

## VPN guide for Linux – Ubuntu

### What is VPN and what is VPN used for?

VPN stands for **V**irtual **P**rivate **N**etwork and offers the possibility to establish a secure and encrypted connection via the insecure and public internet. The prerequisite for setting up a connection is an existing Internet connection. It is necessary that the protocol is not blocked by the local provider.

In addition to encryption, when a VPN connection is established, the client is assigned an official Internet address (IP address) from the address range of the University of Bonn and thus has access to services that are otherwise only available to computers at the university.

Furthermore, the VPN connection can only be established after successful authentication with the University of Bonn's Uni-ID.

Establishing a VPN connection to the VPN servers of the University of Bonn is currently required in the following cases:

- Use of the WLAN at the University of Bonn
- Use of the vast majority of literature databases and electronic journals (eMedia) from home or on the road
- Working from the home office

Please note that a service may be subject to further restrictions and VPN is not sufficient for access in all cases.

#### Setting up VPN

There are two different servers:

- Connections from external or home:
- https://unibn-vpn.uni-bonn.de
- Connections from the WLAN or the network of the University of Bonn **internally**: <u>https://unibn-wlan.uni-bonn.de</u>



# Step by step guide

1. Open a terminal window with, for example, the	
key combination <strg><alt><t>.</t></alt></strg>	
2. enter the following commands:	
sudo apt install network-manager-oper	nconnect
sudo apt install network-manager-oper	iconnect-gnome
3. Enter aumin password and install.	
5 Select the settings for the " <b>Network</b> " via	Aktivitäten 🗘 Einstellungen 9. Mai 13:48 📩 🐗 🍿
"Activities/System settings" and click on the +	Q Einstellungen ≡ Netzwerk – σ ×
sign next to VPN.	Netzwerk
	Bluetooth
	Verbunden - 1000 Mb/s
	Darstellung VPN +
	A Benachrichtigungen     Nicht eingerichtet
	Multitasking     Netzwerk-Proxy     Aus
	···· Programme >
	S Freigabe
6. Here, "VPN connection compatible with Cisco	Abbrechen VPN hinzufügen
AnyConnect (openconnect)" must be selected.	Multiprotokoll-VPN-Client (Openconnect)
	Kompatibel mit Cisco AnyConnect, Juniper Network Connect, Junos Pulse und PAN GlobalProtect SSL VPNs.
	OpenVPN
	Kompatibel zum OpenVPN-Server.
	Point-to-Point Tunneling Protocol (PPTP) Kompatibel mit Microsofts und anderen PPTP VPN-Servern.
	Aur Datal importance
7. Set the following settings:	Informationen Identität IPv4 IPv6
Name <sup>,</sup> any	Name VPN 1
	Allgemein
VPN protocol: Cisco AnyConnect	VPN-Protokoll Cisco AnyConnect oder Openconnect ~
Gateway (for external connection): <u>unibn-vpn.uni-</u>	Gateway unibn-vpn.uni-bonn.de
bonn.de	CA-Zertifikat
CA certificate: via Browse under	Proxy
	Sicherheitsscanner-Trojaner erlauben (CSD)
/etc/ssi/certs/1-1eleSec_GlobalRoot_Class_2.perm	Trojaner-CSD-Wrapper-Skript
to select the certificate.	Ermitteltes Betriebssystem
	Zertifikat-Legitimierung
	Benutzerzertifikat (keine)
	Geheimer Schlüssel (keine)



<ol> <li>Leave all other details unchanged and save the connection via the button "Add".</li> </ol>	



### Using the VPN Client

<ol> <li>Now the VPN connection can be switched on and off as desired via the slider.</li> </ol>	og 9. Mai 13:59 🛃 🚥 🌒 🛍
	Netzwerk – 🖻 X
	Kabelgebunden +
	Verbunden - 1000 Mb/s
	VPN +
	VPN 1 VPN
	Netzwerk-Proxy Aus
<ol> <li>For authentication, enter the Uni-ID (without <u>@uni-bonn.de</u>) with the corresponding password and click the button "Connect".</li> </ol>	Connect to VPN "VPN 1"     ×       VPN host unibn-vpn.uni-bonn.de ~     Connect
	Username: UNI-ID
	Password:
	Save passwords Cancel Login
	> Log
	Close
<ol> <li>If you would like to use the VPN client within the university in order to be able to use certain services, you must create another VPN connection according to the instructions above. All details are identical, except that the gateway must now be entered as: <u>unibn- wlan.uni-bonn.de</u>.</li> </ol>	