Re: VPN and Fedora server/Win client?

Source: http://www.derkeiler.com/Newsgroups/comp.os.linux.security/2005−04/0238.html

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Date: 04/19/05

Date: Tue, 19 Apr 2005 21:07:34 GMT

news@celticbear.com wrote:
> I'm not even sure if what we want to do, VPN can allow. What I've
> looked around at so far, has more confused me than anything.
>
> We have an employee that will be moving to another city, and will need
> to be able to access files on a server here, but more than just what
> sFTP would allow. Will need to access files in multiple directories,
> and possibly another folder on another machine on the LAN.
>
> I see OpenVPN, but I'm not exactly sure how...what...what am I reading
> there?
>
> The client machine will be Windows, the connection will be going
> through a NAT/router forwarding the connection to Linux server X. If
> all they can do is then access files on the server, that's fine, but
> would they also be able to access shared folders on other machines on
> the switch the server is on?
>
> I guess what I'm asking is a confirmation if this is possible, and then
> maybe a link to some UberIdiot's Guide to Very Basic VPN explanations
> and how−tos.

For successful setting up of a VPN, you need pretty good understanding of IP network addressing and routing principles.

You could start with Rusty's Guides from <http://people.netfilter.org/~rusty/unreliable−guides/>. Don't let the names mislead you − the guides are some of the best there are.

VPN is a method to extend a private network by actually transporting the packets of the network using a public network (usually Internet). There are many ways to do it, so the name 'VPN' is far from unique.

The packets of the private network are re−packaged into packets of the public network for transmission. The connection is called a tunnel. For IP tunnels there are four IP addresses associated with the tunnel, two at each end, one for the private network (inside)

and one for the transport network (outside).

To keep the private traffic private, the packets are usually encrypted.

OpenVPN can in principle generate two different types of tunnels:

- IP tunnel,
- Link−level tunnel (bridged).

The IP tunnel links the ends of the tunnel as separate IP subnets, so IP routing is needed and the tunnel does not forward local link broadcasts (used by the basic MS networking).

The link−level tunnel works much like an extended Ethernet and it's able to forward the MS networking intact.

In both cases, the tunnel ends are connected by an UDP/IP or TCP/IP link, which is then transported over the Net.

In your case, I'd first try the bridged approach, unless it is deemed to be too intimate for the security of the internal network.

HTH

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