How do I configure my WiFi access?

In the FeM-Net, there are multiple WiFi networks, which are available on the campus:

- FeM.PSK
- FeM.1X
- FeM_Welcome

FeM_Welcome is an open network to which everyone can connect to. It offers information about the FeM-Net as well as an automated device regsistration system. A full internet access is not available in this network.

The networks FeM.PSK and FeM.1X both provide a full FeM-Net access and internet access. To use these networks, devices must be registered beforehand.

If a device can't connect to FeM.PSK or FeM.1X, it might help to disable MAC-randomization.
Especially newer devices are affected by this.

FeM.PSK

To use FeM.PSK, a password is required. This password will be sent via email after the first device is registered for WiFi. It is also possible to generate a new password afterwards in case the password gets lost. Alternatively, the password can also be set in MyInfo. For this, the device must be connected to the FeM-Net!

The password email also contains information about the devices the password is valid for. However, usually passwords are valid for all registered devices.

FeM.1X

The network FeM.1X uses so-called 802.1X authentication. With this mechanism, it is possible to authenticate using a username and password. However, the setup is more difficult. If the Uni-Login has been submitted with the application for admission, the university login credentials (username: four letters, four numbers) can be used for loggin in to the WiFi network. Otherwise, a MyInfo login has to be created. For this, the device must be connected to the FeM-Net (e.g. using the FeM_Welcome WiFi network).

Login credentials

Depending on which type of credentials shall be used, a different configuration must be used:

MyInfo credentials

- Username: USERAME or USERNAME@auth.fem.tu-ilmenau.de
  - (replace USERNAME with the MyInfo username)
- Password: use the MyInfo password
- anonymous Identity: anonymous@auth.fem.tu-ilmenau.de

Uni-Login

- **This method can only be used if a university login was specified on the application for admission**
- Username: UNI-USERNAME@fem.tu-ilmenau.de
  - (replace UNI-USERNAME with the university login username, e.g. hada1234)
- Password: use the password from the university login
- anonymous Identity: anonymous@fem.tu-ilmenau.de

Certificate

To prevent attackers from stealing login credentials, the certificate needs to be configured for the WiFi network. This certificate is also linked as download in the respective configuration sections.

For the download, the device must be connected to the FeM-Net, e.g. using the FeM_Welcome WiFi network.

WiFi network configuration

Depending on your operating system, the configuration may vary:

Apple MacOS and iOS

The settings for FeM.1X can not be entered manually. Instead, this file must be imported (only available in the FeM-Net, e.g. using FeM_Welcome). When being asked for login credentials, the credentials from the above section must be used.

Linux

Depending on the network configuration software, different settings must be applied, but the parameters are always the same:

- Type: WPA2 enterprise with TTLS and PAP
- Identity: see credentials
- Anonymous identity: see credentials
- Password: see credentials
- Client certificate: (none)
- CA certificate: download

- Domain: fem.tu-ilmenau.de

Android

The settings are as follows:

- EAP-Type: TTLS
- Phase 2: PAP
- Server certificate: N/A
- CA certificate: download
- Identity: see credentials
- Anonymous identity: see credentials
- Password: see credentials
- Domain: fem.tu-ilmenau.de

See Also

- Information about the FeM-Net
- How can I disable MAC-randomization?

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