



LAN to LAN Branch Office Vpn Connection
With QoS/Bandwith Limiting
using Zeroshell
As Appliance on Virtual Machines :

Zeroshell by;

Fulvio Ricciardi

e-mail: fulvio@zeroshell.net

skype: zeroshellnet

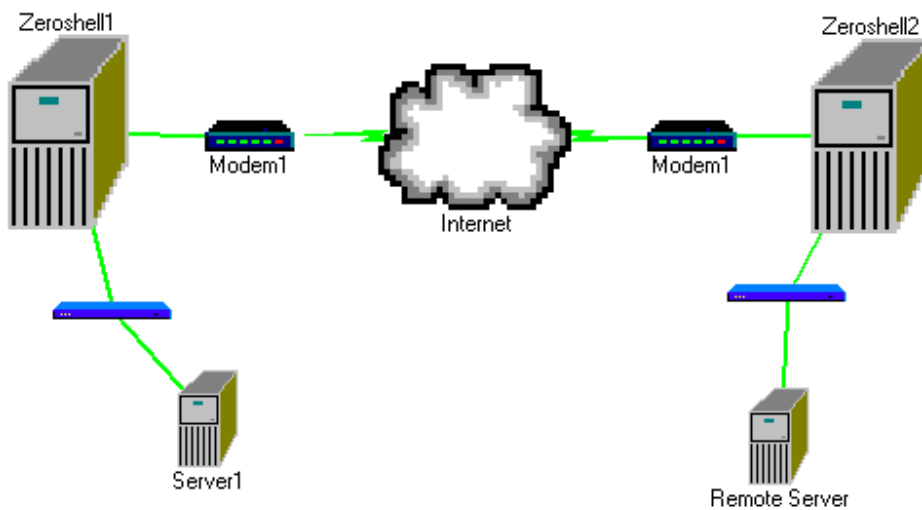
Author of document;

a t i f k @ y a h o o . c o m

We have two offices with ADSL Internet connections. Zeroshell helped us connect these two sites with Openvpn and QoS intelligently limits traffic so that regular use is not interrupted. We are using Lotus Notes and rsync applications over the vpn connection.

Zeroshell performs quite well, without any need for restarts or anything.

Main site has a static IP address, the remote site is dynamic and it has a dynamic DNS name which is also maintained by Zeroshell.



Main Zeroshell1 Setup;

The screenshot displays the Zeroshell1 web interface. At the top left, the logo "ZEROSHELL Net Services" is visible, along with the release information "Release 1.0.beta14" and an "About" link. On the top right, there are links for "Logout", "Reboot", and "Shutdown". A navigation bar below the header contains tabs for "VPN", "Host-to-LAN (OpenVPN)", "Host-to-LAN (L2TP/IPSec)", and "LAN-to-LAN".

The left sidebar contains a menu with categories: "SYSTEM" (Setup, Logs, Utilities), "USERS" (Users, Groups, LDAP / NIS, RADIUS, Captive Portal), "NETWORK" (Hosts, Router, DNS, DHCP, VPN, QoS, Wireless, Net Balancer), and "SECURITY" (Kerberos 5, Firewall, X.509 CA, HTTP Proxy).

The main content area is titled "Virtual Private Network LAN to LAN over SSL tunnel". It shows a table of active VPN connections:

VPN	Status	Remote IP	Port	Protocol	UP
VPN00	Connected to 78.16		:5	(TCP)	<input checked="" type="checkbox"/>
Vpn4ankara					<input checked="" type="checkbox"/>
10.0.0.34		255.255.255.0			<input checked="" type="checkbox"/>

An overlaid window titled "VPN Config - Google Chrome" shows the "LAN-to-LAN Virtual Private Network Configuration" page. The interface includes a "Save" and "Close" button at the top right. Below the title, it indicates the current interface is "VPN00" and is "Connected to" a remote host (represented by a green square) using "TCP".

The "Tunnel Configuration" section contains the following fields:

- Remote Host: Port: Compression Encryption
- Authentication: Remote CN: PSK:
- Gateway:
- Parameters:

Remote Zeroshell2 VPN Setup

The screenshot displays the Zeroshell2 web interface for configuring a VPN. The main dashboard shows system information (Release 1.0.beta14, CPU Intel(R) Xeon(R) CPU X3210 @ 2.13GHz, Uptime 68 days, 7:49) and navigation tabs for VPN, Host-to-LAN (OpenVPN), Host-to-LAN (L2TP/IPSec), and LAN-to-LAN. The 'LAN-to-LAN' tab is active, showing a 'Virtual Private Network LAN to LAN over SSL tunnel' configuration. A table lists VPNs, with 'VPN00' connected to '10.0.0.6' on '255.255.255.0' via '(TCP)'. A modal window titled 'LAN-to-LAN Virtual Private Network Configuration' is open, showing the following configuration details:

- Interface: VPN00 Connected to .42:5...99 (TCP)
- Description: Vpr
- Tunnel Configuration:
 - Remote Host: [IP Address] Port: 5 TCP Role: Server Compression: [] Encryption: [x]
 - Authentication: Pre-Shared Key Remote CN: [] PSK: [] GenKey: []
 - Gateway: DEFAULT GATEWAY (192.168.2.1)
 - Parameters: [Show]
- X.509 Authentication:
 - X.509 Host Certificate: []
 - Local CA: [] OU=Hosts, CN: lyndns.org
 - Status: OK Imported Trusted CAs

Both the machines are running on VMware vSphere hypervisors, so no additional hardware is needed and only minimum resources are used by Zeroshell. They are behind port forwarding configured ADSL modems so firewall configuration is not so critical.

Link to Zeroshell website: www.zeroshell.net