



Setup under Windows 10

#### **Central IT**

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## Setup under Windows 10

With Eduroam, you as a university member have access to WiFi,

- on the campus of the Nuremberg Institute of Technology and
- since Eduroam is an international initiative of the universities, at all participating universities worldwide.

## **Step 1: Establishing the Connection**



To establish a connection to Eduroam, click the Wi-Fi icon in the right half of the taskbar.

Select

- Eduroam
- Connect

# **Step 2: Logon**

Once the connection has been established, you will be prompted to enter your user data.

## **User Name**

The Eduroam user name is composed of

- the user name you are also using for logging on to the university's PCs, and
- the domain @th-nuernberg.de

#### Examples:

- Student Erika Mustermann: mustermanner12345@th-nuernberg.de
- Prof. Dr. Elfriede Musterfrau: musterfrauel@th-nuernberg.de



### Password

Here you enter your MSAD password.

This is not your e-mail password! Instead, you enter your **MSAD password** here (i.e., the one you use for logging on to the university's Windows computers).



You enter username and your MSAD password.

## Troubleshooting

Under certain circumstances, your PC may experience problems with establishing a connection. In this case, the following tips may be useful.

## Tip 1: Connect first, log on afterwards

In some cases, the connection to Eduroam fails to establish if the user is logged on to his/her PC already.

In these cases, it may help to log off from your PC via the

CTRL + ALT + DEL

shortcut. Subsequently, connect to Eduroam first (using the Wi-Fi icon in the lower right corner of the screen). Once the connection has been established, log on to your PC again.

## Tip 2: Delete WiFi profile

If the connection fails to establish even though you have set up Eduroam once before (or if you come from another university), then it may help to remove Eduroam from the list of known networks once (= "Forget" button) and to set it up anew following these instructions.



## How to delete the WiFi profile

÷	Einstellungen	
\$	Startseite	Einige Einstellungen werden von Ih
Eins	stellung suchen 🔎	WLAN
Netzv	verk und Internet	Ein
₿	Status	Verfügbare Netzwerke anzeigen
G.	WLAN	Hardwareeigenschaften
\$	DFÜ	Bekannte Netzwerke verwalten

← Einstellungen WLAN Bekannte Netzwerke verwalten eduroam Eigenschaften Nicht speichern Open the start menu under Windows 10 and then select "Settings" (gear icon).

Select "Network & Internet". In the dialog box that opens, click "WiFi" in the left sidebar.

Click the "Manage known networks" link (if necessary, scroll down a bit to do so).

In the lower part of the next dialog box, you will find a list of all known networks. Select the one in question and click the "Forget" button.

Please note: This will delete all information related to this WiFi profile. Subsequently, you can reconnect.

## **Tip 3: Check the WiFi Properties**

		do to the Network and Sharing Centre dialog boy
💐 Network and Sharing Centre		
$\leftarrow ~ ightarrow ~ \star 2 >  ightarrow$ Control Pane	el 🔹 All Control Panel Items 🔌 Netw	
Control Panel Home	View your basic network i	In the left sidebar, click
Change adapter settings	View your active networks You are r	Change adapter settings
Change advanced sharing settings	Change your networking settings	
💐 Network Connections		
🔶 🔶 🕤 🛧 💆 > Contr	ol Panel 🔹 Network	
Organise 🔻		Right-click
WLAN Not connected Marvell AVASTAR W	/ireless-AC Ne	<ul> <li>WiFi</li> <li>and then choose</li> </ul>
		> Properties

Go to the Network and Sharing Centre dialog box.



Marvell AVASTAR Wireless-AC Network Controller      Konfigurieren  Diese Verbindung verwendet folgende Elemente:      GoS-Paketplaner      Internetprotokoll, Version 4 (TCP/IPv4)      Microsoft-Multiplexorprotokoll für Netzwerkadapter      Internetprotokoll, Version 6 (TCP/IPv6)      Internetprotokoll, Version 5 (TCP/IPv6)      Internetprotokoll, Version 5 (TCP/IPv6)      Antwort für Verbindungsschicht-Topologieerkennung	VEIDING		
Konfigurieren           Diese Verbindung verwendet folgende Elemente:           Image: Comparison of the state of the stat	<b>P</b> 1	Narvell AVASTAR Wireless-AC Network Controller	
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Allgemein	Alternative Konfiguration
IP-Einste Netzwer Netzwer	llungen können automatisch zugewiesen werden, wenn das < diese Funktion unterstützt. Wenden Sie sich andernfalls an den <administrator, beziehen.<="" die="" geeigneten="" ip-einstellungen="" td="" um="" zu=""></administrator,>
● IP-	Adresse automatisch beziehen
OFolg	ende IP-Adresse verwenden:
O DNS	S-Serveradresse automatisch beziehen
-	

#### On the Networking tab, uncheck the option

□ Internet Protocol Version 6 (TCP/IPv6)

#### and check the option

✓ Internet Protocol Version 4 (TCP/IPv4)

#### Then click the

#### > Properties

button below the list.

Make sure that both addresses are obtained automatically (the corresponding radio buttons must be selected).

#### Then click

- ≻ OK
- Close

## **Tip 4: Checking network settings**





## **Connection Settings**

To check the network settings, click the Windows icon in the lower left corner of the screen and then click on the settings button

#### Then select

- Network & Internet
- Network and Sharing Centre

#### Here, choose

Set up a new connection or network



Choose a connec	tion option		
Connect to the Set up a broad Set up a new n Set up a new n Manually conn Connect to a h Connect to a w Set up a dial-u	Internet Iband or dial-up connection to the Internet. etwork outer or access point. ect to a wireless network idden network or create a new wireless profile. vorkplace p or VPN connection to your workplace.	<ul><li>Manually conn</li><li>Next</li></ul>	ect to a wireless network
Enter information	for the wireless network that you want to	Enter the following da	ta in the dialog box that opens:
Network name:	Eduroam	Network name:	eduroam
Security type:	WPA2-Enterprise ~	Security type:	WPA2-Enterprise
Encryption type: Security Key:	AES  Hide character	Encryption type:	AES
Annually connect	t to a wireless network	> Next	
Successfully ad → Change Open the co	ded Eduroam connection settings onnection properties so that I can change the settings.	<ul> <li>Change conne</li> </ul>	ction settings
Eduroam Wireless No Connection Security	etwork Properties X	On the Connection tab automatically when th	o, you can set the option to connect e network is in range.
Security type: Encryption type:	WPA2-Enterprise V AES V	Then switch to the Sec	curity tab.
Choose a network au Microsoft: Protected Remember my ca time I'm logged o	thentication method: EAP (PEAP) Settings redentials for this connection each on	Uncheck the option	
Advanced setting	5	Then click	ings



Advanced settings		^
802.1X settings 802.11 settings		
Specify authentication mode:		
User or computer authentication $\sim$	Save cre	dentials
Delete credentials for all users		
Enable single sign on for this network		
Perform immediately before user I	og-on	
O Perform immediately after user log	g-on	
Maximum delay (seconds):	10	*
Allow additional dialogues to be d	isplayed during	g single
sign on		
<ul> <li>Anov additional datagutes to be a sign on</li> <li>This network uses separate virtual and user authentication</li> </ul>	LANs for mad	hine
Anov adultonal dangues to be a sign on     This network uses separate virtual and user authentication	LANs for mad	hine
Anov additional datagues to be a sign on This network uses separate virtual and user authentication Advanced settings 802.11 settings	LANs for mad	hine ×
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Allow additional datagets to be d sign on This network uses separate virtual and user authentication Advanced settings 802.1X settings 802.11 settings Fast roaming	LANs for mad	hine
Advanced settings  Advanced settings  Advanced settings	LANs for mad	hine ×
Allow additional datagues to be d sign on This network uses separate virtual and user authentication Advanced settings 802.1X settings 802.1X settings Fast roaming Fast roaming MK time to live (minutes): Number of entries in PMK cache:	LANs for mad	hine ×
Advanced settings  Advanced settings  Advanced settings  802.1X settings  802.11 settings  Fast roaming  Fast roaming  MK time to live (minutes):  Number of entries in PMK cache:  This network uses pre-authentication	LANs for mad	hine ×
Advanced settings  Advanced settings  802.1X settings  802.11 settings  Fast roaming  MK time to live (minutes):  Number of entries in PMK cache:  This network uses pre-authentication  Maximum pre-authentication attempts	LANs for mad hing 720 128	hine ×

On the 802.1X settings tab, check the following option:

Specify authentication mode: User or computer authentication

On the 802.11 settings tab, make sure that the following option is checked:

☑ Enable Pairwise Master Key (PMK) caching

➢ OK

Eduroam Wireless Net	work Properties	:	×
Connection Security			
Security type:	WPA2-Enterprise	$\sim$	
Encryption type:	AES	×.	
Choose a network auth	entication method:		
Microsoft: Protected E	AP (PEAP)	Settings	
Remember my cree time I'm logged on	dentials for this connection	n each	

Protected EAP Properties	$\times$
When connecting:	
$\checkmark$ Verify the server's identity by validating the certificate	
Connect to these servers (examples:srv1;srv2;.*\.srv3\.com):	

## Authentication

Back in the Eduroam Wireless Network Properties dialog box, click the

#### Settings

button next to Microsoft: Protected EAP (PEAP)

For safe access to Eduroam, the University provides the OHM CA certificate.

To be able to use it, the following option must be checked:

✓ Verify the server's identity by validating the certificate



I nawte Premium Server CA		^
thawte Primary Root CA		
thawte Primary Root CA - G3		
Thawte Timestamping CA		
T-TeleSec GlobalRoot Class 2		
T-TeleSec GlobalRoot Class 3		
UTN-USERFirst-Object		~
<	>	

From the Trusted Root Certification Authorities list, select:

> T-TeleSec GlobalRoot Class 2

Secured password (EAP-MS	CHAP v2)	Configure
✓ Enable Fast Reconnect		
Disconnect if server does	not present cryptobinding 1	ΓLV
Enable Identity Privacy	anonymous	

In the lower part of the tab, activate the checkbox

Enable Identity Privacy

In the input field next to it, enter:

> anonymous

Subsequently, click the

Configure
 button below Select Authentication Method.

Uncheck the option

□ Automatically use my Windows logon name ...

> Ok

Then close all dialog boxes of the Network and Sharing Centre.