Data Storage Locations Guidance

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Data Storage Locations Guidance

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Data Storage Locations Guidance Background

- We work in a complex, devolved environment

- We need to consolidate the number of places we store our data

- We need to reduce the risk of data loss or cyber security storage incidents

- The guidance in this presentation is aligned with the University IT Principles and Standards and the IT Roadmaps.

- This presentation describes University recommended storage platforms that address a range of client requirements

Data Storage Locations Guidance Protection

- Target always available 24/7, maintenance is performed with no downtime

- ITS never delete data; data lifecycle management is client controlled

- Previous versions of data are kept for a rolling 90 days

- Data is replicated to multiple data centres

- Data is always encrypted in transit (excluding some HCS on-campus activities)

- Data integrity is continuously checked.

Data Storage Locations Guidance Assumptions

- The Data Storage locations specified in this presentation are supported, secure, recoverable, included in disaster recovery plans, monitored and have vendor support contracts.

- Syncplicity is being replaced by Microsoft 365 OneDrive and Teams.

- Final copies of Official University Records must be stored in OURDrive.

Data Storage Locations Guidance Overview

Recommended locations:

- Microsoft 365 - Teams and OneDrive
- High Capacity Storage (HCS)
- Globus Data Publication
- Otago Research Information System (ORIS)
- Research Data Management Platform
- NZ eScience Infrastructure (NeSI)
- Practice Management Systems
- Research PACS (Picture Archiving Solution)
- OURDrive
- University AWS and Azure Environments

Locations not recommended:

- Email
- Your Personal Devices
- USB Devices (good for one-time transfer only)
- Your computer's hard drive (if your only copy)
- Your Personal or Home Cloud Storage
- Portable Hard Drives

Data Storage Locations Guidance
Syncplicity Migration to OneDrive and Teams

- Microsoft 365 OneDrive and Teams replace Syncplicity

- It enables collaboration between staff, students and external people/organisations

- Use OneDrive for individual storage (where files are not shared with groups)

- Use Teams for group/collaborative workspace and storage

- There is a 1TB OneDrive quota for each staff member by default

- OneDrive and Teams are available on your desktop and mobile, as both storage for your role specific files (for example team leaders might store HR, Finance material in OneDrive), and as the shared storage beneath your Microsoft 365 Team sites

Data Storage Locations Guidance Microsoft 365 File Storage

OneDrive

- Recommended place to start creating/editing a document while working on it. Move the document over to your Teams site when ready to share with a wider audience.

- Office documents (Word, Excel, PowerPoint etc)

Teams

- Share files and collaborate with your team members, or project team.

- As required individual files/folders can be shared with external organisations.

Data Storage Locations Guidance
High Capacity Storage (HCS)

Used for

- Recommended place to put large files (> 10GB) or large numbers of files (> 1000 per folder).

- Large research data sets

- **If complex file and folder permissions are required for staff/students.**

- If particular storage protocols are required (e.g. CIFS)

- If high performance file storage is required.

- Primary use is on-campus.

- Enterprise Systems File Storage (e.g. eVision, Finance1)

How do I share

- Internally share via folder permissions using Active Directory Groups

- Externally share using Globus Publications & Sharing modules

- Externally share by moving files (if they are less than 10GB in size) into Microsoft 365 Teams or OneDrive.

- Via the Research Data Management platform (as it will access HCS)

Data Storage Locations Guidance
Use Case 1: Research

My Objective

- I have Māori data that must be stored within New Zealand
- I need a collaborative workspace for my Lab or Research Team
- I need file storage for my Lab or Research Team and we have complex file access permission requirements
- I have very large files that I need to store (e.g. genomic sequencing)
- I need to publish or share a very large number of files or very large files
- I want publish my research data set (e.g. paper, results, raw data, thesis)
- I need to perform large computational analysis with my data set
- I work with an MRI Scanner, SEM, TEM, or optical microscope and need a system that can store, visualise and share my data

Use Highlighted Storage Locations

- Microsoft 365 Teams
- Microsoft 365 OneDrive
- High Capacity Storage
- Globus Data Publication
- Research Data Management System*
- NeSI
- Practice Mgmt Systems
- Research PACS*
- OURDrive
- Otago Research Information System*

Data Storage Locations Guidance
Use Case 2: Medical

My Objective

I am working remotely and need to store a record of my research participant interviews (e.g. a/v recording)

I need to arrange secure publication / sharing for a large set of Medical data (e.g. genomic sequencing results)

I need to arrange secure data transfer, storage and high performance compute for a large set of Medical data (e.g. genomic sequencing data)

I need to manage and record patient appointments and treatment notes

I need to store or access imaging data and metadata for research

Use Highlighted Storage Locations

Microsoft 365 Teams

Microsoft 365 OneDrive

High Capacity Storage

Globus Data Publication

Research Data Management System*

NeSI

Practice Mgmt Systems

Research PACS*

OURDrive

Otago Research Information System*

Data Storage Locations Guidance
Use Case 3: University Records

My Objective

I am in a committee meeting taking notes in draft form

I have a draft contract with a vendor which is going to be reviewed by a panel of staff

I have signed a contract with a vendor and need to store the contract

I am ready to publish my committee meeting minutes

I have been communicating with a student and need to make a record of the interaction

I have a signed research contract

Use Highlighted Storage Locations

Microsoft 365 Teams

Microsoft 365 OneDrive

High Capacity Storage

Globus Data Publication

Research Data Management System*

NeSI

Practice Mgmt Systems

Research PACS*

OURDrive

Otago Research Information System*

Data Storage Locations Guidance
Use Case 4: Departments and Teams

My Objective

- I am creating an document which my team will collaborate on and follow
- I want to have an informal place to communicate with my team (e.g. bounce ideas around)
- I need a place for my lab groups to collaborate with each other and teaching staff
- I am leading a project that needs a collaborative workspace
- I have a large division/department and need to share documents with a variety of permission levels

Use Highlighted Storage Locations

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Data Storage Locations Guidance
Use Case 5: Individual

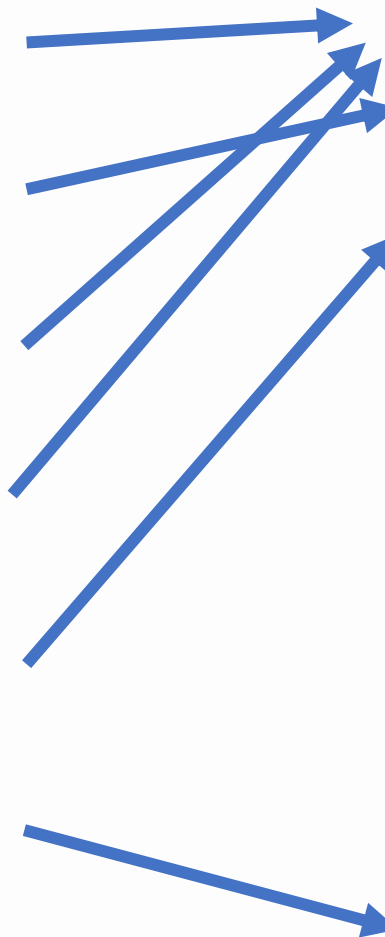## My Objective

- I want a place to store my meeting notes
- I am working on a draft document
- I have a document and need to share it with an external person
- I am working on a conference presentation with another staff member or external person
- I'm doing a personal research project which is generating large files
- I have written a status report for my research funders

Use Highlighted Storage Locations

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