IHSVPN – IHS Secure Network Access

Updated 2017-03-17

**Recommended setup:** Secure Socket Tunneling Protocol

Type of VPN: **SSTP** (Secure Socket Tunneling Protocol)

VPN Server/Gateway: **vpn.ihs.ac.at**

IHS network drives: Server **files.ihs.ac.at**

SMB-Shares **home, user, group**

**Alternative setup:** Layer 2 Tunneling Protocol

Type of VPN: **L2TP/IPsec** (Layer 2 Tunneling Protocol)

Pre-shared key: **ihsvpn**

VPN Server/Gateway: **vpn.ihs.ac.at**

IHS network drives: Server **files.ihs.ac.at**

SMB-Shares **home, user, group**

**Firewall Troubleshooting:**

If you are using firewall software you may have to disable or change the firewall's settings: **UDP Ports 500, 4500, 1701** and **Protocol 50 (ESP)** must be able to **pass through your firewall**.

This option may be called “L2TP VPN”.
Linux Ubuntu 16.04 LTS (Xenial Xerus) and newer

Prerequisites
- You need to have a working Internet connection.
- You need to know how to open the terminal and enter commands.

Installation

Open the Terminal: Search for “terminal” via the menu search bar, or find it in the Menu => System Tools.

Now, add the third party repository https://launchpad.net/~eivnaes/+archive/ubuntu/network-manager-sstp.

Be aware that the software contained within third party repositories is not maintained by Ubuntu, and neither by IHS-IT!

Type, and then press enter:

```
sudo apt-add-repository ppa:eivnaes/network-manager-sstp
```

Enter your password and wait for the process to finish with OK:

```
OK
```

Next, update your local repository information.

Type, and then press enter:

```
sudo apt-get update
```

Then, install the package “network-manager-sstp-gnome” from the repository.

Type, and then press enter:

```
sudo apt-get install network-manager-sstp-gnome
```

A few packages will be added automatically for installation. (“libsstp-client0”, “network-manager-sstp”, “sstp-client”) Confirm your choice and wait for the installation to finish.
VPN Configuration (SSTP)

Click on your network connection’s icon (top row menu bar, next to time display) and select *Edit Connections*.

Click *Add*.

Expand the drop-down bar and select *Secure Socket Tunneling Protocol (SSTP)* from the Section *VPN* at the bottom of the list.
Click the Create button.

Next, fill in the form.

*Connection name:* IHSVVPN (or another recognizable name)

*Gateway:* **vpn.ihs.ac.at**

*User name:* your IHS user name

Do not close the window yet.

Click the Advanced... button at the bottom of the window.
Now, de-select all Authentication types except MSCHAPv2. Activate Use Point-to-Point encryption (MPPE) and set it to 128-bit (most secure). Leave the other settings alone and confirm the SSTP Advanced Options with OK.

Next, Save your IHSVPN connection. Finally, close the Network Connections window.
Connecting to VPN

Right-click the network manager icon, and select VPN connections – IHSVPN to connect.

Enter your IHS password when the password prompt appears and confirm with OK.

A small padlock added to the usual network manager symbol indicates that you have successfully connected to VPN. For VPN-connected WiFi connections you will see , for LAN this is the symbol you should see: .

To disconnect IHSVPN, right-click the network manager icon, expand the VPN Connections menu, and un-check the IHSVPN entry.
Accessing network drives

After starting IHSVNP (top row menu bar, next to time display, password required) you may access IHS network drives:

Select Places (top row menu bar) – Connect to Server and change the Service type to Windows share and fill in the form (use your username instead of donald):

![Service Type: Windows share](image1)

To connect to the group drive (drive J: on IHS-PC) use group as Share name:

![Service Type: Windows share](image2)

Use users as Share name to connect to the IHS U: drive.

You may click Add bookmark to save the configuration for future use (quick access via Places – Bookmarks).
Printing

In the Dash (“Ubuntu Start Menu”) input field, search for “printing”.

Click the “Printing” symbol.

The window Printing – localhost will open.

Click Add.
Network Printer

LPD/LPR Host or Printer
Host: ihsprint.vienna.ihs.ac.at
Queue: ljmmc  (choose the printer you want to use)

Forward

Two windows will pop up: "Searching for Drivers..." / "Searching for available drivers...".
Wait for the search to finish and for those two windows to close.
Select printer from database

HP
Forward
Select Model (see description on Printer or ask IHS-IT)

Forward

Select Installable Options (eg. Duplex Unit, additional Paper Trays)

Forward
Describe Printer

Printer Name: choose freely (we recommend the Queue Name, ljmmc)

Apply

"Would you like to print a test page?" – choose Cancel.

Adjust the Printer Options:
- Media Size: A4
- Two-Sided: Long-Edge Binding (for portrait, 1 page/side)
- Paper for Booklet: A4

Go to Settings.
Click Print Test Page.

Click Print Test Page.

Click OK.
Confirm everything with **OK**.

Close the window *Printing – localhost*.
Apple Mac OS X 10.8 or newer

Prerequisites
You need to have a working Internet connection.
All software components needed for the VPN connection are already included in the operating system.

VPN Configuration
Start configuring the connection by selecting System Preferences – Network (System Preferences is located in the Application folder on your hard disk and in the Finder menu bar).
Click + (lower left corner, see picture) to create a new connection.

Select the Interface (VPN), the VPN Type (L2TP over IPSec) and the name (IHSVPN), click Create.
Enter Server Address, Account Name (use your username instead of donald) and click Authentication Settings.

Select Shared Secret and enter ihsvpn (only bullets shown), OK
Select Show VPN status in menu bar, click Apply and close System Preferences.
Changing Service Order

Before connecting to the IHS network check the Service Order (required for printing and sometimes required for connecting to the network drives):

Start System Preferences – Network and click the small gear-wheel icon and select Set Service Order (see picture).

Change the Service Order to be IHSVPN the topmost entry in the list.
Connecting to VPN

To start IHSVPN, click the VPN icon in the Finder menu bar and select Connect IHSVPN (see picture). Enter your IHS username and password.

![VPN Icon](image1.png)

Accessing network drives

After starting IHSVPN you may access IHS network drives.

Select Go (Finder menu bar) – Connect to Server and fill in the Server Address:

![Connect to Server](image2.png)

Click Connect and enter your IHS username and password.

If connecting to the IHS network drives does not work please check the Service Order (see above).
Printing
Before getting started, please check the Service Order (see above) to avoid problems with the printer setup.

Start System Preferences.
Select Print & Scan.
Press “+”.
Select IP.

Protocol: “line Printer Daemon – LPD”
Address: “ihsprint.vienna.ihs.ac.at”
Queue: <printer share name> (e.g. “ljmmc”)
Name: Choose freely (we recommend the Queue Name, e.g. “ljmmc”)
Print Using: chose brand and model of printer (e.g. HP Laserjet 600 ...)

Add

Choose Installable Options: e.g. Duplex Unit, Additional Paper Trays
OK

Close Print & Scan.