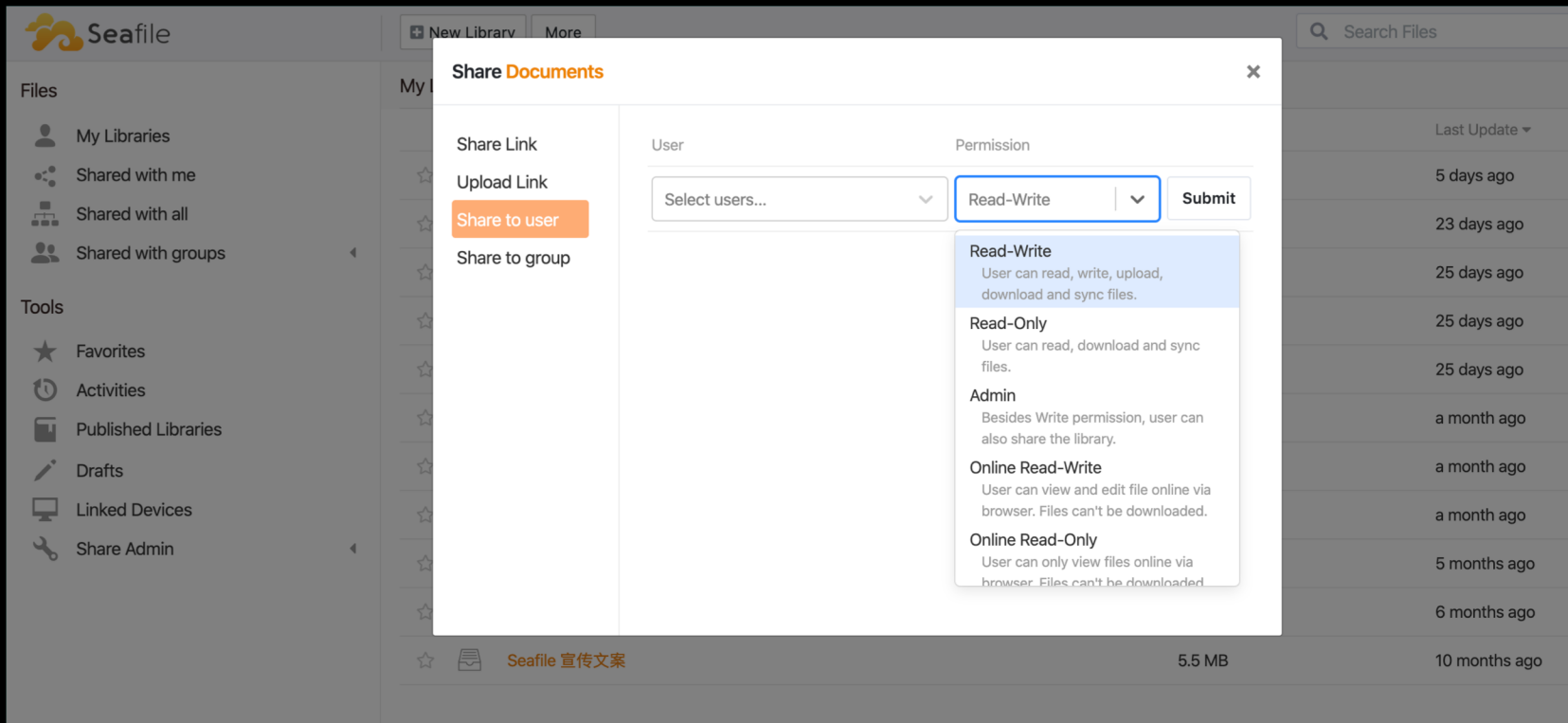
Releases for
Community Edition

13

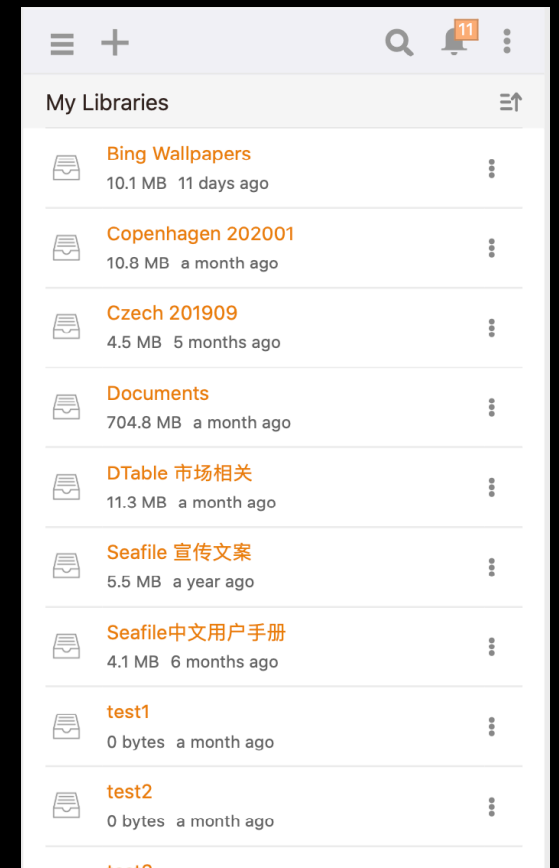
Releases for
Professional Edition

7.0 - Redesigned Web UI

- Web UI is rewritten with React framework
- Look & feel of UI components more consistent
- Smooth mobile browser experience



Web



Mobile

7.0 - Seafile Docs

WYSIWYG Markdown Editing

- It is now part of Seafile main releases
- Save/edit rich text with Markdown syntax
- Edit Markdown text just like in Word
- Table editing, insert image, image
- Files saved in Seafile

Heading 1 B I </> 🔗 “ ” ☰ ☰ ☑️ </> 🗃️ 🖼️

Draft and review

You can create a draft from an existing file or create a new draft file from scratch. After done editing, you can create a review and send the link to other people. Others can view file diffs in the review page and put comments on the file.

seafile.com docs 页面文案(draft).md review

🔗 Close Publish

- Markdown 所见即所得编辑
 - 像编辑 word 文件一样编辑 Markdown 文件，简单直观
 - 轻松插入图片、表格、链接、列表
 - 文档保存为纯文本 Markdown 格式，轻松从 Github 导入导出
- 文档 Draft 和 Review
 - 类似代码中 branch 和 merge，Draft 和 Review 提供类似的但又简化的工作流程，解决“有代码无文档”的管理难题
 - 像 Review 代码一样 Review 文档，解决“有代码无文档”的管理难题
 - 富视图的文档版本比较功能，提升评审效率
 - 通过编写更加规范的设计文档，提高软件质量
- 文件标签
 - 给资料库设置一个标签集，并把标签应用到文档，支持 10 种标签颜色。
 - 给文档打上“已过期”，“实现中”等标签，帮助你更好的管理文档状态。
- 根基视图
 - 按照根基的方式浏览一个资料库，方便的在多云文档中跳转和浏览。
- 实时协同
 - 实时知道有多少人在查看和编辑一个文档。
 - 需要文档时 如需文档时请人更新 看实时通知

Reviewers

jonathan.xu

Author

潘浚涛

Changes

Number of changes: 0

File labels

You can create tag list for a library. The tags can then applied to files in the library.

7.0 - Published Libraries

- Allow public access to a library
- Perfect for Markdown based documentation

Seafile

内容 [seafile-manual / deploy_pro / deploy_in_a_cluster.md](#)

Architecture

The Seafile cluster solution employs a 3-tier architecture:

- Load balancer tier: Distribute incoming traffic to Seafile servers. HA can be achieved by deploying multiple load balancer instances.
- Seafile server cluster: a cluster of Seafile server instances. If one instance fails, the load balancer will stop handing traffic to it. So HA is achieved.
- Backend storage: Distributed storage cluster, e.g. S3, Openstack Swift or Ceph.

This architecture scales horizontally. That means, you can handle more traffic by adding more machines. The architecture is visualized in the following picture.

The diagram illustrates a 3-tier architecture. On the left, a 'Network' cloud connects to two 'Load Balancer' nodes. These load balancers distribute traffic to a cluster of 'Seafile frontend server' nodes. The frontend servers connect to a 'Seafile background server' node. The background server connects to 'Storage' (represented by server racks), a 'Memcached Cluster' (represented by a blue cube), and a 'MariaDB Cluster' (represented by a blue cube). Arrows indicate the flow of data and traffic between these components.

Architecture

Preparation

- Hardware, Database, Me...
- Install Python libraries

Configure a Single Node

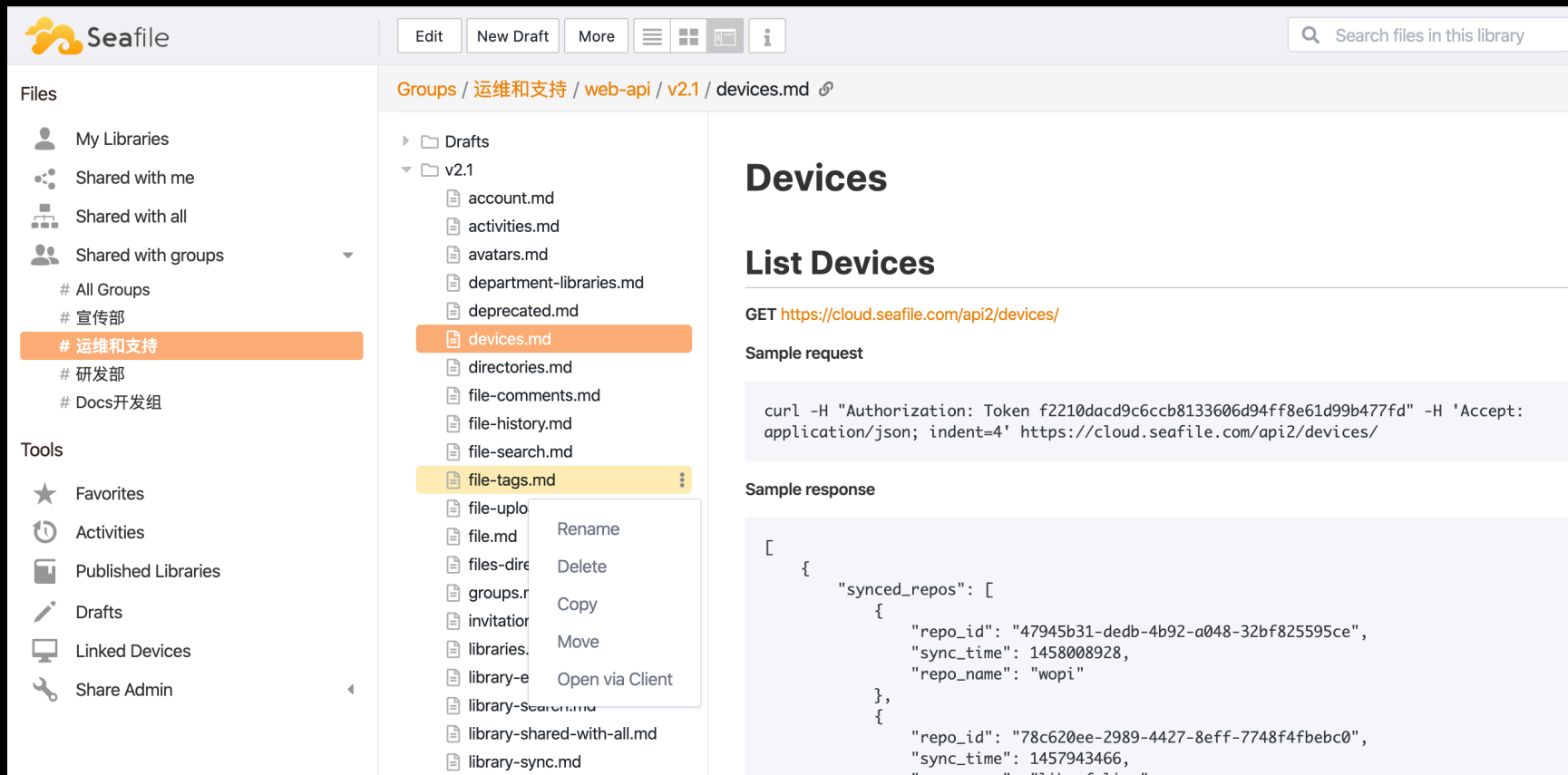
- Get the license
- Download/Uncompress ...
- Setup Seafile
- Update Seahub Database
- Backend Storage Settings
- Run and Test the Single ...

Configure other nodes

- Copy the config to all Se...
- Setup Nginx/Apache and Htt...
- Start Seafile Service on boot
- Firewall Settings
- Load Balancer Setting
 - AWS Elastic Load Balanc...
 - HAProxy
- See how it runs
- The final configuration of th...

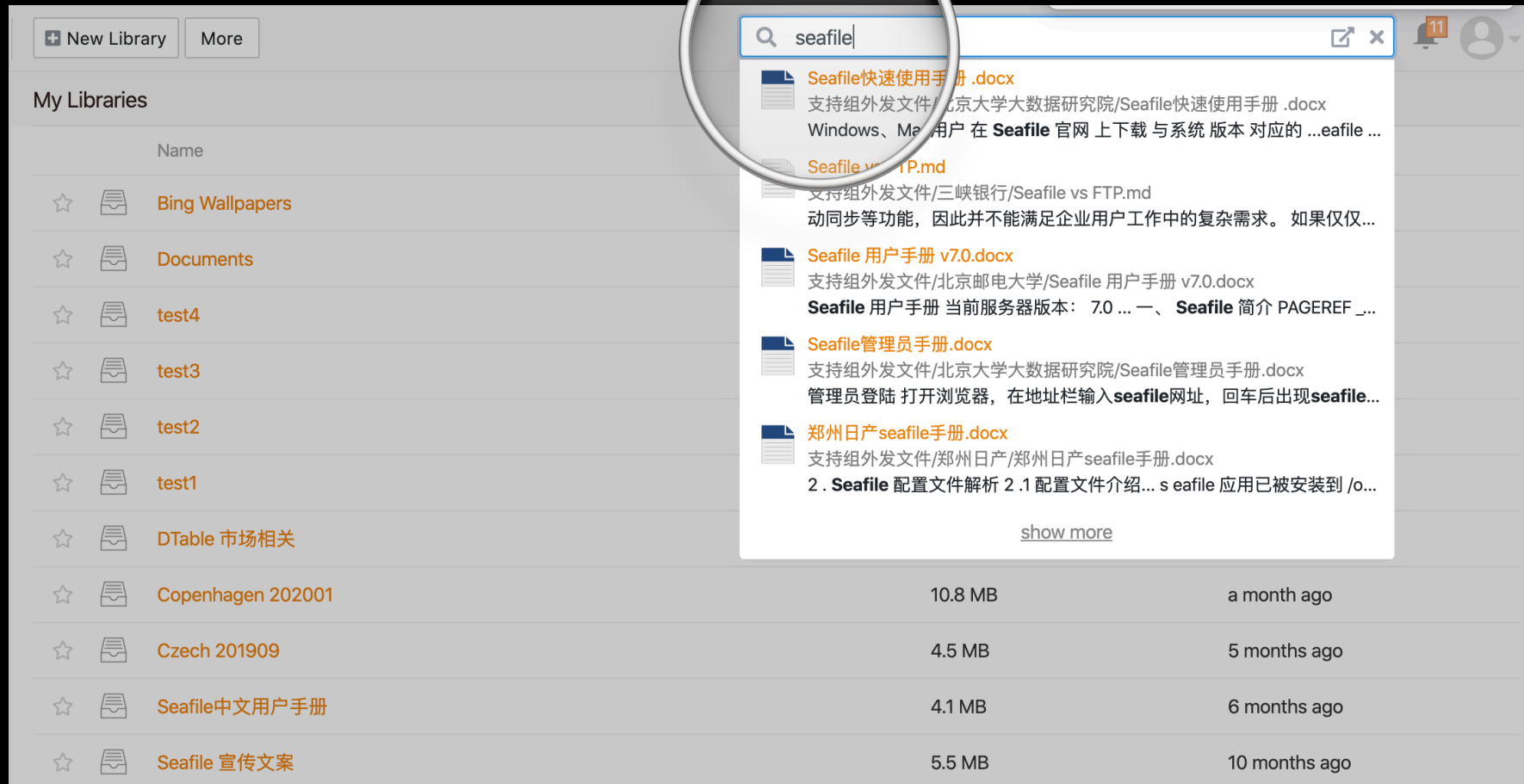
7.0 - Column Mode

- Expand folders as tree
- Context menus
- Instant file preview



7.0 - Real-time Search

Instantly display search results when the user types in keywords

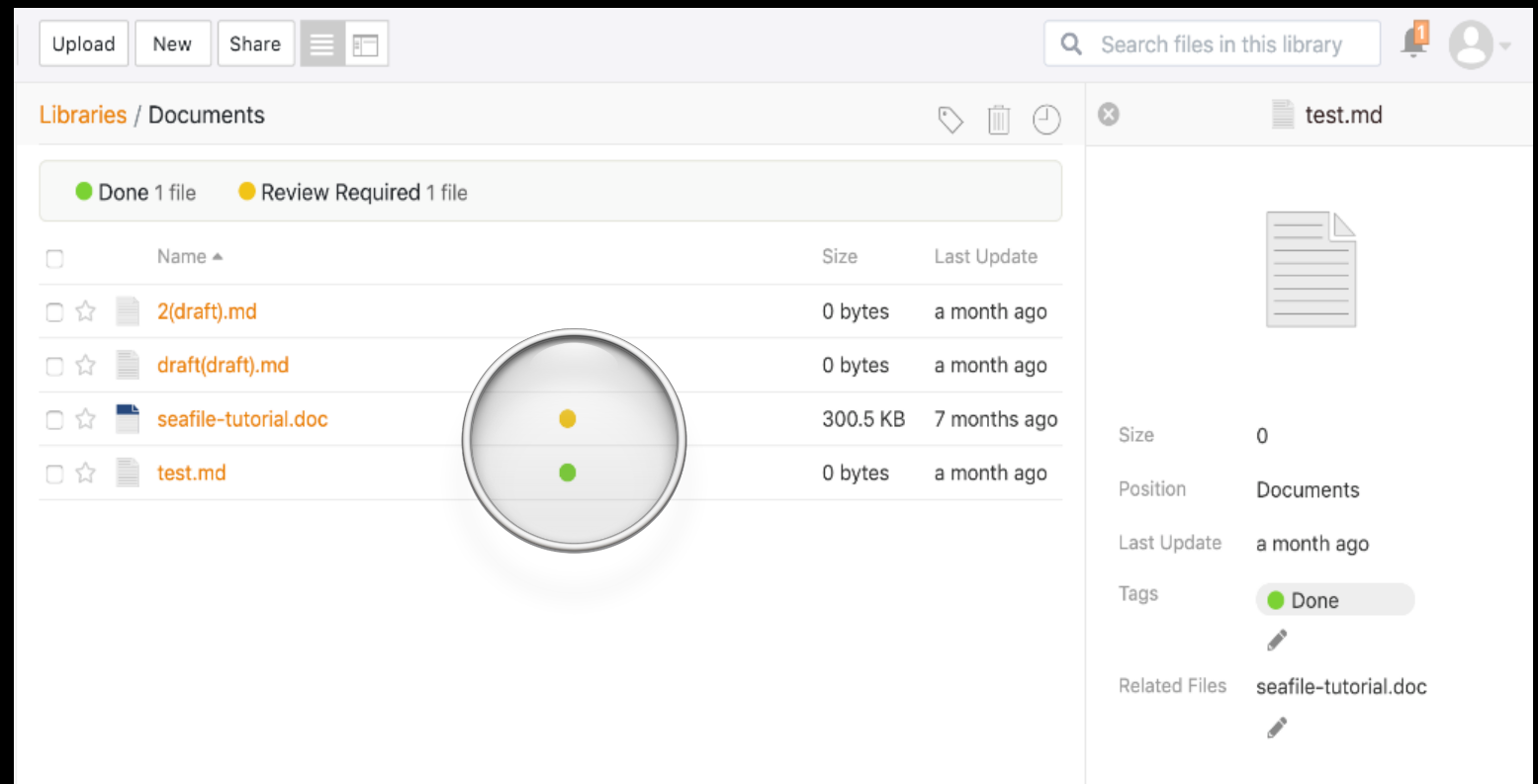


The screenshot shows the Seafiler web interface. On the left, there are buttons for 'New Library' and 'More', and a section titled 'My Libraries' containing a list of libraries such as 'Bing Wallpapers', 'Documents', and 'test4'. On the right, a search bar contains the text 'seafiler'. A dropdown menu is open, displaying search results for documents related to Seafiler, including 'Seafiler快速使用手册.docx', 'Seafiler vs FTP.md', 'Seafiler 用户手册 v7.0.docx', 'Seafiler管理员手册.docx', and '郑州日产seafiler手册.docx'. A magnifying glass graphic highlights the search bar and the dropdown menu.

Name	Size	Time
Bing Wallpapers		
Documents		
test4		
test3		
test2		
test1		
DTable 市场相关		
Copenhagen 202001	10.8 MB	a month ago
Czech 201909	4.5 MB	5 months ago
Seafiler中文用户手册	4.1 MB	6 months ago
Seafiler 宣传文案	5.5 MB	10 months ago

7.0 - File Labels

- Create label set for library
- Set labels for files
- Locate files by labels



The screenshot displays the Seafone file management interface. At the top, there are buttons for 'Upload', 'New', and 'Share', along with a search bar and user profile icon. The main area shows a list of files in a 'Documents' library. A circular overlay highlights the file 'test.md', which is labeled 'Done' (indicated by a green dot). The interface also shows a summary bar with 'Done 1 file' and 'Review Required 1 file'. The right sidebar provides details for the selected file 'test.md', including its size (0 bytes), position (Documents), last update time (a month ago), and tags (Done). A related file 'seafile-tutorial.doc' is also listed.

Name	Size	Last Update
2(draft).md	0 bytes	a month ago
draft(draft).md	0 bytes	a month ago
seafile-tutorial.doc	300.5 KB	7 months ago
test.md	0 bytes	a month ago

File Details for test.md:

- Size: 0
- Position: Documents
- Last Update: a month ago
- Tags: Done
- Related Files: seafile-tutorial.doc

7.0 - Online-only Share Permissions

The screenshot displays the Seafile interface with a 'Share Documents' dialog box open. The dialog has a sidebar on the left with options: 'Share Link', 'Upload Link', 'Share to user' (highlighted in orange), and 'Share to group'. The main area is divided into 'User' and 'Permission' sections. The 'User' section contains a dropdown menu labeled 'Select users...'. The 'Permission' section features a dropdown menu currently set to 'Read-Write' and a 'Submit' button. A circular callout highlights the 'Read-Write' dropdown menu, which is expanded to show the following options:

- Read-Write**
User can read, write, upload, download and sync files.
- Read-Only**
User can read, download and sync files.
- Admin**
Besides Write permission, user can also share the library.
- Online Read-Write**
User can view and edit file online via browser. Files can't be downloaded.
- Online Read-Only**
User can only view files online via browser. Files can't be downloaded.

The background interface shows a sidebar with 'Files' and 'Tools' sections, a search bar, and a file list with columns for 'Last Update' and file details. A file named 'Seafile 宣传文案' (5.5 MB) is visible at the bottom of the list.

7.1 - Python 3 Support

- ✓ **Python 2.x end of life on January 2020**
- ✓ **Refactor Seafile server components to make code migration easier**
- ✓ **Modified Seahub, Seaf-server, ccnet-server, seafevents**
- ✓ **WebDAV server is upgraded too. Better WebDAV support.**
- ✓ **Released before end of 2019**

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Improvements to Desktop Clients

- ✓ More consistent error reporting on sync clients:
Main window, sync error list, system tray icon.
- ✓ Report sync error for some edge case, like updating a file under a synced read-only library.
- ✓ QuickLook plugin for Mac SeaDrive, to prevent aggressive download of photos
- ✓ **Redesign SeaDrive for Windows with native Cloud Files API**

Redesign SeaDrive with Cloud Files API

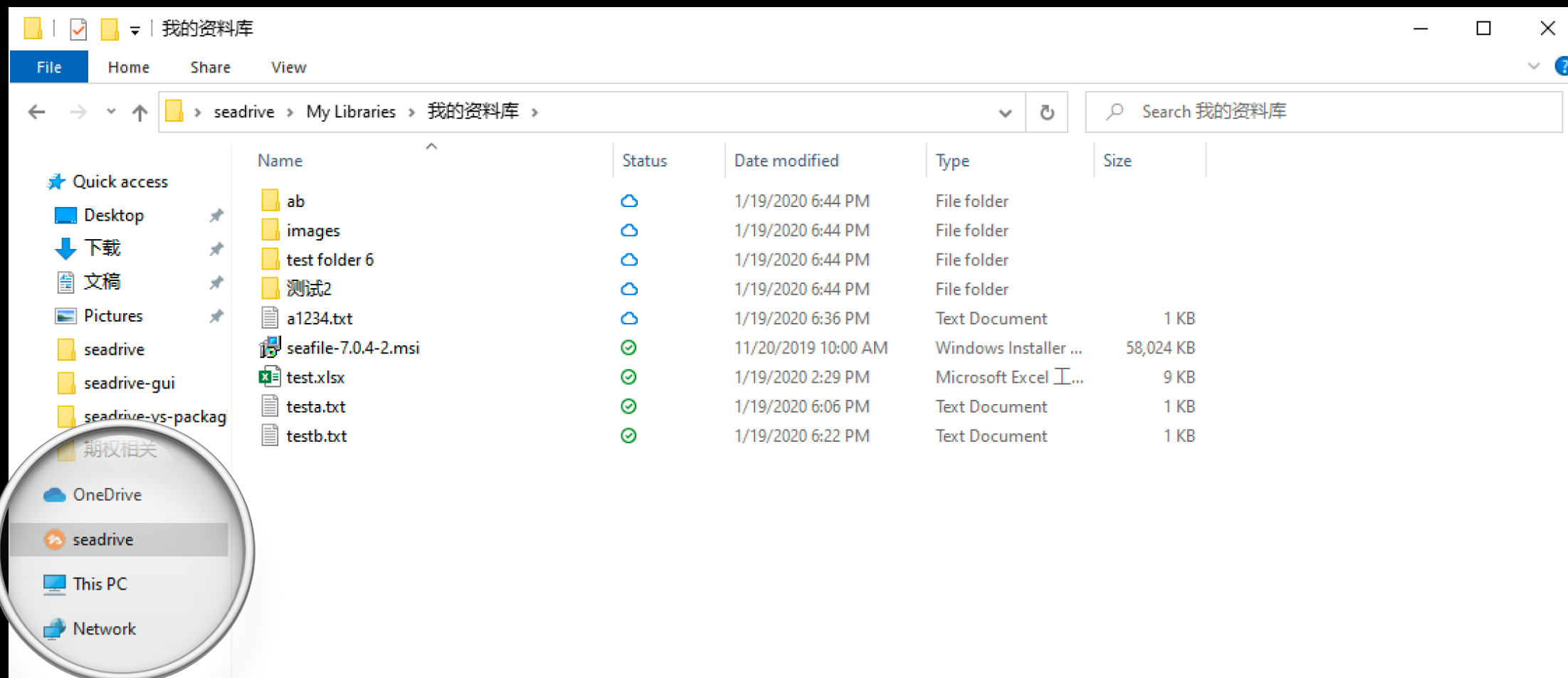
Issues with current Windows SeaDrive

- ✓ Implementing file system API is hard
- ✓ Unexpected download of files, by Explorer, Anti Virus etc.
- ✓ Non-optimal user experience: copying over-sized files into virtual drive
- ✓ Small issues from Dokany driver

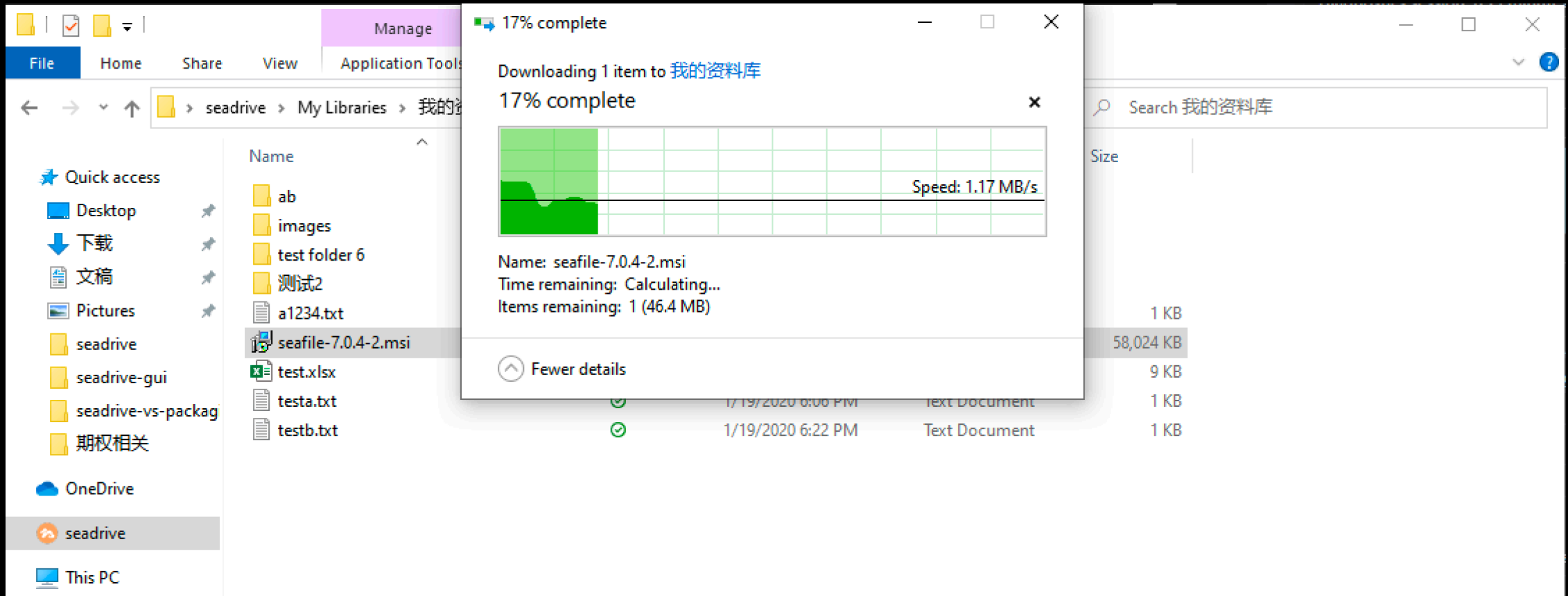
SeaDrive was designed back at 2016. Technology has evolved.

Windows now provides native virtual drive API.

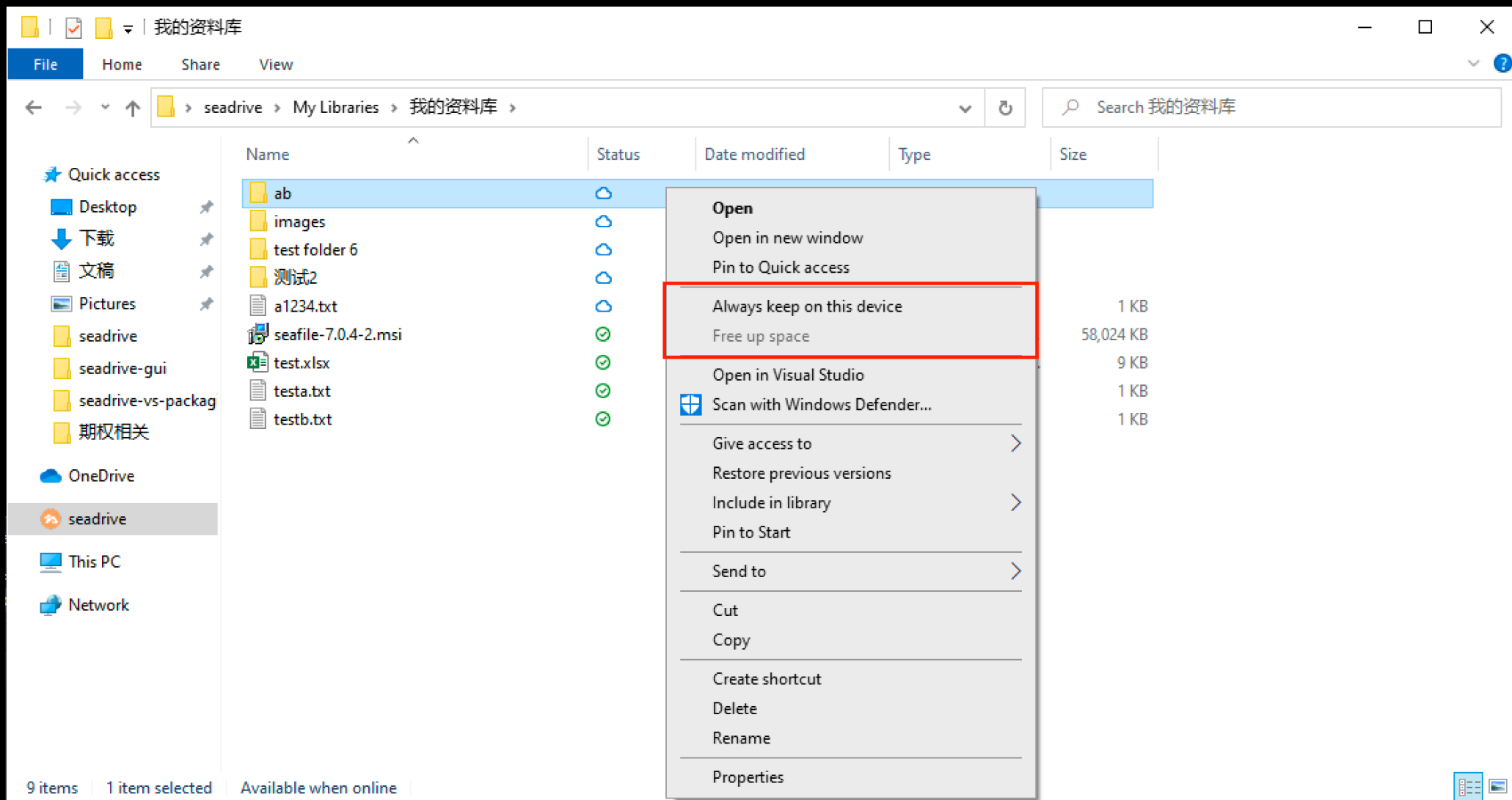
Redesign SeaDrive with Cloud Files API



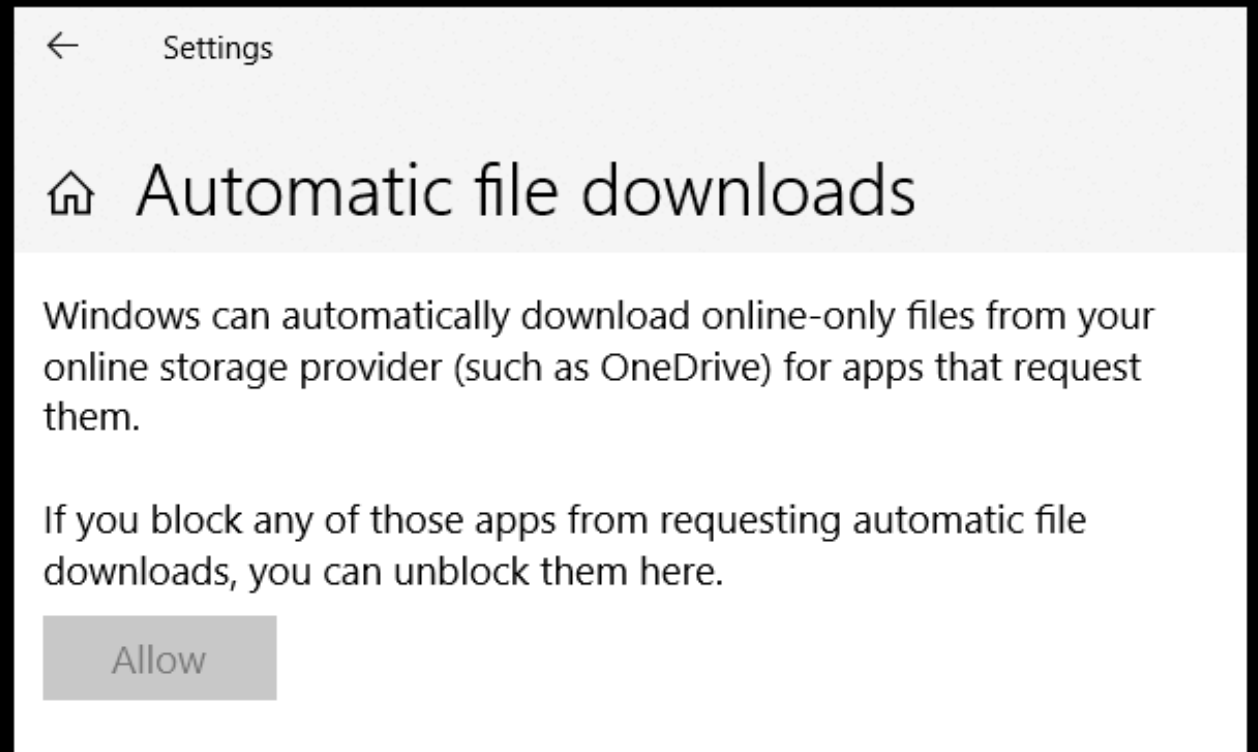
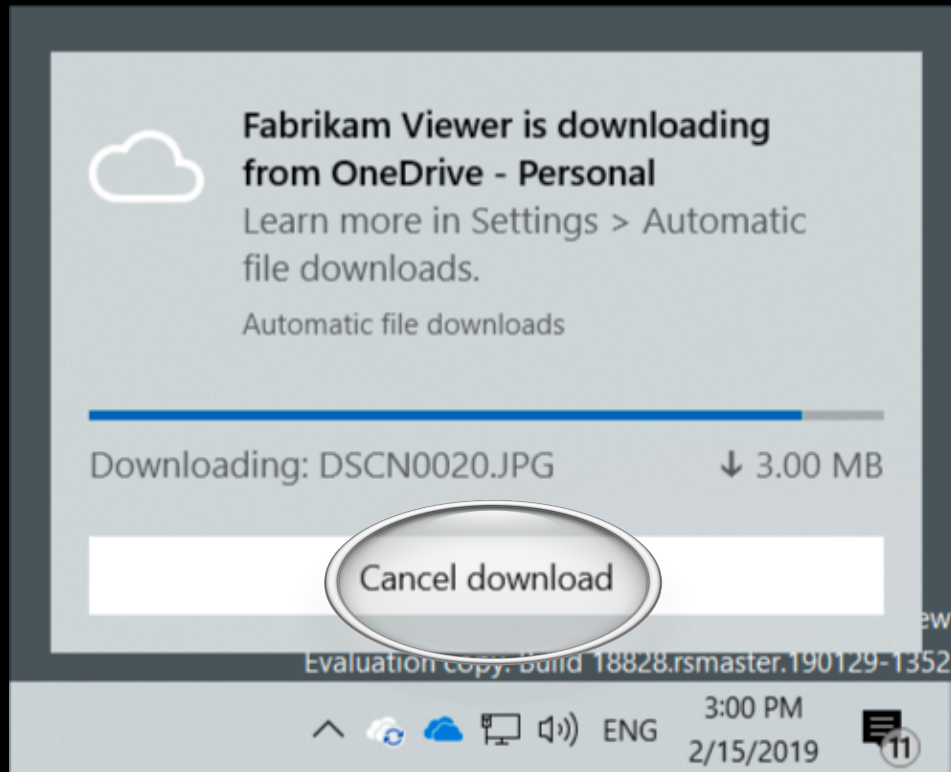
Redesign SeaDrive with Cloud Files API



Redesign SeaDrive with Cloud Files API



Redesign SeaDrive with Cloud Files API



Redesign SeaDrive with Cloud Files API

- ✓ Look & feel almost identical to current SeaDrive.
- ✓ Files are placeholders in NTFS. Better compatibility.
- ✓ No more unexpected file downloads. User has control.
- ✓ Deep integration into File Explorer.
- ✓ User gets standard system error message when copying oversized files into the virtual drive.
- ✓ First beta expected to release in Q1 2020.

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Open Cloud Mesh Support

- ✓ 2020/08 – use OCM protocol to share/access files between Seafile servers (8.0 version)
- ✓ OCM share with other cloud solutions will be developed in 2020 and released in early 2021


Open Cloud Mesh Support

Share **lib of 1** ×

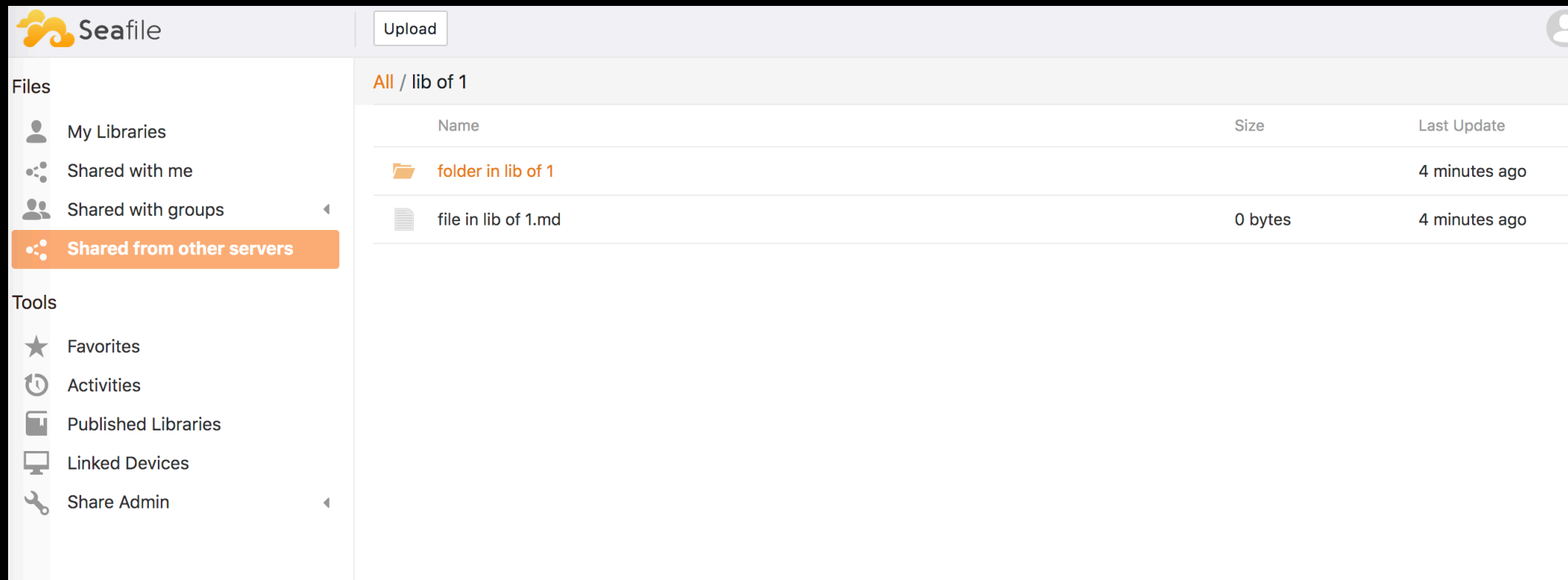
Share Link	Server URL	User Email	Permission
Upload Link	<input type="text" value="http://127.0.0.1:8000/"/>	<input type="text" value="foo@foo.com"/>	只读 <input type="button" value="Submit"/>
Share to group	http://127.0.0.1:8000/	lian@lian.com	可读写
Share to other server	http://127.0.0.1:8000/	foo@foo.com	只读

Open Cloud Mesh Support

The screenshot shows the Seafile web interface. At the top left is the Seafile logo. At the top right is a search bar labeled "Search Files". On the left side, there is a navigation menu with two sections: "Files" and "Tools". Under "Files", there are options for "My Libraries", "Shared with me", "Shared with groups", and "Shared from other servers" (which is highlighted in orange). Under "Tools", there are options for "Favorites", "Activities", "Published Libraries", "Linked Devices", and "Share Admin". The main content area is titled "Shared from other servers" and contains a table with the following data:

Name	Shared from	At site	Time
 lib of 1	1@1.com	http://127.0.0.1:8000/	5 minutes ago

Open Cloud Mesh Support



The screenshot displays the Seafile web interface. At the top left is the Seafile logo. A navigation sidebar on the left is divided into 'Files' and 'Tools' sections. The 'Files' section includes 'My Libraries', 'Shared with me', 'Shared with groups', and 'Shared from other servers' (which is highlighted in orange). The 'Tools' section includes 'Favorites', 'Activities', 'Published Libraries', 'Linked Devices', and 'Share Admin'. The main content area shows a library view for 'lib of 1' with an 'Upload' button at the top right. Below the library name is a table with columns for 'Name', 'Size', and 'Last Update'. The table contains two entries: a folder named 'folder in lib of 1' and a file named 'file in lib of 1.md' with a size of '0 bytes'. Both were updated '4 minutes ago'. A user profile icon is visible in the top right corner.

Name	Size	Last Update
folder in lib of 1		4 minutes ago
file in lib of 1.md	0 bytes	4 minutes ago

Seafile OCM Compatibility

- ✓ Cannot support syncing across Seafile, ownCloud/NextCloud servers. Web access is supported.
- ✓ A Seafile protocol type is added to support Seafile-to-Seafile sharing. WebDAV is also provided for communicating with ownCloud/NextCloud.
- ✓ Two new parameters in seafile protocol: repo ID and repo API token

SeaDrive Client 2.0

- ✓ Q2 2020 - Use Cloud Files API to implement virtual drive on Windows
- ✓ Q2 2020 – Support encrypted library



THANKS

KEEP CONTACT

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