

Performance Test Report

This document has been created to collect the results of the performance test run executed against the Booking Api application.

Test Report

- Test Objective: Test the latest release of Booking Api
- Test Timestamp: 29-05-2025 13:12 BST to 13:22 BST
- Test Duration: 10 minutes.
- Virtual user load: 15 (Getbooking: 15 ; Create/update Booking: 5)
- Ramup: 10 seconds
- Test Environment : NFT
- Target Throughput: 10 requests/minute
- Test status: **Fail**

Performance Metrics:

User Journey	Transaction Count	Average Response Time (ms)	90th Percentile (ms)	95th Percentile (ms)	Min (ms)	Max (ms)	Error %	Throughput (transactions/minute)	Received KB/sec)
Create Token	93	454	458	485	415	1016	0	9.2	0.11
CreateBooking	41	113	120	124	104	135	0	4.1	0.07
GetBookingIds - All IDs	42	243	343	344	108	632	0	4.2	2.27
UpdateBooking	41	235	127	797	102	2115	7.32	4.2	0.06
PartialUpdateBooking	40	119	121	122	104	422	12.5	4.4	0.07
GetBooking	40	203	341	356	103	377	15	5	0.07
DeleteBooking	40	263	355	641	103	1324	12.5	4.4	0.05
GetBookingIds - by Name	40	301	445	451	108	492	0	4	1.15
GetBookingIds - by date	40	154	333	356	104	387	17.5	4	0.07
TOTAL	417	260	448	456	102	2115	6.24	41.1	3.60

Key Observations:

- 95th percentile response time metrics has exceeded the SLA for the below user journeys
 - Update Booking
 - GetBooking
 - Delete Booking
 - GetBooking - by Name
 - GetBooking - by date
- Observed intermittent blank responses got Getbooking by date under load. Due to which the error rate has gone up to 17%. Sample request: GET <https://restful-booker.herokuapp.com/booking?checkin=2023-11-11&checkout=2025-10-12>
- Getbooking by name returns a blank response for newly created bookings, which looks like a functional issue.
- Update/Partial update booking started throwing HTTP/1.1 403 Forbidden towards the end of the test. Need to investigate whether this is related to data or application issues.
- The application returns http-503 service unavailable error when the load is increased to 30 Virtual users. Also observed 100% error rate across multiple user journeys hence stopped the test. Looks like the application is not able to handle the higher load of 30 virtual users.

Label	# Samples	Average	Median	90% Line	95% Line	99% Line	Min	Maximum	Error %	Through...	Received ...	Sent KB/sec
Create Token	30	474	463	495	497	747	422	747	0.00%	2.3/sec	1.76	0.63
CreateBooking	10	5226	5281	7283	7283	7342	1566	7342	40.00%	26.0/min	0.47	0.21
GetBookingIds - All IDs	20	3352	744	8153	8199	8232	110	8232	20.00%	41.1/min	338.07	0.13
UpdateBooking	10	2929	1105	7413	7413	13880	102	13880	100.00%	26.2/min	0.41	0.23
PartialUpdateBooking	4	358	109	1108	1108	1108	105	1108	100.00%	30.7/min	0.38	0.17
GetBooking	4	100	105	116	116	116	72	116	100.00%	46.9/min	1.03	0.11
TOTAL	78	2111	473	7342	8102	8232	72	13880	33.33%	2.2/sec	275.92	0.67

Graphs (if any):

Next Steps / Action Items:

- Investigate the root cause of the blank responses for Get booking by date user journey. Raise defect if needed
- Investigate HTTP/1.1 403 Forbidden errors occurred during the test.
- Investigate the http-503 errors and check if it is related to application threshold/capacity.