Connecting to OpenStack Lab VMs

This document provides information on setting up the X2Go client and using it to connect to the lab VMs that are hosted on the NTNU OpenStack cloud. The VMs in the OpenStack cloud run an X2Go server which allows remote connections to a graphical desktop session while being more lightweight in terms of bandwidth requirements than an SSH session with X-forwarding.

Install the X2Go Client

Navigate to https://wiki.x2go.org/doku.php/doc:installation:x2goclient and follow the instructions to set up the X2Go client for your OS.

Connecting to the VMs

The VMs are only accessible via the university network. Hence, you will need to connect to the university VPN first. Instructions are available at https://innsida.ntnu.no/wiki/-/wiki/English/Install+VPN.

After connecting to the university network, launch the X2Go client and create a new session. Fill in the "Host" and "Login" fields with the IP address that was provided for your group and ttm4200, respectively, cf. Figure 1. The IP address can be found on Blackboard: TTM4200 > My Groups > LabGroup_ > Group Homepage > Group Description. Also, select "XFCE" in the "Session type" section. Additionally, you can adjust settings related to the compression, display resolution, and shared folders in the corresponding tabs. We recommend making the following changes.

- Input/Output: adjust resolution.
- Media: disable sound and printing support.
- Shared folders: add a local path containing the lab material for convenient file exchange between your local machine and the lab VM. The automount option is recommended. With this, the shared folder will be available on the desktop of the VM (mounted at /tmp/.x2go-ttm4200/media/disk/...). Note: if you choose this option, make sure to copy the content of the lab folder to the home directory (/home/ttm4200/) on the VM in order to be consistent with the instructions in the lab assignment. Also, make sure to regularly back up your progress to your own PC in case VMs become unavailable or need to be reset due to crashes, misconfiguration, or other issues.

After completing the setup, click on the newly created session, input the password that was provided to you, and connect to the VM. You should now be able to interact with the VM in the same way as if you'd set it up locally.

🖉 Session preferences - TTM4200 - Lab VM	?	×
Session Connection Input/Output Media Shared folders		
Session name: TTTM4200 - Lab VM		
<< change icon		
Path: /		
Server		
Host: 10.212.138.]
Login: ttm4200		
SSH port: 22	÷	
Use RSA/DSA key for ssh connection:		
Try auto login (via SSH Agent or default SSH key)		
Kerberos 5 (GSSAPI) authentication		
Delegation of GSSAPI credentials to the server		
Use Proxy server for SSH connection		
Session type		
Run in X2GoKDrive (experimental)		
XFCE Command:		
<u>QK</u> <u>C</u> ancel	Defaul	ts

Figure 1: Session setup.