

# Enterprise Architecture Office

## Data Storage Locations Guidance

University of Otago

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# Data Storage Locations



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# Data Storage Locations 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 platform(s) that address a number of client requirements

# Data Storage Locations 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 centers
- Data is always encrypted in transit (excluding some HCS on-campus activities)
- Data integrity is continuously checked.

# Data Storage Locations Assumptions

- The Data Storage locations specified in this presentation are supported, secure, recoverable, included in disaster recovery plans, monitored and have vendor support contracts.
- Storage locations below marked with an \* are in our IT Roadmaps and will be made available over the next 12-18 months.
- This presentation assumes that Syncplicity will be replaced by OneDrive and that Office 365 for Staff, the Research PACs, University cloud tenancies with Azure and AWS, and the Research Data Management Platform will be delivered as per the ITS Roadmaps.
- The default file storage location for University staff will be OneDrive.
- Official University Records must be stored in OurDrive.

# Data Storage Locations Overview

## Places we recommend storing data

- Office365 OneDrive & Teams
- High Capacity Storage (HCS)
- Globus Data Publication
- Otago Research Information System (ORIS)
- Research Data Management Platform
- NZ eScience Infrastructure (NeSI)
- Patient Management Systems
- Research PACS (Picture Archiving Soln)
- OurDrive
- University AWS and Azure Environments

## Places we don't recommend

- 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



# Syncplicity Migration to OneDrive

- Office365 being rolled out to Staff commencing Q3 2019
- Microsoft OneDrive will replace Syncplicity
- It enables collaboration between staff, students and external organisations
- There is a 1TB OneDrive quota for each staff member by default
- The data migration process will be advised by the project team soon
- OneDrive is configurable on your desktop and mobile, as both storage for your role specific files (for example team leaders might store HR, Finance material here), and as the shared storage beneath your Office 365 Team sites
- Like Syncplicity, OneDrive files and folders can be shared and synchronised across your devices. They are backed up and previous versions are recoverable for up to 90 days.

# Office 365 File Storage Recommendations



## Office365 OneDrive

- Recommended place to start creating/editing a document while working on it. Move the document over to your Office365 Teams site when ready to share with a wider audience.
- As required individual files/folders can be shared to either individual UoO Users or externally.
- Office documents (Word, Excel, PowerPoint etc)

## Office365 Teams Site

- Share files and live collaboration amongst your team members, or project team.
- As required individual files/folders can be shared with external organisations.



# 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 Office365 Teams or OneDrive.
- Via the Research Data Management platform (as it will access HCS)

# Data Storage Locations

## 1. Research

### My Objective

I need a collaborative workspace for my Lab or Research Team

I need a 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

Office365 Teams



Office365 OneDrive



High Capacity Storage



Globus Data Publication



Research Data Management System\*

NeSI



Patient Mgmt Systems



Research PACS\*



OurDrive



Otago Research Information System\*



# Data Storage Locations

## 2. Medical

### My Objective

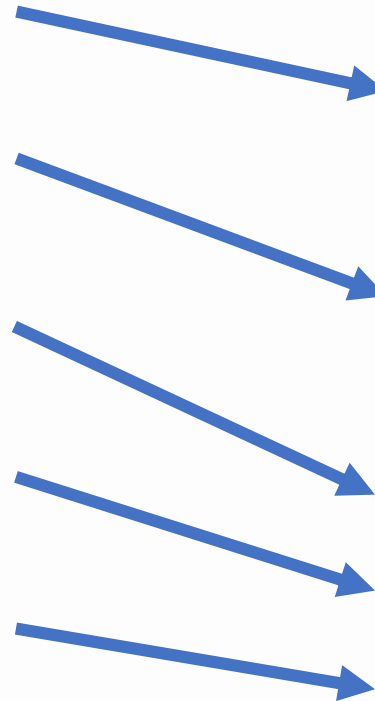
I am working remotely and need to store a record of my research participant interviews (e.g. a/v recording)

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

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



### Use Highlighted Storage Locations

Office365 Teams



Office365 OneDrive



High Capacity Storage



Globus Data Publication



Research Data Management System\*

NeSI



Patient Mgmt Systems



Research PACS\*



OurDrive



Otago Research Information System\*



# Data Storage Locations

## 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

Office365 Teams



Office365 OneDrive



High Capacity Storage



Globus Data Publication



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# Data Storage Locations

## 4. Department & Teams

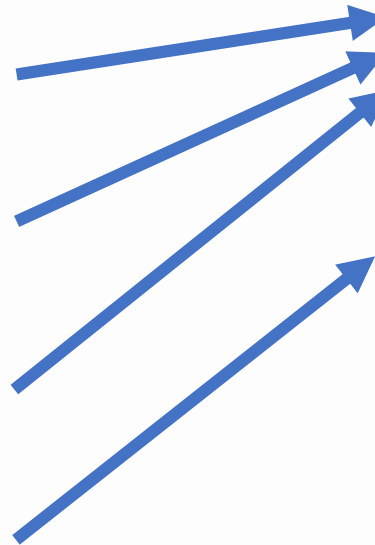
### My Objective

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 have a large division/department and need to share documents with a variety of permission levels



### Use Highlighted Storage Locations

Office365 Teams



Office365 OneDrive



High Capacity Storage



Globus Data Publication



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# Data Storage Locations

## 5. Individual

### My Objective

I want a place to store my meeting notes

I am working on a document

I have a document and need to share it with an external user

I am working on a conference presentation with another staff member or external user

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

Office365 Teams



Office365 OneDrive



High Capacity Storage



Globus Data Publication



Research Data Management System\*

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