

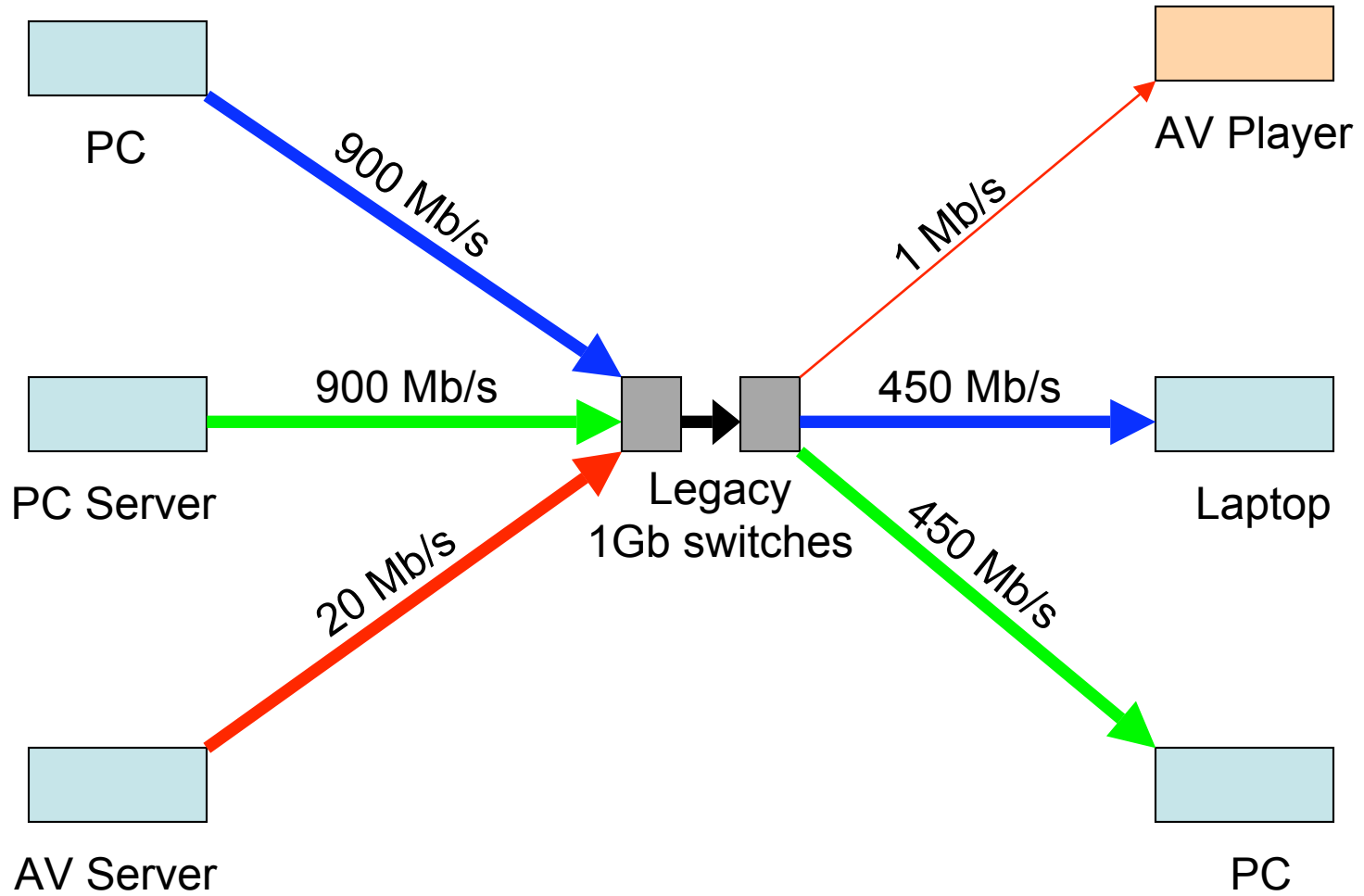
# Bandwidth Problem at Any Speed

For RE SG - IEEE Plenary

John Gildred, Pioneer

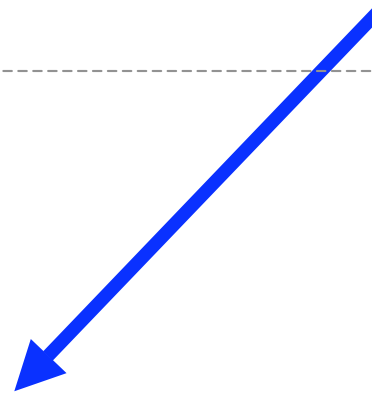
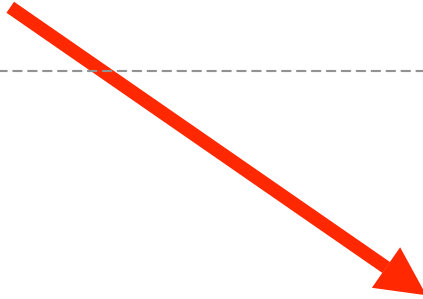
[John@pioneer-pra.com](mailto:John@pioneer-pra.com)

# Legacy Scenario

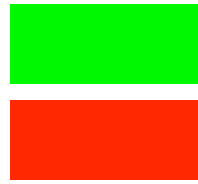


# Legacy Scenario

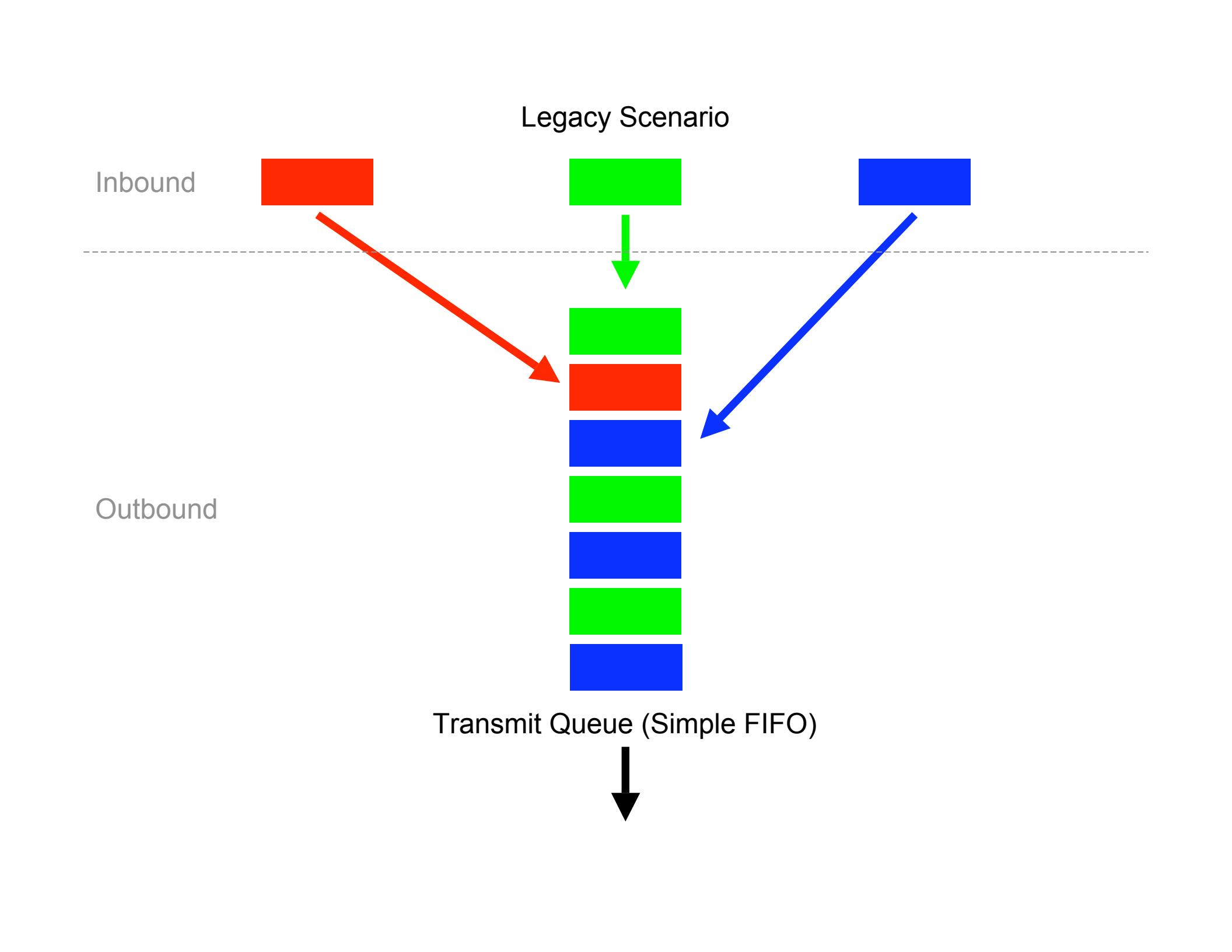
Inbound



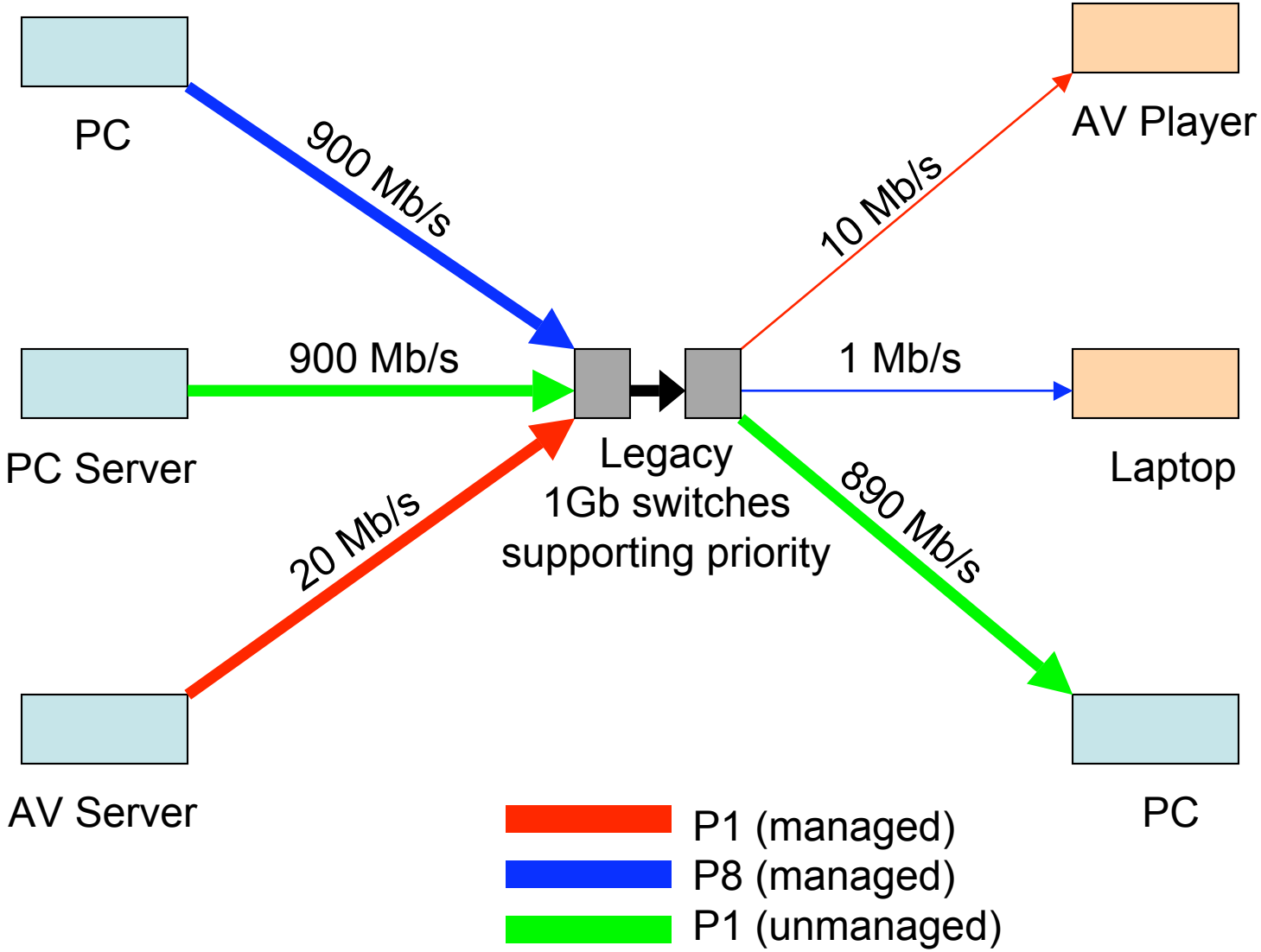
Outbound



Transmit Queue (Simple FIFO)



# Priority Scenario

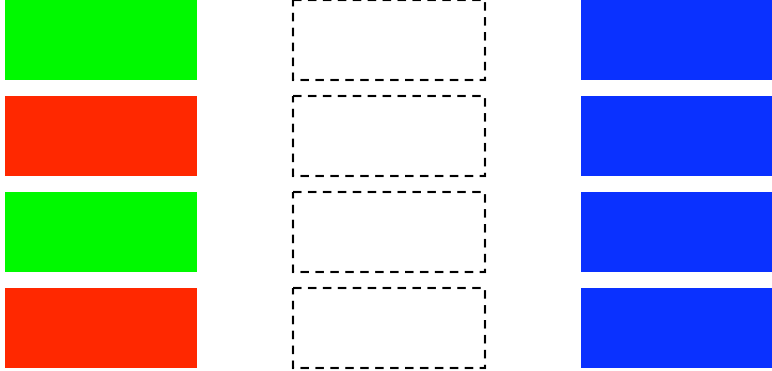


# Priority Scenario

Inbound

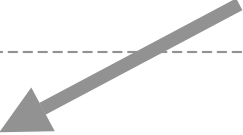
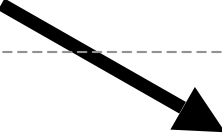
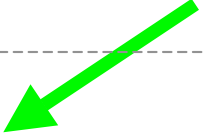
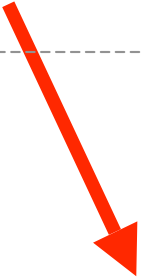
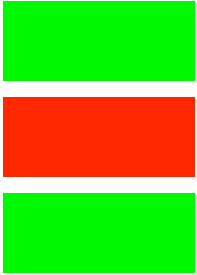


Queues

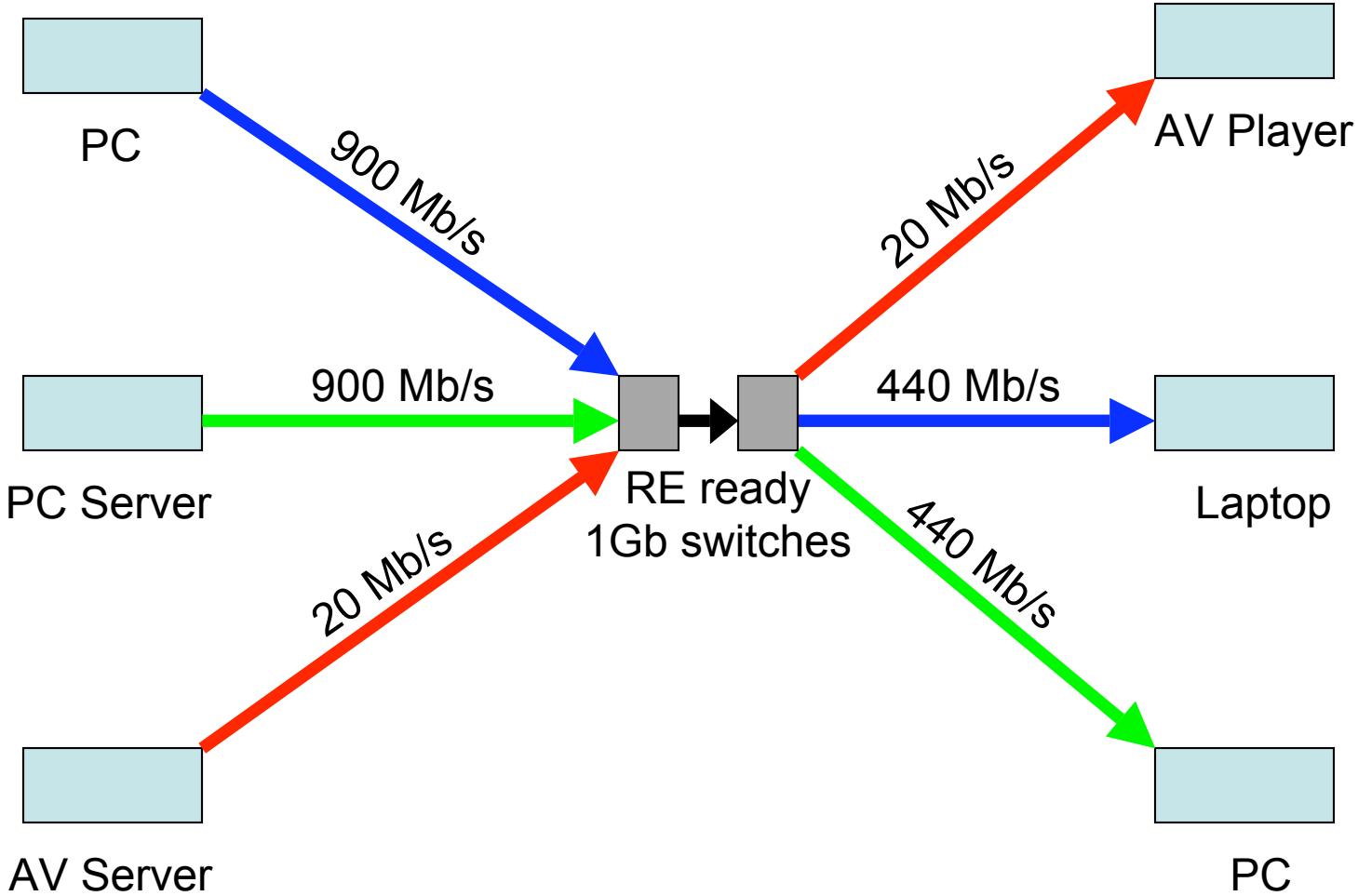


P1 ..... P8

Outbound



RE Scenario  
802.3av :)

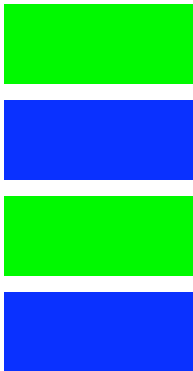


# RE Scenario

Inbound



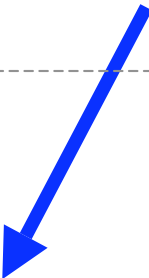
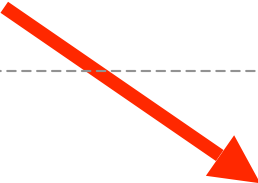
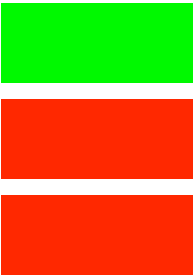
Queues



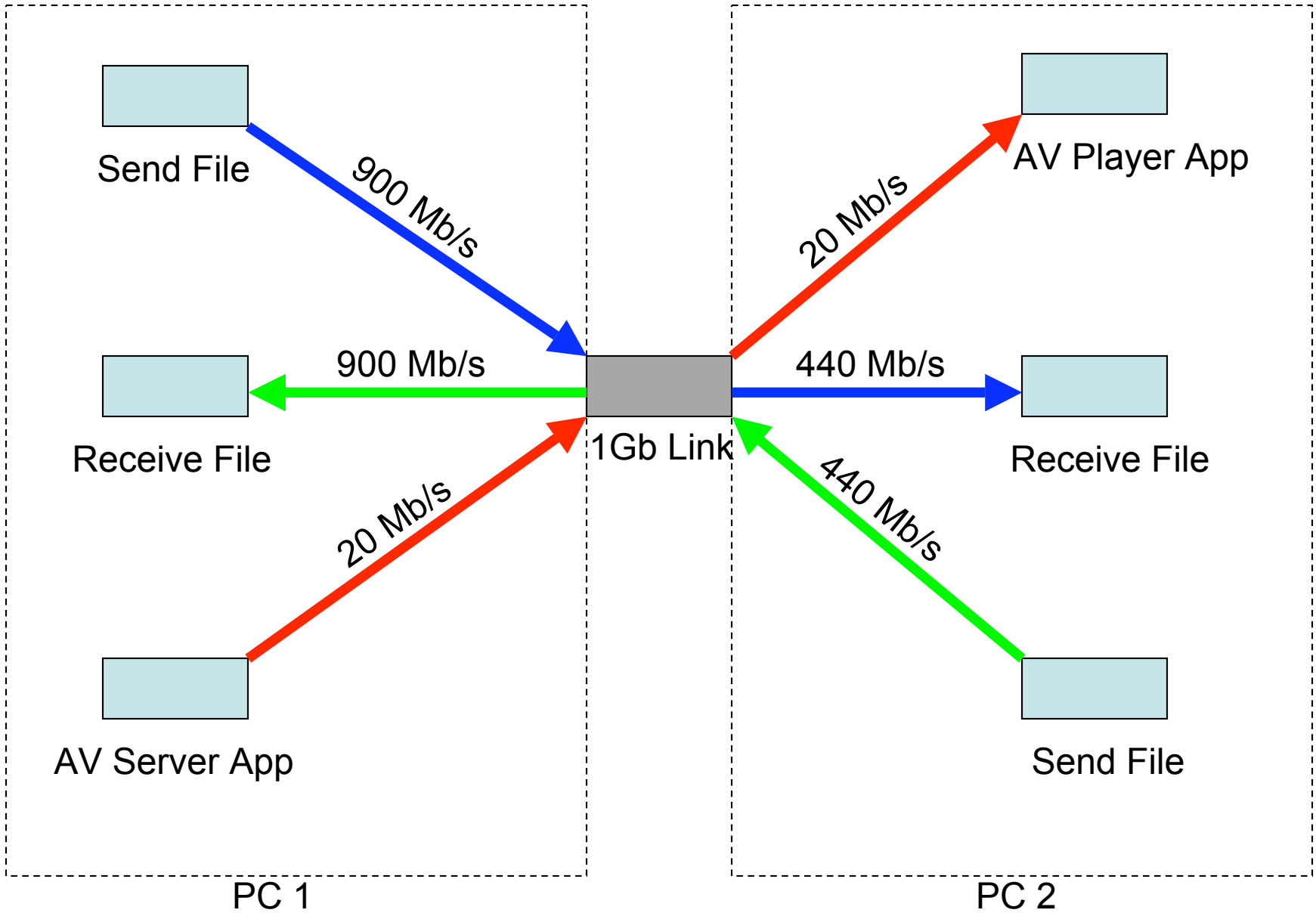
ISOC

ASYNC

Outbound

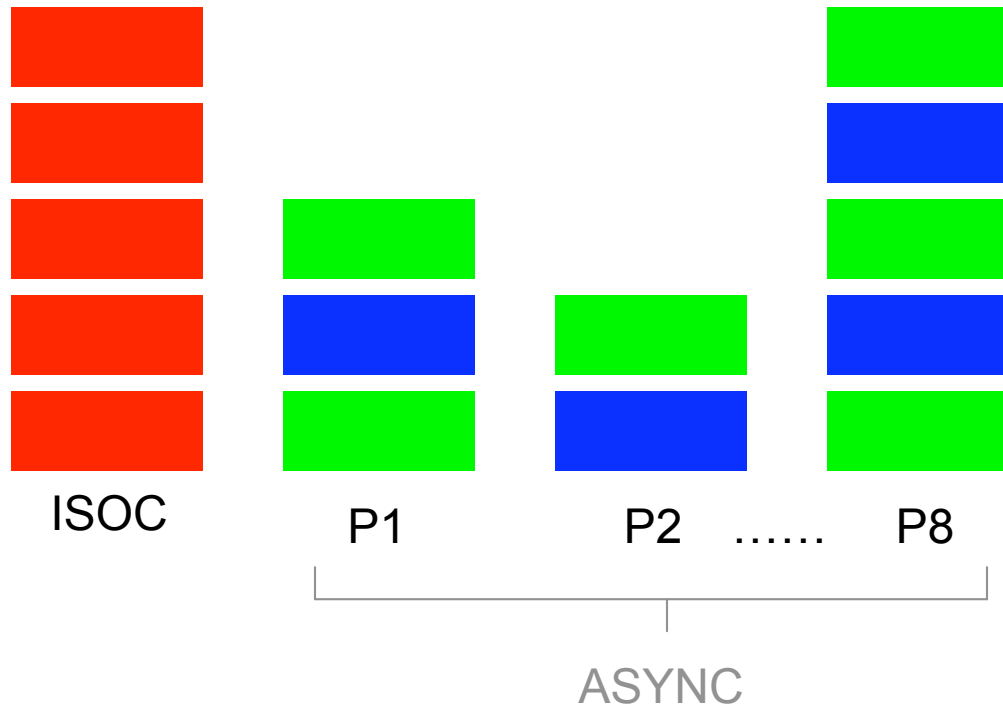


# Link Only RE Scenario





## Time-Based Queues



1. ISOC Queue always sends x frames per time
2. ASync Queues send frames according to priority, using the remaining time between ISOC frame transmissions