

Tunnel Broker with OpenVPN

Christian Schild
JOIN Projekt Team
Zentrum für Informationsverarbeitung
Westfälische Wilhelms-Universität Münster
<http://www.join.uni-muenster.de>
[mailto: join@uni-muenster.de](mailto:join@uni-muenster.de)



Why a Tunnel Broker

- Easy solution to provide IPv6 to Dial-In users (ISDN, xDSL)
- Needed for connectivity within a site (at least in some places)
- Possible solutions:
 - ISATAP
 - 6in4
 - IPsec
 - OpenVPN

What is OpenVPN?

- OpenVPN is an open source (GPL) VPN solution
- Creates tunneled connections between two or more nodes
- Uses tun/tap drivers of the OS to create tunnel
- Uses OpenSSL and TLS for authentication, encryption and key exchange
- Port based connections

Advantages of OpenVPN

- Available for many platforms (Windows, Linux, *BSD, Solaris, MacOS)
- Already includes open source security mechanisms to authenticate users
- Established tunnels are robust against IP changes
- Easily traverses NAT
- Recent versions (since 1.6-rc3) support IPv6

JOIN Tunnel Broker

- Scripts that build
 - CA
 - (DB)
 - OpenVPN server
 - Create routing entries
 - Creates client certificates and scripts (up/down)
- Single host (/128) and multihost (/64) connections are possible

Links

- OpenVPN Homepage:
 - <http://openvpn.sourceforge.net>
- JOIN tunnel broker documentation:
 - <http://www.join.uni-muenster.de?lang=en>
 - ? Documents
 - ? Howtos
 - http://www.join.uni-muenster.de/Dokumente/Howtos/Howto_OpenVPN_Tunnelbroker.php?lang=en

JOIN

Questions?

Contact: join@uni-muenster.de

Homepage: <http://www.join.uni-muenster.de>