

How to map the BCP BioSupraMol file system (BCPFS) under Windows

Preamble. Measurement data of multi-user devices are stored on a special file system drive called BCB-storage.¹ Here, the data are usually stored in directories that are named for the corresponding measuring devices and for the working groups. In this way, the users have direct data access. Additionally, raw data are backed up in conformity with the DFG guidelines.

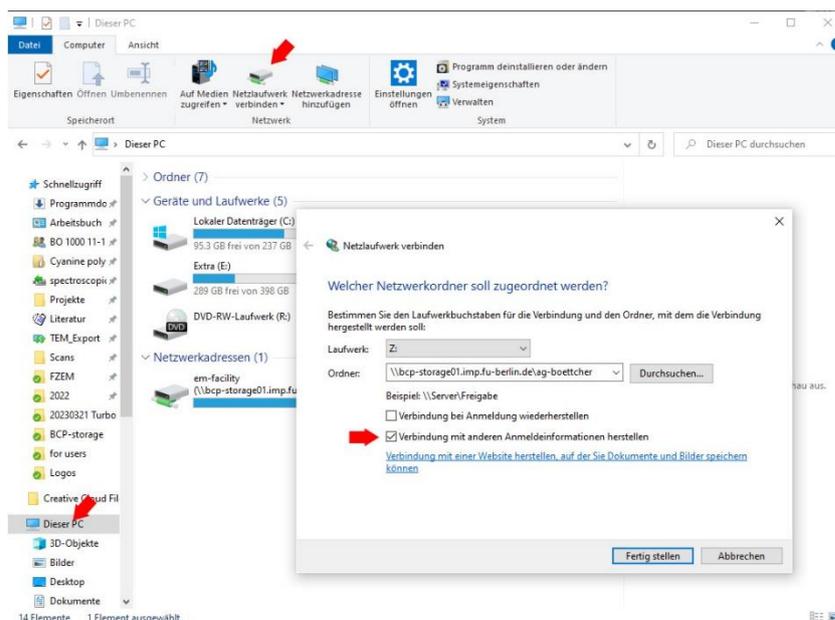
To get principal access to the BCPFS you must be registered at the “MI portal” at <https://portal.mi.fu-berlin.de/>, which will be taken on by your working groups IT manager. There is a specialised handout on the admission to BCPFS.

In this handout, we describe the principle procedures for attending the BCPFS from your computer (Windows) to get direct data access. There is a separate handout for the mapping procedure on devices.

Map network drive (Windows) on your computer

IMPORTANT: If you are not in the university (ZEDAT) network, you have to connect your computer via VPN to the ZEDAT network before!

- Go to “my computer”, right mouse click on “my computer” and select “map network drive”
- Type folder path as: \\bcp-storage01.imp.fu-berlin.de\ag-<lab>, where <lab> is your working group name.
Please note the usage of backslashes when typing the path!
- Enable “connect using different credentials” then “Finish”

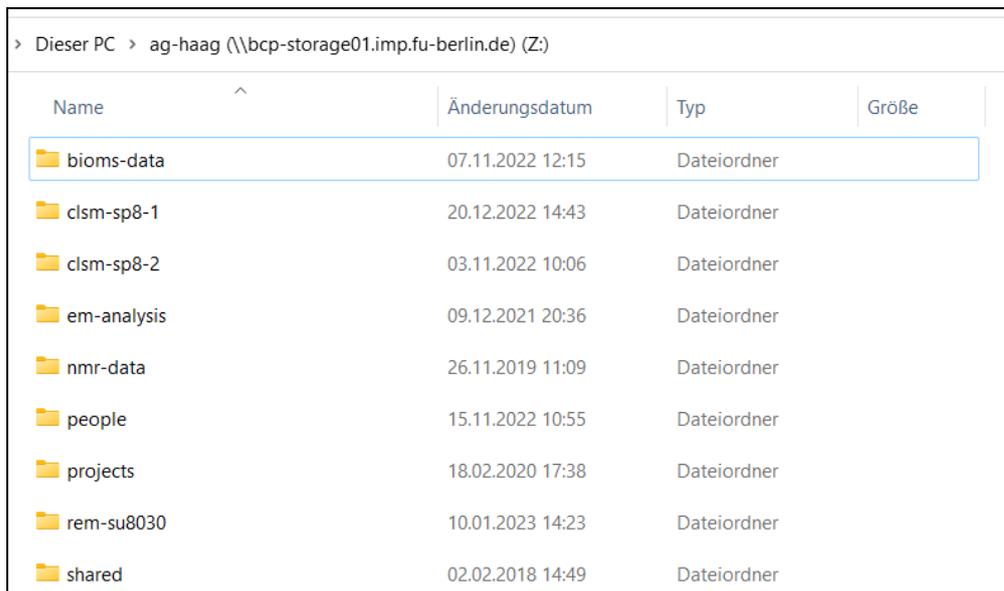


¹ Please note that the storage is currently still free of charge, but may be charged in the future.

The system now requires your username and password:

- User name: FU-BERLIN*Important: FU-BERLIN must be in capitals!*
Please note the backslash when typing the user name!
- Password: your ZEDAT account password
- Save your data

If you succeeded, you will find all folders, which you can access on BCPFS (according to the given rights) as a new drive on your PC.



Name	Änderungsdatum	Typ	Größe
bioms-data	07.11.2022 12:15	Dateiordner	
clsm-sp8-1	20.12.2022 14:43	Dateiordner	
clsm-sp8-2	03.11.2022 10:06	Dateiordner	
em-analysis	09.12.2021 20:36	Dateiordner	
nmr-data	26.11.2019 11:09	Dateiordner	
people	15.11.2022 10:55	Dateiordner	
projects	18.02.2020 17:38	Dateiordner	
rem-su8030	10.01.2023 14:23	Dateiordner	
shared	02.02.2018 14:49	Dateiordner	

If you map multiple BCPFS folders as network drives, for example `ag-<lab>` and `em-facility`, use the option 'Connect using different credentials' only for the first drive. Map the second drive with the default options. Otherwise, Windows may complain about multiple conflicting connections to the same server.

How to fix mount problems

It is a known issue that some Windows applications hold open file handles although they appear to have closed all files. The unmount scripts in [./bcpwinmount/](#) contain a check that refuses to unmount if there are open file handles. If you always follow a strategy that avoids such hidden file handles, mount problems should never appear. Possible approaches:

- Always logoff when switching the user who mounts the microscope folder.
- Always close applications that may hold open file handles to BCPFS before unmounting.

If you experience mount problems, you can try several things.

On shared computers, if you suspect that the mount problem is due to open file handles, ask the user who had mounted BCPFS before to unmount again. Then close applications that may hold open file handles. Unmount and retry to mount as the desired user.

To identify applications that hold open file handles, use `handle.exe`, which is available from <https://live.sysinternals.com> and included in `bcpwinmount`, to list open file handles:

- `handle.exe bcp-storage01.imp.fu-berlin.de`

Then close the applications that hold the file handles.

In rare situations, it may be useful to forcefully close handles using `handle.exe -c <handle> -p <pid>` as an administrator. Be aware that this may cause data corruption if the application that holds the handle uses the old handle later:

see <https://technet.microsoft.com/en-us/library/2009.04.windowsconfidential.aspx> for a discussion.

A safe alternative is to logoff and logon again to clear the session cache. This approach has worked in all cases. However, it might not be applicable, because logoff is restricted on the microscope due to other constraints.

The following command, executed in a Windows Command Prompt (`cmd.exe`), drops all connections:

- `net use * /del`

Although this may help to resolve network problems in general, it is unclear in which specific situations it would be useful.