Easy OpenVPN with DD-WRT clients

Easy OpenVPN was created to quickly and easily setup an OpenVPN server and connect a remote router(s) running dd-wrt firmware. This scripts have been tested only on Centos 6 (32 & 64). This type of configuration would be helpful in the deployment of remote SIP phones.

Below are the basic server steps:

Install Centos 6 (or PBXiaf w/Centos 6) physically or Virtually.

Download Easy OpenVPN from here.

Untar the scripts in the /root directory.

cd to the newly created /root/EasyOpenVPN directory.

Type:
chmod 755 ./install-EasyOpenVPN_part1.sh
chmod 755 ./install-EasyOpenVPN_part2.sh
chmod 755 ./create-EasyOpenVPN-client.sh

Run Script 1:
This script will install all the needed OpenVPN software and then have you edit the vars file.

./install-EasyOpenVPN_part1.sh

Run script 2:
This script will build the certificates, keys and server configuration need by OpenVPN. It will also open UDP port 1194 on the server to allow OpenVPN connections.

./install-EasyOpenVPN_part2.sh

Run script 3:
This script will create a client file(s) for the dd-wrt router. Create as many clients as you would like, but always use a different name for each client.

./create-EasyOpenVPN-client.sh

Port forward UDP port 1194 on your router to your VPN server.

This completes the Server Setup/config.

Below are the basic dd-wrt steps:

Install the dd-wrt **OpenVPN** firmware version on your supported router.
My version is version is DD-WRT v24-sp2 (08/07/10) vpn - build 14896

After install your firmware, proceed to the Servers >VPN tab.
Enable the “OpenVPN Client” and edit/verify the settings below.

Server Name: Your OpenVPN server IP or FQDN

Port: 1194

Tun MTU Setting: 1500

TUN MTU Extra: 32

TCP MSS: 1450

Use LZO Compression: Disabled

Tunnel Protocol: UDP

Tunnel Device: TUN

nsCertType: NOT checked

CA Cert: = Paste the ca.crt file created with script create-EasyOpenVPN-client.sh in the server section.

Example:

-----BEGIN CERTIFICATE-----

EwgzMmJpdFBCWDEUMBIGA1UEAxMLMzJiaXRQQlggQ0ExFjAUBgNVBCkTDURhcnJ5

bCBEb3Rzb24xJzAlBgkqhkiG9w0BCQEWGGRhcnJ5bEB0aGVkb3Rzb25jbGFuLmNv

bTCBnzANBgkqhkiG9w0BAQEFAAOBjQAwgYkCgYEAo7gdpPIni4IaeKODa03xAM5i

EXCnzpecxbecSdF17D2QQNiE8JtQaTxIbtLkEpah4YIucVkzHRn+JkGijZavB4Ur

RvYtes9tWAscxp+wIWekwgKmi3Sf0KoYOkS6JkPd/0Oc3EFOBMLyL+kW/dM7eBNA

OBURiOZif96I6mHwfNUCAwEAAaOCAQIwgf8wHQYDVR0OBBYEFDpiAFib7S0HTlFq

kCUFCCMKFkCLMIHPBgNVHSMEgccwgcSAFDpiAFib7S0HTlFqkCUFCCMKFkCLoYGg

pIGdMIGaMQswCQYDVQQGEwJVUzELMAkGA1UECBMCRkwxFDASBgNVBAcTC0ludGVy

bGFjaGVuMREwDwYDVQQKEwgzMmJpdA1UEAxMLMzJiaXRQQlggQ0Ex

FjAUBgNVBCkTDURhcnJ5bCBEb3Rzb24xJzAlBgkqhkiG9w0BCQEWGGRhcnJ5bEB0

aGVkb3Rzb25jbGFuLmNvbYIJANP3+ODT6PtxMAwGA1UdEwQFMAMBAf8wDQYJKoZI

hvcNAQEFBQADgYEAB7oyQsrc9aaiyr/65tSDUt8l/Dh7GqvrJUC8pJAy8thk6uv5

NOpJR/3r247S9NnIaC4wtEL1kO4tcoV64XZlyDDuxtWtOZjPm5npAHOVvkj0fmnN

4B8loTYh27h+DppaOth/nXZbZ8NWq4ky+EhkL2e4pvO12nDFC4STcENUlUI=

-----END CERTIFICATE-----

Public Client Cert: = Paste the Client.crt file created with script create-EasyOpenVPN-client.sh in the server section.

Example:

-----BEGIN CERTIFICATE-----

8A/p5Ih22hv9jBsnxWpiq9jJf5RSCNqTsiYudaLIEfzORNiffDRrVXzB2Pi3QykY

FMlABiYbOErVKgR+6UC3PJpuLcTQIesWQiFsH53LAgMBAAGjggFRMIIBTTAJBgNV

HRMEAjAAMC0GCWCGSAGG+EIBDQQgFh5FYXN5LVJTQSBHZW5lcmF0ZWQgQ2VydGlm

aWNhdGUwHQYDVR0OBBYEFIGiVLPQjxqJCysqN8jbMWqQ7oZQMIHPBgNVHSMEgccw

gcSAFDpiAFib7S0HTlFqkCUFCCMKFkaMQswCQYDVQQGEwJVUzEL

MAkGA1UECBMCRkwxFDASBgNVBAcTC0ludGVybGFjaGVuMREwDwYDVQQKEwgzMmJp

dFBCWDEUMBIGA1UEAxMLMzJiaXRQQlggQ0ExFjAUBgNVBCkTDURhcnJ5bCBEb3Rz

b24xJzAlBgkqhkiG9w0BCQEWGGRhcnJ5bEB0aGVkb3Rzb25jbGFuLmNvbYIJANP3

+ODT6PtxMBMGA1UdJQQMMAoGCCsGAQUFBwMCMAsGA1UdDwQEAwIHgDANBgkqhkiG

9w0BAQUFAAOBgQBGka5oh1wk97MMf0AMK97uOdwLlw7fkOuxoIZukGmW91A9hBJX

ccSp9qLEySSwau8mW2efBbNWgabljyueymvt8E8hNXa1gkzSI9Q4g0alGZ1iEhBa

p6ywew8CTZVjacgWGSKzNdOttgaqHsARx5YB6M96NCn94q8MLh3w2m3Ptw==

-----END CERTIFICATE-----

Private Client Key: Paste the Client.key file created with script create-EasyOpenVPN-client.sh in the server section.

Example:

-----BEGIN PRIVATE KEY-----

Mbz1MNRtLiX8e4uZ4tv+SzpW4l01KOlJZFBccEVeoJJ9jiP+Mco4W6Kj8L09h+BfX

ubVmIEN3jpacAZHnPtioxbmPccb8o0iAZWHx2c8ZBqe7Nl1ER9zu7NWNUXRawbLt

Eoq+oGb+d4DVw1BjosECQQD84I0vmzxAJ4O5gTnwDKh0zfDp9LX9TOuWXUpCt0Wk

f0+9ahdN9MzRKKkoJt8w1UKRlUGwy0IsyLHrMrMZFiAjAkEA1qKVJBMFu9Byvwp7

eqPGuVwzMemOGO41mGqsJhPP6fXA3QSTWGGIoehvSh0RxDdNPUVezx0B6eM4cgkF

H1ASOQJBAITNoRgpXIEMv38CwNyyqR1+slEL9S+r3+W95KwY9/gl7Ei7mLWWJKKL

yhqOH5TTyvwN+MvSU1SVqeqtW6WHGyUCQDeYxakihEmyJQb3YCTUZ5V8HIbBSN2M

VrW0bAMw/ppL3jliBgjOuuW1n55DCWcaLBfC8FwV13kOMoDXdUw3IYECQEsbSq1D

NnT/bF8DcSiOQI8lE0XUWJ899U2hUSFuwVyYoWgidPhNLeRs+aUgFBnkJSRCuXVr

r8VRlkR3kZrSu8o=

-----END PRIVATE KEY-----

Save and apply settings.

At this point, your dd-wrt router should be able to connect your OpenVPN server. Devices (ie SIP phones) behind your dd-wrt router should be able to communicate your OpenVPN server/PBX.

Important Notes:

The time on the VPN server AND the time on the dd-wrt router must match. If they are incorrect, the client will not connect! Keep in mind, the dd-wrt uses UTC time! adjust your settings accordingly.

Port 1194 is the default OpenVPN port. If you wish to change port numbers, you will need to make three changes.

/etc/openvpn/server.conf.

Iptables firewall.

Port forwarding in your router.