

# Network

Solutions for common network-related problems and detailed explanations.

Please contact the NetzAG exclusively via E-Mail, as this allows us to better track and assign issues.

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# Getting connected

Use Ethernet for stationary devices and tuermeroam for portable ones. If you can't use either, use the OIH WLAN.

Getting connected

# tuermeroam WLAN

**tuermeroam** is our flagship network, which we host together with the other three towers. By connecting to tuermeroam you will be able to access the internet in every tower.

You should have received a username and password from the NetzAG. If you haven't, please [contact us](#).

## What devices is this meant for?

You should use tuermeroam on laptops, tablets, phones and all other devices that support it. It covers the largest area and is generally the most stable

## How do I connect?

### Android

Use the PWD authentication method when connecting to the network. You'll simply have to enter your username and password.

### Windows

Use EAP-TTLS with PAP. Enable certificate validation for server "; oih.rwth-aachen.de" with the ISRG Root X1 certificate authority. You will need to enter your username and password again. [Learn more... \(tutorial\)](#)

### MacOS and iOS

Install this profile file and enter your username and password: [tuermeroam.mobileconfig](#).

### Linux

Don't waste your time on anything else, just use PWD. You'll figure the rest out, I believe in you^^



Getting connected

# OIH WLAN

**OIH** is our compatibility WLAN. It's intended for devices that don't support neither [tuermereoam](#) nor Ethernet.

## What devices is this meant for?

**OIH** is at times unstable. Use it only if you don't have any other way of getting your device online.

Smart home devices such as Amazon Echo/Fire TV, Apple TV (without Ethernet), Chromecast, smart fans/toasters etc. are the target group for this network. Please note that many devices can be connected via an Ethernet adapter, which is a great deal faster and more stable.

## How do I connect?

Visit the [OIH Net](#) website and sign in with your oih.ac account.

In order to add a device, you will need to find out its WLAN MAC address. If you need to finish setup to do so, you can try setting your device up with a hotspot and then going into network settings to find the MAC address.

After adding your device via OIH Net, you can simply connect using the password visible on the [website](#).

Getting connected

# Ethernet

Our Ethernet network is very fast and stable, with consistent speeds of up to 1 Gbps. If you desire, we can also organize 10 Gbps, provided you bring your own equipment and your cable can handle it.

## What devices is this meant for?

Anything you can connect with a wire.

## How do I connect?

Visit the [OIH Net](#) website and sign in with your oih.ac account. In order to add a device, you will need to register its Ethernet MAC.

# Printer

Your credits can be used with the printer located in one of the basement rooms. Each black page will cost you one credit, color pages cost three.

If you **run out of credits**, all your jobs will be **canceled** automatically without warning. This is required for the printer to be able to sync with our database. Unfortunately, there doesn't seem to be a workaround available.

## Printing

### Mobile devices

Mobile devices can print via the *Konica Minolta Mobile Print* app or NFC: [Google Play Store](#), [Apple App Store](#)

You also need to set your account in the printer preferences. This differs from device to device, but you should be able to find an option called *User authentication* or similar. Save your credentials there.

### USB Stick

Insert your USB stick into the USB port on the side of the printer and sign in with your username and password.

### Computer (not recommended)

If you don't want to print from a USB Stick, you also have the option to print from your computer. For that you will need to add the printer as a network printer with the correct drivers if not detected automatically. [Bizhub C368](#)

If your computer does not detect the printer automatically, you can manually add the printer using the address 137.226.148.12.

Linux users can use [this](#) tutorial, although it is very old.

printer preferences windowlogin window picture

# Problems

## Printer communication error

If you ever receive a printer communication error, someone is likely printing and blocking the synchronization, just try again after a minute or so.

**Still experiencing problems?** Restarting the printer using the power button on the side behind one of the panels should do the trick if nobody is printing.



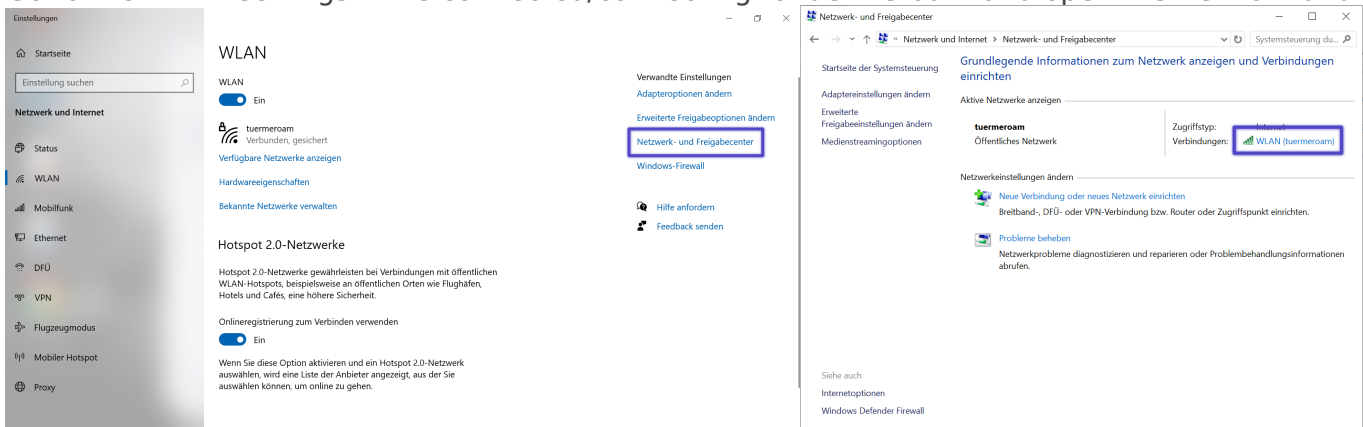
# Tutorials

# tuermeroam on Windows 10

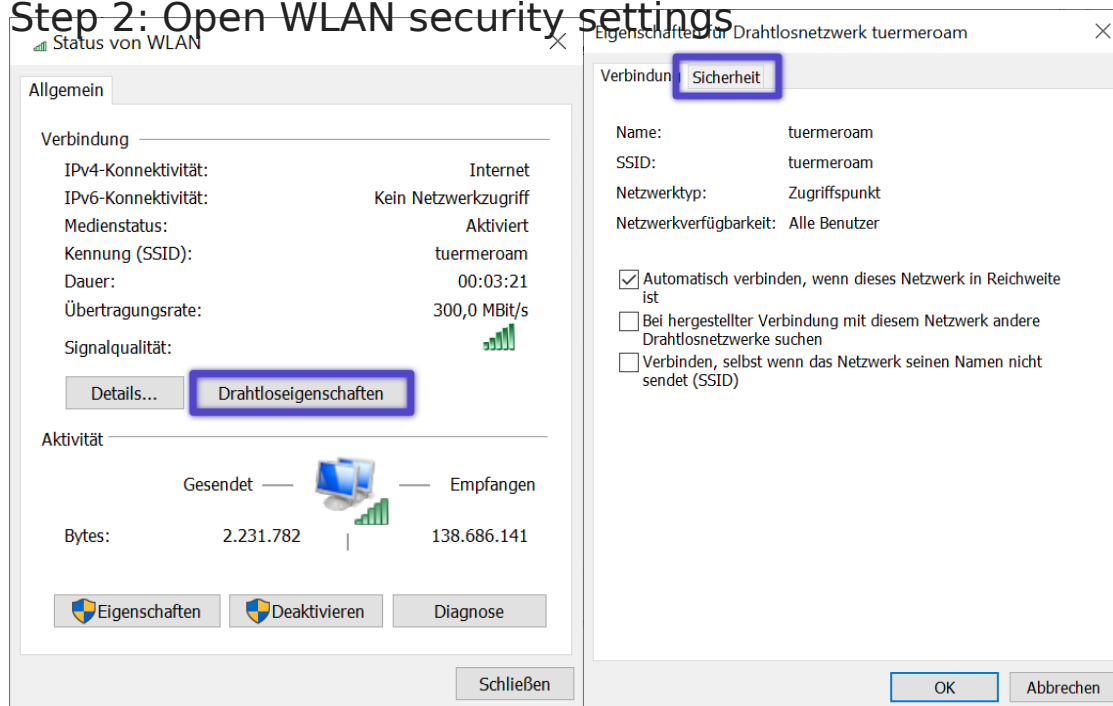
I hate Microsoft with a burning passion for this and only this. Needless to say, setting this up is a bit annoying.

## Step 1: Open WLAN status

Go to the WLAN settings while connected/connecting to *tuermeroam* and open the *Network and*



## Step 2: Open WLAN security settings



curity tab.

## Step 3: Set the right settings

Set *EAP-TTLS* as the authentication method and open its settings. In the window that pops up, set `anonymous@oih.rwth-aachen.de` as the anonymous identity and `; oih.rwth-aachen.de` as the domain. Yes, with the semicolon and the space. No, I don't know why.

The image shows two side-by-side Windows network configuration windows. The left window, titled "Eigenschaften für Drahtlosnetzwerk tuermereoam", has the "Sicherheit" tab selected. It shows "Sicherheitstyp" set to "WPA2-Enterprise" and "Verschlüsselungstyp" set to "AES". Under "Wählen Sie eine Methode für die Netzwerkauthentifizierung aus:", "Microsoft: EAP-TTLS" is selected, and the "Einstellungen" button is highlighted. There is also a checkbox for "Für diese Verbindung eigene Anmeldeinformationen für jede Anmeldung speichern" which is checked. The right window, titled "TTLS-Eigenschaften", has "Identitätsschutz aktivieren" checked, with the identity field set to "anonymous@oih.rwth-aachen.de". Under "Serverzertifikatüberprüfung", "Verbindung mit folgenden S..." is set to "; oih.rwth-aachen.de". Under "Vertrauenswürdige Stammzertifizierungsstellen", "ISRG Root X1" is checked. Under "Clientauthentifizierung", "EAP-fremde Authentifizierungsmethode auswählen" is selected, and "Unverschlüsseltes Kennwort (PAP)" is chosen. Both windows have "OK" and "Abbrechen" buttons at the bottom.

Finally, set *PAP*

After clicking OK, you will have to enter your username and password again. Windows will then ask you if you're connecting to this network where you expect, which you are, so click OK.

Congratulations!

# Welcome to the Internet !

# FAQ

FAQ

**Q: My Access Point is not lighting up. What do I do?**

A: This is normal.

Q: My iPhone/iPad/Mac suddenly can't connect anymore. Please help.  
Please

A: Try forgetting the network and adding it back. You might need to accept a new certificate.

If the above steps don't help, [contact us](#).

# Q: How do I connect a smart home device to the network?

A: Please use the [OIH WLAN](#), or [Ethernet](#) (if you can).

# Q: Can I torrent on the network?

A: No. If the media industry's bots see your IP, they will report it to the university, who will subsequently report it to us.



Q: Can I share my internet access?

A: Sorry, this is not allowed.