CS-C3100 Computer Graphics, Fall 2021

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Working on the Assignments Remotely

Due to the ongoing pandemic physical access to IT-classes on campus may be limited or completely restricted. This fall's edition of the computer graphics class has **no contact teaching**. All exercise sessions are virtual and no IT-class has been physically reserved.

There are two alternative ways of working on the assignments:

- 1. Install Visual Studio 2019 (link) on your own computer.
- 2. Use the Aalto Virtual Desktop Infrastructure (VDI) to connect to a virtual machine or physical IT-class machine with VS2019 pre-installed.

Working with Aalto VDI

Virtual Machines

You can access virtual machines (with Windows) here with a full remote-desktop experience with your Aalto-credentials. The below instructions are near identical to those found on the Aalto help-page for VDI, but instead of choosing a Windows 10, be sure to pick Windows 10 3D. The Win10 instances do not have GPUs nor do they have VS installed!

- 1. Make sure that you have multifactor authentication (MFA) enabled. Instructions can be found here.
- 2. Login either with your browser (HTML Access) or alternatively with the VMware client (1).
- 3. Choose "Windows 10 3D" (2).
- 4. Locate (or download) the assignment files and start working. Note that your Aalto home directory is carried over to the virtual machine.
- 5. VS may ask about logging in on startup, this can be skipped (3).
- 6. Once finished, remember to logout properly! Only a limited number of concurrent users may use the resources at a time.

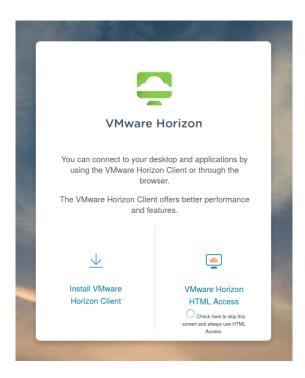


Figure 1: Login screen at vdi.aalto.fi.

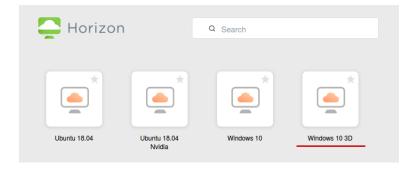


Figure 2: Be sure to choose a Windows 10 3D instance, the vanilla instance cannot be used for the exercises.

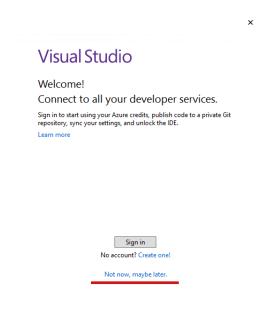


Figure 3: VS may prompt you to login upon startup, which can be skipped.

IT-class Machines

As long as the IT-classes are physically closed, their workstations can also be reached using the VDI service at mfavdi.aalto.fi. The workflow is identical with the virtual machines, but instead of choosing the generic Windows 10 3D virtual machine, you can choose a physical computer within a classroom. The classrooms require multi-factor authentication (MFA) through MS, that is a single-use code sent to your phone at login. More information about remote use of the classroom computers and MFA can be found here.

Note, that not all classrooms have Visual Studio installed, you can check which classes do at computers.aalto.fi.

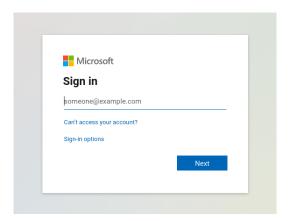


Figure 4: Classroom remote login over VDI at mfavdi.aalto.fi through Microsoft. Entering your aalto-mail redirects to an Aalto-login page.

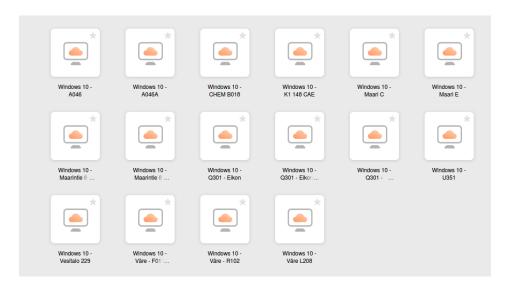


Figure 5: Instead of generic VM instances, you can now choose a classroom from where you want a physical machine.