

3000 bytes

Host A → Router A

802.11 MTU = 1500 bytes

$1500 - 20 - 20 = 1460$ data bytes

$\text{Ceil}(\text{data} / 1460) = 3$ Fragments

Mbit=1
20 1460

Mbit=1
20 1460

Mbit=0
20 80

]= 3060 bytes
of "data"
sent to PPP
rcvd by

Router A → Router B

PPP MTU = 532 bytes TCP/IP

First packet size = $532 - 20 - 20 = 492$ bytes

Remaining packet size = $532 - 20 = 512$ bytes

Mbit=1
492

Mbit=1
512

Mbit=1
476

~~20 80~~

First 1480 byte packet

Mbit=1
512

Mbit=1
512

Mbit=0
456

Second 1480 byte packet

Mbit=0
100

= 3060 bytes of
"data" sent over
PPP, 3000 bytes
of data and the
60 bytes added with
the 802.11 IP headers

No more Fragmentation required because
Ethernet MTU > each PPP Packet Size

- 1) Host B then gets 10 Fragments, 7 From PPP and 3 ~~over~~ ^{from} 802.11
- 2) 2 Fragments, the last from 802.11 and the last from PPP
- 3) 100 bytes - 20 From IP header = 80 bytes