

# New Features on the CERNBox Sync Client

**Samuel Alfageme Sainz**  
On behalf of the CERNBox team

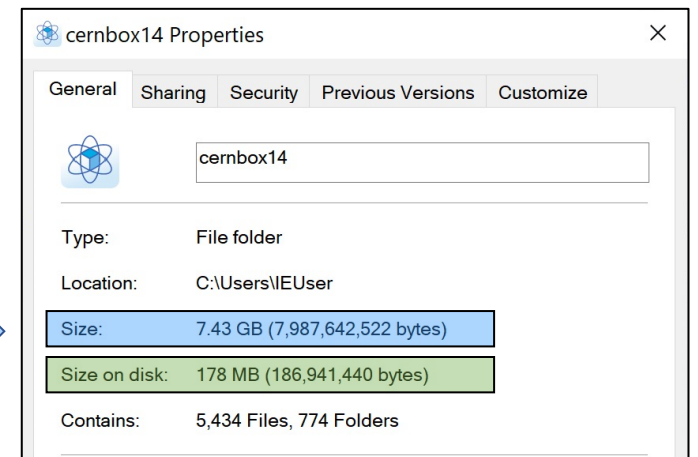
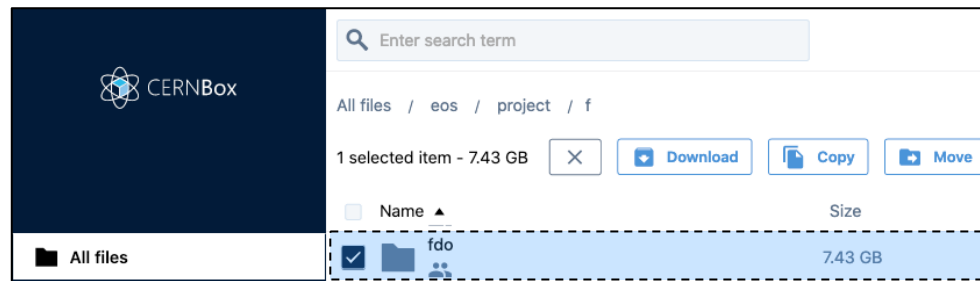
8 December 2021  
CERNBox User Forum





# The Case for a VFS Mode

- Enables files and folders to be **downloaded on demand**
- **Reduces substantially the space on disk of remote folders/projects**
- Important data can be 'pinned' to ensure availability



- Highly requested feature from our users
- Popular option on commercial cloud offerings
  - OneDrive's Files on Demand, Dropbox Smart Sync





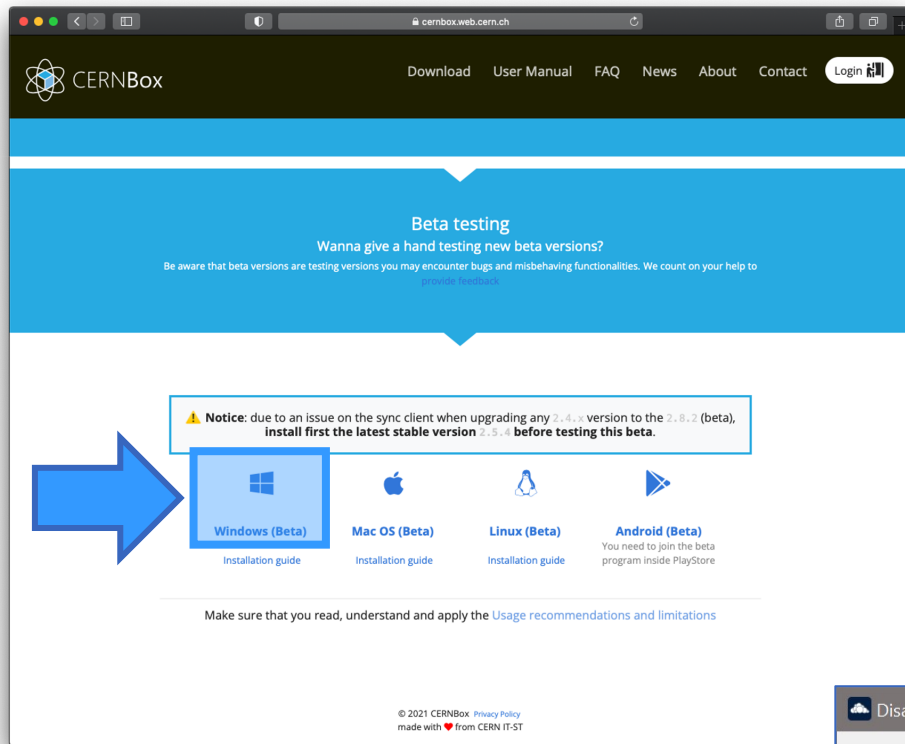
# Get Involved: Start Testing VFS Today

- Available on CERNBox version 2.8.2 (beta)

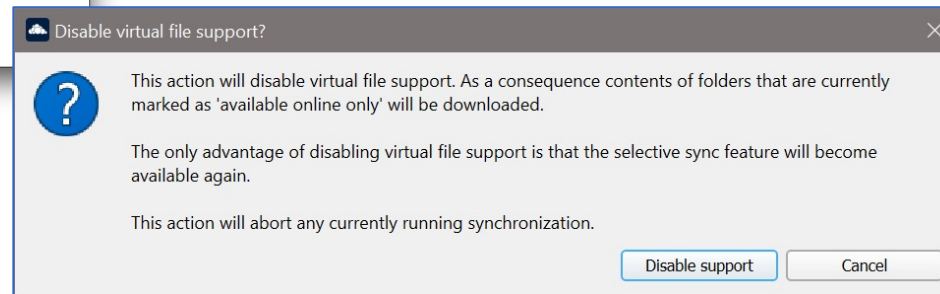


<http://cern.ch/go/Fk8F>

- Enabled by default on new sync folders
- Existing folders can be migrated manually on the UI
  - Safe procedure to disable this mode on the client

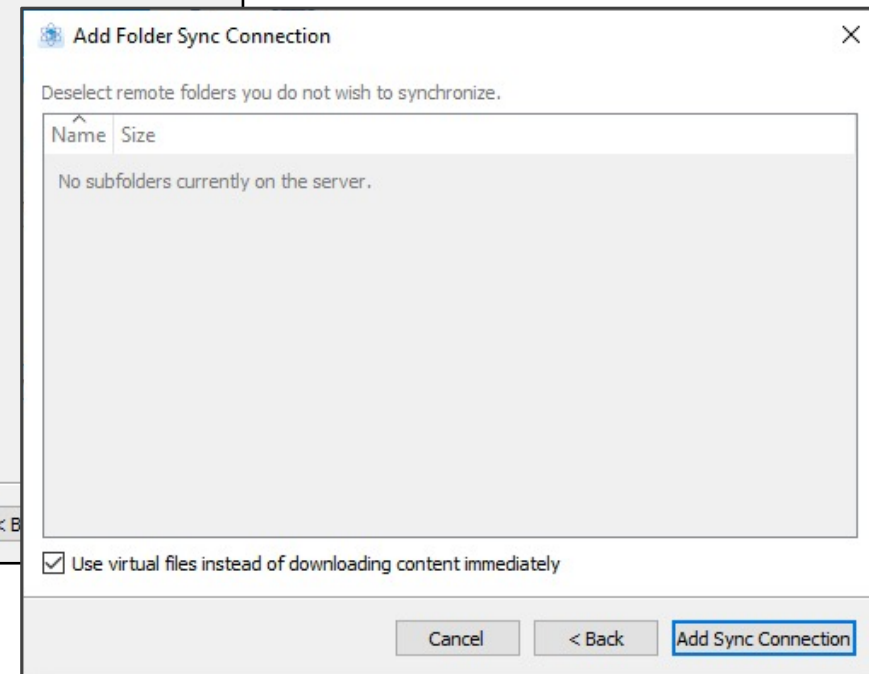
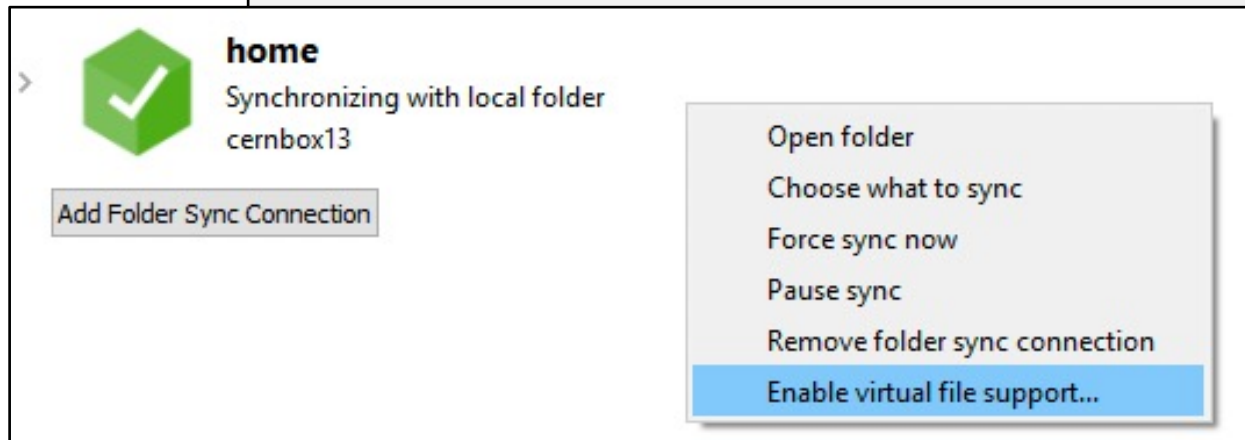
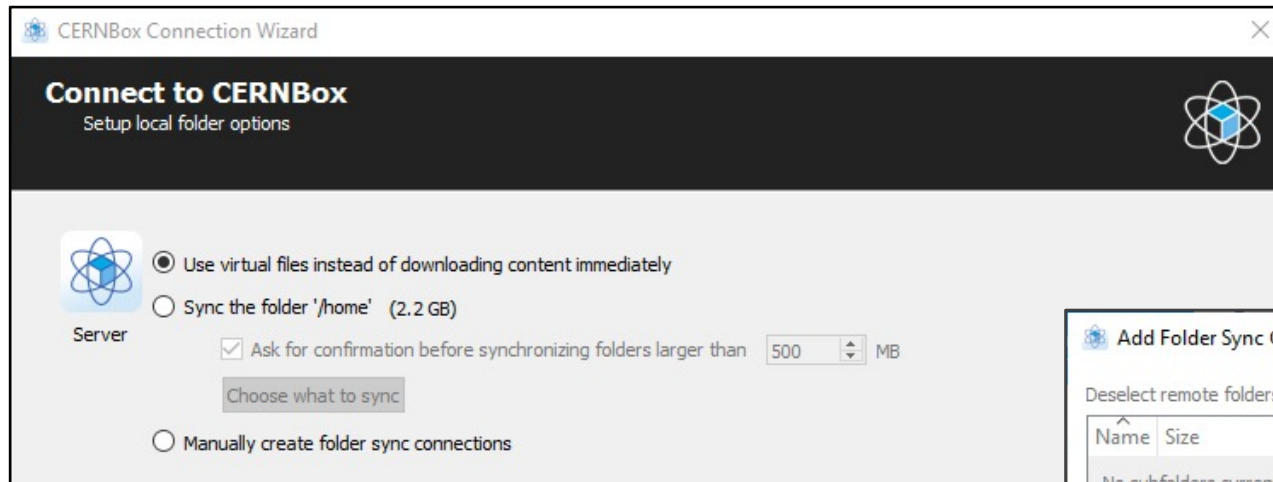


<https://cernbox.web.cern.ch/downloads>





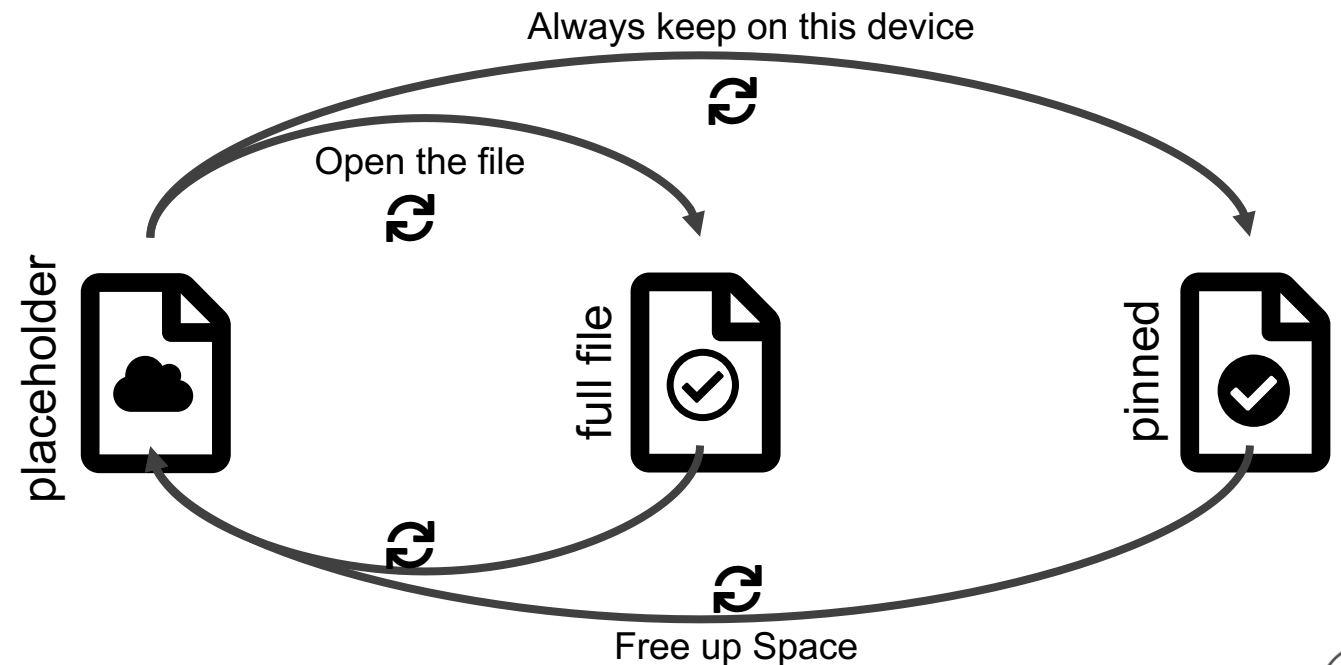
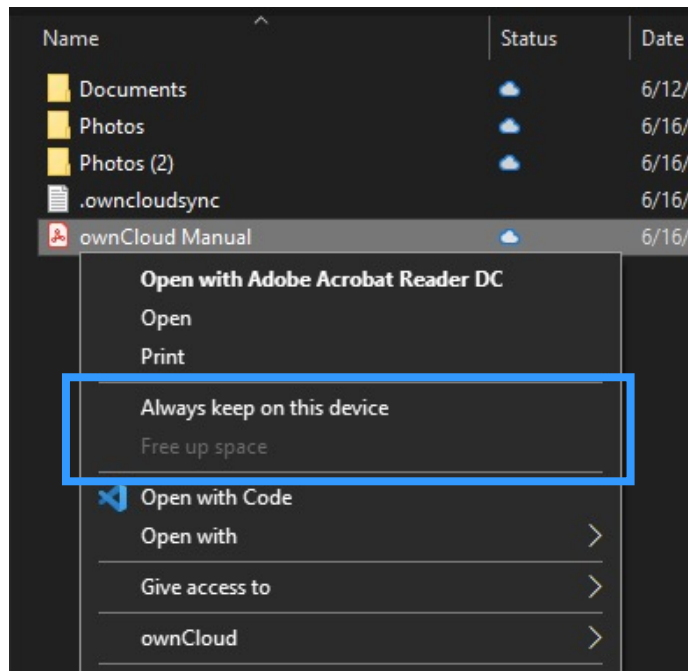
# Enabling VFS Mode on the Client









# Interacting with your Files on VFS

- Files on VFS: created as placeholders & can navigate three states
- Transitions controlled from the Windows file explorer and its context menu





# Native Windows Integration

- Requires the client to be running
- Replaces the overlay icons with    



- New 'status' column on Explorer's list view
- New elements on the user interface:
  - Progress dialog for network transfers
  - Notifications for files downloaded in background

Name	Status	Date modified	Type
Documents		4/16/2020 5:40 PM	File folder
Music		4/16/2020 5:40 PM	File folder
Pictures		4/16/2020 5:40 PM	File folder
Security ebooks		4/28/2020 1:49 PM	File folder
Videos		4/16/2020 5:40 PM	File folder
WINDOWS		4/16/2020 5:33 PM	File folder
.owncloudsync		4/29/2020 12:18 PM	Text Document
CERN-VIDEO-2020-019-001		4/28/2020 12:01 PM	MOV File
CV_Junta_Samuel_Alfageme		2/13/2019 5:55 PM	Microsoft Word D...
Designing_Distributed_Systems		4/28/2020 11:49 AM	Adobe Acrobat D...
test		4/29/2020 11:58 AM	Text Source File

50% complete

Downloading 1 item to ownCloud7

50% complete

Speed: 1.27 MB/s

Name: CERN-VIDEO-2020-019-001  
Time remaining: Calculating...  
Items remaining: 1 (45.1 MB)

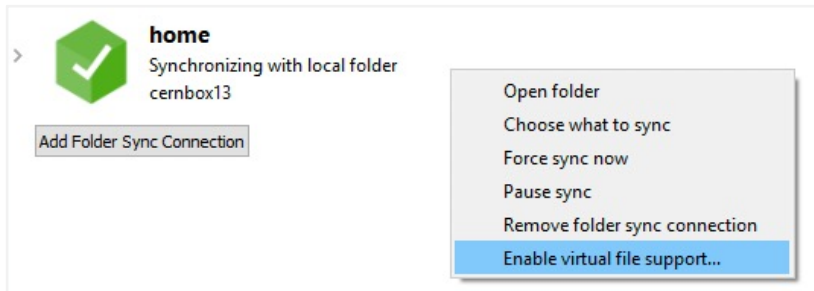
Fewer details



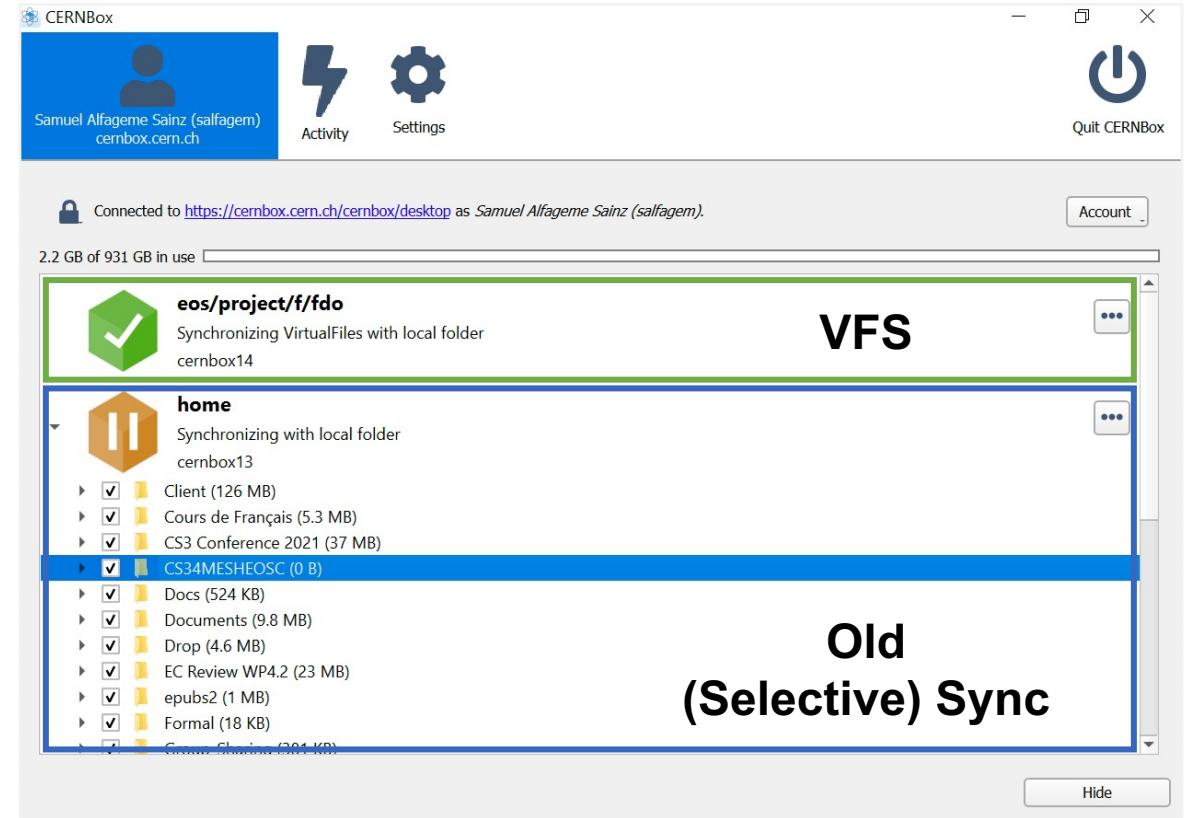
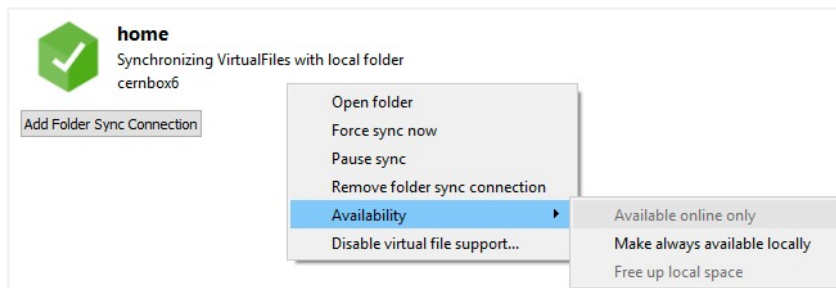


# Additional Changes in the Client UI

- Setting available per sync folder:



- Cannot be combined with Selective-Sync
- New "Availability" options:





# Automatic Sync of Shares and Projects

Coming soon in 2022

The screenshot illustrates the automatic synchronization of shares and projects between a web interface and a desktop interface. On the left, the 'WEB' view shows a 'My Shares' section with a '+ New' button and a list of folders: 'MALT Coordination' and 'ownCloud Roadmap 2021'. A blue arrow points from the 'MALT Coordination' folder in the web view to the 'myshares' folder in the desktop view. On the right, the 'DESKTOP' view shows a file manager interface with a status bar indicating '50 GB of 955 GB in use'. The desktop view displays three folders: 'home', 'myprojects', and 'myshares', each with a green checkmark icon and the text 'Synchronizing with local folder'. The 'myshares' folder is expanded to show two sub-folders: 'MALT Coordination (0 B)' and 'ownCloud Roadmap 2021 (0 B)', both with blue checkmarks in their status boxes. The top of the desktop view shows the user is connected to 'https://cernbox.cern.ch/cernbox/desktop' as 'Hugo Gonzalez Labrador (gonzalhu)'.







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Thank you

**Samuel Alfageme Sainz**  
samuel.alfageme.sainz@cern.ch