

ENCRYPTION

WHY AND HOW

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HOW DO I SAFELY WORK WITH DATA?

- The rules for dealing with data are set by IT security and are based on Norwegian law as well as international law and agreements
- There are a lot of these rules
- Enabling encryption on your device will solve almost all problems you may have
- *Exceptions apply for **red** and black data*

Data management is a tough task. Make it easier.
Encrypt your device.

**Encryption
makes your life
easier!**

ENABLE ENCRYPTION : COMPUTERS / LAPTOPS



WINDOWS

ENABLE BITLOCKER

Windows 10 and newer offer BitLocker for encryption.



MACOS

ENABLE FILEVAULT

Enable FileVault in System Preferences > Security & Privacy > FileVault.



LINUX

MULTIPLE SOLUTIONS

Sadly, exact solutions depend on the distribution in question. It is usually easiest to enable encryption during install.

ENABLE ENCRYPTION : PORTABLE DEVICES



ANDROID

ENABLED BY DEFAULT

Modern Android devices (since 2014) should have encryption enabled by default.



IOS/IPADOS

ENABLED BY DEFAULT

iOS started encrypting devices in iOS4 which was released in 2011. Modern devices require encryption.



OTHER

HARD TO KNOW

Some devices encrypt, others don't. Find documentation from the manufacturer. Some devices (like Remarkable) are known not to support encryption at all.

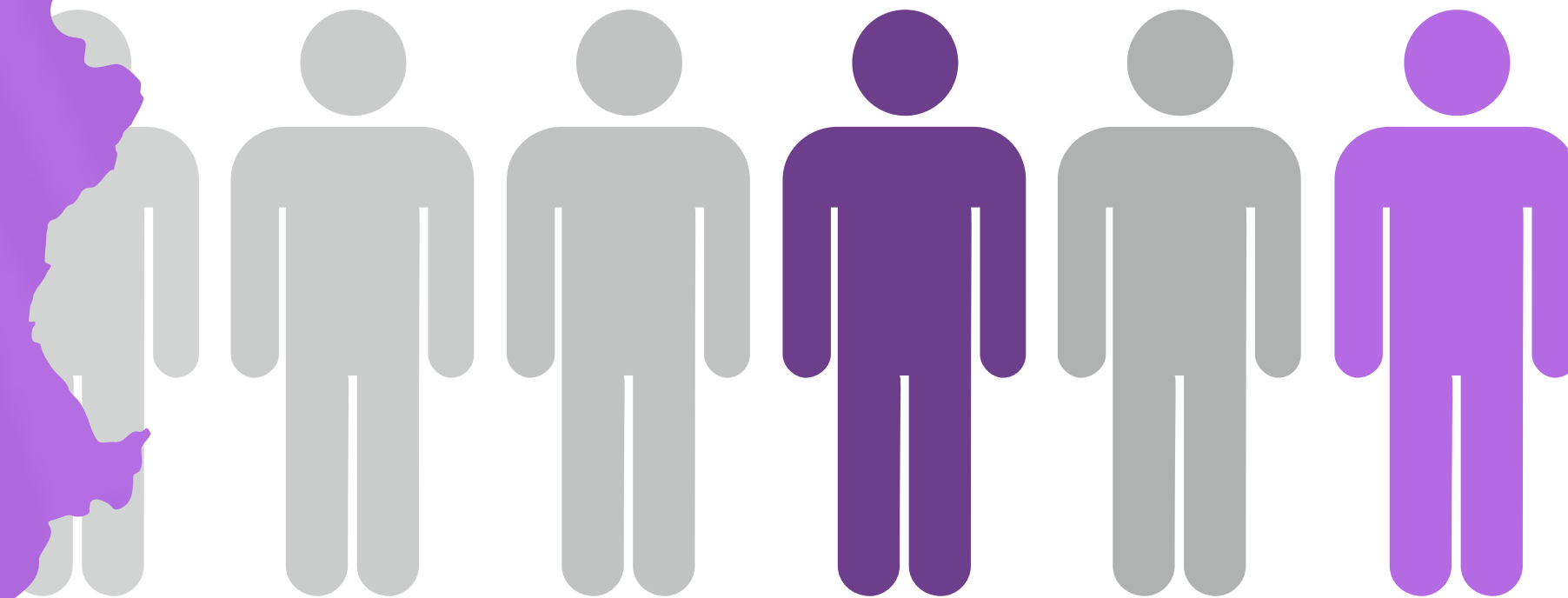


IDENTIFIABLE DATA

- Sometimes you get yellow data that is “anonymised”
- Anonymised data is usually anonymised to lower security levels
- Modern tools can sometimes re-identify such data
- Re-identification is a problem as it leaks sensitive data
- Treat anonymised data with care!

AM I ANONYMOUS?
Can I be re-identified?

WHAT ABOUT ME?
Can you extrapolate
information about me?



GIT



VERSION CONTROL FOR EVERYONE AND EVERYTHING (?)

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git



REPOSITORY	Git works on repositories. A repository is a single unit of files and folders that belong together. <i>Example: A master thesis.</i>
VERSIONING	Git keeps track of versions of its repository. You commit changes to the repository. <i>Example: How did this tex file look a month ago?</i>
CONTENTS	Git typically works with plain text files, be it tex/markdown or program code. <i>Example: .tex-files or python code.</i>
DISTRIBUTED	Git is made to have multiple complete copies of a repository in multiple places with multiple editors. <i>Example: Laptop and workstation both have a copy</i>
REMOTES	To facilitate the distributed nature, one can set up remotes that one pushes changes to. <i>Example: github.uio.no</i>
BRANCHES	In a single repository one can have many branches that contain different ongoing processes. <i>Example: "main", "experiment one", "from Bob"</i>

WHAT IS GIT?

Git was initially released in 2005 to support the development of Linux.

Today, the vast majority of software companies use git in one way or another, and you will find git in places you never thought possible.

Typically, one has multiple branches that are all worked on a bit now and then, and these branches are occasionally merged together into the "main" branch.

One can also use tags to mark specific commits, or create releases.

GIT: REMOTES

A remote in git is remote copy of your repository that you can both push changes to and pull updates from.

As for choosing a remote, ask yourself:
Can I legally share this with the world?
And do I want to share this with the world?
If the answer to either question is “no”,
choose [github.uio.no](https://github.com).

Note that your access to [github.uio.no](https://github.com) will be lost once your affiliation with UiO expires.

- PRIVATE
- FREE
- GREEN DATA
- YELLOW DATA
- RED DATA
- WORLD PUBLIC



[GITHUB.UIO.NO](https://github.com)



[GITHUB.COM](https://github.com)



[GITLAB.COM](https://gitlab.com)



HELP!

For in-person help, you can visit Student-IT at the faculty of Mathematics and Natural Sciences. They are located on the second floor, in the library, at Vilhelm Bjerknes' hus.



MON-FRI 10-20

SAT-SUN 10-18

The central Helpdesk, it-support@uio.no is also available for assistance.

