

# IT Guide for Employees



IT Guide November 2018

# Welcome!

We like to relieve your start in the IT at TUM, answer recurring questions as well as give you information with this "IT Guide for Employees".

The broschure gives you a mix out of information and short manuals.

Below we have listed the most important abbreviations to read through this guide.

We hope to relieve your working day and are looking forward to your feedback or helpful suggestions.

Kindly your

Annekatrin Witte and Dr. Frauke Donner Corporate IT Systems and Services

#### Important abbreviations

ITSZ: Corporate IT Systems and Services

LRZ: Leibniz Supercomputing Center

**MWN:** Munich Scientific Network (Network of all Munich universities) provided by the LRZ

NAS: Central storage, provided by the LRZ

**DFN:** German National Research and Education Network (Network of all national universities and research institutions as well as international universities, ...)

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# **Current News, Informationen...**

There is a wide range of opportunities to catch up on the IT services of TUM. Some of the services we like to show you in this booklet. Addtional we offer IT trainings or you can subscribe the IT-Newsletter.

#### **Current News**

Current News, our offer on IT services, scheduled maintenance or interruptions can you find...

- ... at **www.it.tum.de/en** . Current news and the whole offer of IT services and systems.
- ... in the **TUM IT-Newsletter**. News, security and event notes and a lot more information. Subscribe at **www.it.tum.de/en/news/itnews/**
- ... in the IT system service interruption notifier. Interruptions and scheduled maintenance of IT systems www.it.tum.de/en/aktuelles/stoerungsmelder/

#### **Guidelines, FAQ and Manuals**

We put together a set of manuals, user guides or frequently asked questions on our IT systems for you.

The **Download Center** offers guidelines, manuals or information brochures in PDF format for you. www.it.tum.de/en/downloadcenter/

Detailed **step-by-step manuals** can you find in the "Wiki Docs". **wiki.tum.de/x/Zpbw** 

On our YouTube channel "TUM IT-Servicezentrum" and on our websites we put together **video manuals** for you. **wiki.tum.de/x/eguQAg** 

# ... Training and Assistance

All **frenquently asked questions (FAQ)** are clearly merged at **www.it.tum.de/en/faq/** 

Or you just order one of our brochures at the IT-Support.

#### **IT Training**

Do you need a training on one of our IT systems? The LRZ and the TUM offer face-to-face or online trainings.

Face-to-face trainings are offered e. g. for TUMonline, Moodle, SAP, OTRS, PC-Software or high-performance computing www.it.tum.de/en/info/training/

The **webinar series "IT for Dessert**" explains once a month in between 15 minutes one special IT application. http://www.it.tum.de/en/webinars/

The video training portal Lynda offers free of charge video trainings to different softwares or soft skills. www.it.tum.de/en/lynda

#### Assistance

Do you have questions? Did you forgot your password? Or do you have other IT problems? TUM IT Support kindly likes to help you out!

E-Mail: **it-support@tum.de** Phone: **089.289.17123** Face-to-face: see page 52

# Your TUM Account

You receive your TUM account automatically with your employment. The TUM account gives you access to a lot of IT services you need for your work, such as the

- ... Campus-Management-System TUMonline,
- ... central storage,
- ... Wi-Fi "eduroam,"
- ... eLearning-system Moodle and a lot more.

All IT systems and further helpful information on your TUM account can you find at www.it.tum.de/en/account

#### **User name und Password**

Your user name is either your **TUM ID**, e. g. ga53xum (p. 7) or your **TUM e-mail address**, e. g. erika.mustermann@tum.de (p. 9). Set your **password** at initial login. Choose your password carefully and do not give it to third parties!

For a lifetime the same TUM ID: If you have studied at the TUM or have already been an employee, please use the existing ID. You have forgotten your user credentials? Please contact the IT Support at it-support@tum.de



# E-mail at TUM

As soon as your TUM account gets activated you are able to use the TUM e-mailing system. Choose and set up your TUM e-mail address by yourself (p. 9).

#### The E-mail System Exchange

The e-mail system Exchange gives you a lot of advantages and opportunities to work with your colleagues.

- You have 3 GB of storage that can be increased if needed.
- You can access calendars and contacts and you can share your calendar with colleagues.
- You can set up collaborative calendars or functional e-mail accounts for your organization.
- You can use all applications wordwide with an internet browser at mail.tum.de .

Further information on the topic e-mail can you find at www.it.tum.de/en/e-mail



#### E-mail Certificates

A certificate can be used to sign an e-mail electronically. The mail program of the recipient can determine whether the mail address, the content and the electronic signature are trustworthy.

www.it.tum.de/en/certificates

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Log	-in			
				3
	User name Password			
		Log in Can	cei	
	Students:			
	You can obtain your P Please enter your mat	rikel number wi		
l r	Enter your PIN code h     Mitarbeiter:		1	
L	<ul><li>Enter your PIN code h</li><li>Alumni:</li></ul>		1	
	Enter your PIN code h	ere		

# Account - Validate PIN Code

#### Mitarbeiter

PIN code	
Geburtsdatum	Format
	Save

# Initial Login with TUM Account

TUM Account? TUMCard? Login? We put together all needed information for your "First steps in TUMonline" : wiki.tum.de/x/JxBSB

#### Enter PIN Code

You receive your PIN code to initially login TUMonline from the User Administrator of your organization or the IT Support.

Open **campus.tum.de** and switch the langugage by clicking on "de | en" top right. Click on Login top right.

Below the Login field click on

"Mitarbeiter: Enter your PIN code here".

Type in your PIN code and your date of birth and confirm with "Save".

Subsequent set your **personal password** for your TUM account. Never reveal it to anyone else! For tips on how to create secure passwords, follow this link: **www.it.tum.de/en/it-security** 

#### TUM ID

Your TUM ID is an unchangeable syllable-number-syllable combination, which is assgined to you for a lifetime, e. g. ga53xum.

You can find your TUM ID in your TUMonline business card at "TUM ID".

#### TUMcard: Identification card

The TUMCard (Personal Card) is a multifunctional chip card. You can use it as identification card for TUM membership, library and mensa. Apply for it in TUMonline. www.it.tum.de/en/tumcard

bookmarks	ŧ	Applications	0 ∠+→	Organisations & Respons	sibilities	<b>±</b>	TUMcard passport pho
kmarks Timetable			2	TUM ID		Ţ	Software
iD			Ð	Use Policies		8	Change Password
			[ <del> - </del> ]	Calendar		ø	TUM Mailbox (Exchang
			õ	Roles		\$	Storage (NAS)
			<u>نې</u>	Personal Settings		$\bigcirc$	Sync+Share
				Login Log	_		
			@	E-mail Addresses			

E-mail addresses (incoming) Adresse		
Eingabe - Adresse		
erika		▼ @tum.de
Momentane Adressen 4038BF3A32B44699@mvtum.de	.mustermann	
ga53xum@mytum.de	ga53xum	hở
Mailbox chosen		
Nur Weiterleitung		
TUM-Mailbox (exchange)		
Meine Weiterleitungsadresse		
anne.witte@tum.de		

 If you choose "Nur Weiterleitung", you have to enter an address under "Meine Weiterleitungsadresse".

enter an address ander mente weitenentangsda

Further information and help



# The TUM E-mail address

Please set up your TUM e-mail address as soon as possible. You receive relevant information of TUM to this address, so please make sure you are reachable.

#### How do I set up my TUM E-mail address?

Login at **campus.tum.de** and select "E-Mail-Adresses". Enter your desired e-mail address in the upper field of the opened card - like this:

#### givenname.familyname@tum.de

As far as possible your TUMonline User Administrator sets up department E-mail adresses, which are administrated in TUMonline, for you.

#### How do I access my E-mail?

You can access your e-mail account at any time and from anywhere using the login at **mail.tum.de**. It is of course also possible to retrieve your e-mails with common e-mail programs, such as Outlook and so forth. Manuals can you find here: **go.tum.de/999791** (MS Exchange) or **go.tum.de/209210** (Outlook)

How to receive your e-mail with your smartphone is explained on page 11.

#### E-mail forwarding

You can forward your e-mails to a department e-mail address. Choose at "Mailbox chosen" in the e-mails mask "Nur Weiterleitung". Type in your forwarding address in the field "Forward mails to".

A forwarding of your e-mails to a commercial e-mail provider is due to security risks not recommendable.



Cancel	Exchange	Done
Email	erika.mustermann@	)tum.de
Server	xmail.mwn.de	
Domain	ADS	
Username	ga53xum	
Password	•••••	

# **TUM E-mails on Smartphones**

Due to a variety of smartphones and operating systems only a general overview on how to set up the TUM e-mail address on smartphones can be given.

#### Set up a new E-mail account...

Create a new e-mail account on the smartphone. Choose a "MS Exchange" account and use the advanced / manual settings to set it up.

The following data is needed to configure the e-mail account.

Your E-mail	givenname.lastname@tum.de
User name	e.g. <b>ga53xum</b> (Your TUM ID)
Server	xmail.mwn.de
Domain	ads

**Note:** Some smartphones combine the field "user name and domain". Enter the information as shown, divided by a **backslash**:

#### ads\your TUM ID (e.g. ads\ga53xum)

You have to enter the domain, otherwise the e-mails cannot be sent to your smartphone.

Note: The usage of the Outlook App is forbidden at TUM due to data security reasons.

#### Download a certificate ...

In addition, on some devices you need to install two user certificates.

You can find the "Root-certificate" for Deutsche Telekom here: **go.tum.de/380271** 

The T-TeleSec class 2 "Root-certificate" can be found here: **go.tum.de/804966** 

```
Ms. Mustermann, Erika
Email ga53xum@mytum.de
Homepage -
Telephone TUM -
Office hours Mo.Fr 7 00-11.00 Uhr
Additional info Virtuelle Person für Dokumentationszwecke des IT-Management (Annekatrin Witte)
Postal address TU00000 Technische Universität München
803333 München, Arcisstr. 21
other org. TUPEX01 TUM
```

ing & Research	Studies	Resources	Services
Course bookmarks	Applications	Organisations & Responsibilities	TUMcard passport photograph upload
LV-Bookmarks Timetable		TUM ID	Software
ORCID iD		Use Policies	Change Password
		Calendar	TUM Mailbox (Exchange)
		Or Roles	Storage (NAS)
		O Personal Settings	

#### IT-Management

- Homepage
- M Contact
- 💄 Head
- Secretarial Office

Teaching & Research	Resources	Services
Module Catalog	O ∠←→ People & Responsibilities	Resource Occupancy
	AD-Administrators	Resources
	Persons	
	Roles	

Role/Person		
Name/ holder	from	to
User Administrator (H)		
Lauchner, Albert, DiplPhys. (Univ.)	18.11.2011	
Role manager (H)		
This role is not assigned to any person.		
Guest Management (H)		
Lauchner, Albert, DiplPhys. (Univ.)	26.05.2014	
LRZ MasterUser		
Lauchner, Albert, DiplPhys. (Univ.)	24.09.2014	
Pongratz, Johann, Dr. rer. nat.	24.09.2014	
Maillist Administrator (H)		
This role is not assigned to any person.		
Organisational Dates (H)		
This role is not assigned to any person.		
Room Setup Editing (H)		
This role is not assigned to any person.		
Resource Management (H)		
This role is not assigned to any person.		
Telephone Administration (H)		
This role is not assigned to any person		
TUMonline Administrator (H)		
Lauchner, Albert, DiplPhys. (Univ.)	18.11.2011	

# TUMonline

TUMonline is the Campus-Management-System of TUM. At **campus.tum.de** you have the opportunity to...

- ... search for people, organizations, rooms and so on,
- ... view the degree programs,
- ... manage your contact details,
- ... manage courses or exams, and a lot more.

#### The personal business card

You reach your personal business card by clicking on your name top right.

Here you administrate your contact details and you have access to the different applications.

Edit your contact details by clicking on "Edit" top right.

There is also a business card for every organization which can be found via the navigation tree on the left.

#### Roles

In order to administrate e. g. "examinations" you need certain roles in TUMonline. These roles are allocated by your department's "TUMonline Administrator (TOB)".

You can find the TOB of your organization/department on the business card of your organization, at "Roles". To reach the business card of your organization, click on it on your personal business card.

Your personal "Roles" can you find at your personal business card at "Roles".

Informationen and manuals on TUMonline can you find at: www.it.tum.de/en/tumonline

#### = HILFE - delon ТШ Lemplattform Moodle Technische Universität München Moodle Login Willkommen bei Moodle! Mit TUM-Kennung 02.10.17, News Modele Update auf Version 3.3 W halon unave Langitation Model auf de Version 3.3 aktualiset, Edwarpublik W halon unave Langitation Model auf de Version 3.3 aktualiset, Edwarpublik weither auf and the Version and Antonia and Antonia aktuality weither and antonia aktuality of the Version 3.3 aktualiset, Edwarpublik Bederungsehermitik verlichten, serpfeherm alt finner, des Anderungen kärge aktige Sollen. Mit LMU-Kennung Als Gast (ohne Kennung) Kontakt C. ProLehre | Medien und Didaktik Technische Universität München Barer Str. 21 80333 München 02.10.17, Webinar Webinar "Neues in Moodle 3.3" Termin: Mo., 09.10.17, 15.00 - 15.40 Uhr Ims-support@tum.de

#### Course categories allocate - Select category elements

Save & Continue	Save & Close	Cancel
Category group: eLearning		1045-0
Element		
Neuen Moodle-Kurs im aktueller	n Semester bereitstellen	
Neuen Moodle-Kurs MIT GRUP	PEN im akt. Sem. bereitstellen	
KEINEN Moodle-Kurs im akt. Se	em. bereitstellen	
Save & Continue	Save & Close	Cancel
MOLUS ABILL	MOUS - GINI	- 10

# Moodle

Moodle is TUM's central learning platform. Students have here the opportunity to learn independent of time and place in their own pace. In addition Moodle offers a lot of options to support your teaching, such as...

- ... structure learning materials,
- ... create tasks for students,
- ... promote the collaboration of students,
- ... online meetings,
- ... self-tests and much more.

Log in with your TUM ID and your personal password (p. 7) under **moodle.tum.de** .

#### Setting up a moodle course

If you offer a course, you can configure a Moodle course for the corresponding TUMonline course by allocating the category "e-learning" to your lecture in TUMonline.

Instructions: go.tum.de/380482

#### Help and Information

Do you have questions? The moodle team likes to help you out at **Ims-support@tum.de** 

Further information on e-learning at the TUM can be found at **www.prolehre.tum.de/**.

Events concerning the topic e-learning are listed at: www.prolehre.tum.de/





# eduroam -Wireless Internet Access

eduroam is an international university initiative that provides employees and students simple and uncomplicated WiFi Internet access.

#### Availability

eduroam is available at every TUM campus and at all participating german, european or universities around the world. Additional eduroam is available on a lot of public places such as Munich downtown or at sights. Irz.de/wlan

#### Authentication

The login requires your **TUM ID** and your **personal pass-word**.

On the following pages the installation of the needed configuration profiles is described for the operation systems Windows (p. 19), macOS (p. 21), Android (p. 23) und iOS (p. 25).

**Please note:** It's imperative that you utilize the suitable configuration profile for your operating system! Logging in without proper configuration poses security risks for your personal data!





er credentials			(.))
		e	duro
Username:	ga53xum		
Username: Password:	ga53xum		



# eduroam with Windows



It's imperative that you utilize the suitable configuration tool for your operating system! Logging in without proper configuration poses security risks for your personal data!

#### **Download configuration tool**

At the campus you can use the open WiFi "Irz" or a LAN connection to configure the eduroam on your device.

#### At

**Irz.de/services/netz/wlan\_en/eduroam\_en/** choose the suitable version of Windows and install the configuration tool.

#### Authentication

While the installation you are asked for your user name and password.

Your user name is: TUM ID@eduroam.mwn.de e. g. ga53xum@eduroam.mwn.de

Password is your personal password (p. 7)

Enter your user credentials like this and your device connects automatically to the eduroam, if available.

#### **Connect the WiFi**

After installing the configuration profile choose "eduroam" in the settings and connect your device to the WiFi. Choose "Connect automatically" and your devices connects automatically to the eduroam.

This profile will con	figure your Mac with the follo	wing: 2 Certificates and Wi-Fi Network.
Show Profile		Cancel Continu
2 settings eduroam 2 settings		Supercomputing Centre of the Bavarian Academy of Sciences and Humanities' - provided by eduroam
	Signed	GRP: eduroam CAT FedAdmins
	Installed	20. Mar 2018 at 11:36
	Settings	Certificate Deutsche Telekom Root CA 2
		Wi-Fi Network

	Enterprise Network	
Enter settings fo	r the enterprise network "eduroam":	
Username:	ga53xum@eduroam.mwn.de	
Password:	•••••	



# eduroam with macOS



It's imperative that you utilize the suitable configuration profile for your operating system! Logging in without proper configuration poses security risks for your personal data!

#### Download the configuration profile

At the campus you can use the open WiFi "Irz" or a LAN connection to configure the eduroam on your device.

#### At

**Irz.de/services/netz/wlan\_en/eduroam\_en/** choose the suitable version of macOS and install the configuration profile.

#### Authentication

While the installation you are asked for your user name and password.

Your user name is: TUM ID@eduroam.mwn.de e. g. ga53xum@eduroam.mwn.de

Password is your personal password (p. 7)

Enter your user credentials like this and your device connects automatically to the eduroam, if available.

#### Connect WiFi

After installing the configuration profile choose "eduroam" in the settings and connect your device to the WiFi.

< Wi-	Fi	Wi-Fi Direc	st :
ON			
AVAILABL	E NETWORKS		
(((.	@BayernWLAN		
	eduroam		
	eduroam-IPv6only		
(((.	lrz		
	mwn-events		
(((.	dhri_karl		
	EES		



### eduroam with Android



On your Android opererated device use the configuration with the EAP method : PWD.

#### Configuration

Open the WiFi network eduroam to connect to it.

Select the EAP method PWD .

#### Authentication

In the next step enter your user name and password as follows.

Your user name is: TUM ID@eduroam.mwn.de e. g. ga53xum@eduroam.mwn.de

Password is your personal password (p. 7)

Enter your user credentials like this and your device connects automatically to the eduroam, if available.

#### **Connect WiFi**

Your device connects automatically to the WiFi. If NOT, select "eduroam" out of the list of WiFis again.



Cancel	Install Profile	Install
	<b>eduroam</b> Technical University o	f Munic
Signed by	cat-invite@eduroam.de Verified ✓	
Description	Network configuration pro 'eduroam Universitaet Fre 'Albert-Ludwigs-Universit - provided by eduroam	iburg' of
Contains	Wi-Fi Network 3 Certificates	

#### More Details

# eduroam with iOS



It's imperative that you utilize the suitable configuration profile for your operating system! Logging in without proper configuration poses security risks for your personal data!

#### Download configuration profile

You find the configuration profile for your iOS at:

#### cat.eduroam.de/

Select the Technical University of Munich (TUM) from the list of home institutions. Use the manual search function, if TUM is not listed.

Download the configuration profile.

#### Authentication

In the next step enter your user name and password as follows.

Your user name is: TUM ID@eduroam.mwn.de e. g. ga53xum@eduroam.mwn.de

Password is your personal password (p. 7)

Enter your user credentials like this and your device connects automatically to the eduroam, if available.

#### **Connect WiFi**

Your device connects automatically to the WiFi. If NOT, select "eduroam" out of the WiFi settings again.

# Data storage, ...

You can safely and easily store your data on the "network access storage" (NAS) system, which is operated by the LRZ for all Munich universities.

The NAS offers a wide range of advantages such as:

- High availability, so that your data can be accessed at any time.
- A high degree of security, so your data is protected against access by third parties.
- The capability to restore your data by using snapshots of older versions.
- Personal or project-based storage space

#### Personal storage space

Each member of TUM currently has 100GB of storage on the NAS. You can set up this space as a network drive on your PC (p. 29f). With the help of a VPN client, you can also use your **network drive** with a laptopon the run, or access the storage space with a web browser under **webdisk.mwn.de**.

#### Project storage space

In order to collaborate with other people within your unit or elsewhere within TUM, apply for "project storage space" by contacting your IT Administrator. Project storage space is used exactly in the same way as personal storage space (p. 33).

#### Sharing data with external partners

An especially suitable way to share data with external partners is the "Synch+Share" service operated by LRZ. You can find further information on page 39.

### ... secure and archive

For archiving or long-term storage of data, you can use the Tivoli Storage Manager (TSM) operated by LRZ. The TSM offers the following:

- Long-term data storage
- Automatic back-ups
- Archiving of large amounts of data

Information about data storage, back-up and archiving can be found at:

www.it.tum.de/en/storage-archiving/ www.it.tum.de/en/faq/storage

#### Data medium disposal

TUM offers collection points where you can dispose of data medium such as hard drives, USB sticks, DVDs and magnetic tapes in compliance with data protection regulations. You can find an overview of the collection points at: www.it.tum.de/en/faq/geraete-entsorgung/





Windows Security Enter network credentials	×
Enter your credentials to connect to: nas.mwn.de	
ADS\ga53xum	
•••••	
Domain: ADS	
Remember my credentials	
More choices	
OK Cancel	

# Integrating the personal drive - Windows

You can integrate your personal drive (storage) easily on your workplace PC or laptop. On your workplace in between the Munich Scientifc Network take the way described on this page.

On the run, use a VPN connection as described on p. 35.

#### Integrate drive

In your file explorer click on "This PC" with the **right** mouse button and choose "Map network drive"

In the next step you assign a letter to the drive. You can use the suggested letter.

Under "Folder" you enter the the following path:

#### \\nas.mwn.de\TUM ID

e. g. \\nas.mwn.de\ga53xum (TUM ID p. 7) Click on "Finish".

In the next window enter your user name and password as shown:

#### ADS\TUM ID e. g. ADS\ga53xum Your personal password (p.7)

By setting the tick "Reconnect at sign-in" your device connects automatically with the drive after starting.

You find your drive in the file explorer at "This PC" and there a folder with your TUM ID.

The **Backslash**  $\$  can you reach via the shortcut "Alt Gr" und "?B $\$  on a german keyboard.

🗳 Fi	nder	File	Edit	View	Go Window Help	
					Back	¥[
					Forward	光]
					Select Startup Disk	☆爰↑
					Recents	企業F
					Documents	<b>企業O</b>
					E Desktop	企業D
					Downloads	₹₩L
					😭 Home	<mark>ት</mark> ዝ
					Computer	企業C
					MirDrop	企業R
					Wetwork	企業K
					Cloud Drive	企第1
					A Applications	ΩжА
					💥 Utilities	企業U
					Recent Folders	•
allen					Go to Folder	<del>∲%G</del>
	633				Connect to Server	жĸ
0 0			Co	nnect to	Server	
Server Address:						
smb://nas.mv	wn.de/	ga53x	um			+ 0~
Favorite Servers						
(?) Remo	ove				Browse	Connect
					_	
	Ent				d password for the	convor
1 MAR			vn.de		u passworu for the	server
	IIC	13.111	vii.ue	•		
1	Co	nnec	t as:	Gue	aet	
	00	mee	. u.s.	_	istered User	
				- neí	Jistered Oser	
		Na	ime:	ga53>	um	
	P	assw	ord:	•••••	•••••	
	6	A Rer	nemb	er this	password in my ke	ychain
					Cancel	Connect

# Integrating the personal drive – macOS

You can integrate your personal drive (storage) easily on your mac or macbook. On your workplace in between the Munich Scientifc Network take the way described on this page.

On the run, use a VPN connection as described on p. 35.

#### Integrate drive

In the Finder under the menu "Go" select "Connect to Server.

In the next window enter the server address as follows: smb://nas.mwn.de/TUM ID

e. g. smb://nas.mwn.de/ga53xum (TUM ID p. 7) Click on "Connect".

This opens a window where you will be asked for your user name and password.

Enter your TUM ID and your personal password (p. 7). Click on "Connect".

If you would like to use the connection on a regular basis, activate the "Remeber this password in my keychain" checkbox.

You find the drive at "Favorite Servers" the next time.

	nas.mwn.de\tuzeitm			
Exa		~	Browse	
	mple: \\server\share			
$\checkmark$	Reconnect at sign-in			
	Connect using differer			

• • •	Conn	ect to Server	r	
Server Address:				
smb://nas.mwn.c	le/tuzeitm			+ 0~
Favorite Servers:				
? Remove			Browse	Connect
0				

Technische Universität München

#### Search



lits: 87		
	ID	Organisation
1	TUZEITM	IT-Management
2	TUZEITZ	Corporate IT Systems and Services
3	[TUINI20]	Informatics 20 - Chair of IT Security (Prof. Eck
4	[TUEIITS]	IT-Service
5	TUZEITH	IT-Support
6	[TUZVR23]	IT-Support (department 25)

# **Integrating Project Drives**

A projekt or organization drive can be used, if it is arragened for your organization. Please contact your **IT administrator** first and ask if the storage is used in your organization.

To integrate the projekt drive proceed as described.

#### **Project Drive- Windows**

Proceed as described on p. 29. In the second step, while assigning the letter, enter at "Folder" your organization ID as follows: \\nas.mwn.de\Organization ID e. g. \\nas.mwn.de\TUZEITM

Afterwards you enter **your** TUM ID and your personal password (p. 7).

#### **Project Drive - MacOS**

Proceed as described at p. 31. In the second step you enter at "Server Address" of your organization ID as follows: **smb://nas.mwn.de/Organization ID** e. g. smb://nas.mwn.de/TUZEITM

Afterwards you enter **your** TUM ID and your personal password (p. 7).

#### **Find Organization ID**

To find your organization ID use the search function of TUMonline at **campus.tum.de** top right.

Here you choose "Organization" and search for your organization. The ID of your organization ist shown in the result at "ID".

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# The MWN on the run - with VPN

On the run you can also use a lot of TUM IT services. Be part of the MWN with the help of a Virtual Private Network (VPN).

All you need is a VPN client and internet access.

# Install VPN Client

The VPN client is a program you need to install on your device. This program establishes a secure connection to the MWN.

The process is equal for Windows and macOS users.

Download the VPN client at **https://asa-cluster.lrz.de**. Enter your TUM ID and personal password (p. 7). Afterwards your operating system will be detected and the correct VPN client will be downloaded.

Should the automatic download not work, you can download and install the latest version of the "AnyConnect Secure Mobility Client" at: **go.tum.de/369007** 

# **Connect VPN Client**

Start the Cisco AnyConnect client after installing it. The process is equal for Windows and macOS users.

In the "Connect" field, enter **asa-cluster.lrz.de** . Click on "Connect".

In the next window enter your TUM ID and personal password (p. 7) and click on "OK".

You get a message once the client is connected, "VPN connected".

# Software & Hardware

# Software

TUM owns several campus licenses that allow the university to offer its members an interesting selection on inexpensive or even free software programs. These include:

- Microsoft Windows and Office products
- Sophos Antivirus
- EndNote and Citavi
- MathWorks products
- OriginPro
- ANSYS and a lot more

All central software offers can be found at: www.it.tum.de/software

### Hardware

TUM has campus agreements with Apple, Fujitsu, HP and Lenovo for the aquisition of various hardware (PCs, laptops, server, and so on). So the TUM gets the devices at lower cost.

If you need new hardware, contact the IT administrator of your organization.

Only orders for official use are permitted.

Informationen on Hardware can you find at: www.it.tum.de/en/software-hardware



# **Security & Data Protection**

Would you leave the door unlocked when you leave the house? Of course not! Protect your devices and data!

# **IT-Security**

Protect your PC, laptop or smartphone against unauthorized access by:

- Using secure passwords and PINs
- Using anti-virus software
- Locking your screen
- Scrutinizing suspicious e-mails (phishing, spam)
- Avoiding unsecure IT services
- Encrypting notebook hard drives

Further information about IT security can be found at: www.it.tum.de/en/it-security/

# Data security

As part of your daily activities, you handle a variety of sensitive information, whether it's student data, research results or personal data. Here's how you can protect this information:

- Keep private and work activities separate on social media sites
- Use alternatives to services such as Dropbox and Doodle
- Store your data on internal TUM servers
- Save/store as little data as possible

Further information about alternative services or data protection can be found at:

www.it.tum.de/en/doodle-co www.datenschutz.tum.de

# Communicate...

# Share, exchange and synchronize data

**Sync+Share** offers you 50GB of space to easily store your data or share it with others. You can also synchronize the data on various end-user devices. You can learn more on page 41.

#### syncandshare.lrz.de

**GigaMove** is a particularly suitable way to share large volumes of data. You can use it to share files as large as 2GB with your partners within a limited timeframe. **gigamove.rz.rwth-aachen.de** 

# **Function objects**

With the help of function objects, you can create e-mail distribution lists or establish guidelines for access to the NAS system for your work group. The person responsible for this area is the "Function Objects Administrator" for your department in TUMonline. In addition, your department must utilize the TUM Exchange e-mail system (p. 5). www.it.tum.de/en/funktionsobjekte

# E-mail distribution lists & newsletters

By using the free program Mailman, you can create e-mail lists and send out newsletters. Mailman also features the mandatory double-opt-in newsletter registration. Recipients can unsubscribe from the newsletter at any time. www.it.tum.de/en/mailverteiler

Information about other **communication and collaboration** services can be found at: **www.it.tum.de/en/communication-collaboration/** 

# ... and Collaborate

# Video conferences

The **Meet** application operated by LRZ offers fast and simple video conferencing. This online service functions in many different browsers and with a wide range of devices (smartphones, tablets). Read page 43 to learn more. **www.it.tum.de/en/faq/meet** 

Adobe Connect is provided through the German Research Network (DFN) and features functions such as a whiteboard, screen authorization and recording. This service is well-suited for webinars or meetings with a high number of participants since the video conferences can be moderated.

www.it.tum.de/en/faq/adobe-connect

### Wiki

Utilize the TUM Wiki service for fast and uncomplicated collaboration. This platform allows you to gather and share knowledge and information on a collaborative basis. **wiki.tum.de** 

# Schedule meetings

With the Foodle meeting planner, you can quickly and easily schedule meetings with multiple people. **terminplaner.dfn.de** 

# Work on documents together

GitLab and ShareLaTeX make it possible to work on documents together while offering simple version management. Irz.de/services/netzdienste/gitlab/ (GitLab) sharelatex.tum.de/ (ShareLaTeX)

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# Sync + Share

Log in at **syncandshare.lrz.de** with your TUM ID and personal password (p. 7).

# Share Data

Create a folder by clicking on the "Folder+" icon. To upload data, open the folder and drag the file in the field marked by the interrupted line below the list of folders.

To share data and work together on projects you can add other people with the "Person+" icon. This way you can give them specific rights, such as write or read.

You have also the opportunity to give read-only access of folders or files to external persons. To do so, you choose the "chain" icon, generating a web link. This way external persons can download the files.

At "Verlinkungen" you can check all created links.

# Work on Documents

You can work together on office documents (Word, PowerPoint, Excel). By opening the document, an editor opens where you can work together at the same time on one document.

# Sync Data

At "Clients" you have the opportunity to download sync clients for different operating systems.

These clients allow you to work offline, automatically synchronizing the changes made on different devices, the next time your device connects to the internet.





Password required		×
ga53xum		
I		
	Cancel	Ok



# Video Conferences with Meet

Meet offers you an easy and quick option to hold a video conference. Open meet.lrz.de

# Choose URL

In the field in the middle enter the URL/web link for your meeting, e. g. https://meet.lrz.de/test Click on "LOS".

# **Release Audio/Video**

It opens a windows in your browser top left. Release your microphone and camera for the meeting by agreeing to it.

# Authentication

Confirm that you are the "Host" of the meeting. Sign in with your TUM ID and personal password (p. 7)

# **Invite Participants**

After signing in your camera starts und you can see yourself.

Click on the "i" bottom right to get the weblink of your conference room. Copy this link and send it via e-mail to the participants of your video conference.

To end the conference click on the red phone on the bottom of the screen.

# Design, lecture recording...

TUM and LRZ offer wide range of media and design services.

# **Corporate Design**

To help you implement the TUM corporate design, a wide selection of layout templates for online and offline media is available, such as presentations, business letters and flyers

portal.mytum.de/corporatedesign

# Design

The team at TUM ProLehre | Media and Didactics can help you with design questions. We develop ideas and design all of the products you need for your communications while teaching. With a feel for color, form and composition, we ensure an appealing aesthetic that complies with the TUM corporate design.

www.prolehre.tum.de/design



# **Printing & Scanning**

At the Leibniz Supercomputing Center, you can

- ... scan templates as large as DIN A0,
- ... scan slides and filmstrips,
- ... print posters as large as DIN A0 and much more.

#### Irz.de/services/peripherie

# ... MOOCs, printing and more

# Lecture recording

You'd like to record your lectures? TUM ProLehre | Media and Didactics provides state-ofthe-art lecture hall technology and the mediasite system in order to record lectures and make them available to students. Information is available at: streams-support@tum.de

www.prolehre.tum.de/vorlesungsaufzeichnungen

# MOOCs

MOOCs – massive open online courses – are available around the world at no charge from TUM. Are you interested in offering MOOCs? The team from TUM ProLehre | Media and Didactics has a professional MOOC studio and is available to help you with your project. www.prolehre.tum.de/moocs

# Videos

The multimedia team at TUM ProLehre | Media and Didactics can help you to design your video or produce it for you. Recording services and Internet live-streams are available as well.

#### www.prolehre.tum.de/videoteam

LRZ also offers several video-related services such as multimedia lab workspaces or video streaming. Irz.de/services/peripherie

# Event Management, ...

You are planning an event, conference or the like? The TUM offers you, depending on kind and size of the event, different options to support you.

# **Event Management**

### **Online Forms**

With the help of online forms, you can easily set up event registrations. Create your forms using the central Wiki system.

www.it.tum.de/en/event-management

### MyTUM EventManager

The MyTUM EventManager offers you the possibility to perform more complex online registrations. Thus, you can install e. g. waiting lists or mass applications. www.it.tum.de/en/event-management

### Converia

The conference management system Converia supports you in planning and conducting scientific conferences, conventions or other major events liable to pay cost. **www.events.tum.de** 



# Websites & Content Management

You would like to set up a website for your organization? First consult your IT administrator, he/she will advise you.

### Websites

#### Туро3

The TYPO3 team offers websites that comply with the TUM corporate design. Further information regarding how to apply for and manage the content for TYPO3 websites can be found at:

#### www.typo3.tum.de

#### Wiki

For the quick and easy setup of websites our wiki system is available. With the optional website design, it is well suited e. g. for project and conference webpages. **wiki.tum.de** 

#### **MyTUM**

Are you responsible for the content on the MyTUM portal and require corresponding training? Please contact the MyTUM team at:

portal.mytum.de/onlinesupport/support

# **Online Writing and Social Media**

The Corporate Communications Center provides helpful tips and tricks on how to make webpages and social media sites appealing and easy to understand. wiki.tum.de/x/EAYh

# Short URLs

You want to publish a link, but it is too long? Use our short URL service, which allows you to set up easy and short URL to TUM websites.

portal.mytum.de/online-service

# IT based...

### Online Catalouge (OPAC)

The online catalouge (OPAC) provides you access to all of the media in the TUM library. You can also research all of the Bavarian scientific libraries.

#### ub.tum.de/en/searching-finding

#### **Electronic magazines, Books and Databases**

eAccess offers you worlwide access to a large amount of licensed electronic media, including numerous databases and electronic periodicals, articles and books.

Login with your TUM ID and personal password (p. 7) at: eaccess.ub.tum.de/login

#### **Document delivery services**

If you don't have time to visit the library or you need media that is not available at TUM, the university library offers several delivery services:

- Remote library loan services (from libraries at other locations)
- Subito (fast delivery to the location of your choice)
- dokumenTUM (PDFs per e-mail from TUM inventories)
- Digitalization on demand (digital copies of works prior to 1900)

- TIB document delivery service (TIB delivery service) Information about document delivery services can be found at:

#### ub.tum.de/en/delivery-services

### ORCID iD

With the help of ORCID iD, you can ensure that your publications are correctly and perpetually attributed and that library-based indicators such as citation rates or h-index are factored in. Create your individual ORCID iD via TUMonline or link your existing ORCID iD to your TUM account

### ub.tum.de/en/orcid

# ... Library Services

### **Research Data Management**

The Library offers information, consultation and training on all aspects of research data management. These include, but are not limited to, collection, storage and documentation of the research results based on specific standards as well as the publication of the data.

### ub.tum.de/en/research-data-management

### **Reference Management**

Typing is a thing of the past! Reference management programs can help you maintain an overview of even a vast number of sources. These programs also make it esier to properly cite your sources and create bibliographies. Use TUM's campus licenses for the Citavi and EndNote programs at no cost!

#### ub.tum.de/en/reference-management

### Digital publication with mediaTUM

Would you like to digitally publish your publication list, dissertation, post-doctoral work, open-access publications, conference contributions or the like?

mediaTUM, the central media and publication server, is just the tool you need. You can register a DOI (Digital Object Identifier) for data released here.

#### mediatum.ub.tum.de



# More offers

The ITSZ and the LRZ provide you with numerous additional services, which we briefly present here. For further information please visit:

www.it.tum.de/en and www.lrz.de/english/

#### **Client Management**

The ITSZ and the LRZ offer in cooperation managed clients for both Windows (TUM-PC) and Apple (MWN-MAC). As a result, the cost for the support of computer workstations is considerably reduced.

#### www.it.tum.de/en/clients

#### **Identity Management**

TUM provides a central directory (LDAP, active directory) containing all identities, system accounts and groups. These identities are administrated through TUMonline. www.it.tum.de/en/identity-management

#### Network

Basic services such as network infrastructure, sub networks, IP addresses, DHCP servers, DNS entries, Internet access, public WiFi access (lecture halls, seminar rooms), VLANs and firewalls are provided by LRZ at no cost as part of the underlying services provisionig agreement. www.it.tum.de/en/network

### OTRS

The software OTRS (Open Ticket Request System) is used to manage requests.

www.it.tum.de/en/otrs

### SAP

With SAP, accounting and reporting is handled at TUM. www.it.tum.de/en/sap

#### Servers

The LRZ offers a wide range of server services. This includes for example housing of servers and cluster nodes, virtual Windows and Linux servers, the LRZ Compute Cloud as well as further HPC systems.

#### www.it.tum.de/en/server

#### System Accounts

A system account enables the use of IT services for non personal computer systems (e. g. printer, scanner,...). www.it.tum.de/en/identity-management

#### Certificates

TUM provides certificates for both users and servers free of charge in collaboration with the DFN. www.it.tum.de/en/certificates

# Contact

The IT Support of the Corporate IT Services and Systems is there for you as contact person concerning all topics related to IT at TUM.

TUM's departments and schools offer their own it support services.

#### **Corporate IT Services and Systems**

www.it.tum.de/en

### IT-Support

it-support@tum.de | 089 289 17123 www.it.tum.de/en/it-support Karlstr. 45, 5. Floor, 80333 München or Boltzmannstr. 10, Room 10, 85748Garching

#### **Central Administration**

it-support@tum.de | 089 289 17123 www.it.tum.de/en/central-administration/

### **Departments and Schools**

www.it.tum.de/en/it-support\_dezentral/

Each department appoints an Information Officer (IO) which represents the IT topics of their department at TUM. You can find your IO at www.it.tum.de/en/committee/members/

### Leibniz Supercomputing Center (LRZ)

Servicedesk: www.lrz.de/services/beratung lrzpost@lrz.de | 089 35381 8800 Boltzmannstr. 1, 85748 Garching, www.lrz.de

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#### Grafiken:

VLADGRIN S.

# Do you have further questions?

Our IT Support kindly likes to help you out! Just write us an e-mail to:

it-support@tum.de 089 289 17123

# Assistance and information:

www.it.tum.de/en www.it.tum.de/en/employees www.it.tum.de/en/faq

# **Useful links**

campus.tum.de (TUMonline)

mail.tum.de (Web-Mail)

webdisk.mwn.de (Online-Storage)

moodle.tum.de (Learning platform)

syncandshare.lrz.de (File sharing)