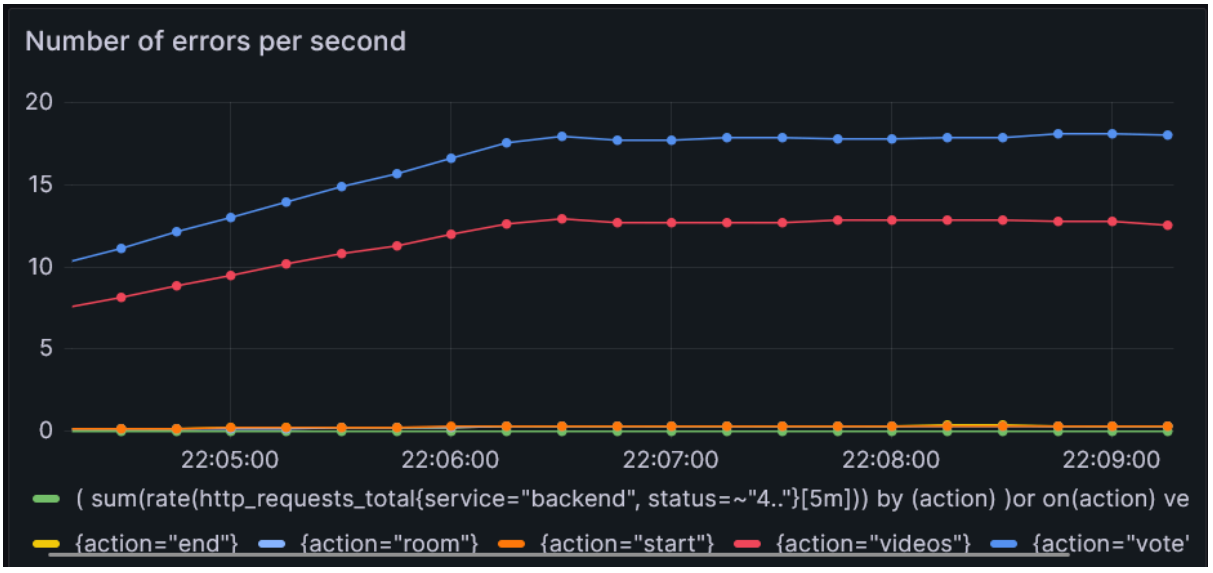
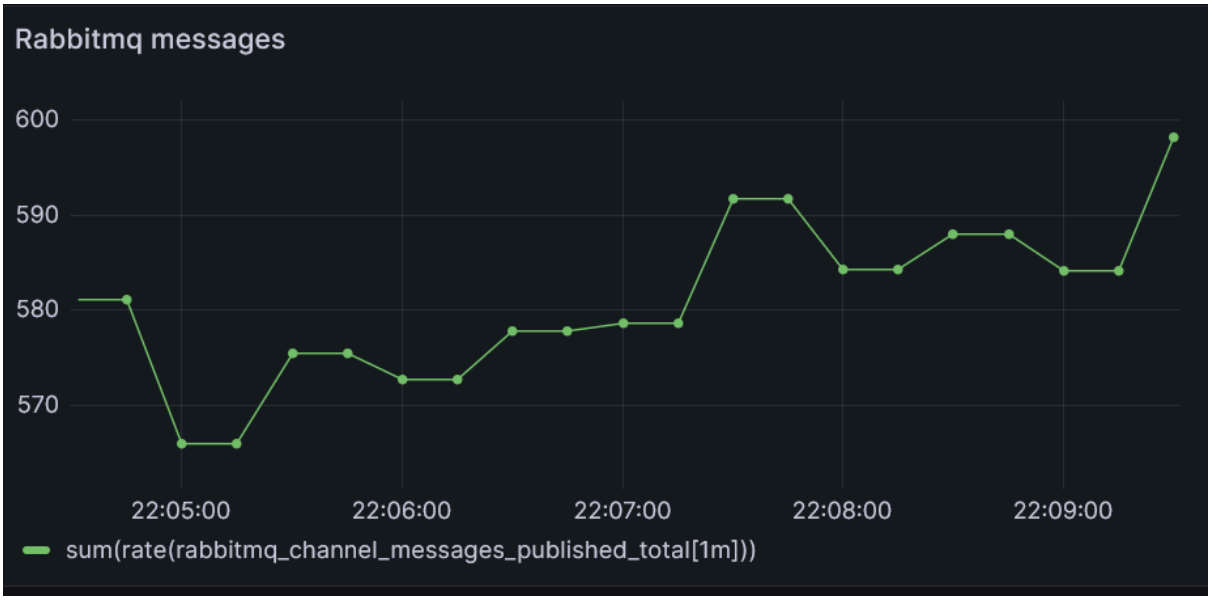
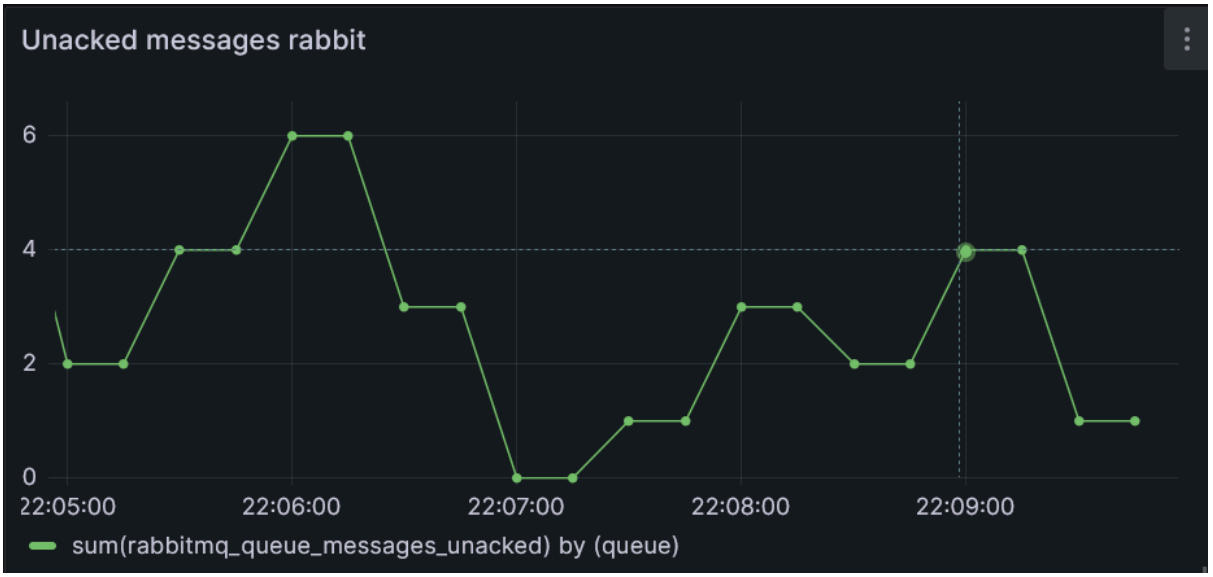
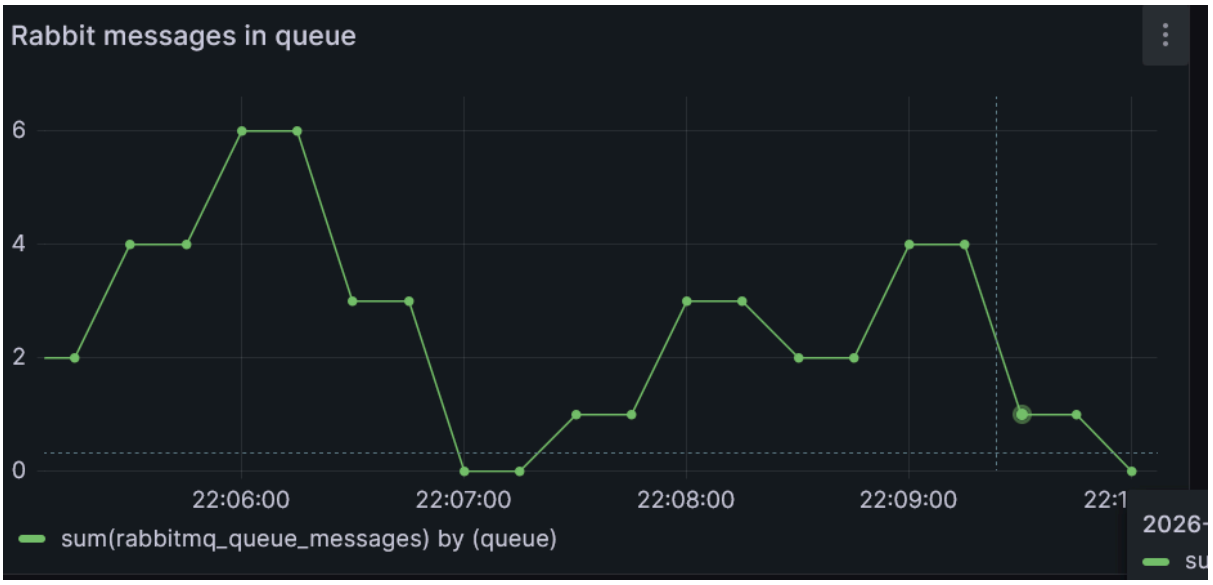
# Monolith system

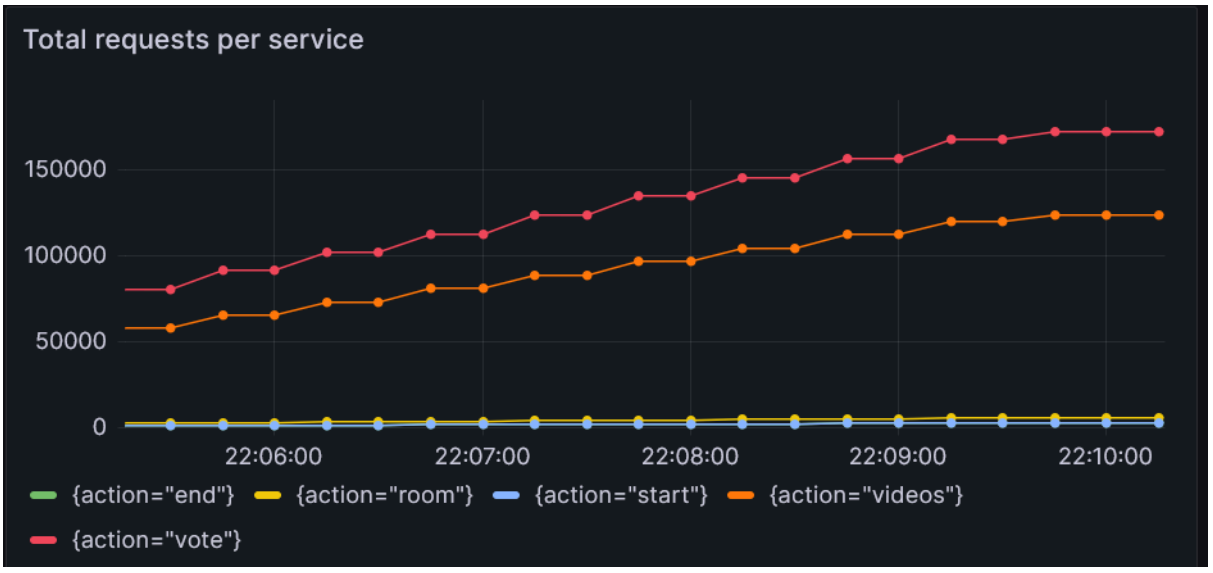
load testing: 3 replicas, backend: 1 replica, rabbit worker: 1 replica

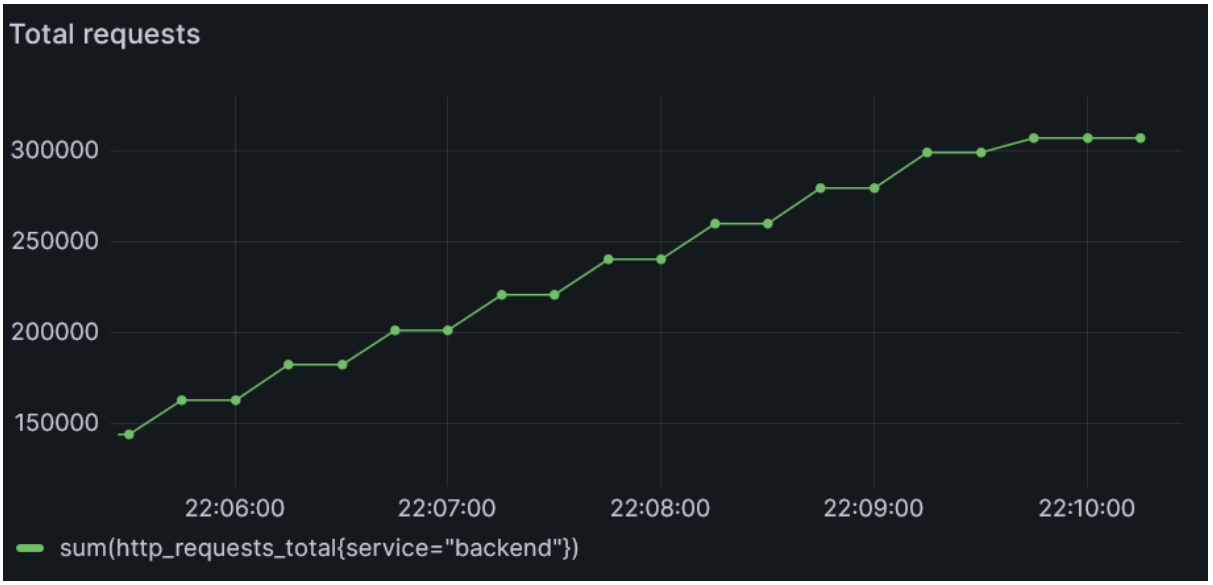


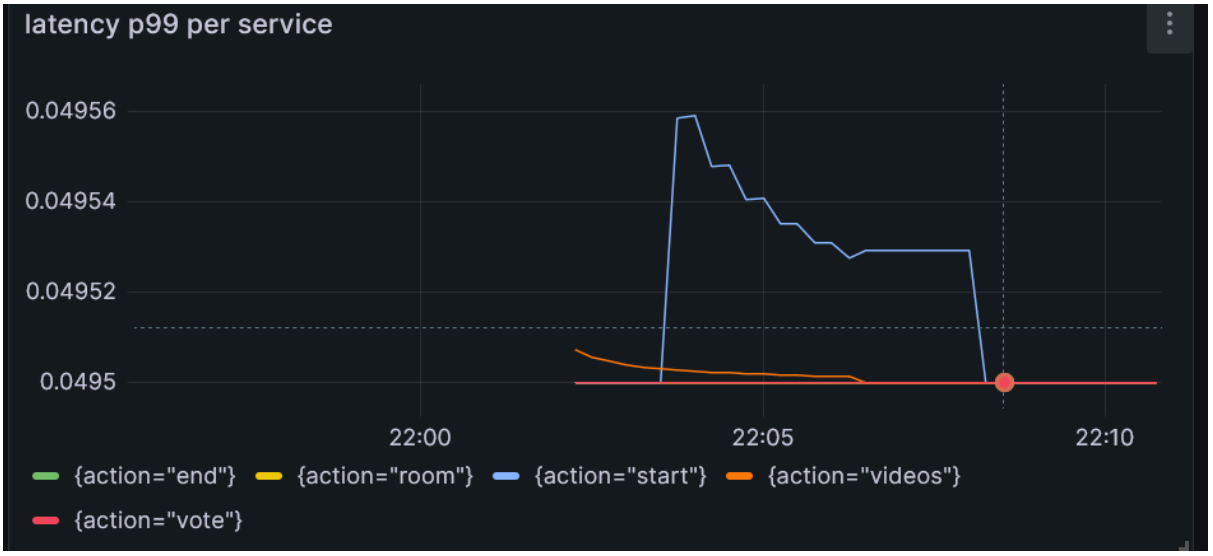



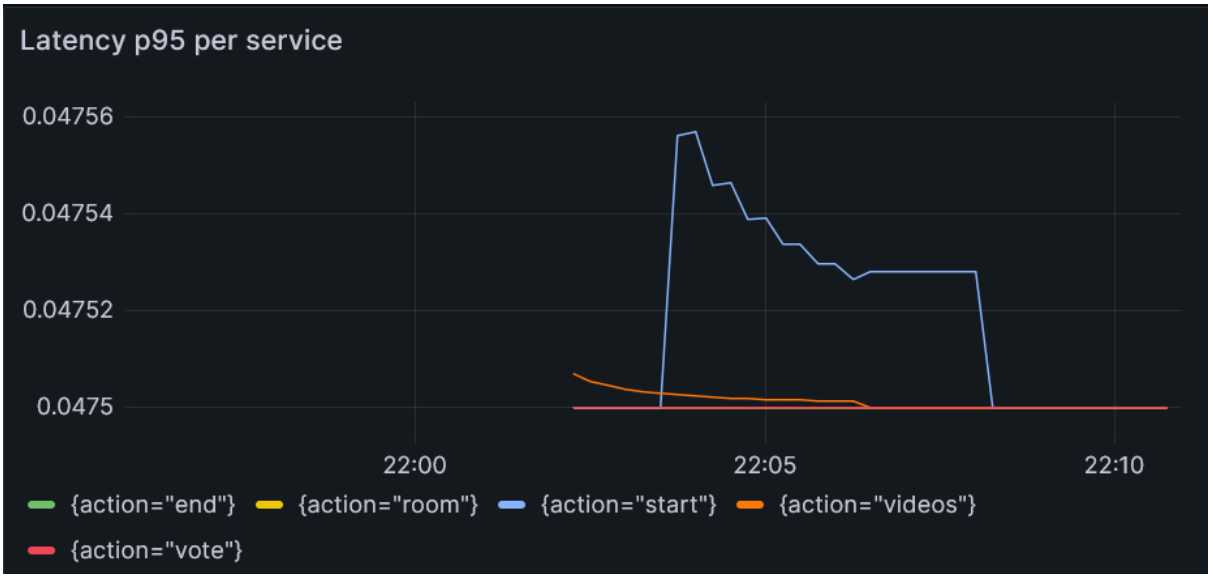

Unacked messages rabbit
6
4
2
0
22:05:00
22:06:00
22:07:00
22:08:00
22:09:00
sum(rabbitmq_queue_messages_unacked) by (queue)

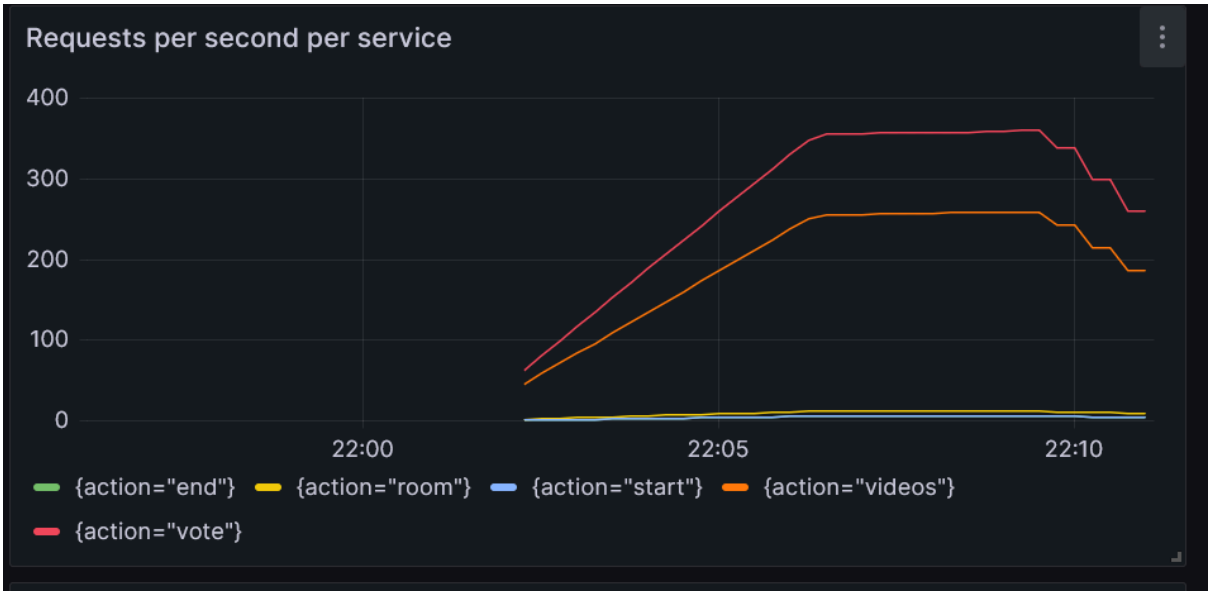

Rabbit messages in queue
6
4
2
0
22:06:00
22:07:00
22:08:00
22:09:00
sum(rabbitmq_queue_messages) by (queue)


Total requests per service
150000
100000
50000
0
22:06:00
22:07:00
22:08:00
22:09:00
22:10:00
{action="end"}
{action="room"}
{action="start"}
{action="videos"}
{action="vote"}


Total requests
300000
250000
200000
150000
22:06:00
22:07:00
22:08:00
22:09:00
22:10:00
sum(http_requests_total{service="backend"})

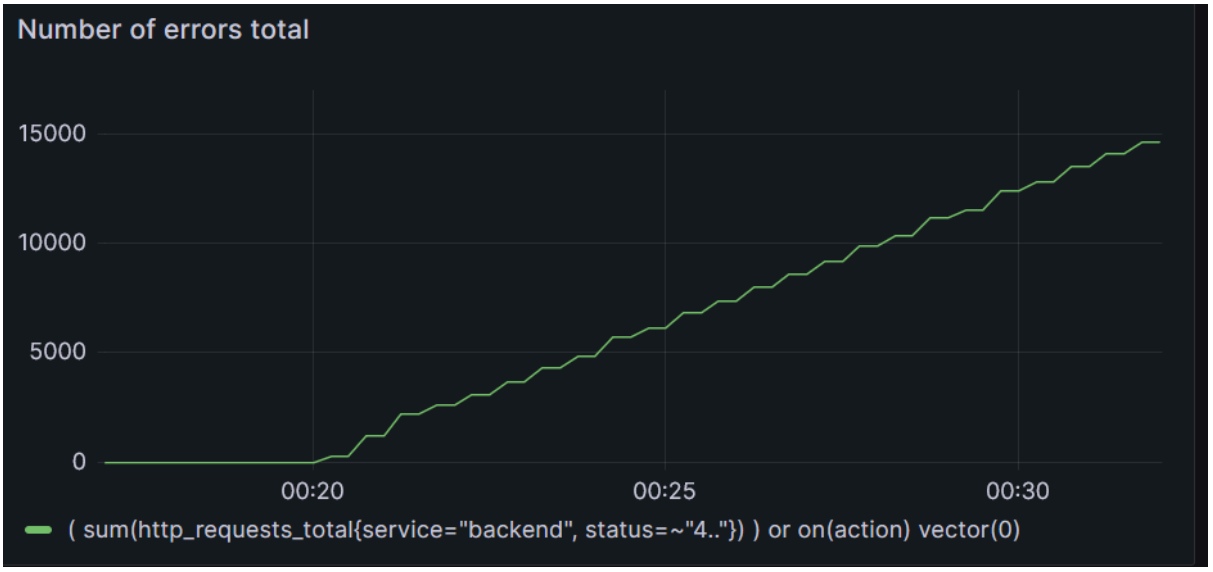

latency p99 per service
0.04956
0.04954
0.04952
0.0495
22:00
22:05
22:10
{action="end"}
{action="room"}
{action="start"}
{action="videos"}
{action="vote"}

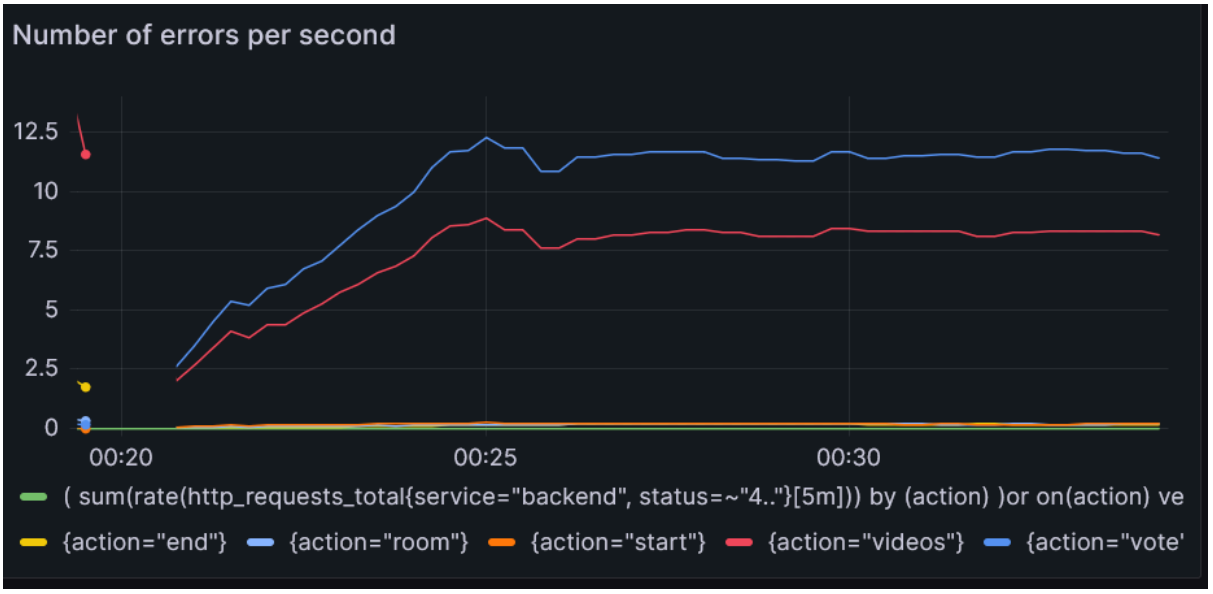

Latency p95 per service
0.04756
0.04754
0.04752
0.0475
22:00
22:05
22:10
{action="end"}
{action="room"}
{action="start"}
{action="videos"}
{action="vote"}


Requests per second per service
400
300
200
100
0
22:00
22:05
22:10
{action="end"}
{action="room"}
{action="start"}
{action="videos"}
{action="vote"}

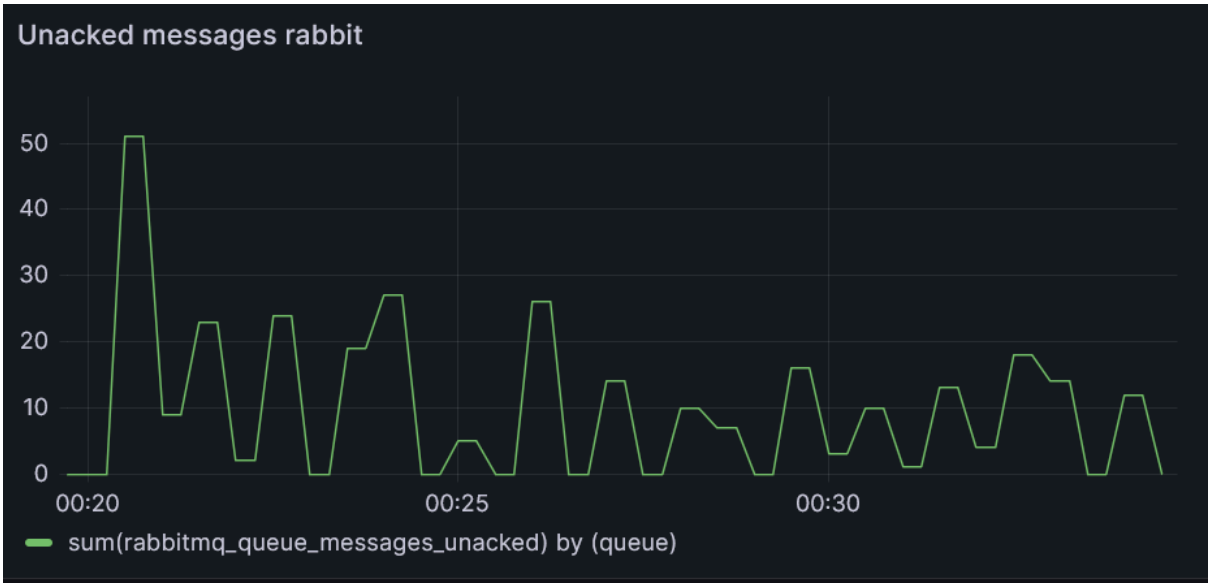
Total requests per second
700
600
500
400
300
200
100
22:00
22:05
22:10
sum(rate(http_requests_total{service="backend"}[5m]))

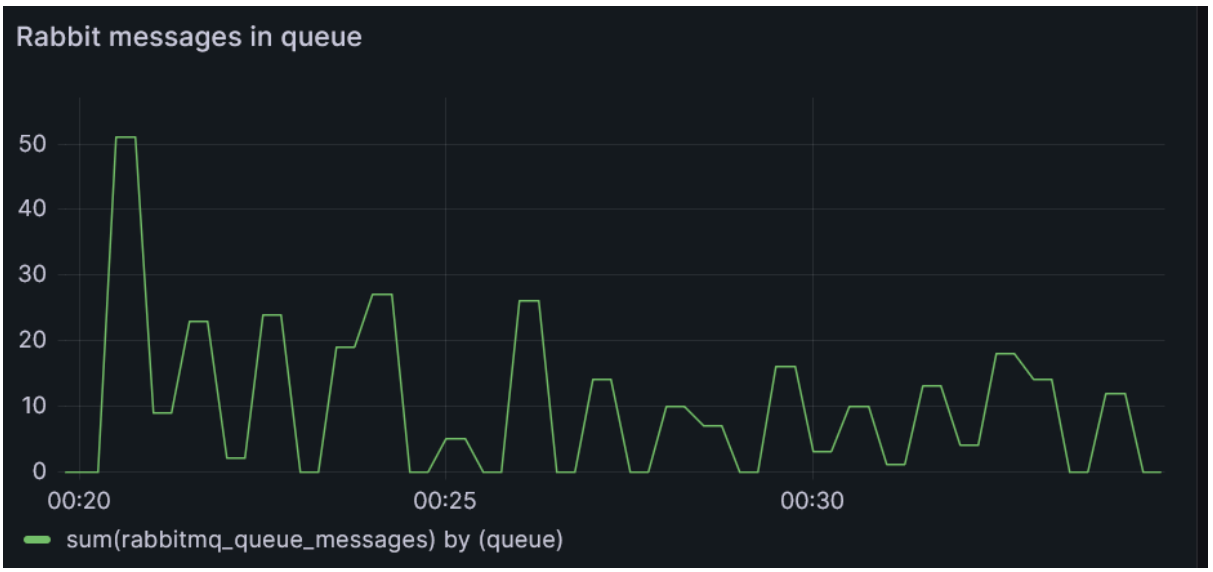
Load testing: 30 replicas backend: 1 replicas, rabbit worker: 8 replicas

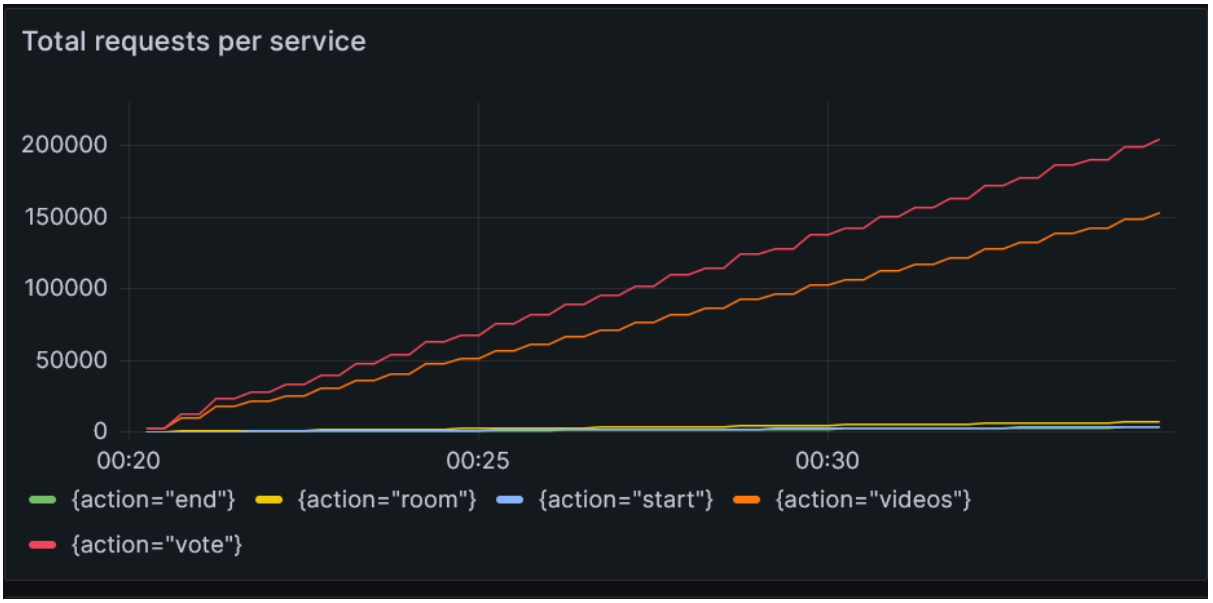


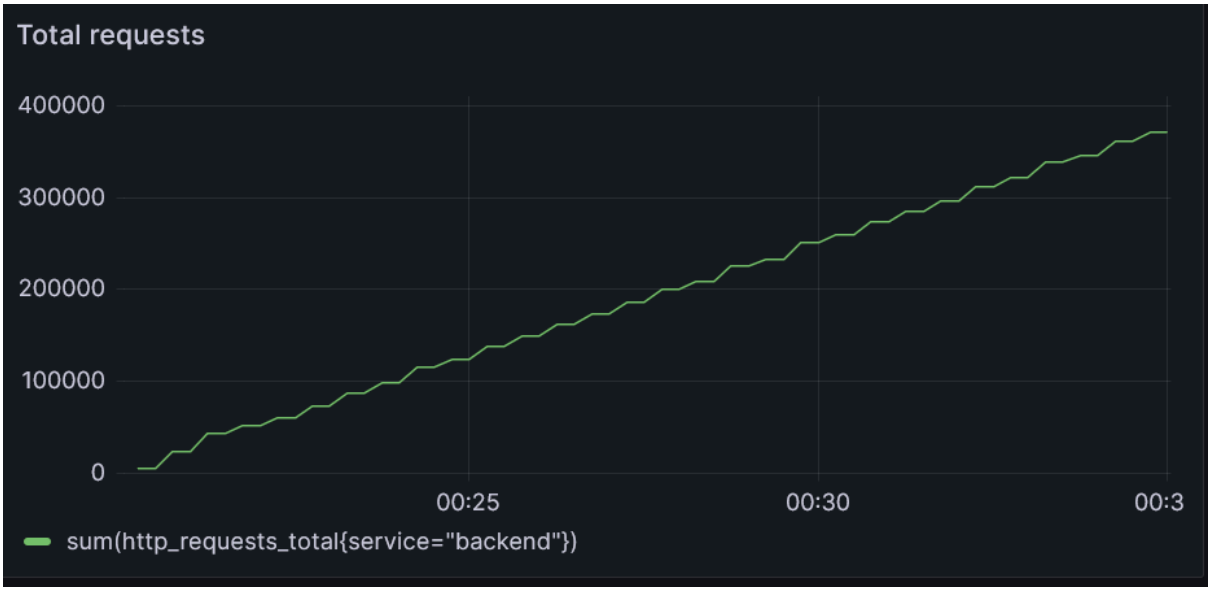



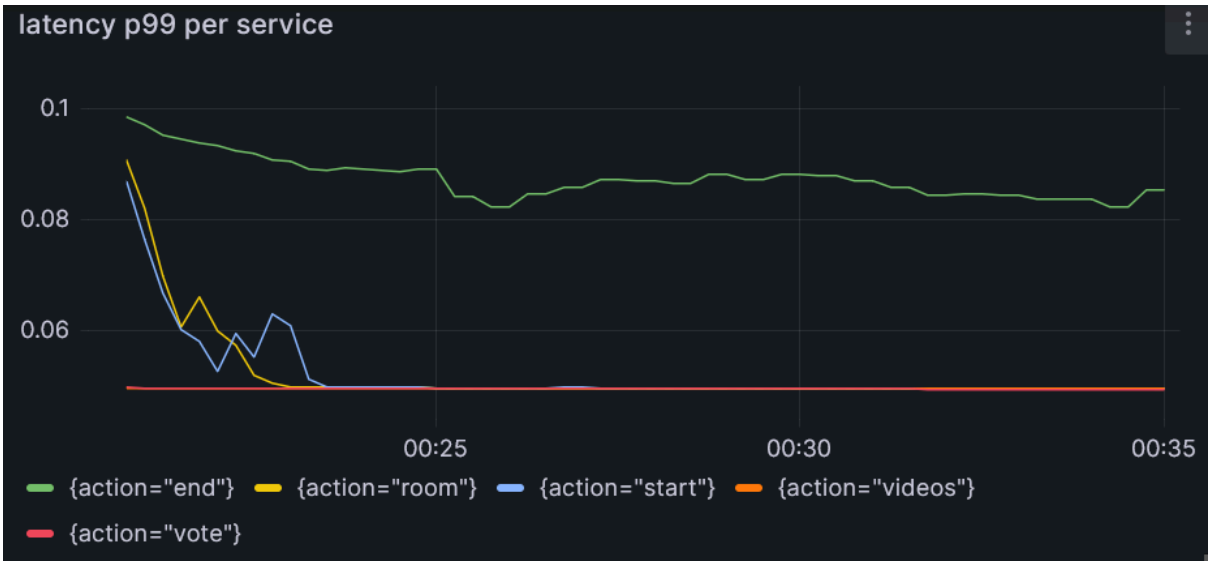
Rabbitmq messages
600
400
200
0
00:20
00:25
00:30
sum(rate(rabbitmq_channel_messages_published_total[1m]))

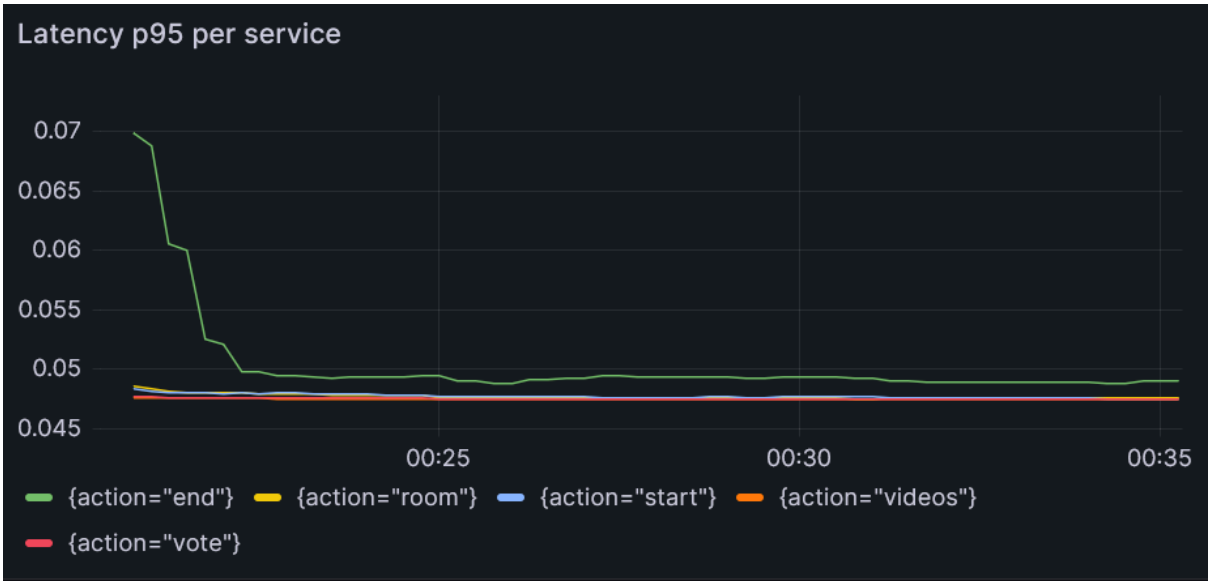

Unacked messages rabbit
50
40
30
20
10
0
00:20
00:25
00:30
sum(rabbitmq_queue_messages_unacked) by (queue)

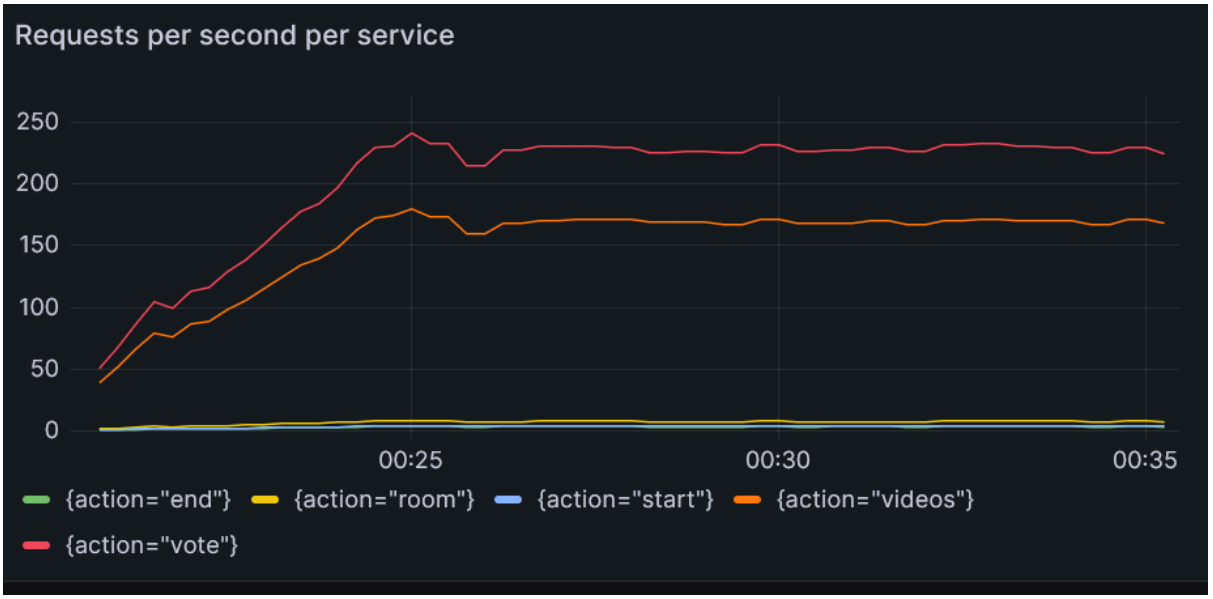

Rabbit messages in queue
50
40
30
20
10
0
00:20
00:25
00:30
sum(rabbitmq_queue_messages) by (queue)

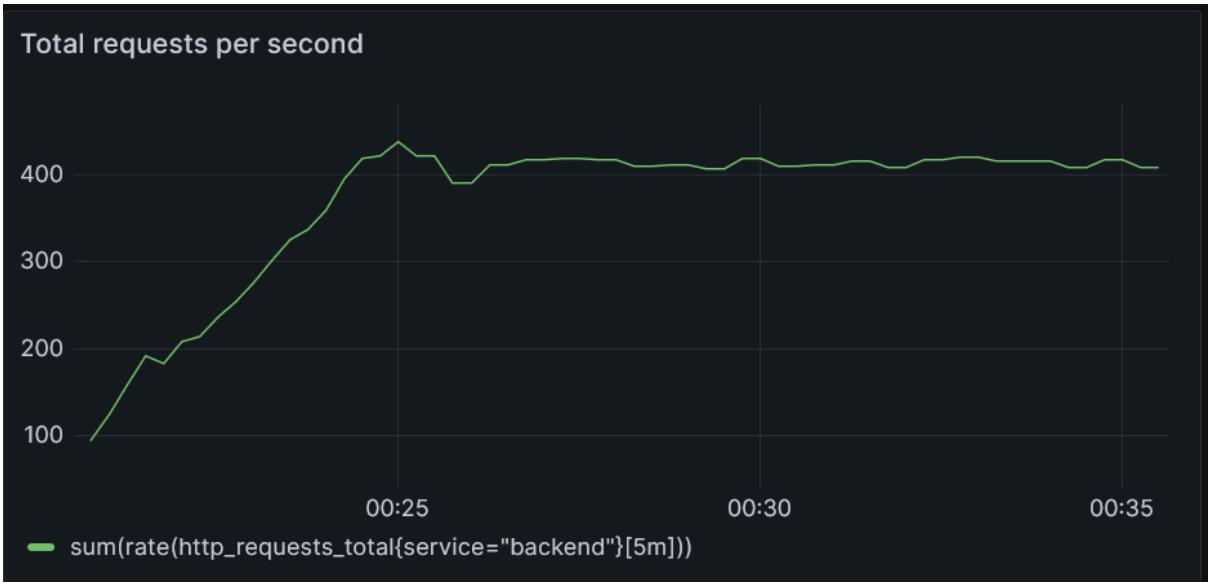

Total requests per service
200000
150000
100000
50000
0
00:20
00:25
00:30
{action="end"}
{action="room"}
{action="start"}
{action="videos"}
{action="vote"}


Total requests
400000
300000
200000
100000
0
00:25
00:30
00:3
sum(http_requests_total{service="backend"})

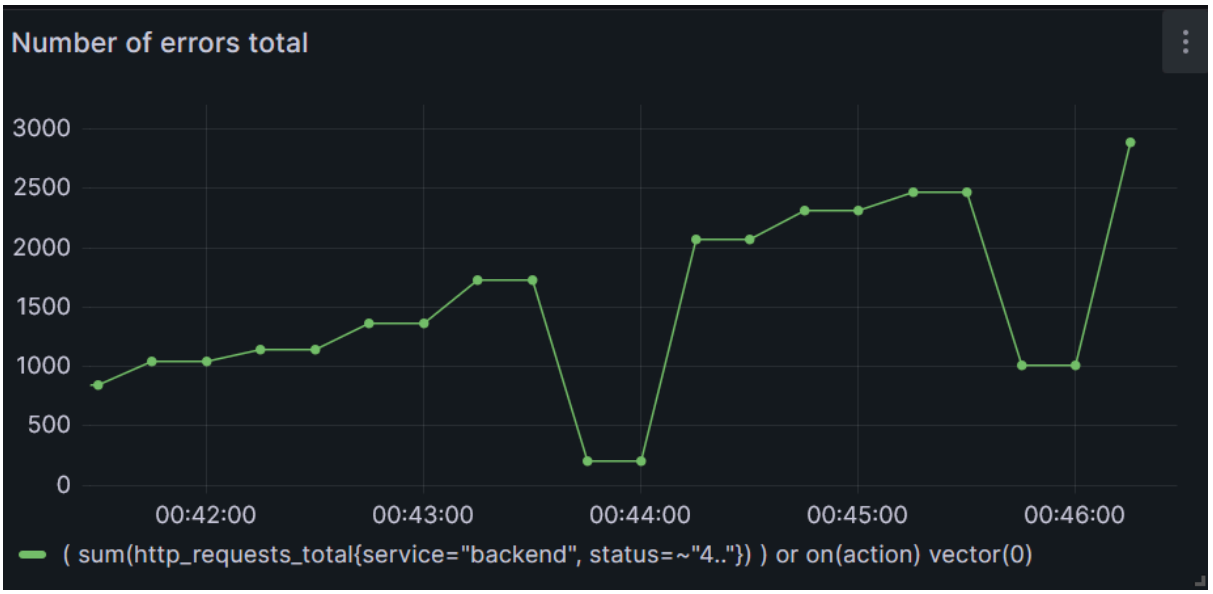

latency p99 per service
0.1
0.08
0.06
00:25
00:30
00:35
{action="end"}
{action="room"}
{action="start"}
{action="videos"}
{action="vote"}

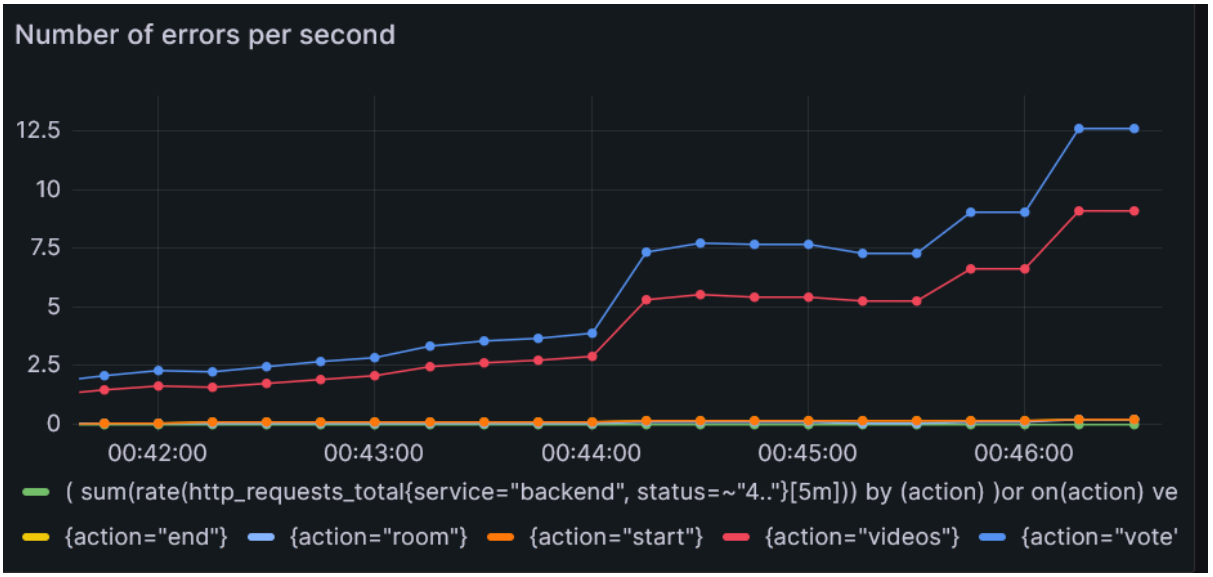

Latency p95 per service
0.07
0.065
0.06
0.055
0.05
0.045
00:25
00:30
00:35
{action="end"}
{action="room"}
{action="start"}
{action="videos"}
{action="vote"}

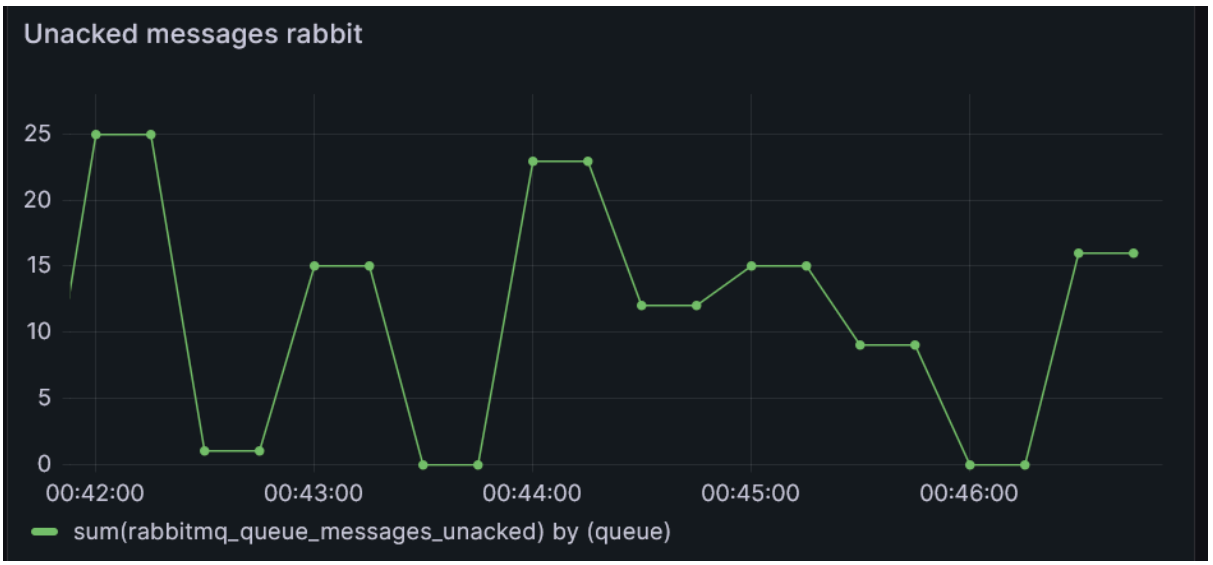

Requests per second per service
250
200
150
100
50
0
00:25
00:30
00:35
{action="end"}
{action="room"}
{action="start"}
{action="videos"}
{action="vote"}

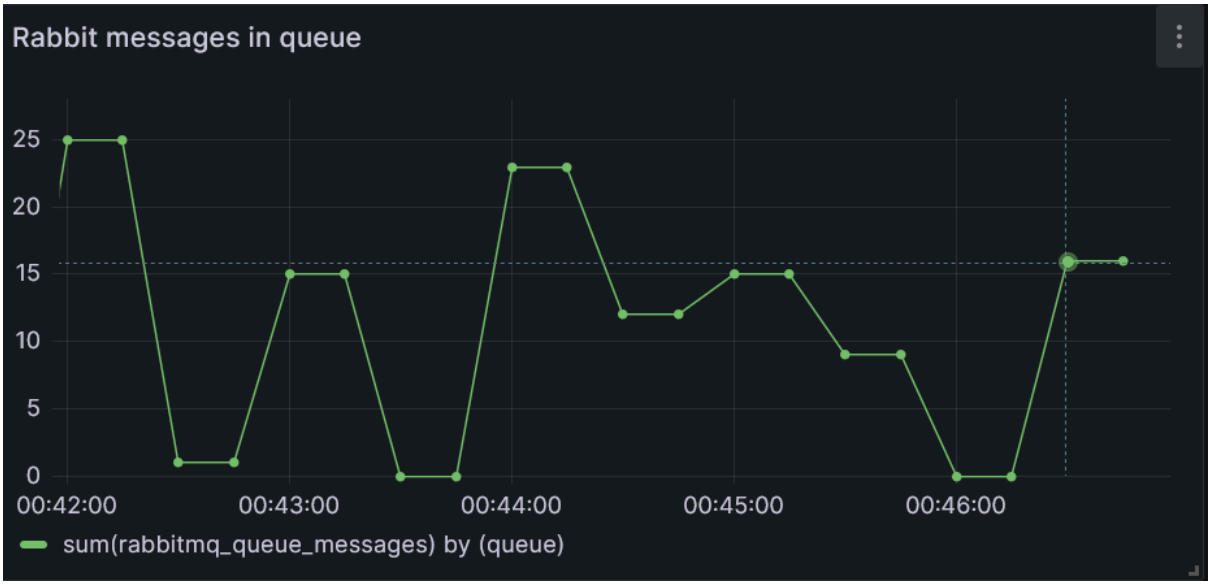

Total requests per second
400
300
200
100
00:25
00:30
00:35
sum(rate(http_requests_total{service="backend"}[5m]))

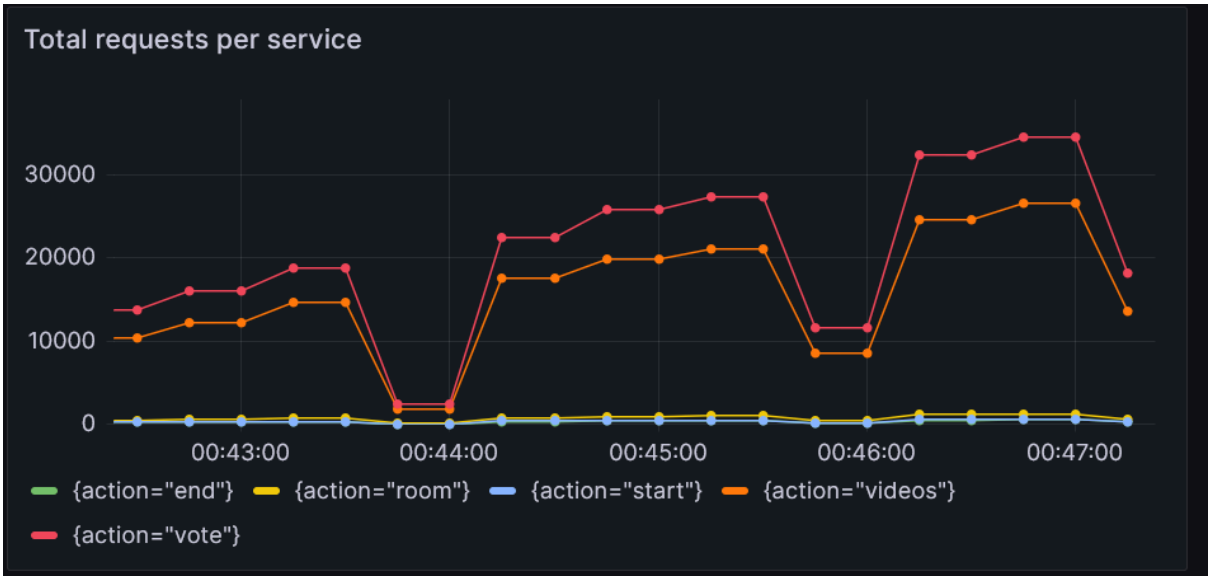
Load testing: 30 replicas backend: 3 replicas, rabbit worker: 8 replicas



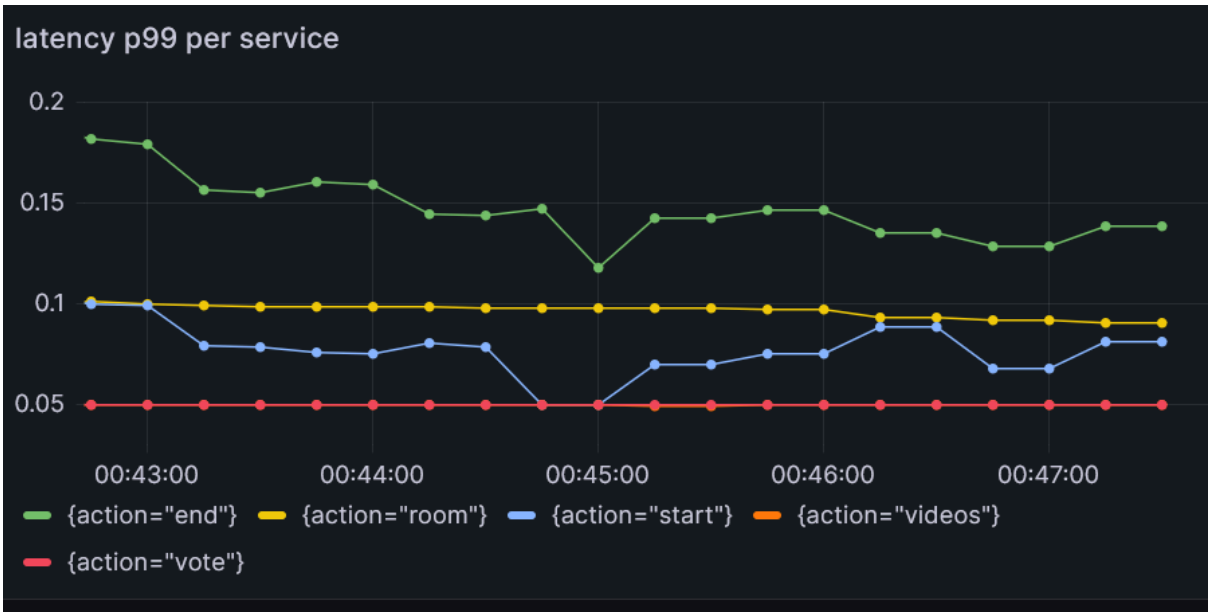



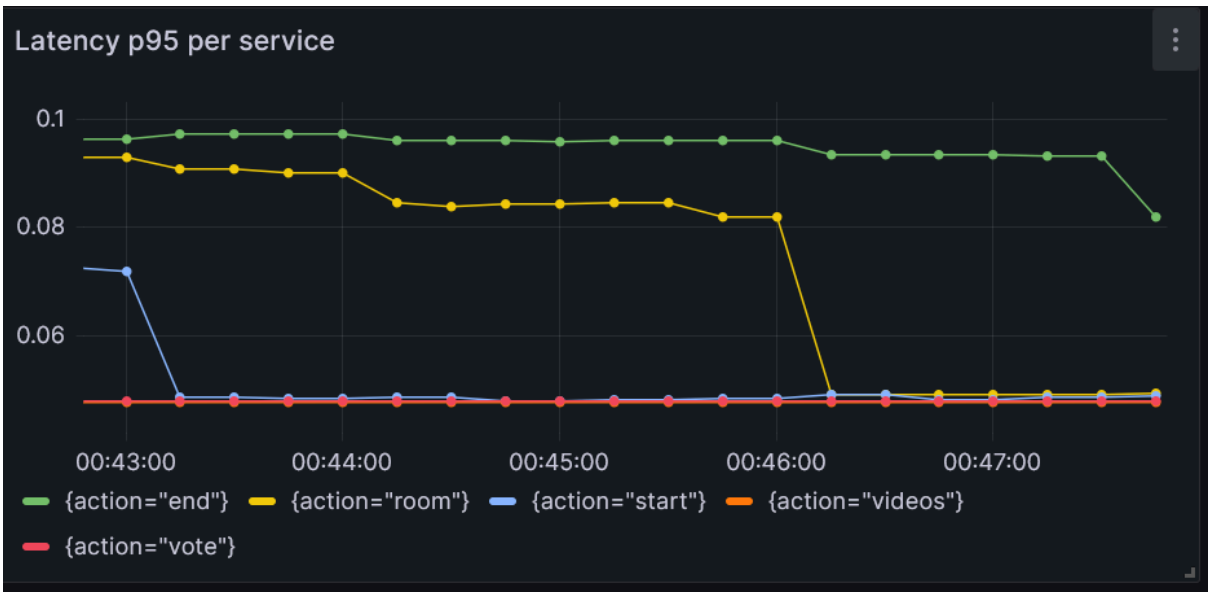

Unacked messages rabbit
25
20
15
10
5
0
00:42:00
00:43:00
00:44:00
00:45:00
00:46:00
sum(rabbitmq_queue_messages_unacked) by (queue)

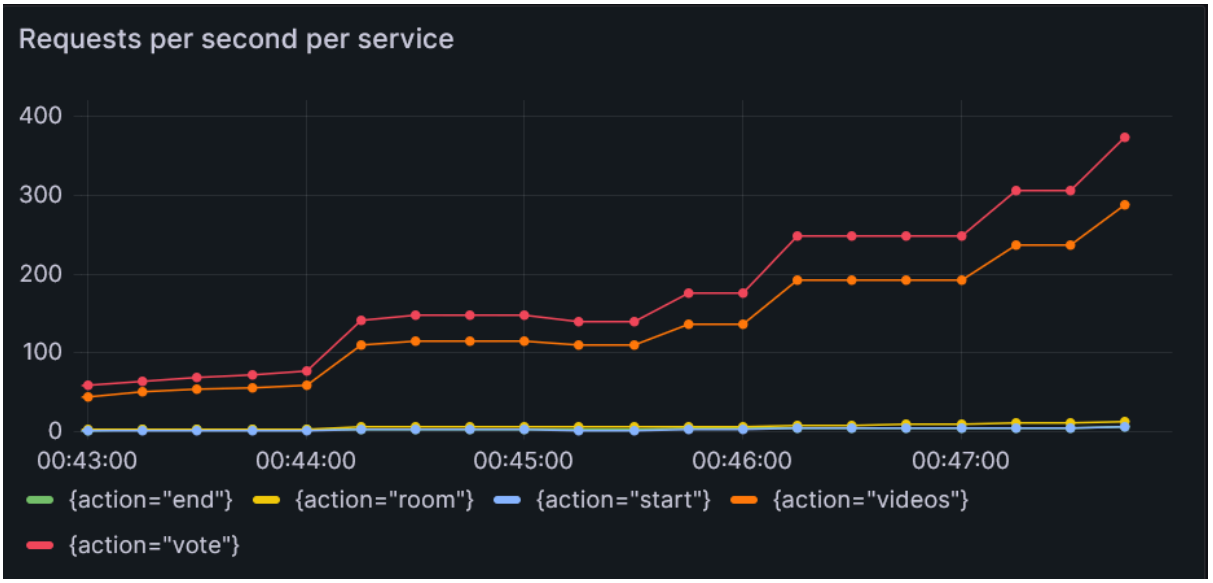

Rabbit messages in queue
25
20
15
10
5
0
00:42:00
00:43:00
00:44:00
00:45:00
00:46:00
sum(rabbitmq_queue_messages) by (queue)

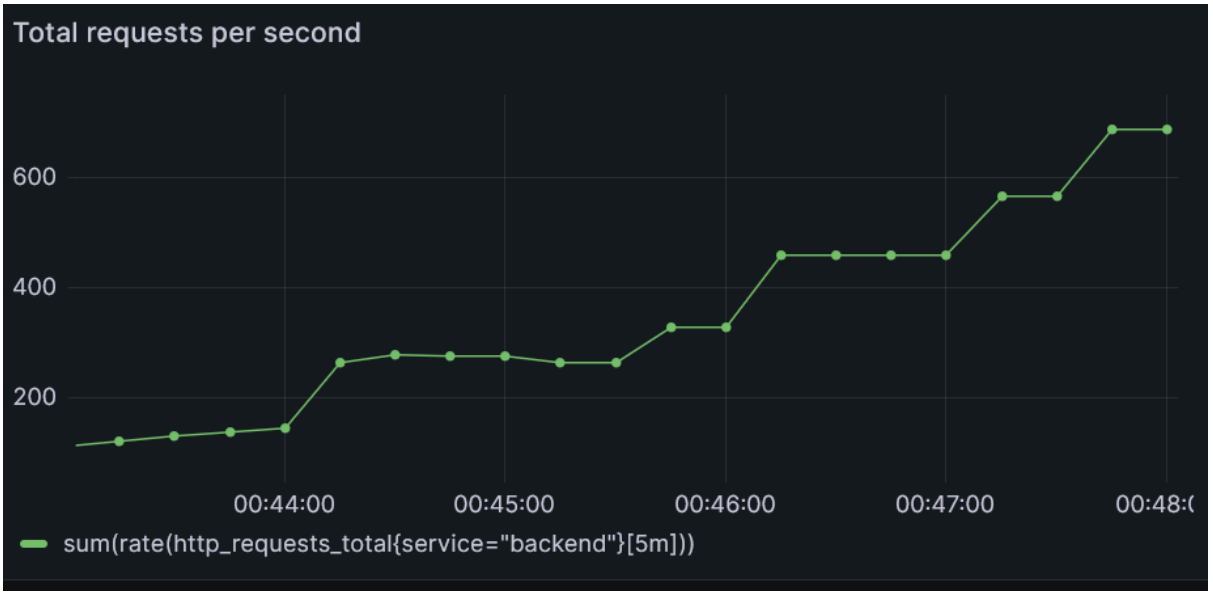

Total requests per service
30000
20000
10000
0
00:43:00
00:44:00
00:45:00
00:46:00
00:47:00
{action="end"}
{action="room"}
{action="start"}
{action="videos"}
{action="vote"}

Total requests
60000
40000
20000
0
00:43:00
00:44:00
00:45:00
00:46:00
00:47:00
sum(http_requests_total{service="backend"})


latency p99 per service
0.2
0.15
0.1
0.05
00:43:00
00:44:00
00:45:00
00:46:00
00:47:00
{action="end"}
{action="room"}
{action="start"}
{action="videos"}
{action="vote"}

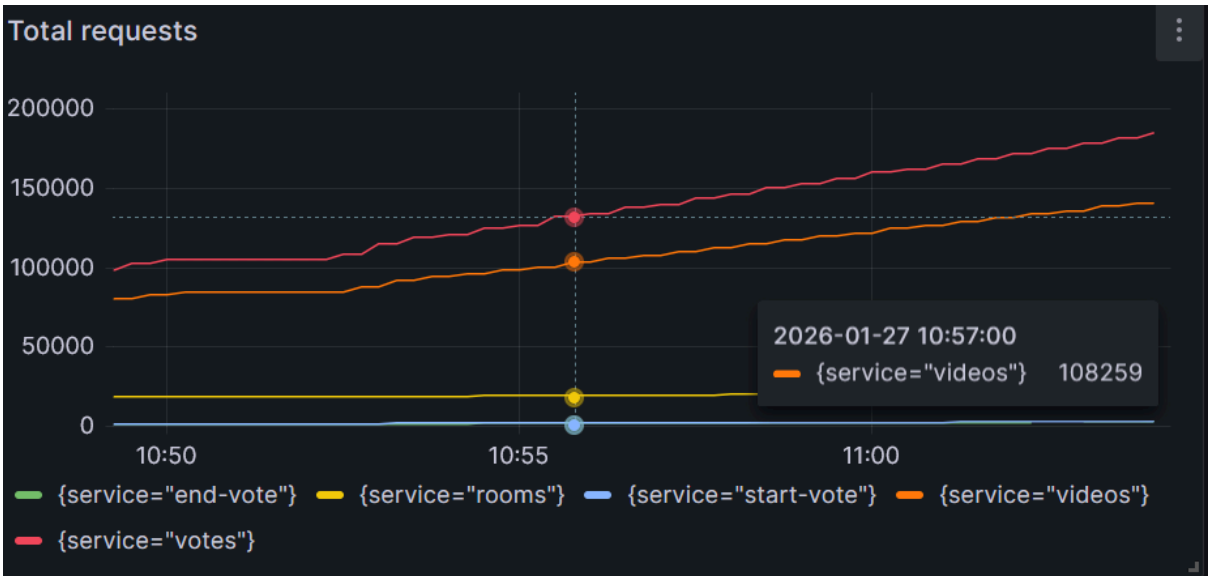

Latency p95 per service
0.1
0.08
0.06
00:43:00
00:44:00
00:45:00
00:46:00
00:47:00
{action="end"}
{action="room"}
{action="start"}
{action="videos"}
{action="vote"}

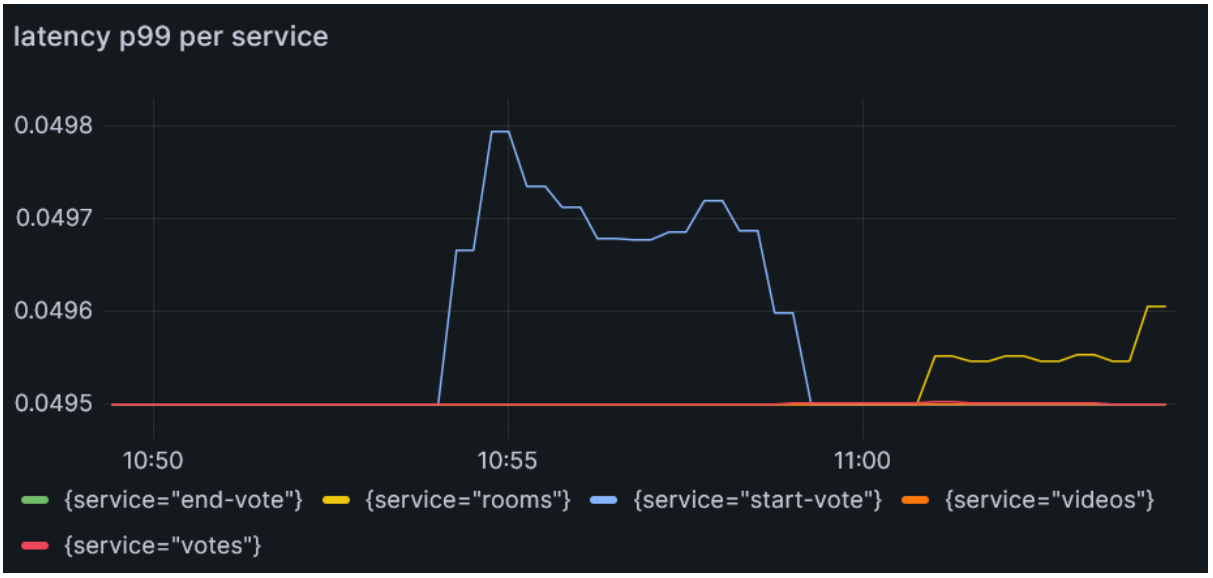

Requests per second per service
400
300
200
100
0
00:43:00
00:44:00
00:45:00
00:46:00
00:47:00
{action="end"}
{action="room"}
{action="start"}
{action="videos"}
{action="vote"}

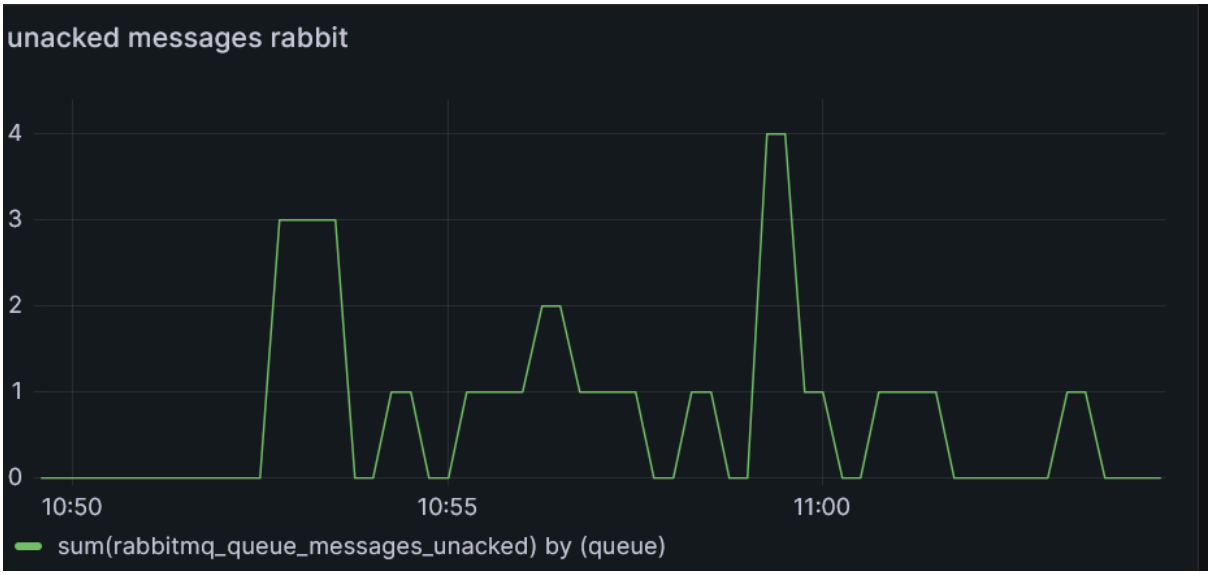

Total requests per second
600
400
200
00:44:00
00:45:00
00:46:00
00:47:00
sum(rate(http_requests_total{service="backend"}[5m]))

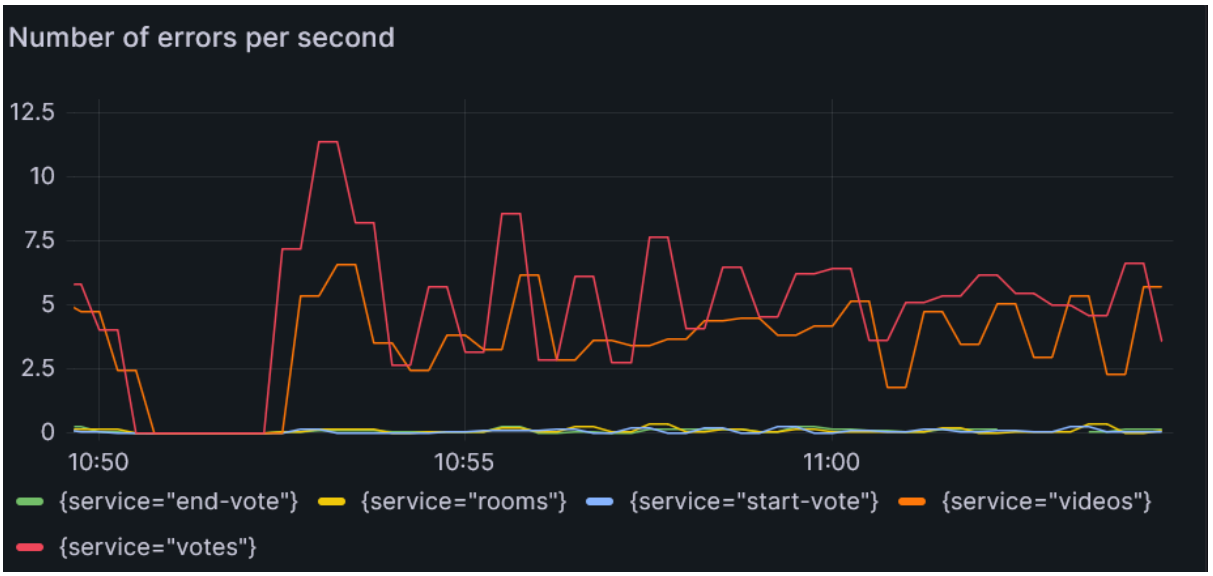
# Micro services systems

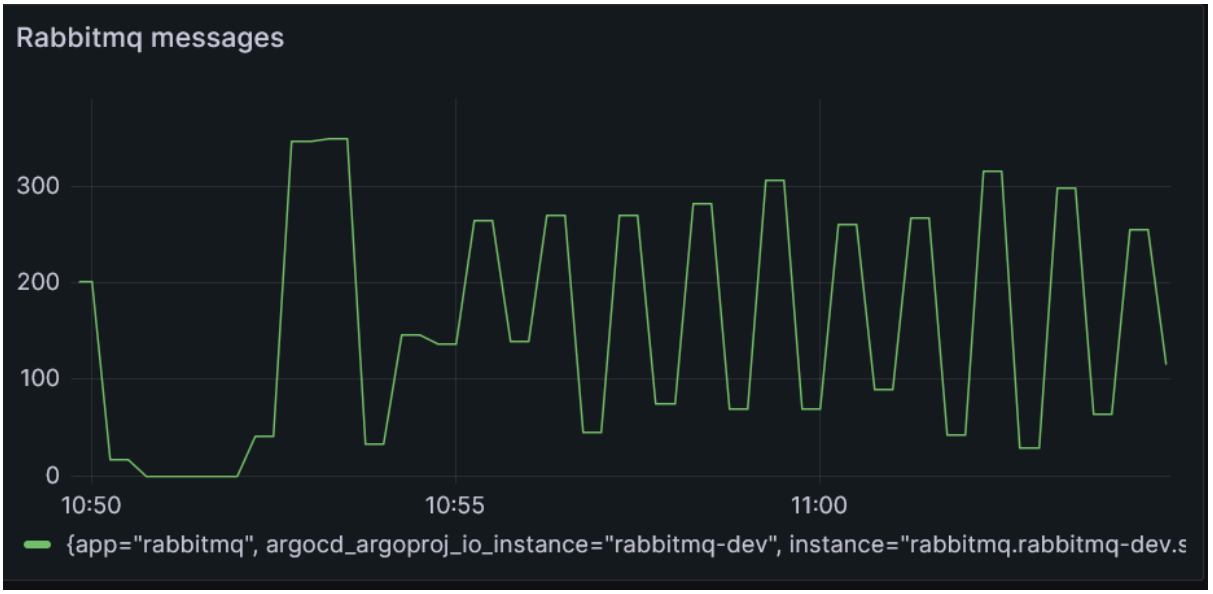
## load testing: 3 replicas, services 1 replica

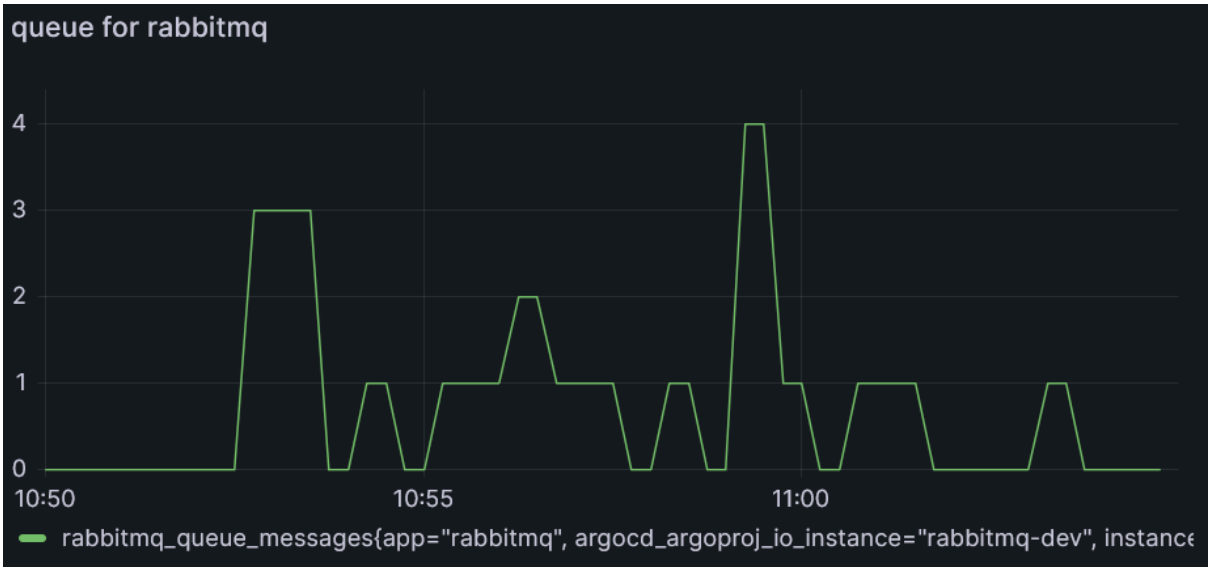


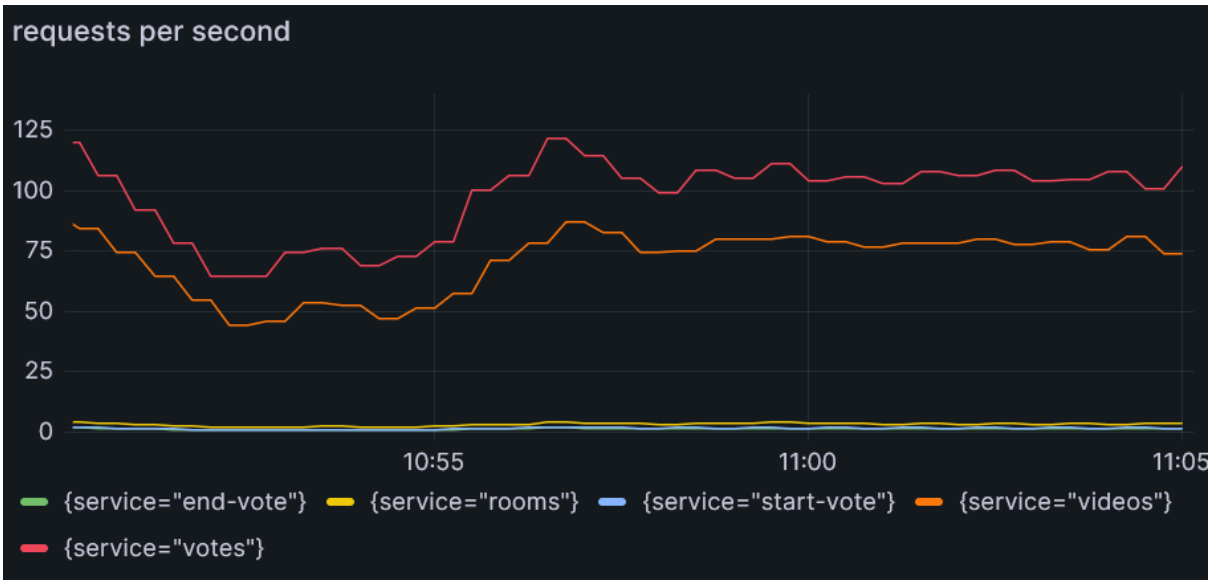



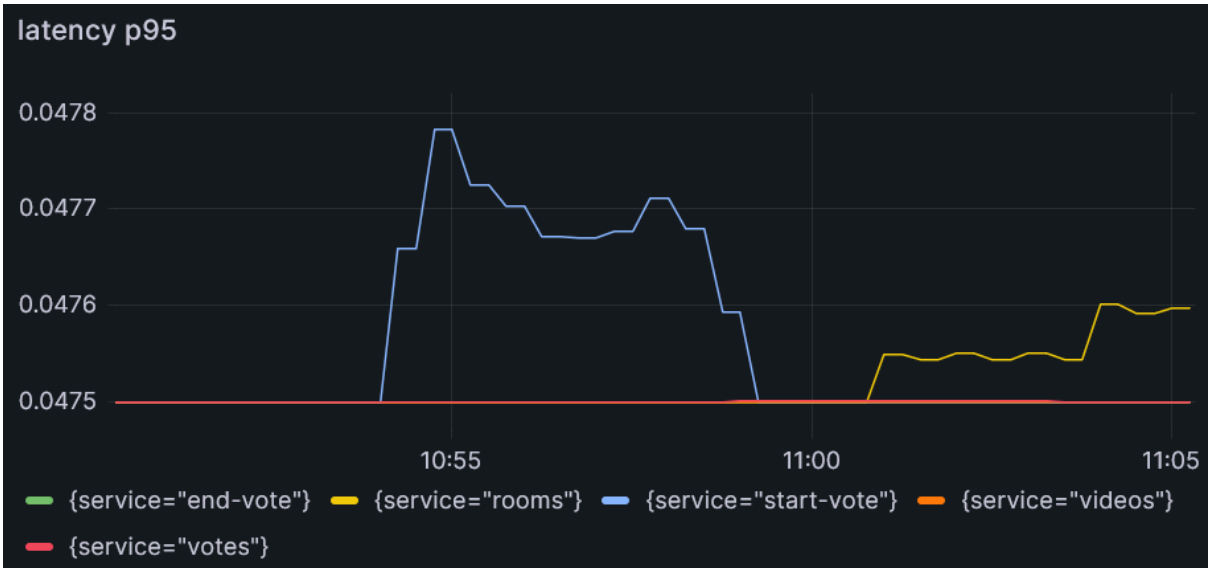

unacked messages rabbit
4
3
2
1
0
10:50
10:55
11:00
sum(rabbitmq_queue_messages_unacked) by (queue)


Number of errors per second
12.5
10
7.5
5
2.5
0
10:50
10:55
11:00
{service="end-vote"}
{service="rooms"}
{service="start-vote"}
{service="videos"}
{service="votes"}

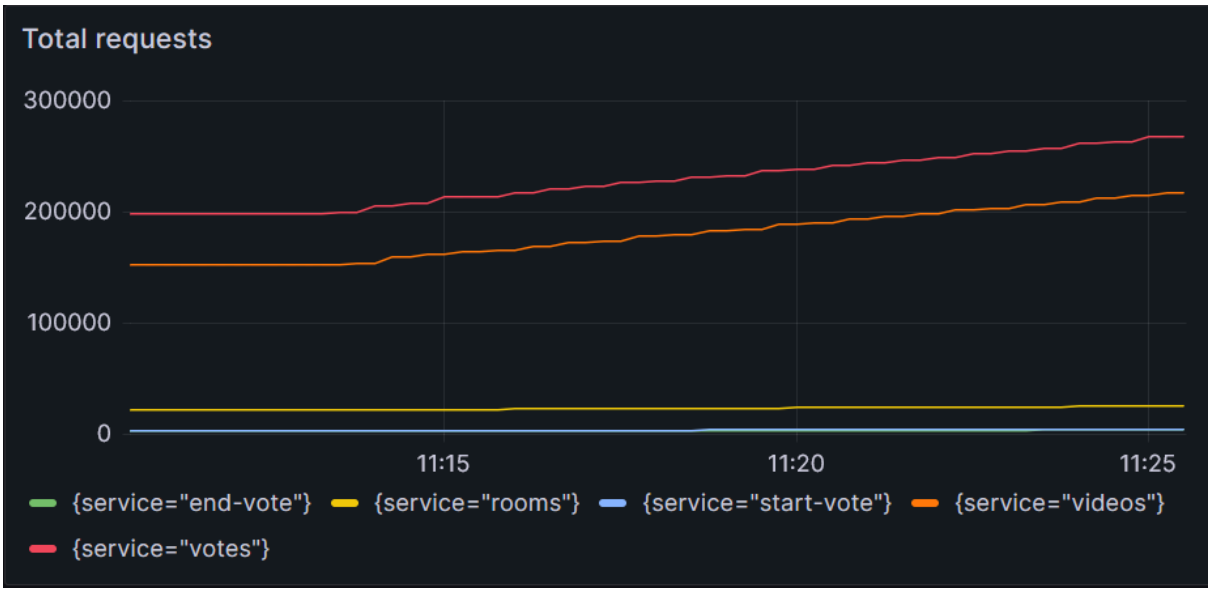

Rabbitmq messages
300
200
100
0
10:50
10:55
11:00
{app="rabbitmq", argocd_argoproj_io_instance="rabbitmq-dev", instance="rabbitmq.rabbitmq-dev.s

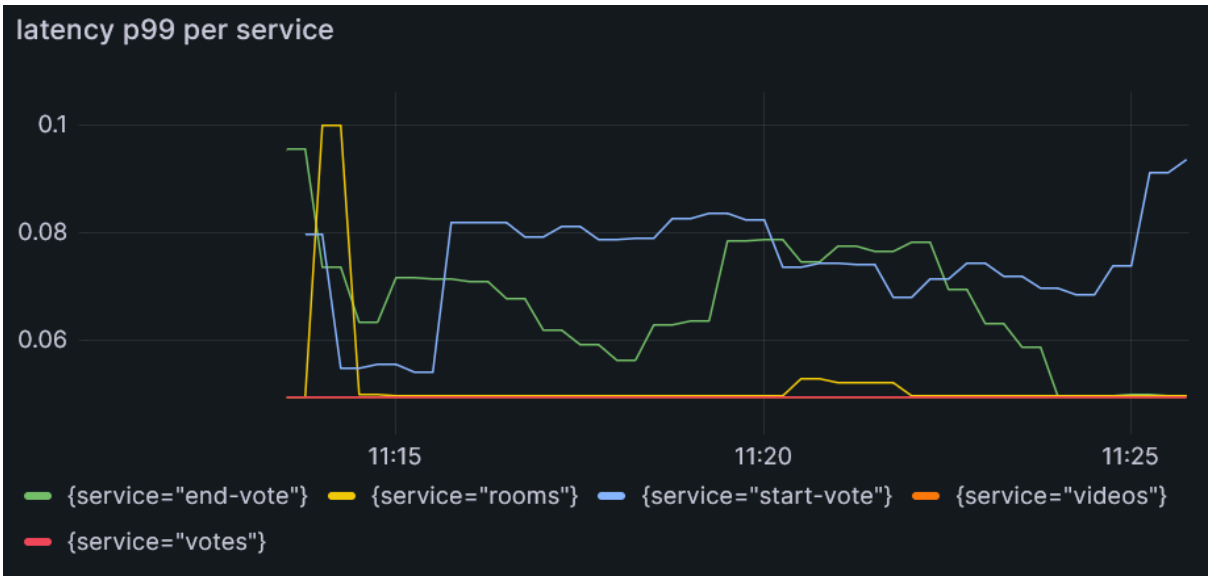

queue for rabbitmq
4
3
2
1
0
10:50
10:55
11:00
rabbitmq_queue_messages{app="rabbitmq", argocd_argoproj_io_instance="rabbitmq-dev", instance

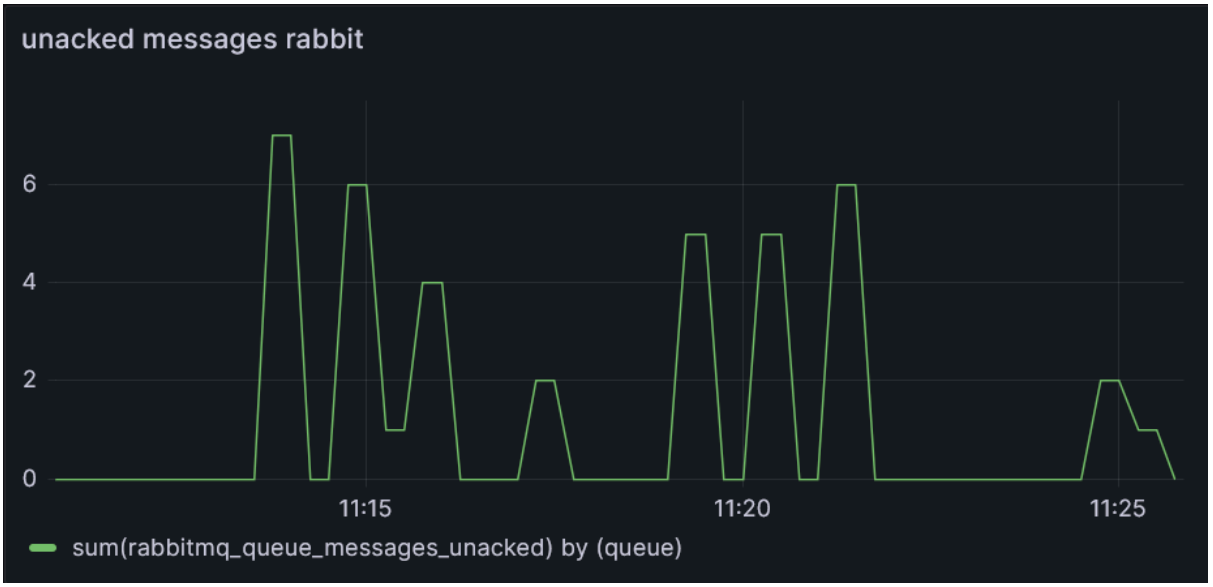

requests per second
125
100
75
50
25
0
10:55
11:00
11:05
{service="end-vote"}
{service="rooms"}
{service="start-vote"}
{service="videos"}
{service="votes"}

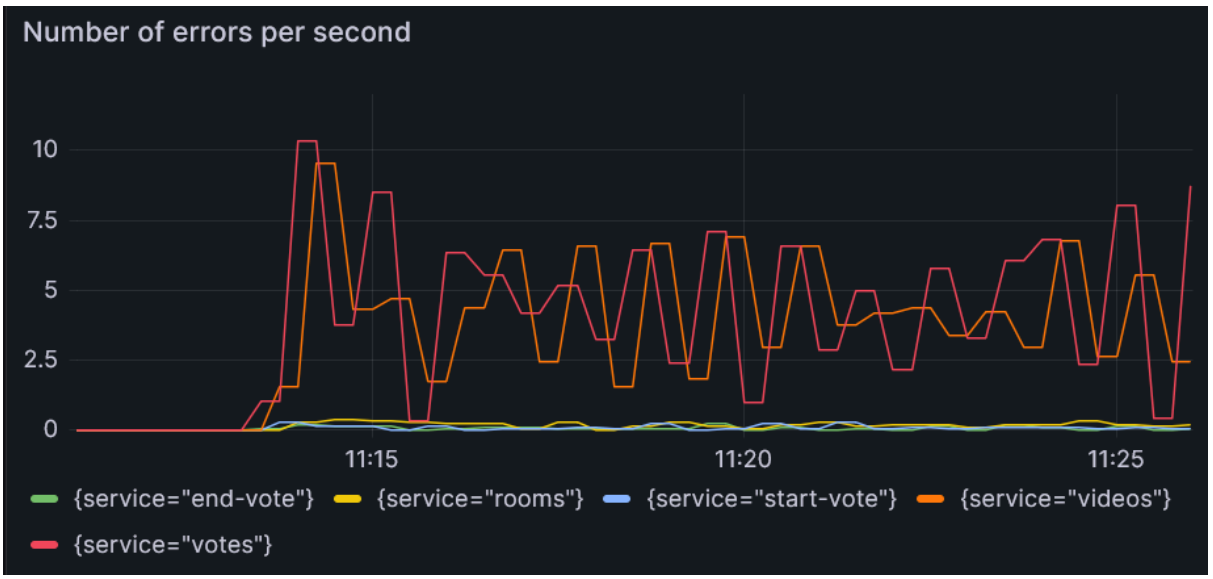

latency p95
0.0478
0.0477
0.0476
0.0475
10:55
11:00
11:05
{service="end-vote"}
{service="rooms"}
{service="start-vote"}
{service="videos"}
{service="votes"}

load testing: 30 replicas, services 1 replica, rabbit worker: 8 replicas,

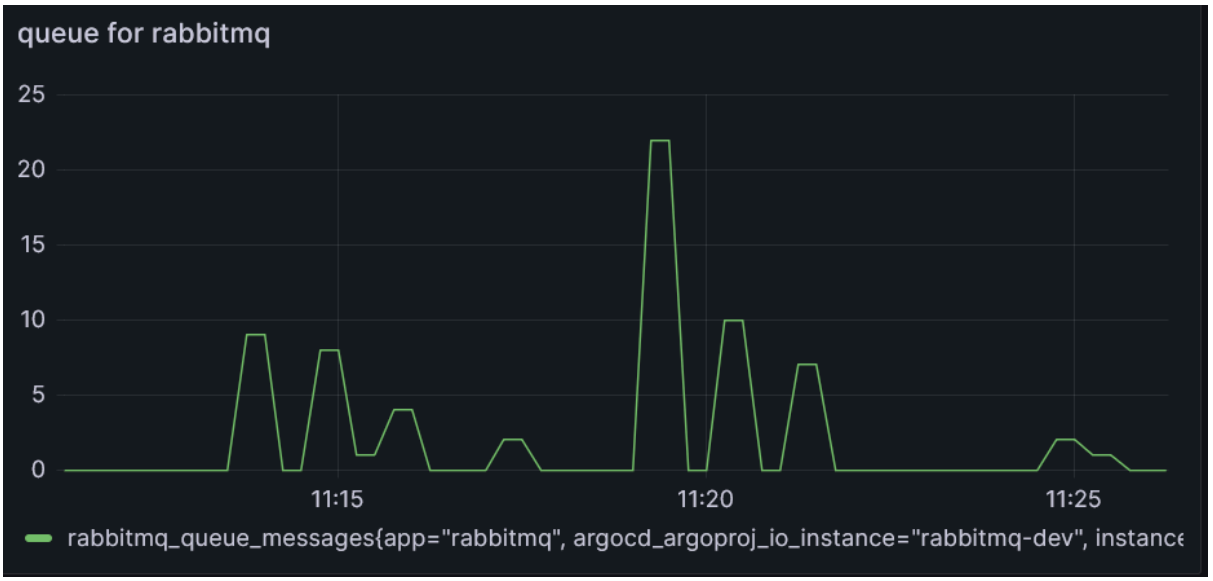


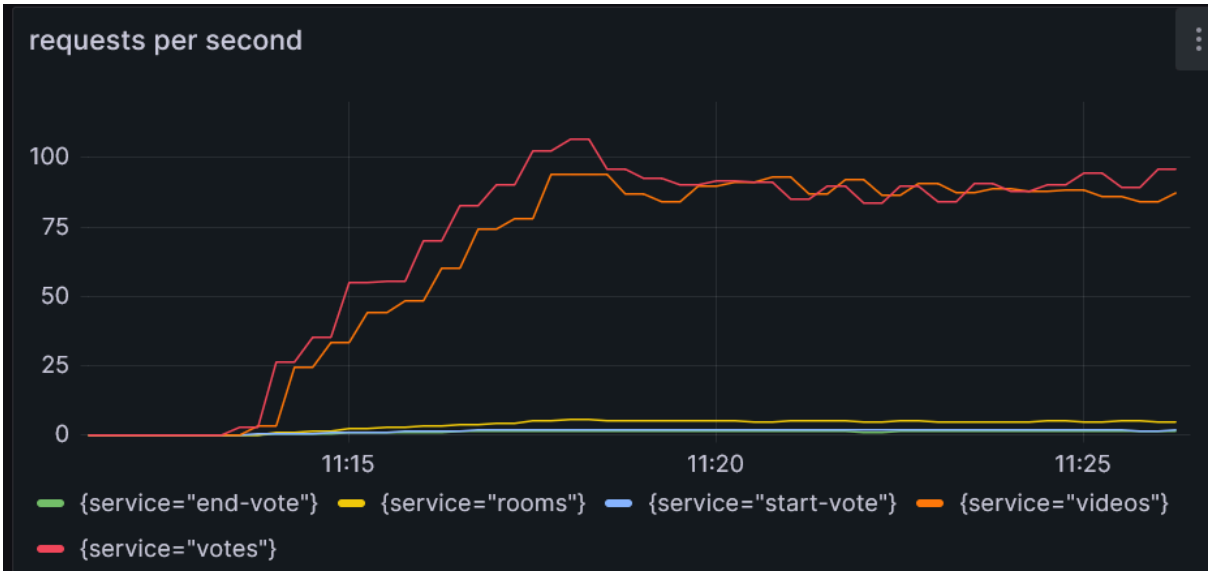



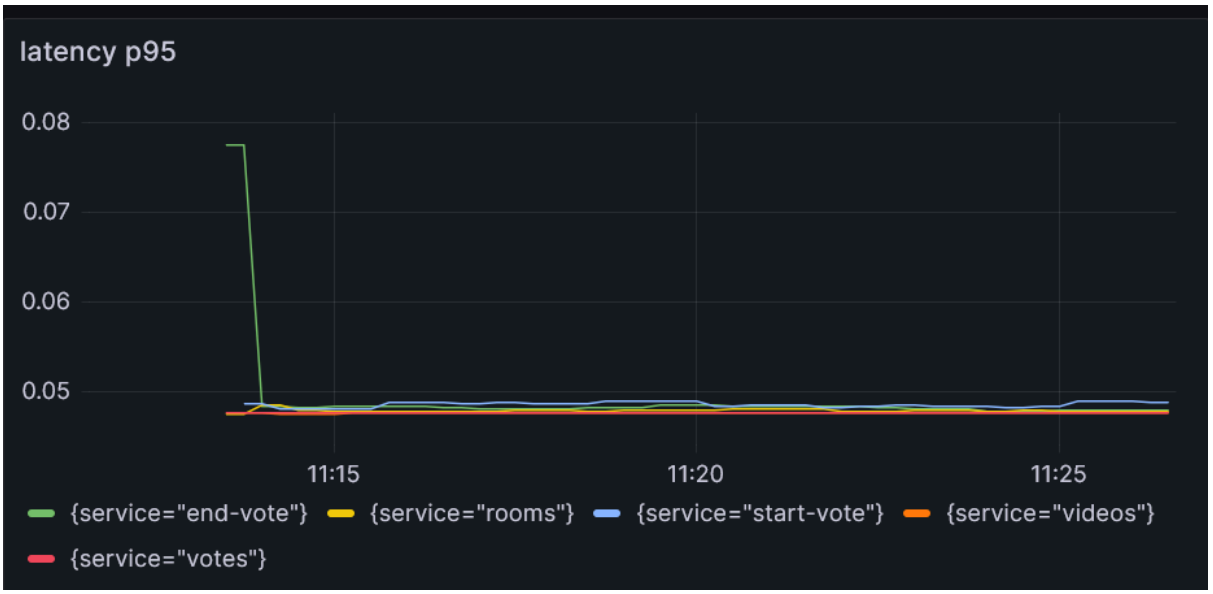




Number of errors per second
10
7.5
5
2.5
0
11:15
11:20
11:25
{service="end-vote"}
{service="rooms"}
{service="start-vote"}
{service="videos"}
{service="votes"}

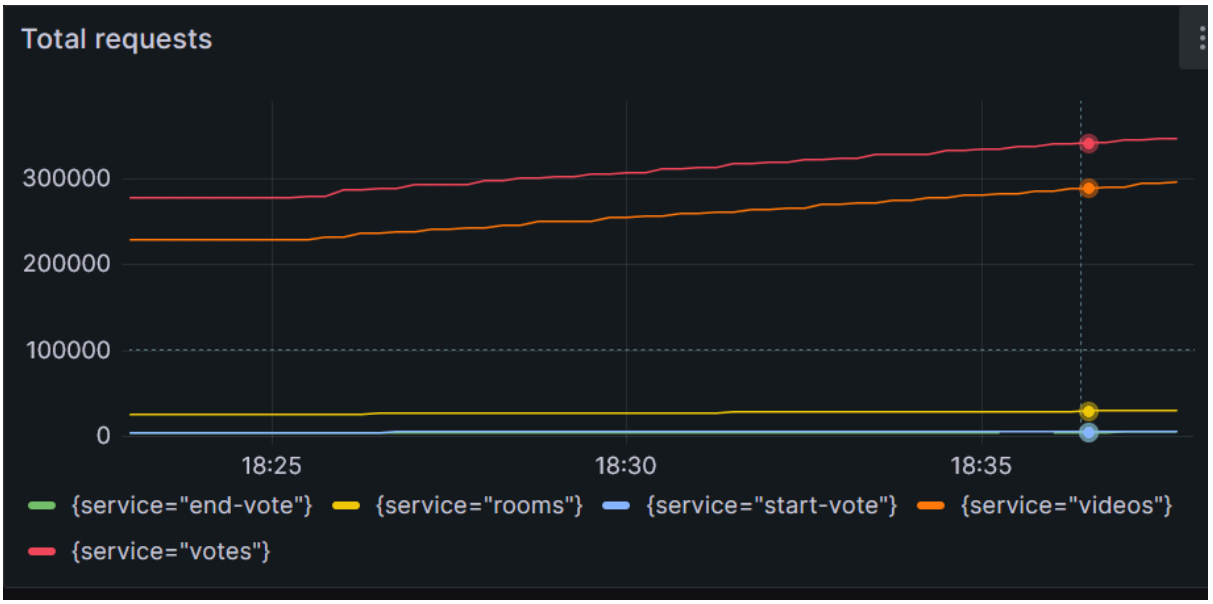
Rabbitmq messages
300
200
100
0
11:15
11:20
11:25
{app="rabbitmq", argocd_argoproj_io_instance="rabbitmq-dev", instance="rabbitmq.rabbitmq-dev.s

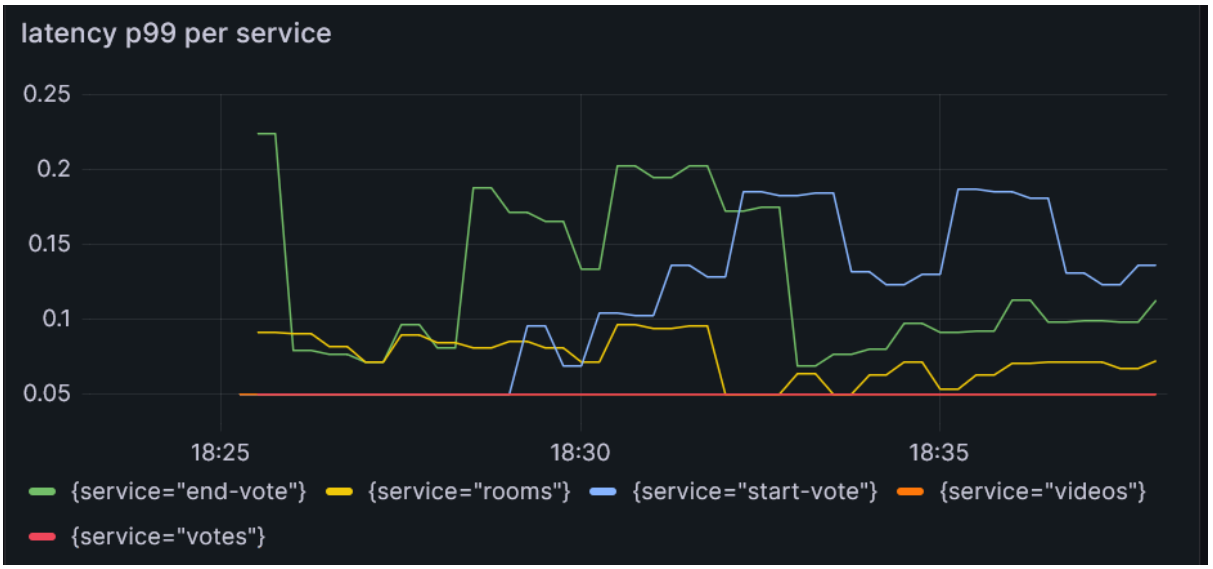

queue for rabbitmq
25
20
15
10
5
0
11:15
11:20
11:25
rabbitmq_queue_messages{app="rabbitmq", argocd_argoproj_io_instance="rabbitmq-dev", instance

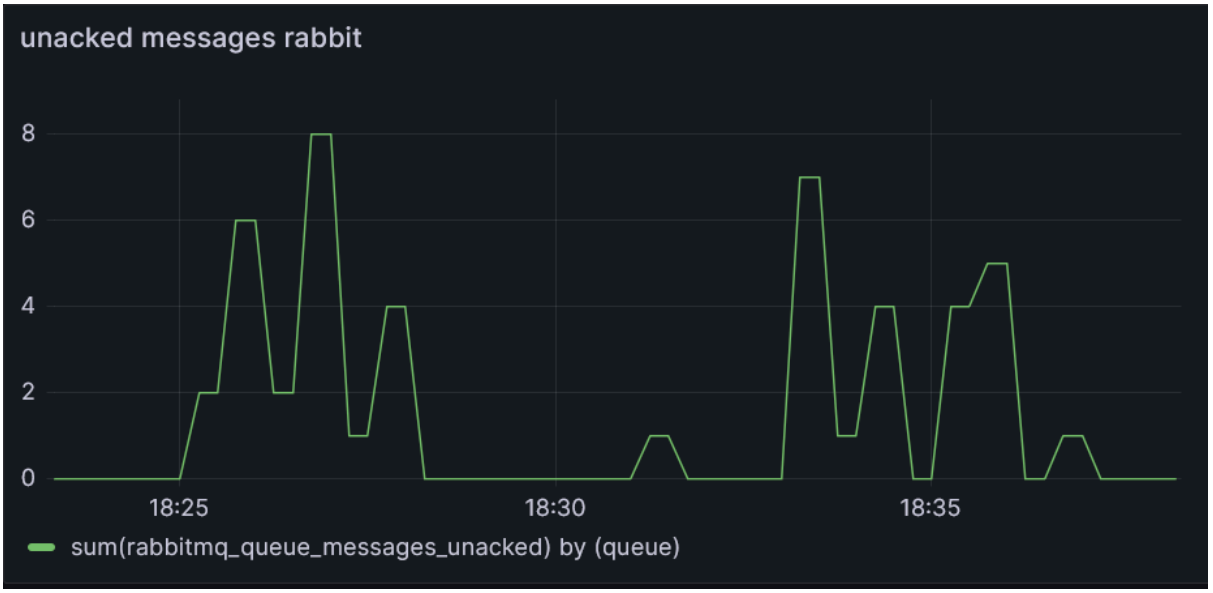

requests per second
100
75
50
25
0
11:15
11:20
11:25
{service="end-vote"}
{service="rooms"}
{service="start-vote"}
{service="videos"}
{service="votes"}

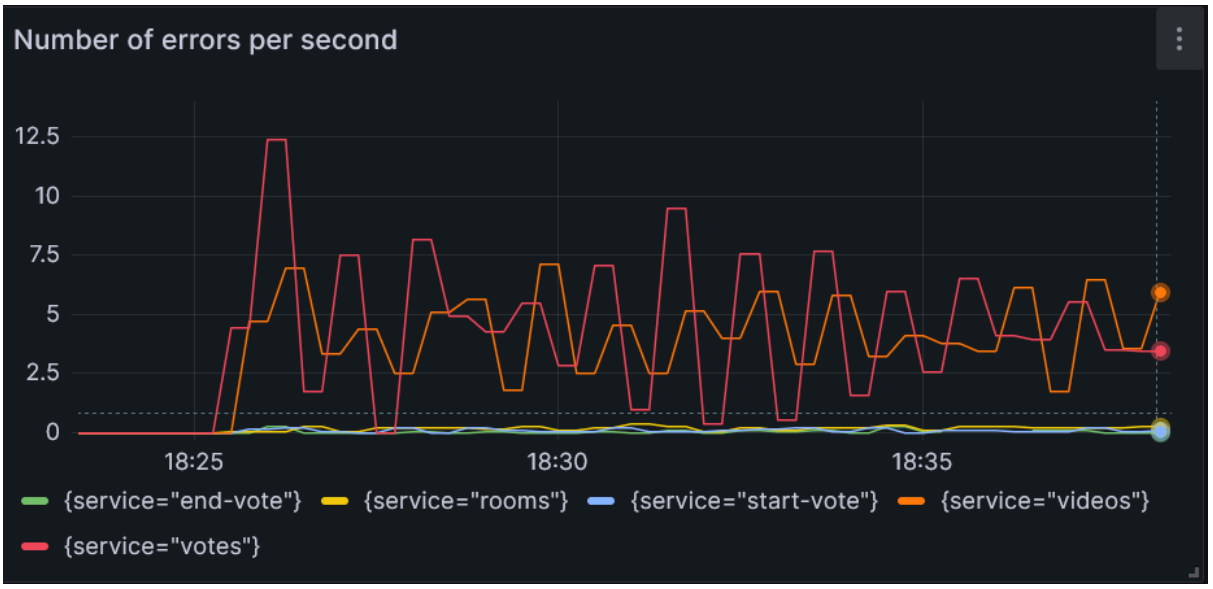

latency p95
0.08
0.07
0.06
0.05
11:15
11:20
11:25
{service="end-vote"}
{service="rooms"}
{service="start-vote"}
{service="videos"}
{service="votes"}

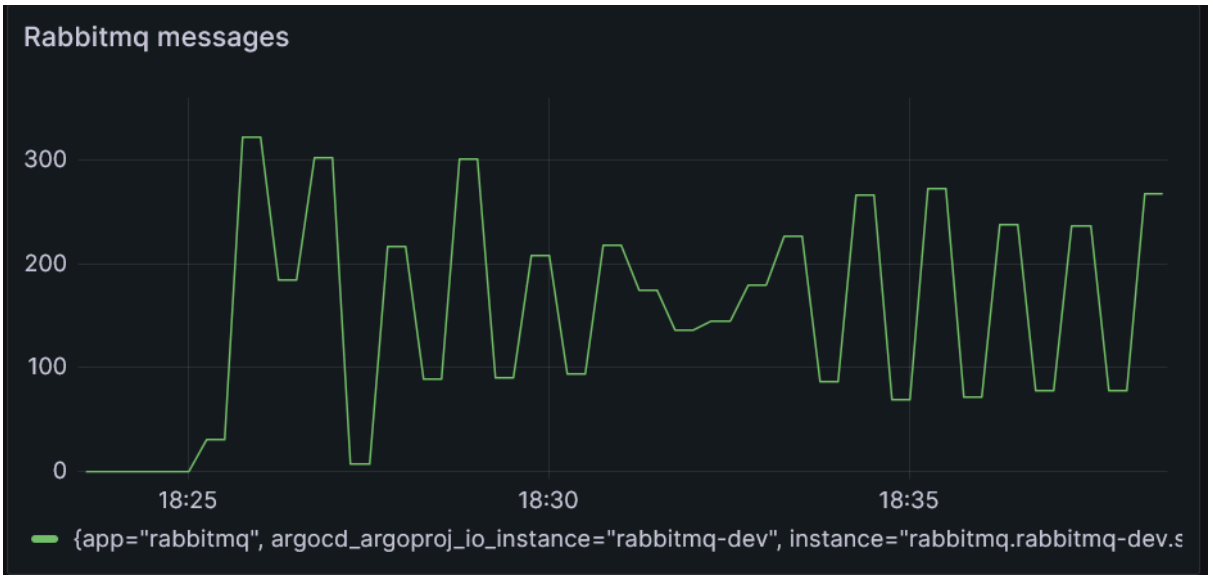
Load testing: 30 replicas backend: 6 replicas, rabbit worker: 8 replicas, vote: 8 replicas, video: 6 replicas

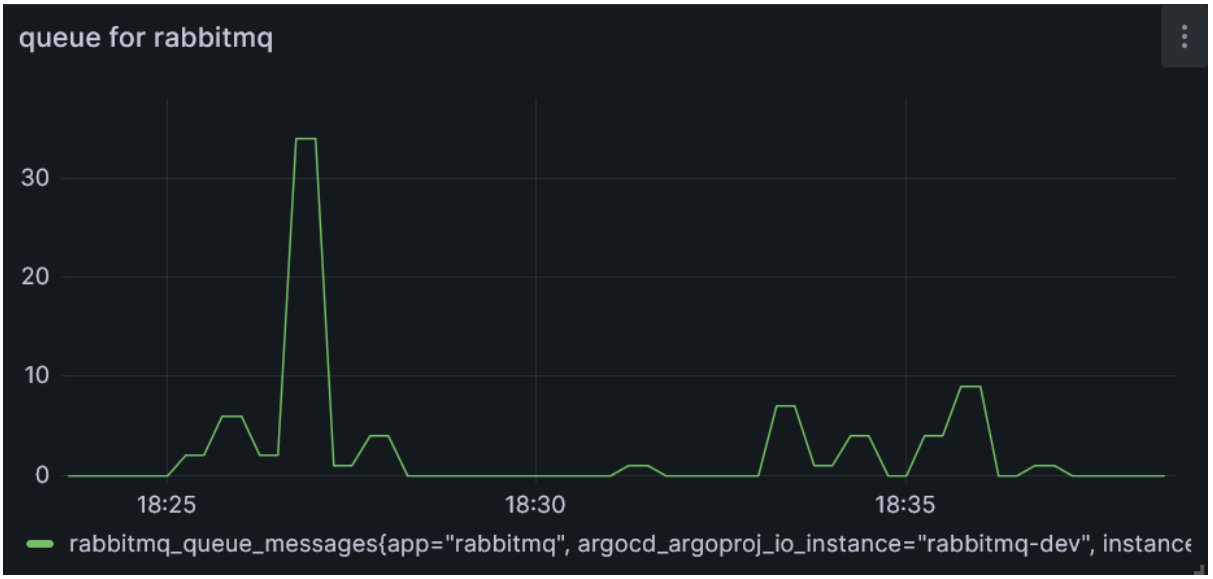


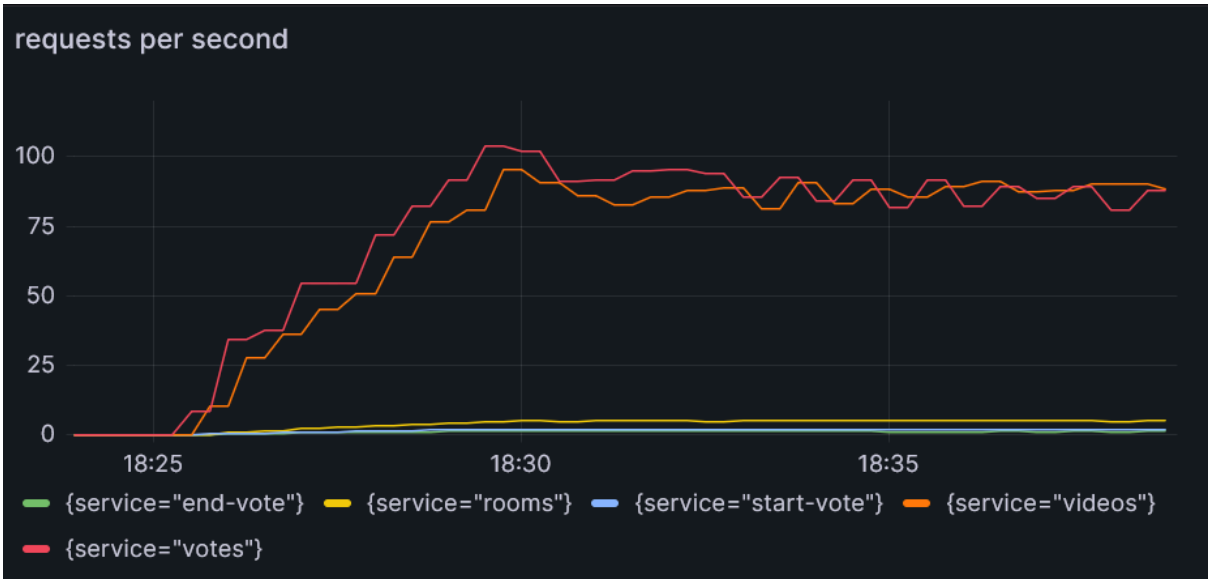



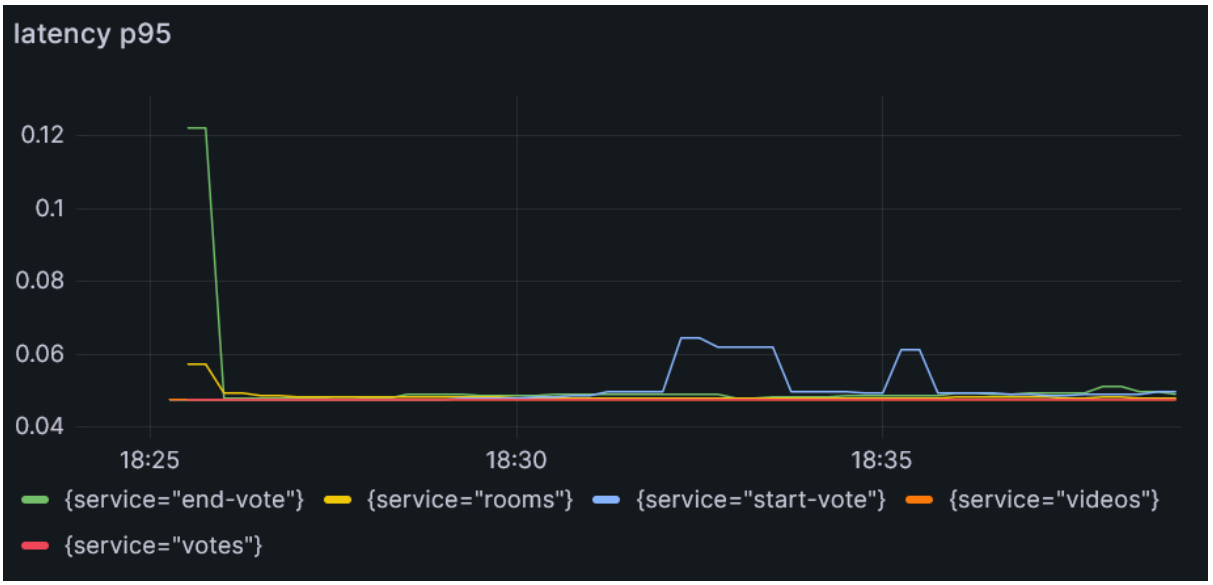

unacked messages rabbit
8
6
4
2
0
18:25
18:30
18:35
sum(rabbitmq_queue_messages_unacked) by (queue)


Number of errors per second
12.5
10
7.5
5
2.5
0
18:25
18:30
18:35
{service="end-vote"}
{service="rooms"}
{service="start-vote"}
{service="videos"}
{service="votes"}


Rabbitmq messages
300
200
100
0
18:25
18:30
18:35
{app="rabbitmq", argocd_argoproj_io_instance="rabbitmq-dev", instance="rabbitmq.rabbitmq-dev.s


queue for rabbitmq
30
20
10
0
18:25
18:30
18:35
rabbitmq_queue_messages{app="rabbitmq", argocd_argoproj_io_instance="rabbitmq-dev", instance


requests per second
100
75
50
25
0
18:25
18:30
18:35
{service="end-vote"}
{service="rooms"}
{service="start-vote"}
{service="videos"}
{service="votes"}


latency p95
0.12
0.1
0.08
0.06
0.04
18:25
18:30
18:35
{service="end-vote"}
{service="rooms"}
{service="start-vote"}
{service="videos"}
{service="votes"}