

# Machine Learning Applications (MLA)

## Instruction for Infrastructure

## Overview of Drive Application



## What is Synology Drive application?

- It combines the File Station with cloud storage features
- There are clients for Windows/ Mac/ Linux for synchronising files and folders
- You can download, upload, create, move, delete, rename,... files and folders (drag and drop)
- You can tag files for better organisation and structuring
- You can create documents (text, tables, slides) to work together on the same files

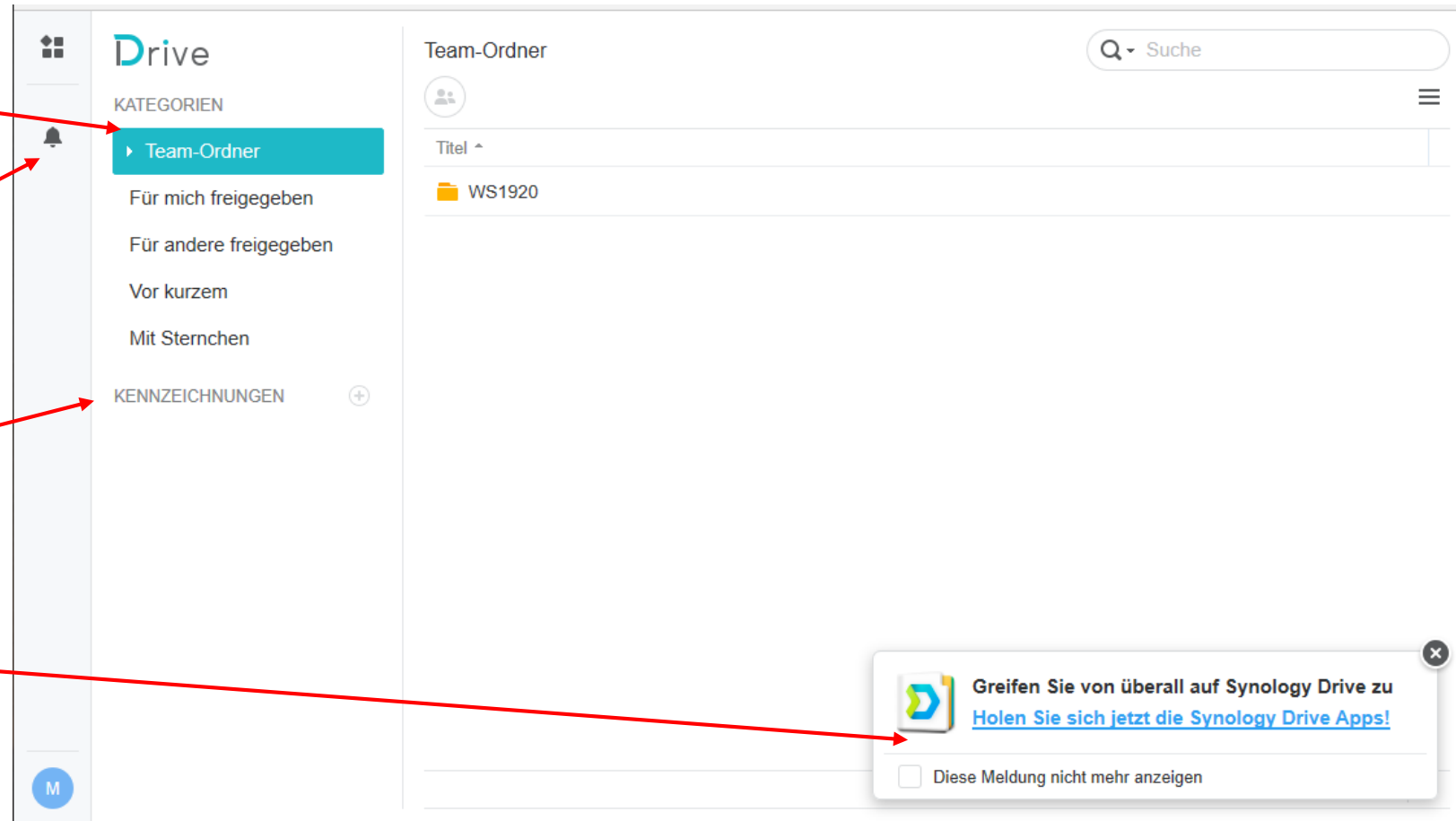
## How do I access the Drive application?

- Way 1: Click the icon on the desktop or start menu (opens in new window)
- Way 2: Open the URL <https://srv-mla.fsr.maschinenbau.tu-darmstadt.de/drive>



# What Do I See at First Start?

- Folder structure (Team-Ordner)
- Notifications
- Tags (*Kennzeichnungen*)
- Notification that enables download of client
  - Download: click on the blue text
  - Checkbox to disable the message

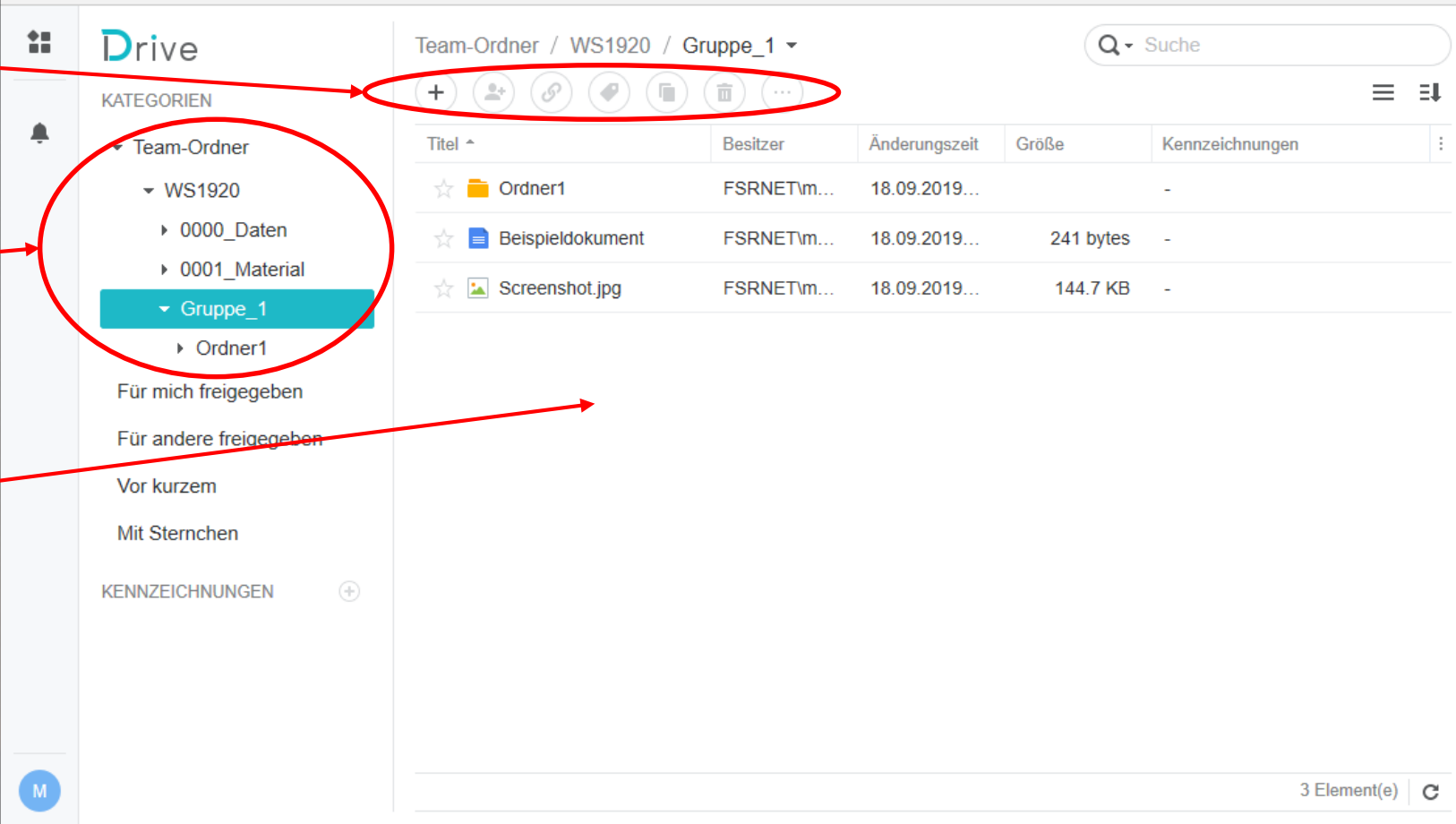


# How Do I Manage Files in the Browser?

- Menu

- Tree view








- Folders content



The screenshot shows the OneDrive web interface. The left sidebar displays a tree view of folders: Team-Ordner, WS1920, 0000\_Daten, 0001\_Material, and Gruppe\_1 (highlighted with a red circle). Below the tree view are options for sharing and a section for tags. The main area shows the contents of the 'Gruppe\_1' folder, including a table with columns: Titel, Besitzer, Änderungszeit, Größe, and Kennzeichnungen. The table lists three items: Ordner1, Beispieldokument, and Screenshot.jpg. A red oval highlights the action menu (plus icon) in the top right of the file list. A red arrow points from the 'Folders content' label to the file list area.

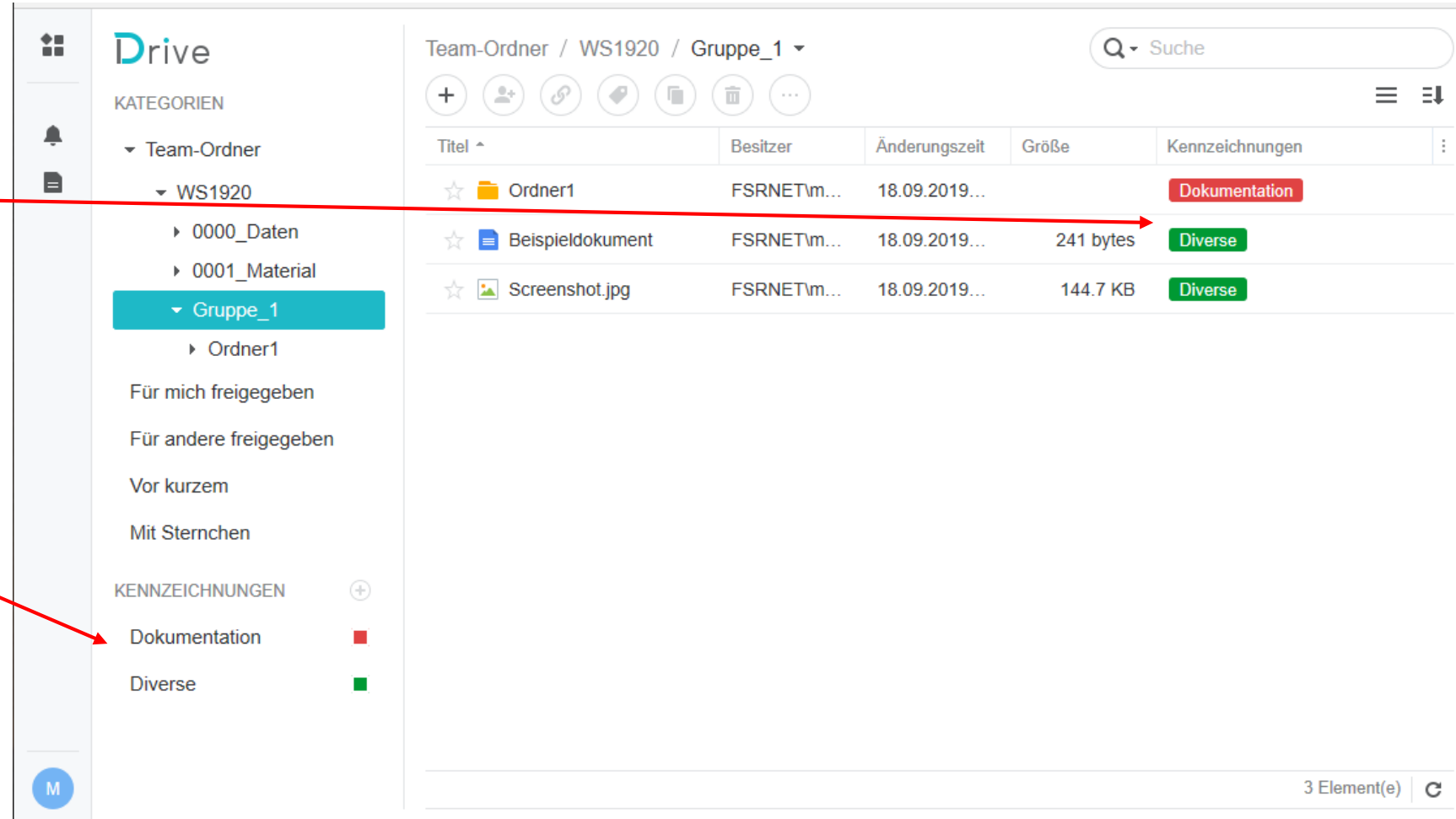
Titel	Besitzer	Änderungszeit	Größe	Kennzeichnungen
☆ Ordner1	FSRNET\m...	18.09.2019...		-
☆ Beispieldokument	FSRNET\m...	18.09.2019...	241 bytes	-
☆ Screenshot.jpg	FSRNET\m...	18.09.2019...	144.7 KB	-

# Menu Bar in File Overview

-  Create new files/ folders
-   Create sharing links for files/ folders (restricted)
-  Add Tags to files/ folders and create them
-  Duplicate a file/ folder
-  Remove a file/ folder
-  Additional options for a file/ folder – same as doing right mouse click on file/ folder

# What are Tags?

- Helpful to organise files and folders by marking them with tags.
- Here you can list files/folders that are tagged with specific tag.



The screenshot shows the Drive interface with a sidebar on the left and a main content area on the right. The sidebar contains a navigation menu with 'Team-Ordner' expanded, showing 'WS1920' and 'Gruppe\_1'. Below this, there are options for 'Für mich freigegeben', 'Für andere freigegeben', 'Vor kurzem', and 'Mit Sternchen'. The 'KENNZEICHNUNGEN' section shows two tags: 'Dokumentation' (red square) and 'Diverse' (green square). The main content area shows a list of files and folders under the path 'Team-Ordner / WS1920 / Gruppe\_1'. The list has columns for 'Titel', 'Besitzer', 'Änderungszeit', 'Größe', and 'Kennzeichnungen'. The files are 'Ordner1' (tagged 'Dokumentation'), 'Beispieldokument' (tagged 'Diverse'), and 'Screenshot.jpg' (tagged 'Diverse'). Red arrows point from the text in the list group to the 'Dokumentation' tag in the sidebar and the 'Diverse' tag in the file list.

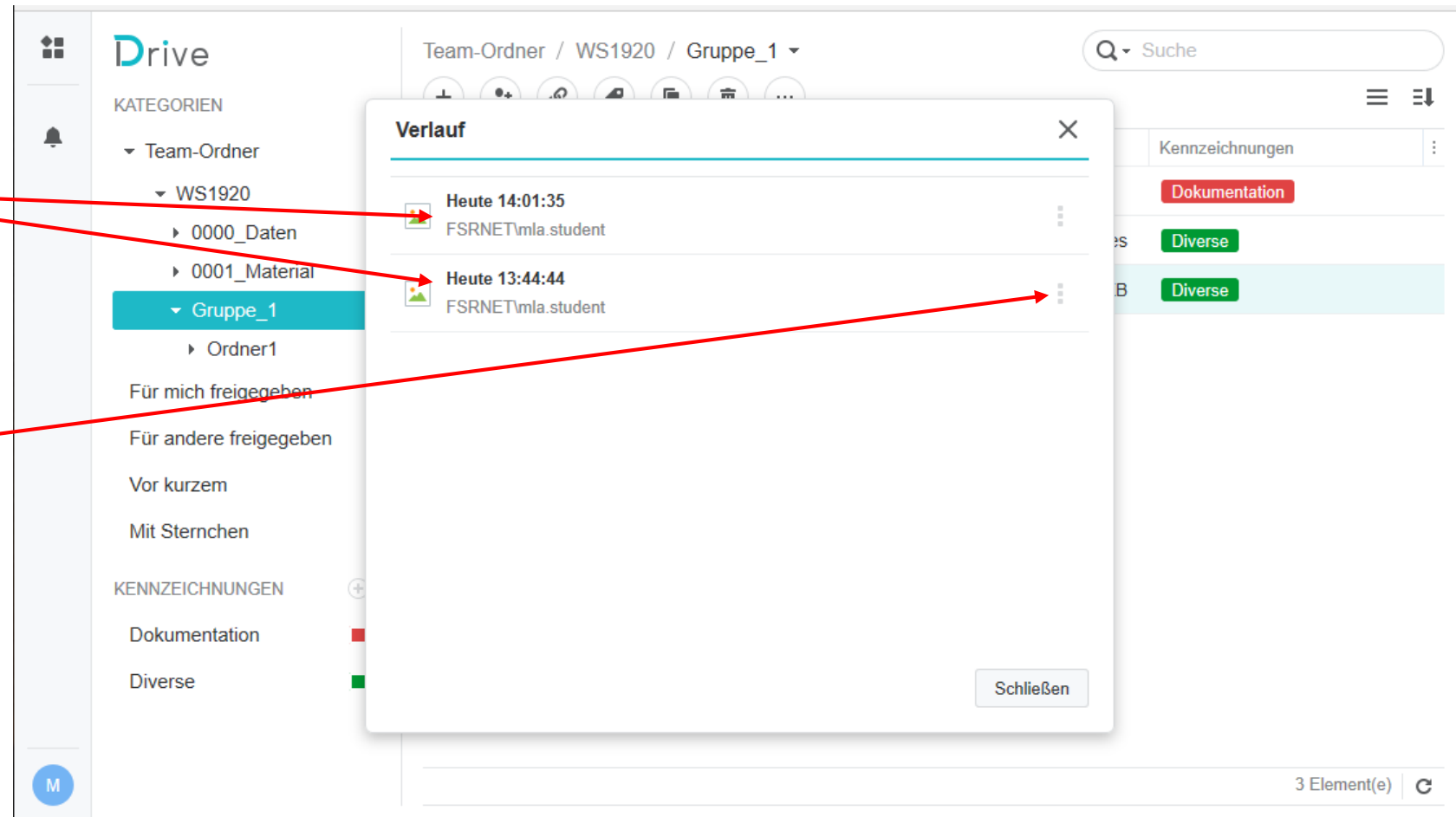
Titel	Besitzer	Änderungszeit	Größe	Kennzeichnungen
☆ Ordner1	FSRNET\m...	18.09.2019...		Dokumentation
☆ Beispieldokument	FSRNET\m...	18.09.2019...	241 bytes	Diverse
☆ Screenshot.jpg	FSRNET\m...	18.09.2019...	144.7 KB	Diverse

# What is the File History (*Dateiverlauf*)?

- Each change of a file creates a new version (32 rotating versions)  
E.g. each time you edit and save a picture file, a new version is created of that file
- After 32 versions the oldest one will be deleted to have space for the newest version in the file history
- You can recover any available version of the file, e.g. in case you accidentally modified it
- Versions older than 60 days will be deleted automatically (not the file itself)
- You can access the file history by doing a right mouse click on the file and selecting *Verlauf*


# File History of File Screenshot.png

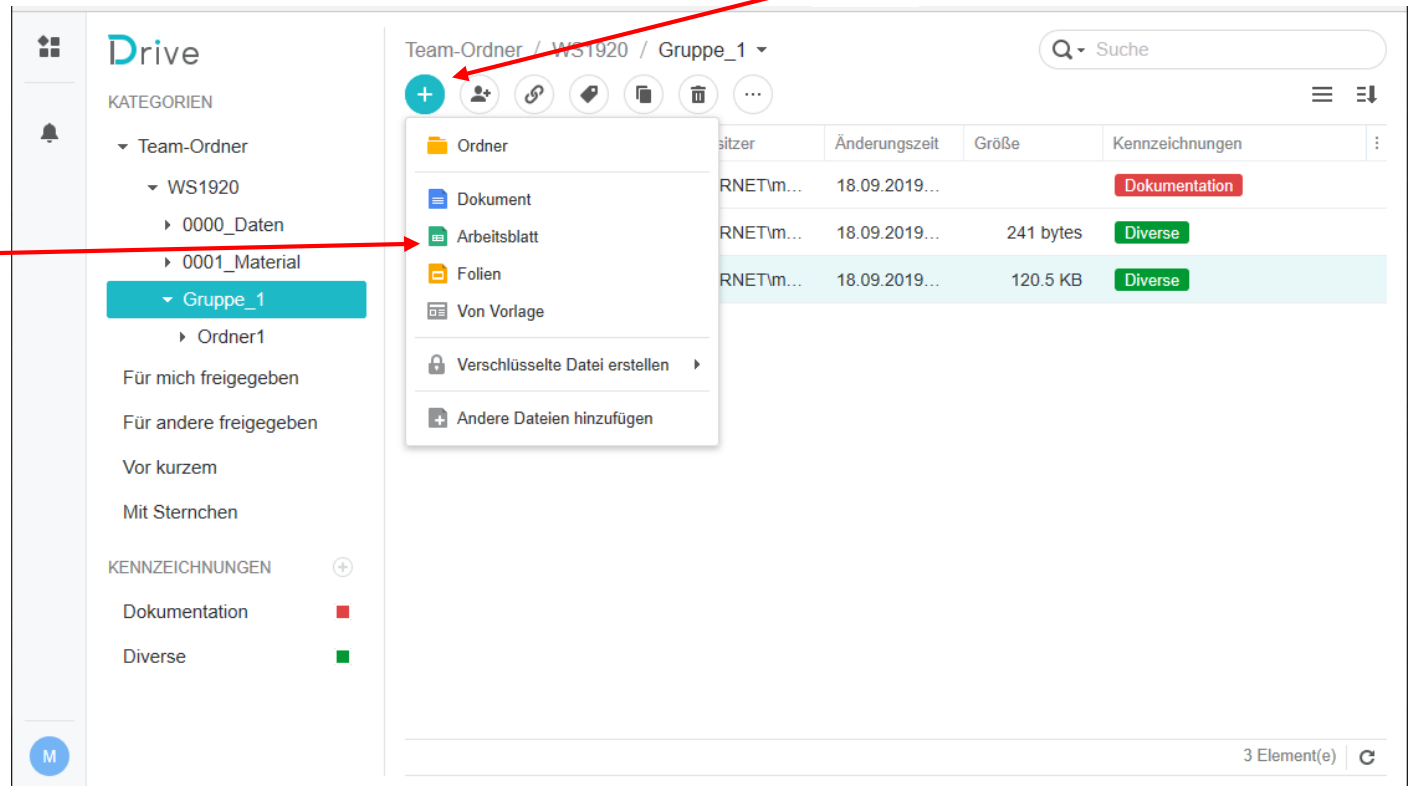
- Timestamp and account from which the file was modified
- Menu to
  - download
  - restore
  - copy
- file version





# Edit Documents Together (Browser only)

- You can create and edit documents at the same time together in your internet browser (similar to google-docs) → Create files by clicking on 
- Possibility to work together on texts, tables or slides
- You should not use this feature for your final report, since there is no corporate design



# Synchronise Files using Windows/Mac/Linus Client

- Drive supports synchronisation between Windows/ Mac/ Linux and server (similar to Dropbox, One-Drive, etc.)
- You can use the synchronisation for editing files locally on your computer
- Usually conflicts in synchronisation are marked – however, you should always make sure that only one person works on a file at the same time
- Windows client is able to do on-demand synchronisation (files will only be downloaded when they are needed)
- You can select which (sub)folders should be synchronised

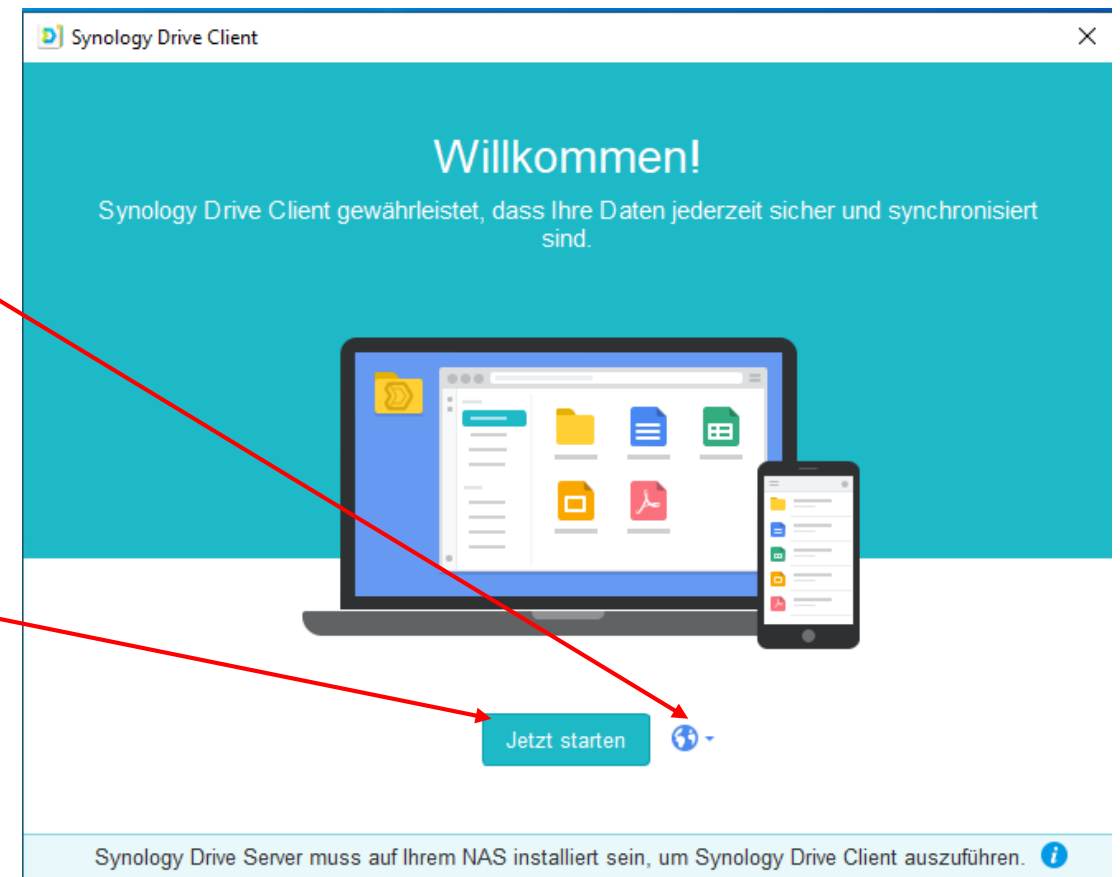
# Download of the Client for Windows/Mac/Linux

- Click on the letter in the left bottom corner and then select *Client* → *Client herunterladen*
- Alternative: Download *Synology Drive Client* for your operating system from here  
<https://www.synology.com/de-de/support/download/RS1619xs+#utilities>



# Setup of the Client (1)

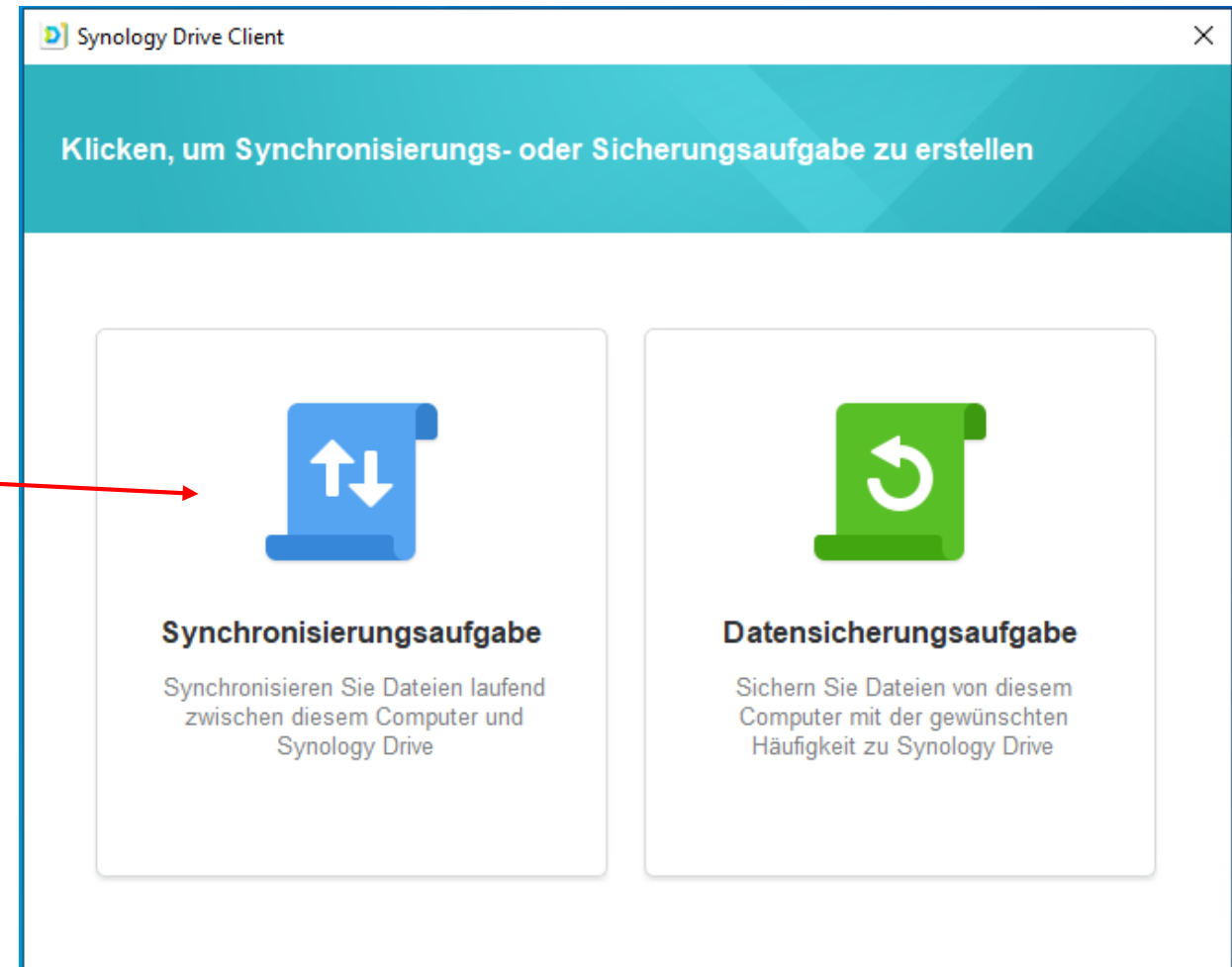
- The client starts after installation automatically
- You can change the language here if you want
- Click on *Jetzt starten*



## Setup of the Client (2)

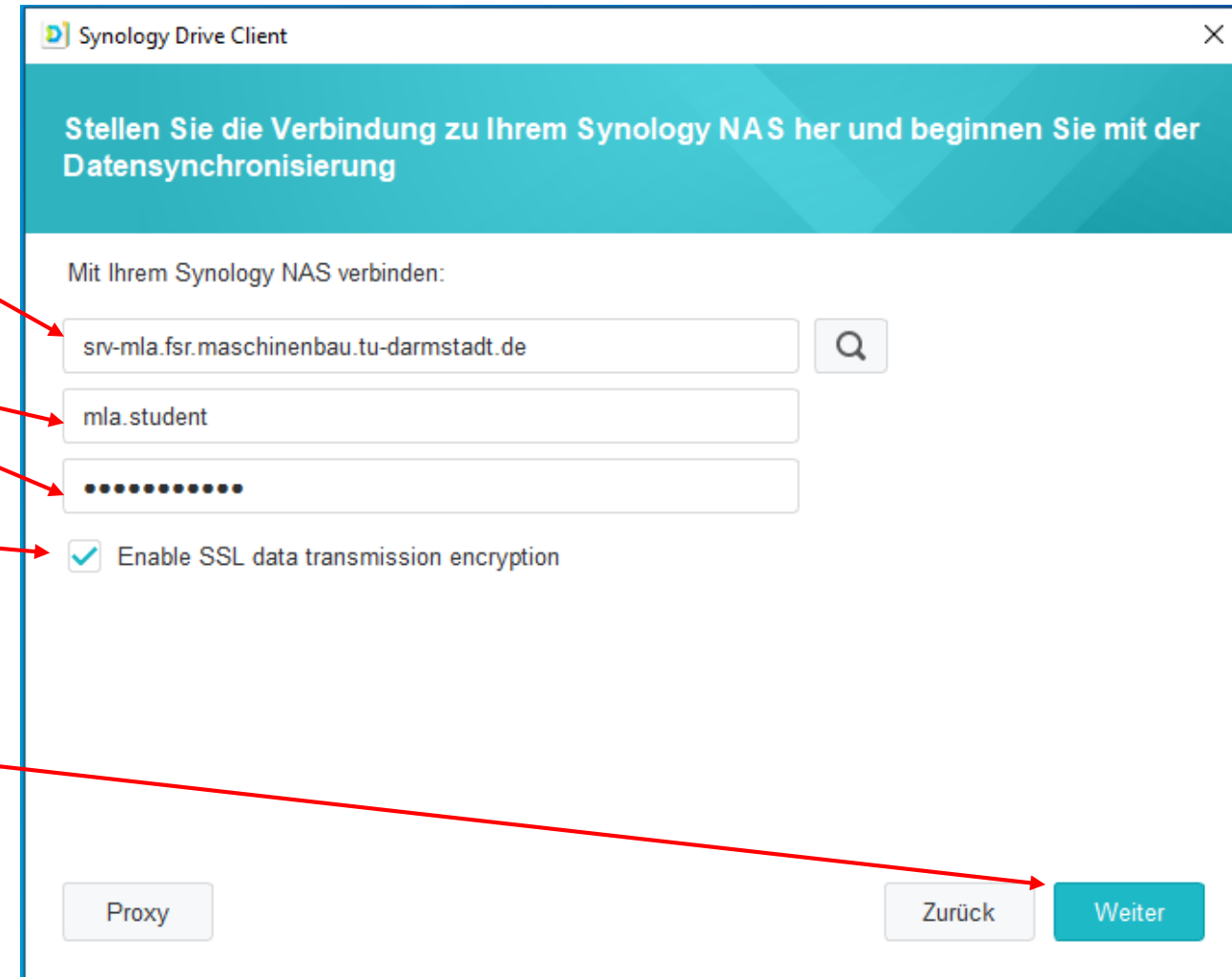
- You have to create a synchronisation task (*Synchronisierungsaufgabe*)

→ Click here



# Setup of the Client (3)

1. Address:  
srv-mla.fsr.maschinenbau.tu-darmstadt.de
2. Username and password  
mla.student
3. Activate this Checkbox  
☒ Enable SSL data transmission encryption
4. Click on *Weiter*



Synology Drive Client

Stellen Sie die Verbindung zu Ihrem Synology NAS her und beginnen Sie mit der Datensynchronisierung

Mit Ihrem Synology NAS verbinden:

srv-mla.fsr.maschinenbau.tu-darmstadt.de

mla.student

.....

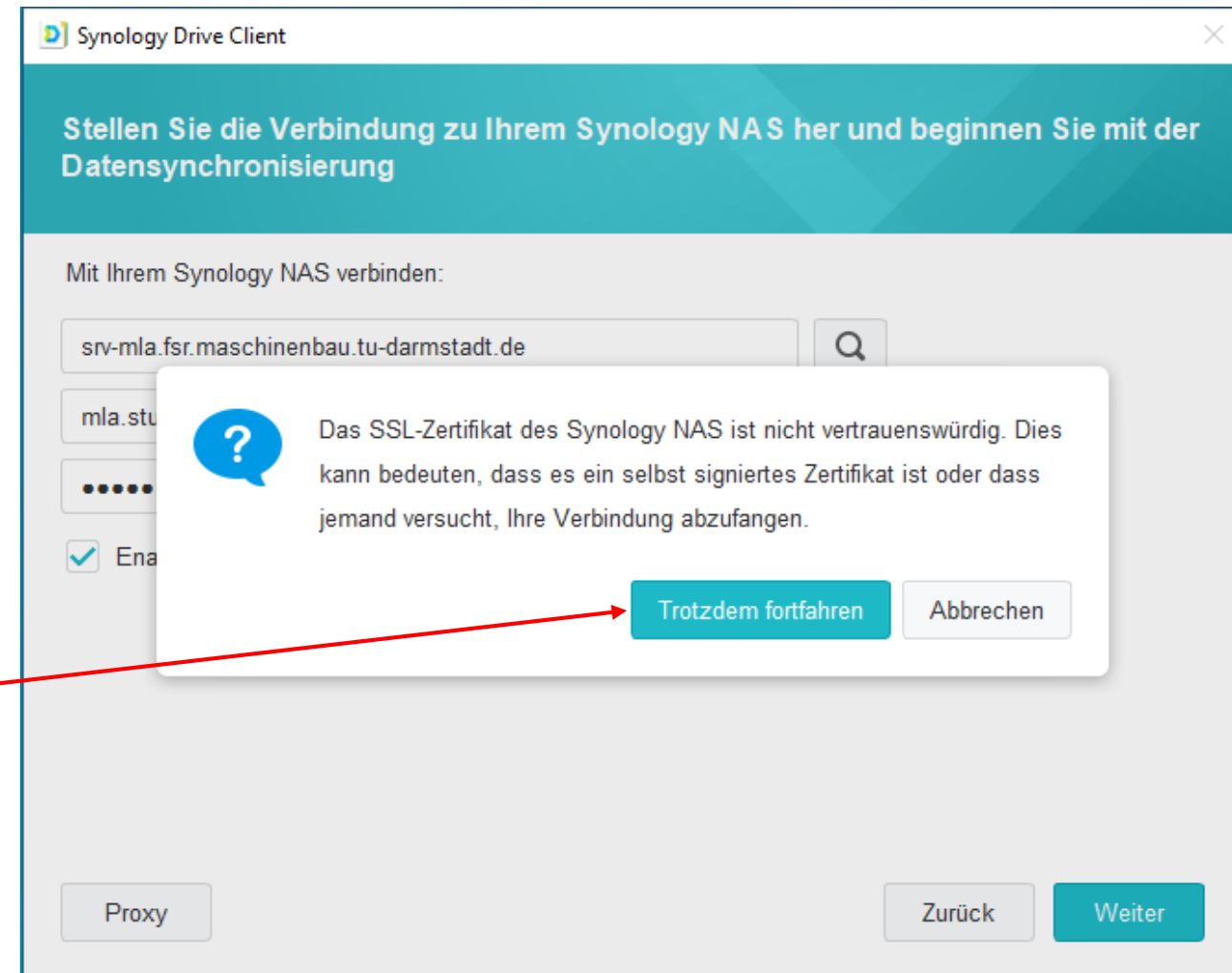
☒ Enable SSL data transmission encryption

Proxy Zurück Weiter

# Setup of the Client (4)


In case you receive a message that the program does not trust the certificate – ignore it. The certificate is certified by Deutsche Forschungsnetzwerk which you can verify in your browser by accessing the URL and opening the details of the certificate.

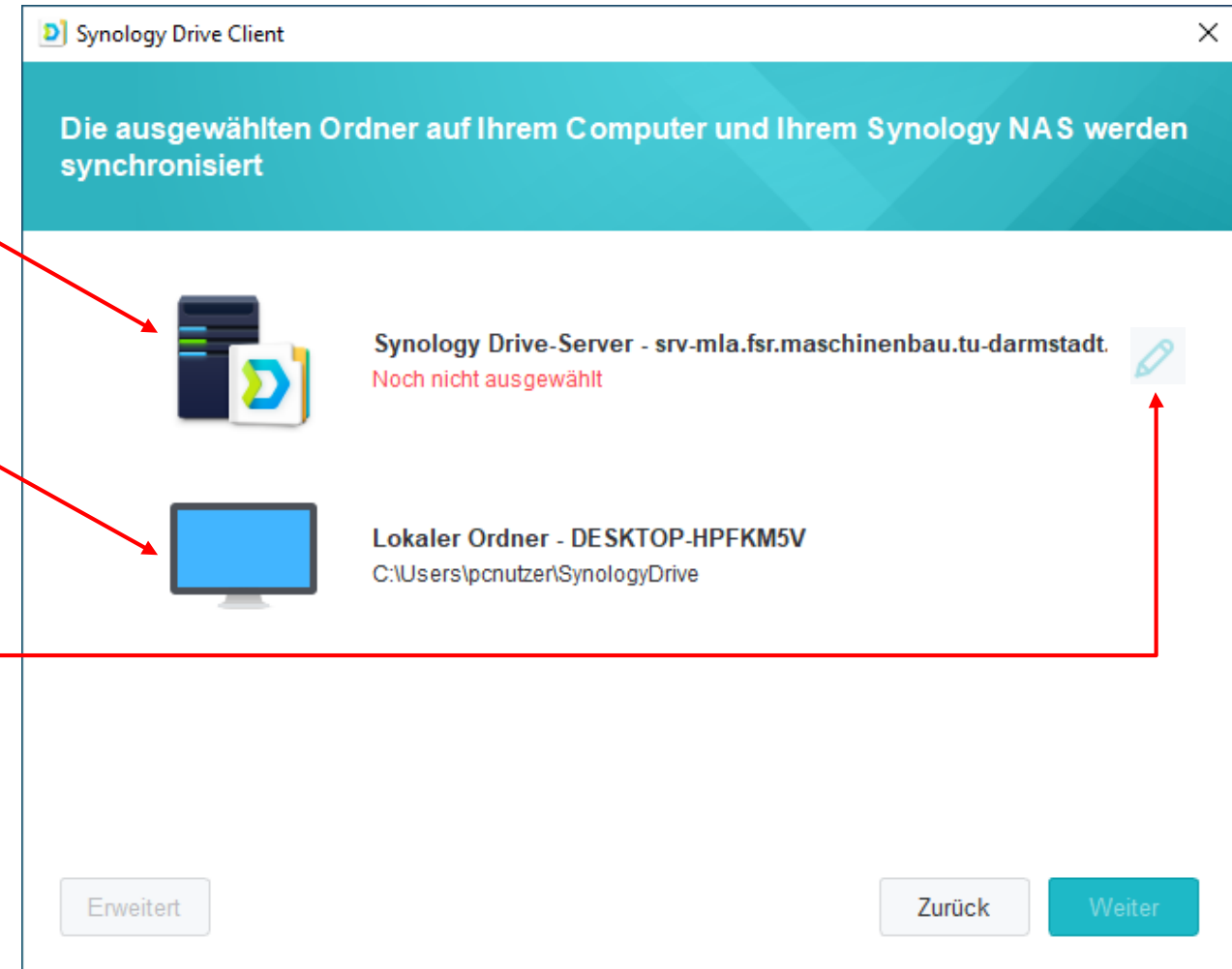
→ Click on *Trotzdem fortfahren*



# Setup of the Client (5)

- You have to select a remote folder (on server) that should be synchronised
- You have to select a local folder (on computer) that should be synchronised

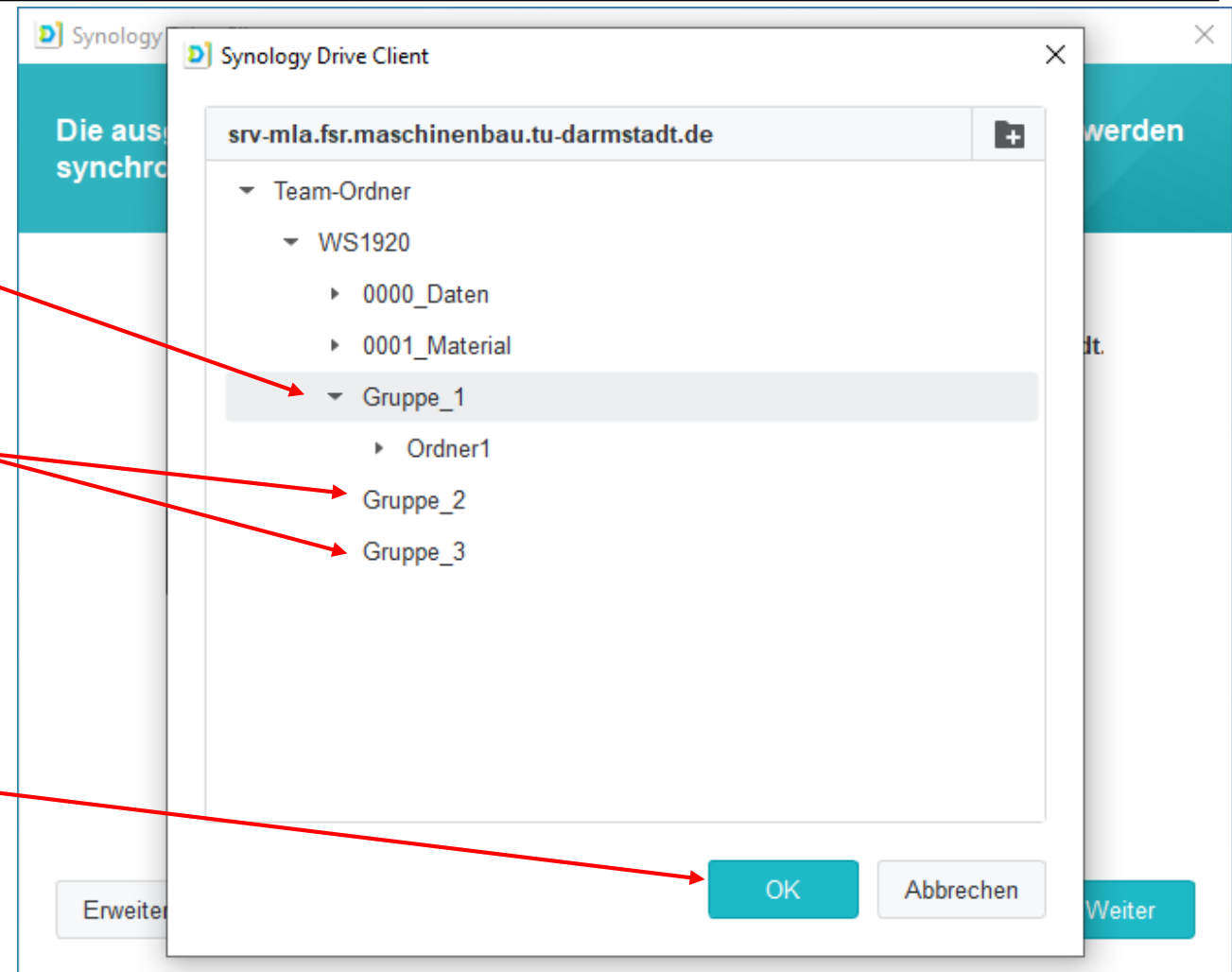
→ First hover over the first entry and click on the pencil on the right  (the pencil is only visible when you hover with the cursor over the entry)






# Setup of the Client (6)

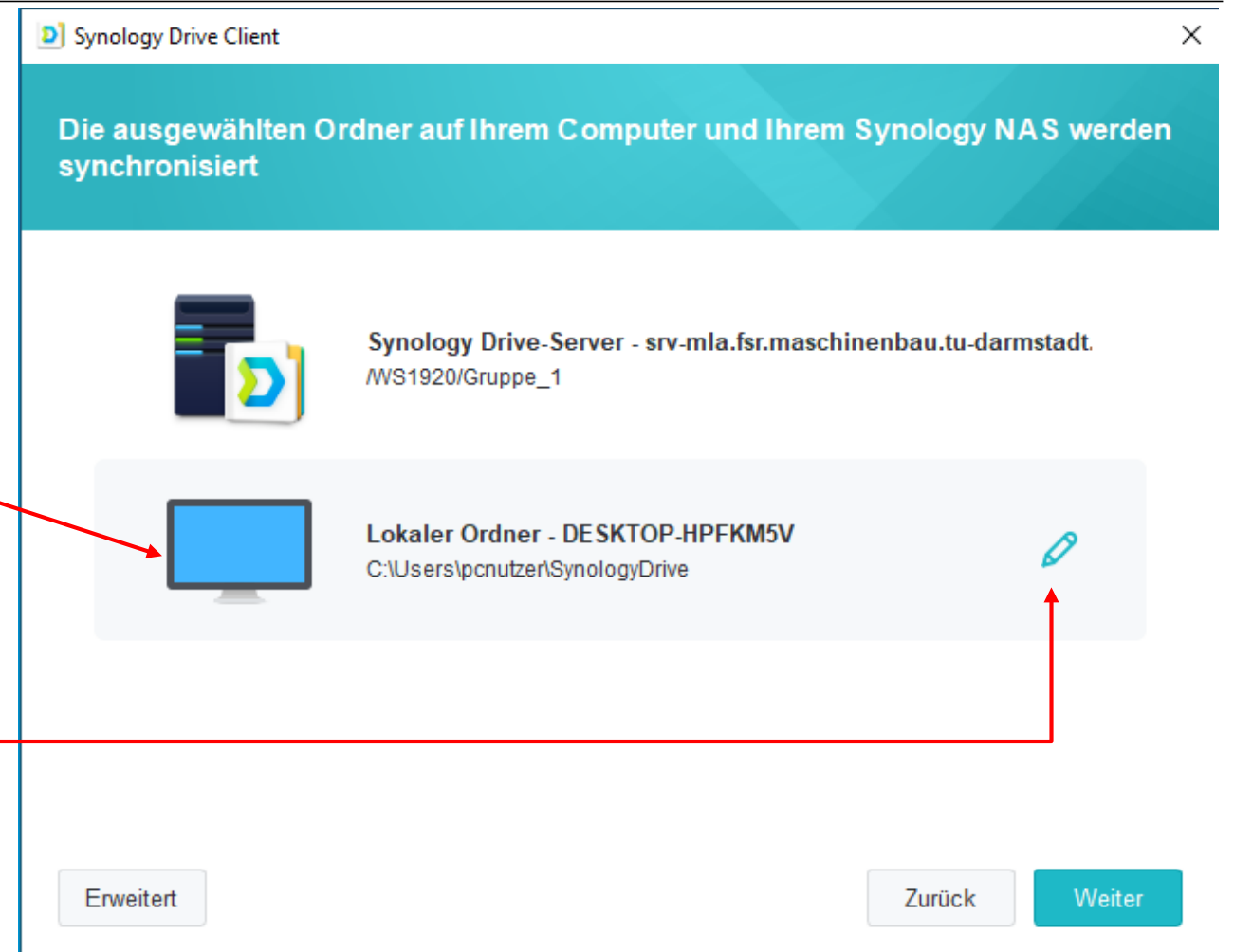
- Open the tree and navigate to the folder of your group and select it (e.g. Gruppe\_1)
  - It might happen that you see folders of other groups, however, it's **not** possible to access them
- Click on *OK* to confirm your folder selection



# Setup of the Client (7)

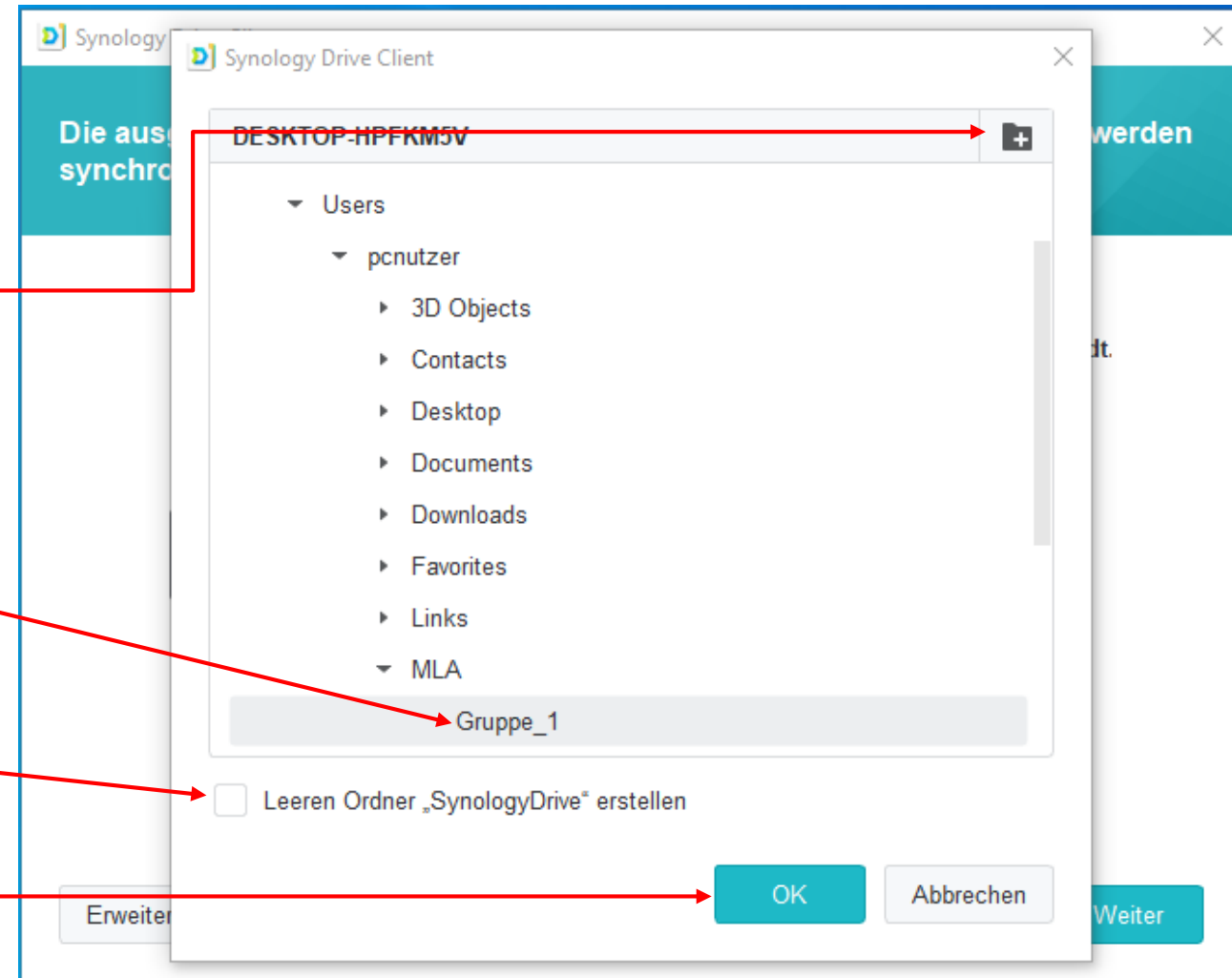
- You have to select a local folder (on computer) that should be synchronised

→ Hover the mouse cursor over the second entry and click on the pencil  (the pencil is only visible when you hover with the cursor over the entry)



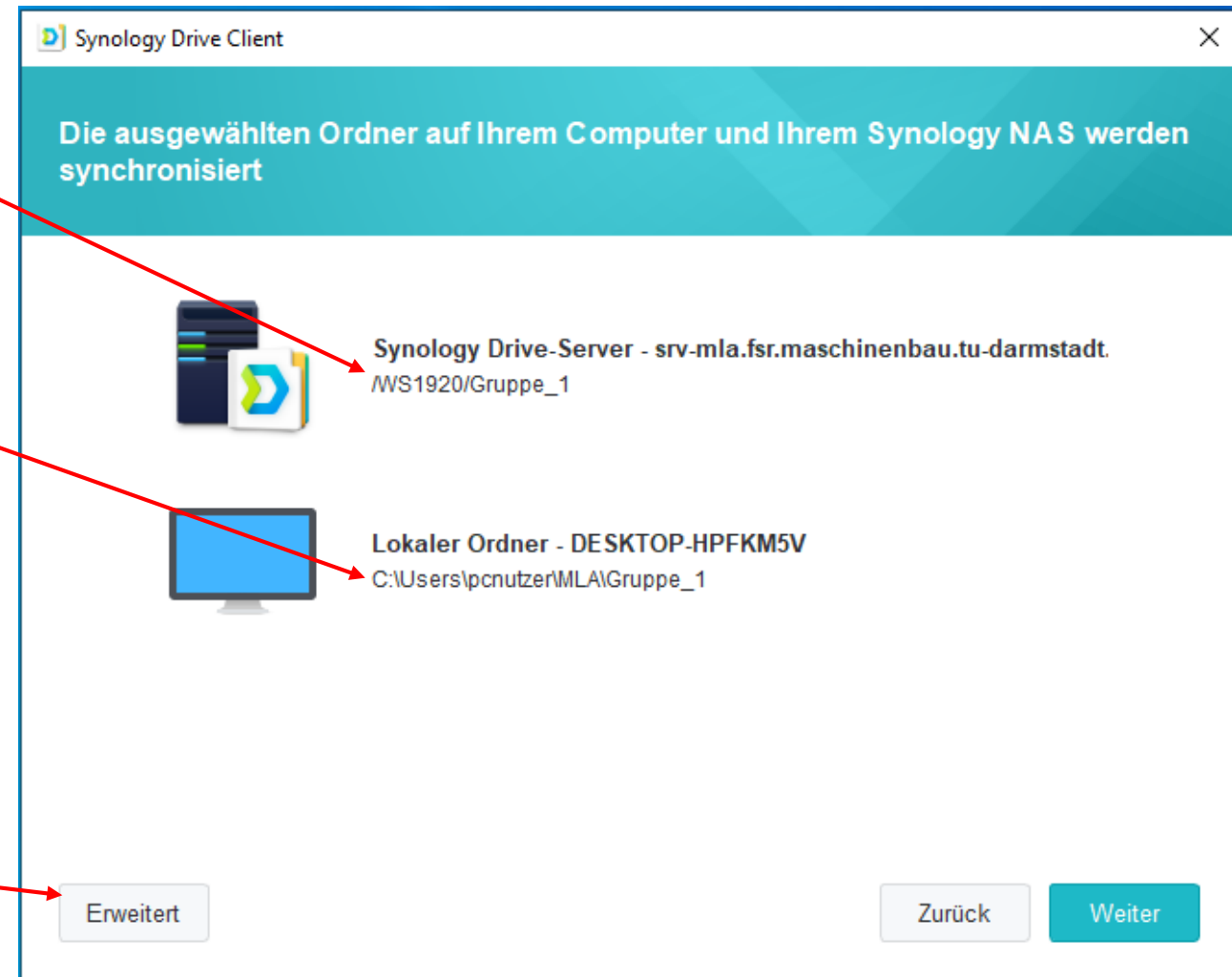
# Setup of the Client (8)

- In the tree view navigate to the folder in which you want to store the data
  - Create a new folder and name it *MLA*
  - In the folder *MLA* create another folder named as your group (e.g. *Gruppe\_1*) and select this folder
  - Uncheck the Checkbox
- Click on *OK* to confirm the folder selection



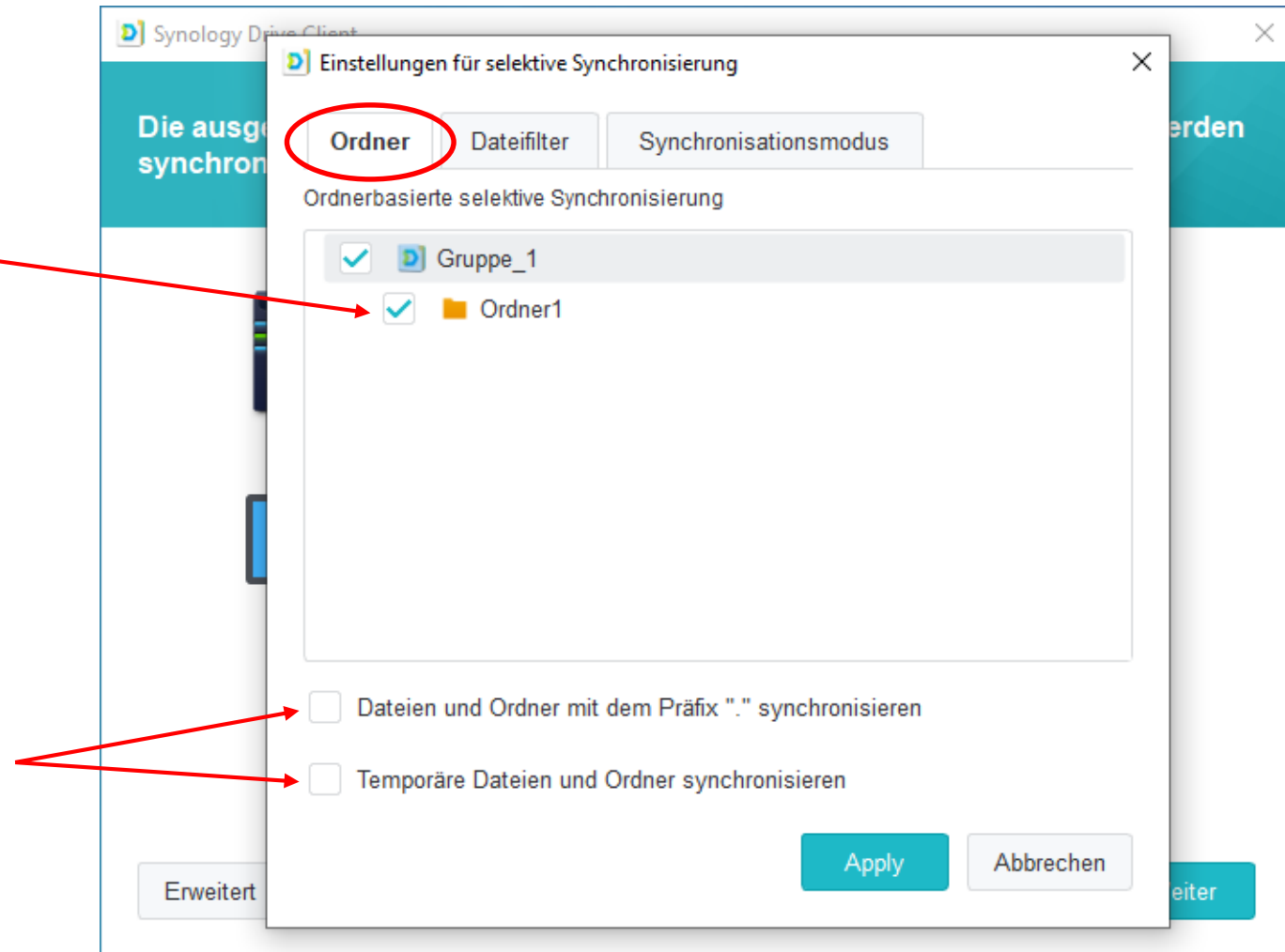
# Setup of the Client (9)

- It should now look like this for the server folder
- Here you should see the path to your folder for your group on your computer
- Click on *Erweitert* for advanced settings



# Setup of the Client (10)

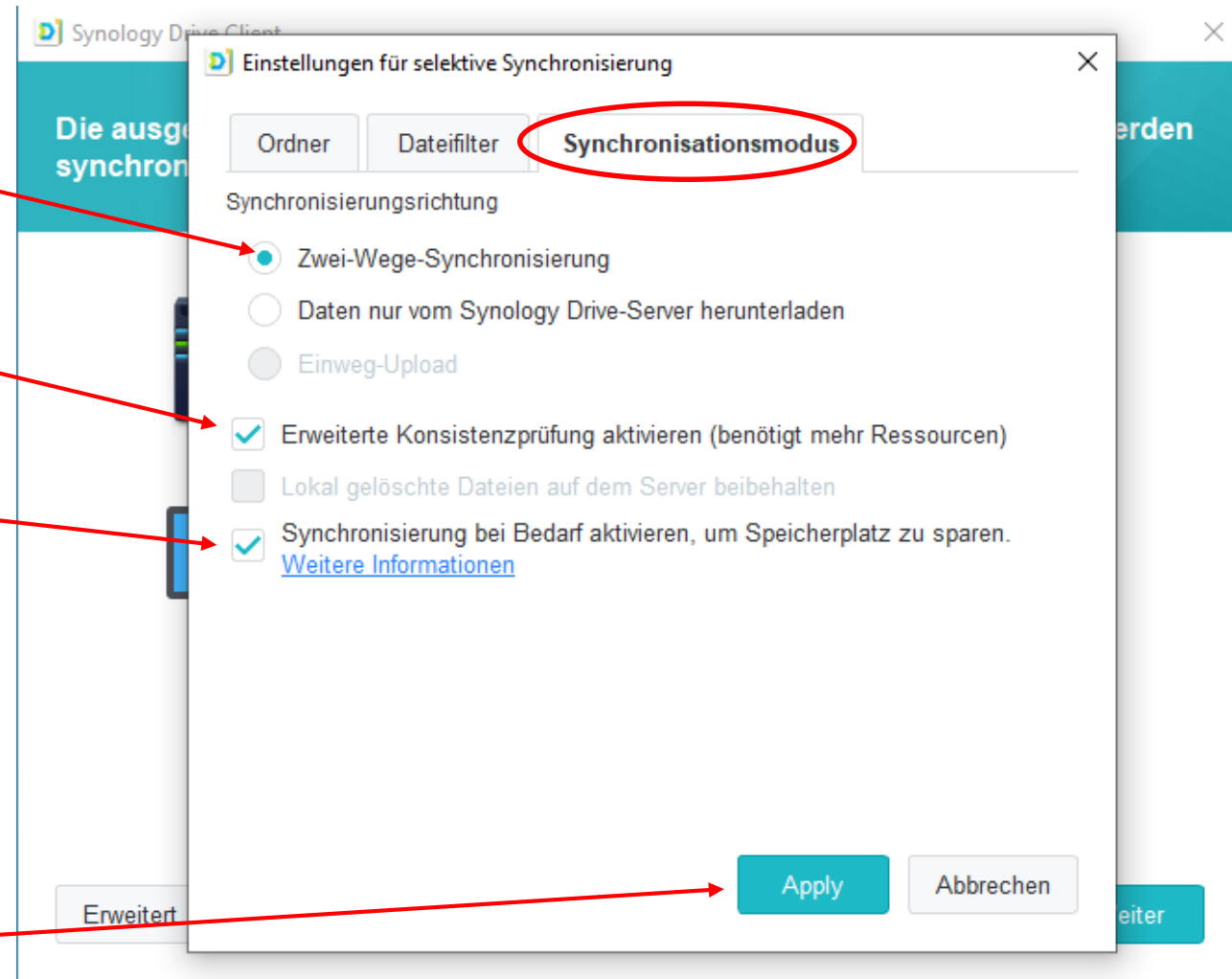
- You can deselect or select subfolders to prevent their synchronisation by removing the hook in the checkbox
- Make sure these checkboxes are not checked



# Setup of the Client (11)

- Select *Zwei-Wege-Synchronisierung* it up- and downloads files (recommended)
- It's recommended to check this box
- This option enables on-demand synchronisation, if you want so (currently only available for Windows)  
If you check this, you should make sure that you are always connected to the internet, since it's necessary to access files on-demand when they were not downloaded yet

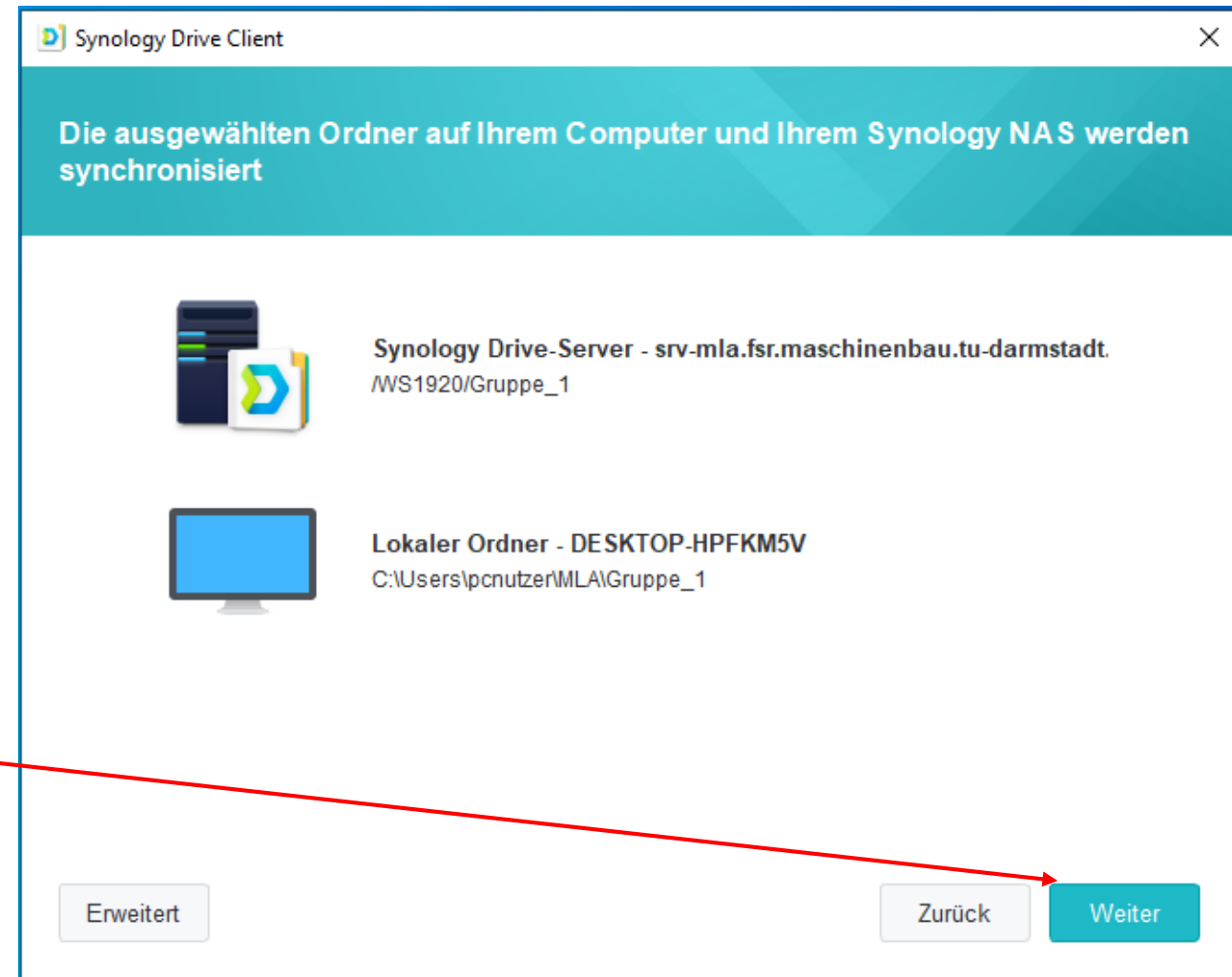
→ Click on *Apply* to confirm your settings



# Setup of the Client (12)

After adjusting the advanced settings you can continue

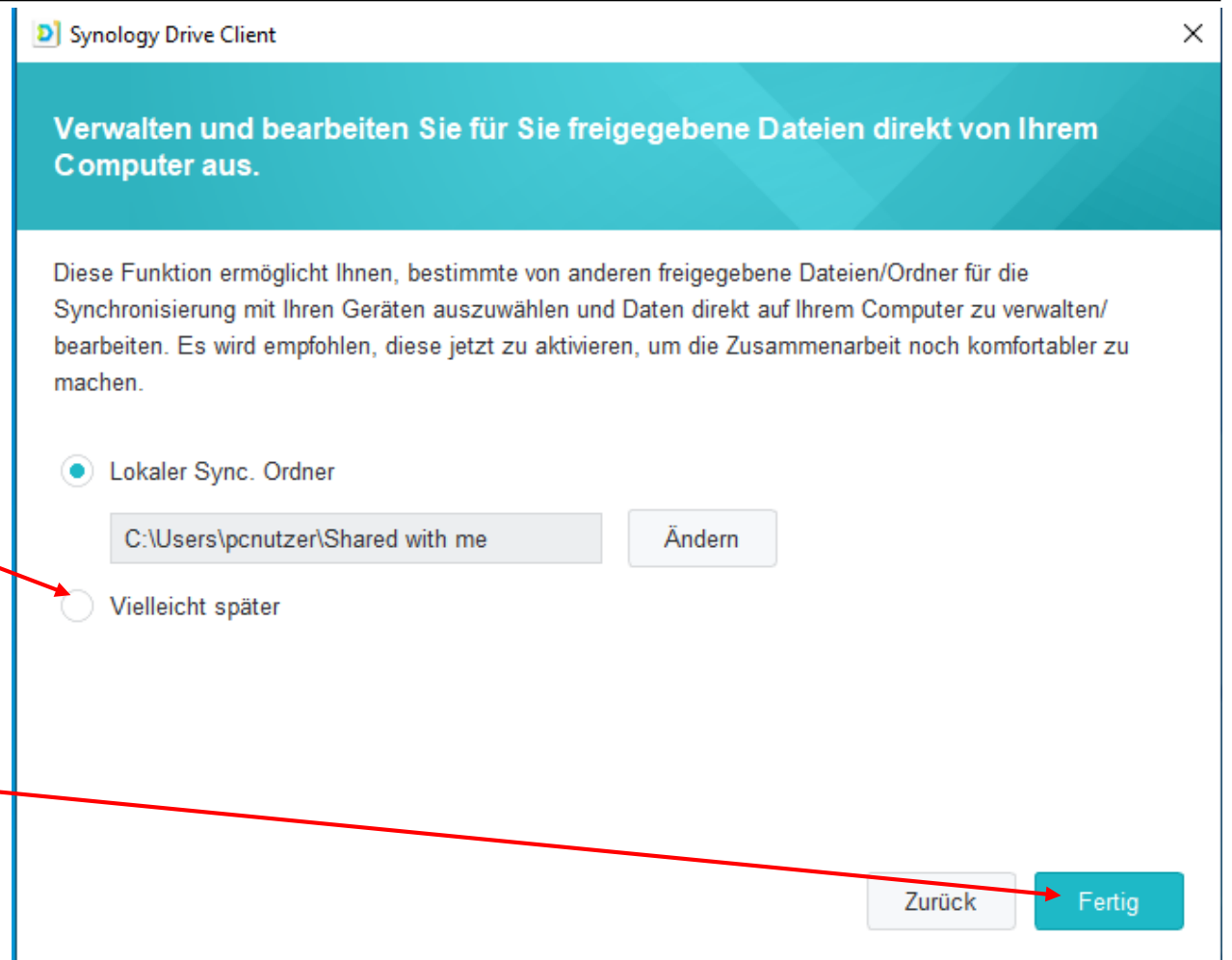
→ Click on *Weiter*



# Setup of the Client (13)

You don't need to accept the proposal of the program to create a further folder for the *Shared with me* files. It's recommended to select *Vielleicht später*, because this feature is typically not necessary.

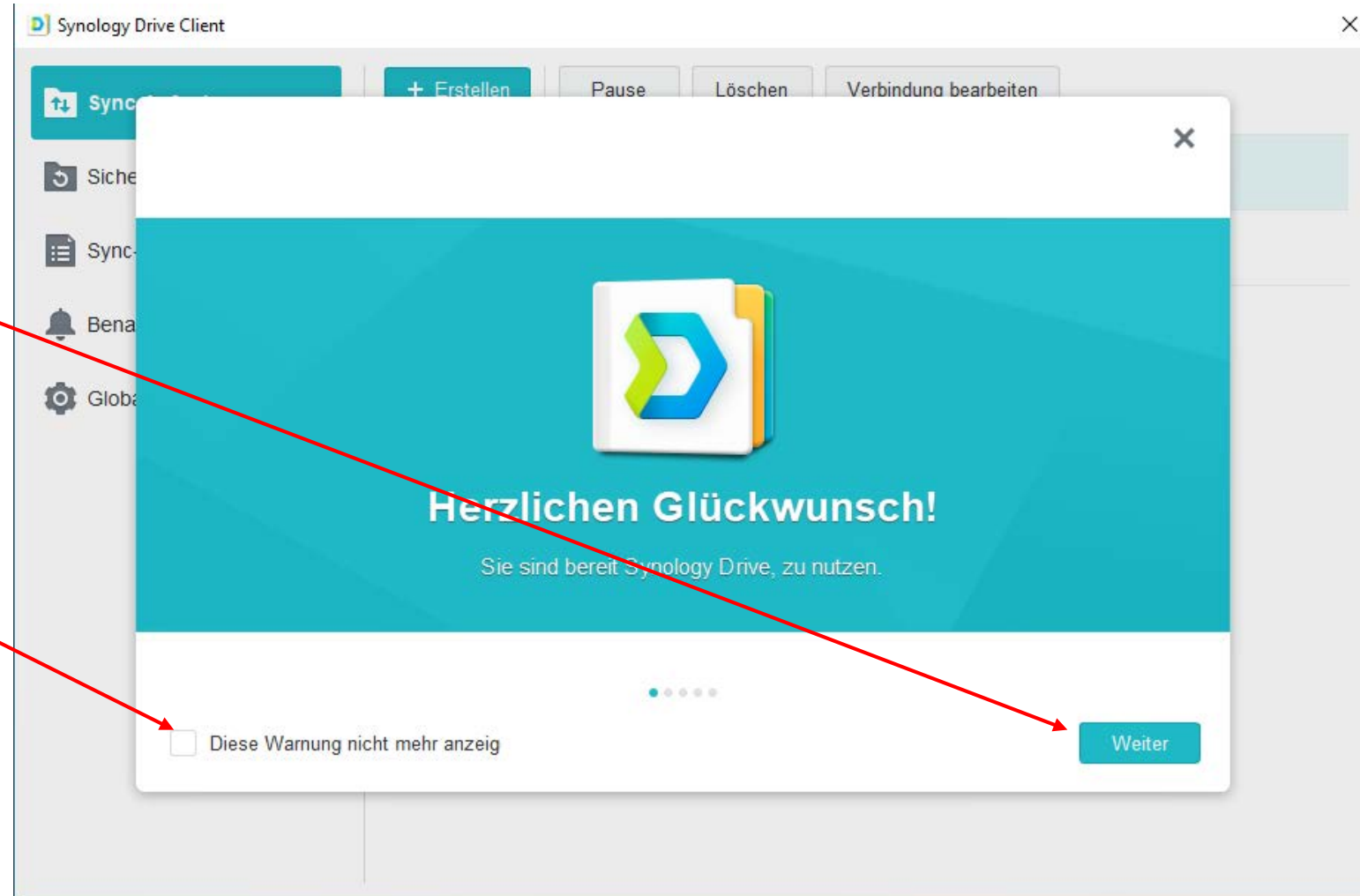
→ Click on *Fertig* to finish the configuration





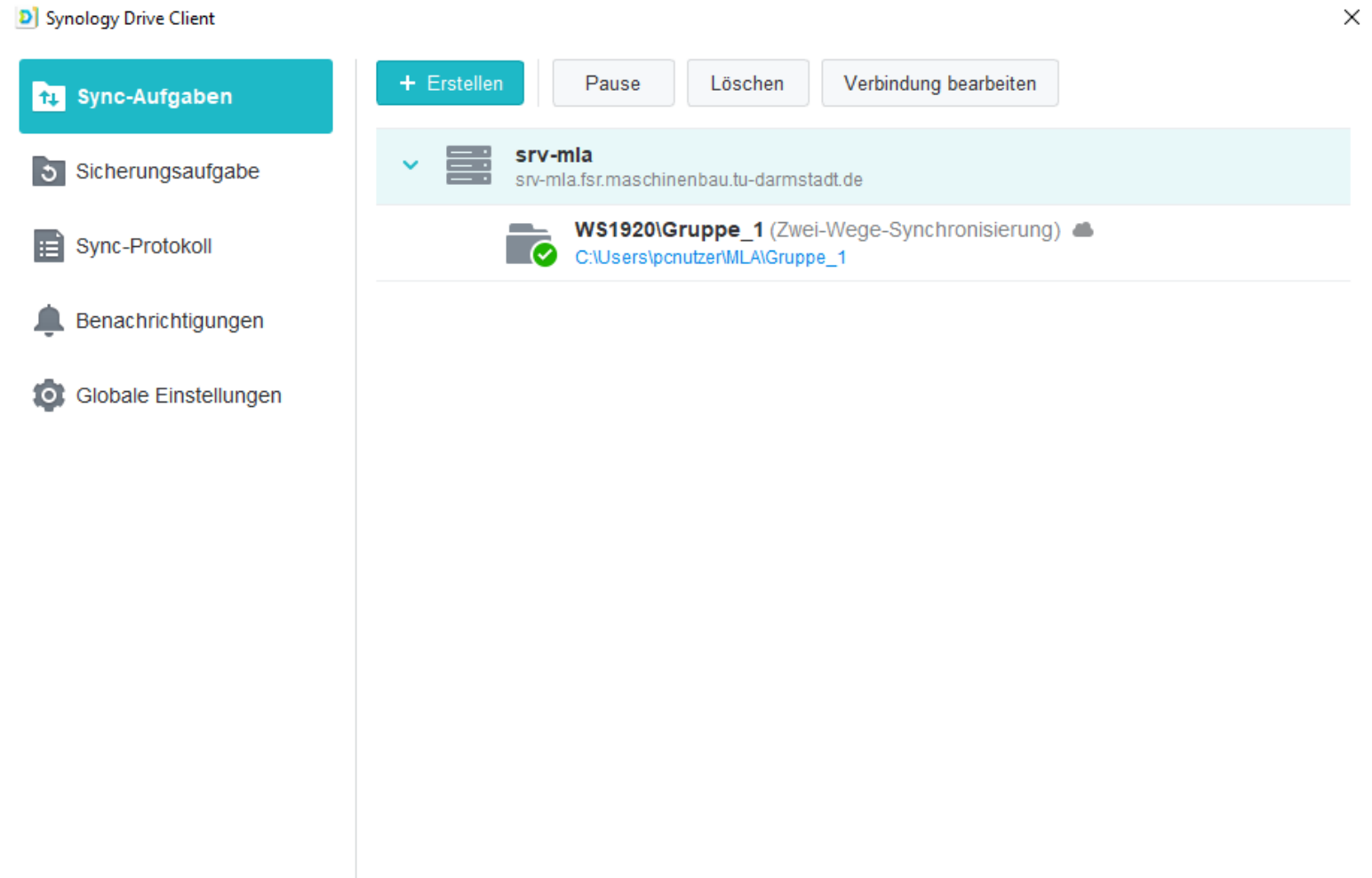
# Setup of the Client (14)

Mark the Checkbox at the bottom to prevent the introduction screen to open again and click through the introduction by clicking on *Weiter*



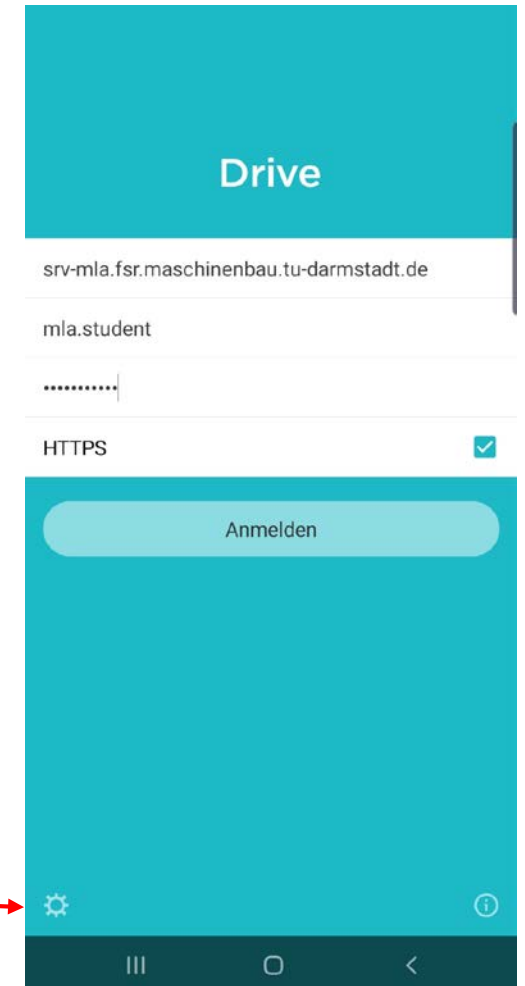
# Setup of the Client (15)

- The synchronisation runs in the background
- You can close the window
- Clicking on *Erstellen* opens the configuration wizard for further folders
- In case the synchronization stopped working for any reason check whether you can click on *Resume* where the *Pause* button is shown in the picture



# Android und iOS App

- **Drive** App exists for Android and iOS to access the service via mobile devices
  - Android: <https://play.google.com/store/apps/details?id=com.synology.dsdrive>
  - iOS: <https://apps.apple.com/de/app/synology-drive/id1267275421>
- Setup
  - **Adress:** srv-mla.fsr.maschinenbau.tu-darmstadt.de
  - Enter username and password
  - Check **HTTPS** option
- In case you receive a certificate error: open the settings and deactivate *Zertifikat überprüfen*



# Contact / Questions / Problems

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