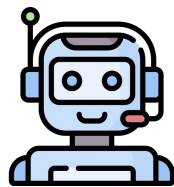
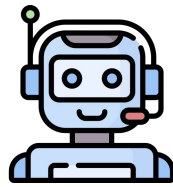


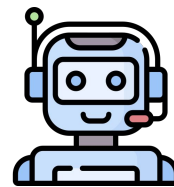
Rebalancing Protocol



P2

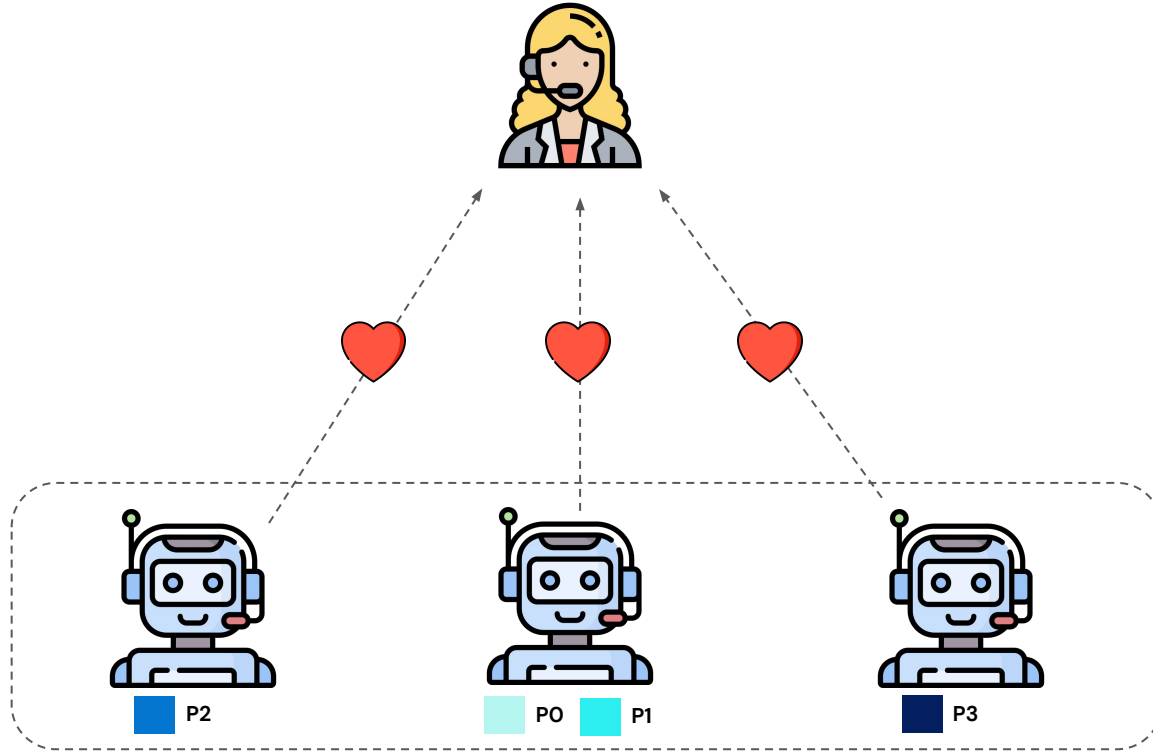


P0 P1

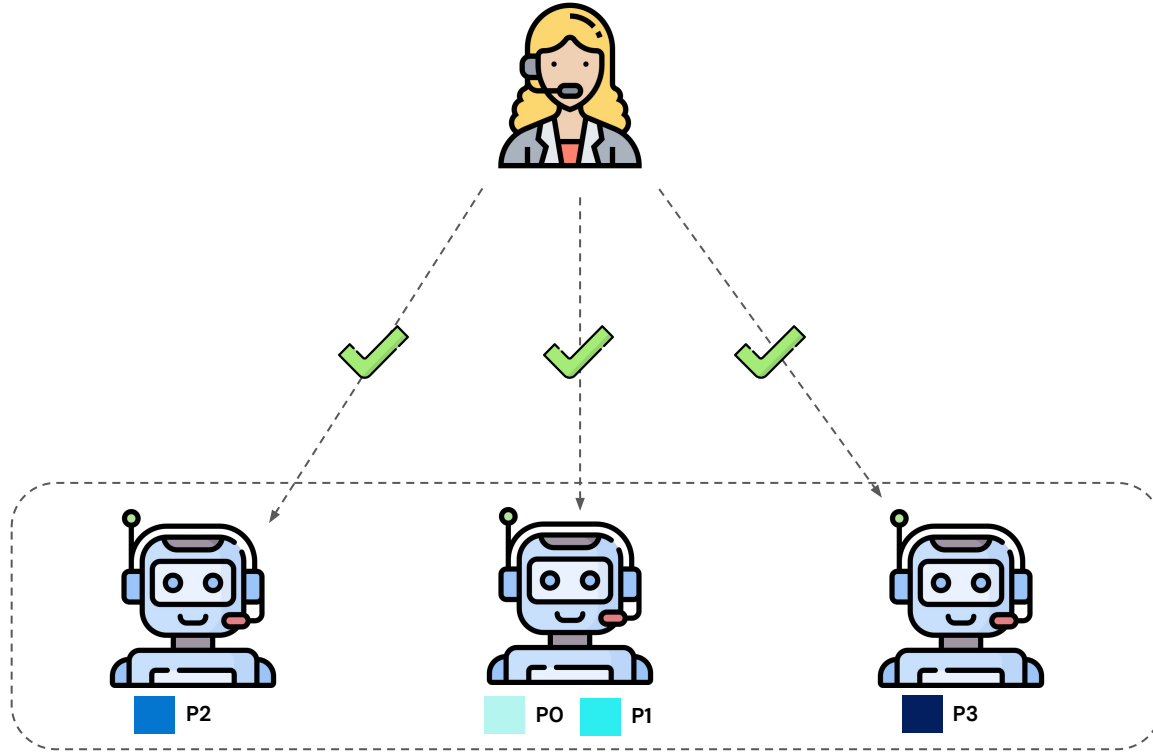


P3

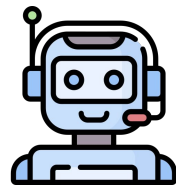
Rebalancing Protocol



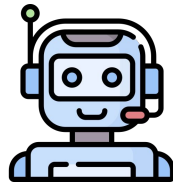
Rebalancing Protocol



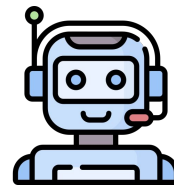
Rebalancing Protocol



 P2

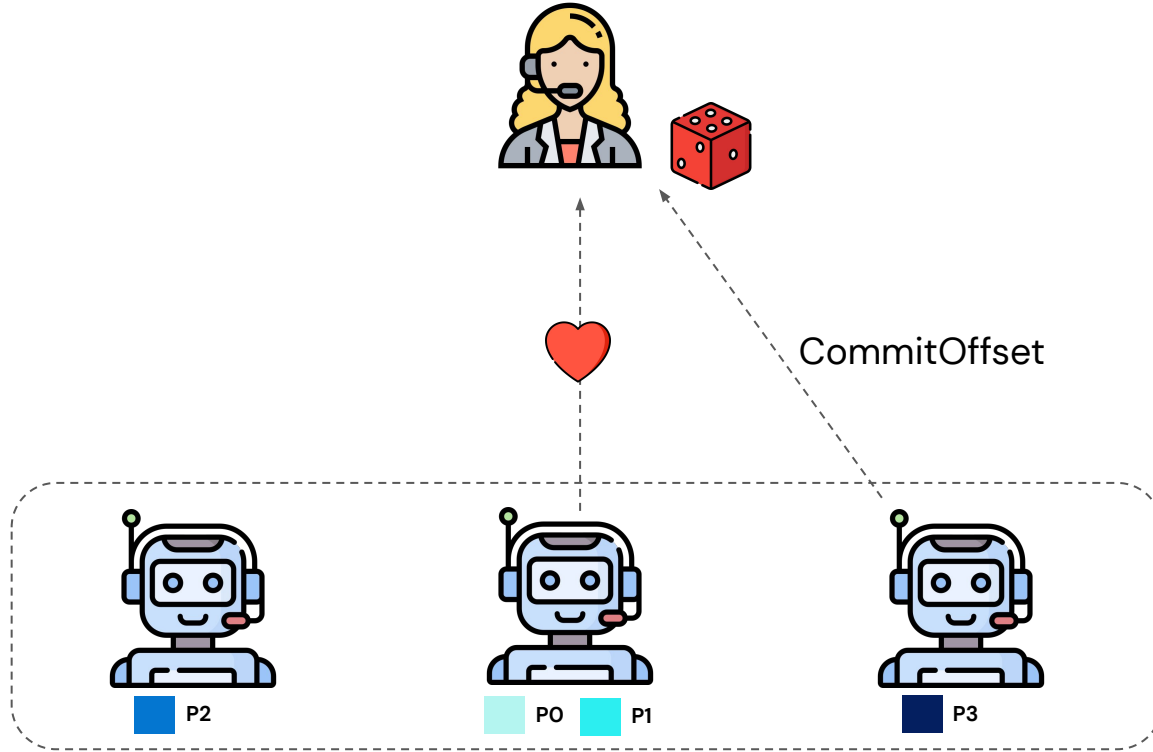


 P0  P1

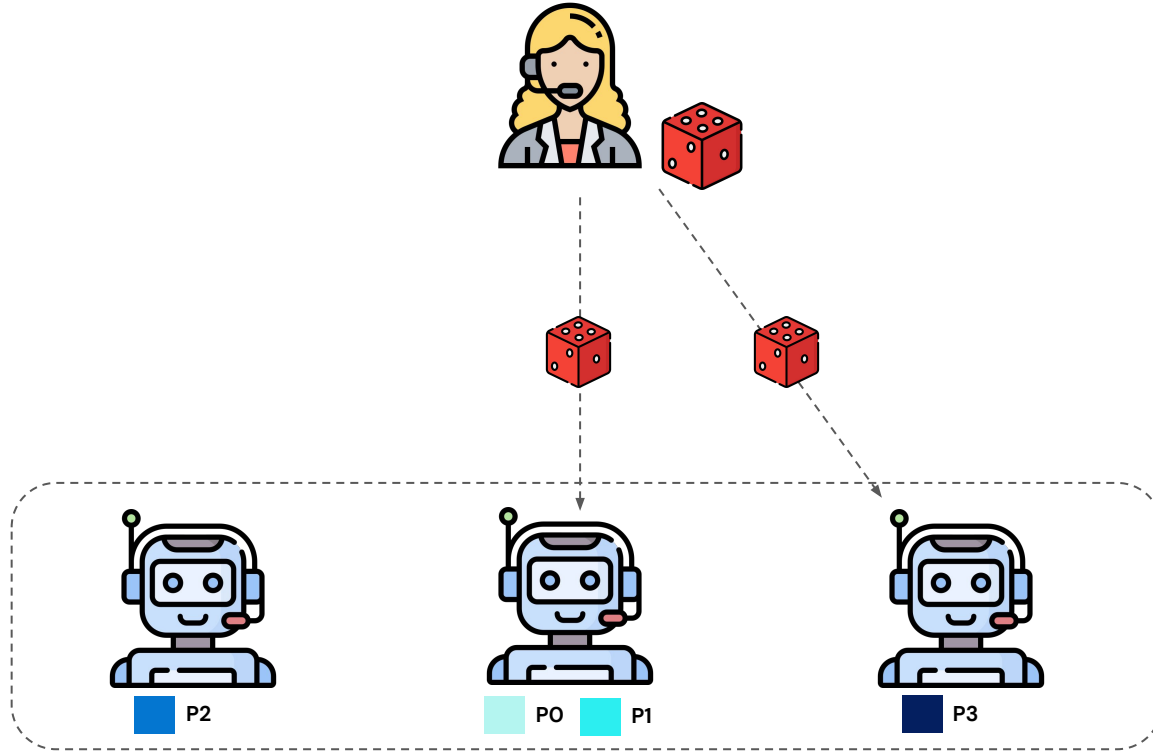


 P3

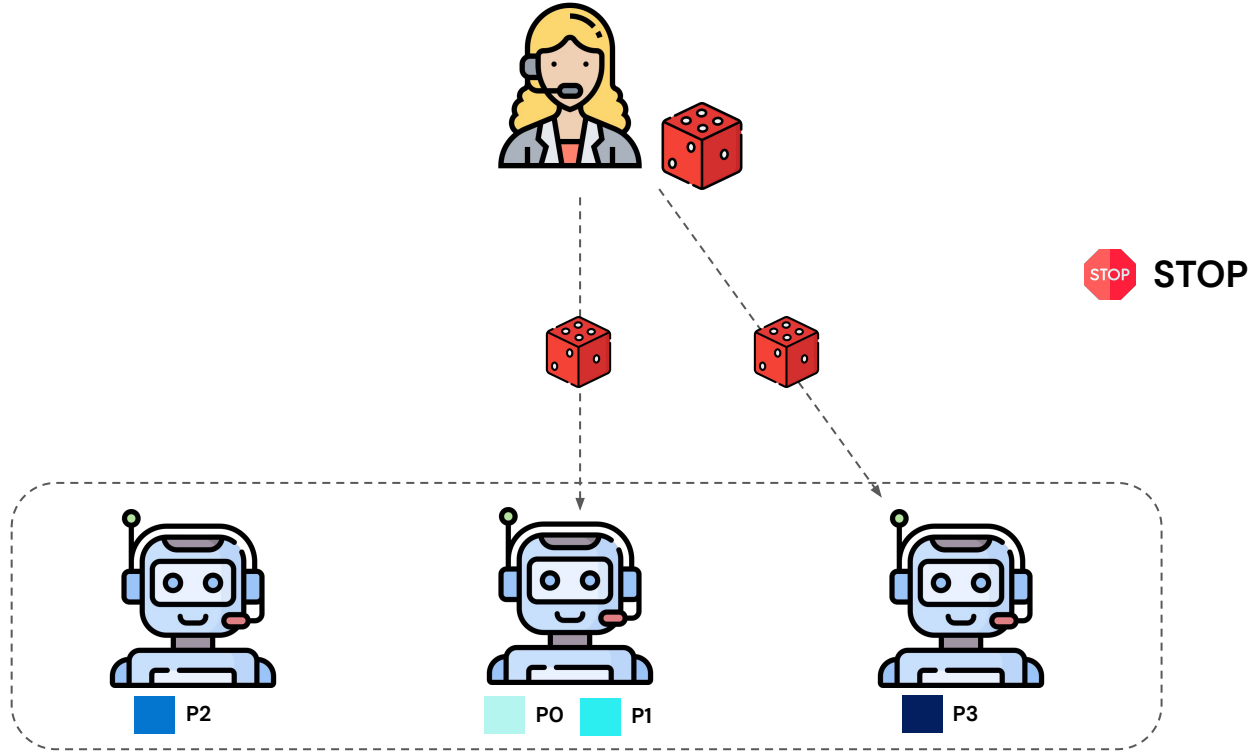
Rebalancing Protocol



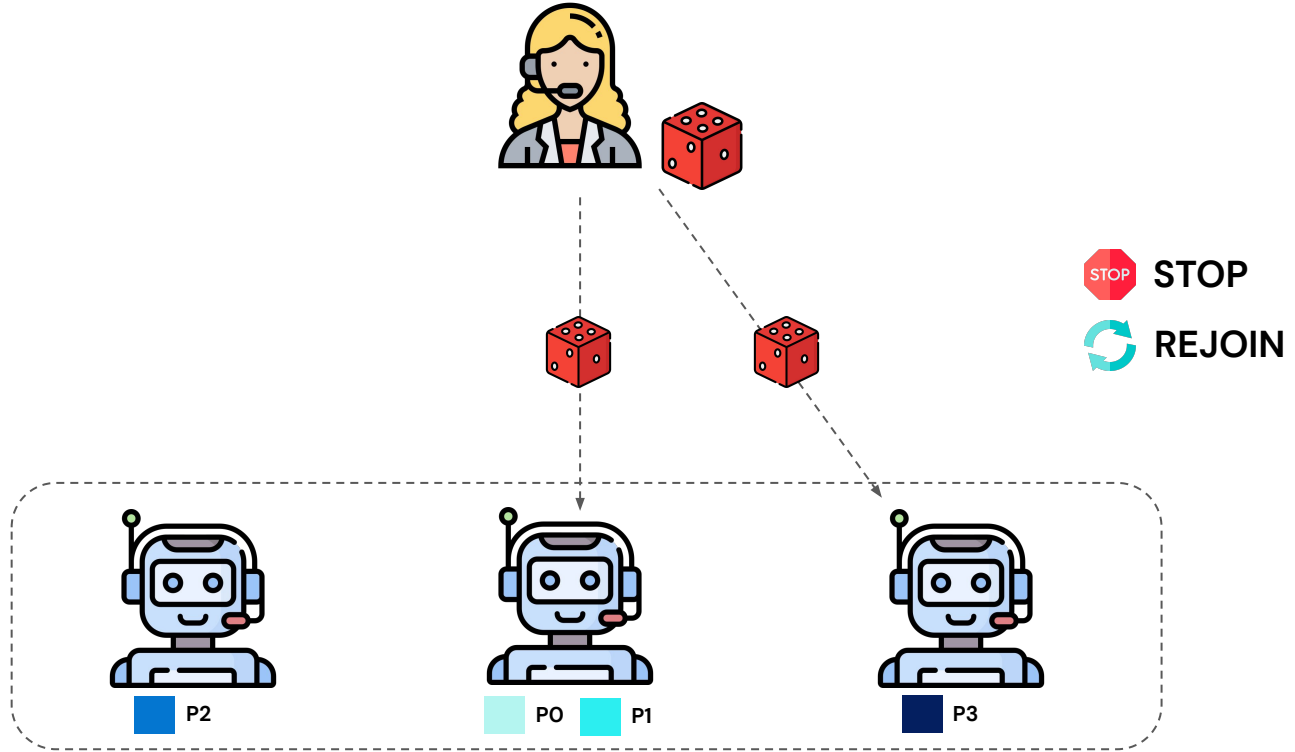
Rebalancing Protocol



Rebalancing Protocol



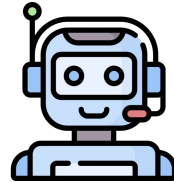
Rebalancing Protocol



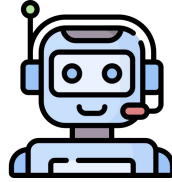
Rebalance Triggers



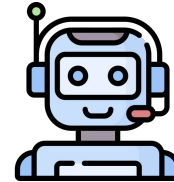
Start rebalancing when Consumer:



P2



P0 P1




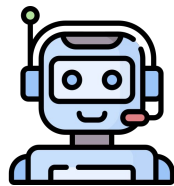
P3

Rebalance Triggers

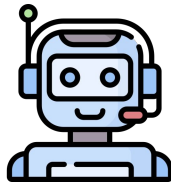


Start rebalancing when Consumer:

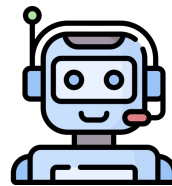
1. Dies 



 P2



 P0  P1




 P3

Rebalance Triggers

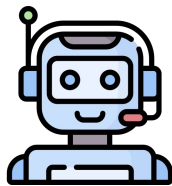


Start rebalancing when Consumer:

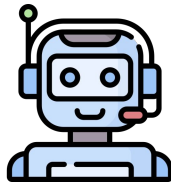
1. Dies 



session.timeout.ms

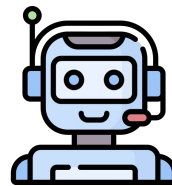


P2



P0

P1




P3

Rebalance Triggers

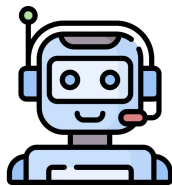


Start rebalancing when Consumer:

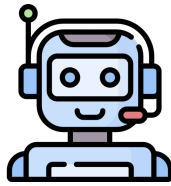
1. Dies 



session.timeout.ms

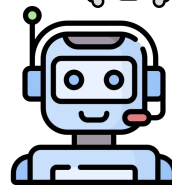


P2



P0

P1

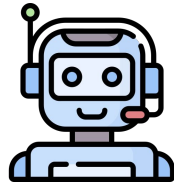


P3

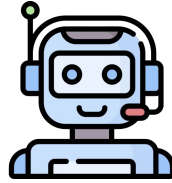
Rebalance Triggers



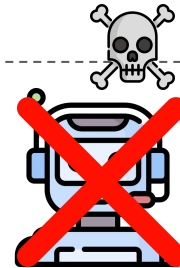
Start rebalancing when Consumer:
1. Dies ☠️



P2



P0 P1



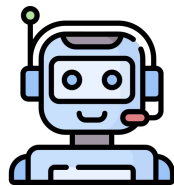
P3

Rebalance Triggers

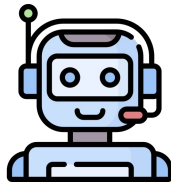


Start rebalancing when Consumer:

1. Dies 
2. Leaves 



P2

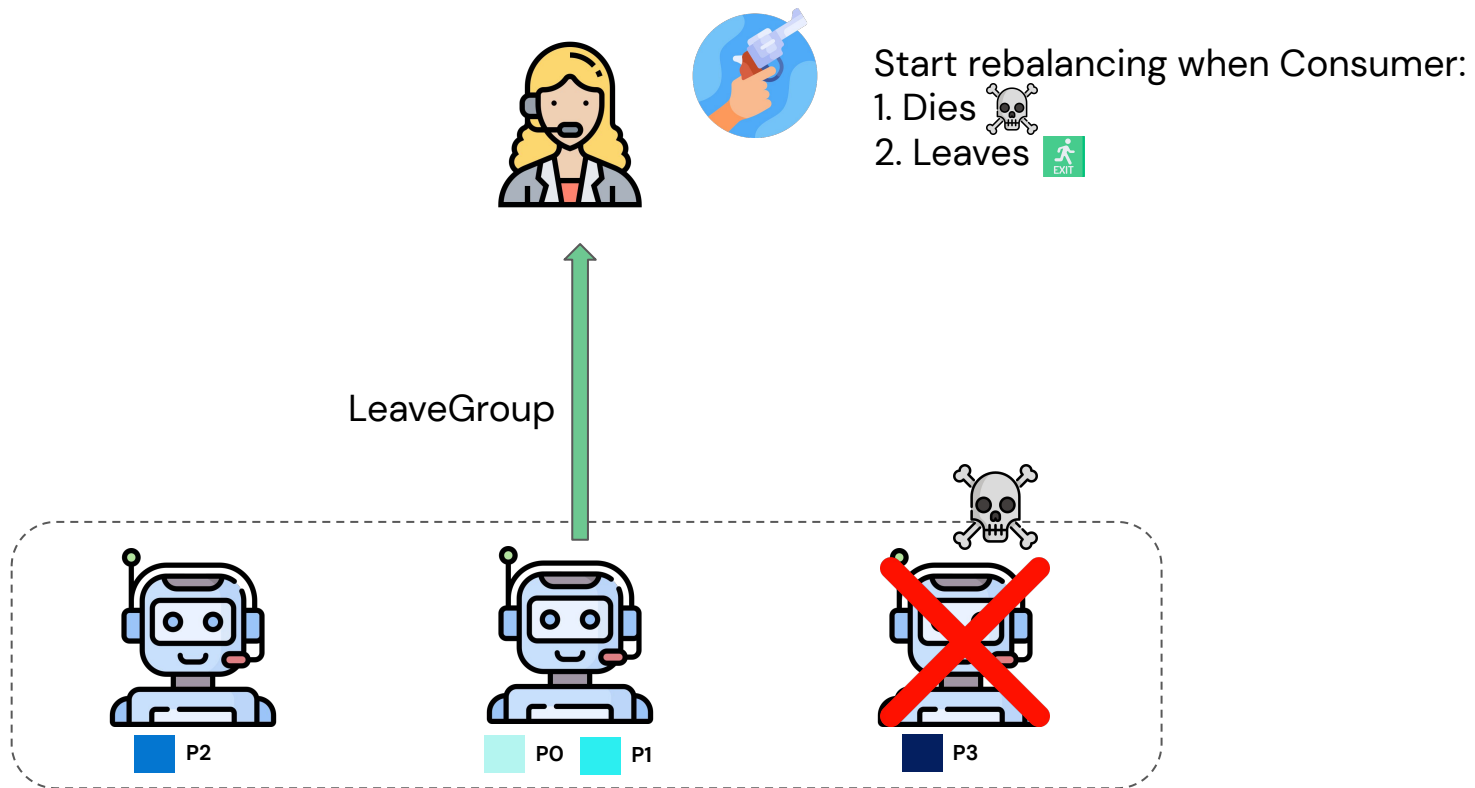


P0 P1

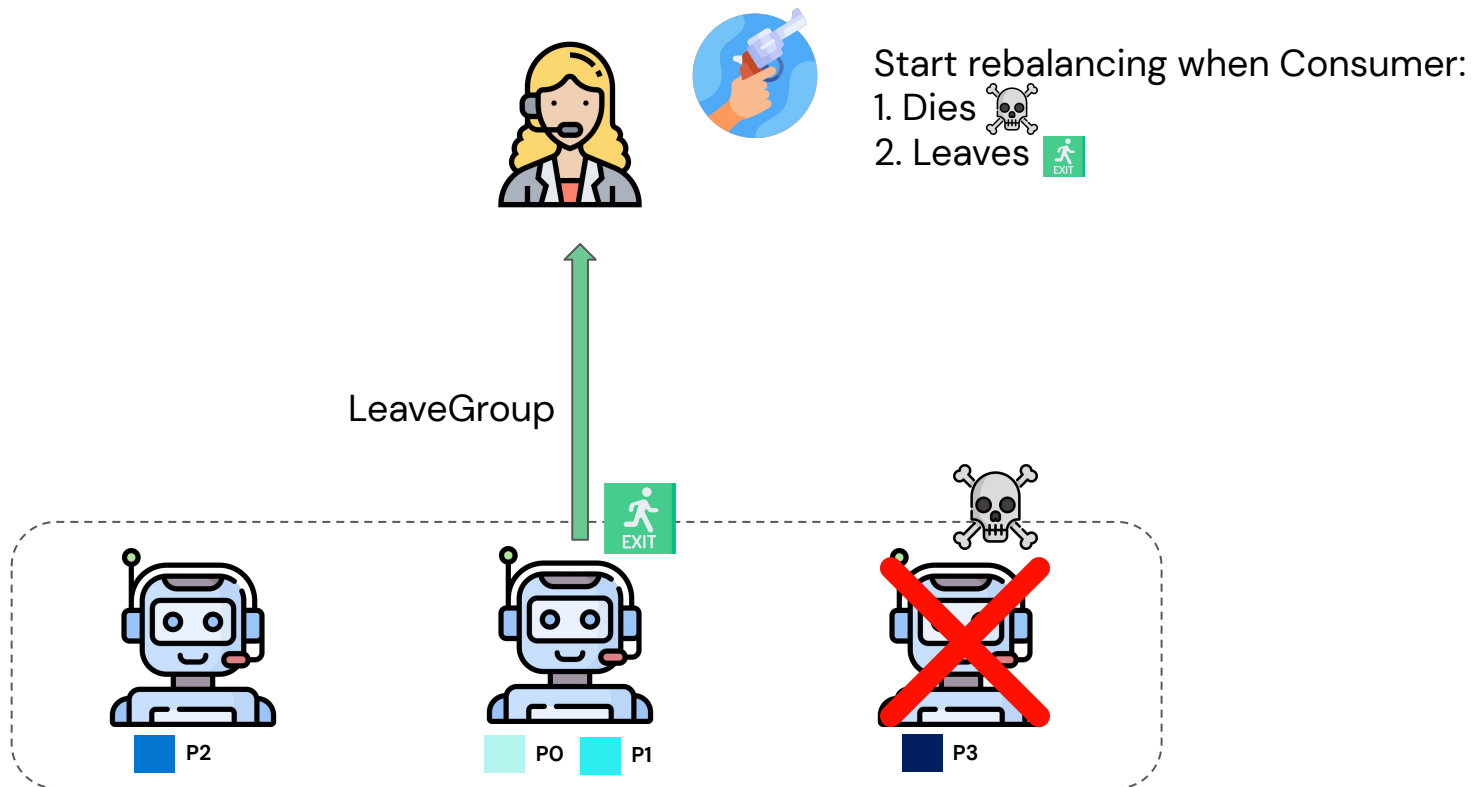


P3

Rebalance Triggers



Rebalance Triggers



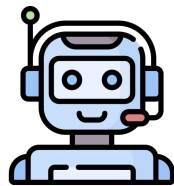
Rebalance Triggers



Start rebalancing when Consumer:

1. Dies 

2. Leaves 



P2



P0 P1




P3



Rebalance Triggers

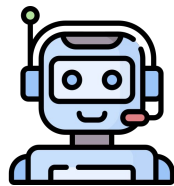


Start rebalancing when Consumer:

1. Dies 

2. Leaves 

3. Joins 



P2



P0

P1




P3

Rebalance Triggers

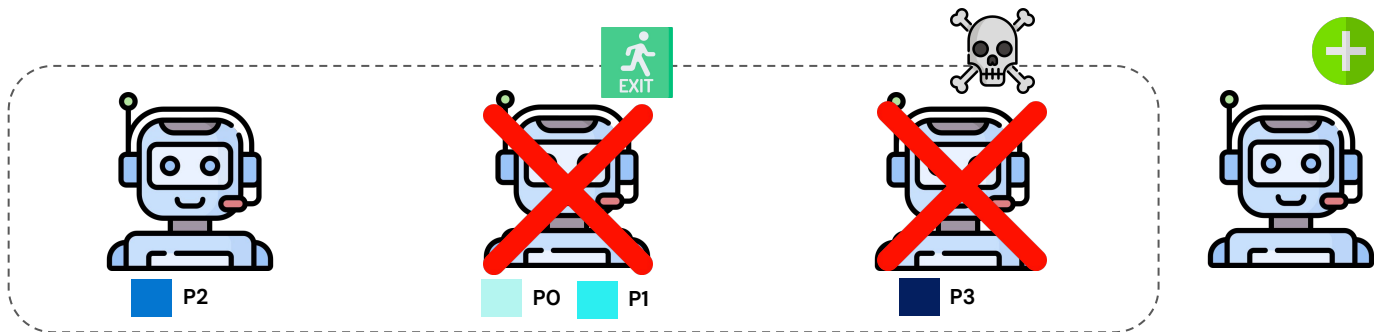


Start rebalancing when Consumer:

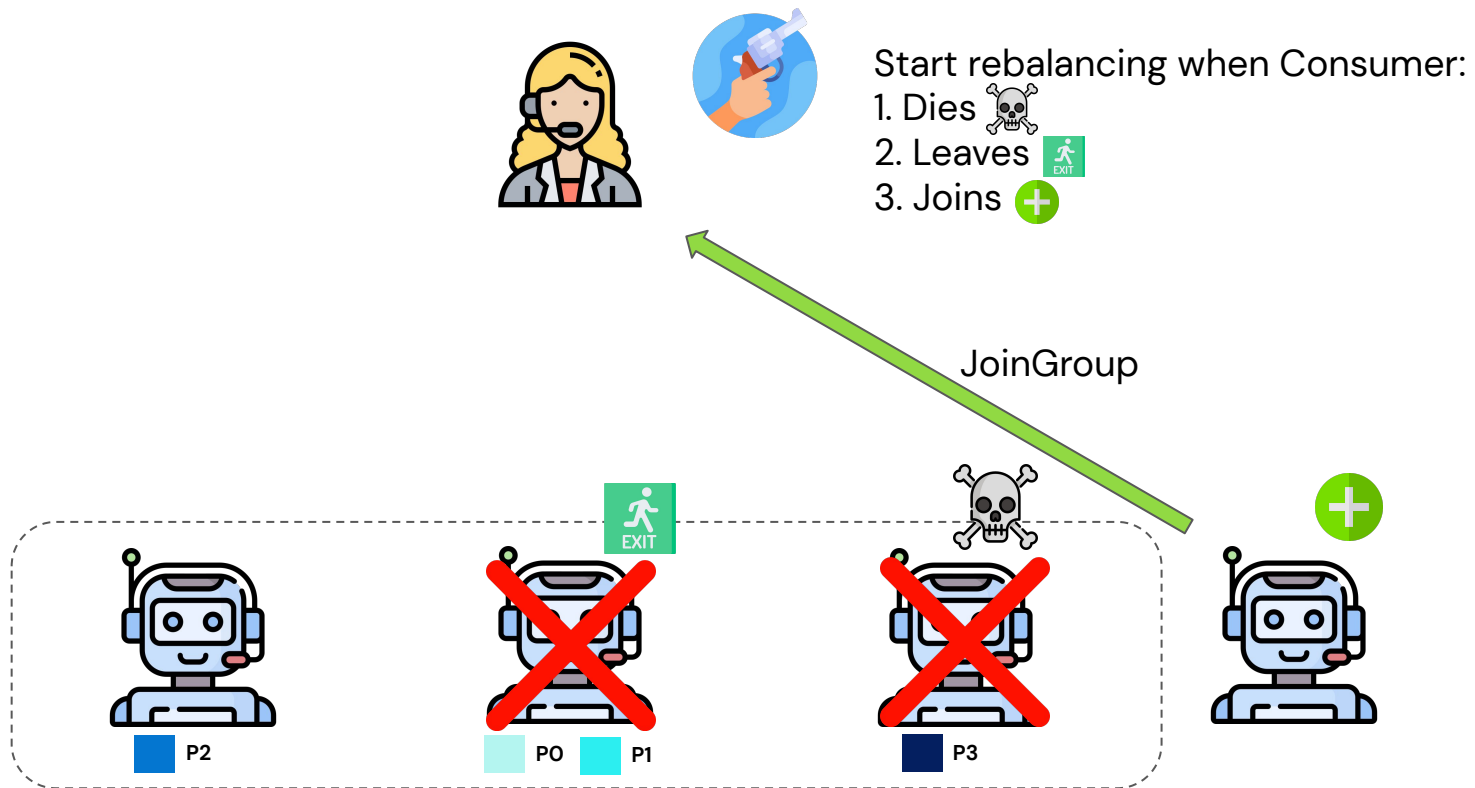
1. Dies 

2. Leaves 

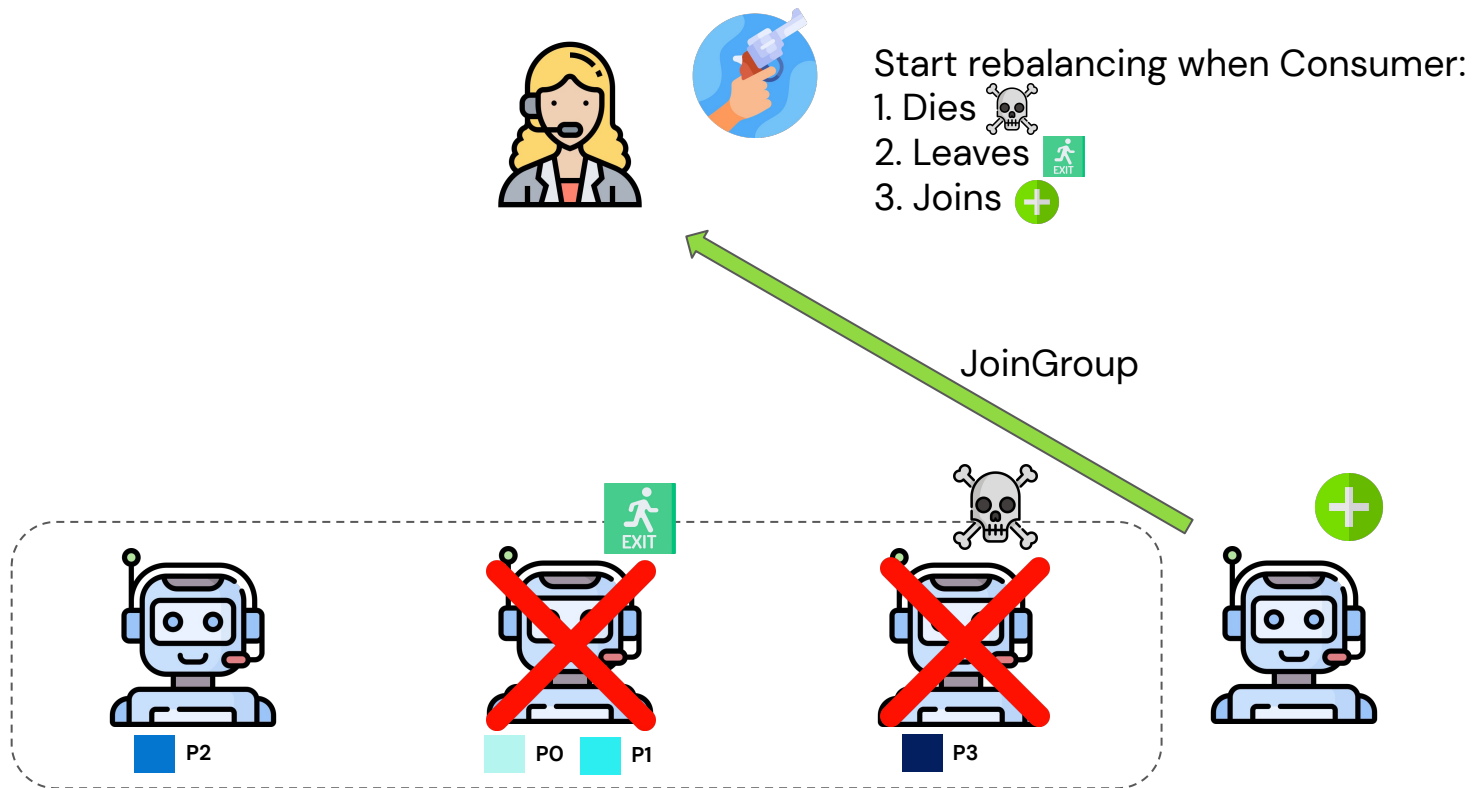
3. Joins 



Rebalance Triggers




Rebalance Triggers



Rebalance Triggers

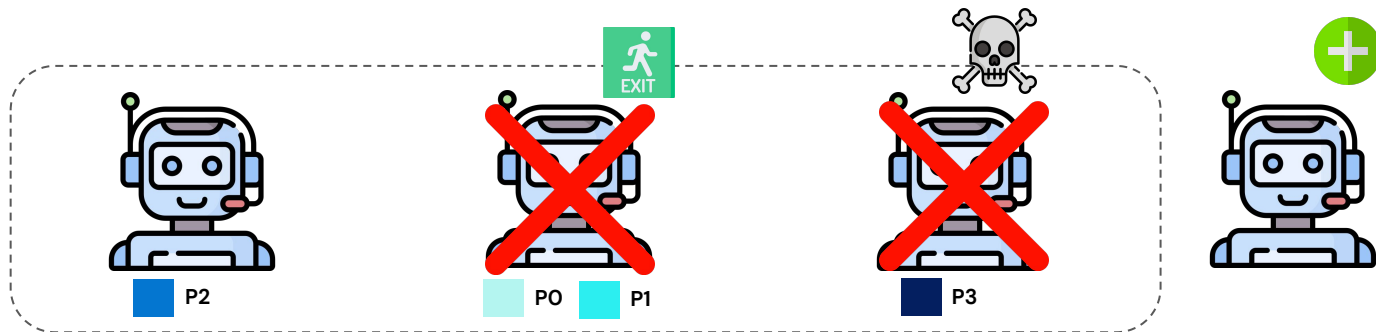


Start rebalancing when Consumer:

1. Dies 

2. Leaves 

3. Joins 



Rebalance configuration

Rebalance configuration

heartbeat.interval.ms

Frequency of consumer heartbeats

3 sec

Rebalance configuration

heartbeat.interval.ms

Frequency of consumer heartbeats

3 sec

session.timeout.ms

Heartbeats should be more frequent than this

10 sec

Rebalance configuration

heartbeat.interval.ms

Frequency of consumer heartbeats

3 sec

session.timeout.ms

Heartbeats should be more frequent than this

10 sec

max.poll.interval.ms

Consumer must poll more frequently than this

5 min