## **VPN(Virtual Private Network)**

VPN

VPN

XP VPN

1 www.Shahrashub.com

VPN	•		virtual priv	vate network		VPN	
			(	)			
						•	
		. VPN					
Mail							
					FTP		
		. RAS			•		
		VPN .		VPN			
Packet							
	VPN						snifter
						(LAN)	

					VPN	(
VPN						
	VPN .					
			•			
					VPN	
					V11V	
Dialup			VPN			
				DialUp .		Leased
					,	,
	•				(L	eased)
	•					
		•				
		LAN			VPN	
		•				
	VDN					
	VPN .					
						VPN
				VPN		•

		(Tunneling	g) (
		VPN	
VPN			
		. (Tu	nneling)
	(Encapsulation)		
		(	)
·		. Heade	
		. ITeauc	J1
•			
		Tunneling	
	(Interface)		
·			
IPX, IP, NetBe	ui .		
	IPSec, L2F, PPTP, L2TP, GRE		
	Encapsulation	VPN	
		VPN	
VPN			
Tunneling			
C			

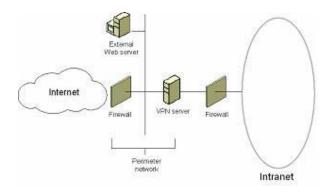
VPN (

VPN

(Firewall)

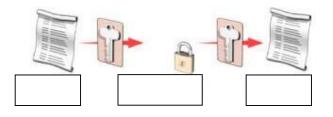
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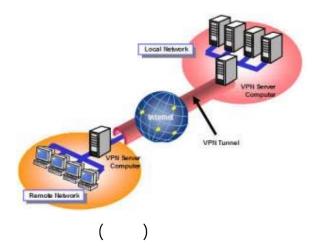
( ) Secret



. ( )

(

VPN (



VPN

VPN ( VPN " VPN "VPN PIX VPN Dial-up VPN NAS .VPN .VPN VPN  $PIX^1$ VPN Proxy NAT VPN

<sup>1</sup> Private Internet exchange

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			VP	PN	(
•				(Packet Ori	ented)
		PPP		V	PN
			OSI		
		(Ap	pplication Oriented	)	
		O	SI		
			OSI		
	•	(NAT)			
	VPN				
			VPN		( -
	SOCKS	SSH			
				SSH	
SSH				SSH .	TCP/IP
ТСР		ТСР	•		
					IP
SSH .				·	
		VPN			

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			OSI	SO	CKS
SOCKS					
	SOCKS		•	Circuit-Level	Proxy
		Proxy	SOCKS		
SOCKS	(NAT)				
				VPN	( -
			VPN		
				SKIP <sup>1</sup>	(
	OSI		VPN		
				$PPTP^2$	(
PPP					`

Chap<sup>4</sup>

PPP

 $PAP^3$ 

**PPTP** 

Dialup

<sup>&</sup>lt;sup>1</sup> Simple Key Management for Internet Protocol; SKIP
<sup>2</sup> Point to Point Tunneling Protocol, PPTP
<sup>3</sup> Password Authentication Protocol,PAP
<sup>4</sup> Challenge Handshake Authentication Protocol, CHAP

	PPTP .	RSA	
			PPTP
Remote Access		. Dial in	
	)		RRAS <sup>1</sup> Polices
			.(
	PPTP		VPN
	VPN		. L2TP/IPSec
		V	PN
		. VPN	
			L2TP <sup>2</sup> (
			L2TP <sup>2</sup> (
	TO	CP UDP <sup>3</sup>	
·			
IPSec <sup>4</sup>		VPN	VIIV
	L2F PPTP		VPN
		PPP	
$L2F^5$ .		NAS	

<sup>&</sup>lt;sup>1</sup> Remote Routing Access Service, RRAS
<sup>2</sup> Layer2 Forwarding protocol, L2TP
<sup>3</sup> User Datagram Protocol, UDP
<sup>4</sup> IP Security, IPSec
<sup>5</sup> Layer Two Filtering

	Cisco						PPTP
						Telecom	
					Ι	psec <sup>1</sup>	(
					L2TP	PPTP	Ipsec
IP Header							
			IP Head	er			
	•	Tunneling				Ipsec	
					•		
	VPN	٠		IP			VPN
	Service provider						
	-						ISP
				•		ISP	
						VPN	
	VPN .					VP	N
VPN							
		•	IPSec				
			,	VPN			

<sup>1</sup> IP Security protocol, IPSec

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.(MPLS VPN) SSL VPN VPN MPLS VPN VPN VPN OSI VPN

VPN

VPN

VPN VPN -

Frame Relay ATM OSI

Frame Relay

ATM

tunneling VPN VPN -

IPSec Tunneling VPN

L2TP L2TP GRE

VPN

SSL	VPN.					VPN	:	VPN -
	SSL				SSL.	VPN		
			SSH .	SSH	VPN			
				VPN				login
					VPN	1		
						VPN.		
		VPN			VP	N .		
					V	'PN		. DMZ
				п				
			V	'PN				

IT

XP VPN VPN XP **VPN** XP **Network Connections** Create a new connection **Network Tasks** Create a new connection Set up a home or small office network next

Connect to the network at my workplace

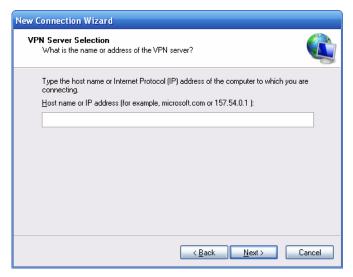
next



Virtual Private Network connection next



ΙP



Finish . Next IP

**Network Connections** 



**ISP** 

## **Network Connections**

properties



IP general

(System tray)

		<b>ৣ৾৻</b>	A network cable is unplugged
	. Netw	ork Connections	
disable		local Area Connection	LAN or high speed dialing
			. (Enable)
	network adapter	device manager	
			IP
VPN			VPN

next .

Setup an advanced connection

Create a new connection Network Connections

next



next

Accept incoming connection

**Network Connections** 

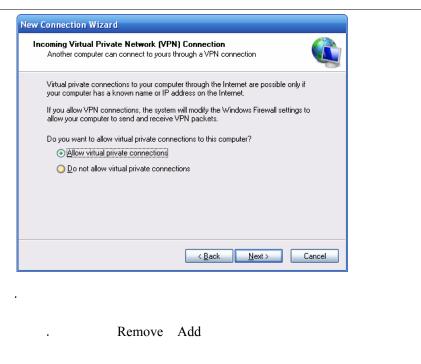
incoming connection



VPN

Allow virtual private connections

next



next . Properties

VPN (

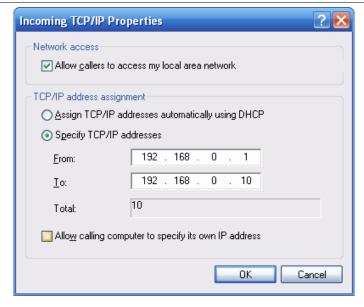
Properties . TCP/IP



DHCP IP

IP

dynamic host configuration protocol DHCP



Finish next

•

incoming connection

•

incoming :

. 127.0.0.1 IP connection

(www.fekrinejat.com)

Vahanab@yahoo.com

- Virtual Private Networks for Windows Server 2003, http://www.microsoft.com/windowsserver2003/technologies/networking/vpn/default.mspx

- WWW.HELMIG.COM
- WWW.HUPAA.COM
- Virtual Private Networking Frequently Asked Questions
- Antivirus Firewall Anti-Virus Firewall Hardware Software VPN LAN WAN Wireless Network Security Policy UKfiles