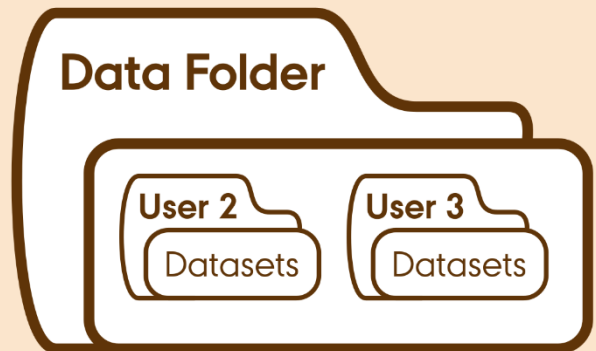
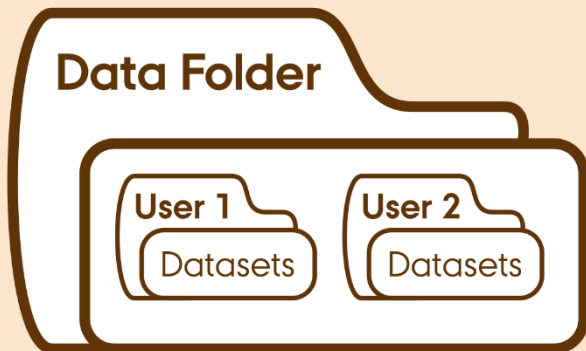




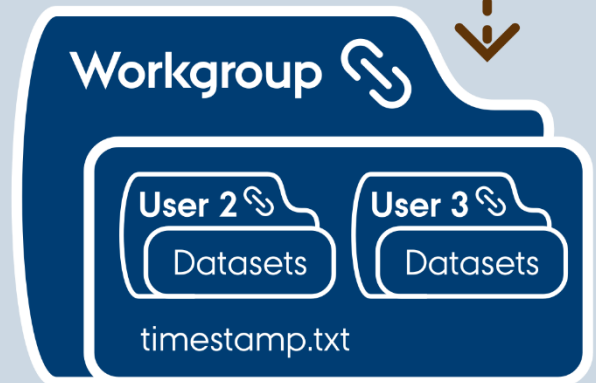
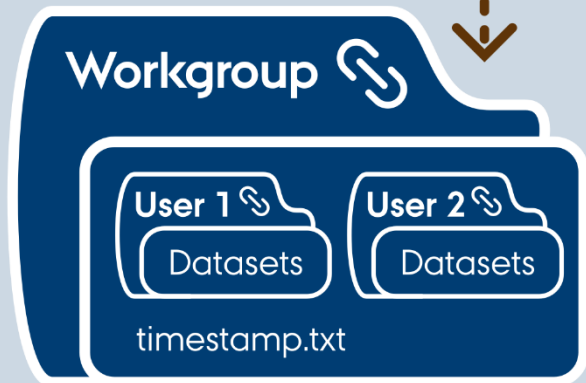
 Instrument
PC 1

 Instrument
PC 2



rclone copy to
ERDA every 15 min. 

rclone copy to
ERDA every 15 min. 



 Cron Job
every minute



www.....shareLink\public_sync_page.html



ERDA.au.dk

PC	Last sync to ERDA	Status
# 1	dd-mm-yyyy hh:mm:ss	OK
# 2	dd-mm-yyyy hh:mm:ss	OK

GUIDE

SETTING UP RCLONE FOR AUTOMATIC SYNCHRONIZATION BETWEEN AN INSTRUMENT PC AND ERDA CLOUD STORAGE

TABLE OF CONTENT:

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Rclone synchronization from an instrument PC to ERDA folder	4-7
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Install rclone or ERDA SIF DRIVE and add to PATH.

Create Workgroup and sub-workgroups for individual users.

Create 'Share Link' and note down the 'Share Link ID'.

Configure remote connection using the ERDA 'Share Link ID'.

Create automation scripts for 'timestamp creation' and 'rclone copy to ERDA Workgroup'.

Setup 'Windows Task Scheduler' every 15 minutes for continued copy to ERDA.

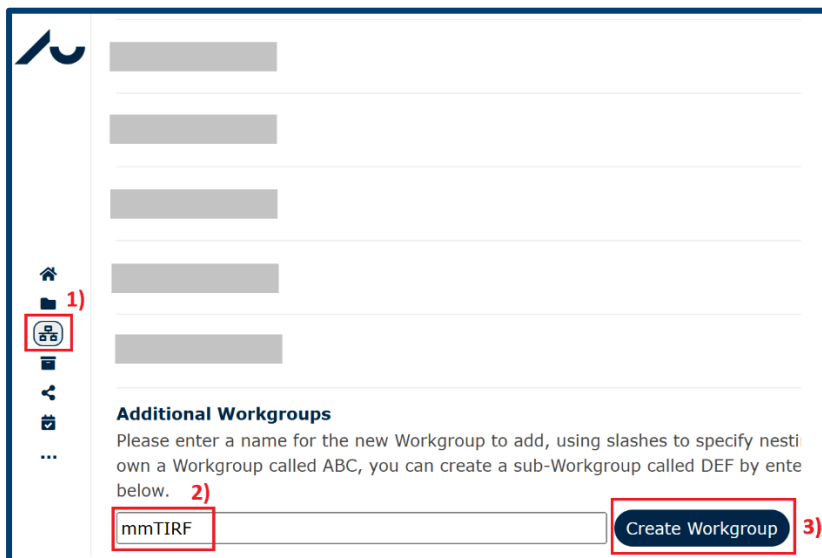
Recieve files from Instrument PCs (data and timestamps).

- ❖ In this example, we will create an automatic transfer of content from the local folder, "C:\Data\mmTIRF_erdashare_PC", on an instrument PC with internet access, to ERDA cloud storage in the Workgroup "mmTIRF" using a *Share Link*.
- ❖ *Made with help from Thomas Vosegaard and Jesper Lykkegaard Karlsen*

1. Create a new Workgroup on ERDA for your transferred files (or use an existing folder on ERDA).

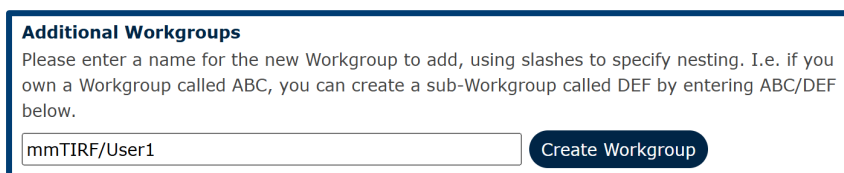
For data from instrument PCs with several users, Workgroups are preferred over regular folders, since you will be able to add owners and members to Workgroups – they will be able to see and edit all subfolders in the Workgroup.

In this example: *mmTIRF*



2. Create sub-Workgroups for each instrument user and add each user as a member of the specific sub-Workgroup.

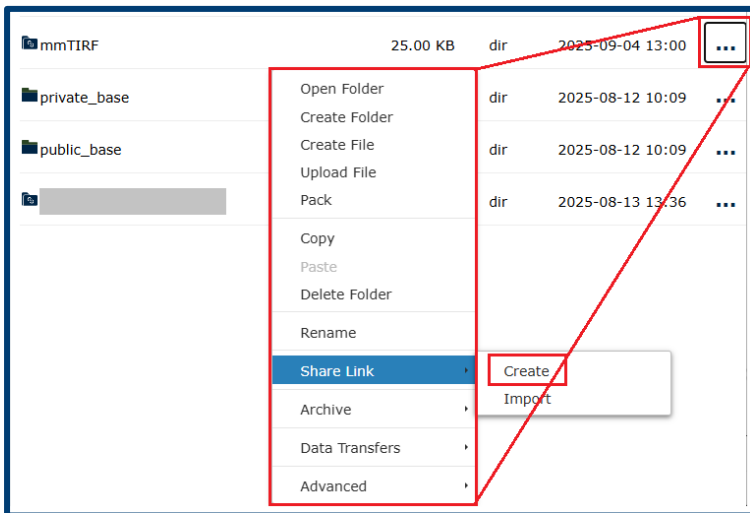
By creating this workgroup-structure you ensure that users cannot access each other's data on ERDA.



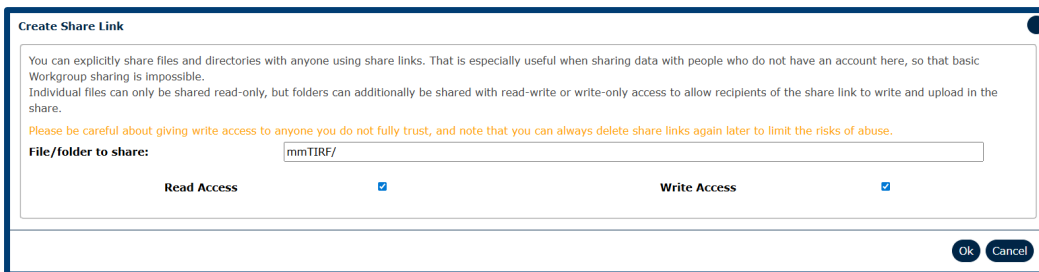
3. Your workgroup-structure will now look something like this:

Name	Size	Type	Date Modified	...
User1	25.00 KB	dir	2025-08-15 14:44	...
User2	25.00 KB	dir	2025-08-28 14:18	...
User3	25.00 KB	dir	2025-07-07 10:25	...
User4	25.00 KB	dir	2025-07-07 10:26	...

4. Click 'Share Link' on the instrument Workgroup, here mmTIRF → Create



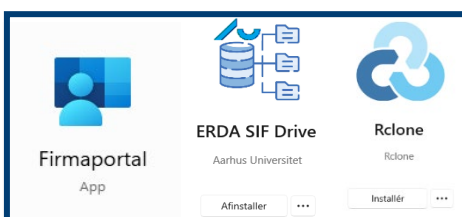
5. Give both "Read Access" and "Write Access"



6. Click OK → You can now see the Created Share Link ID at the top (XXXXXXXXXX). This, you will use as a username and password when creating the ERDA transfer via *rclone*.



7. On the PC which is logged on the shared instrument User: Install *ERDA_SIF_DRIVE* as an app via the *Company portal/Firmaportal* or using this link: https://anon.erda.au.dk/share_redirect/ge1bwSsjnv. If you install *ERDA_SIF_DRIVE* you will directly have *rclone* and all dependencies and mounting options installed with it.



8. Add the path to PowerShell:
- open "Windows Powershell" and type the following:

- b. `$userPath = [Environment]::GetEnvironmentVariable("Path", "User")`
- c. `$newPath = "$userPath;C:\Path\To\Your\Program"` (where C:\Path\To\Your\Program usually is found here: C:\Program Files\ERDA SIF DRIVE\)
- d. `[Environment]::SetEnvironmentVariable("Path", $newPath, "User")`
- e. You can check that it is correctly set up by closing and re-opening PowerShell and type:
- f. `$ENV:PATH -split ';'` and look for the path
- g. You have to restart your PC for the path-change to take effect

9. Add the path to the command prompt as well:

- a. Open the command prompt (cmd) and type the following:
- b. `Set PATH= %PATH%; C:\Path\To\Your\Program`
- c. You have to restart your PC for the path-change to take effect

10. Configure the transfer using the rclone command in the terminal (cmd):

```
rclone config create mmTIRF_erda_share sftp host io.erda.au.dk port 2222 user XXXXXXXXX pass XXXXXXXXX
```

This creates `mmTIRF_erda_share` which will be the rclone link between the local PC and the ERDA workgroup.

Test that it works by typing: `rclone ls mmTIRF_erda_share:`

See point 16 for more information.

11. Create a file (in an optional folder, for example C:\ERDA_scripts\) called "rclone_copy.ps1" with the content:

```
Get-Date -Format "dd-MM-yyyy HH:mm:ss" > "C:\Data\mmTIRF_erda_share_PC\timestamp.txt"
```

```
rclone.exe copy -l "C:\Data\mmTIRF_erda_share_PC" mmTIRF_erda_share:
```

In general terms: `rclone.exe copy -l "source_path" destination_path` (: = remote path on ERDA)

Here, `copy` will copy all newly added files to ERDA, or files where the size or content has been updated.

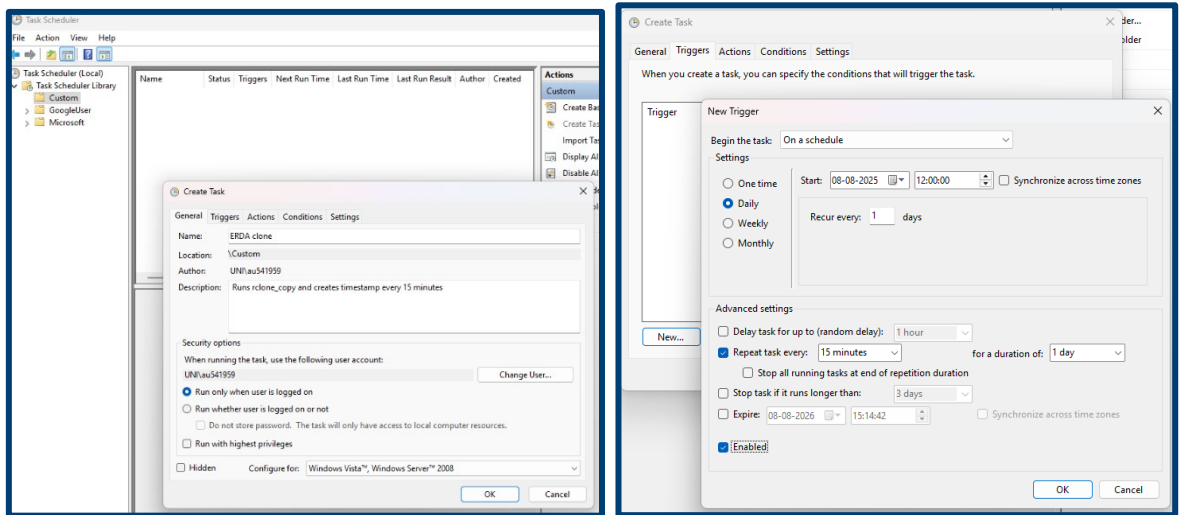
If you wish to synchronize from ERDA to the workstation instead, you simply have to reverse the order of the paths.

If you use `rclone.exe sync` instead of `rclone.exe copy`, the folder will be synced, meaning that if you delete files in the `source_path`, they will also be deleted in the `destination_path` !

12. Create a scheduled tasks in "Task Scheduler" on Windows:

- a. Go to the Task Scheduler Library folder you want to save the task in. In this case "Custom".

- b. Create Task... → Name: *ERDA clone* → Triggers → every day, every 15 minutes



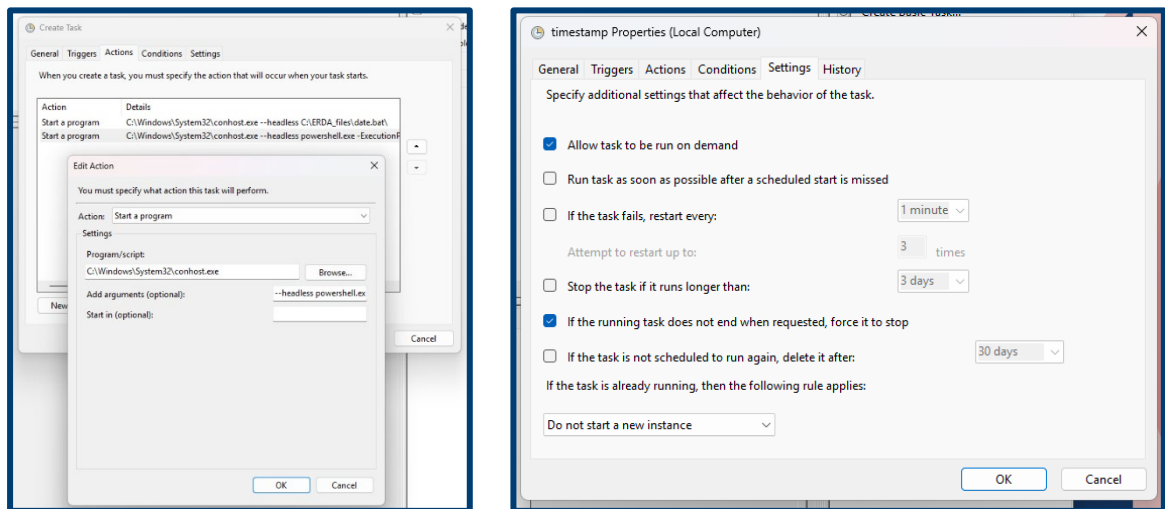
- c. Actions → New.. → Program/script: Browse... → find conhost.exe under System32 folder and choose this.

- d. Add argument → write the following:

```
--headless powershell.exe -ExecutionPolicy Bypass -File "C:\ERDA_scripts\rclone_copy.ps1"
```

Here, C:\ERDA_scripts\ is the path to your rclone_copy.ps1 file. → OK

- e. Settings → untick "Stop the task.." → OK



13. After clicking OK, your task (creates timestamp and transfers new/modified files to ERDA) should run every 15 minutes when the user is logged on. Make sure that it creates the timestamp first, and then runs the rclone script!

14. To copy your data directly into the user sub-workgroups, create subfolder in the source folder (here mmTIRF_erda_share_PC) with the same titles as you have on ERDA: User1, User2, User3, etc.

ADDITIONAL INFORMATION

15. To delete a configuration file on the workstation, write the following in the terminal (cmd):

```
rclone config delete [name]
```

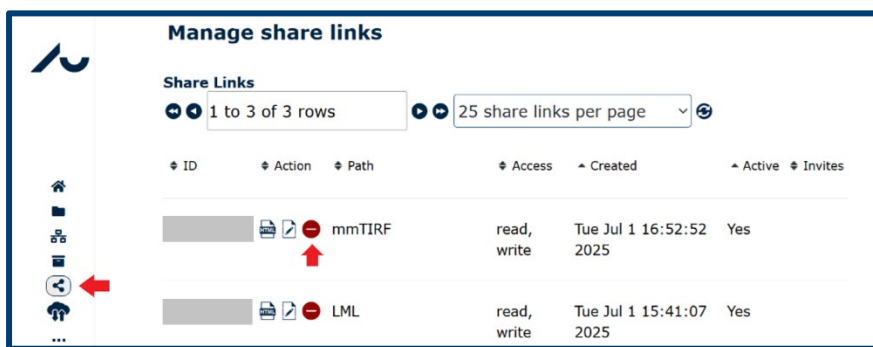
For the example with mmTIRF_erda_share:

```
rclone config delete mmTIRF_erda_share
```

You can most likely find the configuration file "rclone.conf" here:

```
"C:\Users\auXXXXXX\AppData\Roaming\rclone\rclone.conf"
```

16. To delete a Shared Link on ERDA, go to the "Manage share links for easy data exchange" tap in the menu, and press the red button to remove the Shared Link ID.



17. If the PowerShell script fails to run, even though you have put "-ExecutionPolicy Bypass" in the argument, you might have to change the *ExecutionPolicy* for Windows PowerShell, if you are setting this up on your personal work computer:

- Open Windows PowerShell ISE and open the rclone_copy.ps1 file and try to run it. If you get an error regarding execution right, you will have to change these. Read more [here](#).
- Elevate to admin right via Heimdal Thor Agent (not needed on instrument PCs)
- Open Windows PowerShell as administrator
- Write the following in the terminal:

```
Set-ExecutionPolicy -ExecutionPolicy RemoteSigned
```

- Check if you can run the script now and see your files on the ERDA cloud

18. To mount and unmount your drive on shared workstations, do the following:

- Open the *ERDA SIF DRIVE* app.
- Click the "Public key text:" box, which opens the browser and copies the text in the white box (1)
- Log into ERDA user your own ERDA account
- Paste the text into the "Public Keys box" (2)

- e. Copy your Username and paste into the Username box in the app and press ENTER

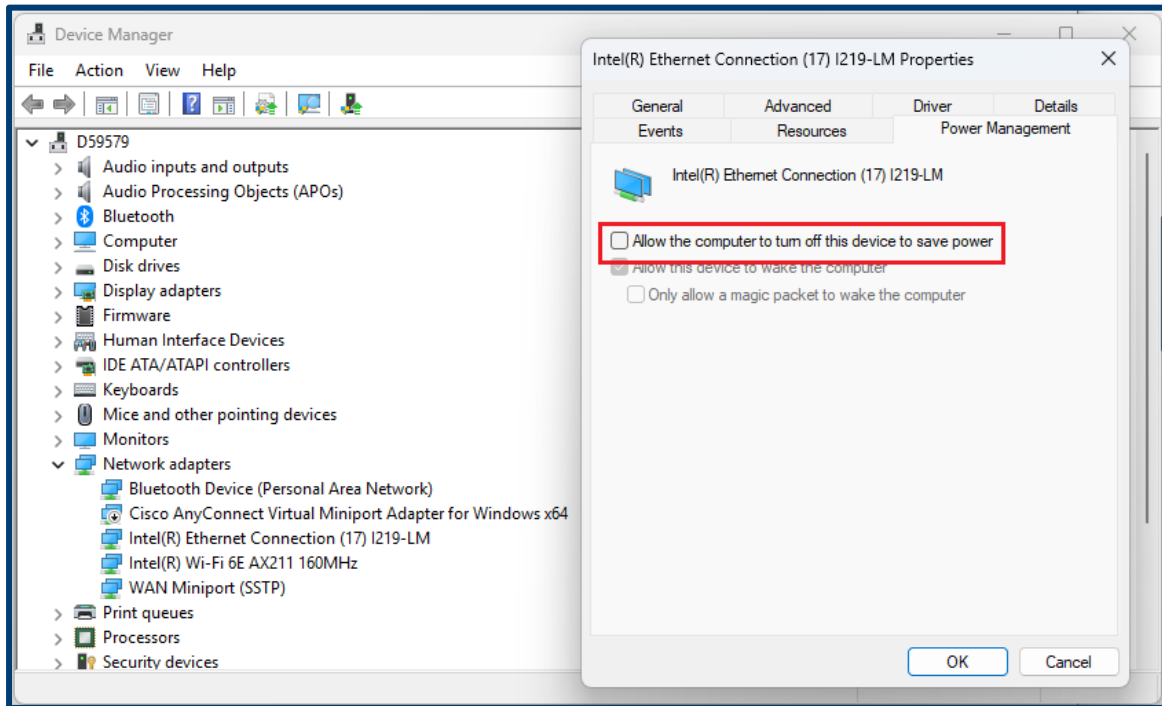
- f. Press 'Mount' if possible, or press 'Test Connection' to troubleshoot or contact ERDA support if needed.
- g. You should now find your ERDA drive under the Z-drive

- h. Work with your mounted ERDA folder until you are done for the day
- i. Last part is only needed for shared workstations with multiple users:
 - i. Press 'Unmount' and close down the ERDA SIF DRIVE app.
 - ii. Open ERDA in the browser again and remove the 'Public key' so other users are not able to mound your ERDA drive on the Workstation.

19. If you have to transfer large amounts of data while the PC sleeps, you might have to change the Power Management

Settings for the Ethernet adapter:

- a. Open Device Manager as administrator
- b. Find the 'Ethernet Connection Properties' under 'Network adapters'
- c. Remove the tick mark from "Allow the computer to turn off this device to save power"
- d. Click OK to save the settings. Now, rclone can transfer the data even if the PC 'goes to sleep'

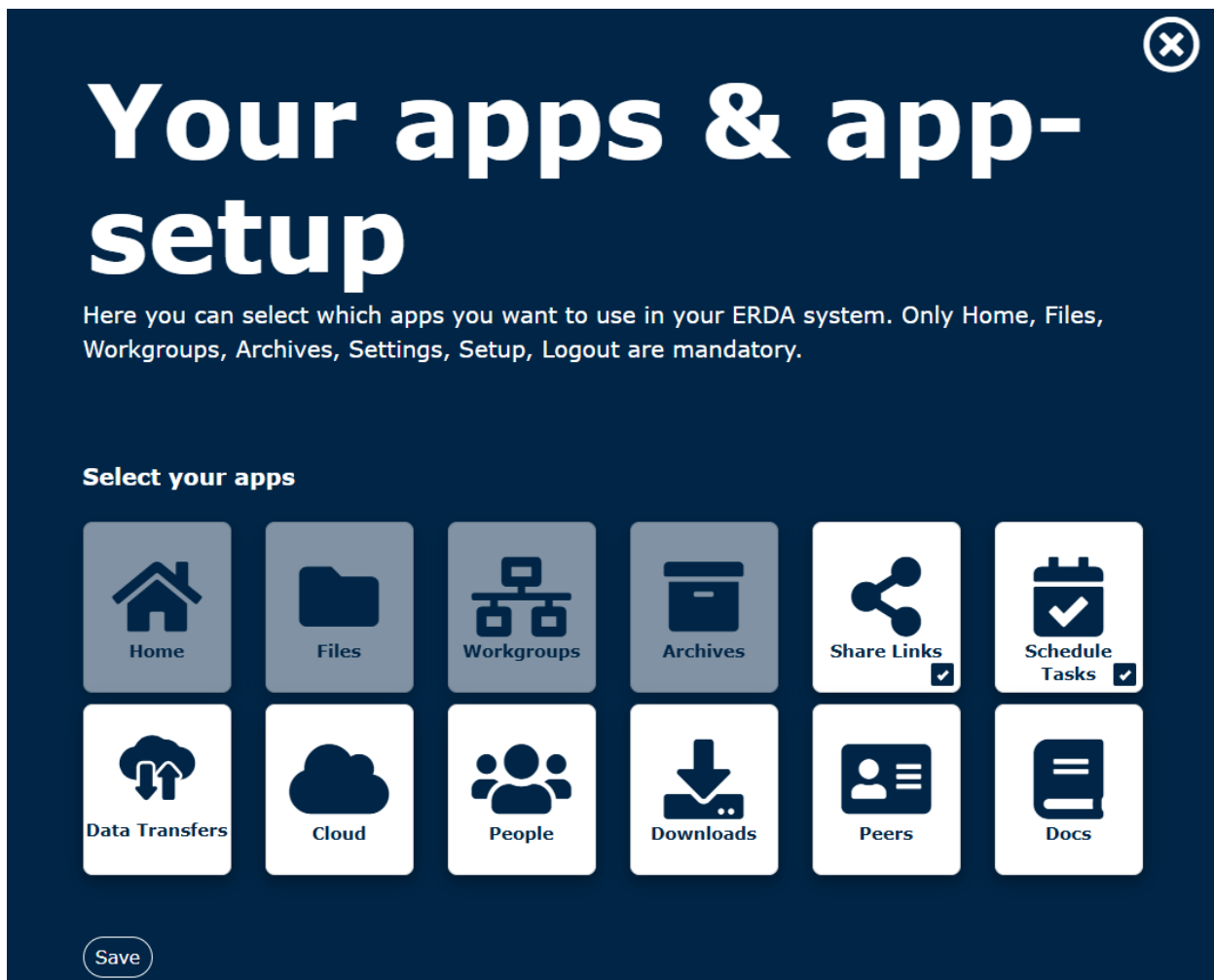


WEBSITE HOSTING FOR SYNC OVERVIEW

- ❖ If you have several instrument PCs you might want to have an overview over all sync statuses that you can access anywhere. This can be solved by hosting a static html page through ERDA using Scheduled Tasks (Cron Jobs). Made with help from Mathias Harding Tolstrup.



20. Create a folder or Workgroup on ERDA. In this example, we call this Workgroup “VB-group-public-backup”. This Workgroup is going to contain your HTML file as well as the timestamp.txt files from your instrument PCs.
21. Go to “Schedule Tasks” on ERDA. If you cannot find this on the ‘ERDA Welcome Page’, then press “Add” and ‘tick’ the box for “Schedule Tasks”



22. Set up a “Cron Jobs” transfer for each timestamp.txt from your ERDA instrument Workgroups. In this example, we show it for two different instrument Workgroups. While transferring the timestamp, you also rename the file to end with the source Workgroups name (in this example, “_mmTIRF” and “_Luminosa”).

For setting up the Cron Job to repeat every minute use the UN*X crontab format: * * * * *

Example: `* * * * * cp -f mmTIRF/timestamp.txt VB-group-public-backup/timestamp_mmTIRF.txt`

→ Save Cron/At Jobs Settings

Schedule Tasks

Manage Tasks View Logs

Manage Scheduled Tasks

You can schedule ERDA commands to run on your behalf at given times. In that way you can automate many of the routine tasks that you would in practice be able to do manually, but which would be tedious and inconvenient to repeat every time. This includes tasks like regular backup or archiving, which typically makes most sense to run e.g. every night or once a week.

Information about any scheduled actions you configure automatically gets logged and you can use View Logs above to inspect them.

Please note that for security reasons you can ONLY schedule runs of a limited set of commands, namely a selection of the most useful actions you would be able to interactively run.

The fold-outs at the bottom contain additional help on the available commands and the format in use.

All timestamps implicitly use the site timezone where the date and time is currently 2025-08-13 15:29:33.

Cron Jobs: Repeating Command Schedule

Each line here follows the standard UN*X crontab format with five time fields specifying when to run, followed by the command to run.

```
1 ### Cron Jobs: Regularly Running Tasks
2 # This is a standard crontab specification describing actions to run on your
3 # behalf at given times. Lines starting with a '#' are comments, only used for
4 # explaining things. All other lines represent a scheduled task.
5 #
6 # Each task to run has to be defined through a single line indicating with
7 # different fields when the task will be run and what command to run for the
8 # task.
9 #
10 # To define the time you can provide concrete values for minute (m), hour (h),
11 # day of month (dom), month (mon), and day of week (dow) or use '*' in these
12 # fields (for 'any').
13 #
14 # For example, if you have a Documents folder and want to create a backup of it
15 # at 5 a.m every week, you can do so by adding a rule like:
16 # 0 5 * * 1 pack Documents Documents-backup.zip
17 # somewhere below this help text. Just leave out the leading '#'.
18 #
19 # m h dom mon dow command
20
21 * * * * * cp -f mmTIRF/timestamp.txt VB-group-public-backup/timestamp_mmTIRF.txt
22 * * * * * cp -f Luminosa/timestamp.txt VB-group-public-backup/timestamp_Luminosa.txt
23
```

At Jobs: One-time Command Schedule

For one-time commands you can use the following field instead. Each line consists of a time stamp in ISO format followed by the command to run at that particular time.

```
1 ### At Jobs: One-time Tasks
2 # This is a basic at schedule file. It is similar to the crontab only with
3 # time stamps leading the command line.
4 #
5 # It uses the ISO time format YYYY-MM-DD HH:MM:SS so to schedule a one-time
6 # backup like the cron job example and make it run on the 14th of May 2019
7 # 42 minutes past midnight one would enter something like:
8 # 2019-05-14 00:42:00 pack Documents Documents-backup.zip
9 # You can insert such commands below and just leave out the leading '#'.
10 #
11 # yyyy-mm-dd hh:mm:ss command
```

Save Cron/At Jobs Settings

- Help on available cron/at variable names and values
- Help on available commands and arguments

Support About

→ check that the task was successfully saved when pressing 'Save':

Save Scheduled Tasks

Found and saved 2 valid crontab entries

Found and saved 0 valid atjobs entries

Return to schedule task overview

23. Go to the shared folder (link below) on ERDA and save the content of *backup-page.txt* as an html file (*backup-page.html*) in your own folder → https://anon.erd.au.dk/cgi-sid/ls.py?share_id=gKdk9tHhDZ

Shared Files

Working directory:
gKdk9tHhDZ

5698 Wed Aug 13 13:36:00 2025 backup-page.txt

Name	Size	Type	Date Modified	...
timestamp_mmTIRF.txt	21.00 B	txt	2025-08-13 15:07	...
timestamp_Luminosa.txt	22.00 B	txt	2025-08-13 15:07	...
backup-page.html	5.56 KB	html	2025-08-13 13:12	...

24. Edit the backup-page.html file, scroll to the bottom and change the standard names to your own PC information (line 124)

backup-page.html 5.56 KB html

- Show
- Download
- Edit**

```

123 // ---- Only edit here: add/remove PCs ----
124 fillRow('mmTIRF', 'timestamp_mmTIRF.txt');
125 fillRow('Luminosa', 'timestamp_Luminosa.txt');
126 // fillRow('Another', 'timestamp_Another.txt');
127 </script>
128 </body>
129 </html>
130

```

HTML/Text Editor **Code Editor** Raw text field

Save Changes

25. Make a Share Link with Read access for the folder, go to the Share Link and open the .html file from there. The URL of this site can now be reached by anyone with the link.




VB-group-public-backup 25.00 KB dir 2025-08-13 13:36

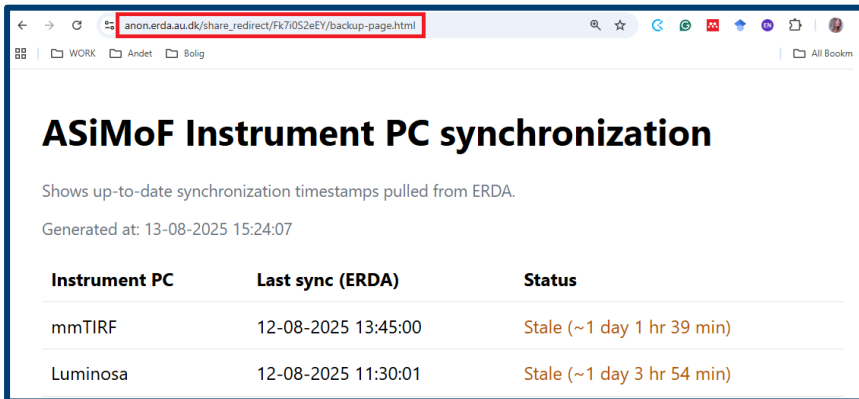
- Open Folder
- Create Folder
- Create File
- Upload File
- Pack
- Copy
- Paste
- Delete Folder
- Rename
- Share Link**
 - Create**
 - Import
- Archive
- Data Transfers
- Advanced

Shared Files

Working directory:

Fk7i0S2eEY

5698	Wed Aug 13 13:12:42 2025	 backup-page.html
22	Wed Aug 13 15:22:01 2025	 timestamp_Luminosa.txt
21	Wed Aug 13 15:22:01 2025	 timestamp_mmTIRF.txt



The screenshot shows a web browser window with the address bar containing `anon.erda.au.dk/share_redirect/Fk7i0S2eEY/backup-page.html`. The page title is "ASiMoF Instrument PC synchronization". Below the title, it states "Shows up-to-date synchronization timestamps pulled from ERDA." and "Generated at: 13-08-2025 15:24:07". A table follows with three columns: "Instrument PC", "Last sync (ERDA)", and "Status".

Instrument PC	Last sync (ERDA)	Status
mmTIRF	12-08-2025 13:45:00	Stale (~1 day 1 hr 39 min)
Luminosa	12-08-2025 11:30:01	Stale (~1 day 3 hr 54 min)