



Rick Frey Consulting
www.rickfreyconsulting.com

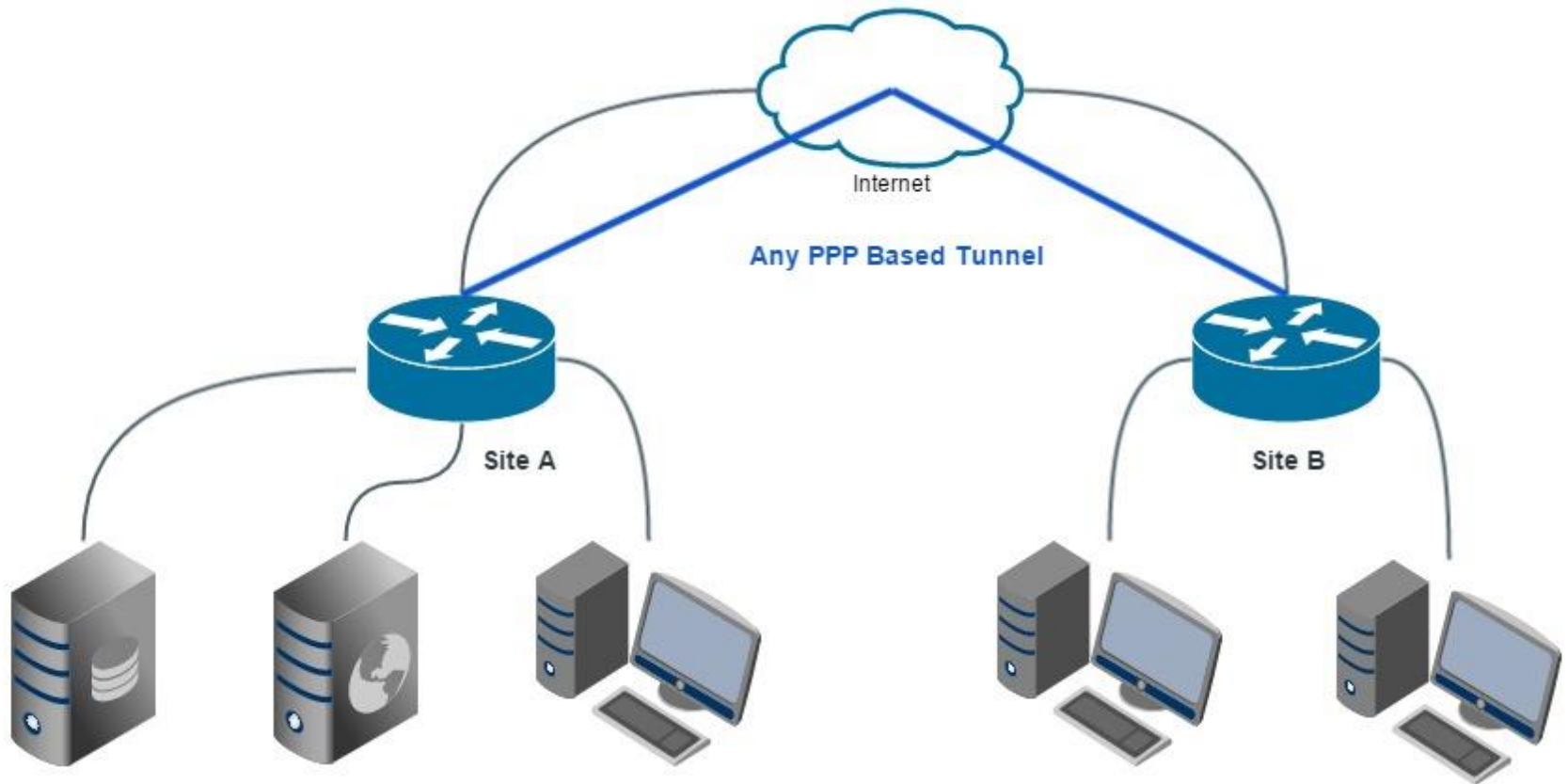
PPP Based Tunnels & Bridging (BCP)



PPP Based Tunnels & Bridging (BCP)



BCP Typical Use





Bridging Control Protocol

- ▶ All PPP based tunnels in MikroTik can be bridged using the BCP
- ▶ The tunnels can be bridged to other tunnel types
- ▶ The tunnels are completely Layer 2 at that point
- ▶ BCP is not a proprietary mechanism
- ▶ When BCP is enabled in the profile, other non-BCP enabled clients will still connect to the server as normal (albeit without BCP)
- ▶ The profile must be set on both the client and the server



Where to set BCP

Server Side

PPP Profile <default-encryption>

General Protocols Limits Queue

Name: default-encryption

Local Address: 10.10.10.1

Remote Address: VPN

Bridge: VPN_Bridge

Bridge Port Priority:

Bridge Path Cost:

Incoming Filter:

Outgoing Filter:

Address List:

DNS Server:

WINS Server:

- Change TCP MSS -

default no yes

OK Cancel Apply Comment Copy Remove

default

Client Side

PPP Profile <default-encryption>

General Protocols Limits Queue

Name: default-encryption

Local Address:

Remote Address:

Bridge: VPN_Bridge

Bridge Port Priority:

Bridge Path Cost:

Incoming Filter:

Outgoing Filter:

Address List:

DNS Server:

WINS Server:

- Change TCP MSS -

no yes default

OK Cancel Apply Comment Copy Remove

default



BCP in Action

admin@2.2.2.2 (Houston) - WinBox v6.29.1 on x86 (x86)

Sessions Settings Dashboard

Safe Mode Session: 2.2.2.2

Bridge

Interface	Bridge	Priority (h...	Path Cost	Horizon	Role	Root Pat...
Ether2	Lan Bridge	80	10		designated port	
Ether3	Lan Bridge	80	10		designated port	
Ether4	Lan Bridge	80	10		designated port	
Ether5	Lan Bridge	80	10		designated port	
D ptp-out1	Lan Bridge	80	10		designated port	

PPP

Name	Type	L2 MTU	Tx	Rx	Tx Packet (p/s)	Rx Packet (p/s)	
RS ptp-out1	PPTP Client			440 bps	0 bps	1	0

1 item out of 7

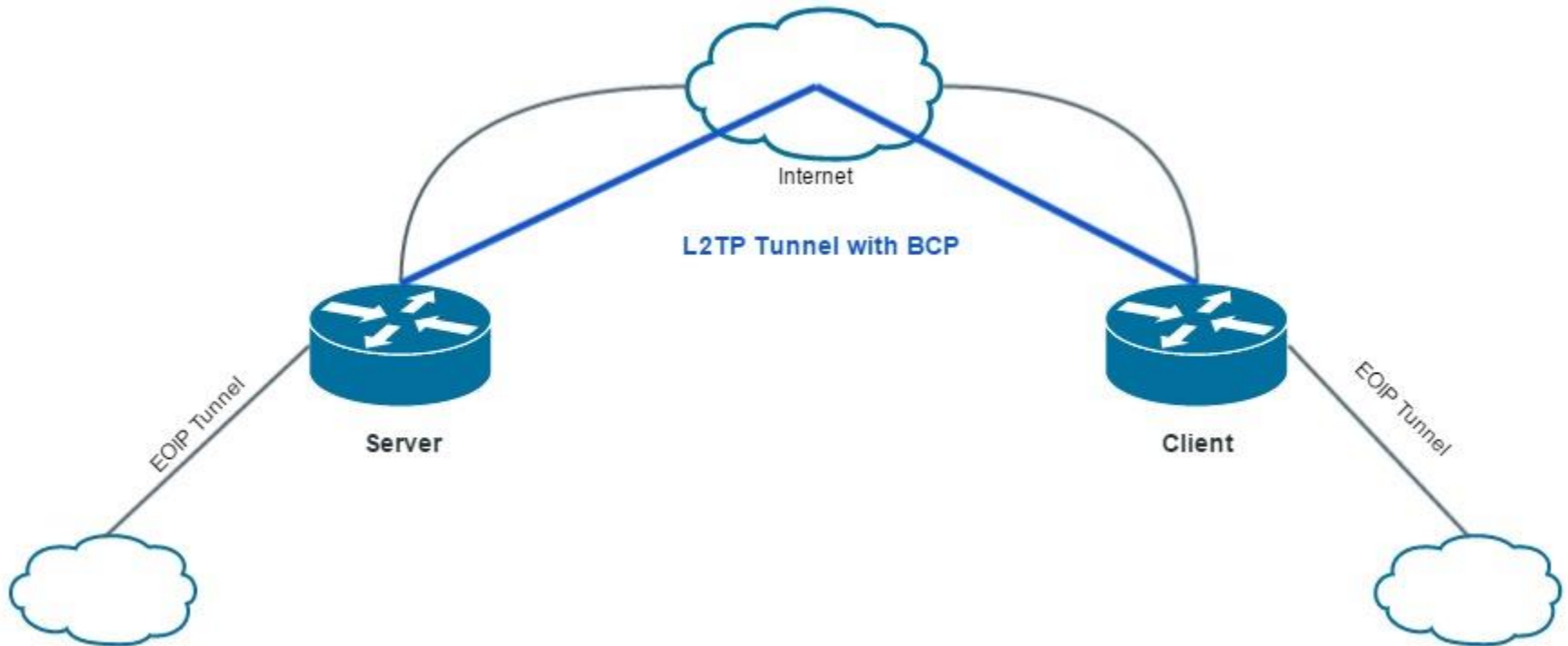
New Dynamic Port added to Bridge on both sides

Tunnel shows the Slave flag



L2TP & EOIP Bridge

Objective: using what you have already learned, bridge together two routers using L2TP+BCP. Add to that bridge an EOIP interface on either side. Use RADIUS for authentication.





End of Module