IT Services at the Department of Geosciences

A quick introduction for new employees
Introduction
A new place, new people, new routines! That’s a common start for many new PhD students Post-docs and other new employees. One of the main struggles is probably to get acquainted with a new IT-system. This document is meant to give you a quick introduction to the IT-system at the Department of Geosciences.

Being a user of the University’s IT systems requires that you are familiar with the central IT-regulations. Please have a look at them:

http://www.uio.no/english/services/it/username-password/rules/index.html

The IT-group at the Department of Geosciences offers a range of IT-services. To get an overview, please visit

http://www.mn.uio.no/geo/english/services/it/help/

IT-infrastructure
At arrival at the department, you will be provided with a username/password to access the university IT-systems. Your password is personal and you are not allowed to share this with anybody, not even IT-personnel. The password can be changed at https://brukerinfo.uio.no – a site you also can view information about e-mail, printing, groups and personal information.

You will be assigned a HOME-directory at a central server (currently kant.uio.no, see figure 1 below) drifted by USIT (University Central IT Organization). The size of the HOME-directory is 25 GB and is meant to store personal documents, articles, setup-files; not large data files (see below).

An e-mail account is automatically generated for you and can be accessed using the same username and password. The University of Oslo runs Microsoft Outlook as its preferred e-mail and calendar client. You can access your e-mail and calendar functions also using the web-based client available through https://mail.uio.no. To setup your e-mail- and calendar account follow these instructions: https://www.uio.no/english/services/it/email-calendar-chat/email-calendar/

The type of software you use during your research defines often the type of Operating System you use. We offer primarily PC’s either installed with Microsoft Windows or Linux (USIT supports primarily RHEL, we try to support Ubuntu as well). We do in principal not offer Mac’s, although we can order it if you really want. If you prefer to use a Mac, you will need to discuss this with your supervisor and see if he/she is willing to sponsor this through his/her project. Be aware, support for Mac is limited, though not absent.

The policy at our department is that research data are stored on shared disks, not on your HOME-directory. Your HOME-directory is a personal directory and is not suited for data sharing. In addition, in case of an accident, we cannot access your data stored in your HOME-directory without written permission of your direct relatives.

The project you are working on most probably has its own project disk, where you can store your results and share data with your colleagues. Please provide us with the project name you are working
on and we fix access to that disk. If you own your own research project, please contact us so we can create a project-disk for you.

It is of common interest to keep the amount of stored data to a minimum. It’s therefore important that you acquire good routines in data handling and storage. We are competent in helping you with these issues. We encourage you also to discuss this with your supervisor and other colleagues in your project.

We can offer a wide range of services varying from simple user support for Microsoft Word to advanced support for parallel computing on the High Performance Computing cluster. We advise you to contact us a good time in advance whenever you plan intensive use of IT-resources. This could be storage of large datasets, intensive computations etc. It’s important for us to know what kind of software you will need to perform your research. We can offer a range of software packages in the field of geosciences (http://www.mn.uio.no/geo/english/services/it/help/software/software.html). If you require software not available in our catalogue, please tell us. If license fees are involved, we need to discuss this with your supervisor, since we do not sponsor licensed, commercial software packages primarily used for research.

**System Overview**

*Figure 1 Overview of the IT systems at the Department of Geosciences*
The IT-infrastructure at the Department of Geosciences

Figure 1 shows a general setup of the IT-infrastructure at the department. From your local pc, you will have access to all of our services. These include:

- **HOME-directory** (located on kant.uio.no): From a Windows PC, your HOME-directory is accessible through "<your-username> \(\text{kant\{some-kind-of-disk-name\}\{M:\}}\)". When using Linux, you will always start in your HOME-directory at logon.

- **All scientific staff, including PhD-students and Post-docs, can apply for 1 TB of disk space for personal research use. This service is provided by USIT. Currently two options are provided:**
  - A personal area with limited options to share data
  - An area linked to the HPC-cluster (requires you are a registered HPC-user)

More info and how to apply at: [http://www.uio.no/tjenester/it/hosting/storage/forskere/](http://www.uio.no/tjenester/it/hosting/storage/forskere/).

- **Shared Data-servers at Geo:**
  - **vann.uio.no:** This is a Linux-machine, but it is also available from all PC’s with Windows installed. From Windows, the shared disks on vann are accessible by either clicking on “IG_felles (K:\)” or “Geo – fellesdisk” in Windows Explorer. If you by any means do not find the K-drive in Windows explorer, you can mount the disk yourself by right-clicking ‘Computer’ in the ‘Start’-menu and choose ‘Map network drive’. Choose ‘K’ for drive and type ‘\\vann.uio.no\felles’ in the Folder-field. If you are using Linux, the shared disks are available through ‘/felles’.
  - **New Shared data service:** We are currently in a process of acquiring new shared disk space on virtual servers run by USIT. At the moment we have a server called “nunatak.uio.no”, which we have started using for data storage.

- **Application-servers:** We have a main Linux application server which is called ‘Sverdrup’ (sverdrup.uio.no). Sverdrup is a ‘module’-based server which means that all software packages you want to run on the server need to be loaded first (see [http://www.mn.uio.no/geo/english/services/it/help/software/user-environment.html](http://www.mn.uio.no/geo/english/services/it/help/software/user-environment.html)). If you want to run an application or a code on this server, be aware that this is a common resource for the entire department. Heavy computations should preferably be run on abel.uio.no, the university High Performance Computing cluster (see next paragraph). Another application server is jern.uio.no. This server is primarily used as a license server, but can also be used to run applications.

- **High Performance Computing:** The department has access to the High Performance Computing cluster of the university, called abel.uio.no. Please contact us if you would like to have access to these resources. We are also capable of helping you optimizing code for parallel computations.

### Important Central IT Services

UiO offers a variety of services which can be of interest for you in addition to what is already described above. Unfortunately, many of the web sites of the Central IT services are only in Norwegian, although some are in English as well. We would like to mention a few of these:

- **Access to IT services from outside the University** – This web-site explains how you can access the internal IT-services when you are at home or travelling.
• **User info** – On this web-site, after logon with your UiO credentials, you can manage your user profile at the University

• **The University Library** – The library gives you access to many online magazines. Physically, the [Science library is located in Vilhelm Bjerknes house](#).

• **Norstore/Notur** – The national eInfrastructure initiative. Here you can apply for storage and high computing facilities beyond what we can offer.

**Finally**

The department has its own Wiki, where many people contribute. The wiki is available on [https://wiki.uio.no/mn/geo/geoit/index.php/MainPage](https://wiki.uio.no/mn/geo/geoit/index.php/MainPage). If you feel something is missing here, please feel free to contribute or tell us.

If you have questions regarding the use of the IT-services at UiO or at the department, please send an e-mail to [drift@geo.uio.no](mailto:drift@geo.uio.no) or visit us in room 223/224 between 12:00 and 13:00 every day (Geology Building) or room 48.10.48 (Forskningsparken, email [metos-drift@geo.uio.no](mailto:metos-drift@geo.uio.no)).

Feedback on this document is also highly appreciated.

Last updated: Michael Heeremans and Kjell Andresen, 8/21/2015