



What is a VPN anyway?

A Lunch Bytes Discussion

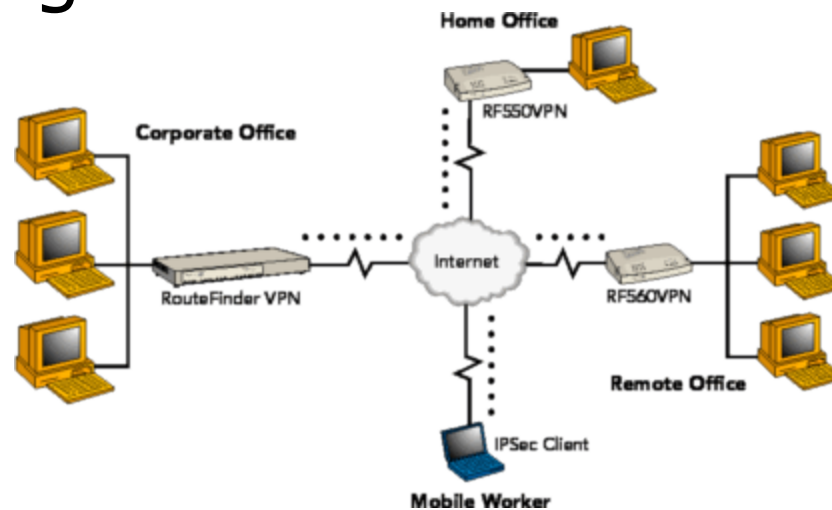
presented by

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What does a VPN look like?

- Here's a model of a VPN configuration





Okay, So What is a VPN?

- What does VPN stand for? And what does that mean in English?

Virtual – using technology/software

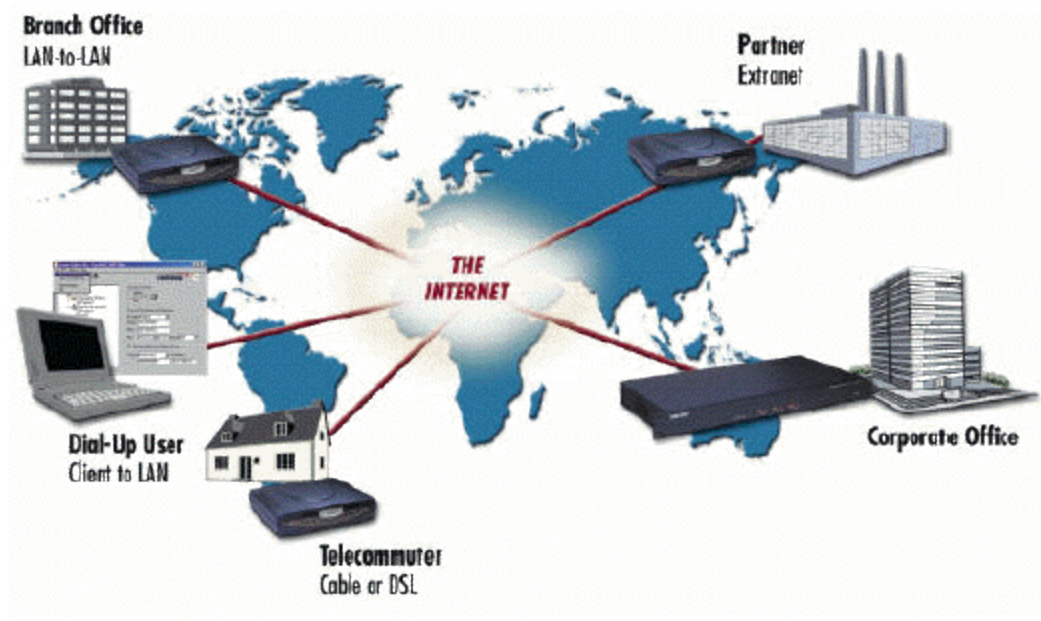
Private – a connection using public Internet

Network – access network resources (files)

- VPN is Information Logistics
- Remote access to documents and files

Why care about VPN technology?

- Flexibility – access to info offsite



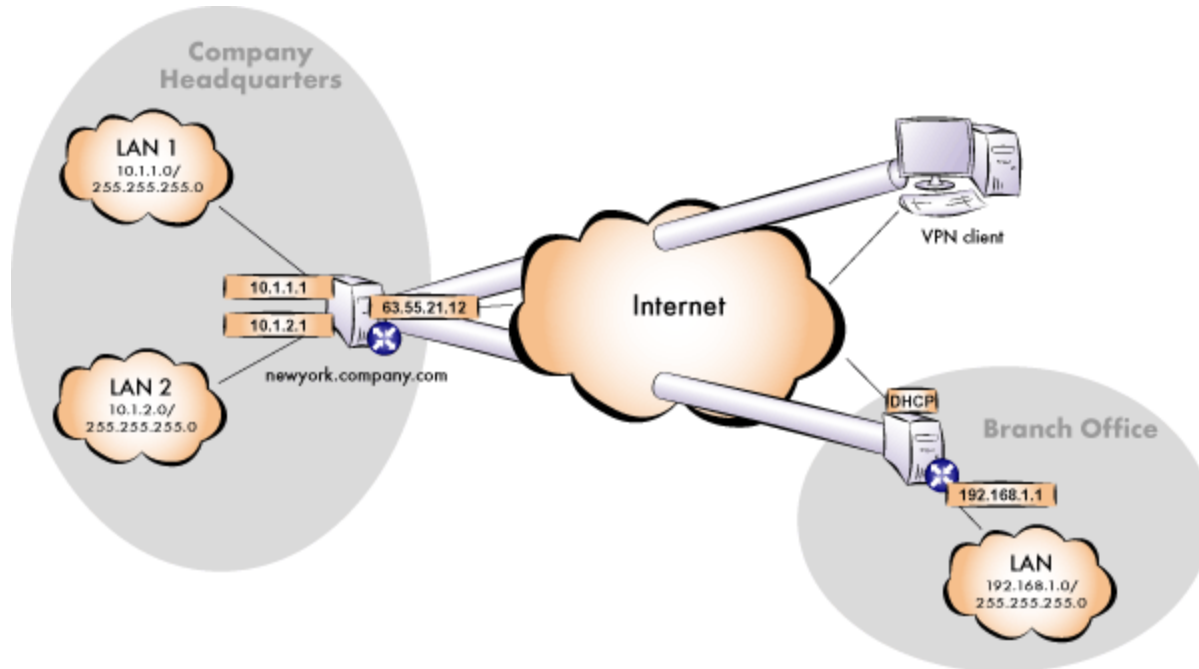


More Affordable VPN Technology

- Now access to faster broadband technology is more widespread because it's become cheaper.
- More non-profits are using DSL or Cable to access the Internet.
- A well thought out and well implemented VPN solution can harness the increased availability of high speed Internet access to let staff work from home, on different schedules, and/or while travelling.

VPN can used by small agencies!

Remote access is not about having a huge budget and hundreds of staff.





Lingo

- VPN (virtual private network)
- VPN Device
- WAN – Wide Area Network
- Router – sits between WAN or Public network and the
- LAN – Local Area Network – your office or home
- VPN Server and VPN Client
- Ports
- Static tunnel connecting 2 sites
- VPN is a secure tunnel encapsulating the communications between your employee's laptops or home desktops through public Internet



Types of VPNs (more Lingo)

- What kind of VPNs are out there?
 - PPTP (point 2 point Tunneling protocol)
 - IPSec (Internet Protocol Security)
 - L2TP (Layer 2 Tunneling Protocol)
 - SSL (Security Socket Layer)
- These are all examples of types of technology used to make VPN connections.
- They all involve encryption and encapsulation.
(data is encrypted using public and private keys, this data is encapsulated in a private tunnel)



A well implemented VPN solution

- Any good solution will fail without good planning and implementation
- Involve parties that will use the technology in discussions about training, service/support level agreements and expectations
- Availability of training and documentation. A Must for new hires.



Proper Conditions

What do I need for an effective VPN?

- Static Public IP at the office
- A VPN Ready Router and/or VPN Server
- A VPN Client and a VPN Server
- Some sort of User Authentication
- High speed Internet at both ends of the VPN connection
- Spending \$250 or more for equipment and setup.



Notes and Follow-Up



What does a VPN connection look like?

- What does one look like? Ordinary but not when you're connecting.
Examples/Demo
- How does it behave (simply a network connection like "My Network Places" in XP)
- Mobile technology – using smart phones and laptops



Common VPN Problems

- ISP must support VPN technology
- Internet access at both ends (no access, can't use VPN)
- Remote network Router must support VPN technology
- Remote network Router/Firewall must be configured to have VPN ports open.
- If it's not working, ask someone if VPN access is allowed.



Companies selling VPN solutions

- Cisco (biggest name, most expensive)
- Sonicwall
- Linksys (business line products)
- Multi-Tech

Look for **SOHO** products –

SOHO = Small Office Home Office