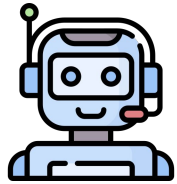
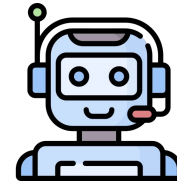
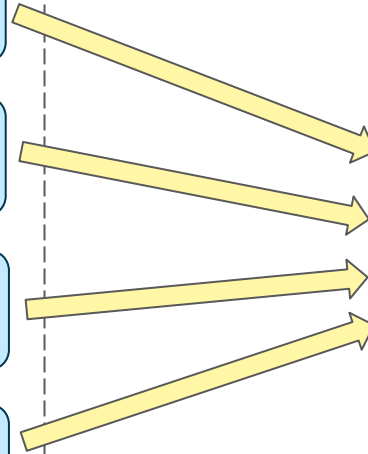
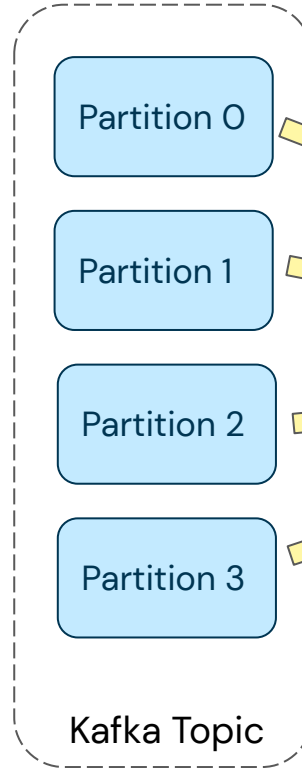


# Consumer Groups

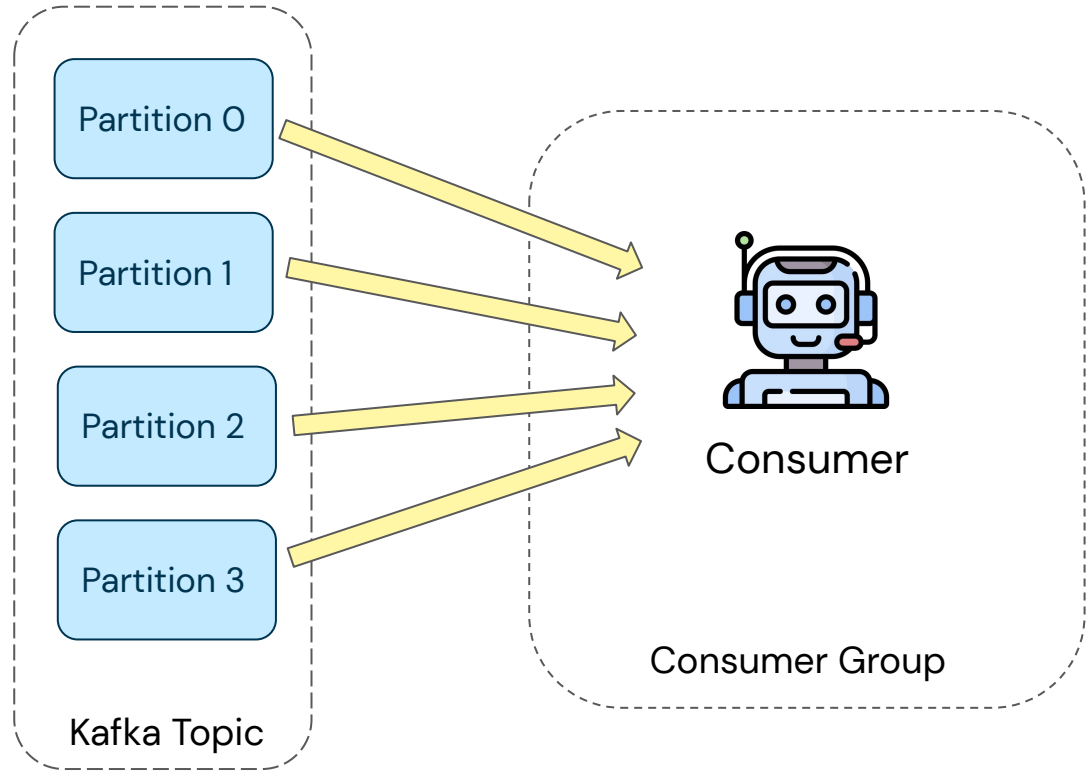


Producer

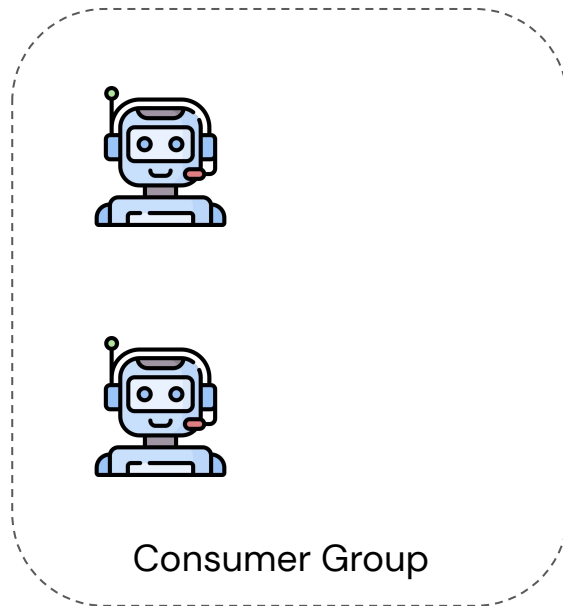
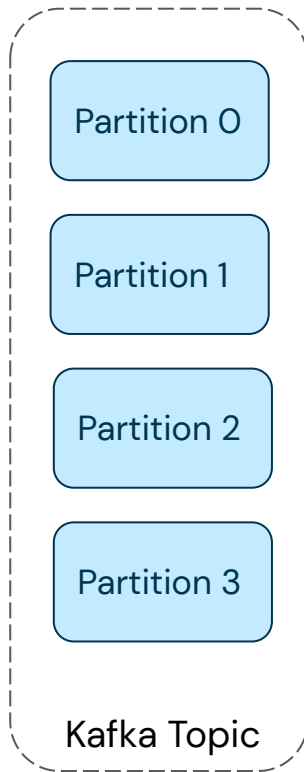


Consumer

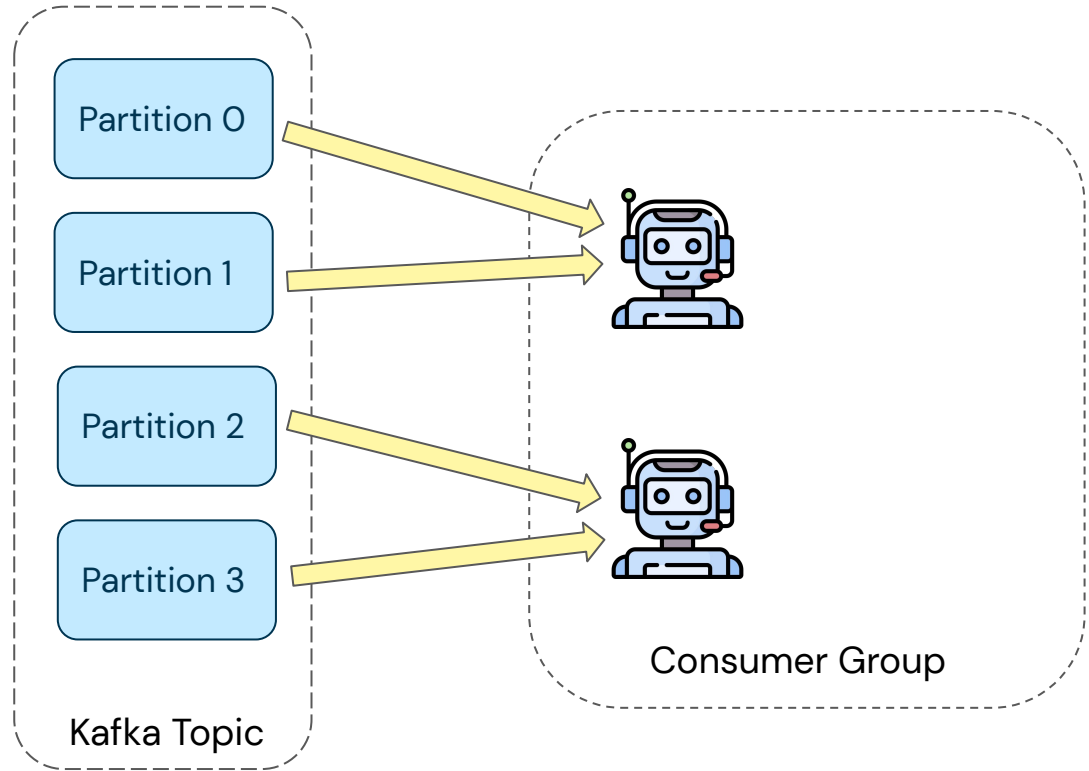
# Consumer Groups



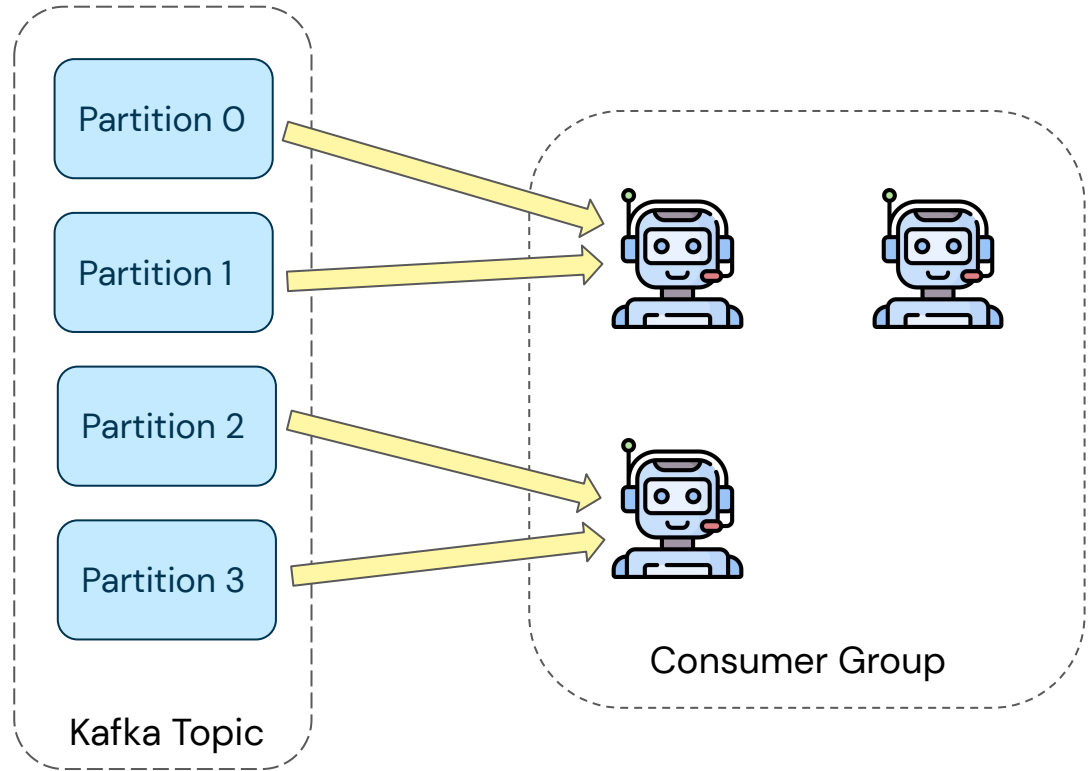
# Consumer Groups



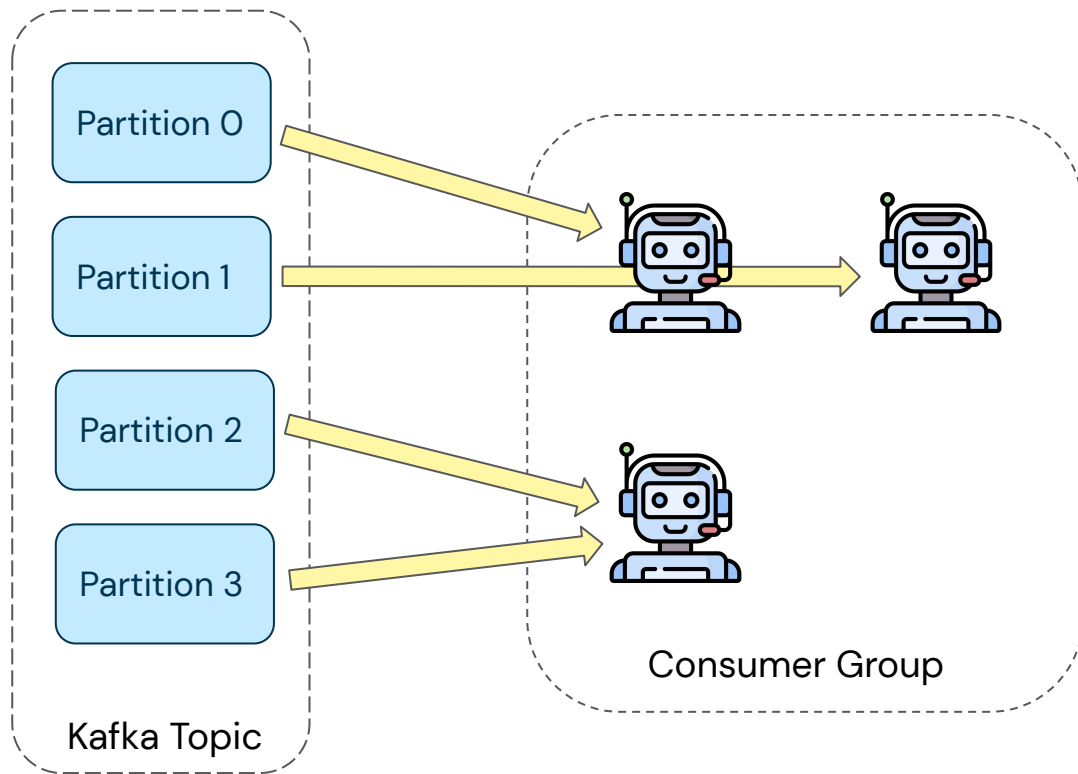
# Consumer Groups



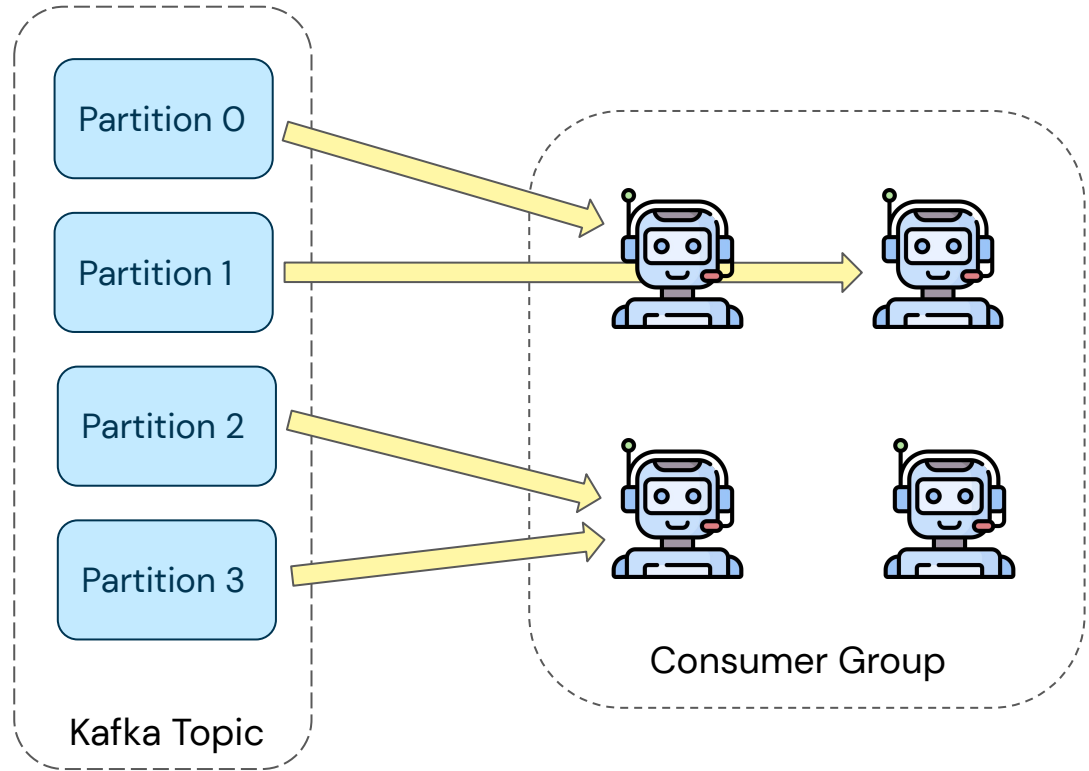
# Consumer Groups



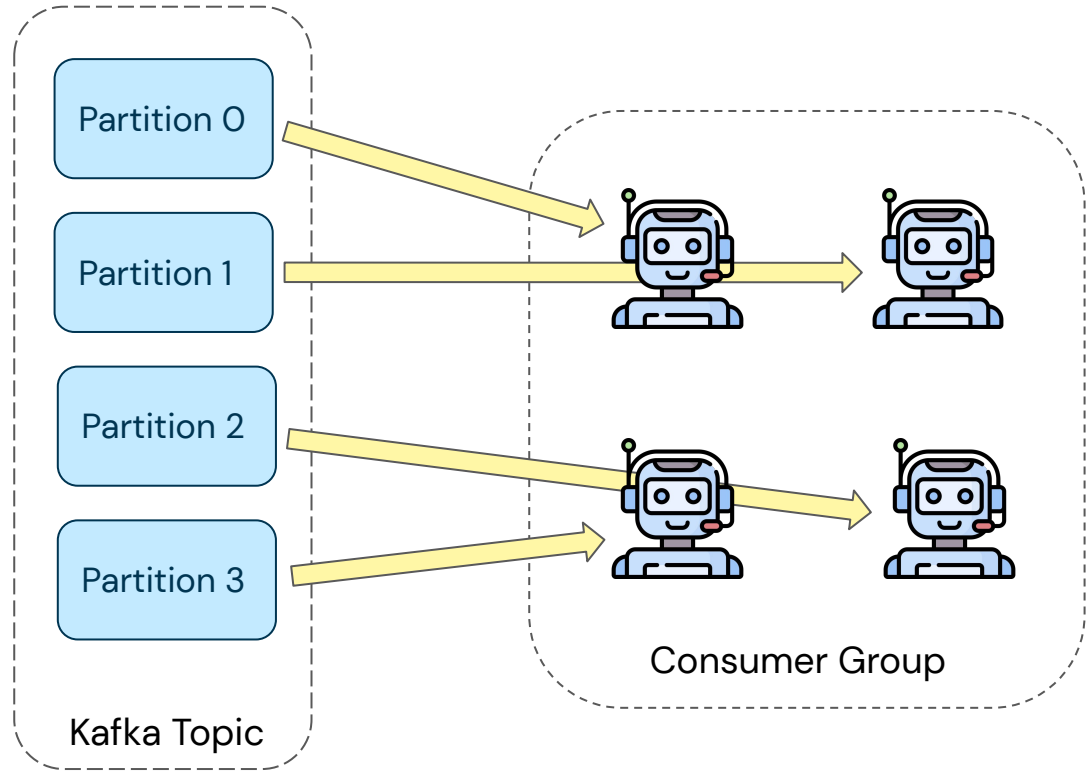
# Consumer Groups



# Consumer Groups

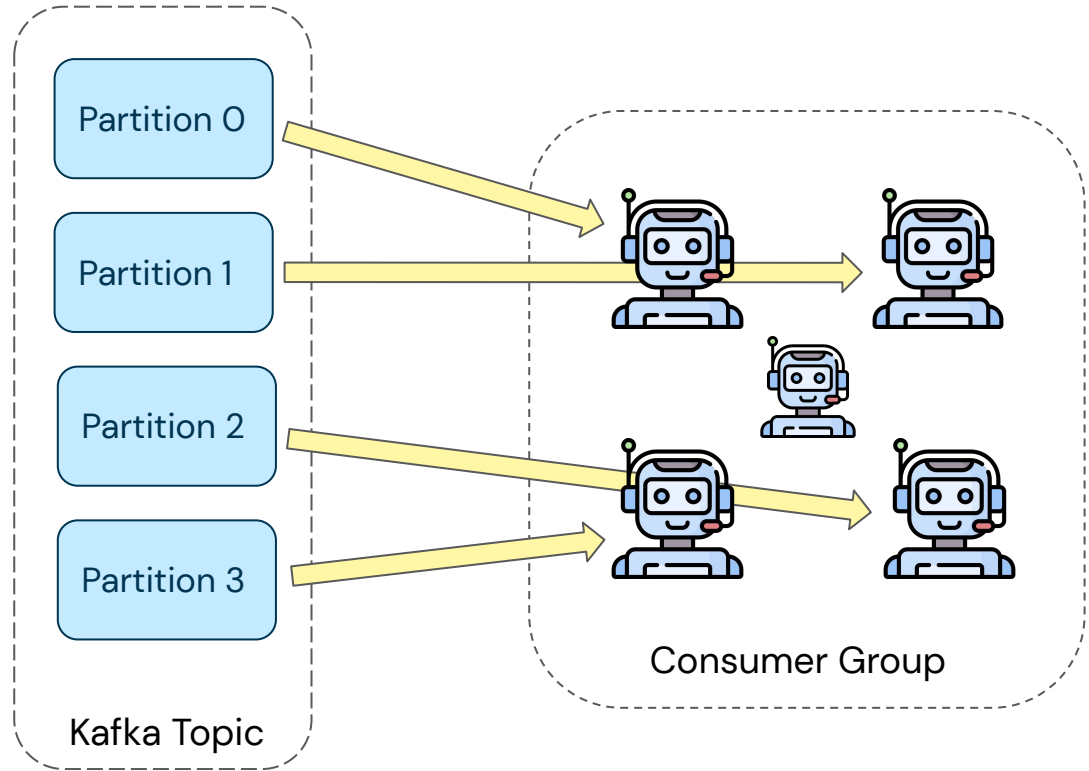


# Consumer Groups



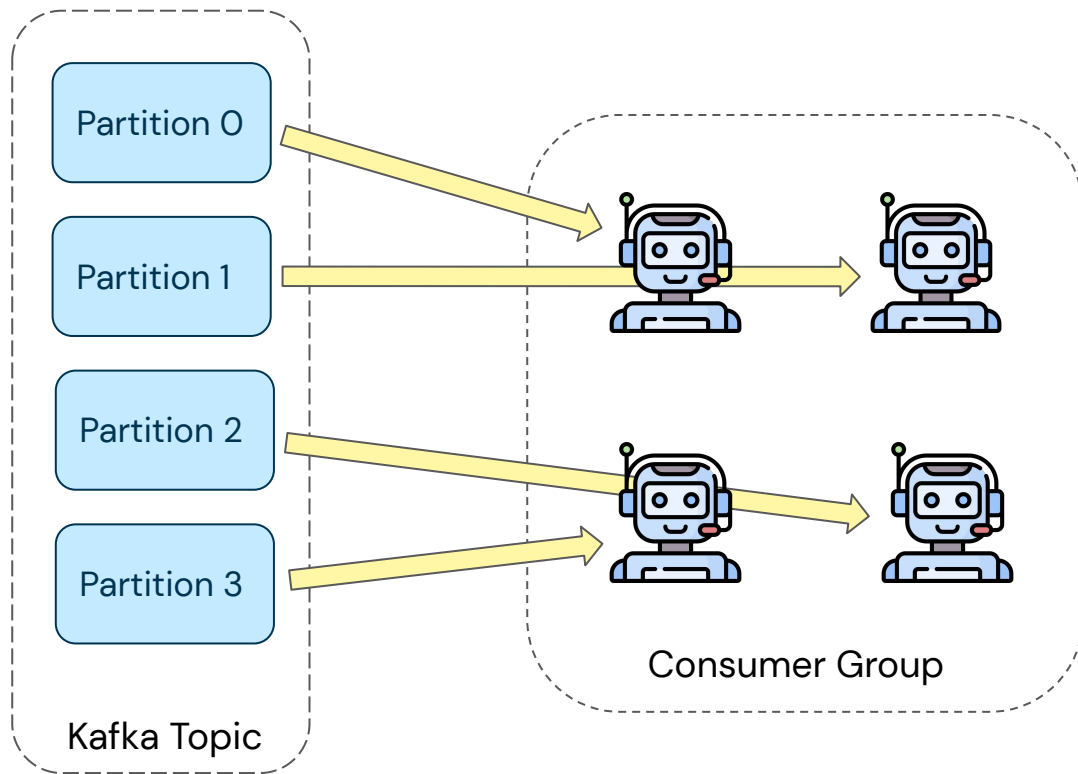


# Consumer Groups



# Consumer Groups

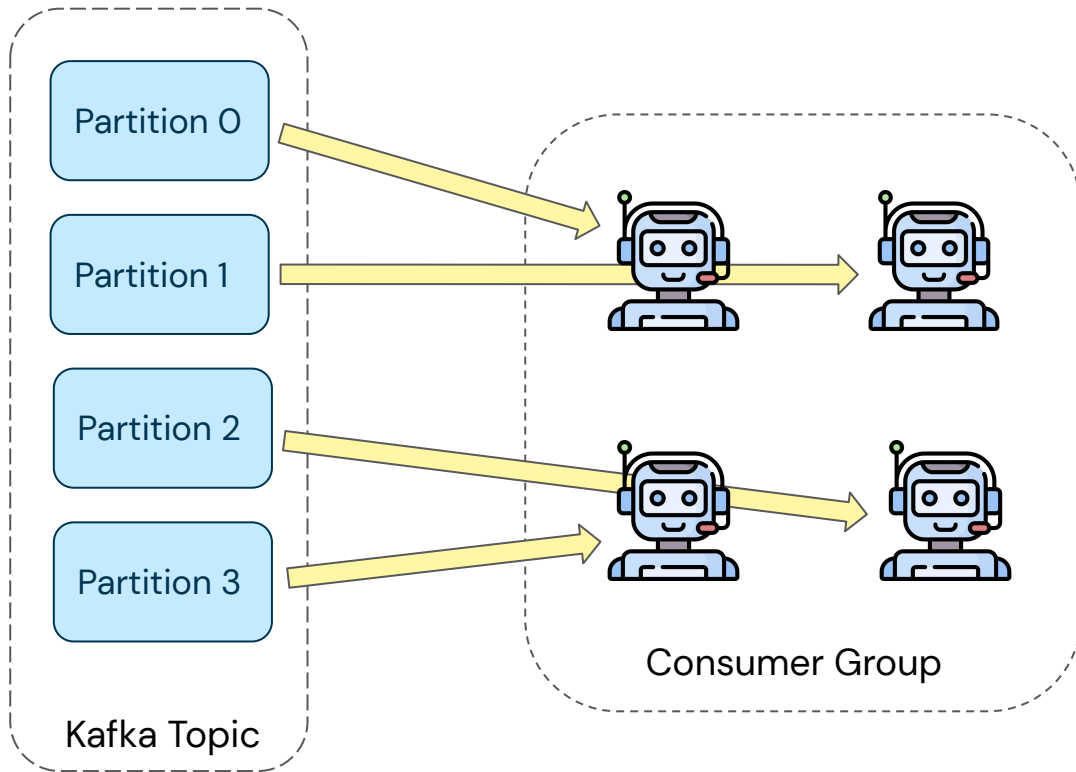
# Partitions



# Consumer Groups

# Partitions

# Consumers

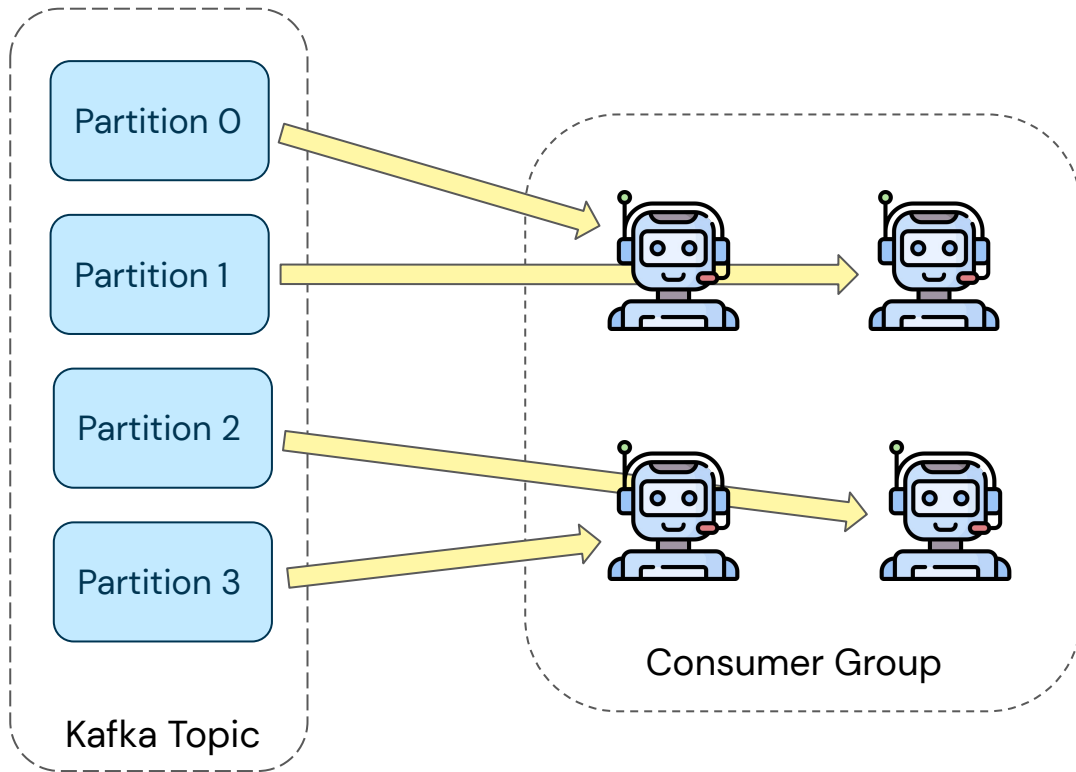


# Consumer Groups

# Partitions

All Producers  
Performance

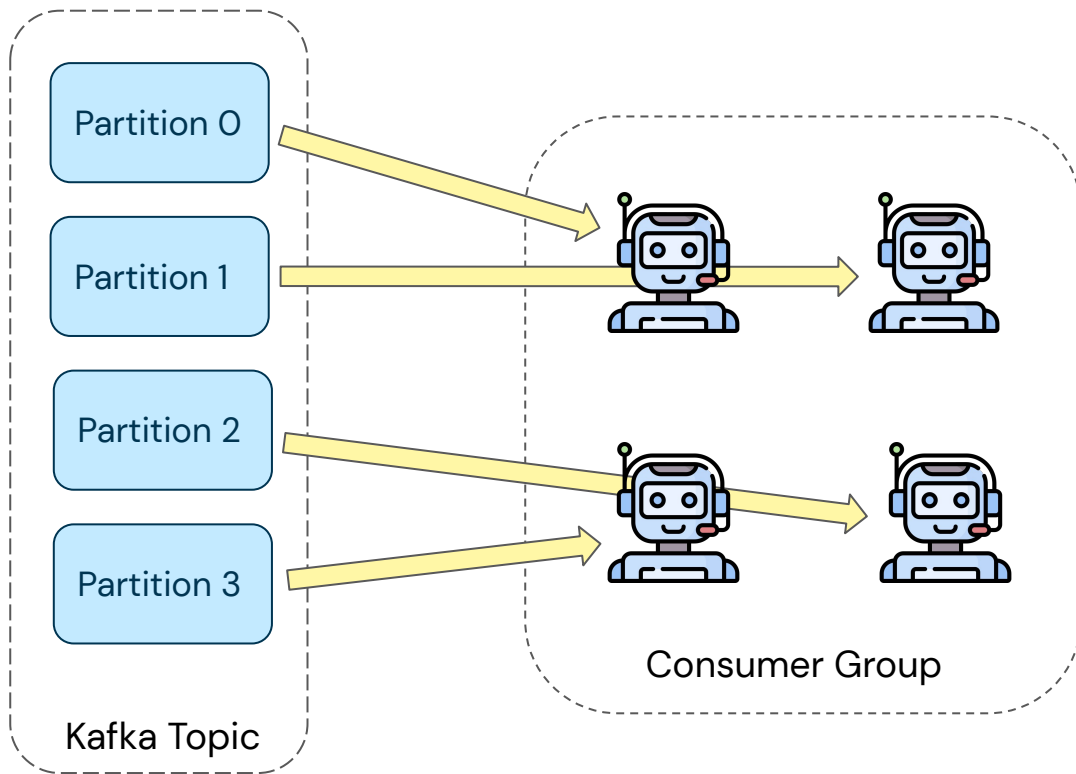
# Consumers =



# Consumer Groups

# Partitions

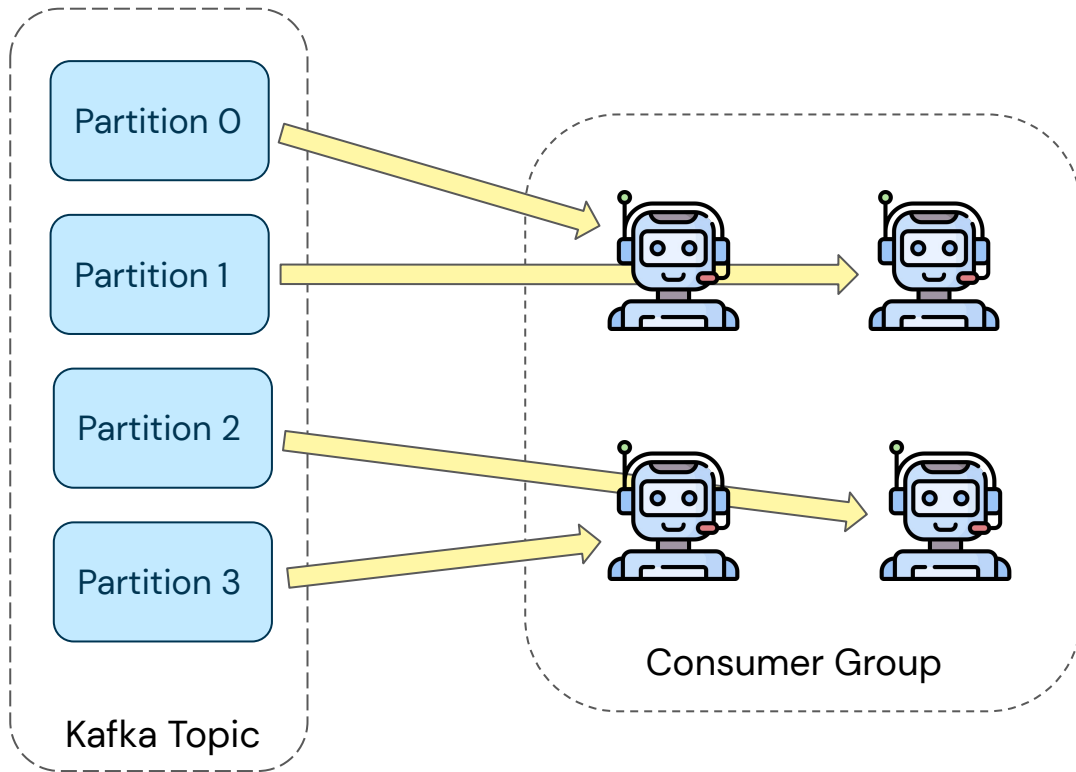
$$\# \text{ Consumers} = \frac{\text{All Producers Performance}}{1 \text{ Consumer Performance}}$$



# Consumer Groups

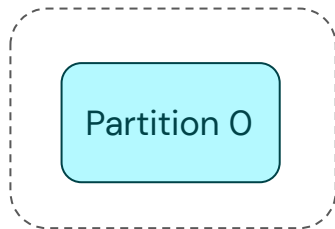
# Partitions  $\geq$  # Consumers

$$\# \text{ Consumers} = \frac{\text{All Producers Performance}}{1 \text{ Consumer Performance}}$$

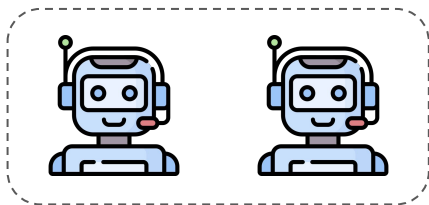
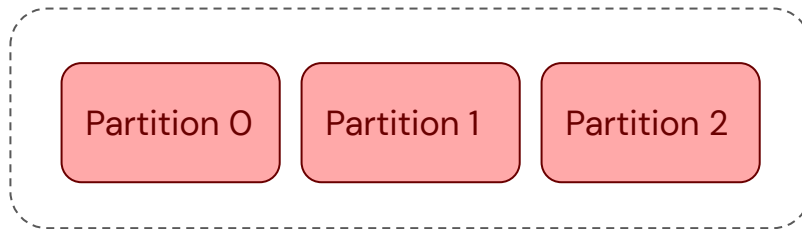


# Consumer Groups

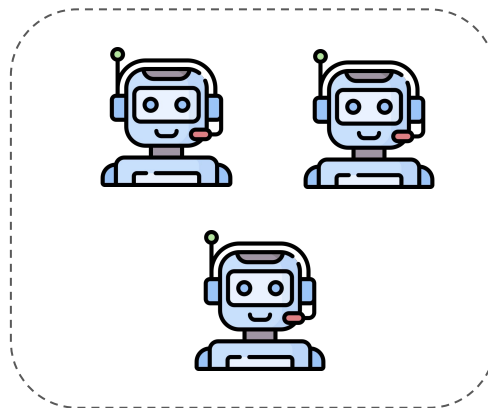
Topic A



Topic B



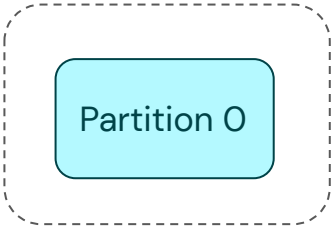
Group A



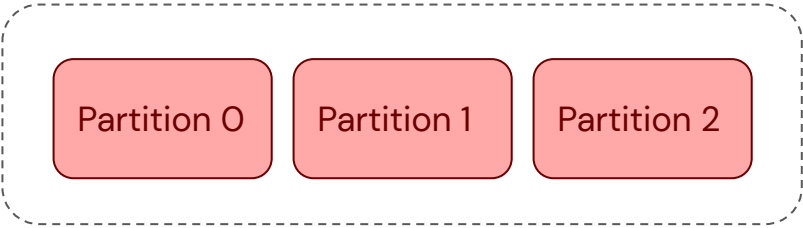
Group B

# Consumer Groups

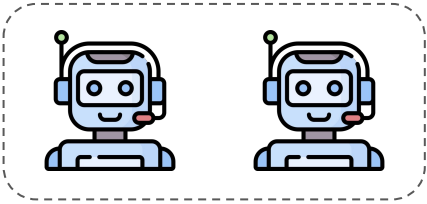
Topic A



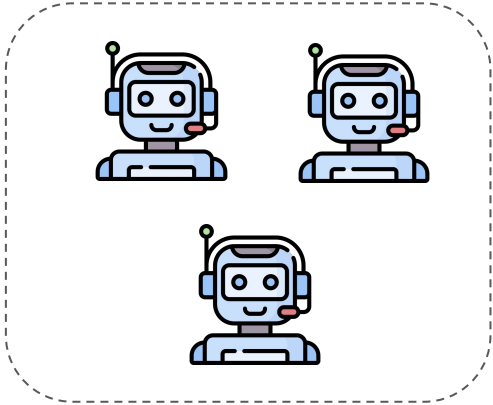
Topic B



Topic A



Group A



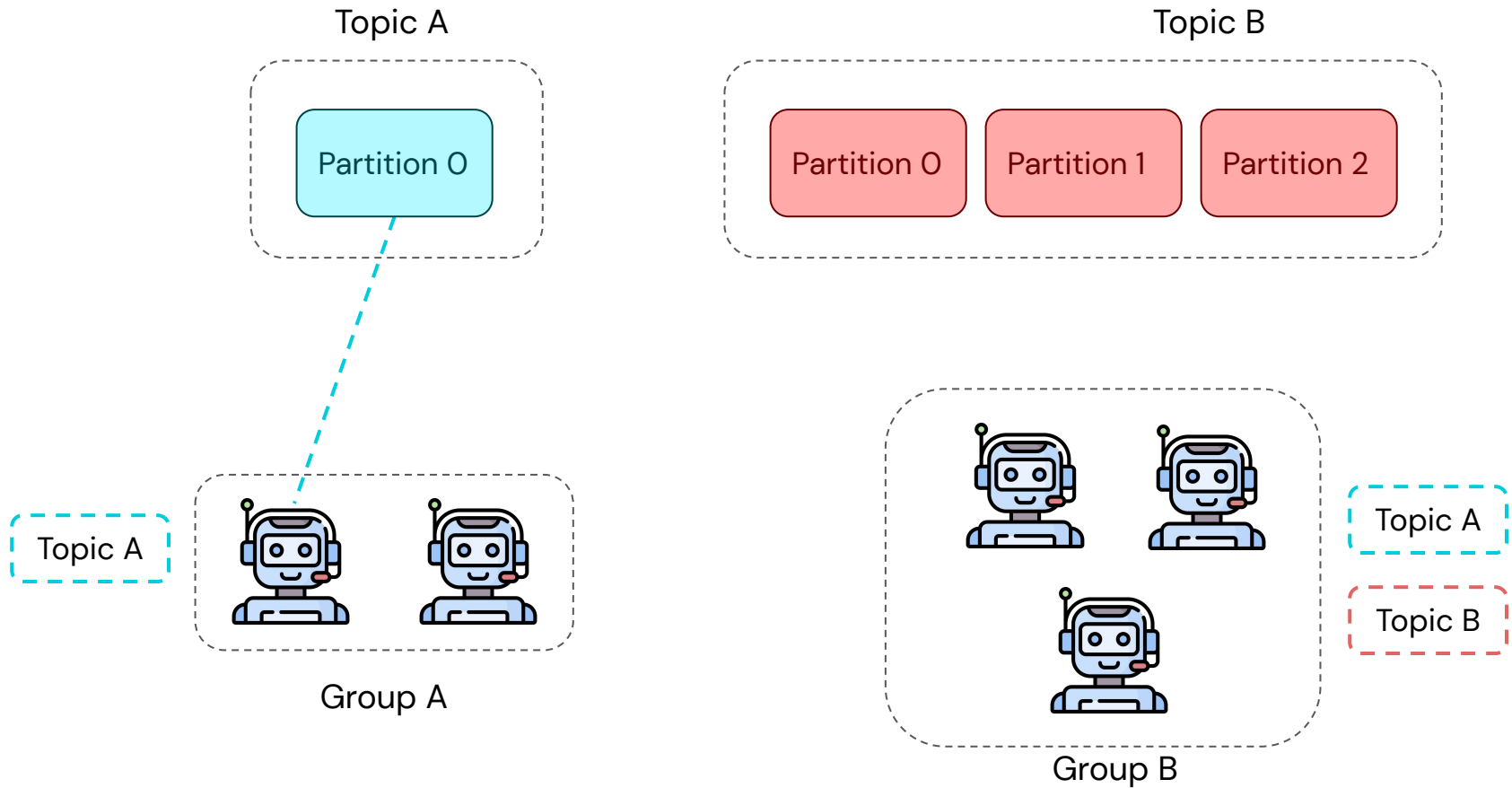
Group B

Topic A

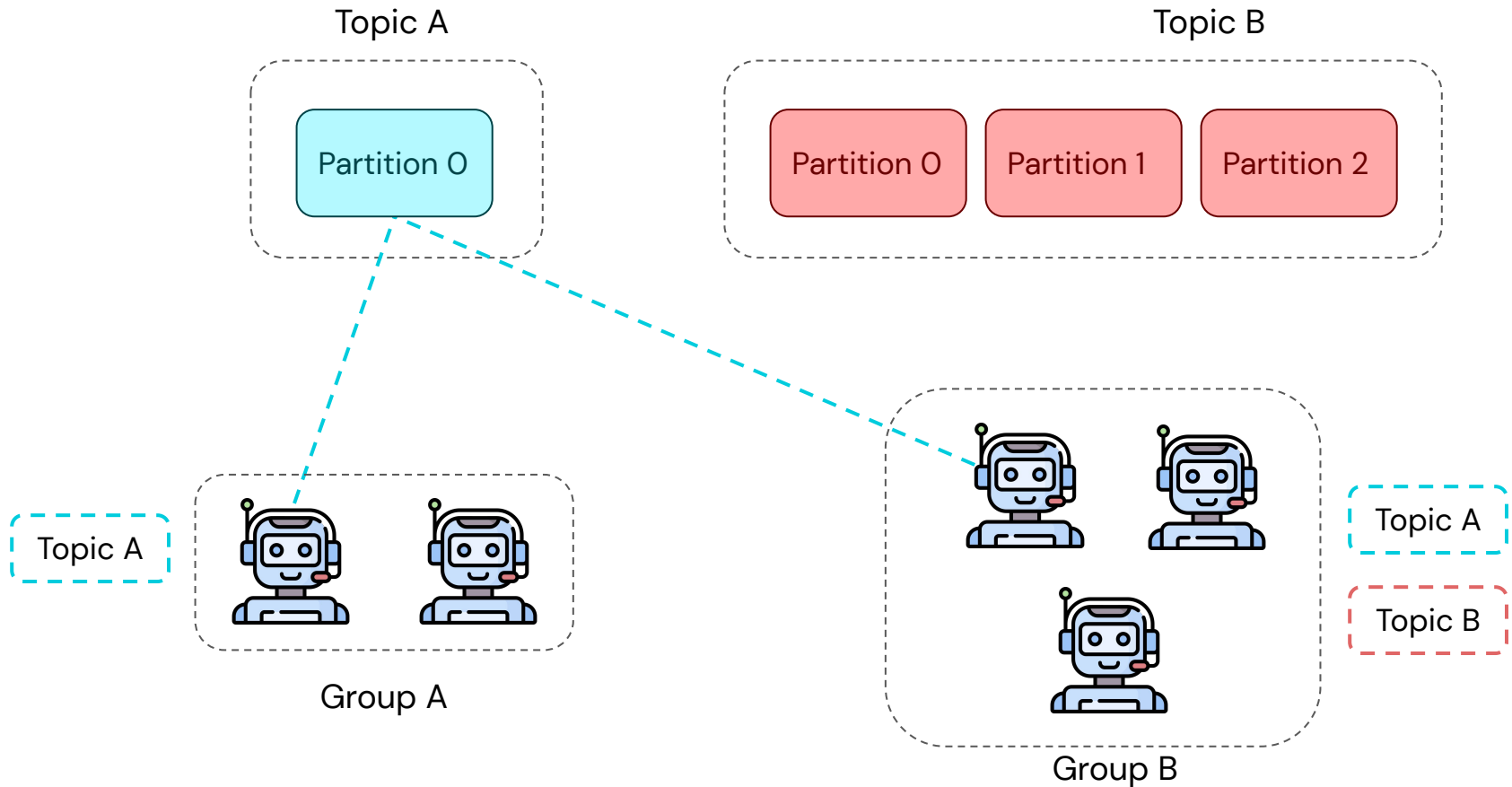
Topic B



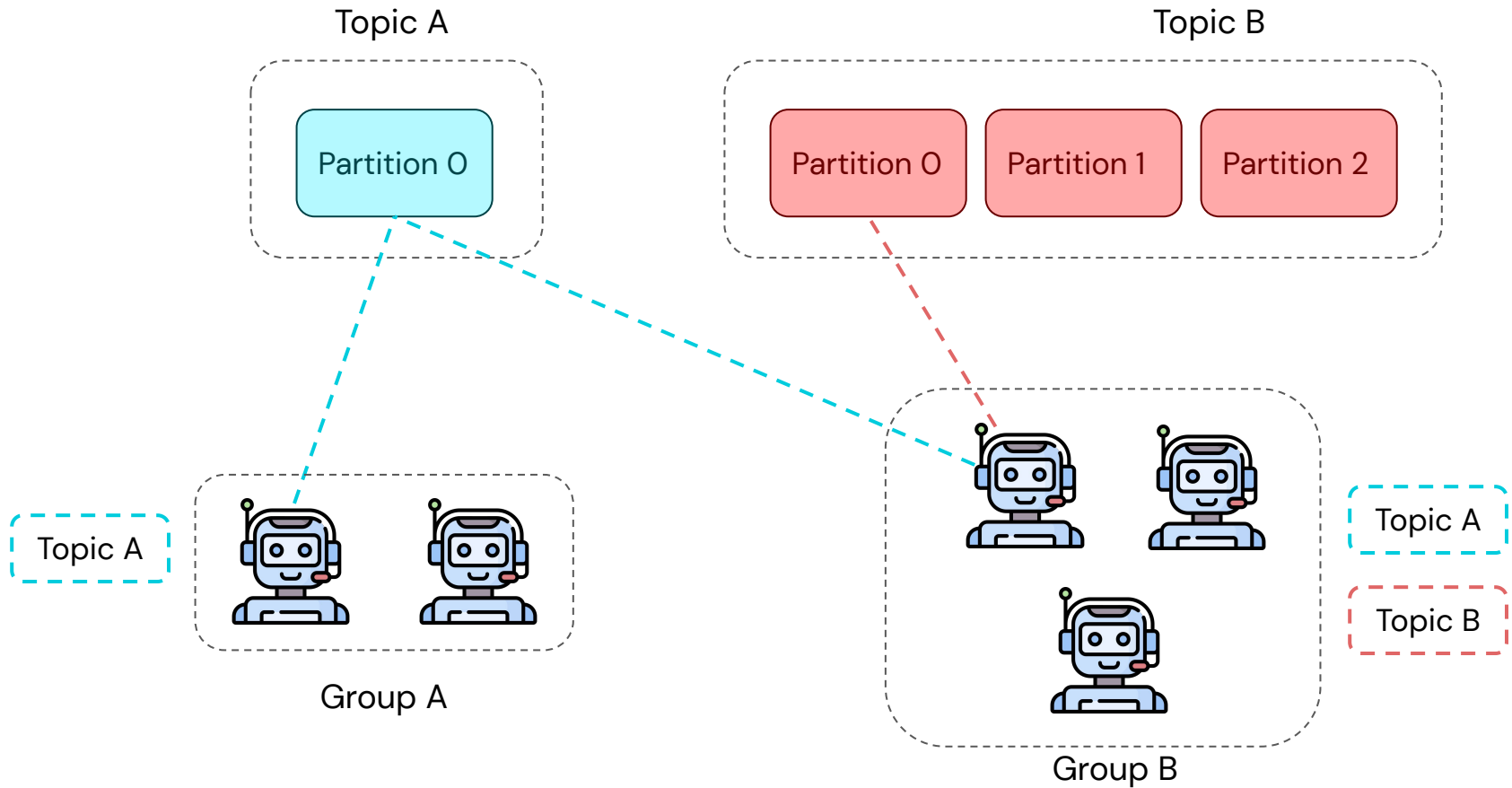
# Consumer Groups



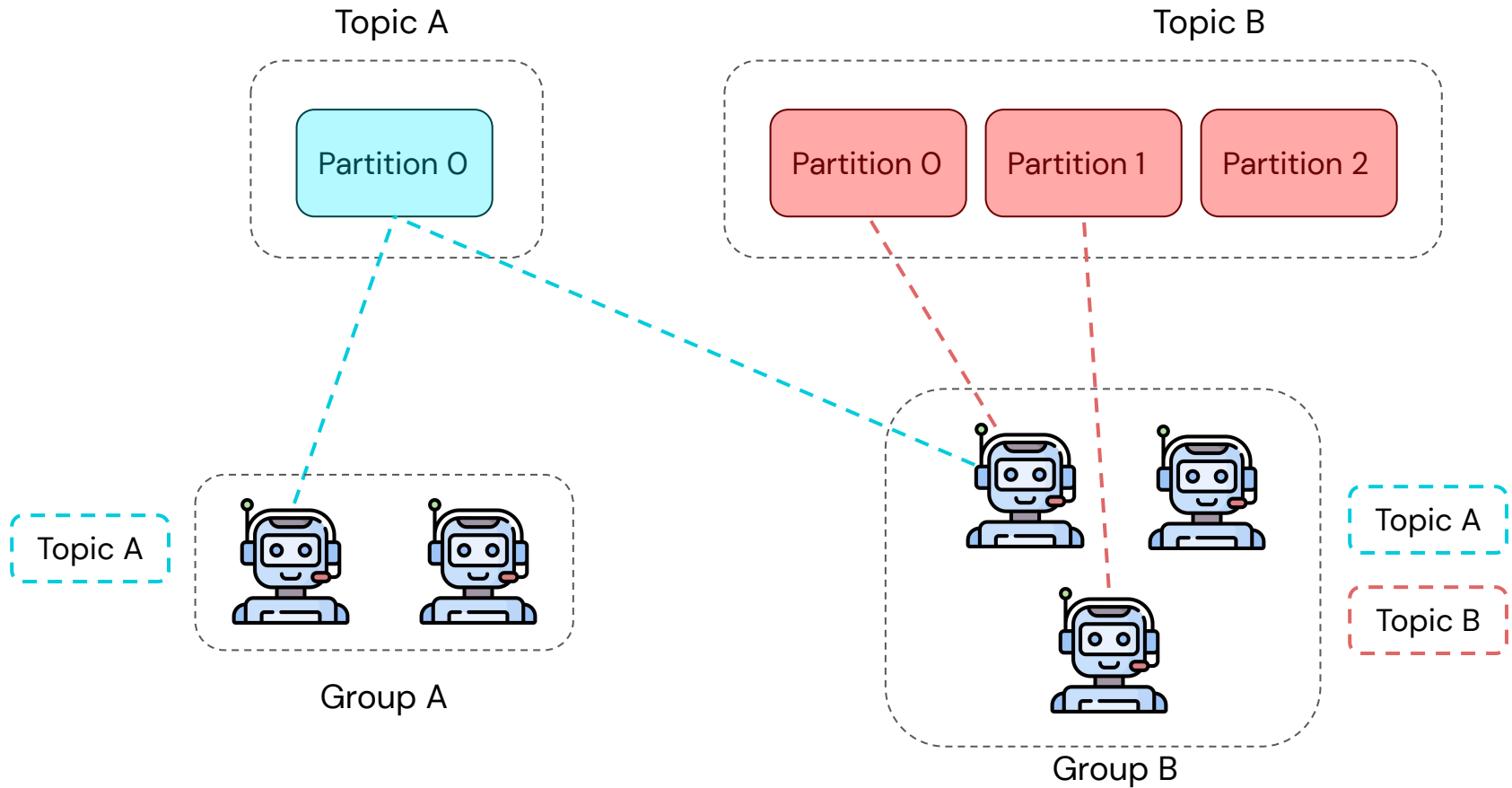
# Consumer Groups



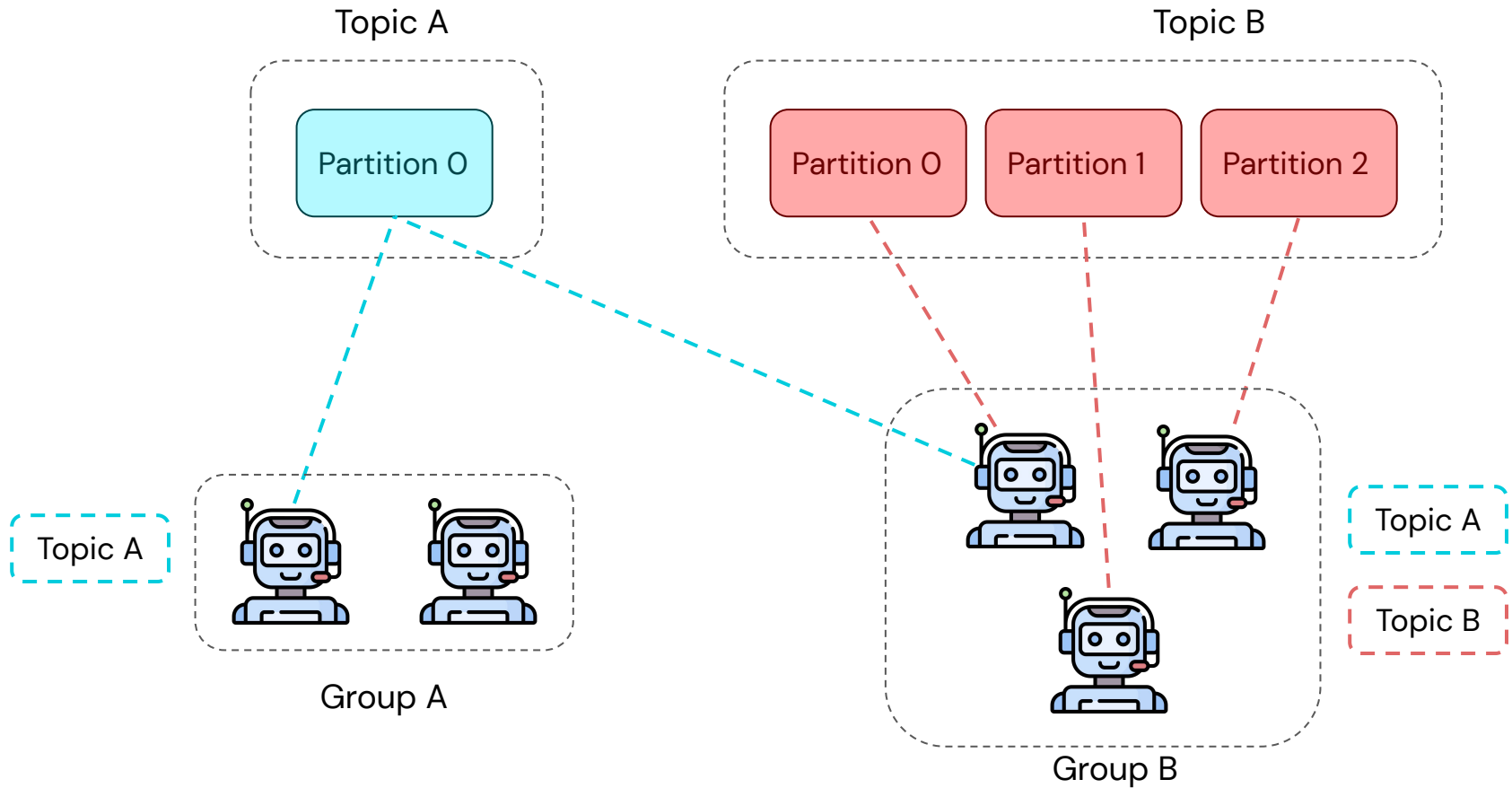
# Consumer Groups



# Consumer Groups

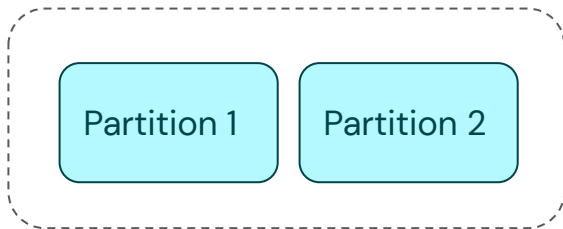


# Consumer Groups

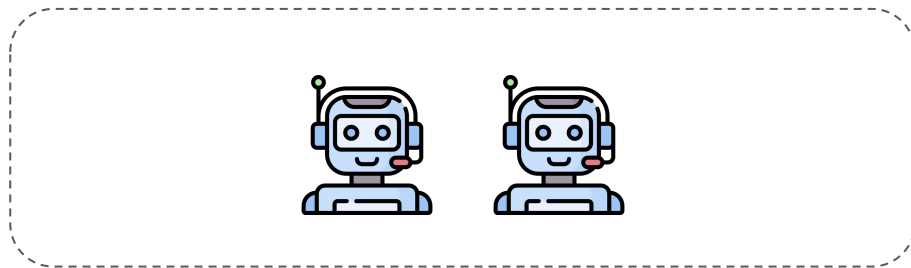
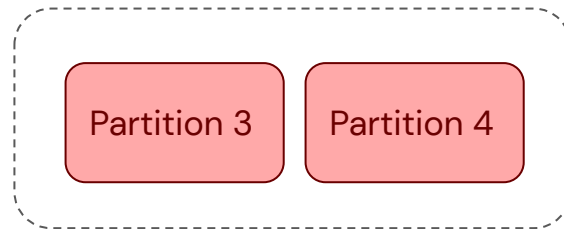


# Consumer Groups

Topic A

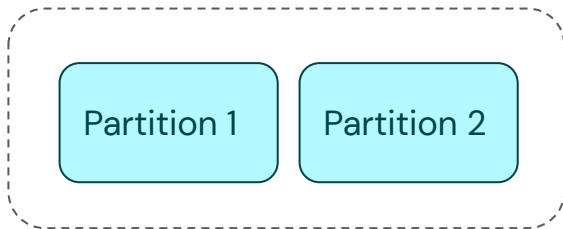


Topic B

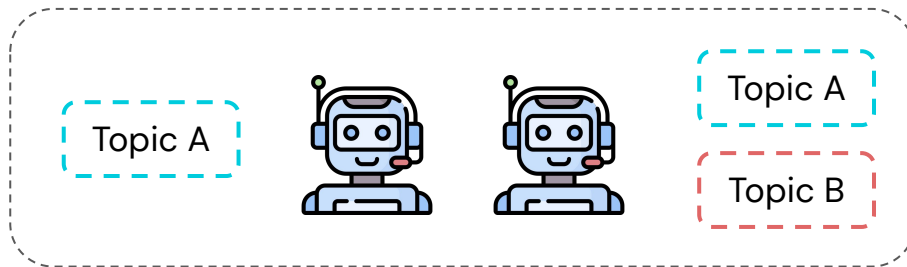
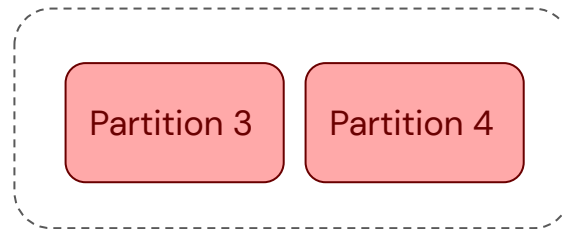


# Consumer Groups

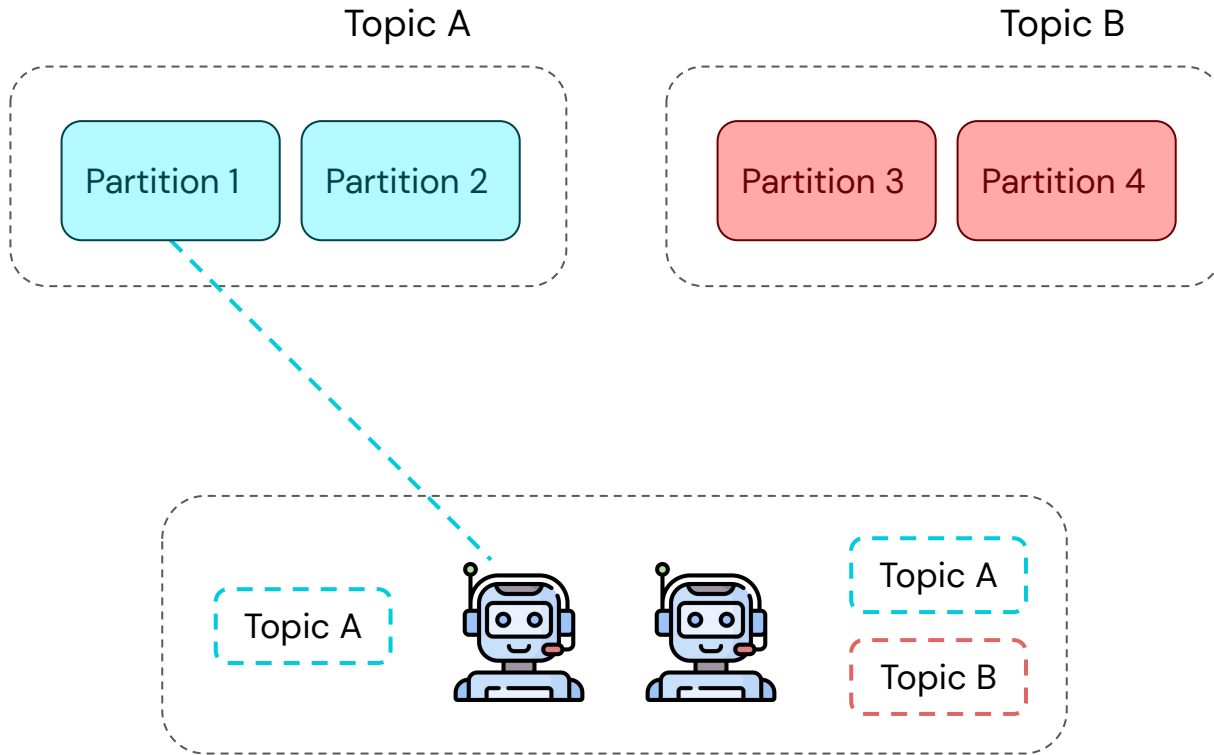
Topic A



Topic B

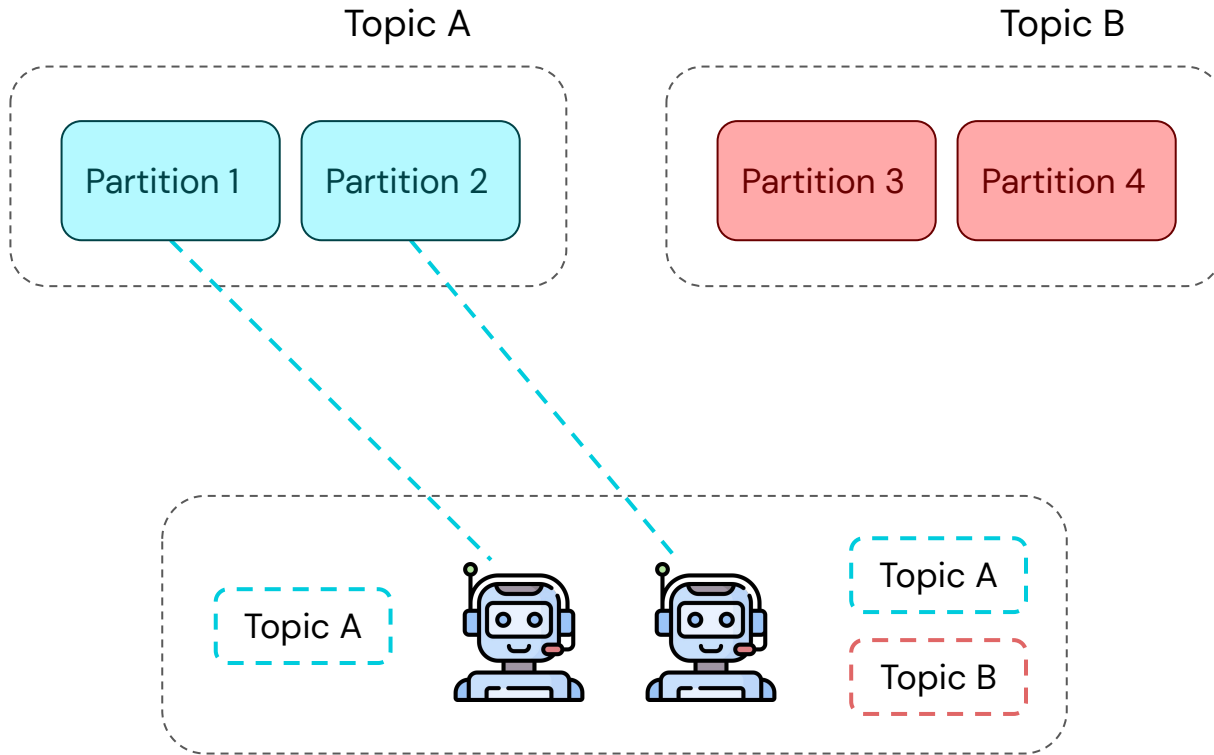


# Consumer Groups

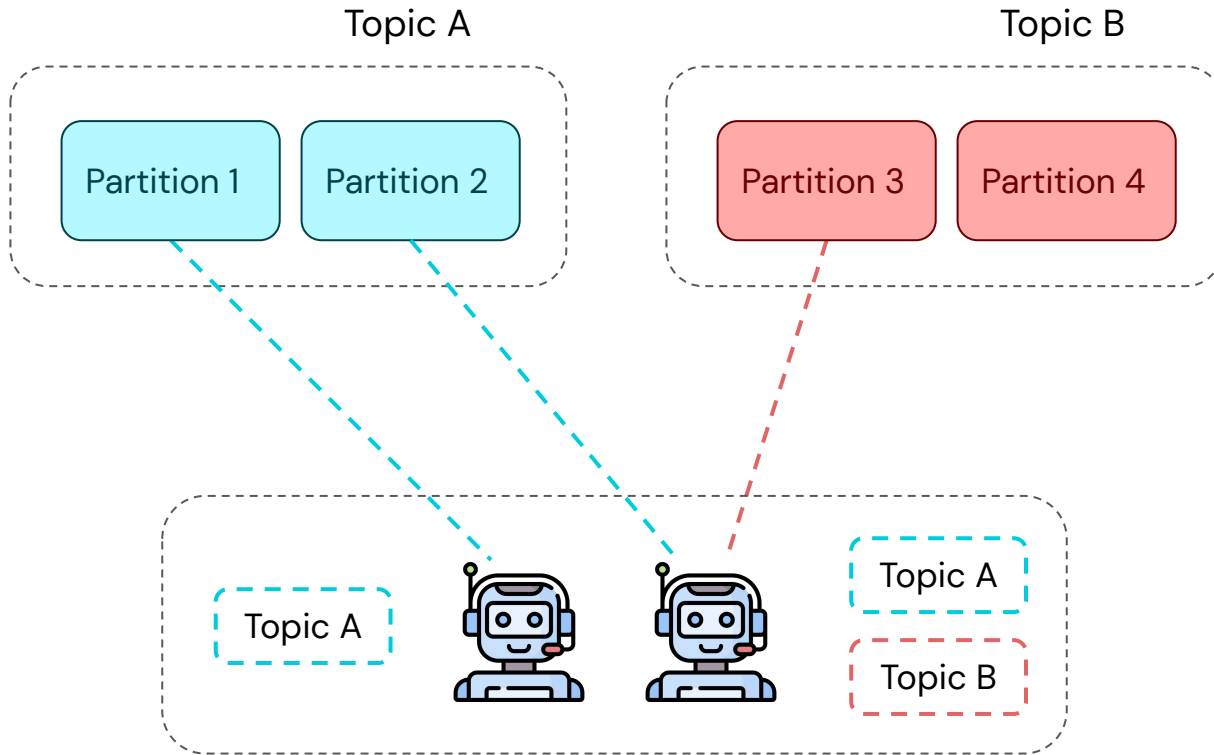




# Consumer Groups



# Consumer Groups



# Consumer Groups

