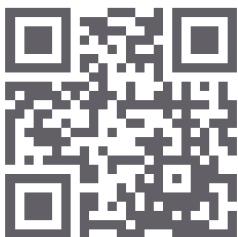


We'll get you on the net

WiFi setup at TH Köln



[th-koeln.de/campus-it](https://www.th-koeln.de/campus-it)

Content

1	What is eduroam?	2
2	Eduroam on Windows 7	3
2.1	Removing an existing eduroam profile	3
2.2	Setting up an eduroam profile	7
3	Eduroam on Windows 8 and 10.....	11
4	Manual installation on Windows 8 and 10.....	16
5	Eduroam on Android	26
5.1	Removing an existing eduroam profile	26
5.2	Downloading the app and profile.....	26
6	Eduroam on iOS 7 or later	32
6.1	Deleting existing profiles	32
6.2	Initial installation	34
6.3	Common further installation steps.....	36
7	Eduroam on macOS.....	37
8	Eduroam on Ubuntu	40
10	Contact.....	43



1 What is eduroam?

Eduroam (Education Roaming) enables teachers, students, and employees of TH Köln to use their campusID to access the Internet at the locations of all universities, colleges, and other organizations participating in eduroam.

This service is provided in close cooperation between DFN-Verein and the computer centers of the institutions connected to the science network.

An overview of the participating institutions and further information can be found here: www.eduroam.org

The most important configuration settings:

EAP method:	TTLS
PHASE2 authentication:	PAP
Identity:	campusID (e.g. mmusterm)
Password:	Your campusID password
Anonymous identity:	eduroam@th-koeln.de
CA certificate:	Root certificate for the university Download at www.th-koeln.de/eduroam

For most operating systems, we recommend the eduroam Configuration Assistant Tool, which greatly simplifies configuration. You will find the download with the corresponding profile for our university on the following website:



<https://cat.eduroam.de/?idp=134&profile=638>

Installation via a configuration file is recommended for Apple devices. (Download at www.th-koeln.de/eduroam)

You can also come to see us during our service hours and receive the required installation tool there.

Information about our service hours can be found in chapter 9 - ‘

Contact’ at the end of this brochure.

2 Eduroam on Windows 7

Please note:

To set up eduroam on Windows 7, you need to have administrator rights on your device for at least one of the following steps.

You need an active Internet connection (mobile data such as UMTS / 3G / H / H+ / LTE / 4G / 4G+, another WiFi or wired network) to set up eduroam for the first time. Or you can copy the installation tool via USB drive from another device.

2.1 Removing an existing eduroam profile

If you have already set up eduroam, you must first remove this profile. To set it up for the first time, jump directly to chapter 2.2.

Proceed as follows:

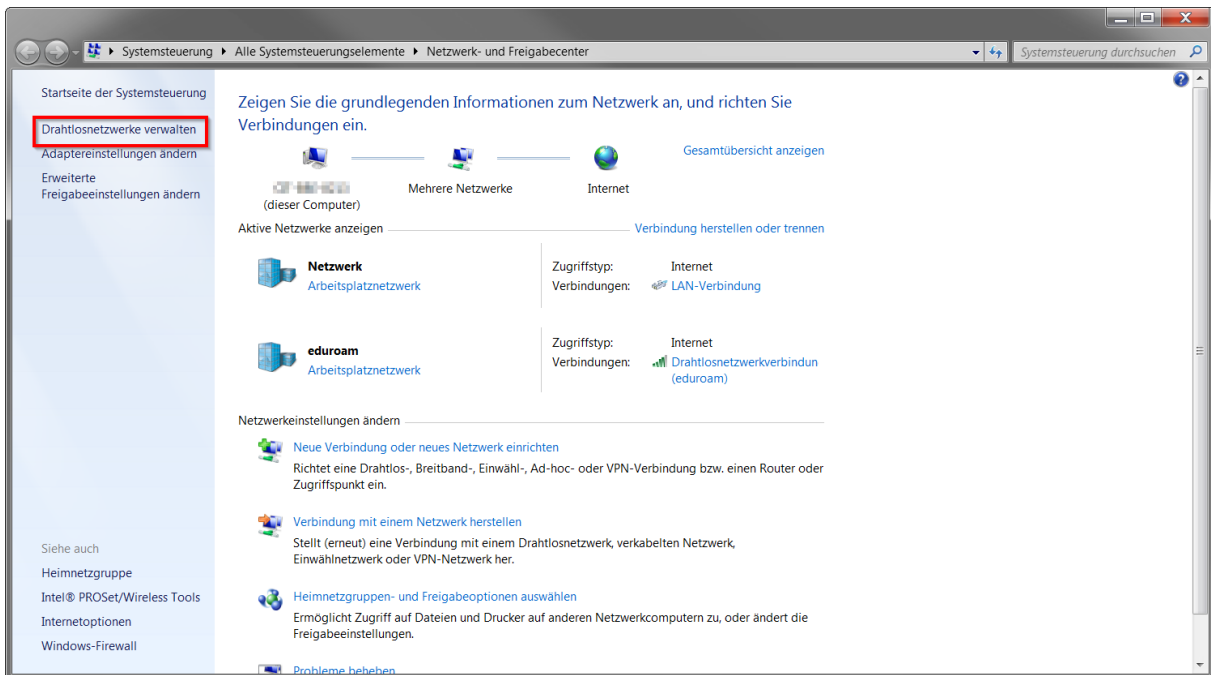
Click on the **network icon** in the Windows taskbar.



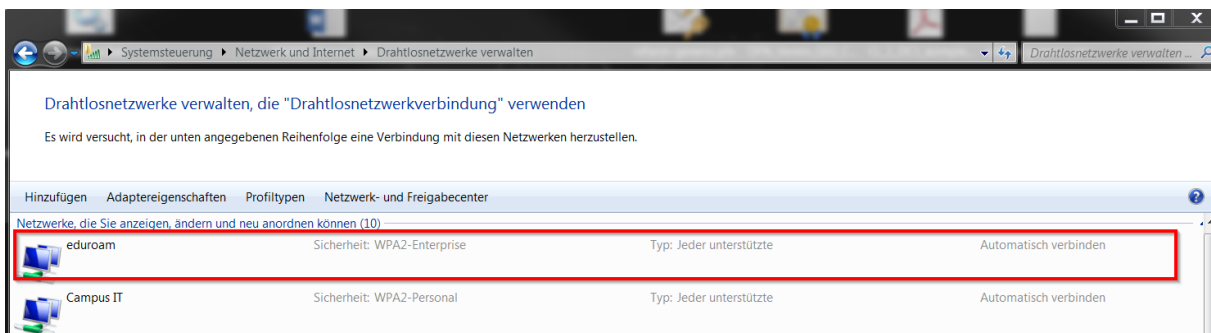
Select the **Network and Sharing Center** below the list of available networks.



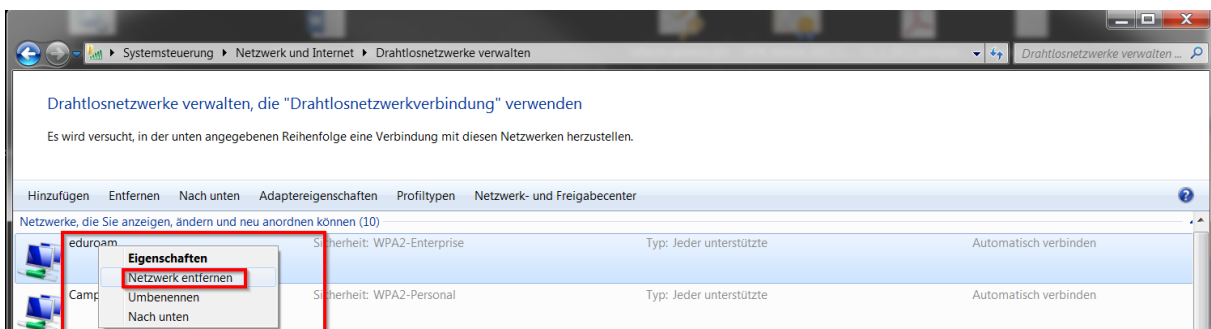
In the Control Panel window, select **Manage wireless networks** from the menu on the left.



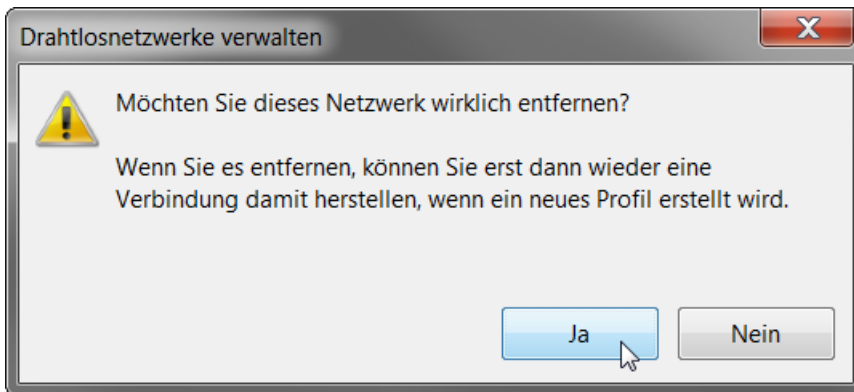
In the list of existing wireless networks, select the **eduroam** profile.



Remove the profile by **right-clicking to open the context menu** and then click on **Remove network**

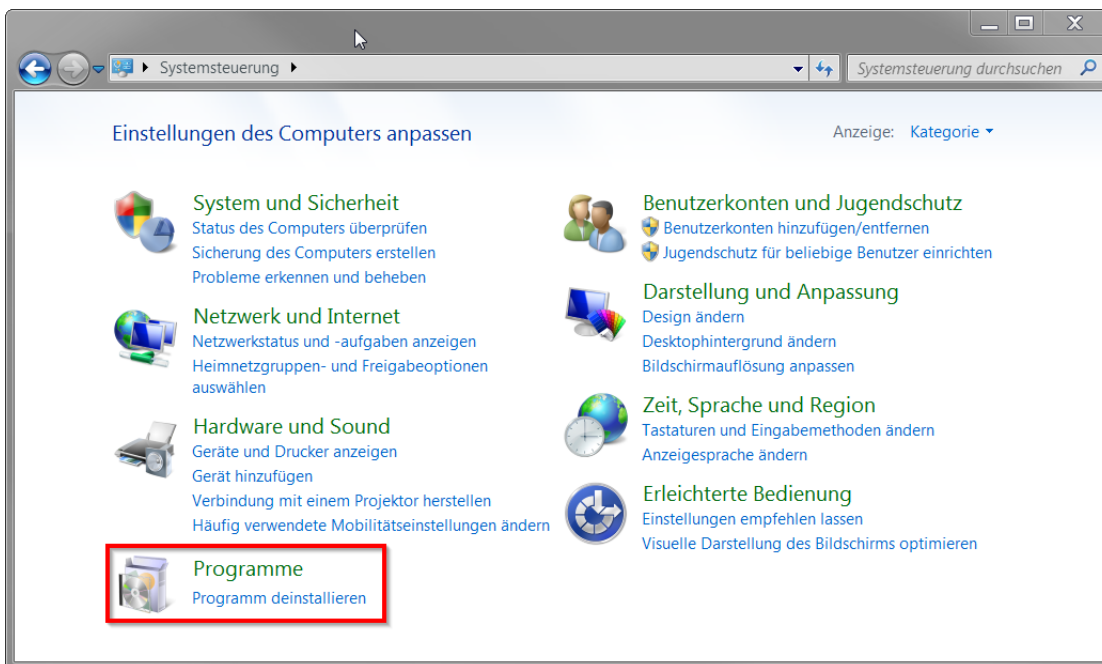


Confirm the following dialog with **Yes**

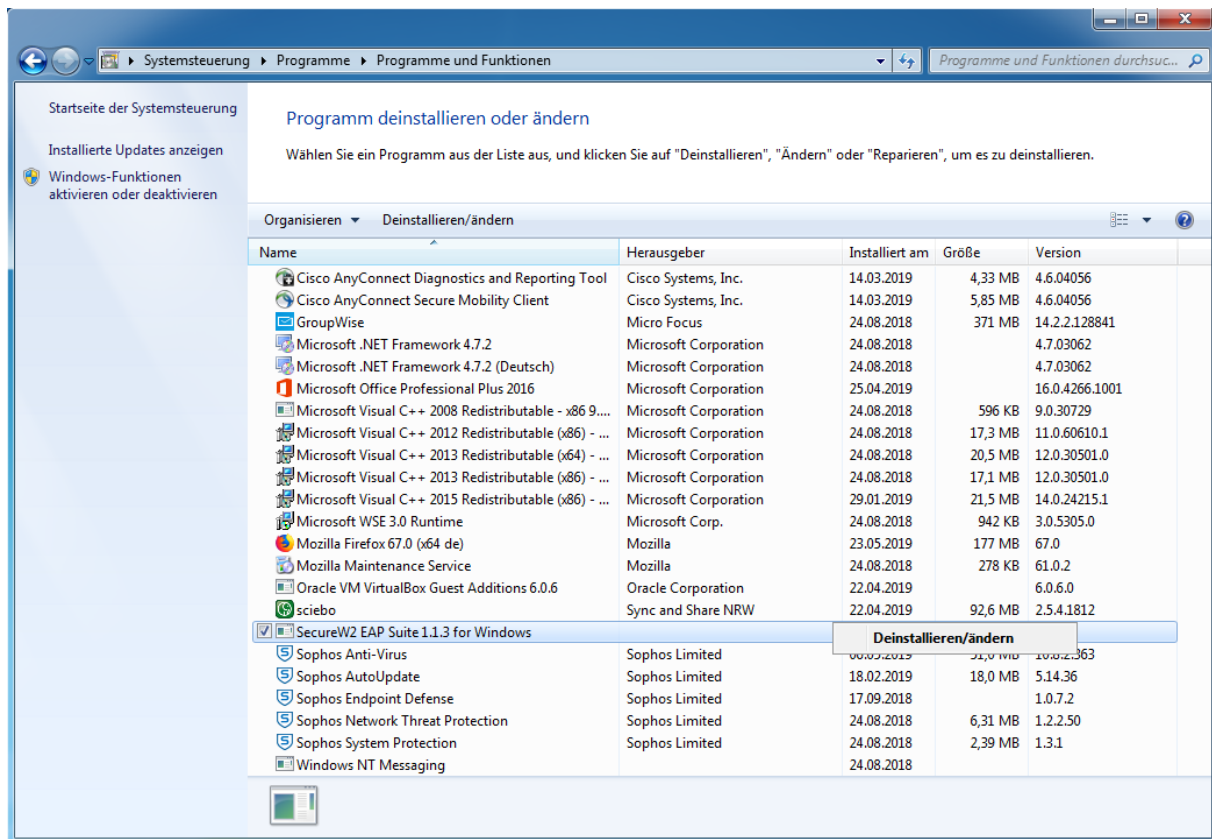


The next step is to uninstall **SecureW2 EAP Suite**. It will be replaced by **GEANTLink**, which is included in the **eduroam installer**. (Chapter 2.2)

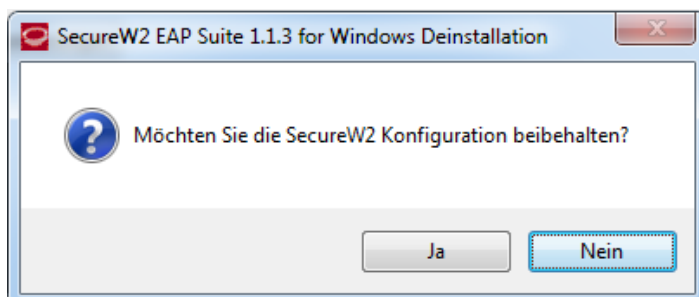
Click on the Start button and open the Control Panel. Now select **Programs > Uninstall a program**



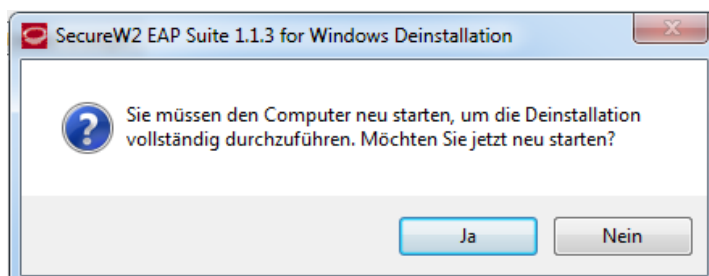
In the displayed list of programs, select the entry **SecureW2_EAP_Suite_1.1.3 for Windows** and uninstall the program.



Respond to the following prompt with **No**



Restart the system to completely uninstall the program.



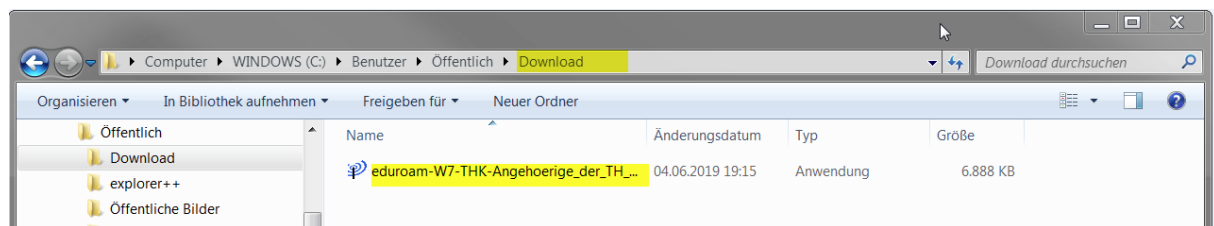
2.2 Setting up an eduroam profile

Open the following website in the browser of your choice
<https://cat.eduroam.de/?idp=134&profile=638>

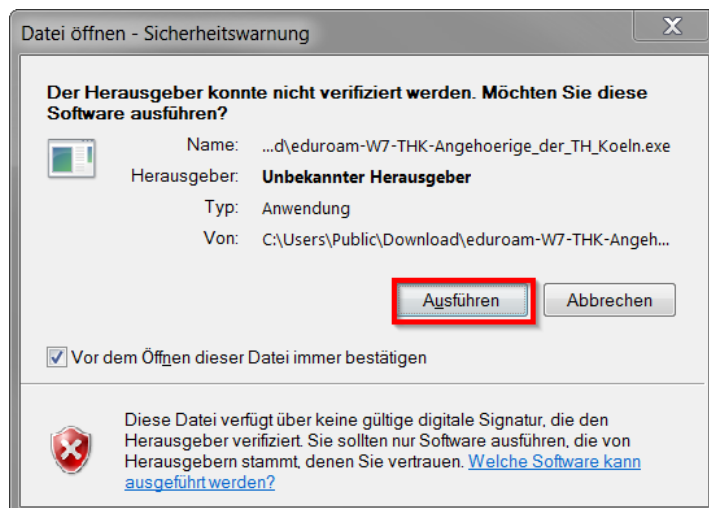
Click the **MS Windows 7** button.



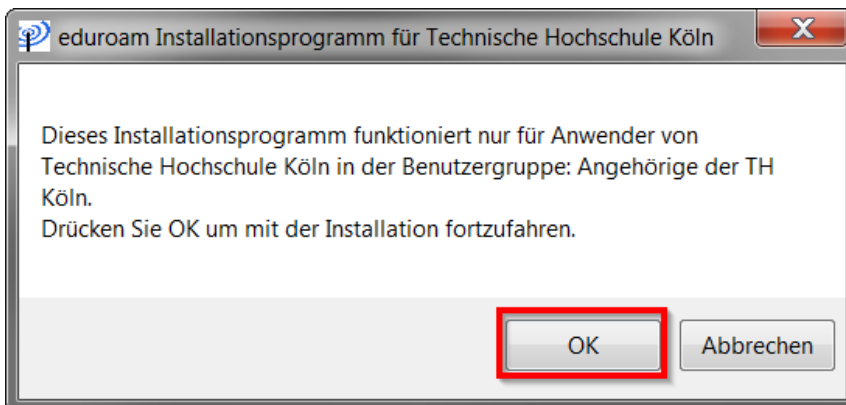
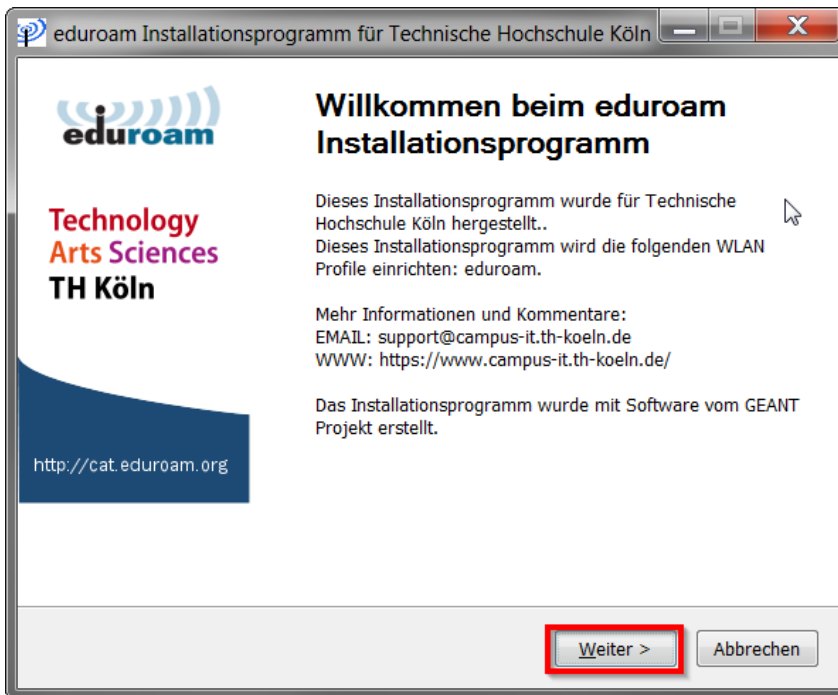
Confirm the Save dialog and then open the target folder.
 Double-click on **eduroam-W7-THK-members_of_TH_Koln**



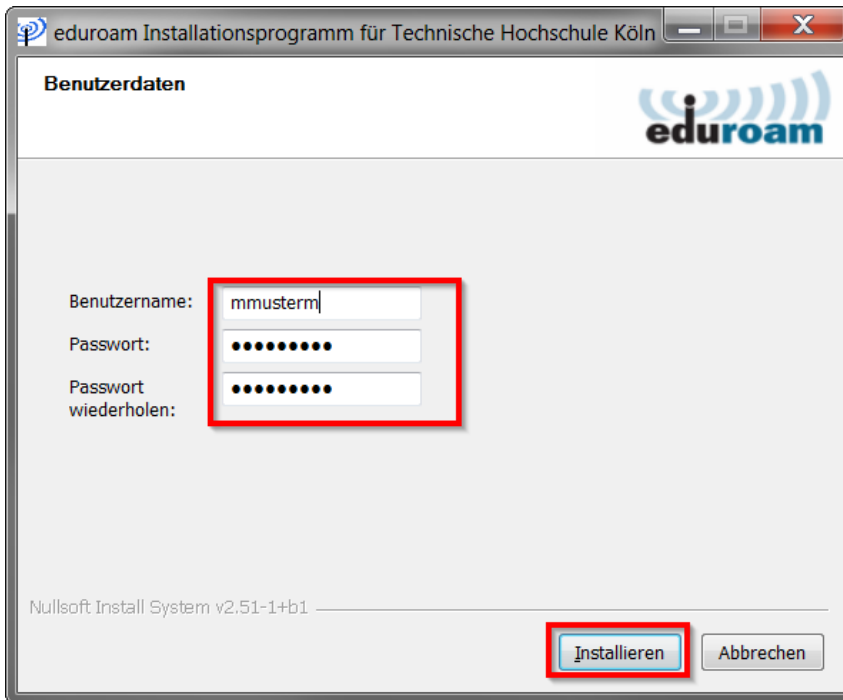
Confirm the security warning by clicking on the **Run** button.



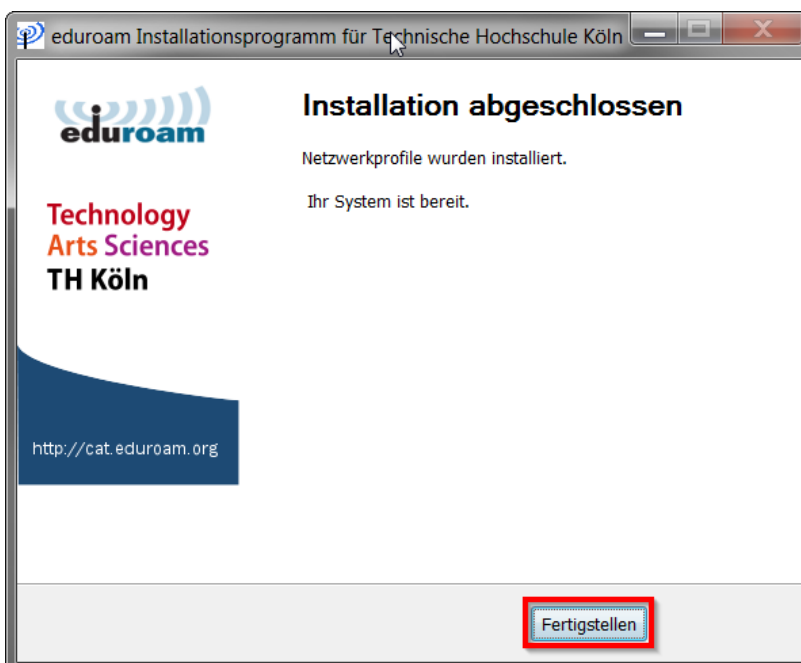
Confirm the following dialogs with **Next** and **OK**



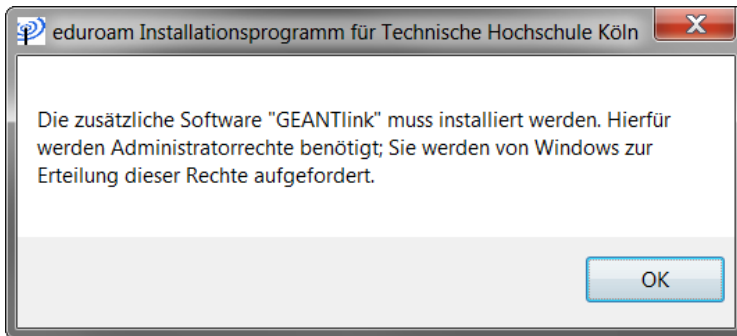
In the user credentials dialog, enter your **campusID** and your **campusID password** and click on **Install**



Complete the installation process by clicking on **Finish**



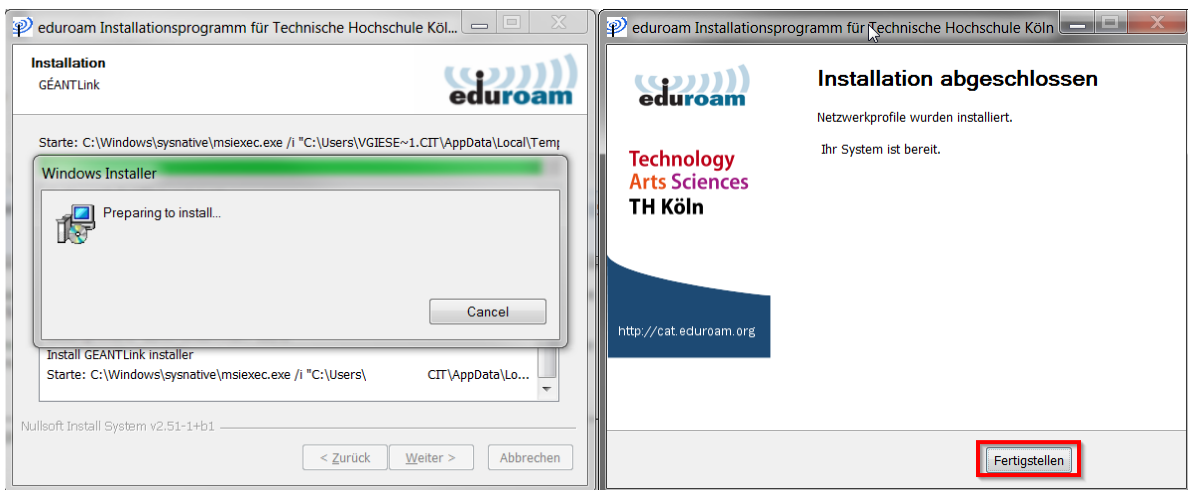
If you confirm this dialog with OK, you need administrator rights on your device in order to be able to confirm the following user account control query.



!!Important!

*If you do not have this authorization, the installation will be aborted here.
In this case, please contact your system administrator.*

If your authorizations are sufficient, the installation dialog and the completion of the installation will follow.



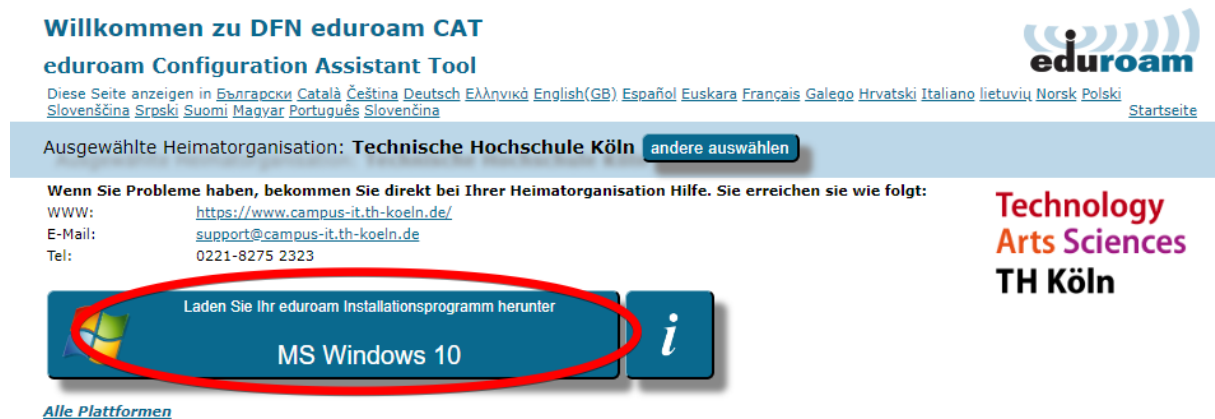
Check that the installation has completed successfully by clicking on the network icon in the Windows taskbar. The entry for the new eduroam wireless network is displayed.

3 Eduroam on Windows 8 and 10

You need an active Internet connection (mobile data such as UMTS / 3G / H / H+ / LTE / 4G / 4G+, another WiFi or wired network) to set up eduroam for the first time. Or you can copy the installation tool via USB drive from another device.

Open the page <https://cat.eduroam.de/?idp=134&profile=638> in your Internet browser.

The tool recognizes the operating system that you are using and offers the appropriate installation data for download.



Willkommen zu DFN eduroam CAT
eduroam Configuration Assistant Tool

Diese Seite anzeigen in [Български](#) [Català](#) [Čeština](#) [Deutsch](#) [Ελληνικό](#) [English\(GB\)](#) [Español](#) [Euskara](#) [Français](#) [Galego](#) [Hrvatski](#) [Italiano](#) [lietuvių](#) [Norsk](#) [Polski](#) [Slovenščina](#) [Srpski](#) [Suomi](#) [Magyar](#) [Português](#) [Slovenčina](#) [Startseite](#)

Ausgewählte Heimatorganisation: **Technische Hochschule Köln** [andere auswählen](#)

Wenn Sie Probleme haben, bekommen Sie direkt bei Ihrer Heimatorganisation Hilfe. Sie erreichen sie wie folgt:
 WWW: <https://www.campus-it.th-koeln.de/>
 E-Mail: support@campus-it.th-koeln.de
 Tel: 0221-8275 2323

**Technology
 Arts Sciences
 TH Köln**

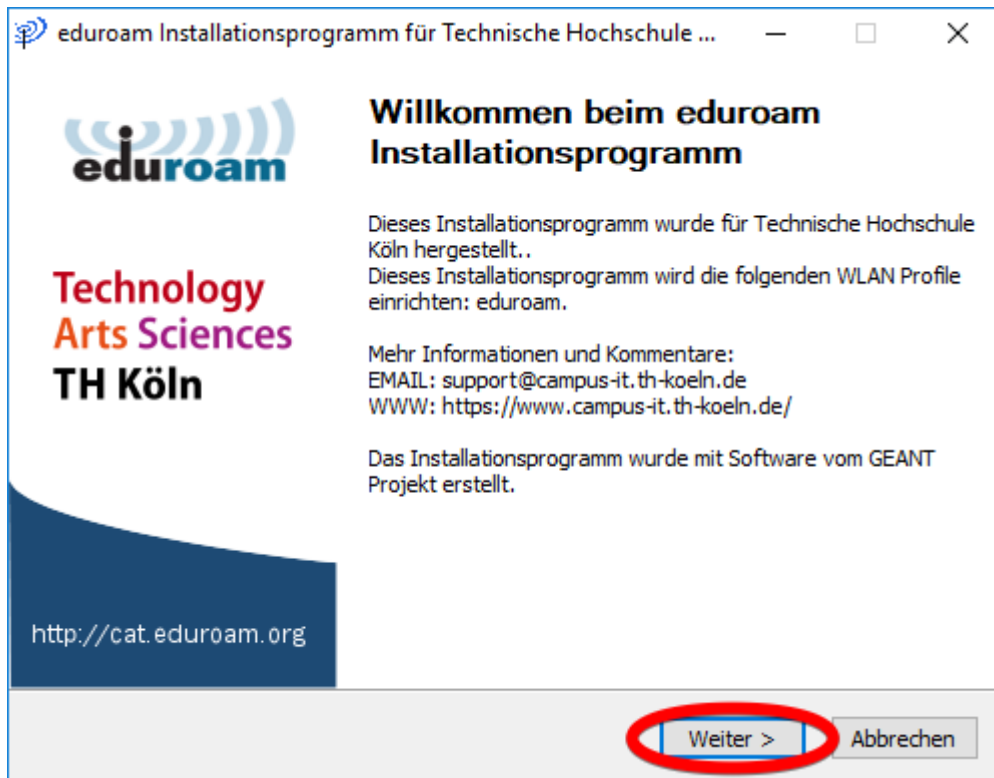
Laden Sie Ihr eduroam Installationsprogramm herunter
MS Windows 10

[Alle Plattformen](#)

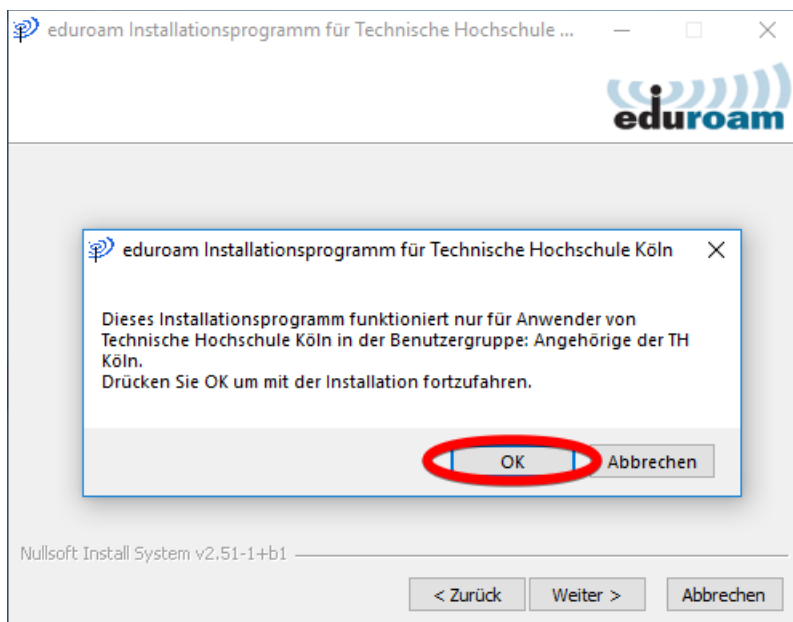
If you need the installer for another operating system, please click on *All platforms*.

Download the installer and open it.

After starting the installer, please click on **Next**.



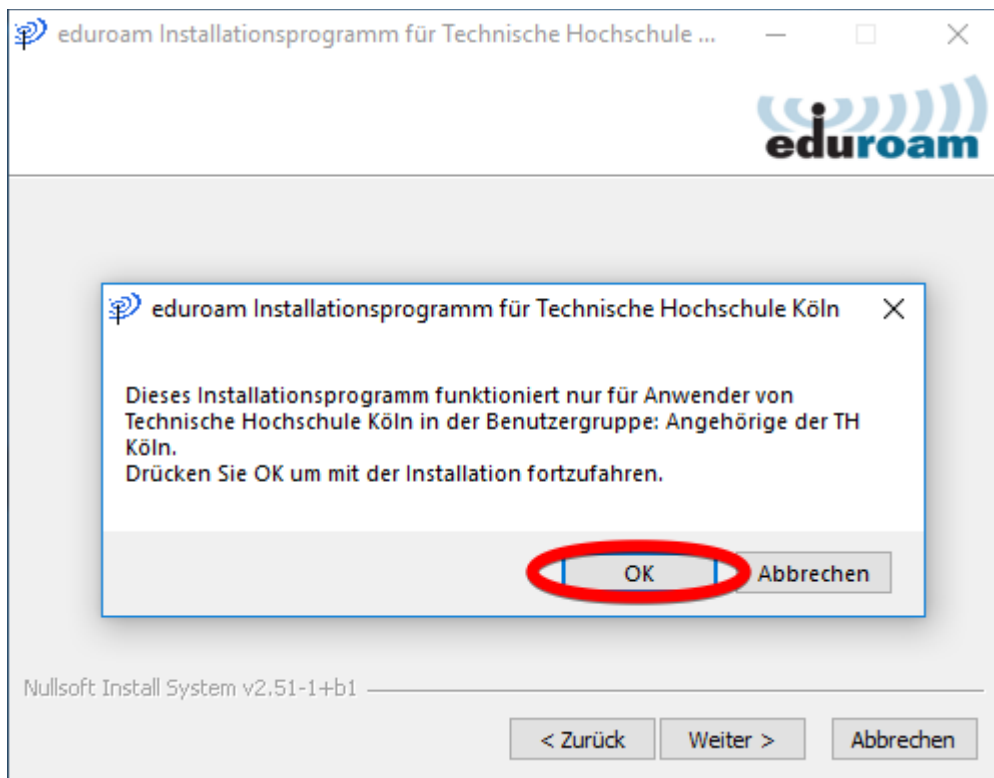
Confirm the next prompt with **OK**.



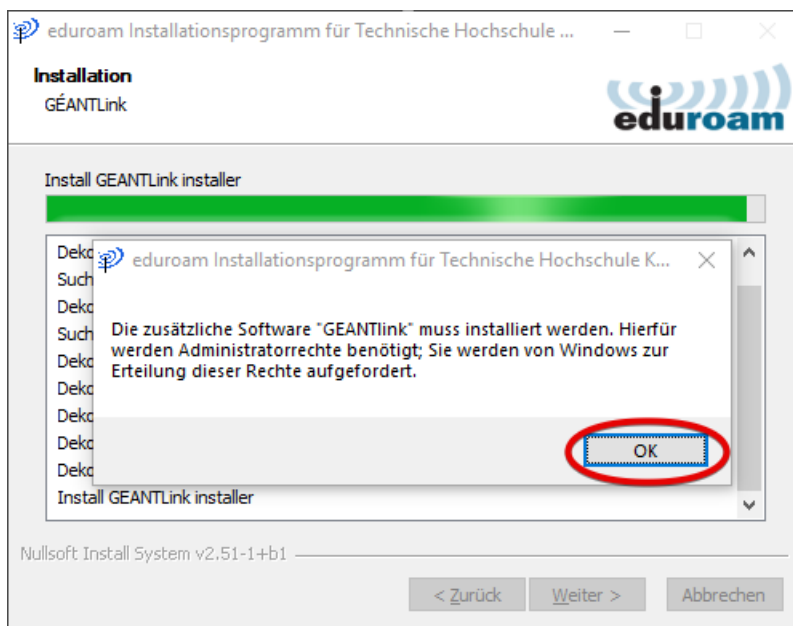
Enter your campusID username and your campusID password and click on **Install**.



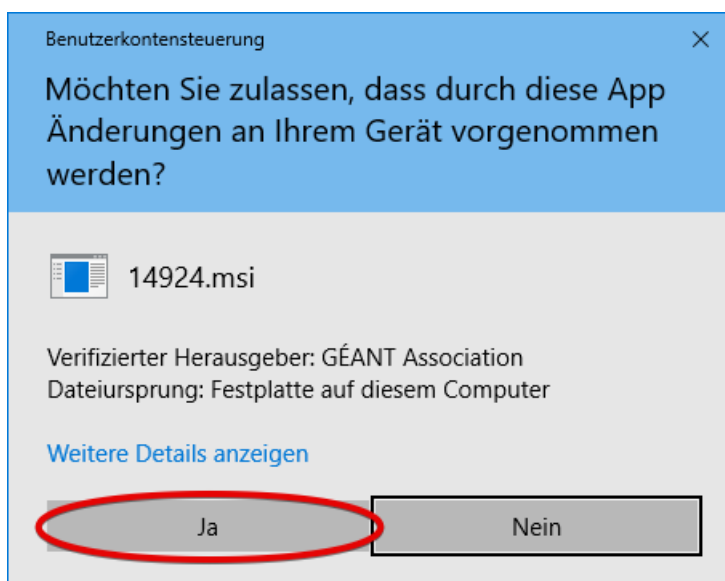
Confirm the following window with **OK**. The installation will now be executed.



It may be necessary to install the GEANTLink software at the same time. Click on **OK**.



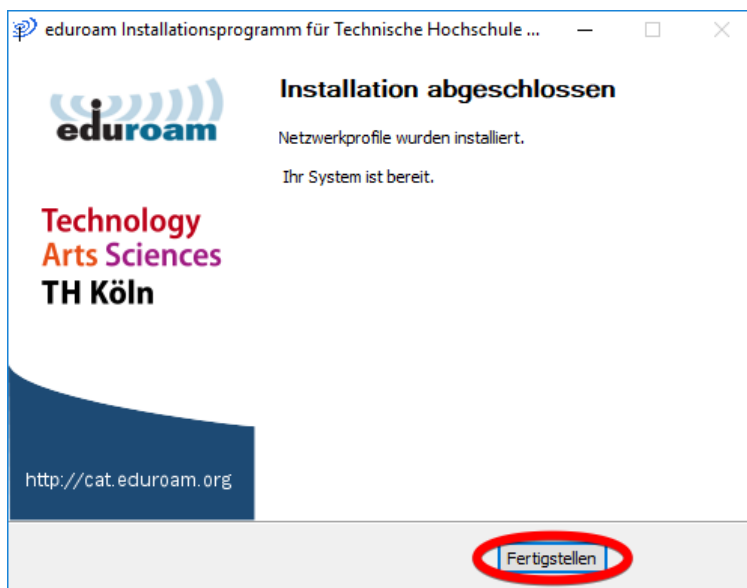
Allow the installation once again with **Yes**.



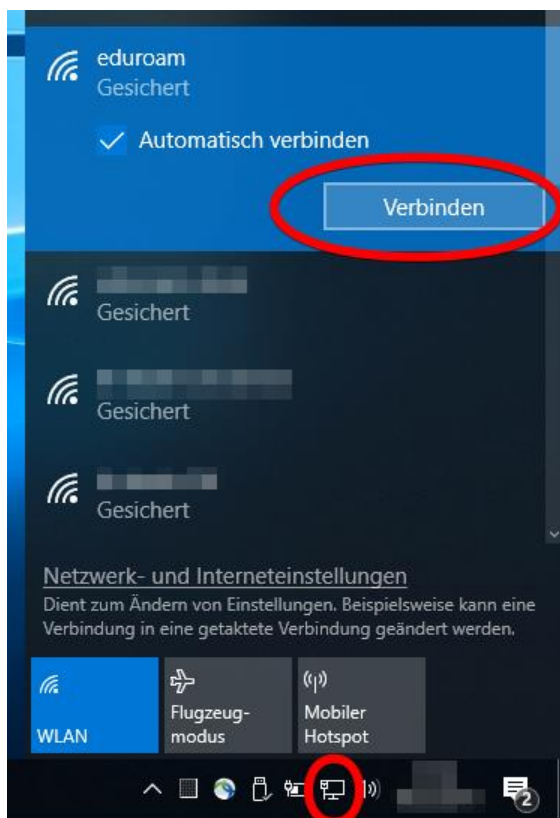
!!Important!

*If you do not have this authorization, the installation will be aborted here.
In this case, please contact your system administrator.*

The installation is now complete. Please click on **Finish**.



Click on the network icon in your taskbar and select the eduroam network. Click on **Connect**.



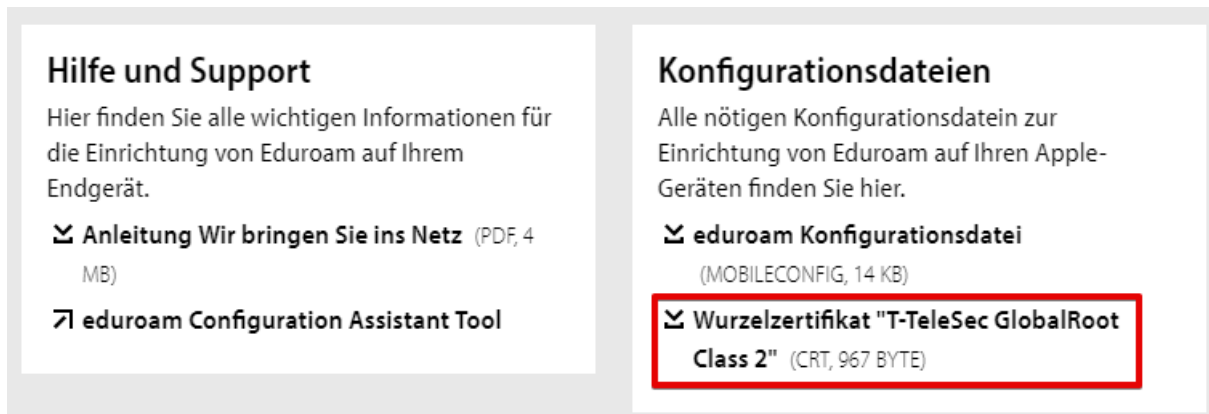
You should now be connected to eduroam.

4 Manual installation on Windows 8 and 10

Download root certificate

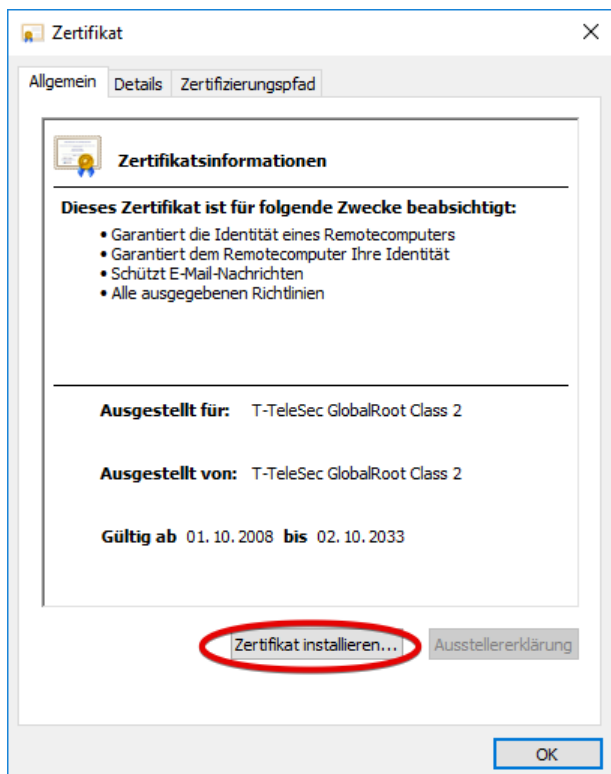
You need a root certificate in order to use eduroam on Windows 10.

You can download the certificate from www.th-koeln.de/eduroam and then install it.

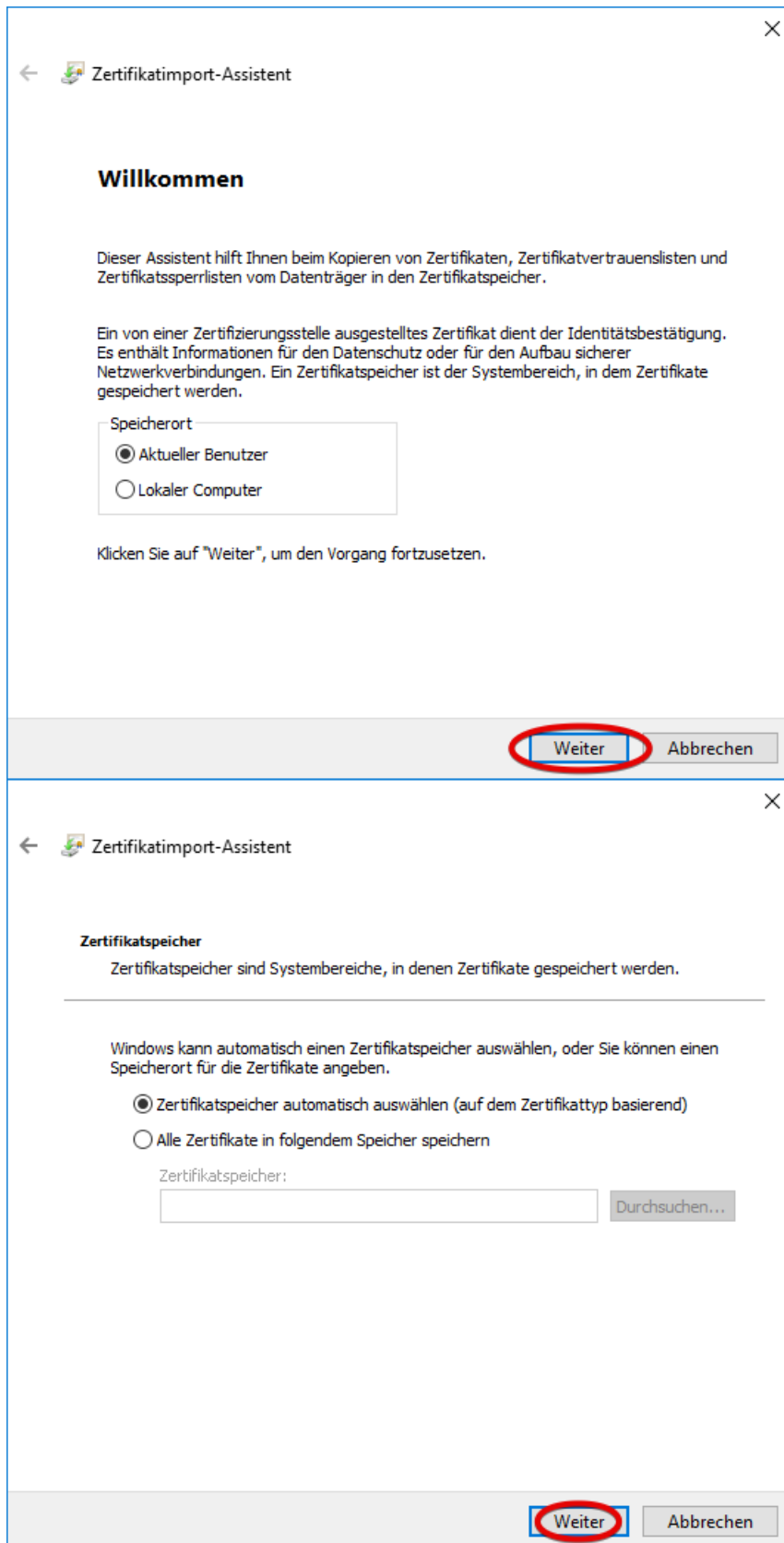


The screenshot shows two columns of information. The left column, titled 'Hilfe und Support', contains a link to a PDF manual 'Anleitung Wir bringen Sie ins Netz' (4 MB) and a link to the 'eduroam Configuration Assistant Tool'. The right column, titled 'Konfigurationsdateien', lists configuration files for eduroam on Apple devices. A red box highlights the download link for the 'Wurzelzertifikat "T-TeleSec GlobalRoot Class 2"' (967 BYTE).

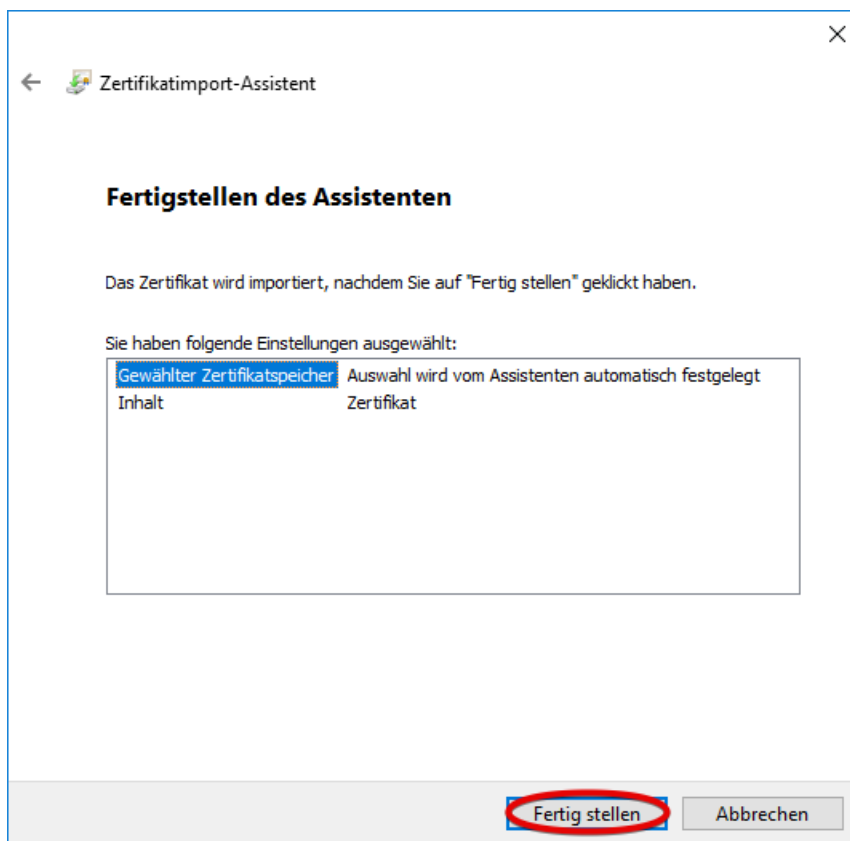
Open the downloaded file. It should be opened directly as a 'certificate'. Then click on **Install certificate**.



Click **Next** in the next two windows.



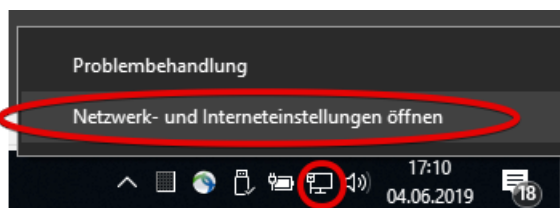
Then click on **Finish**.



Setting up the eduroam profile manually


Restart the PC and go to the **Network and Sharing Center**.

Right-click on the WiFi or network icon and select **Open Network & Internet settings**.



Now click on: **Set up a new connection or network.**

Netzwerkeinstellungen ändern

 **Neue Verbindung oder neues Netzwerk einrichten**

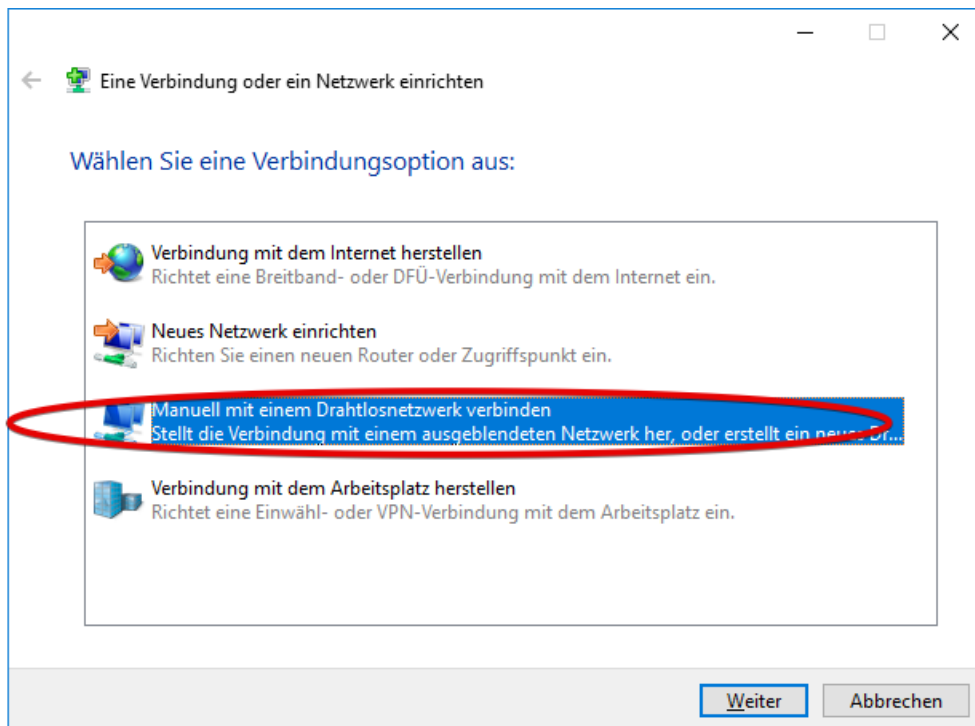
Breitband-, DFÜ- oder VPN-Verbindung bzw. Router oder Zugriffspunkt einrichten.



Probleme beheben

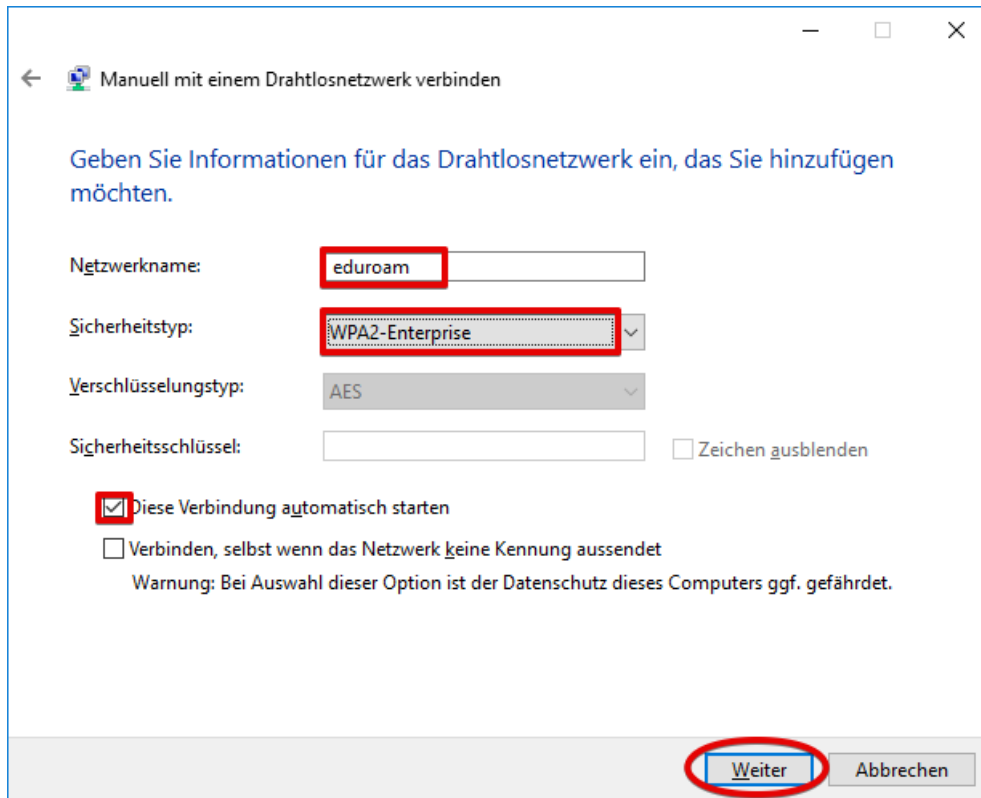
Netzwerkprobleme diagnostizieren und reparieren oder Problembehandlungsinformationen abrufen.

In the next window, select: Manually connect to a wireless network and click on **Next**.



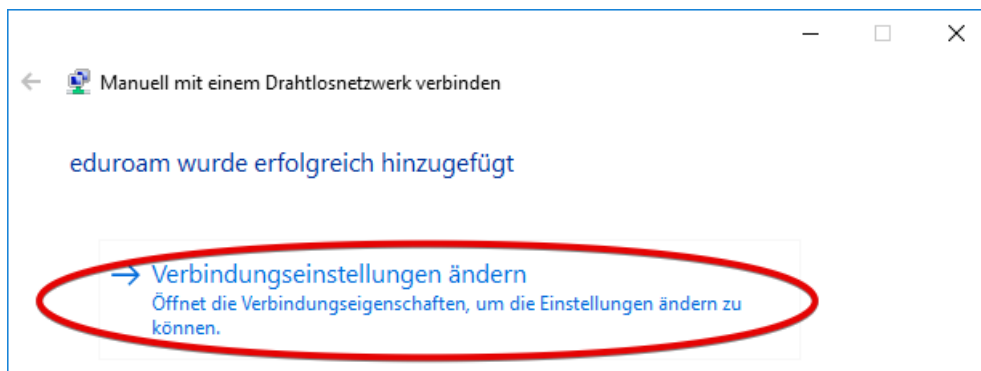
Please enter or select the following information:

Network name: **eduroam**
Security type: **WPA2 Enterprise**
Encryption type: **AES**
And confirm your entries with **Next**.



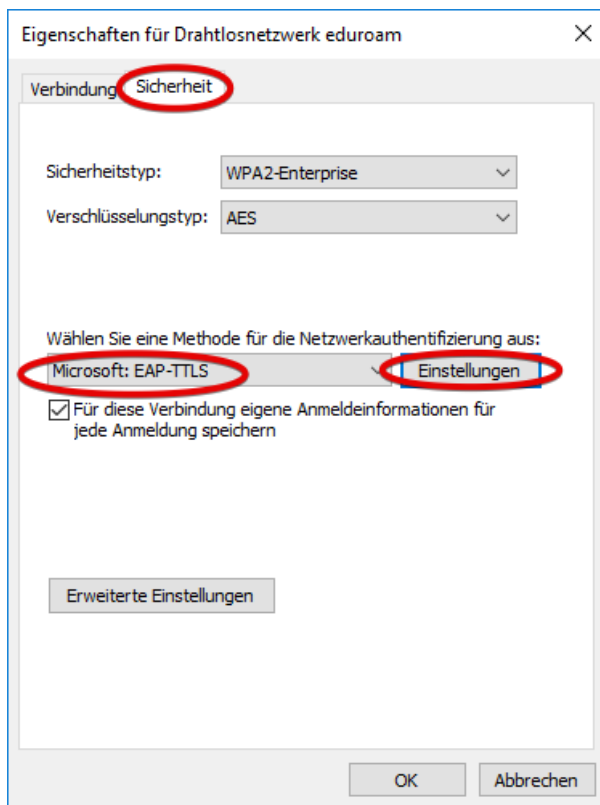
The screenshot shows a Windows window titled "Manuell mit einem Drahtlosnetzwerk verbinden". The main instruction is "Geben Sie Informationen für das Drahtlosnetzwerk ein, das Sie hinzufügen möchten." Below this, there are four input fields: "Netzwerkname" with the value "eduroam", "Sicherheitstyp" with the value "WPA2-Enterprise", "Verschlüsselungstyp" with the value "AES", and "Sicherheitsschlüssel" which is empty. There is a checkbox for "Diese Verbindung automatisch starten" which is checked, and another unchecked checkbox for "Verbinden, selbst wenn das Netzwerk keine Kennung aussendet". A warning message is displayed below the second checkbox: "Warnung: Bei Auswahl dieser Option ist der Datenschutz dieses Computers ggf. gefährdet." At the bottom right, there are two buttons: "Weiter" (highlighted with a red circle) and "Abbrechen".

In the next window, click on: **Change connection settings**.



The screenshot shows the same Windows window, but now it displays a success message: "eduroam wurde erfolgreich hinzugefügt". Below this message, there is a link that says "→ Verbindungseinstellungen ändern" with a subtext "Öffnet die Verbindungseigenschaften, um die Einstellungen ändern zu können." This link is highlighted with a red oval.

The wireless network properties will then open.



Switch to the **Security** tab and select **Microsoft: EAP-TTLS** as the network authentication method.

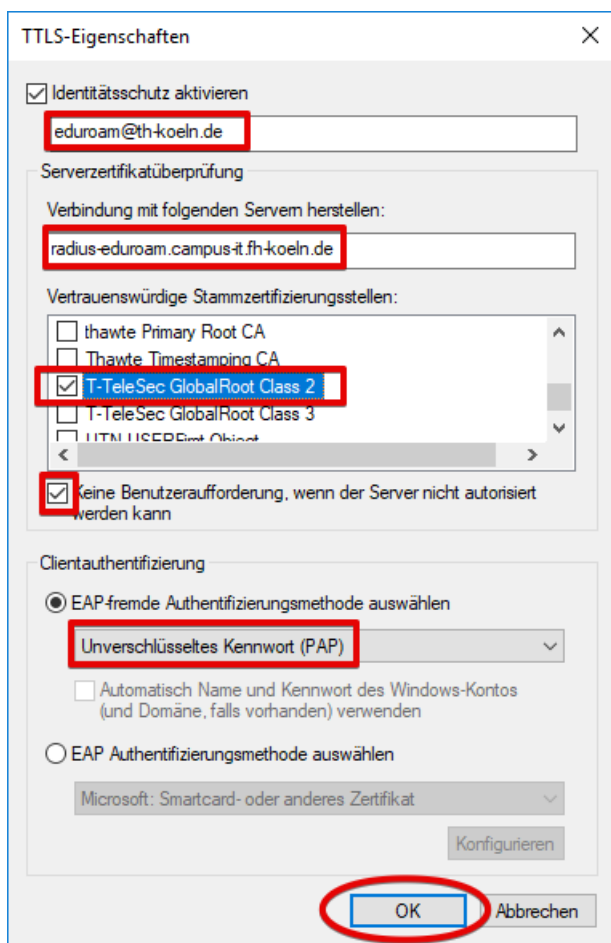
Then click on **Settings**.

Please complete all of the relevant fields (see following picture).

Enable identity privacy:
Connect to these servers:
Trusted Root Certification Authorities:
Select a non-EAP method for authentication:

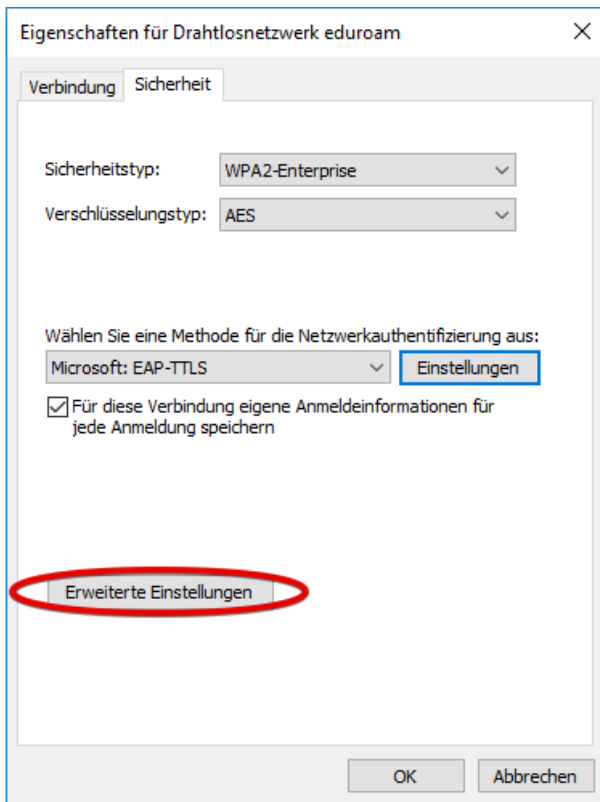
eduroam@th-koeln.de
radius-eduroam.campus-it.fh-koeln.de
T-TeleSec GlobalRoot Class 2
Unencrypted password (PAP)

Then confirm with **OK**.



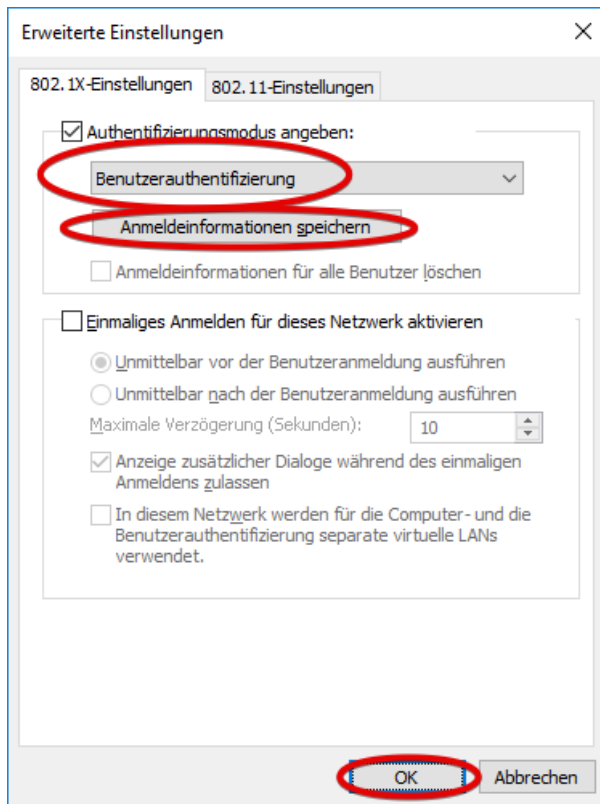
The window with the wireless network properties appears again.

Now select **Advanced settings**.



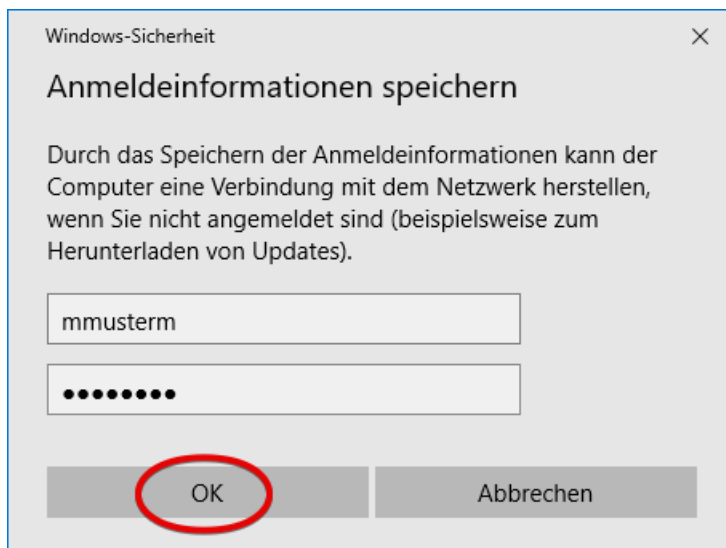
Activate **authentication mode** and select **User authentication** there.

Then click on **Save credentials**.



A window will open asking you to save your credentials.

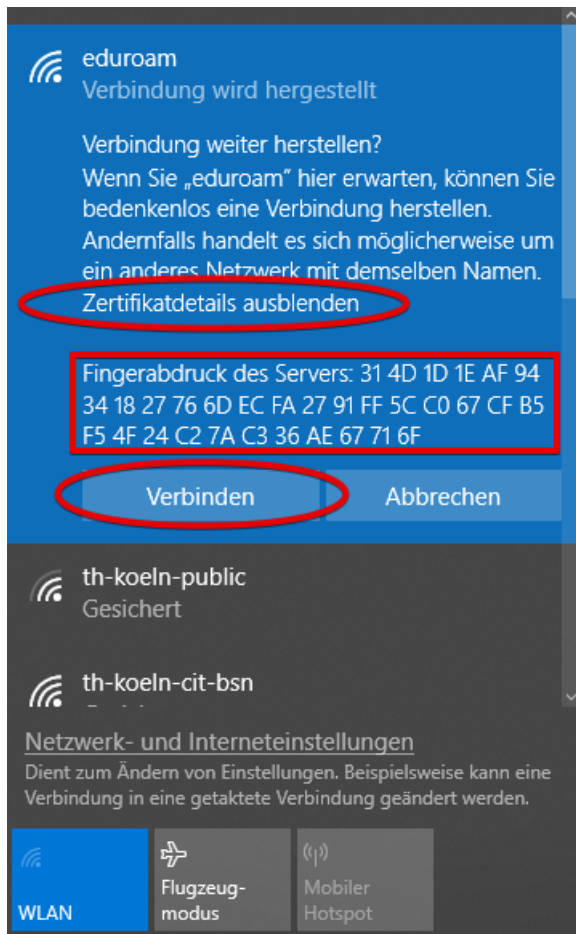
Please enter your **campusID** (e.g.: mmusterm) and your **campusID password** here.



Confirm the windows with the credentials and the advanced settings with **OK** to close the windows.

Then display all available WiFi networks and click on **eduroam**.

Compare the displayed finger print with the one from the picture below to ensure you are connecting to the correct network and click on **connect**.



You are now connected to the eduroam network.

5 Eduroam on Android

A Samsung S9 with Android 9 was used as an example for the step-by-step installation. Android version 4.4 or later is supported.

To set up *eduroam*, you need an active Internet connection and should be in an area where you can receive *eduroam*.

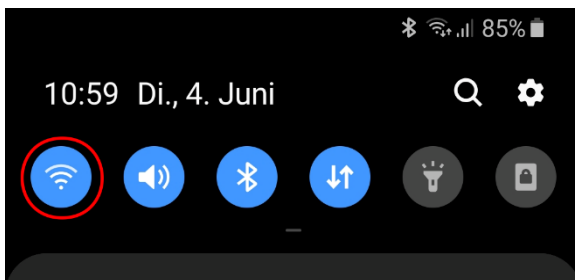
5.1 Removing an existing eduroam profile

If you have already set up *eduroam*, you must first delete the old WiFi profile before you can set it up again.

To set it up for the first time, jump directly to chapter 5.2.

If necessary, download the app and the configuration profile (see chapter 5.2) before you no longer have access to the Internet.

Open the WiFi settings by dragging down the quick settings ('pull-down menu') and holding down the **WiFi icon** until the WiFi settings open.



Hold down the **eduroam** profile and select **Forget network** from the menu.



5.2 Downloading the app and profile

First, open the following page on your Android device.



<https://cat.eduroam.de/?idp=134&profile=638>

Then click on the large button at the bottom of the page.

DFN eduroam CAT



Diese Seite anzeigen in

Deutsch

Bitte wählen Sie Ihr Land

Deutschland

Bitte wählen Sie Ihre Heimatorganisation

Technische Hochschule Köln

Wählen Sie einen Installer zum

Herunterladen

Android 9.x Pie

Haben Sie bei dieser Organisation
ein Benutzerkonto?

Falls ja, und falls alle anderen

Angaben oben stimmen, dann

WWW: <https://www.campus-it-th-koeln.de/>

Tel: [0221-8275 2323](tel:0221-82752323)

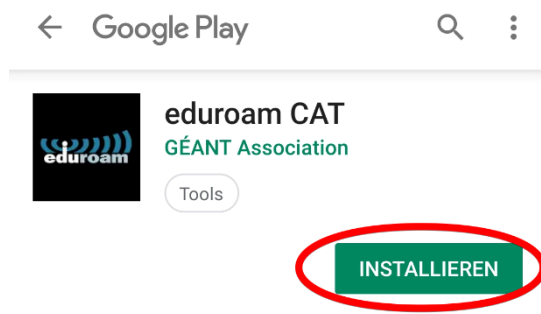
Bevor Sie mit der Installation fortfahren, stellen Sie bitte sicher dass Sie die eduroamCAT App installiert haben. Diese App gibt es bei [Google Play](#), [Amazon Appstore](#) und [direkt hier zum Herunterladen](#). Diese App kann die Konfigurationsdatei die Sie hier herunterladen verarbeiten und macht dann alle nötigen Einstellungen.

Herunterladen des Installers für
Android 9.x Pie

Now click on the link for the corresponding app store (usually Google Play) to install the eduroamCAT app.

If you have already installed the app, skip this step.

Next, click on **Install**.



After the app has been installed, go back to the website and select **Download installer for...** to download the configuration profile.

Tel: [0221-8275 2323](tel:0221-82752323)

Bevor Sie mit der Installation fortfahren, stellen Sie bitte sicher dass Sie die eduroamCAT App installiert haben. Diese App gibt es bei [Google Play](#), [Amazon Appstore](#) und [direkt hier zum Herunterladen](#). Diese App kann die Konfigurationsdatei die Sie hier herunterladen verarbeiten und macht dann alle nötigen Einstellungen.

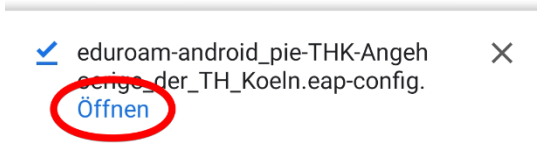
Herunterladen des Installers für
Android 9.x Pie

Neu beginnen

Now **open** the downloaded file with the eduroamCAT app.

Tel: [0221-8275 2323](tel:0221-82752323)

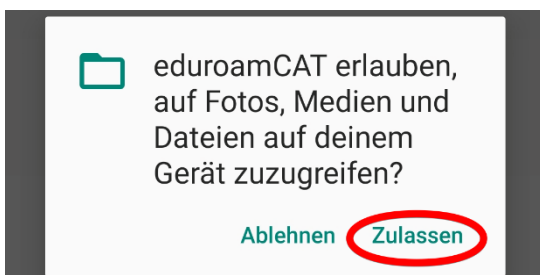
Bevor Sie mit der Installation fortfahren, stellen Sie bitte sicher dass Sie die eduroamCAT App installiert haben. Diese App gibt es bei [Google Play](#), [Amazon Appstore](#) und [direkt hier zum Herunterladen](#). Diese App kann die Konfigurationsdatei die Sie hier heruntergeladen verarbeiten und macht dann alle nötigen Einstellungen.



If you have not yet set up a screen lock, the app will now prompt you to set it up. A screen lock must be selected, otherwise the eduroam configuration cannot be performed.



Allow the app to access your files (such as the download folder) by clicking on **Allow**.



Click on **Install** to install the configuration file.

< Konfigurationsdatei installieren

Zusammenfassung der Konfigurationsdatei

Name des Identitätsproviders: Technische Hochschule Köln - Angehörige der TH Köln
Beschreibung: eduroam-Profil für Angehörige der TH Köln

Anmeldemethode #1

EAP Methode: 21/TTLS
Innere EAP Methode: 1/PAP
Anmeldeserver: eduroam@th-koeln.de
Anmeldeserver: radius-eduroam.campus-it.fh-koeln.de
CA Certificate CN: CN=T-TeleSec GlobalRoot Class 2

Unterstützung

E-Mail: support@campus-it.th-koeln.de
Telefon: 0221-8275 2323
Nutzungsbedingungen:
Internet: <https://www.campus-it.th-koeln.de/>

Verwerfen **Installieren**

Confirm again with **Yes**.

Profil installieren

Sind Sie sicher, dass Sie das Profil installieren möchten?

Nein **Ja**

Next, enter your **campusID** and **campusID password** on the app's start screen. Then click on **Install**.



Benutzername:

Passwort:

Die Profilinstallation wird die bestehende eduroam Konfiguration ersetzen

Status:WLAN Ein:DISCONNECTED:<unknown ssid>

You should now be connected to *eduroam*.

Momentane Geräteeinstellung:

- ✓ Found SSID "eduroam" with mixed mode
- ✓ Anon ID=eduroam@th-koeln.de
- ✓ User ID=mmusterm@th-koeln.de
- ✓ EAP Method=TTLS with Phase2:PAP
- ✓ CA Certificate OK
- ✓ Server Subject Match=radius-

Benutzername:

Passwort:

Profil installiert

Status:CONNECTED to SSID "eduroam"

6 Eduroam on iOS 7 or later

You need an active Internet connection (mobile data such as UMTS / 3G / H / H+ / LTE / 4G / 4G+, another WiFi or wired network) to set up **eduroam** for the first time. There are only a few kilobytes to download.

Important note: If you still have an old eduroam configuration, you first need to delete the old profiles from your iOS device.

Please keep your iPhone up to date with the latest software version (firmware update).

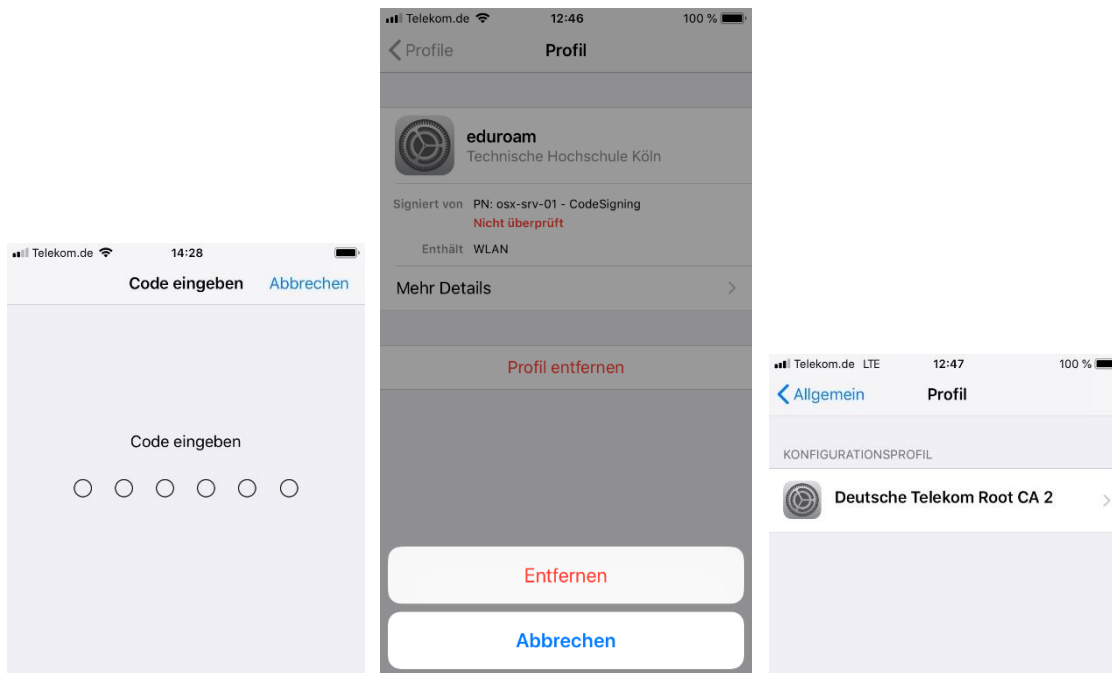
6.1 Deleting existing profiles



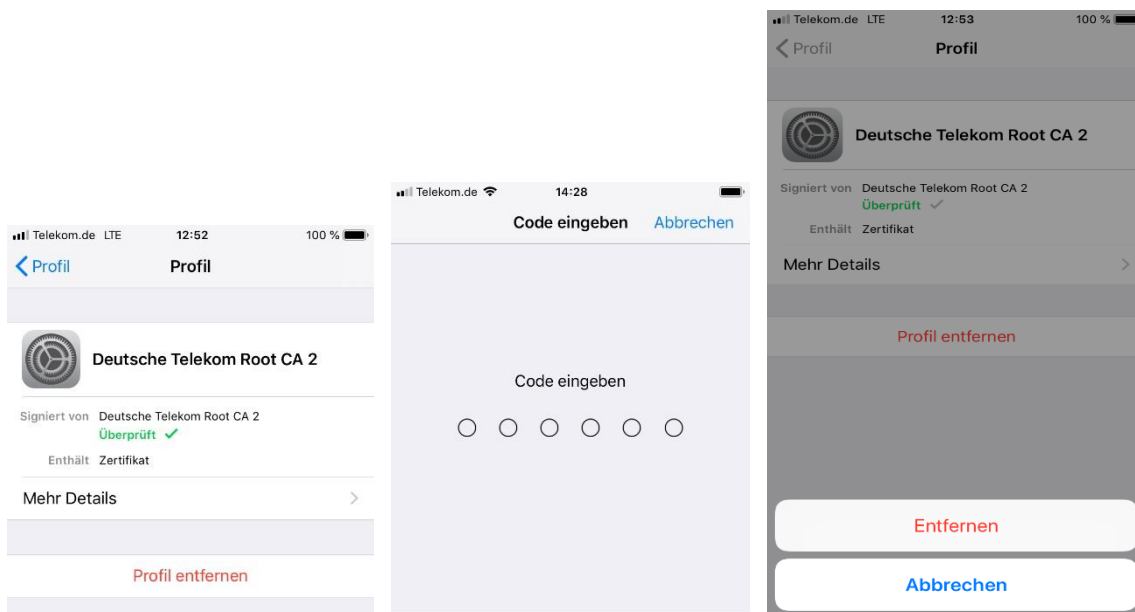
On the Home screen, find and open the **Settings** icon. Scroll down the settings until you find **General** in the menu. Open the **General** menu.



Scroll down the **General** menu until **Profile** appears. Open the **Profile** menu. Here you can find the two old configuration profiles **eduroam** and **Deutsche Telekom Root CA2**. Tap on the configuration profile **eduroam** here and tap **Remove (loaded) profile** in the next window.



Please enter your passcode for **Enter your passcode**, then tap **Remove**. The overview page for the profiles then opens. Only **Deutsche Telekom Root CA2** should be visible now. This must be removed in the same way as the **eduroam** profile.



This time, tap on the configuration profile **Deutsche Telekom Root CA2**, and tap **Remove (loaded) profile** in the next window, enter the device passcode and then tap **Remove**. Neither the **eduroam** nor the **Deutsche Telekom Root CA2** profile should now be present in the **Profiles** overview.

After successfully uninstalling the old profiles, you can return to **6.2 'Initial installation'** and follow the instructions there.

6.2 Initial installation

The iOS eduroam config file can be found here:

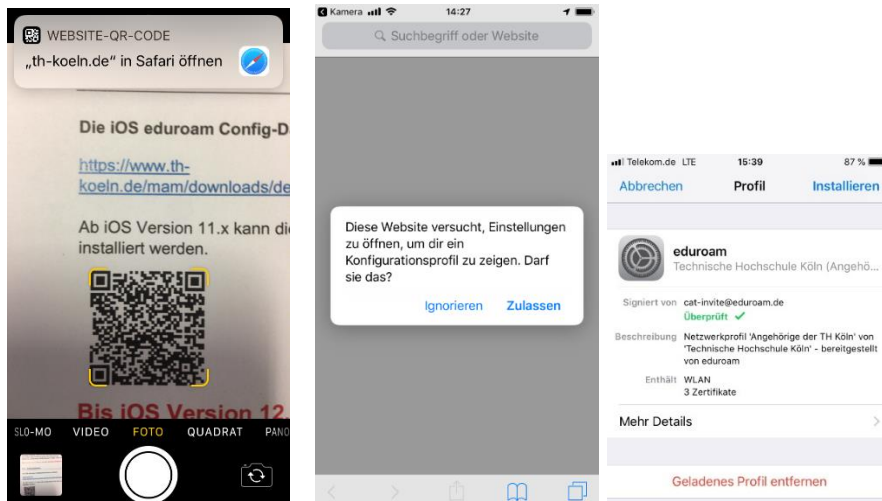
https://www.th-koeln.de/mam/downloads/deutsch/hochschule/organisation/eduroam_konfigurationsdatei.mobileconfig

From iOS version 11.x, the config file can be accessed, downloaded, and installed directly via the QR code.



Up to iOS version 12.1x

Please scan the QR code with the standard camera (DO NOT take a photo!!!) or access the config file via the link above in the Safari browser.

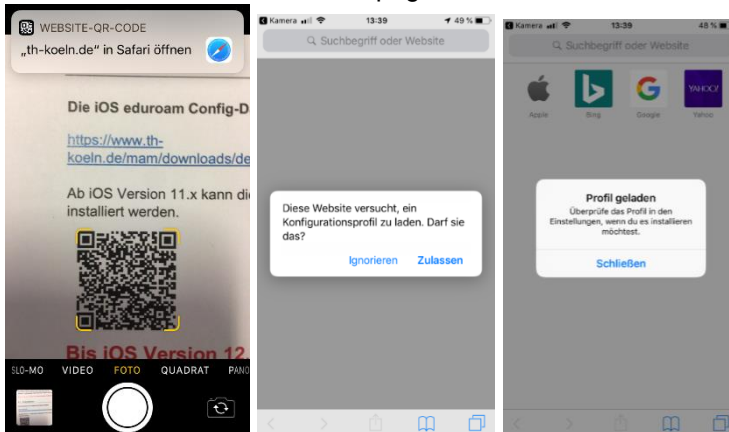


Open the displayed address in Safari, select **Allow**. The **eduroam** profile will be downloaded and the installation will start immediately. Tap **Install** here.

Continue with 6.3 'Common further installation steps' (page 36)

iOS version 12.2x or later

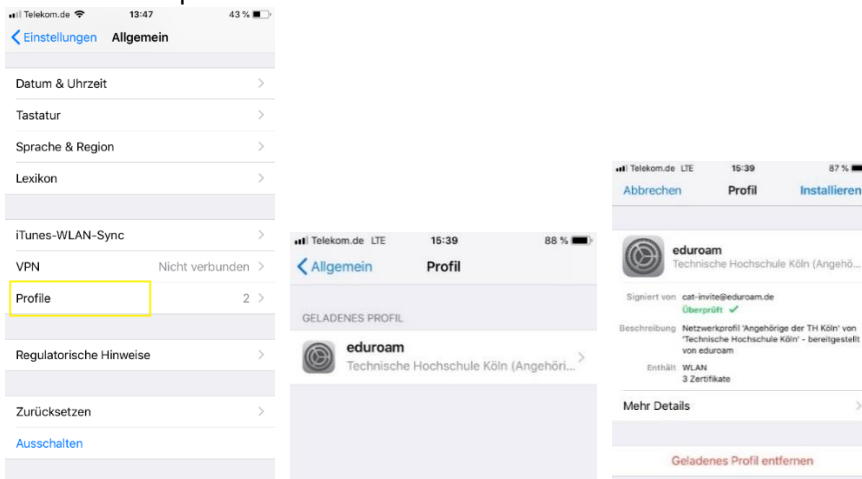
Please scan the QR code from page 34 with the standard camera (DO NOT take a photo!!!)



Open the displayed address in Safari, select **Allow**. The **eduroam** profile will be downloaded and still has to be installed. Tap **Close** here



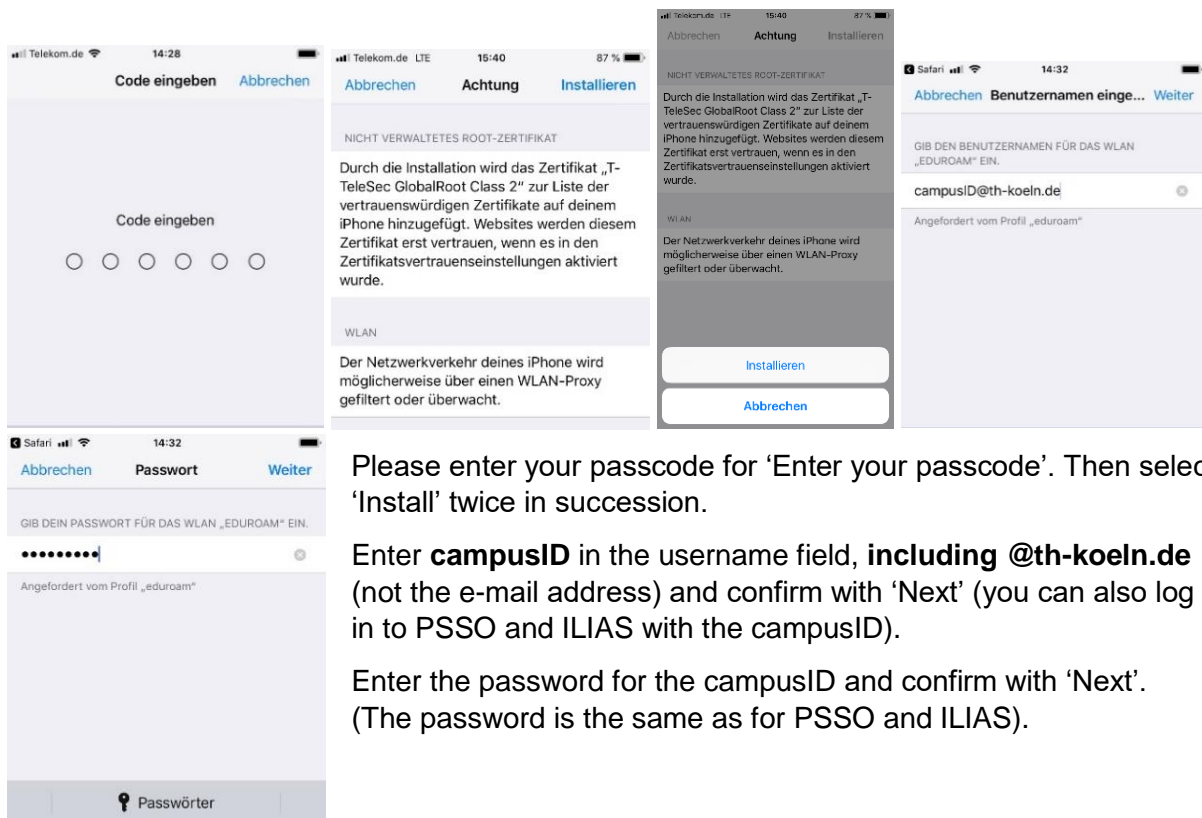
On the Home screen, find and open the **Settings** icon. Scroll down the settings until you find **General** in the menu. Open the **General** menu.



Scroll down the 'General' menu until 'Profile' appears. Open the 'Profile' menu. The 'eduroam' profile can be installed here. Tap 'eduroam' to enter the installation menu. Tap 'Install' here.

Continue with 6.3 'Common further installation steps' (page 36)

6.3 Common further installation steps

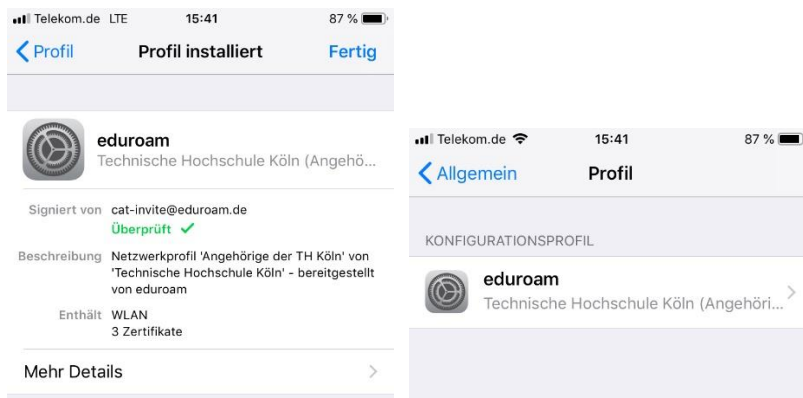


Please enter your passcode for 'Enter your passcode'. Then select 'Install' twice in succession.

Enter **campusID** in the username field, **including @th-koeln.de** (not the e-mail address) and confirm with 'Next' (you can also log in to PSSO and ILIAS with the campusID).

Enter the password for the campusID and confirm with 'Next'. (The password is the same as for PSSO and ILIAS).

Complete the installation with 'Done'.



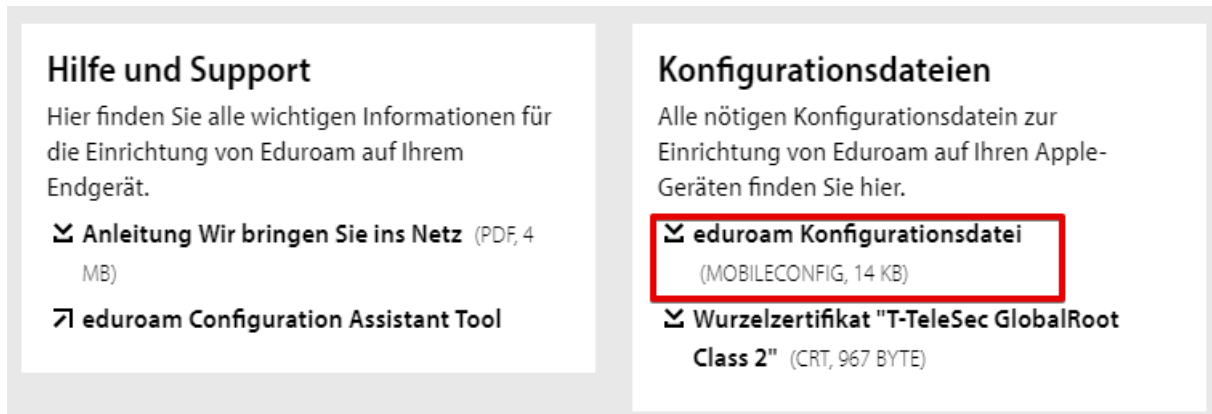
If all of the login details have been entered correctly, the iPhone automatically logs on to the 'eduroam' WiFi.

7 Eduroam on macOS

You need an active Internet connection to set up *eduroam*.

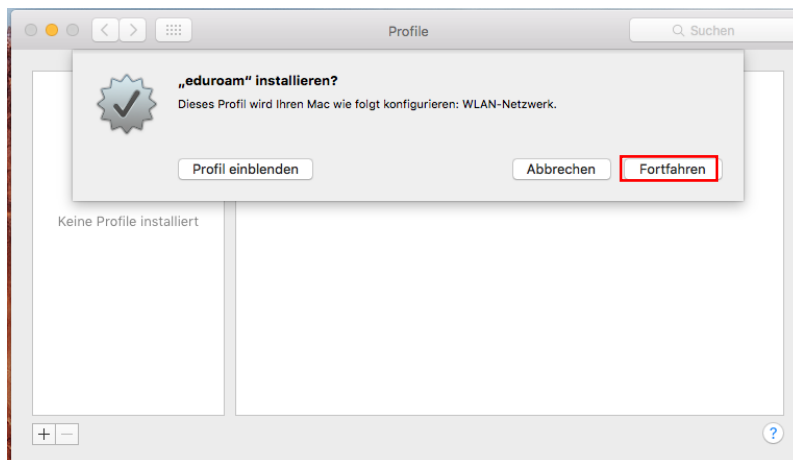
Open the page <http://www.th-koeln.de/eduroam> in your Internet browser and download the Apple configuration file.

Please note: In some browsers, you have to start the download manually by clicking on the right mouse button and 'Save as'. Do not save the file as .txt, but as .mobileconfig.

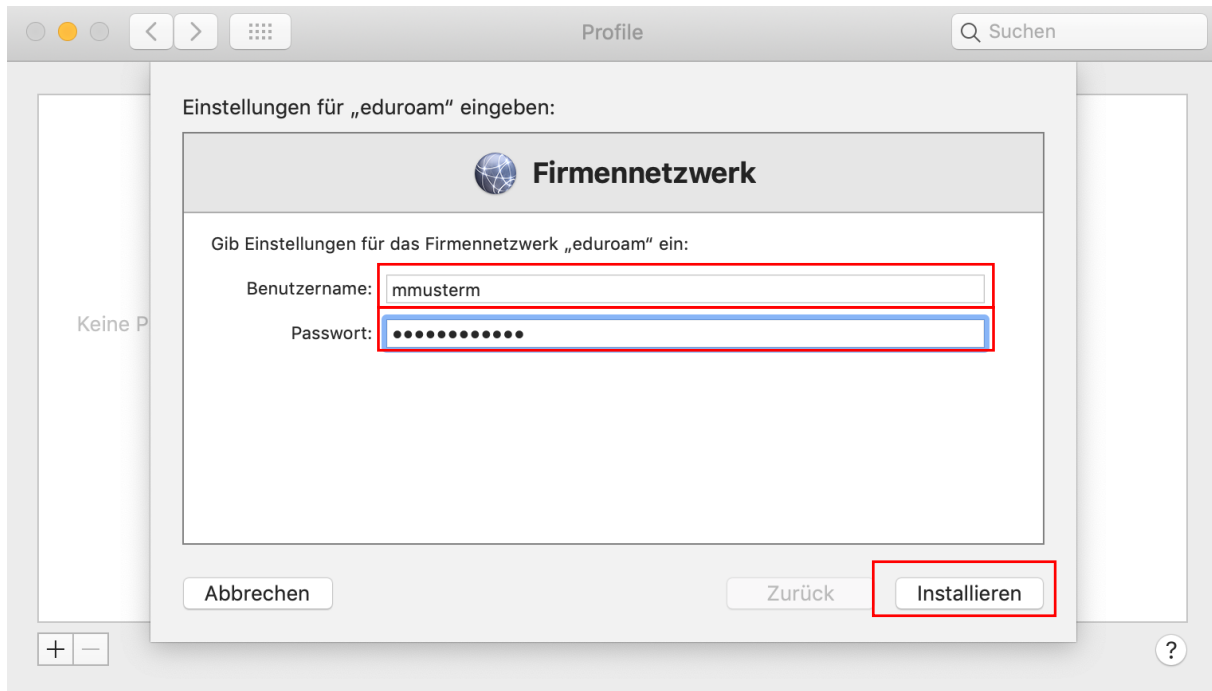


The screenshot shows two columns of information on the eduroam website. The left column, titled 'Hilfe und Support', contains a paragraph about finding information and two links: 'Anleitung Wir bringen Sie ins Netz' (PDF, 4 MB) and 'eduroam Configuration Assistant Tool'. The right column, titled 'Konfigurationsdateien', contains a paragraph about configuration files and two links: 'eduroam Konfigurationsdatei' (MOBILECONFIG, 14 KB) and 'Wurzelzertifikat "T-TeleSec GlobalRoot Class 2"' (CRT, 967 BYTE). The 'eduroam Konfigurationsdatei' link is highlighted with a red box.

Accept the request to install the *eduroam* profile by clicking on **Continue**.



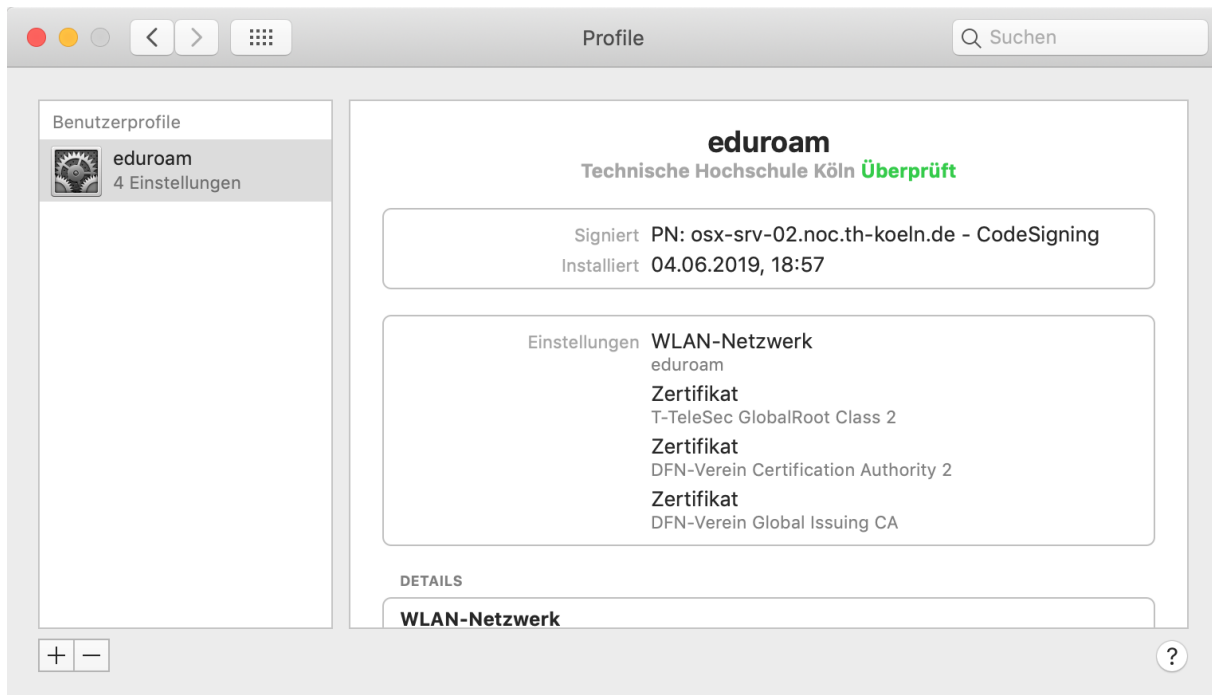
Enter your **campusID** and your **campusID password** in the next dialog and then click on **Install**.



In the next step, please authenticate yourself on your Mac with your user account as you will be making changes to the system settings during the installation.



The new profile will then be installed on your Mac.



Please click on the network icon in the upper menu bar and activate the *eduroam* connection.



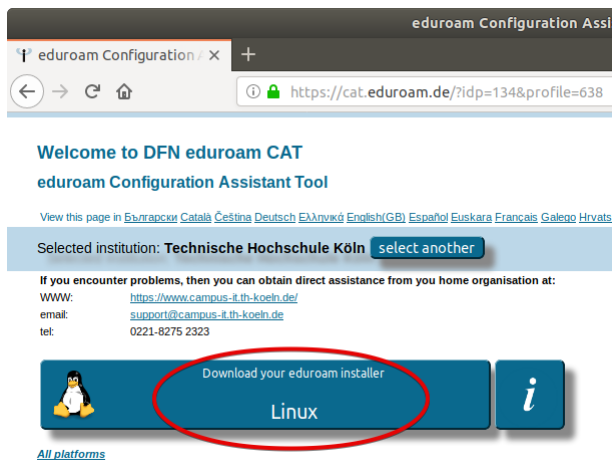
8 Eduroam on Ubuntu

You need an active Internet connection to set up *eduroam*.

Open the page <https://cat.eduroam.de/?idp=134&profile=638> in your Internet browser.

The tool recognizes the operating system that you are using and offers the appropriate installation data for download.

If you need the installer for another operating system, please click on *All platforms*.



Download the installer.

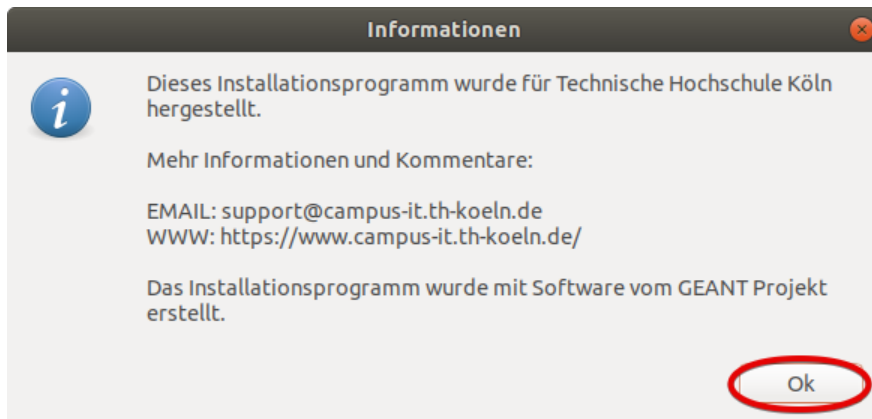
Then open the terminal and enter the following commands to start the installation:

```
cd ~/Downloads
chmod +x eduroam-linux-THK-members_of_TH_Koeln.sh
./ eduroam-linux-THK-members_of_TH_Koeln.sh
```

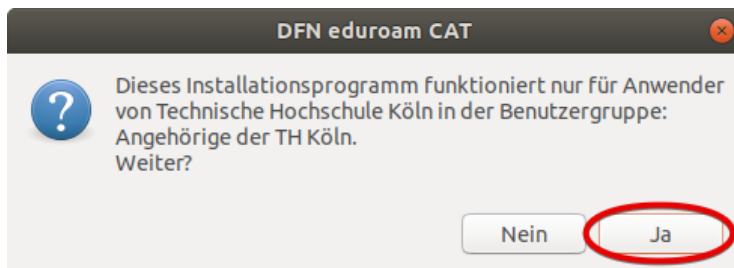
You may need to change the path to the downloaded file.

```
ubuntu@ubuntu: ~/Downloads
Datei Bearbeiten Ansicht Suchen Terminal Hilfe
ubuntu@ubuntu:~$ cd ~/Downloads
ubuntu@ubuntu:~/Downloads$ chmod +x eduroam-linux-THK-Angehoeerige_der_TH_Koeln.sh
ubuntu@ubuntu:~/Downloads$ ./eduroam-linux-THK-Angehoeerige_der_TH_Koeln.sh
```

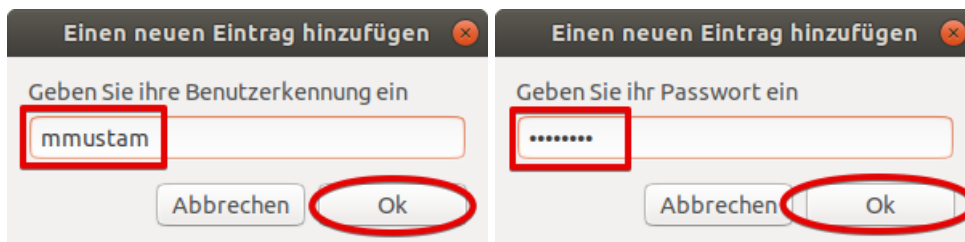
This notification follows. Please click on **OK** here.



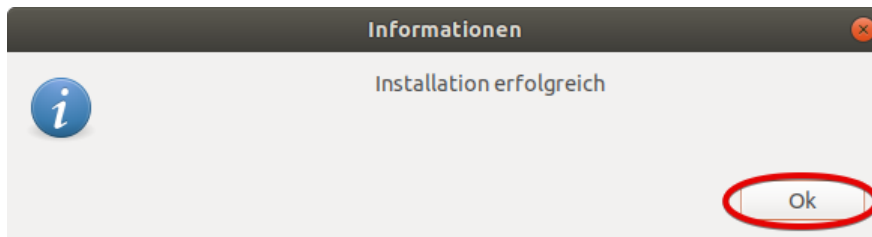
Please click on **Yes** in the following dialog.



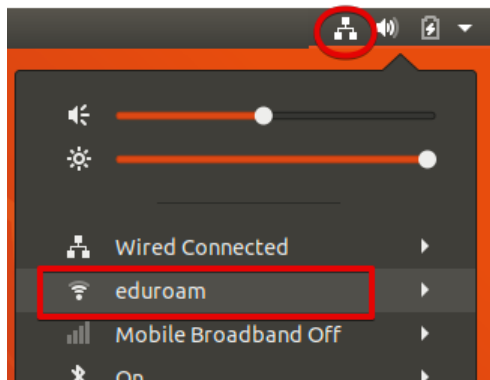
Enter your **campusID** in the next window.
Then enter your **campusID password**.
The password must be input again in the next window.



The installation is now complete.



The eduroam network should connect automatically.



10 Contact

Campus IT Service Desk

You can contact our Service Desk on the telephone number +49 (0)221/8275-2323 during the following office hours:

Monday - Friday 8:00 am - 6:00 pm
Saturday 10:00 am - 2:00 pm

You can also contact the Service Desk by e-mail at support@campus-it.th-koeln.de.

On-site support

Deutz campus service hours

Betzdorfer Str. 2
50679 Cologne
Room ZO-03-20
Monday - Friday 8:00 am - 6:00 pm
Saturday 10:00 am - 2:00 pm

Südstadt campus service hours

Ubierring 48
50678 Cologne
University Library
2nd floor, Room 203
Monday, Tuesday
Thursday - Saturday 12:00 pm - 4:00 pm

Gummersbach campus service hours

Steinmüllerallee 1
51643 Gummersbach
Main building, Room 1.102
Monday - Friday 11:00 am - 4:00 pm

Leverkusen campus (Chempark) service hours

Kaiser-Wilhelm-Allee
51368 Leverkusen
Building E39, Room 044d
Wednesday 10:00 am - 2:00 pm

