Course
CS-E3190
Course materials
Your points

This course has already ended.
The latest instance of the course can be found at: Principles of Algorithmic Techniques: 2023 Autumn

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Aalto IT Linux workstations

If you want to program in a preconfigured Linux environment, Aalto University IT Services has a number of Linux workstations available for remote interactive use.

The are two possible ways to access these workstations:

a. via Virtual Desktop Infrastructure (VDI), and
b. via Secure Shell (SSH).

Access via Virtual Desktop Infrastructure (VDI)

Here are quick instructions on how to access a Linux workstation using Aalto IT Virtual Desktop Infrastructure (VDI), with HTML Access using only your web browser.

1. Go to vdi.aalto.fi.
2. Click on `VMware Horizon HTML Access`.
3. Type in your Aalto University login credentials (username and password) and click `Login`.
4. Click on `Ubuntu 18.04` to open up a virtual Linux desktop.

Alternatively, you may want to install a VMware Horizon Client for better virtual desktop performance and more features.

Access via Secure Shell (SSH)

You can also connect to Aalto IT Linux workstations using secure shell.

1. Install a secure shell client to your computer.
2. Using the client, connect to one of the Linux shell servers at Aalto University, such as `kosh.aalto.fi`.
3. From the Linux shell server, you can remotely connect to any of the Linux workstations available at the Otaniemi campus.

Programming tools available at the workstations

The Aalto IT Linux workstations currently run `Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-40-generic x86_64)` and have the `g++` C++ compiler version `(Ubuntu 9.3.0-10ubuntu2) 9.3.0` as well as the `gdb` debugger version `(Ubuntu 9.1-0ubuntu1) 9.1` installed.

Among the many text editors available for editing program text are `emacs`, `nano`, and `vi`.

The template source files (say, a file called `first.cpp`) at this course have been designed to compile with `g++` using the standard compilation command

```
g++ -O3 -Werror -Wall --pedantic -std=c++17 -march=native -fopenmp -o first first.cpp
```

which outputs an executable binary called `first`.

Further resources

See IT Services for Students for further resources and contact information in case of questions.

Remark

If you are uncomfortable with Linux, remember that it suffices to work with a text editor, a web browser, and the Scratchpad.

Of course we do recommend that you develop at least basic Linux skills during your studies; however, developing such skills is not in the scope of the present course.