# Melbourne Cytometry Platform Data Handling guide

## Saving, accessing and retrieving your data

## Use this guide to:

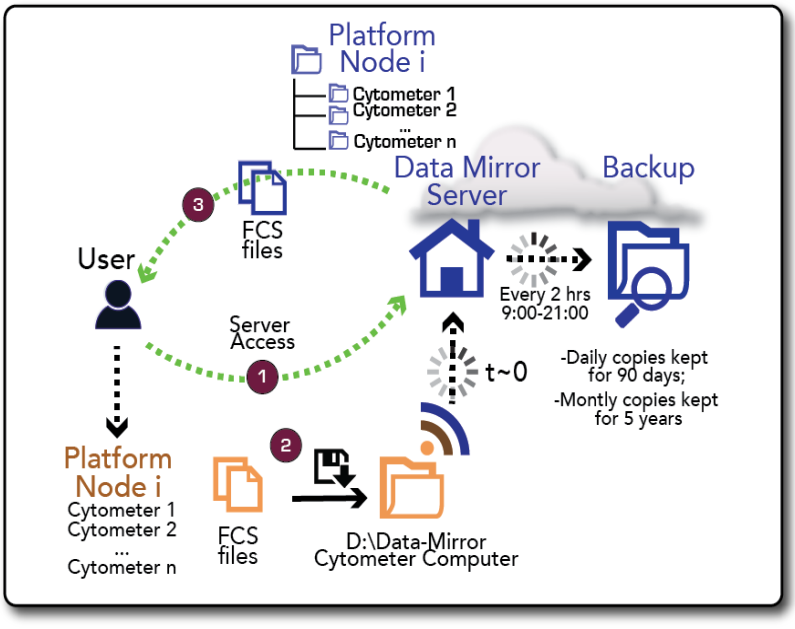
1. Request access to the cytometry data file server
2. Locate and export your data to the Data-mirror folder on the cytometer's PC
3. Connect to the Data-mirror on your own PC/ Mac to retrieve your exported data

## Overview of MCP data management process

The Melbourne Cytometry Platform provides a secure, sophisticated and easy system for accessing and storing cytometry data exported by researchers from any of our Platform-managed cytometers and analysis computers.

Data management begins by a researcher at any of our four nodes actively saving or exporting their data to the cytometer computer's data drive (usually *D*: or *E*:) into a folder named **Data-Mirror**.

Data in the local PC's Data-Mirror drive is mirrored in almost real time to an equivalently named Data-Mirror cloud-based server. Data appearing on the cloud is backed up at least once per day and data is archived for long-term storage. Researchers must request for access to the cloud-based Data-Mirror server and retrieve data onto their own workstations (instructions in the document). Data that is up to 2 months old is readily available for researchers to access from the cloud. Data that is older may be retrieved by request.




**FEATURES:**

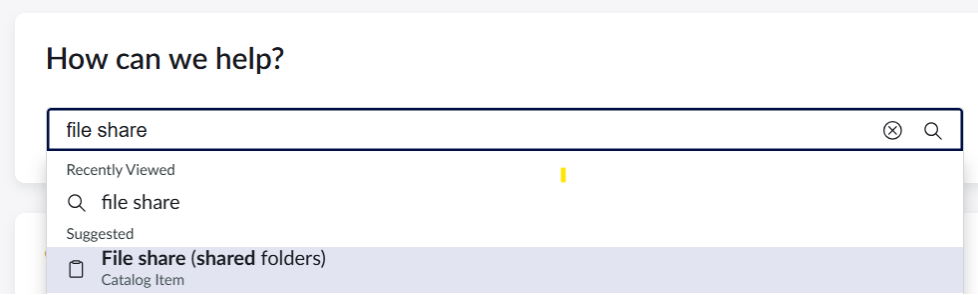
**Central Data Storage**
Access data acquired on any Platform-managed cytometer
**Secured access**
No external memory drives or virus threats. Access from any location, including home via VPN
**Long-term backup**
Your data is preserved for future recovery

## Step 1. Request access to the data file server

University of Melbourne-affiliated staff can directly request Central IT for access to the Data-Mirror server to retrieve data acquired on any Melbourne Cytometry Platform managed resources located at the Peter Doherty Institute, Melbourne Brain Centre, Bio21 or Dental School. Request for students' access to the Data-Mirror server must be placed by a staff member (the lab manager or supervisor) on behalf of the student.

- Go to https://uomservicehub.service-now.com/esc

In the dialogue box, type "file share" and select the 'File share (shared folders)' catalogue item




- In the request form, enter the following details:

**Requested for:** User's name – you may request on somebody else's behalf, for example, for a student

**File Share location:** MDHS;

**File share:** MDHS-Research;

**Type of request:** Provide access to an *existing* share folder;

**Folder details:**\\unimelb.edu.au\MDHS-Research\Platforms\Cytometry\Data-Mirror

**Folder owners (approver):** Vanta Jameson or Alexis Gonzalez*

*The file share administrator that you name first (Vanta or Alexis) will receive an automated request to review and approve/reject the request.

Under **Access details** you'll find two options: "**Read only users**" and "**Read/Write users**". **Type the requestor's name into the Read Only users' field**

*NOTE: Requests for **Read/Write** access to Data Mirror server will be **rejected** by MCP managers and a new ticket will need to be submitted. Tickets will also be rejected if the user name has not been added into the **Read only** field.*

In the text box asking you to "**Please provide your reasoning for this request**" type: "Cytometry platform user requiring access to stored data"

Under "**Additional information**", specify that you "require access to all subfolders and files contained within the data mirror"

- Submit your ticket.

You'll receive an RITM number by email that you should retain for further issues relating to this request. After approval you'll receive an email confirming the request and providing information on how to connect to the server. If your ticket is rejected repeat step 1 specifying "Read only" access

## Step 2. Export your data to the cytometer computer's Data-Mirror folder

**a.** Once you've acquired data on the cytometer, you must save (or export) it to the correct drive on the local PC. **It is the responsibility of the researcher to export their data as soon as they've finished acquisition.**

***NOTE:*** *Data not exported to the local data mirror folder won't appear in the server, won't be backed up for long-term storage and will be deleted from the PC as part of the facility's data maintenance procedures.*

- For BD cytometers (Fortessa/ CantoII), data needs to be actively exported to D:\Data-Mirror
- For Cytek Aurora cytometers, data needs to be actively exported to either the D: or E:\Data-Mirror (cytometer dependent)
- For Beckman Coulter CytoFLEX cytometers, data is recorded directly to the D:\Data-Mirror. This must be selected before acquisition begins. Researchers may choose to re-export CytoFLEX data if they modify their files after the fact, for example re-export with or without compensation matrices or exporting events within a specific analysis gate.

**b.** **For efficiency in archiving, data maintenance and future retrieval, it is your responsibility to export your data in the following hierarchy:**

**Lab group folder\your name folder\year\month**

The Cloud-based Data-Mirror server has folders corresponding to the node and instrument that you've accessed, and data is automatically saved to the correct folder.

## LOCAL DATA STORAGE LENGTH AND LOCAL POLICIES

Data stored in the cytometer's software (library) and the local Data-Mirror folder is periodically deleted by Platform staff to prevent computers from running out of storage space or corruption of the operating system.

At the Peter Doherty node, deletion is done on the first Monday of each month. At this time, data in the acquisition software (for example FACS Diva or SpectroFlo) that is older than 1 month is deleted. For example, data acquired any time in January is deleted on the first Monday of March.

Secondly, data that has been exported to the Data-Mirror folder on the local cytometer computer is deleted after 2 months. For example, data from January will be deleted in April.

Researchers will be able to access and save data to their own PCs or lab-servers via the cloud Data-Mirror *while it is still present on the local Data-Mirror*, so don't delay in accessing your data! You have 2 months.

Contact us if for any reason you were unable to retrieve your data from the local data folder or server for assistance as soon as the issue is detected and BEFORE the monthly purge. For example, extended breaks, illness, travel.

## Step 3. Connect to the Data Server

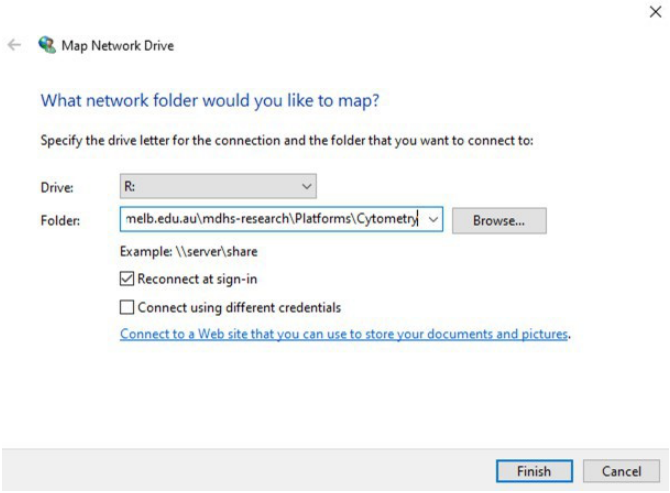
You'll receive instructions from IT via email once your request for access to the cloud Data-Mirror (step 1) has been processed.

In brief:

## a. Windows 10 and 11 users:

Mapping the Network Drive.

Open **File Explorer,** select **This PC** and select Computer from the top menu on Windows 10 or click on the 3 dots on Windows 11. From the menu bar, select **Map Network Drive.** The Map Network




Drive dialogue box will open:

- In the **Drive** box, select your preferred drive name for example, "R:"
- In the **Folder** box, enter:

**\\unimelb.edu.au\mdhs- research\Platforms\Cytometry\Data-Mirror**

- Ensure the **Reconnect at logon box** is checked. Click **Finish**. The network drive will now appear in My Computer.
- **NOTE:** If you are asked for a username and password enter:

Username: unimelb\email username Password: email password

Students should enter: "student\email username" and email password

Download your data from the Data-Mirror folder (Data-mirror/Platform node/Resource/etc..) and store it at a secure location

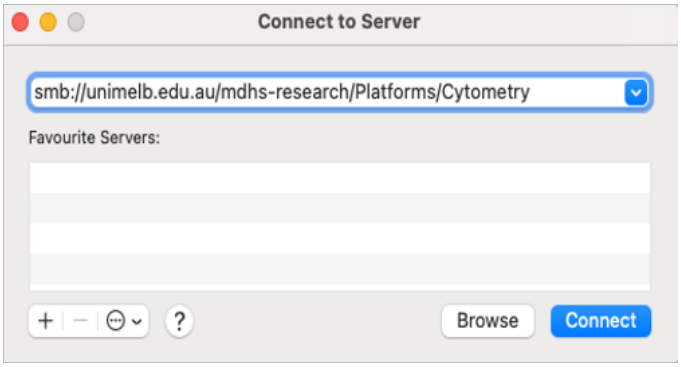
## b. Mac OSX users:

**NOTE:** If connecting via Wi-Fi (UniWireless or from home), make sure you first connect to the University network via vpn (Paloalto/GlobalProtect).

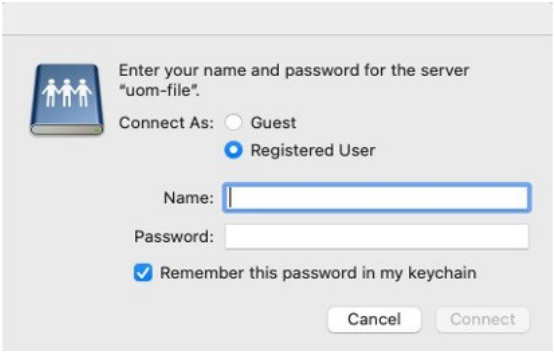
Connecting to the Server. Open **Finder.** From the top menu, select **Go** > **Connect to Server**. The **Connect to Server** dialogue box will open:

In the **Server Address** box, enter

**smb://unimelb.edu.au/mdhs-research/Platforms/Cytometry/Data-Mirror**




Click on the **plus icon** to save this server address in your Favorite Servers and Click Connect. The Authentication dialogue box will open:




Enter:

- Username: unimelb\email username
- Password: email password

NOTE: Students should enter: student\email username and email password

- Ensure that **Remember this password in my keychain** is checked. Click OK.

Finder will then open displaying the contents of the share. A network Icon will also appear on your desktop. To make this network connection available each time you login, drag the **network icon** from the desktop to the right-hand side of the Dock.

Download your data from the Data-Mirror folder (Data-mirror/Platform node/Resource/etc..) and store it at a secure location.