



UiO : University of Oslo Library

Module IV: Data Classification and Storage Selection

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Materials developed as part of the *Skills development project for research data*:
<https://www.ub.uio.no/english/about/projects/rdm-skills/>

Today's course

- 45-minute lecture
- A short break
- Q&A session

Please feel free to write comments and questions in the Chat!

Zoom Feedback Test

Open the menu “Participants” / “Reactions” and click on “Yes” in the bottom of the menu. Then click on “No”.



Types of research data

- Qualitative or Quantitative?
- Observational, Experimental, Computational or Records?
- Personal data or not?
 - General (non-sensitive) personal data:
 - name, address, phone number, e-mail, exam grades, case documents, e-mail communication, audio- and video-recordings, images, log-in activity
 - Sensitive personal data:
 - health information, biometric or genetic information, ethnic or racial origin, political/philosophical/religious perceptions and beliefs, sexual orientation, sexual relationships, trade-union membership

On ownership

- All UiO information shall have an unambiguous and identifiable owner.
- Anyone should easily be able to find out who is responsible for keeping the information updated, maintained and correctly labeled.
- The «information owner» is responsible for the assessment used to place the information in its given category.
- In those cases where an owner cannot be identified, the University Director is responsible for the information.

On ownership - How to decide which class to use?

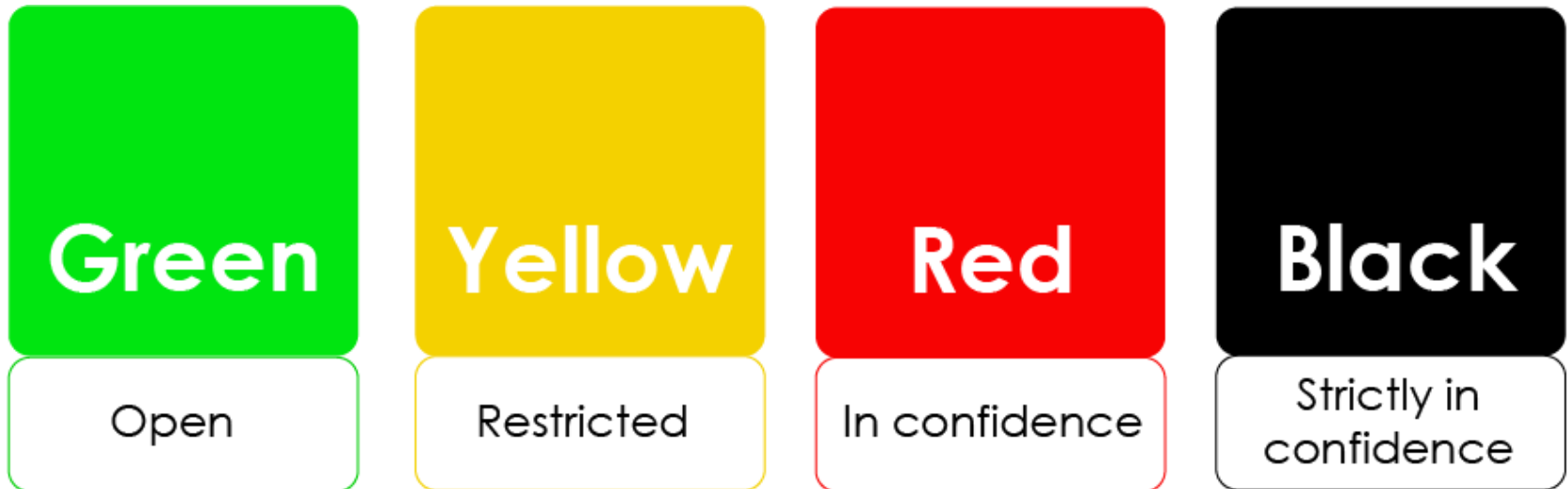
- Always put the information in a sufficiently safe class.
- If you are not sure whether to your information is red or yellow, choose red.





DATA CLASSIFICATION

Classifying your data



<https://www.uio.no/english/services/it/security/isis/data-classes.html>

What is green data

- Open or freely available
- This class is used when it **does not cause any harm** to the institution if the information becomes known to unauthorized persons.
- Any research that is published openly. Information that is not public, needs to be removed first.
- Teaching material that is not subject to copyright
- Completely anonymous data
- Data without any financial or commercial value
- Statistics



Question 1

Do you think you (will) work with **green** data?



yes



no

What is **yellow** data?



- Restricted
- This class is used when it **could cause a certain damage** to the institution if the information becomes known to unauthorized persons.
- Documents that you don't want everyone else to read
- De-identified data where the key is locked away and stored safely away from the data
- Data sets containing minor amounts of non-sensitive personal data
- E-mail attachments that don't contain information that needs protection
- Unpublished research material
- Texts and pictures under copyright

Question 2

Do you think you (will) work with **yellow** data?



yes



no

What is **red** data?

- In confidence
- This class is used if it **could cause harm** to public interests, the university or individuals if the information becomes known to unauthorized persons.
- De-identified data where the key is available and stored with the data
- Special categories of personal data
- Personnel files
- Information relating to e.g. safety systems in buildings or IT systems
- Health related data



Question 3

Do you think you (will) work with **red** data?



yes



no

What is black data?



- Strictly in confidence
- This class is used if it **could cause significant harm** to public interests, the university or individuals if the information becomes known to unauthorized persons.
- Research data that requires extra protection
- Large quantities of sensitive personal data
- Large quantities of health related data
- Research data that is of great financial or commercial value

Question 4

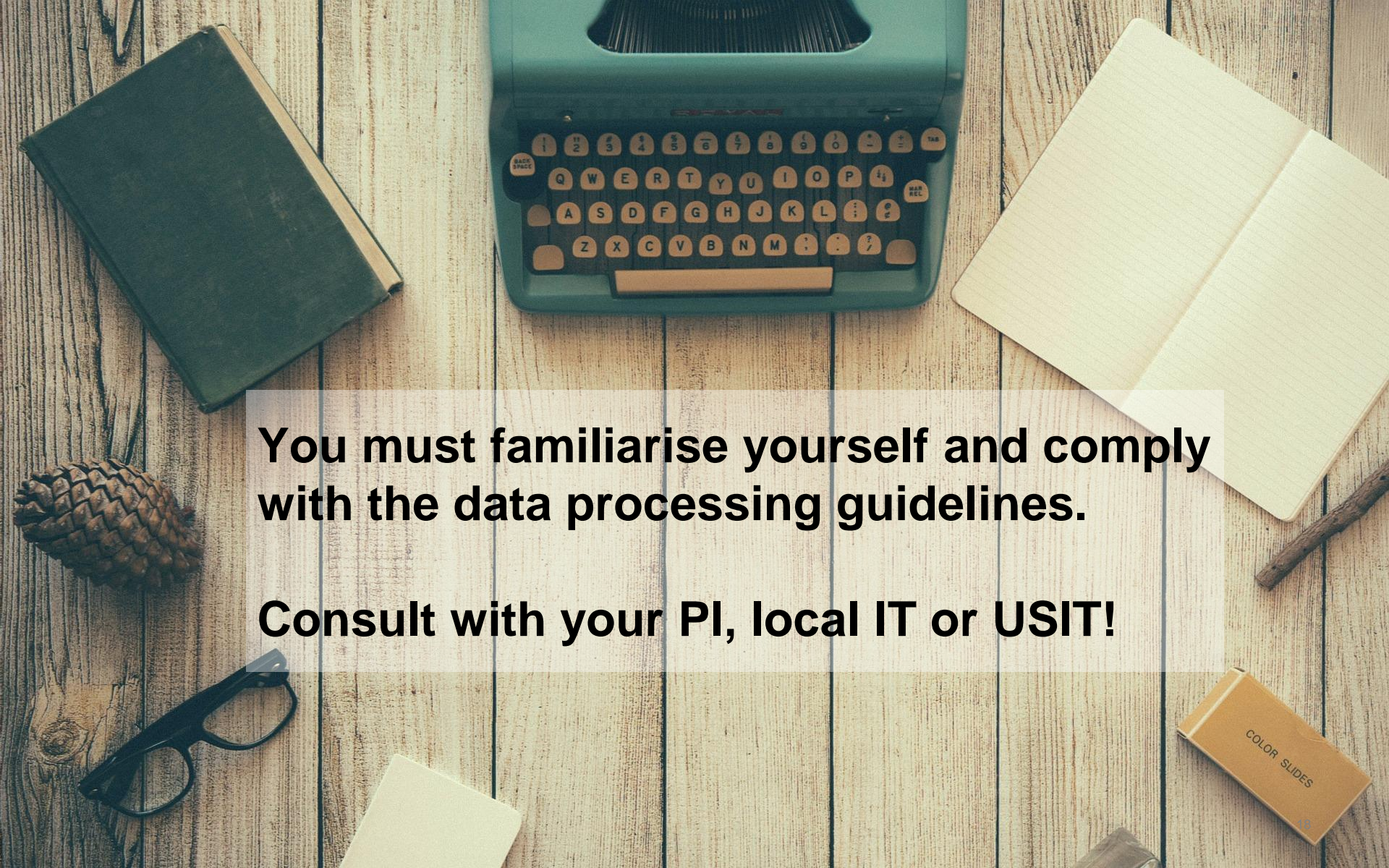
Do you think you (will) work with **black** data?



yes



no

A top-down view of a wooden desk with various objects. In the center is a teal vintage typewriter with a wooden keyboard. To its left is a closed dark green book. To its right is an open, blank, cream-colored notebook. Below the typewriter is a pinecone. In the bottom left corner are a pair of black-rimmed glasses and a small cream-colored notepad. In the bottom right corner is a small orange box labeled 'COLOR SLIDES'.

You must familiarise yourself and comply with the data processing guidelines.

Consult with your PI, local IT or USIT!

5 min for a coffee or tea...



STORAGE SELECTION

Question 5

Are you primarily using a private laptop/computer for your research?



yes



no

Where can you store the different types of data?

Data storage guide:

<https://www.uio.no/english/service/s/it/security/isis/storage-guide.html>



Where can you store the different types of data?

- **Green data:**
 - anywhere you want, but ideally **not only** on your private laptop (very vulnerable!)



Where can you store the different types of data?

- **Yellow data:**

- encrypted hard drive
- UiO cloud solutions (UiO OneDrive, UiO G-Suite, ...)
- UiO home directory (M:)
- UiO storage hotel («lagringshotell»)
- UiO e-mail; UiO Teams; UiO Nettskjema; UiO Canvas...
- **Not** your private laptop or phone, unless they are encrypted and safely used



UiO commercial cloud solutions

- Microsoft Office365 + OneDrive

<https://www.uio.no/english/services/it/store-collaborate/o365/>



- Google Drive + Docs, Sheets, etc

<https://www.uio.no/english/services/it/store-collaborate/gsuite/>



G Suite for Education

Question 6

We have shown you UiO's commercial cloud solutions, *Microsoft OneDrive & Office365* and *Google G-Suite*.

Are you aware of any other commercial cloud solutions that UiO offers?



yes



no

Where can you store the different types of data?

- **Red data:**
 - Fully encrypted disc, memory stick or external harddrive
 - Services for sensitive data – TSD
 - UiO Storage Hotel*
 - UiO Vortex*

*see Storage guide for details!



Where can you store the different types of data?

- **Black data:**
 - Services for sensitive data – TSD



Question 7

Do you think you will be using TSD during your research time at UiO?



yes



no

Storage hotel

- Remote disc where you can safely store and access your data
- Safer than the cloud solutions, so you can store up to red data
- Contact local IT for access
- **Not** free of charge



Guidelines on costs and access to storage hotel:

<https://www.uio.no/english/services/it/store-collaborate/storage-hotel/>

hf-depot

- Researchers at HF may be assigned storage space for job-related material (hf-depot.uio.no)
- Work areas that act as common disks, and are to be used when the home area isn't suitable or doesn't have sufficient capacity.
- Each researcher or group of researchers may be assigned "their" area within their area (institute or center).
- The service is currently free of charge.

Storage services at HF: <https://www.hf.uio.no/english/services/it/research-and-dissemination/storage-solutions/>

Question 8

Do you know where to find contact information for your local IT and the Center for Information Technology (USIT)?



yes



no

Contact Points for IT at UiO

UNIVERSITY
OF OSLO

Where can I get help?

Are you a faculty or staff member and need help or information about our IT services?



Contact your local IT staff

Are you a student and need help or information about our IT services?



Contact your local student IT staff

If you are not affiliated with a particular faculty or department or for other reasons are uncertain about where to direct your questions, please contact Houston, our support and operations centre.



Contact Helpdesk

University Center for Information Technology (USIT)

UiO

University Center for Information Technology

Menu

Norwegian
version of this
page

Find USIT staff

Search in persons



→ All USIT staff

Our services

- The UiO IT services
- Services which can be ordered from USIT
- National IT services

→ All services

Question 9

Do you have a routine for making backups for your research files (manuscripts, data, etc.)



yes



no

Storage solutions and backup



- Use safe storage solutions, where data/files are backed up
- Always keep a copy of your raw data material safely hidden away (like a folder on storage hotel that you never edit)
- Saving files only on your own computer is **not** safe!
- A memory stick or an external hard drive is **not** safe!
- How much extra work would take to recreate all your data or your work?

<https://www.uio.no/english/services/it/store-collaborate/backup/>

Save all the files!



- «For every result, keep track of how it was produced»
(Sandve et al, 2013)
- Save processed data at important stages in the project
- Save processed data and analysis/methods for every table and graph

How will data be stored long-term?

- Data classification will guide your choice of storage
- What storage solution is most appropriate?
- How will need for access be managed and assessed?
- Backups?
- Short-term and long-term costs?



Q&A!



Thank you!

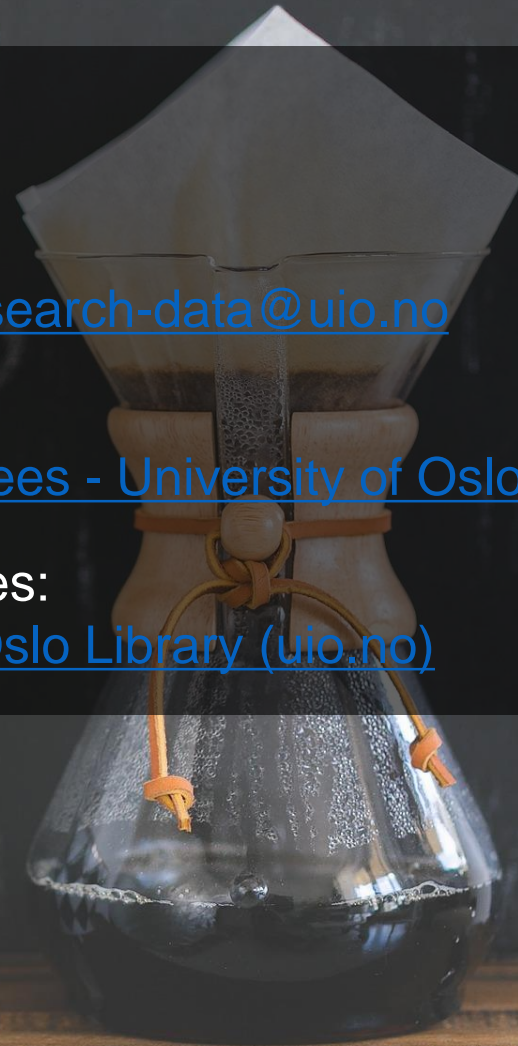
Email UiO's data management experts: research-data@uio.no

Resources at UiO:

[Research Data Management - For employees - University of Oslo \(uio.no\)](#)

More info on data management and courses:

[Digital Scholarship Center - University of Oslo Library \(uio.no\)](#)



Useful links

Research data management at UiO:

<https://www.uio.no/english/for-employees/support/research/research-data-management/>

The UiO data storage guide:

<https://www.uio.no/english/services/it/security/isis/storage-guide.html>

Data classification guide: <https://www.uio.no/english/services/it/security/isis/data-classes.html>

Storage and collaboration:

<https://www.uio.no/english/services/it/store-collaborate/>

Contact Points for IT at UiO: <https://www.uio.no/english/services/it/contact/>

University Center for Information Technology (USIT):

<https://www.usit.uio.no/english/>

Backup: <https://www.uio.no/english/services/it/store-collaborate/backup/>