

# Understanding File Storage Options for Faculty

O1 Data Levels

Personal vs. Shared

Available Tools

O4 Decision Matrix

#### **Data Levels**

At the end of section one, you will be able to identify the classification of data levels used at Charlotte.

#### Personal vs. Shared

At the end of section two, you will be able to recognize the benefits of using shared drives and folders such as Google Shared Drives and Dropbox Team Folders.

#### **Available Tools**

At the end of section three, you will be able to identify the available file storage tools provided by Charlotte.

#### **Decision Matrix**

At the end of section four, you will be able to use a decision matrix to compare and contrast the available tools.

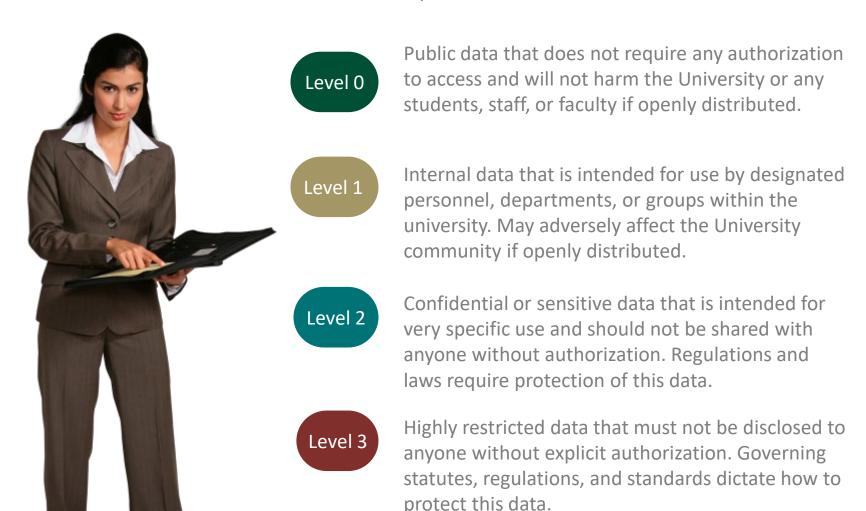
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## Data Levels

Data Classification at Charlotte

### Data Classification at Charlotte

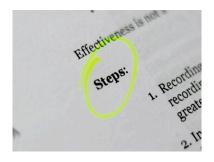
Data classification levels range from Level 0 (public) to Level 3 (highly restricted). As you make decisions about where to store data, first identify the level of the data.



### Sample Data by Classification

The following are just a few examples of data that fall into each of the four levels of data classification.









#### Level 0 - Public

- Advertising
- Product and service information
- Directory listings
- Published research

#### Level 1 - Internal

- Department policies and procedures
- Budget information
- Unpublished research

### Level 2 – Confidential/Sensitive

- Personally identifiable information (PII)
- Financial information
- Grades and student-related data

### **Level 3 – Highly Restricted**

- Social Security
   Numbers
- Restricted research data
- Restricted information protected by non-disclosure agreements

### Personal vs. Shared

### Personal vs. Shared Drives/Folders

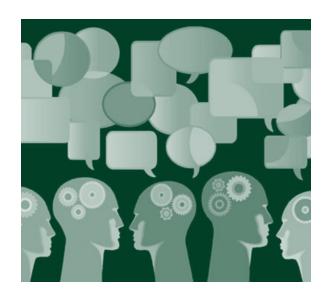
Personal drives and folders serve as repositories for any data, files and information that you create for your own use.

Files that are intended to be shared with others should be stored in shared drives or shared folders.



Shared drives and folders are repositories for data and files that are co-authored or intended for reference and use throughout departments or groups.

Files that are need for use by more than one individual should be stored in shared areas such as Google Shared Drives or Dropbox Team Folders.







### Collaboration







Using central spaces for storing files and information allows a group to easily collaborate.

## Department / Committee Administration







Storing in-demand files in a central space keeps them easily accessible.

### **Knowledge Transfer**







Sharing content in a central space keeps it available to all who need access and avoids loss of information should someone leave the university.

### **Documentation Management**







Maintaining document version control is easier when only one copy is shared in a central space.

### Support







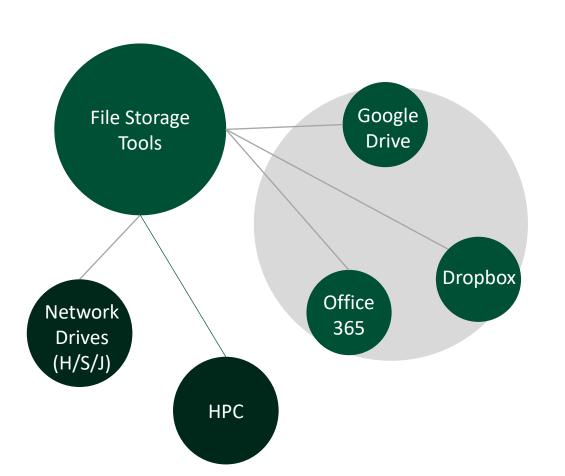
The office of OneIT provides training and/or FAQ pages for Google Shared Drives and Dropbox Team Folders.

### Available Tools

File storage tools made available for Faculty and Staff

### Available File Storage Tools

Charlotte offers three primary file storage options for use by faculty and staff.





### Cloud Storage

OneIT recommends cloud storage for general use, ease of access, and level of support.

Cloud storage options are available through Google Drive, Office 365 -OneDrive, and Dropbox

#### **Network Drives**

OneIT provides on-campus server network drives (H:/ S:/ J: ) that are accessible from university-provided computers.

### **HPC: High Performance Computing - Research**

The Research Computing Group provides research systems to serve a variety of campus research activities.



ToneIT recommended for general purposes, ease of access and level of support

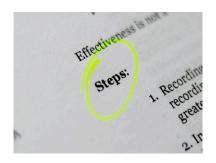
### Tools by Data Classification Level

The tools provided for file storage are accessible for use for the following levels of data classification.



Level 0 - Public

- \*University owned individual computers
- Google Drive
- Office 365 OneDrive
- Dropbox
- OneIT-provided Network Drives



Level 1 - Internal

- \*University owned individual computers
- Google Drive
- Office 365 One Drive
- Dropbox
- OneIT-provided Network Drives



Level 2 – Confidential/Sensitive

- Google Drive
- Office 365 OneDrive
- Dropbox
- OneIT-provided Network Drives



Level 3 – Highly Restricted

- Varies, dependent upon data security plan
- Contact the <u>Data</u>
   <u>Security Officer</u> for your college to learn more.

<sup>\*</sup>University owned individual computers are not to be used to store Level 2 and 3 data.

## Accessing File Storage Tools – Cloud Storage



Google Drive -Shared





Fill out the Google Shared Drive request form for a new shared drive.

Contact your department or committee for access to existing shared drives.



Google Drive -Personal

https://drive.google.com/ Sign in using your Charlotte email and NinerNET credentials.

Fill out the Dropbox for Business request forms to request access to Dropbox or to request a team folder.

### https://dropbox.charlotte. edu/

Sign in using your NinerNFT credentials

Contact your department or committee for access to existing team folders.



Office 365 -OneDrive

### https://login.microsoftonline. com/

Sign in using your Charlotte email.

Select the Work or school account option and provide your NinerNET credentials.



# Accessing File Storage Tools – Network and Research Computing's HPC Storage



#### **Network Drives**

Network drives are available on your university computer. Through the File Explorer, look under This PC to locate your personal network drive (H) and shared and department network drives (S and J).

To access these drives from off campus, you must first connect to the VPN.



Research Computing's HPC storage

Research computing's
HPC storage is available to
members of UNC
Charlotte's research
community.

Visit the <u>University</u>
Research Computing
website to learn more.

### **Sharing with Students**

Shared Drives and Folders allow for collaboration with students in the following instances:



#### Google Shared Drives

Google shared drives can be shared with all students as students have a Google account with Charlotte.



### **Dropbox Shared Folders**

Requests for access for \*student employees only can be made if needed:

<u>Dropbox Request</u>



### Network Drives (S,J)

Requests for access for \*student employees only can be made if needed:

Network Storage Drive Ticket Request



<sup>\*</sup>Dropbox and network drives are not available to the general student population.

# Guidelines for Research Data Security

Faculty members working on research are expected to document and follow security guidelines for research.

Take time to review the <u>Guideline</u> <u>for Research Data Security</u> website to learn more.

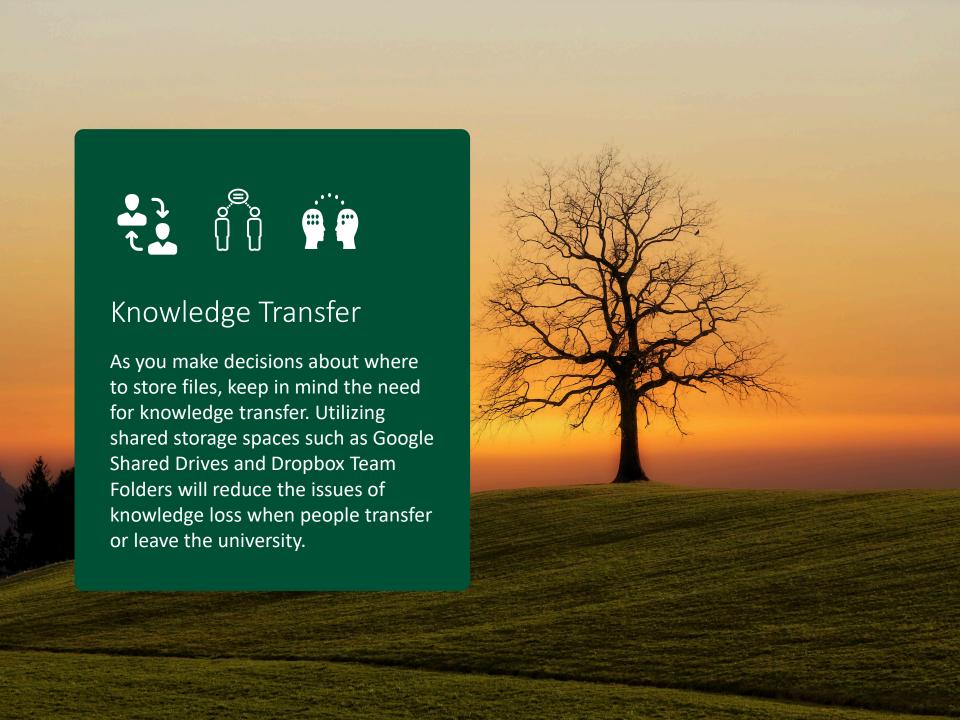
# Department Specific File Storage

Your department may offer additional storage options than you have read about in this presentation.

Please contact your department about additional information and support for the tools that they offer.

### **Decision Matrix**

Compare and contrast file storage tools



Comparing File Storage Tools

The data matrix on the following page will help you compare tools and answer the following questions regarding general use tools: Google Drive, Dropbox, Office 365 OneDrive, and Network Drives (H/S/J):

### **Quota Limit**

What is the storage capacity of each tool? How much can I store on my available drives?

### **Availability**

How do I access each tool?

#### Collaboration

Who can I choose to share my files and folders with in each tool?

### Support

Where can I find support information on using these tools?\*

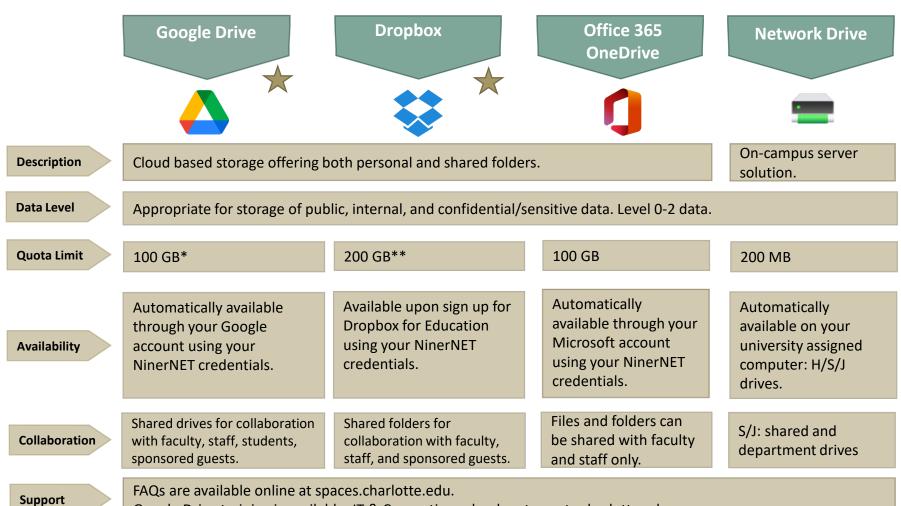
\*OneIT recommended general use tools denoted with a gold star have the highest level of support.





#### General Use File Storage Options for Faculty

Use the decision matrix below to compare the file storage and sharing tools offered at the University of North Carolina at Charlotte.



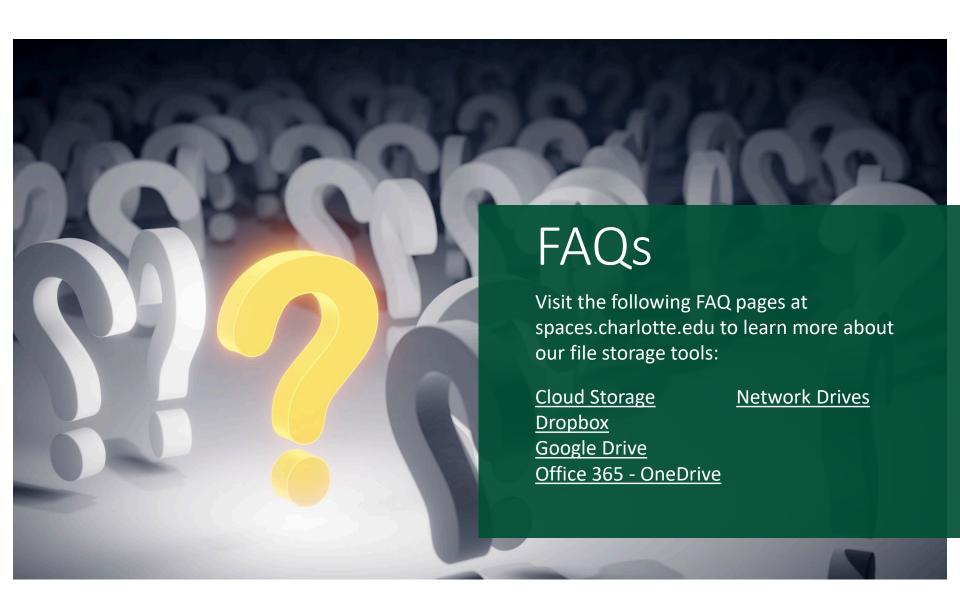
nelT recommended for general use, ease of access, and level of support

Google Drive training is available: IT & Computing calendar at events.charlotte.edu



<sup>\*</sup>Quota limits effective 2023

<sup>\*\*</sup>contact OneIT Service Desk to request additional space for Dropbox.



### Additional Resources

Additional resources about file storage and the available tools can be found at the following Charlotte webpages in the green bar at the bottom of this page.

If you would like a member of OneIT to discuss these options with your department, please contact the OneIT Service Desk.



IT Security & Compliance

**Guideline for Data Handling** oneit.charlotte.edu/iso/guideline-data-handling

Guideline for Research Data Security https://oneit.charlotte.edu/iso/guideline-researchdata-security

**Knowledge Base** Information Technology services.help.charlotte.edu **IT & Computing Events Charlotte Campus Events** campusevents.charlotte.edu

## Thank you!

You have completed this presentation.