How to set up devices for the use of university Wi-Fi networks

- only for members of Goethe University Frankfurt am Main -

Version 1.4
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Windows
You have two options for setting up eduroam on a Windows system:

**Goethe-PEAP**

**Manuel version**

**Goethe-PEAP**

- Download [Goethe-PEAP.exe](#) and run it.

- Then the script starts and installs the Wi-Fi networks “FLUGHAFEN” and “eduroam”.

![Figure 1 Win PEAP-Script](#)
• Now join eduroam

You can usually do this at the bottom right of the screen. For Windows 10, click one of the icons shown below. For other versions of Windows, the icons are similar.

Figure 2 Win 10 WI-FI symbol without ethernet

Figure 3 Win 10 WI-FI symbol with ethernet
Finally, enter your user credentials:

User Name:   <HRZ-Account>@uni-frankfurt.de
Password:    <HRZ-Password>

Figure 4 Win 10 WI-FI user credentials
Manuel version
In the various versions of Windows, the way to manually setting up a wireless network differs. This is shown as an example on Windows 10. In the gray box you will find the way for Windows 7.

### Windows 7:
- Control Panel
  - View network status and tasks
  - Manage wireless networks
  - Add
  - Manually create a network profile

### Windows 10:
- In the “Network and Internet settings”, click "Network and Sharing Center".

![Win 10 Network and Internet settings](image)

*Figure 5 Win 10 Network and Internet settings*
• There you click on “Set up a new connection or network”.

![Image of Win 10 Network and Sharing Center](image-url)  
*Figure 6 Win 10 Network and Sharing Center*

• Now select “Manually connect to a wireless network”.

![Image of Win 10 New Connection or Network](image-url)  
*Figure 7 Win 10 New Connection or Network*
- Enter the Network name and Security type and then click “Next”.

  Network name: eduroam  
  Security type: WPA2-Enterprise

  ![Image of network entry](image)

*Figure 8 Win Manually connect to a wireless network*

- Click on “Change connection settings”.

  ![Image of successful connection](image)

*Figure 9 Win Wireless network created*
- Select “Microsoft: Protected EAP (PEAP)” and open „Settings“. 

*Figure 10 Win Properties wireless network*
• Enable “Verify the server’s identity by validation the certificate”.

• Select “Connect to the these servers” and enter the following:
  (the whole red text must be in one line, remove any line breaks)

  firlefanz.server.uni-frankfurt.de;doppelterdohmen.server.uni-frankfurt.de;schepperaus.server.uni-frankfurt.de;unsemanusscinoed.server.uni-frankfurt.de;herrkonzausberg.server.uni-frankfurt.de;schaedelharry.server.uni-frankfurt.de;tankstellencarlo.server.uni-frankfurt.de;radius.server.uni-frankfurt.de

• Select “Trusted Root Certification Authorities” “USERTrust RSA Certification Authority” and “T-TeleSec GlobalRoot Class 2”.

• Enable “Enable Identity Privacy” and enter eduroam.

• Click “Configure”.

Figure 11 Win Properties of Protected EAP
• Make sure that the option in window Figure 12 is not selected. After that you can close both windows with “OK”.

![Figure 12 Win MSCHAPv2 Properties](image)

• In the window (Figure 13) open the “Advanced settings”. In the new window (Figure 14) choose as the authentication mode “User authentication”.

![Figure 13 Win Properties wireless network](image)  
![Figure 14 Win Advanced settings](image)

• You can close all windows with “OK”.

Now join eduroam

You can usually do this at the bottom right of the screen. For Windows 10, click one of the icons shown below. For other versions of Windows, the icons are similar.

Figure 15 Win 10 WI-FI symbol without ethernet

Figure 16 Win 10 WI-FI symbol with ethernet
Finally, enter your user credentials:

**User Name:** <HRZ-Account>@uni-frankfurt.de

**Password:** <HRZ-Password>

*Figure 17 Win 10 WI-FI user credentials*
Mac OSX
This guide is based on macOS Sonoma (14.2). There were minimal differences in older versions.

Configuration file
- Load and open the configuration file Goethe-Uni-FFM-Wifi.mobileconfig.

- Go to “System Settings” and under “Privacy & Security” open “Profiles”.

![Figure 18 macOS Profiles]
• Double-click the new profile.

![Figure 19 macOS Profile review](image19)

• Make sure that the profile is signed by the “Johann Wolfgang Goethe-Universität Frankfurt am Main SdöR” and then click on “Install”.

![Figure 20 macOS Profile signature](image20)
• Confirm with “Continue” in the next window.

![Figure 21 macOS Profile security question](image1)

• Enter your user credentials and click “Next” / “Install”:
  
  User Name:  
  
  `<HRZ-Account>@uni-frankfurt.de`
  
  Password:  
  
  `<HRZ-Passwort>`

![Figure 22 macOS User credentials eduroam](image2)
- Click “Install” again.
- The installation is completed.
Due to the amount of variations of GUIs and configuration files, we can only provide basic information, but unfortunately no in-depth support. We would still like to ask you to set up your device as safely as possible.

<table>
<thead>
<tr>
<th>SSID</th>
<th>eduroam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security type</td>
<td>WPA2-Enterprise</td>
</tr>
<tr>
<td>Encryption type</td>
<td>AES / CCMP</td>
</tr>
<tr>
<td>CA Certificate</td>
<td>USERTrust_RSA_Certification_Authority</td>
</tr>
<tr>
<td>Outer / Anonymous Identity</td>
<td><a href="mailto:eduroam@uni-frankfurt.de">eduroam@uni-frankfurt.de</a></td>
</tr>
<tr>
<td>Network authentication</td>
<td>PEAP</td>
</tr>
<tr>
<td>Inner authentication</td>
<td>MS-CHAPv2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Username</th>
<th>&lt;HRZ-ACCOUNT-USER&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Password</td>
<td>&lt;HRZ-ACCOUNT-PASSWORD&gt;</td>
</tr>
</tbody>
</table>

| RADIUS server       | firlefanz.server.uni-frankfurt.de |
|                     | scheppakraus.server.uni-frankfurt.de |
|                     | doppelterdohmen.server.uni-frankfurt.de |
|                     | schaedelharry.server.uni-frankfurt.de |
|                     | unsermannauseinoed.server.uni-frankfurt.de |

| RADIUS server altSubjectName | DNS:doppelterdohmen.server.uni-frankfurt.de |
|                              | DNS:firlefanz.server.uni-frankfurt.de |
|                              | DNS:schaedelharry.server.uni-frankfurt.de |
|                              | DNS:scheppakraus.server.uni-frankfurt.de |
|                              | DNS:unsermannauseinoed.server.uni-frankfurt.de |

As you can see in the example of Ubuntu 18.04.2, not everything can be configured in it.

*Figure 26 Ubuntu manuel*
iOS

Configuration file

- Download and run Goethe-Uni-FFM-Wifi.mobileconfig.
  
  From iOS 12.1.1 onward, the profile installation must be started manually via Settings.

Figure 27 iOS Download profile

Figure 28 iOS Profile downloaded

Figure 29 iOS Settings

Figure 30 iOS Start profile installation
• Click “Install”, enter if necessary the passcode, then click “Next” and “Install” to install the two certificates.
- Enter your user credentials:

  User Name:  \(<HRZ\text{-}Account>@uni\text{-}frankfurt.de\)
  Password:  \(<HRZ\text{-}Password>\)
The installation is complete, click “Done” to close it.

Figure 40 iOS Profile installed
Android

When setting up eduroam on an Android device, a distinction must be made as to whether the device is operated with Android 13 and lower or with Android 14 and higher. The geteduroam app does not yet support Android 14 at the time of writing this document.

**Android 13 and lower (geteduroam)**

**Android 14 and higher / Manuel installation**

**Android 13 and lower (geteduroam)**

- Install the [geteduroam](#) app from the Google Play Store and open it.
• Search for “Johann Wolfgang Goethe-Universität Frankfurt am Main” and select the entry.
- Enter your user credentials and save the networks:

  User Name: <HRZ-Account>@uni-frankfurt.de
  Password: <HRZ-Password>

Figure 47 geteduroam credentials

Figure 48 geteduroam save network

Figure 49 geteduroam erfolgreich
Manuel installation / Android 14

Before you start, note that this option is not as secure as the configuration with the geteduroam tool. You can't manually edit all the settings. However, it is currently the only way to set up eduroam for Android 14.

- First download the root certificate USERTrust RSA Certification Authority onto your Android device.

You can either follow the link above or use the following QR code. Hold the camera app via the QR code and at the bottom appears the ability to follow the same link as above. Download the certificate.
Then the network can be configured via Settings → Network & Internet → WI-FI → Add network.

- **EAP method**: PEAP
- **Phase 2 authentication**: MS-CHAP v2
- **CA certificate**: The newly downloaded certificate
- **Domain**: uni-frankfurt.de
- **Identity**: `<HRZ-ACCOUNT>`
- **Anonymous Identity**: eduroam
- **Password**: `<HRZ-PASSWORD>`

To use the downloaded certificate, you must install it the first time. The name for the certificate can be freely chosen.

![Choose CA certificate](image1)

![Install CA certificate](image2)
The final settings should look like this.
**FLUGHAFEN**
The setup of eduroam and FLUGHAFEN are identical. Just replace the network name eduroam with FLUGAHFEN.
QR-Codes

Goethe-PEAP.exe

iOS- / Mac OSX- Configuration file

Android geteduroam

Figure 58 QR-Code Goethe-PEAP.exe

Figure 59 QR-Code mobileconfig

Figure 60 QR-Code geteduroam app