Getting Started - new users

Courses

Need help try a course

or a Video

Computerome requires **2-Factor authentication** for access.
If you do not receive a passcode on SMS after entering your password then contact **Computerome support** and inform us of your mobile number.

Alternatively you can use the **Google Authenticator** app from Google Play or Apple AppStore
To register the Google Authenticator on our system please contact **Computerome support** and request a QR code

Login to Computerome

Authorized users of Computerome may log in using SSH version 2 to the interactive front-end node **computerome.cbs.dtu.dk.**

Example for log in to computerome for fictive user `lifesci`, where
`lifesci@computerome.cbs.dtu.dk`'s password: – your Computerome password, originally provided by DTU
`Enter PASSCODE` – received on the mobile phone and/or Google Authenticator

```
homesystem$ ssh lifesci@computerome.cbs.dtu.dk

   ############################################################
   #                 Welcome to Computerome                   #
   #                                                          #
   #                     NOTICE !!!                           #
   #       This system requires 2-Factor authentication       #
   #                                                          #
   #   If you do not recive a passcode on SMS after entering   #
   #    your password then contact hpc@bio.dtu.dk and          #
   #           inform us of your mobile number                 #
   #                                                          #
   #  Alternativily you can use the google authenticator app   #
   #    To register the application on our system please       #
   #           contact us and request a QR code                #
   #                                                          #
   ############################################################

lifesci@computerome.cbs.dtu.dk's password:
Enter PASSCODE

...<some status information and other important stuff>...

Last login: Thu Feb 15 13:06:48 2016 from <some IP address>

[lifesci@computerome01 ~]$
```

Windows PC users

Windows PC users are recommended to use the free Windows SSH client PuTTY for command-line SSH login to Computerome. If you need to display graphical tools from Computerome on your Windows PC, PuTTY will forward your X11 (a.k.a. X-Windows) display onto your PC.

However, in order to Windows to actually display X11, you need to install an X11 server on your PC.
Please see the excellent X11 on Windows page on Niflheim Wiki for further information.

Several commercial solutions are also available, some even provide bundled SSH and X11 functionality - such as MobaXterm for instance.

MobaXterm and 2-factor authentication

MobaXterm does not "play nice" with 2-factor authentication.

Per default, MobaXterm will open an embedded **SFTP browser** (called SSH-browser) when you start the terminal; this **does not** work with 2-factor authentication, since it means that you will attempt to start two different connections simultaneously, resulting in unwanted behavior in your login.

To avoid this, you need to make the following changes to MobaXterm:

```
Settings => Configuration => SSH

SFTP settings
[ ] Enable graphical SSH-browser                                              <--
must be unchecked
[ ] Automatically switch to SSH-browser tab after login                       <-- must be unchecked

Sessions settings
[V] Use 2-factor authentication for SSH gateways           <-- must be checked
```

On **pre-11** versions of MobaXterm:

```
Settings => Configuration => SSH

SFTP settings
[ ] Use SSH-browser (graphical remote file browser in the sidebar)  <-- must be unchecked

Sessions settings
[V] Use 2-factor authentication for SSH gateways           <-- must be checked
```

On **pre-9.3** versions of MobaXterm:

```
Session settings => SSH => Advanced SSH settings
[ ] Display SFTP browser   <-- must be unchecked
[V] 2-step authentication  <-- must be checked
```

You should **always** create a new connection in MobaXterm by clicking

```
Session => SSH/SFTP/SCP/<whatever>
```

Copy and paste problems on Computerome X applications when using Xquartz server on Mac

Ensure that your XQuartz Preferences Pasteboard settings are:

```
Enable syncing: y
Update Pasteboard when CLIPBOARD changes: n
Update CLIPBOARD when Pasteboard changes: y
Update PRIMARY (middle-click) when Pasteboard changes: y
Update Pasteboard immediately when new text is selected: n
```

If you try using ssh-type commands in the MobaXterm terminal window, **2-factor authentication will fail**.

SFTP Client Configurations

In order to use most FTP/SFTP clients on a 2 factor system you will need to limit the maximum simultaneous connections to avoid multiple login prompts.
Here you can see how to setup the mostly used clients

Filezilla
Changes has been made in resent versions which means that Quickconnect no longer works with 2 factor authentication

GLOBAL

```
Go to Edit->Settings->Transfers
Change Maximum simultaneous transfers to 1
```

SITE PROFILE / BOOKMARK

```
Go to File->Site Manager->(your profile)->Transfer
settings
Check Limit number of simultaneous connections
Change Maximum number of connections to 1
Change Login type to Interactive
```

Cyberduck
As of CyberDuck 7.1, it no longer supports **2-Factor authentication**.

Due to this, we recommend that you use a different tool, but if you insist to use CyberDuck, you need version 7.**0**.x.

GLOBAL

```
Go to Edit->Preferences->Transfers
Change Transfer Files to Use browser connection
```

SITE PROFILE / BOOKMARK

```
Right click your profile and select Edit Bookmark
Change Transfer Files to Use browser connection
```

Login access restrictions

Please note that for reasons of security, SSH login access is only possible from the known Internet domains of authorized users.

If your connection terminates unexpectedly

If you are connecting to Computerome though a slightly unstable connection (Internet/WAN/similar), you **may** experience that it terminates with messages like

```
packet_write_wait: ... Broken pipe error.
```

```
In such a case you could try adding the following to your ~/.ssh/config
```

```
ServerAliveInterval 60
```

```
If you are on Windows, using PuTTY, the equivalent is to set
```

```
PuTTY Configuration => Connection => Seconds between keepalives (0 to turn off): 60
```

Virtual desktop solution

Computerome provides a **virtual desktop solution** based on Cendio ThinLinc

For security reasons, you must use the customised ThinLinc Client provided below - current version is **4.9.0dtu-5775** (uploaded 2018.09.24). Regular ThinLinc clients will **not** work in our environment.

ThincLinc Clients for Computerome

Windows	32-bit	64-bit	-
Mac OS X	-	64-bit	-
Linux RPM	32-bit	64-bit	ARMv7 hard-float
Linux DEB	32-bit	64-bit	ARMv7 hard-float
Linux tar.gz	32-bit	64-bit	ARMv7 hard-float

Several users experience that **Gnome** UI/UX runs **very slow** in Thinlinc. It is recommended to use other alternatives, such as **Mate**.
Loading **anaconda** module in your login environment *will* conflict with ThinLinc login - please ensure that your do not do this, if you plan to use ThinLink.

All ThinLinc Clients for Computerome as a single ZIP file

The ThinLinc Client Bundle contains all of the above, plus additional clients for thin clients such as Fujitsu Futro, Wyse, HP, Thinstation and IGEL.

Software installed on Computerome is managed through Environment Modules, invoked by the 'modules' commands.

If you get the message "no password configured for VNC Auth", you need to select the following in the ThinLinc Client startup:
[v] End existing session

Installed software

Software installed on Computerome is managed through Environment Modules, invoked by the 'modules' commands.

For further information, please see **Installed Software** page.

Computerome and the projects structure

Access to data and resources on is controlled through **projects**, assigned by DTU.

For further information, please see **Working in projects** page.

Running jobs

In general, and in the interest of the systems stability, jobs should **not** be run on the login node – it is **only** used as a **platform to submit** jobs into the high-performance cluster.

Compute resources in the cluster is accessed through a batch system, consisting of Moab Workload Manager and Torque Resource Manager.

Submitting jobs from the **login node** is described in **Batch System**.

Getting information about your usage of Computerome

To inquire about your usage of Computerome, you can run the `usage` command, available through the `usage_script` module

`usage -u` will provide information for yourself.

```
$ module load tools usage_script/1.0
$ usage -u
Usage report for <myself>
From 2016-01-04 to 2016-05-30
Account         CPU Hours       Jobs
------------------------------------
pr_12345:         14832.89         13
pr_23451:         13018.72       2347
pr_34512:         26585.01        729
pr_45123:        264068.02       3248
------------------------------------
Total:           318504.64       6337
```

usage -a <account> will provide information for any account you are member of.

```
$ usage -a pr_45123
Usage report for pr_45123
From 2016-01-03 to 2016-05-30
Users           CPU Hours       Jobs
------------------------------------
<myself>:        264068.02       3248
<user1>:            521.38        552
<user2>:          14980.62       5599
<user3>:         282747.90       5867
s123924:             76.87         14
salling:             72.32        472
shygop:           11404.77        602
sira:             36023.86      27264
vandam:             170.52         56
------------------------------------
Total:           610066.25      43674
```

Courses

Option 1: Hackinars in Computerome

Try the self help guide from the **Hackinars in Computerome**

Hackinars_in_Computerome-wiki.pdf/Hackinars_in_Computerome-wiki.pptx

Option 2: Contact Computerome

Computerome organizes courses on request - Contact

Reporting problems

Please report problems to **Computerome support**.