Machine Learning Applications (MLA)

TECHNISCHE UNIVERSITÄT DARMSTADT

Instruction for Infrastructure

Overview of Accesing Computation Power

FSR

General Information

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What are these computers?

- 2 desktop computers with more computational power (GPU, CPU) are available for complex calculations each having
  - AMD Ryzen 7 2700X (8 Cores, 16 Threads) @3,7GHz
  - NVIDIA GeForce RTX 2080 TI
  - 32GB RAM
- MATLAB and Python are preinstalled

How do I access these computers?

1. Reserve a time slot
2. Login to network (OpenVPN) and access computer via Microsoft Windows remote desktop

How to Reserve the Computers?

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- Reservation is done via Doodle
  - Reservation MLA PC 1: https://doodle.com/poll/qm2f269xpui4eypf
  - Reservation MLA PC 2: https://doodle.com/poll/w64snsgwgvhageqn
- Reservation can be done for 3 hour intervals
- You can reserve more than one interval – chaining the intervals is allowed
- The concept relies on **fair use**:
  - **Only reserve** the time intervals you really need
  - **Do not overrun** the time interval (e.g. finish 5 mins before end of your time slot)
  - **Free up** the resources at the end of your interval
  - **Do not login** to the computer, when you do not have a reservation (e.g. login 5 minutes after start of your time slot)
  - **Remove your reservation**, if you see that you do not need it
    (if you can't remove the reservation by yourself contact mla@fsr.tu-darmstadt.de)

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How to Login to the Computers‘ Network? (1)

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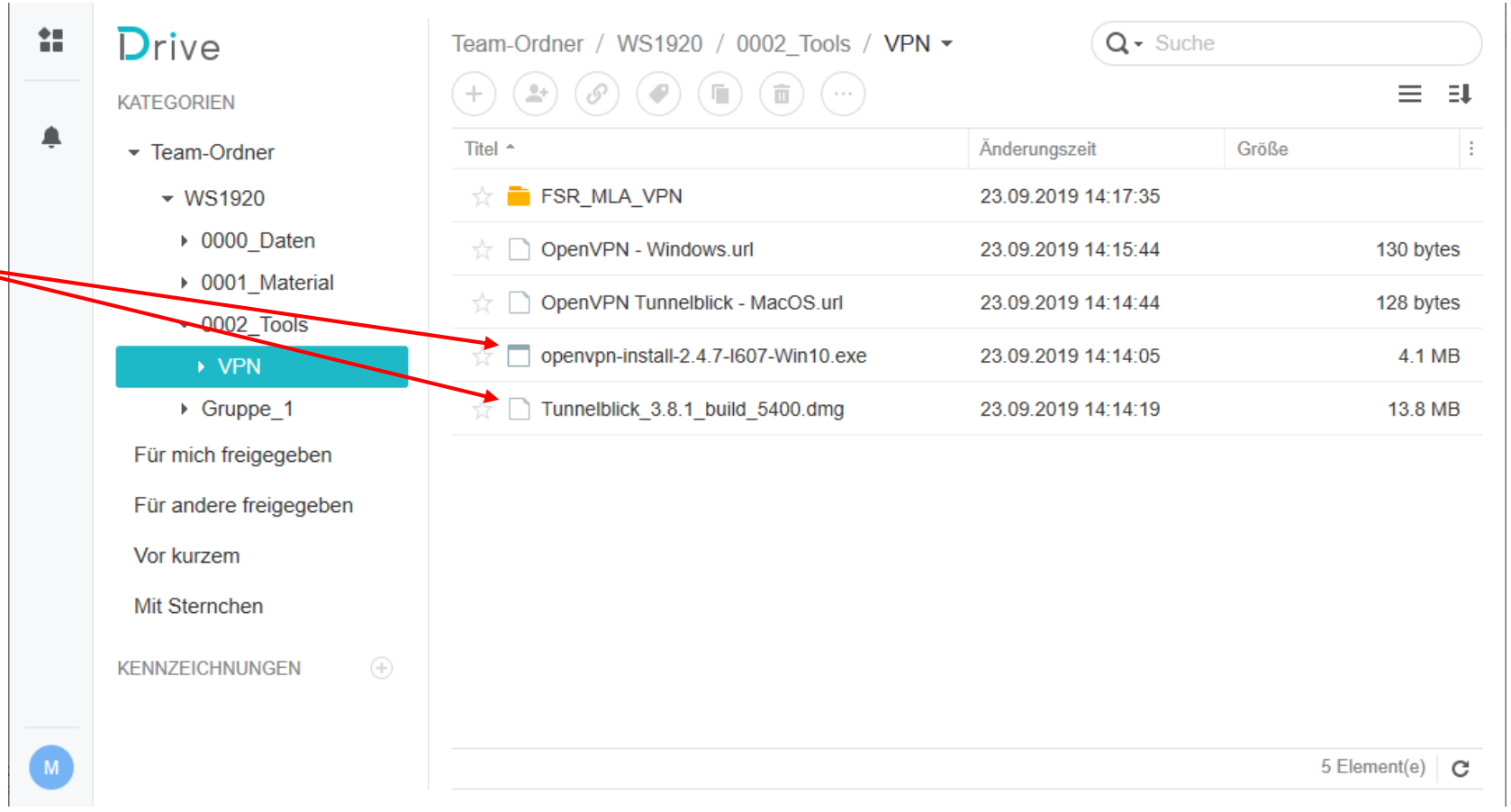
- You must install and use an OpenVPN client
- You can get the OpenVPN client from the *Tools* that are delivered in your Drive (Windows & Mac)
- Download and install the OpenVPN client
- Alternatively
  - Windows: https://openvpn.net/community-downloads/
  - Mac: https://tunnelblick.net/downloads.html



How to Login to the Computers‘ Network? (2)

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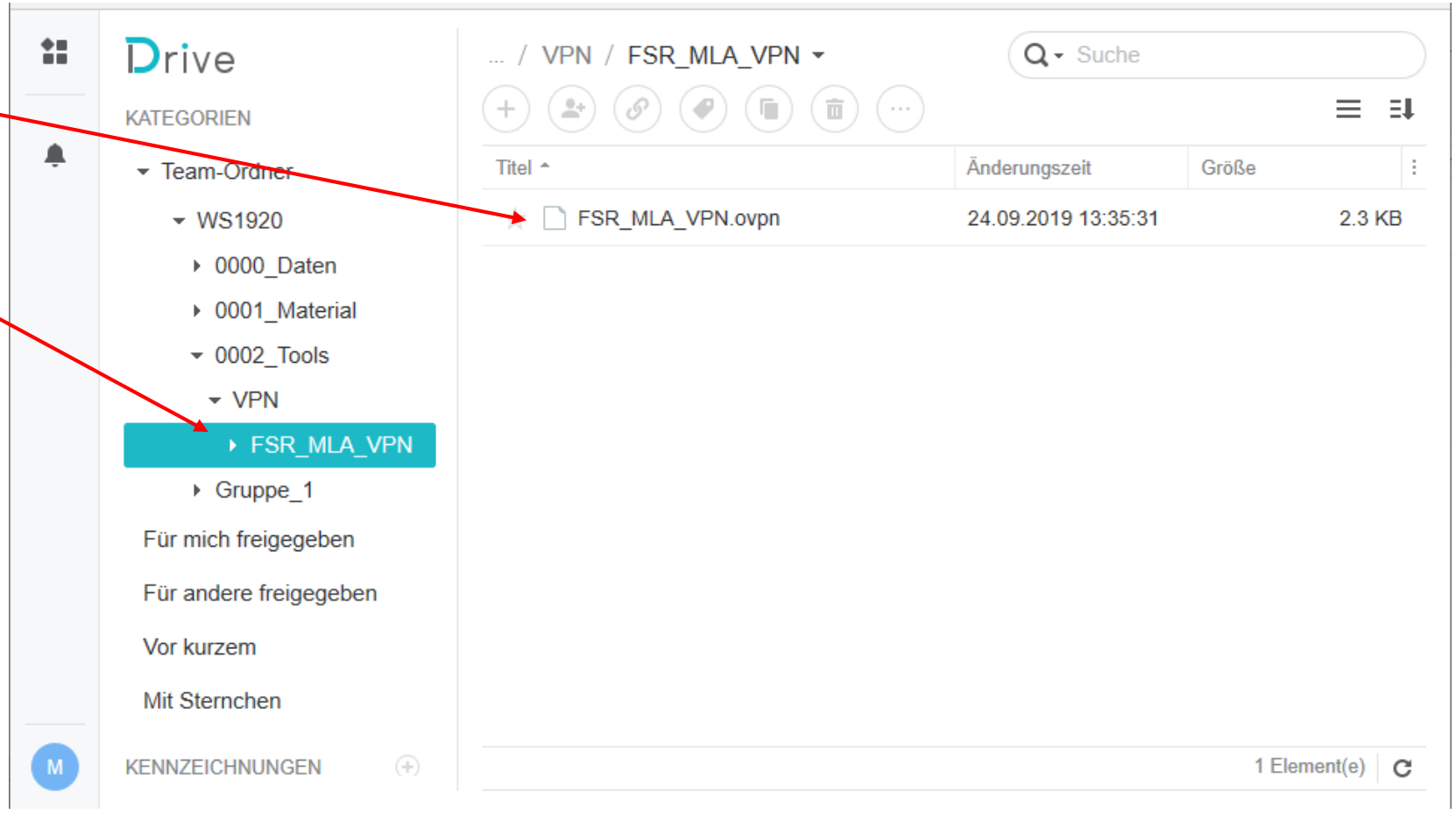
- Download the *FSR_MLA_VPN.ovpn* file from the *Tools* in Drive



How to Login to the Computers‘ Network? (3)

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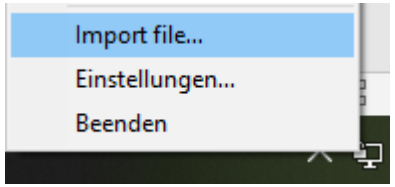
- Open the OpenVPN GUI on your Windows Computer
- This icon will appear in your task bar
- Do a right mouse click on this icon and click on *Import file…*



- Select the downloaded *FSR_MLA_VPN.ovpn* file

- On MAC start the Tunnelblick VPN application
- Have a look into these instructions of the official webpage: https://tunnelblick.net/cConfigT.html#setting-up-and-installing-configurations

How to Login to the Computers‘ Network? (4)

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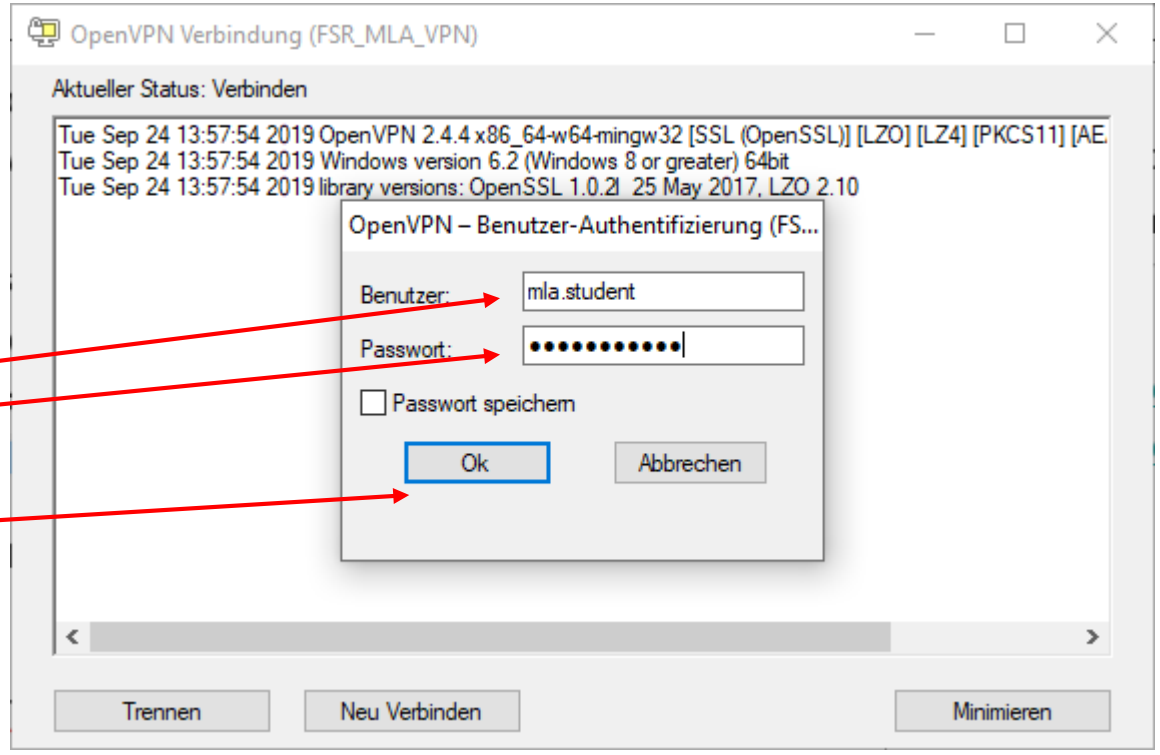
- Open the OpenVPN GUI on your Windows Computer
- This icon will appear in your task bar
- Do a right mouse click on this icon select FSR_MLA_VPN and click *Verbinden*
- A window opens in which the connection starts to establish
- Enter your username and password when asked for
- Click *OK* and wait until the main window closes
- The icon in the taskbar should have a green screen



How to Login to the Computers‘ Network? (5)

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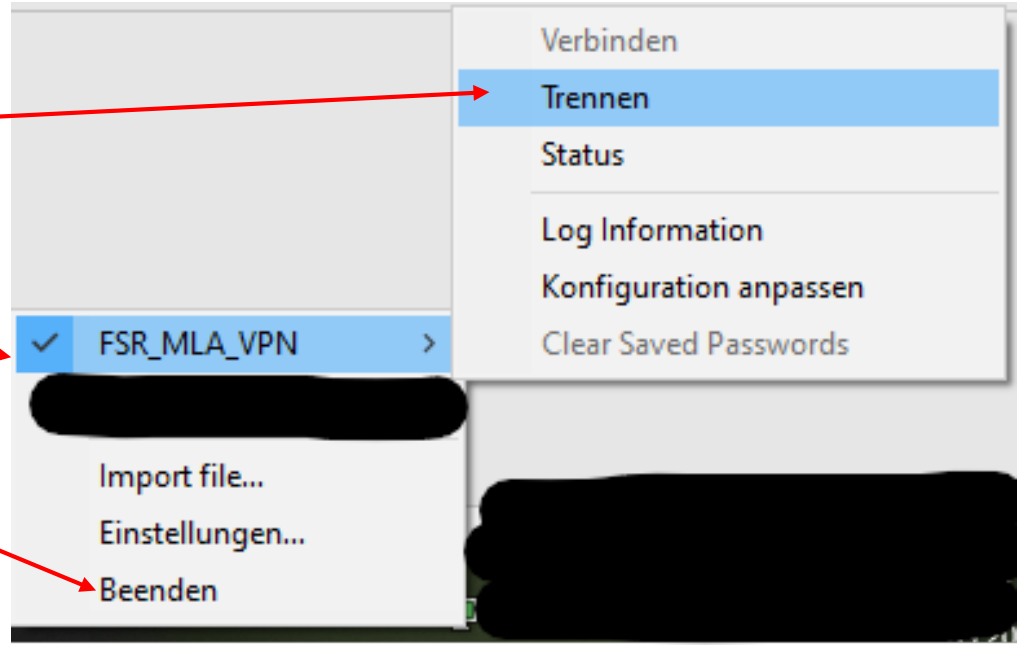
- When you are done using the computer **always disconnect** from the VPN connection
- Do a right mouse click on the icon select FSR_MLA_VPN and click *Trennen*

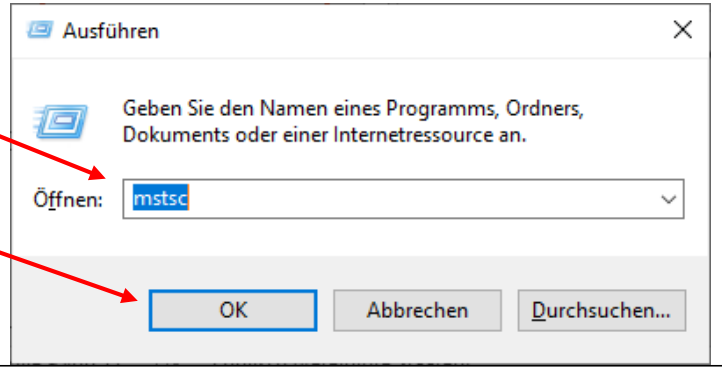


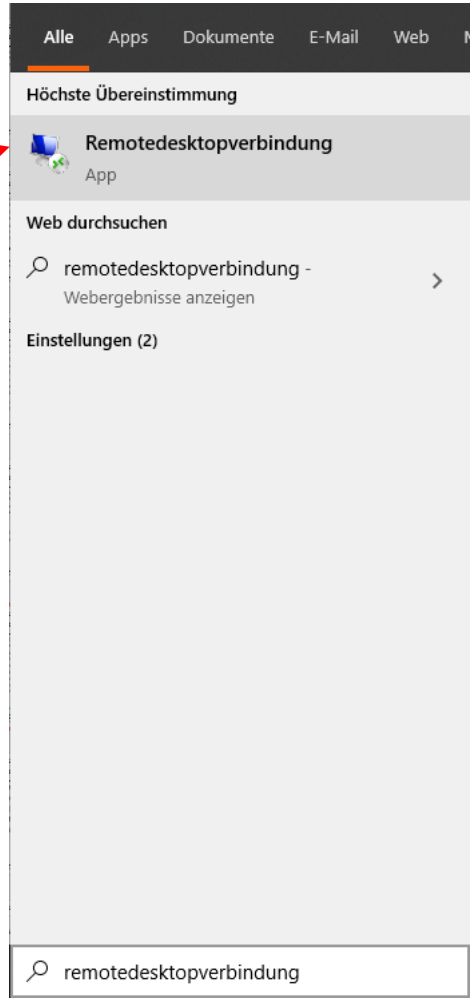
- The connection is now closed and you can exit OpenVPN

How to Login to the Reserved Computer? (1)

- The login is only possible when connected to the VPN network!

- You need to be able to use Microsoft Windows Remote Desktop connection
- Use the windows search and search for *Remotedesktop* or press Windows + R, type *mstsc* and press enter (click *OK*)

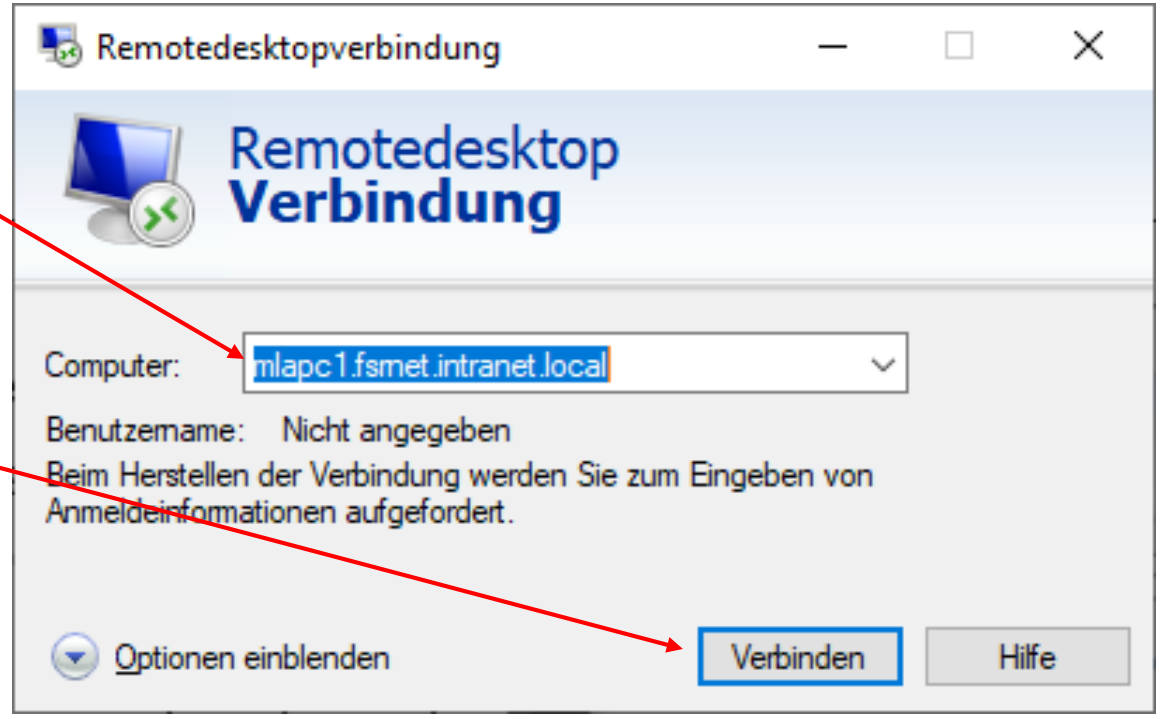




- MAC: https://apps.apple.com/app/microsoft-remote-desktop/id1295203466?mt=12

How to Login to the Reserved Computer? (2)

- Enter the computer address for the computer that you've reserved
  - **MLA PC 1**: *mlapc1.fsrnet.intranet.local* **or** *130.83.71.31*
  - **MLA PC 2**: *mlapc2.fsrnet.intranet.local* **or** *130.83.71.32*
- Click on *Verbinden*



How to Login to the Reserved Computer? (3)

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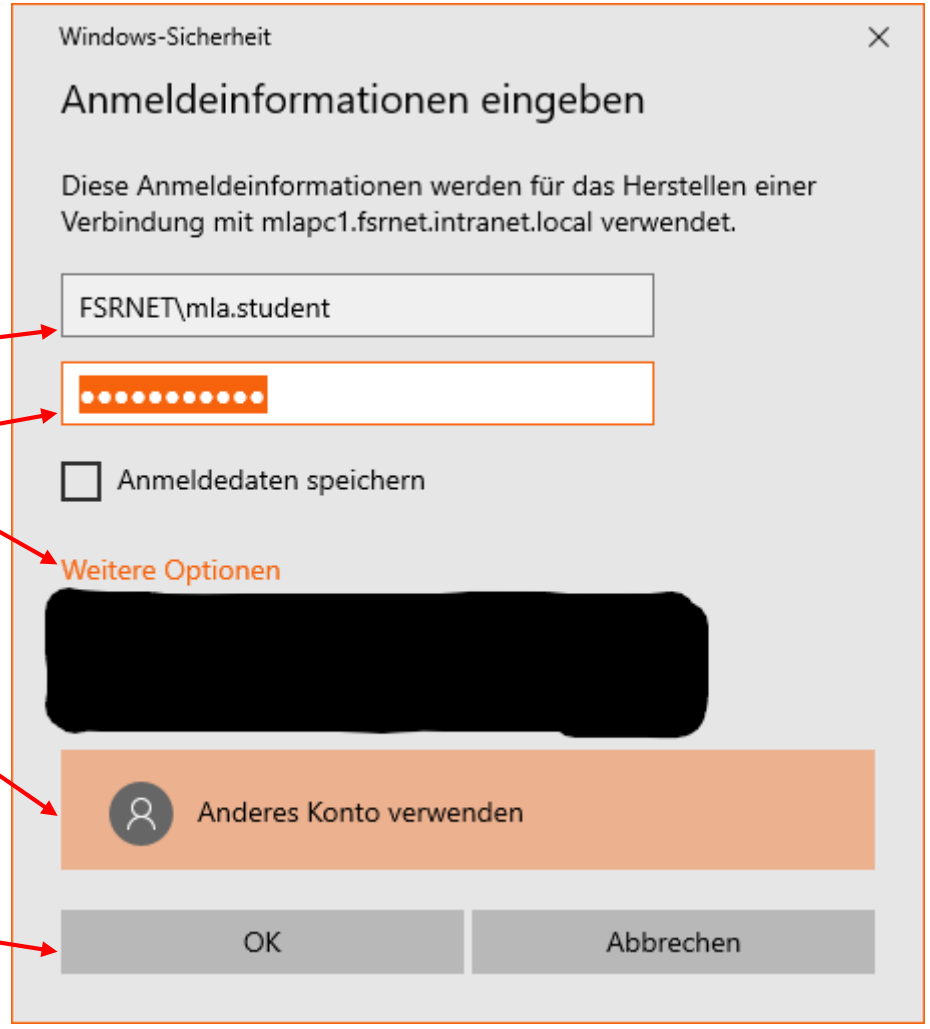
- Click on *Weitere Optionen*
- Click on *Anderes Konto verwenden*
- Enter FSRNET\username
- Enter your password
- Click *OK*



How to Login to the Reserved Computer? (4)

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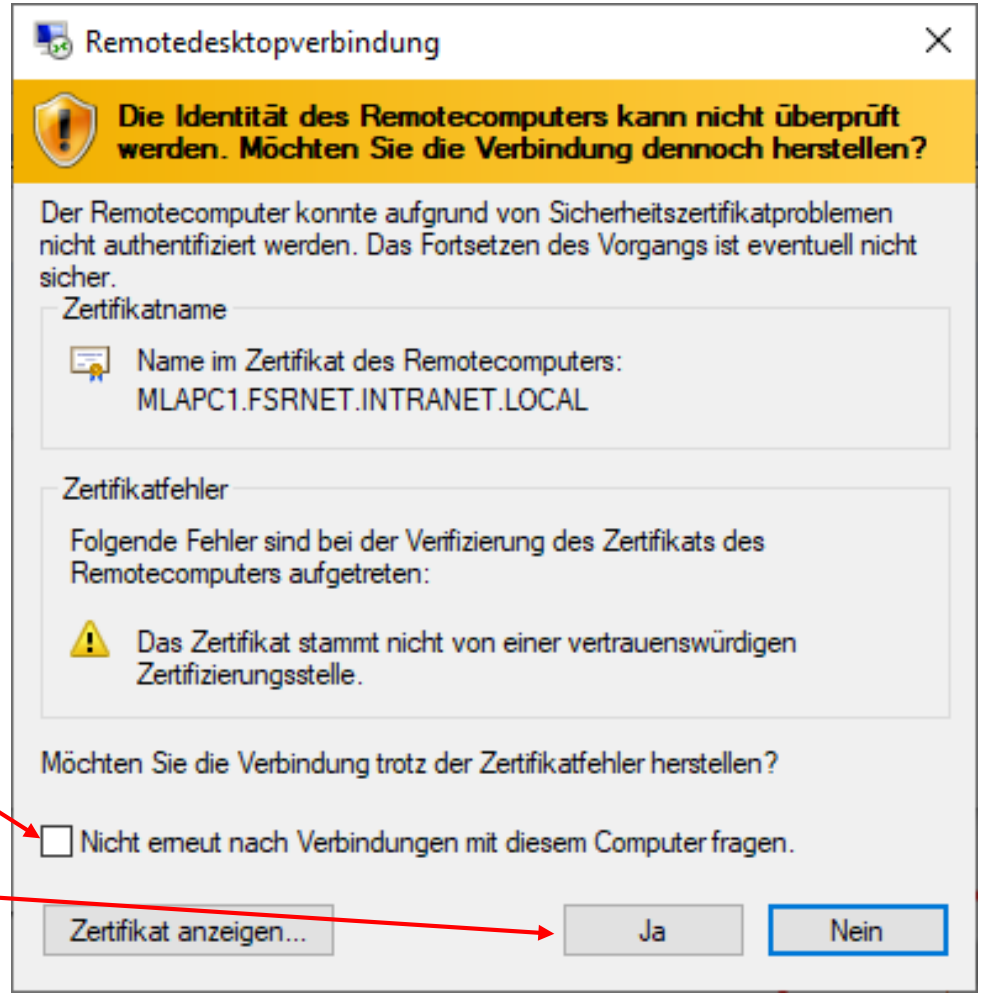
- You might receive an message regarding the certificate for the computer
- Check the checkbox here
- Click on *Ja*



How to Login to the Reserved Computer? (5)

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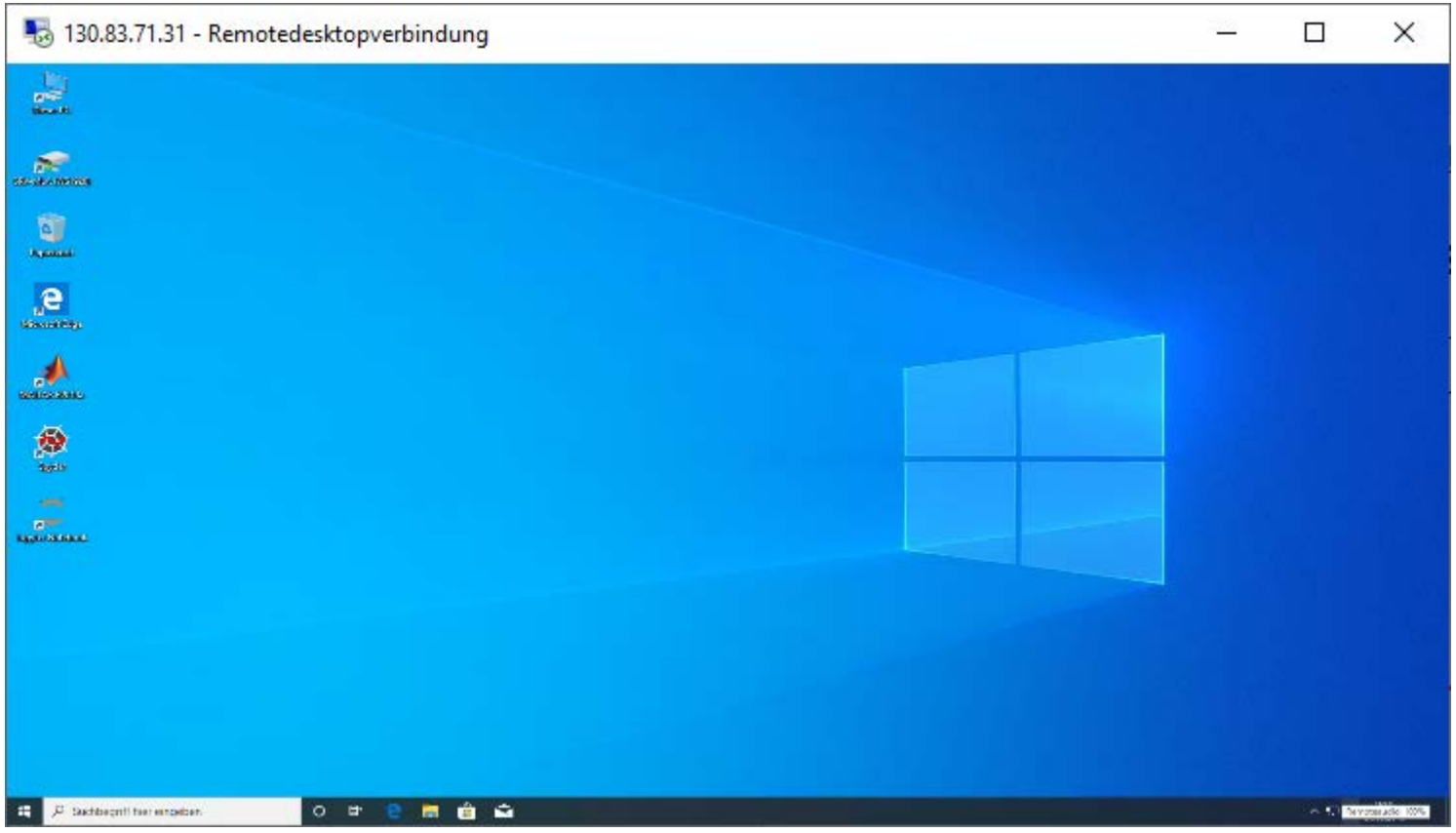
- You will see the remote desktop and you can use it like a windows computer
- The access to the MLA data server is possible via the shared drive Z:\
- **Do not store data locally (except for short period)! It will be deleted!**



Contact / Questions / Problems

Simon Mehringskötter, M. Sc.

Institute of Flight Systems and Automatic Control

L1|01 – 573

E-Mail: mehringskoetter@fsr.tu-darmstadt.de

Tel: +49 6151 16-21067

THANK U