

# framework fig 3.2

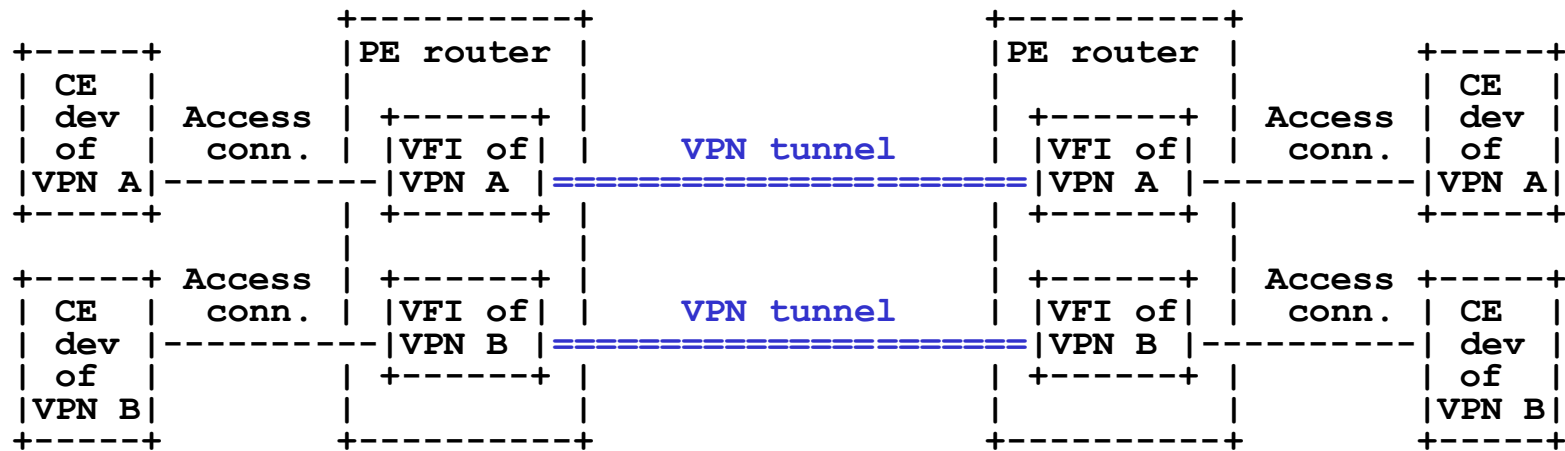


Figure 3.2: Relationship between entities in reference model (1).

fig 3.3

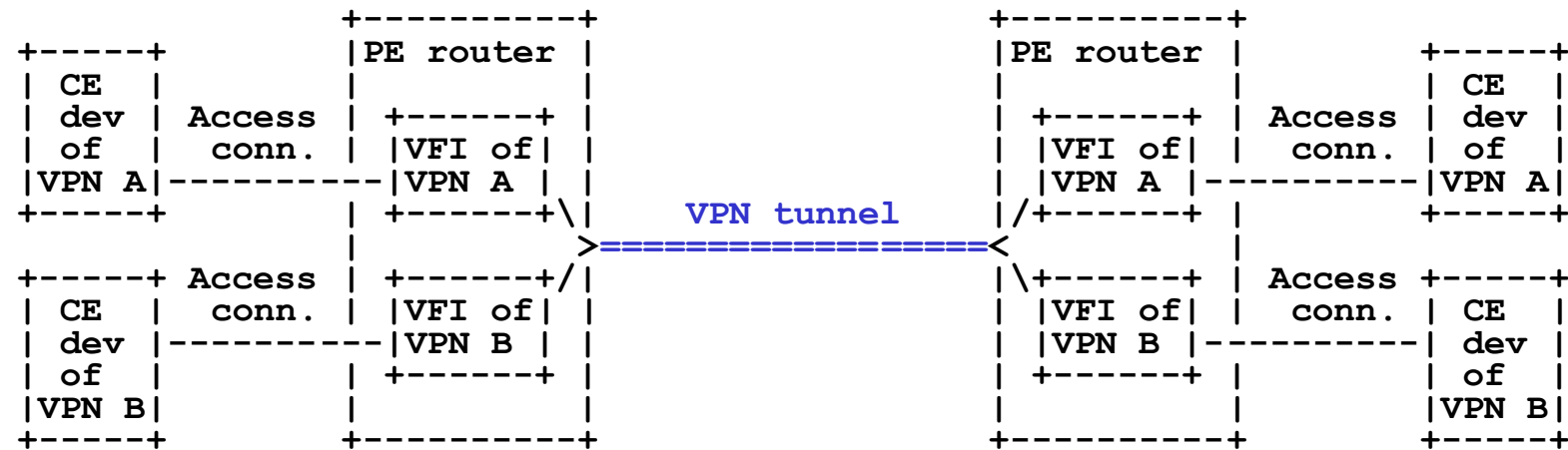


Figure 3.3: Relationship between entities in reference model (2).

this vpn tunnel is a different thing

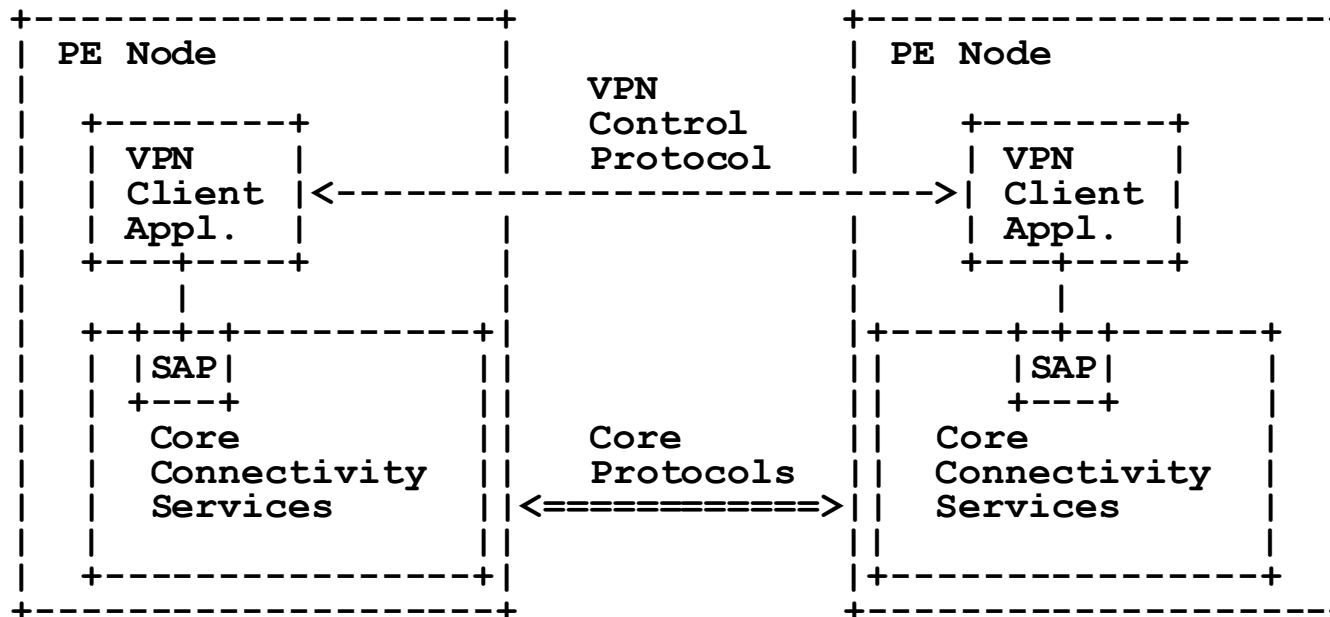
# vpn tunnels defined

they keep packets destined to different **vfis** separate

the vpn tunnel header gets a packet to:

- vfi on the remote pe
- perhaps also next hop

# proposed layering



# for example

+ - - +	-----	+	-----	+	-----	+
CPT		Private User Payload		VPN Tunnel Header		Core Protocol Headers
+ - - +	-----		-----		-----	

		Examples of Private User Payload Protocols		Exmpls. of VPN Tunnels		Examples of Core Protocols
CPT						
-----	+	-----	+	-----	+	-----
-AAL5		-Priv. addr. IPv4		-MPLS		-MPLS LSE(s)
Trlr		-Pub. addr. IPv6		LSP		-1483
		-IPSec		-?		-IPv4
		-IPX				-GRE
		-NetBEUI				-IPSec
		-Appletalk				-L2TP

# benefit

ppvpn solutions must support

- without layering
  - n-by-m matrix of protocol interactions
- with the proposed layering
  - encapsulation into the vpn tunnel and of the vpn tunnel

control protocols only refer to vpn tunnels

vpn app. uses core connectivity

# ascii art *rules!*

