

Information on the scope of use of intranet/Internet access in public areas. at the University of Passau

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This document describes the possibilities of using the Intranet/Internet outside offices (where there is a direct possibility of use anyway).

1. Overview of the access options

The following access options are offered:

| like | where | With what | who | Comments |
|---------|---|--|---|---|
| OpenVPN | Campus network Lecture halls Internet | Windows Linux Mac OS X | Employees Students | |
| via WWW | Lecture halls | all devices with WWW browser | Employees Students special clearance codes | exchanged data are transmitted unencrypted |
| via WWW | Campus network | all devices with WWW browser | Employees special WCM codes | exchanged data are transmitted unencrypted Use via NAT gateway |
| via WWW | open library network | all devices with WWW browser | Library users | only WWW usage via proxy |
| 802.1x | eduroam-WLAN | 802.1x-enabled endpoints that support EAP/TLS | Employees Students | |
| 802.1x | eduroam-WLAN | 802.1x-capable endpoints that support EAP and the authentication mechanism of the home institution | Members of an institution participating in DFNRoaming/eduroam | |

Explanations:

- Column "how": designates the software or technology used to establish access.
- OpenVPN: OpenVPN is an open source software, i.e. it is freely available in source code and is therefore basically not only executable on the platforms listed under "with what". The software enables the establishment of an encrypted and therefore tap- and tamper-proof connection to the Uninetz. Download the software and the configuration files from the Uninetz at

<http://www.zim.uni-passau.de/dienstleistungen/netzwerk-und-server/netzwerkzugang/openvpn/>

- via WWW: No software is required, but the user activates his Internet access for a certain time with his WWW browser.
- 802.1x: Here, the user already authenticates himself to the access point in the WLAN, whereby the data exchange on the WLAN link to the access point is encrypted. Depending on the device used, additional software is required for use.
- Column "where": indicates the network where the device that wants to connect to the Uninet is located.
 - Campus network: Network access (wired or wireless with SSID "CampusUniPassau" or "CampusUniPassau-5GHz") in publicly accessible areas on the university campus.
 - Lecture halls: wired network connections in lecture halls and seminar rooms for lecturers.
 - open library network: wired network connections in the reading rooms of the university library.
 - eduroam-WLAN: wireless network access (SSID "eduroam" or "eduroam-5GHz") for university members and members of other institutions participating in the DFNRoaming/eduroam service.

2. User classes and access rights

Depending on the network and type of user, assignment to a user class is made according to the following table:

| who | Employees | Student | Guest with activation code | Library users with OPAC Identifier | DFNRoaming/eduroam participants |
|----------------------|------------------|----------------|-----------------------------------|---|--|
| where | | | | | |
| Campus network | PERS-PUB | STUD-PUB | PERS-PUB | | |
| Lecture halls | HOERSAAL | HOERSAAL | HOERSAAL | | |
| open library network | | | | UBGUEST | |
| eduroam-WLAN | PERS-PUB | STUD-PUB | | | ROAM |
| Internet | PERS-EXT | STUD-EXT | | | |

Empty fields in the table mean that the access type in question is not available to the user.

The user classes are associated with the following access rights:

a) Accesses within the Uninet (to IP addresses starting with 132.231.):

| User class -> | | | PERS- PUB | STUD- PUB | PERS- EXT | STUD- EXT | HOER- ROOM | UB- GUEST | ROAM |
|---------------|---|------------------------------------|--------------|--------------|--------------|--------------|---------------|--------------|---|
| Service | Protocol (Port) | Server | | | | | | | |
| WWW- PROXY | (3128/tcp) | www- cache.rz.uni- passau.de | yes | yes | no | no | yes | yes | the firewall rules for access from the internet to uni- internal servers apply |
| WWW | HTTP (80/tcp) HTTPS (443/tcp) | all | yes | | | | | no | |
| FTP | FTP (21/tcp) | | | | | | | | |
| SSH | SSH (22/tcp) | | | | | | | | |
| POP3 | POP3 (110/tcp) POP3S (995/tcp) | | | | | | | | |
| IMAP | IMAP (143/tcp) IMAPS (993/tcp) | | | | | | | | |
| SMTP | SMTP (25/tcp) SSMTP (465/tcp) Submission (587/tcp) | | | | | | | | |
| NEWS | NNTP (119/tcp) NNTPS (563/tcp) | | | | | | | | |
| RDP | (3389/tcp) | | | | | | | | |
| VNC | (5900/tcp) (5901/tcp) | | | | | | | | |
| Printer | PDL (9100/tcp) | | | | | | | | |

Additional access rights may have been granted by operators of dedicated servers on the university intranet.

b) Accesses to outside the Uninetz (to the Internet): The following rights apply here:

- For the user classes PERS-PUB, STUD-PUB, HOERSAAL and ROAM: With a few exceptions necessary for security reasons, connections to the Internet can be established as desired. In particular, it is not permitted to send e-mails via SMTP port 25/tcp directly to the Internet; one of the university's e-mail gateways can be used instead (e.g. mail.rz.uni-passau.de). If the e-mail provider supports it, instead of port 25/tcp the port 587/tcp or (for

Secure SMTP) port 465/tcp can be used to send mail directly to the Internet.

- For the user classes PERS-EXT and STUD-EXT: These user classes already access the university network from the Internet via a secure network connection ("VPN tunnel"). Connections to the Internet do not go through this tunnel, but directly (so-called "split tunneling"). Access to the Internet is not possible via the tunnel.
- User class UBGUEST: Internet access is only possible via the ZIM proxy.

3. Bandwidth restrictions

To ensure that network use in public areas does not adversely affect office workplaces, bandwidth restrictions can be imposed on certain user classes. This bandwidth restriction can be adjusted to current requirements from time to time.

The bandwidth restriction *only* applies to access to the Internet. There is no bandwidth restriction within the university intranet. It is therefore recommended to use the ZIM proxy for WWW in order to be able to surf without bandwidth restriction. (The WWW proxy is not available for users of the ROAM class).

4. reserved IP address ranges (information for diagnostic purposes)

| Address range | Network |
|------------------|------------------------------------|
| 132.231.34.0/24 | open library network |
| 132.231.178.0/24 | VPN Campus Network Campus Students |
| 132.231.184.0/23 | VPN Campus Network Employees |
| 132.231.189.0/24 | VPN Internet students |
| 132.231.191.0/25 | VPN Internet employees |
| 132.231.212.0/22 | eduroam employees |
| 132.231.160.0/20 | eduroam students |
| 132.231.216.0/22 | Campus network WWW activation NAT |
| 132.231.220.0/23 | Auditorium Network |
| 192.168.16.0/21 | Campus network Campus |
| 192.168.48.0/20 | eduroam guests |