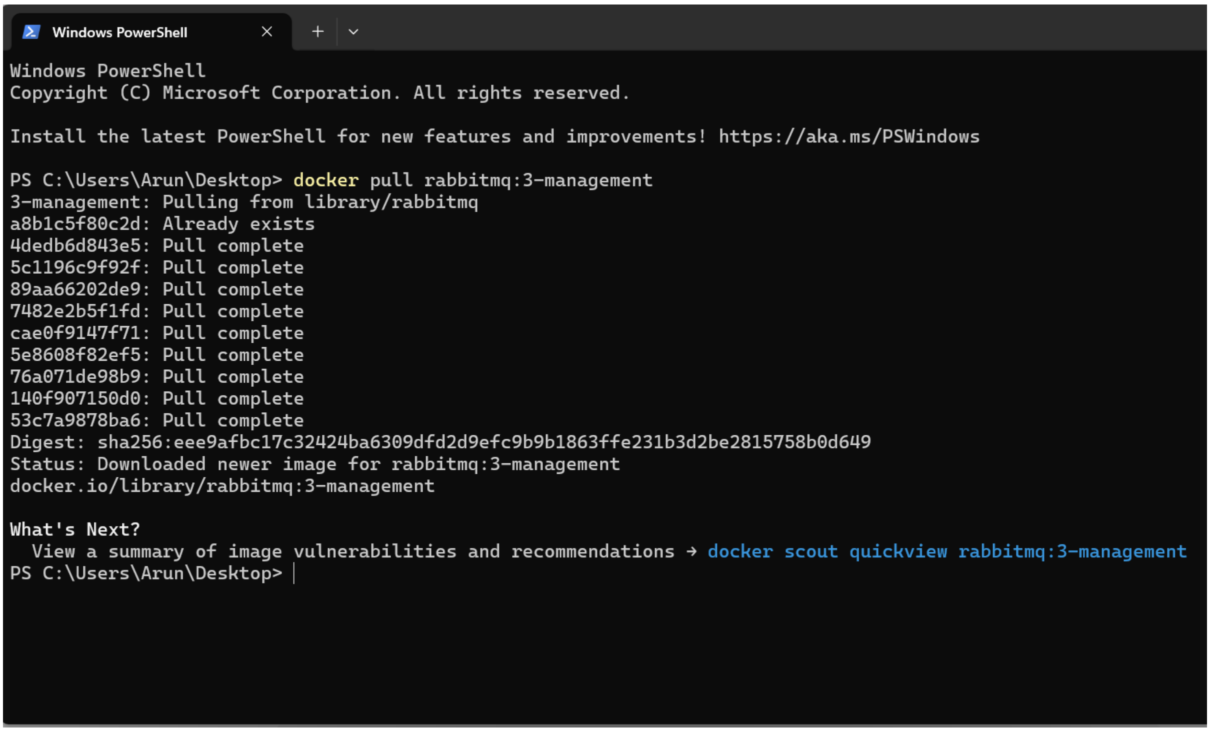
SIMPLE QUEUEING MODEL WITH RABBIT-MQ

Pulling the RabbitMQ Docker Image



```
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Arun\Desktop> docker pull rabbitmq:3-management
3-management: Pulling from library/rabbitmq
a8b1c5f80c2d: Already exists
4dedb6d843e5: Pull complete
5c1196c9f92f: Pull complete
89aa66202de9: Pull complete
7482e2b5f1fd: Pull complete
cae0f9147f71: Pull complete
5e8608f82ef5: Pull complete
76a071de98b9: Pull complete
140f907150d0: Pull complete
53c7a9878ba6: Pull complete
Digest: sha256:eee9afbc17c32424ba6309dfd2d9efc9b9b1863ffe231b3d2be2815758b0d649
Status: Downloaded newer image for rabbitmq:3-management
docker.io/library/rabbitmq:3-management

What's Next?
  View a summary of image vulnerabilities and recommendations → docker scout quickview rabbitmq:3-management
PS C:\Users\Arun\Desktop> |
```
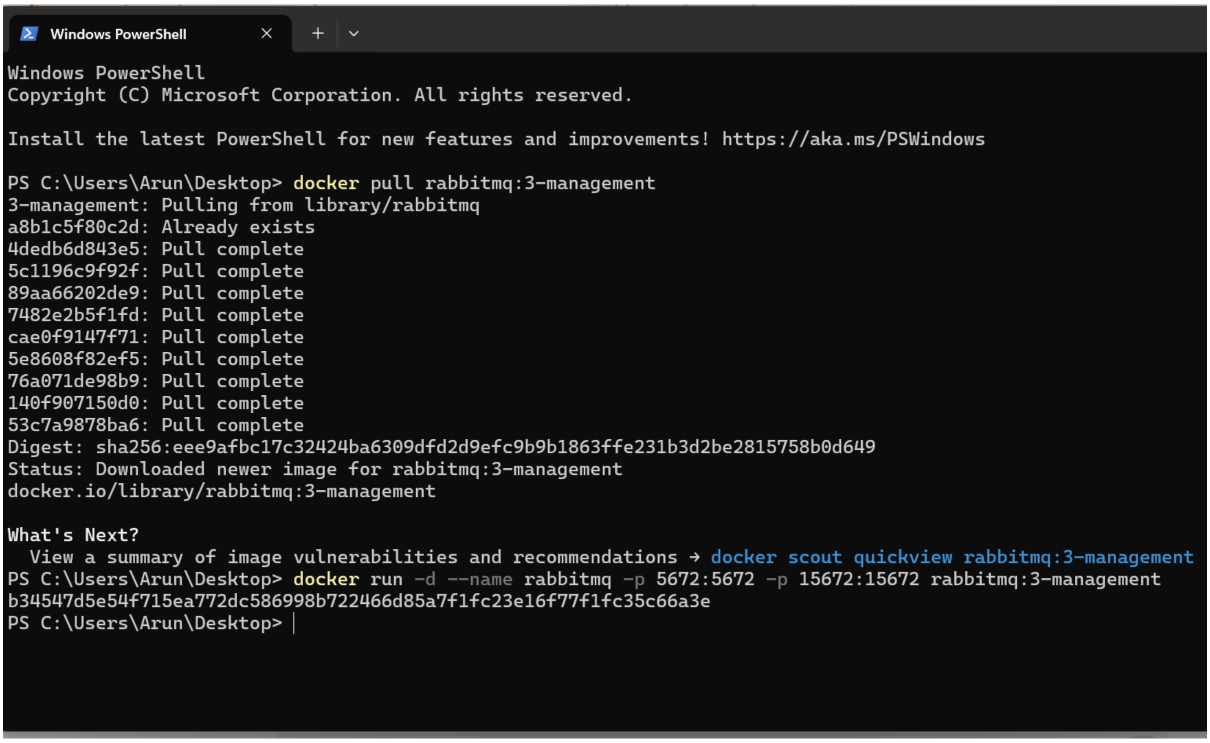

Runing the RabbitMQ Container



```
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PS C:\Users\Arun\Desktop> docker pull rabbitmq:3-management
3-management: Pulling from library/rabbitmq
a8b1c5f80c2d: Already exists
4dedb6d843e5: Pull complete
5c1196c9f92f: Pull complete
89aa66202de9: Pull complete
7482e2b5f1fd: Pull complete
cae0f9147f71: Pull complete
5e8608f82ef5: Pull complete
76a071de98b9: Pull complete
140f907150d0: Pull complete
53c7a9878ba6: Pull complete
Digest: sha256:eee9afbc17c32424ba6309dfd2d9efc9b9b1863ffe231b3d2be2815758b0d649
Status: Downloaded newer image for rabbitmq:3-management
docker.io/library/rabbitmq:3-management

What's Next?
  View a summary of image vulnerabilities and recommendations → docker scout quickview rabbitmq:3-management
PS C:\Users\Arun\Desktop> docker run -d --name rabbitmq -p 5672:5672 -p 15672:15672 rabbitmq:3-management
b34547d5e54f715ea772dc586998b722466d85a7f1fc23e16f77f1fc35c66a3e
PS C:\Users\Arun\Desktop> |
```
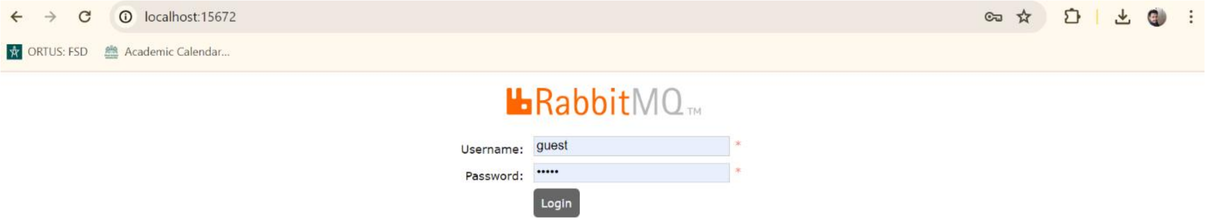
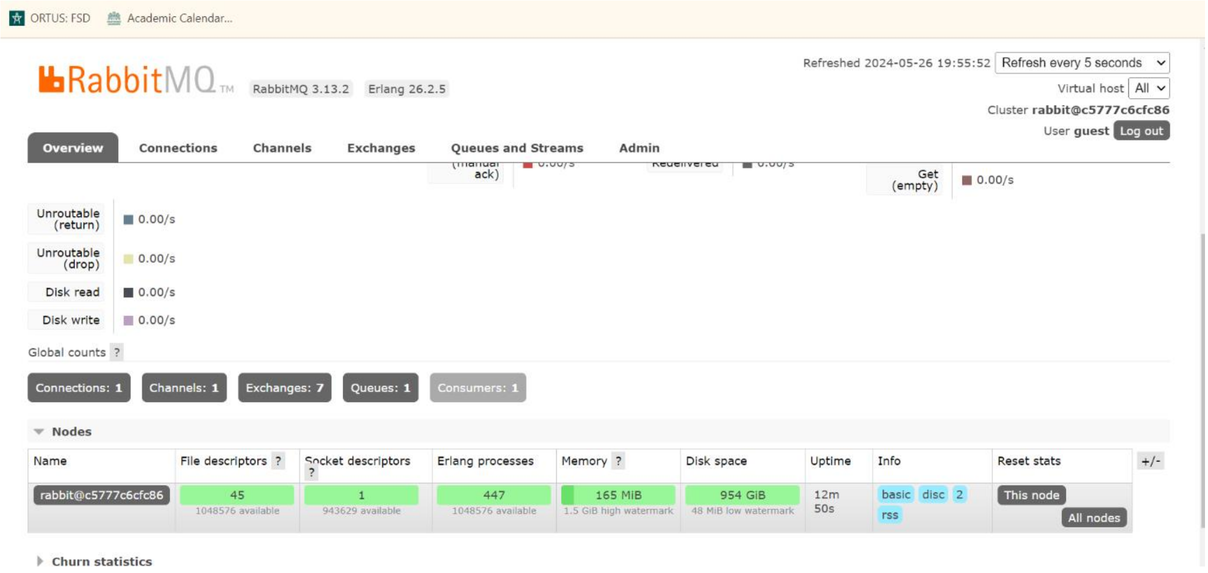

Access RabbitMQ Management Console



Username: guest

Password: •••••



RabbitMQ 3.13.2 Erlang 26.2.5

Refreshed 2024-05-26 19:55:52 Refresh every 5 seconds

Virtual host All

Cluster rabbit@c5777c6cfc86

User guest

Get (empty) 0.00/s

Unroutable (return) 0.00/s

Unroutable (drop) 0.00/s

Disk read 0.00/s

Disk write 0.00/s

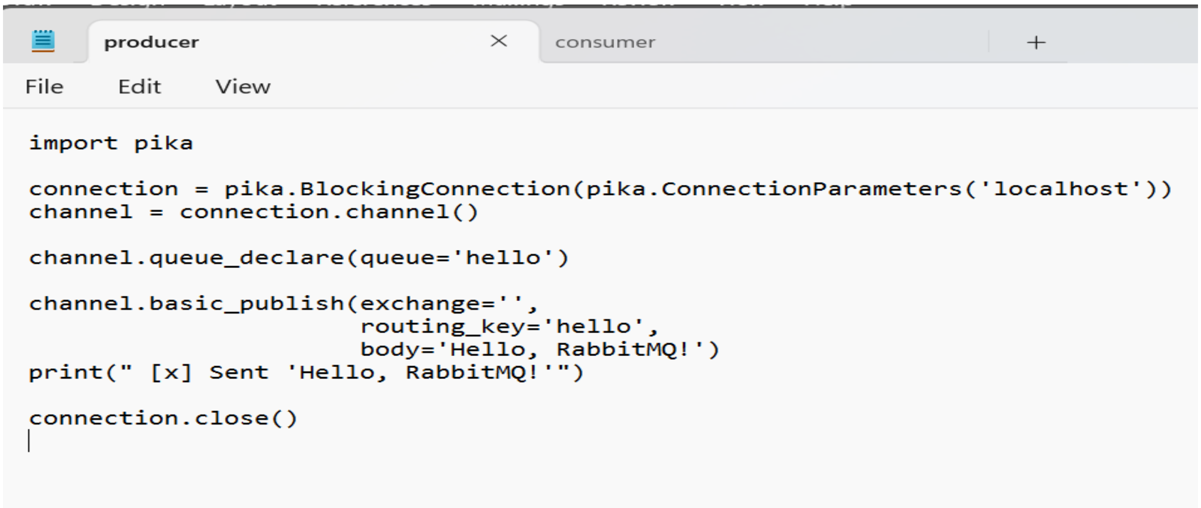
Global counts ?

Connections: 1 Channels: 1 Exchanges: 7 Queues: 1 Consumers: 1

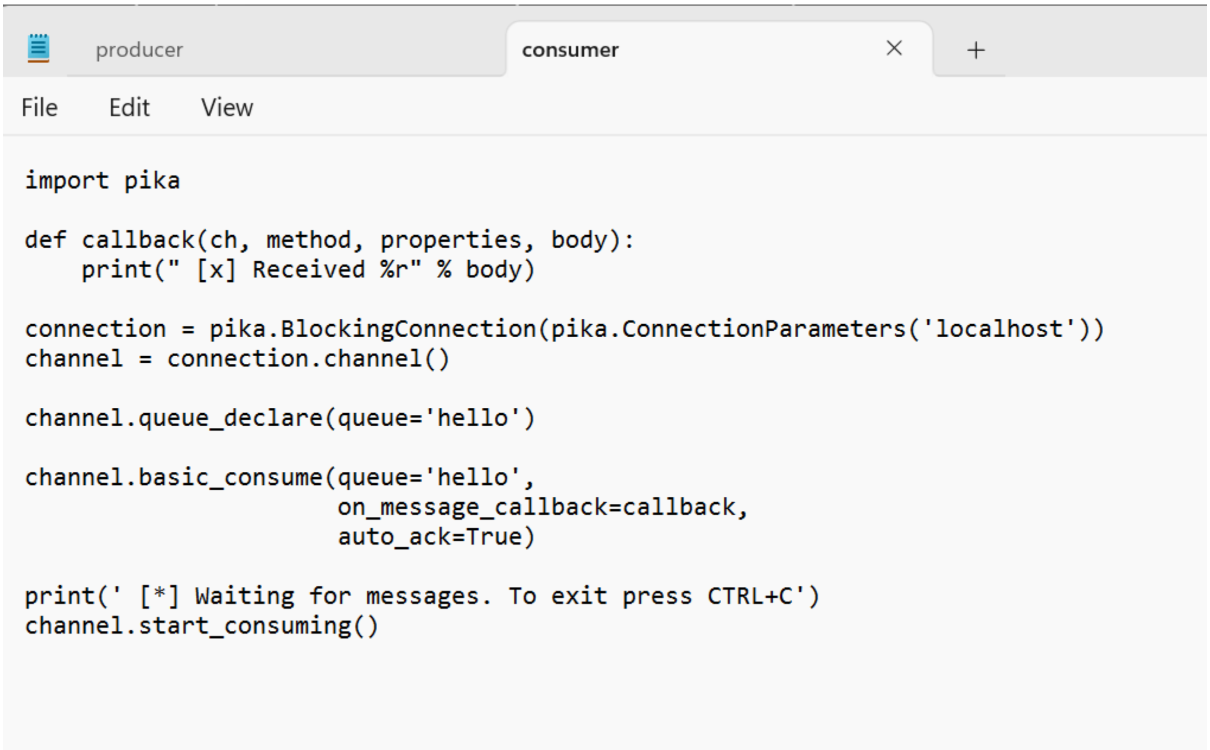
Nodes

Name	File descriptors ?	Socket descriptors ?	Erlang processes	Memory ?	Disk space	Uptime	Info	Reset stats
rabbit@c5777c6cfc86	45 1048576 available	1 943629 available	447 1048576 available	165 MiB 1.5 GiB high watermark	954 GiB 48 MiB low watermark	12m 50s	basic disc 2 rss	This node All nodes

Create a Python Script for the Producer and consumer

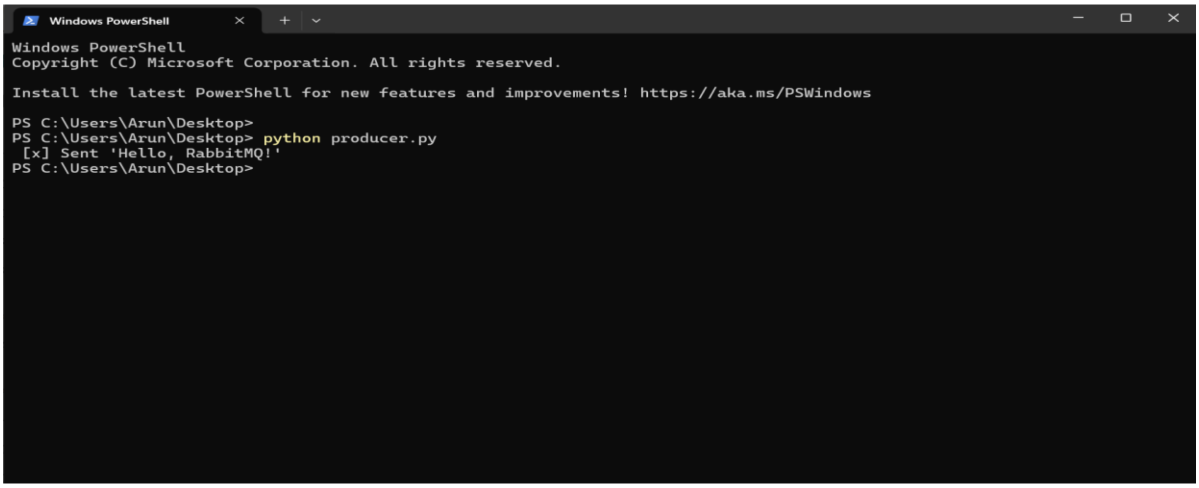


```
import pika

connection = pika.BlockingConnection(pika.ConnectionParameters('localhost'))
channel = connection.channel()

channel.queue_declare(queue='hello')

channel.basic_publish(exchange='',
                      routing_key='hello',
                      body='Hello, RabbitMQ!')
print(" [x] Sent 'Hello, RabbitMQ!'")

connection.close()
```



```
import pika

def callback(ch, method, properties, body):
    print(" [x] Received %r" % body)

connection = pika.BlockingConnection(pika.ConnectionParameters('localhost'))
channel = connection.channel()

channel.queue_declare(queue='hello')

channel.basic_consume(queue='hello',
                      on_message_callback=callback,
                      auto_ack=True)

print(' [*] Waiting for messages. To exit press CTRL+C')
channel.start_consuming()
```

Run the Producer, Consumer and Validate, Verify message



```
Windows PowerShell
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PS C:\Users\Arun\Desktop>
PS C:\Users\Arun\Desktop> python producer.py
 [x] Sent 'Hello, RabbitMQ!'
PS C:\Users\Arun\Desktop>
```

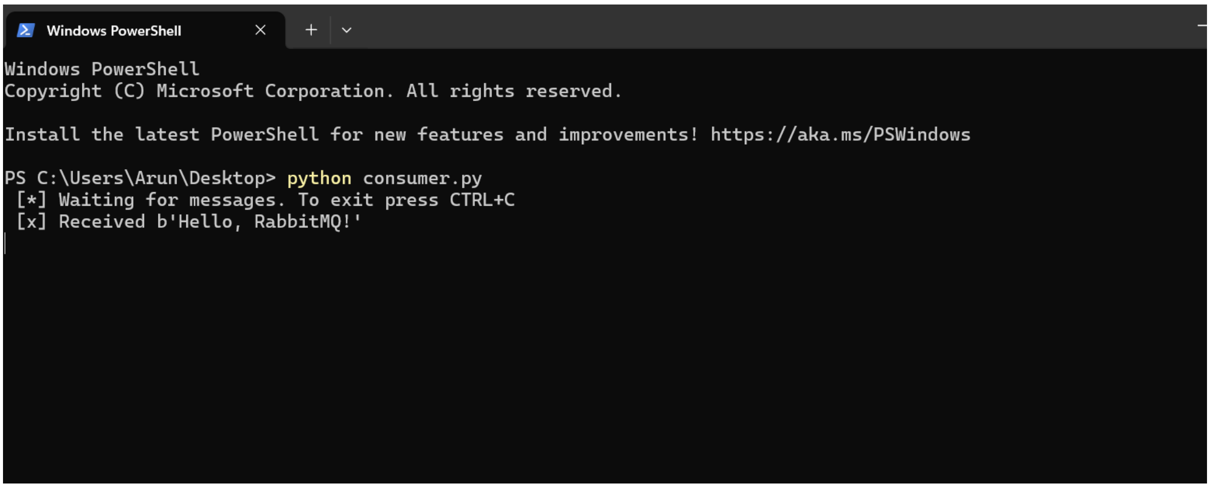

```
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Arun\Desktop> python consumer.py
 [*] Waiting for messages. To exit press CTRL+C
 [x] Received b'Hello, RabbitMQ!'
```

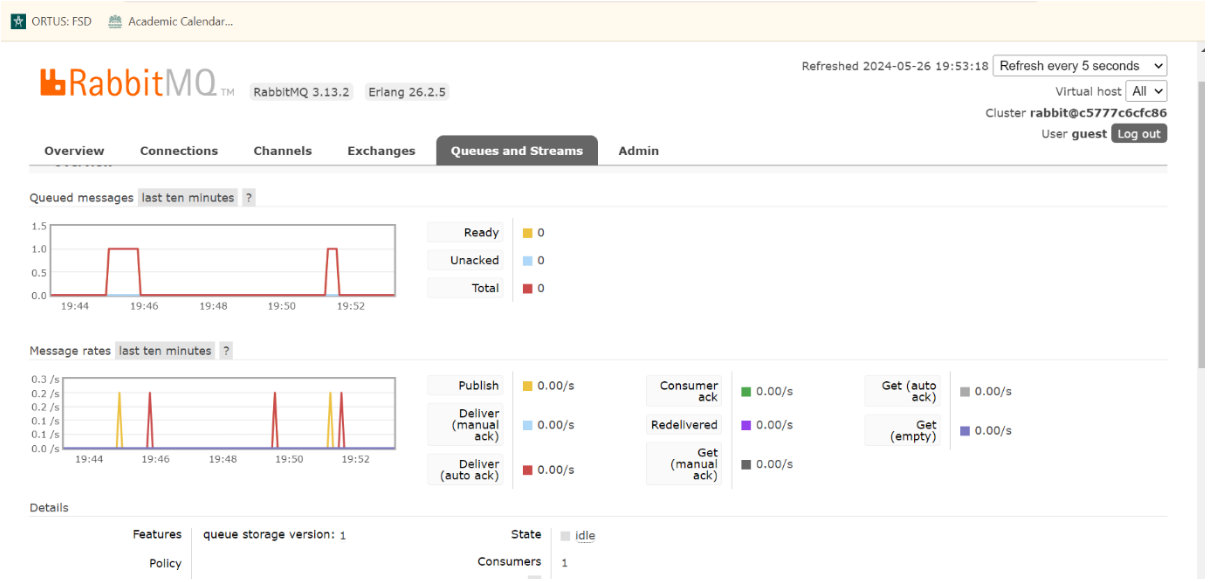

Refreshed 2024-05-26 19:53:18 Refresh every 5 seconds

Virtual host All

Cluster **rabbit@c5777c6cfc86**

User **guest** Log out

Queued messages last ten minutes ?

Ready	🟨 0
Unacked	🟦 0
Total	🟥 0

Message rates last ten minutes ?

Publish	🟨 0.00/s	Consumer ack	🟩 0.00/s	Get (auto ack)	■ 0.00/s
Deliver (manual ack)	🟦 0.00/s	Redelivered	🟪 0.00/s	Get (empty)	🟪 0.00/s
Deliver (auto ack)	🟥 0.00/s	Get (manual ack)	■ 0.00/s		

Details

Features	queue storage version: 1	State	■ idle
Policy		Consumers	1