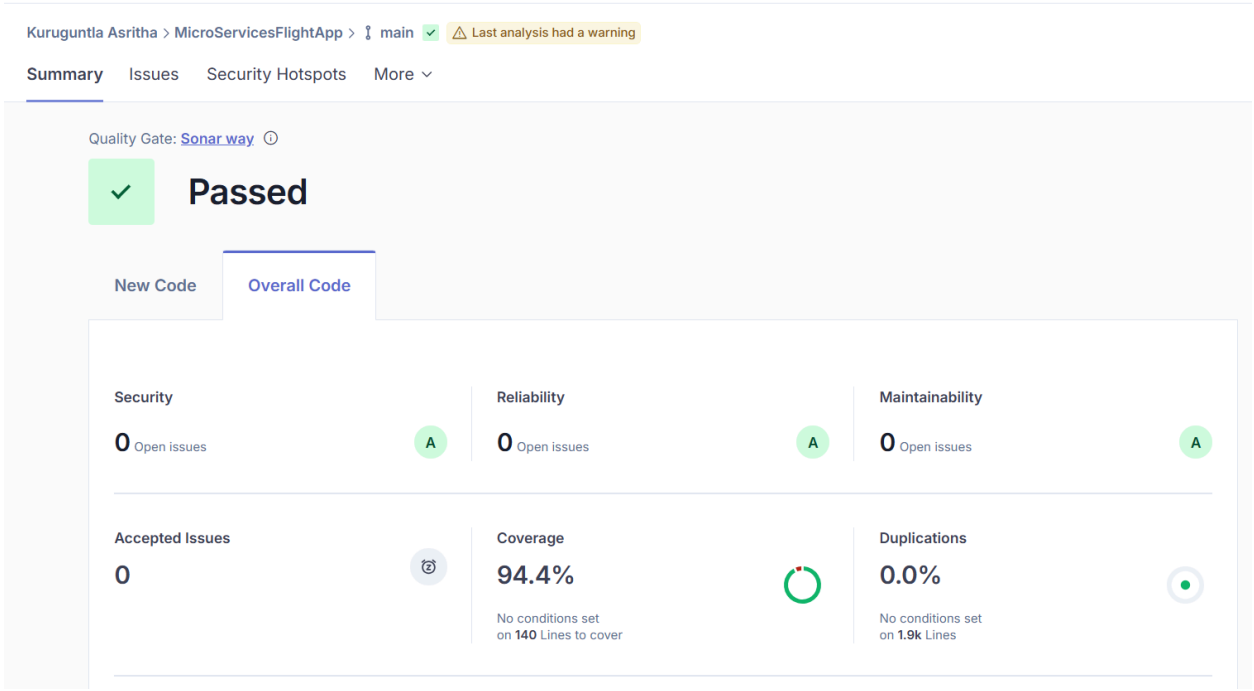
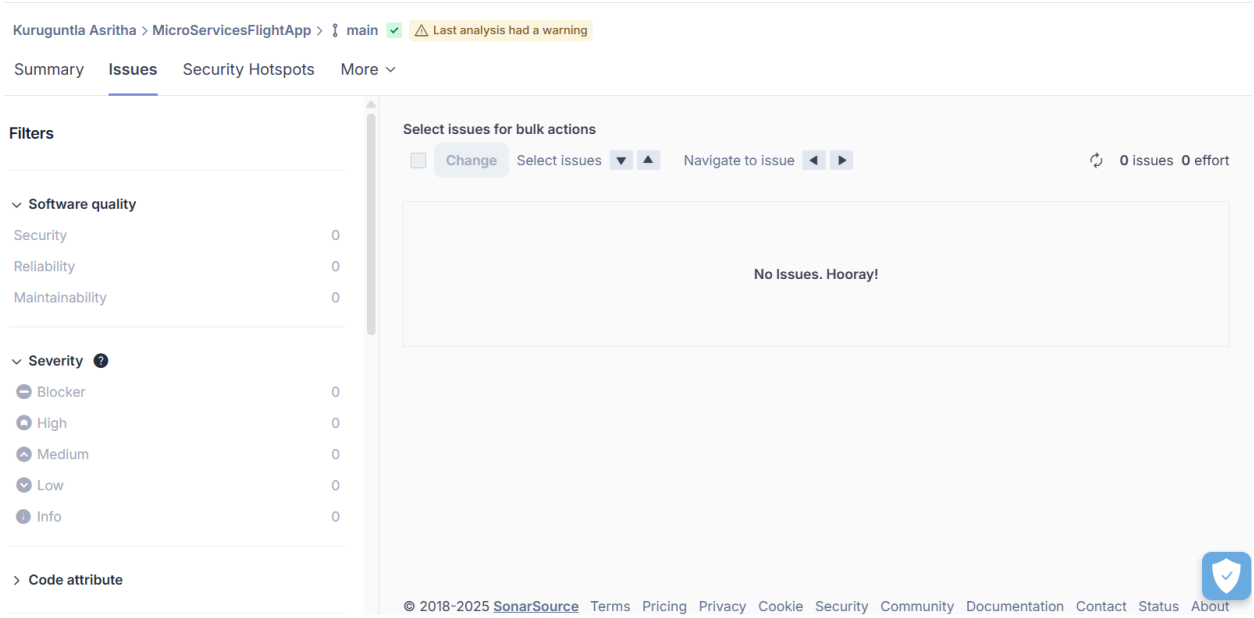
Sonar Qube Analysis:





Jacoco Reports

passenger-service

passenger-service

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
com.example.service		88%		n/a	0	8	2	20	0	8	0	1
com.example		100%		n/a	0	3	0	10	0	3	0	1
com.example.controller		100%		n/a	0	5	0	5	0	5	0	1
com.example.exception		100%		n/a	0	1	0	2	0	1	0	1
Total	14 of 199	92%	0 of 0	n/a	0	17	2	37	0	17	0	4

flight-service

flight-service

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
com.example.service		100%		n/a	0	7	0	15	0	7	0	1
com.example		100%		n/a	0	3	0	10	0	3	0	1
com.example.controller		100%		n/a	0	5	0	5	0	5	0	1
com.example.exception		100%		n/a	0	1	0	2	0	1	0	1
Total	0 of 172	100%	0 of 0	n/a	0	16	0	32	0	16	0	4

ticket-service

ticket-service

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
com.example.service		94%		50%	2	9	1	30	1	8	0	1
com.example		100%		n/a	0	3	0	10	0	3	0	1
com.example.controller		100%		n/a	0	4	0	4	0	4	0	1
com.example.exception		100%		n/a	0	1	0	2	0	1	0	1
Total	10 of 252	96%	1 of 2	50%	2	17	1	46	1	16	0	4

Kafka:

```
ned: [ticket-booked-0]
2025-12-01T15:13:43.402+05:30  INFO 17908 --- [email-service] [ntainer#0-0-C
-1] c.example.demo.listener.EmailListener     : ? Email-service received: Tic
ket booked for passengerId=53, flightId=1, pnr=0c92d8ab
```

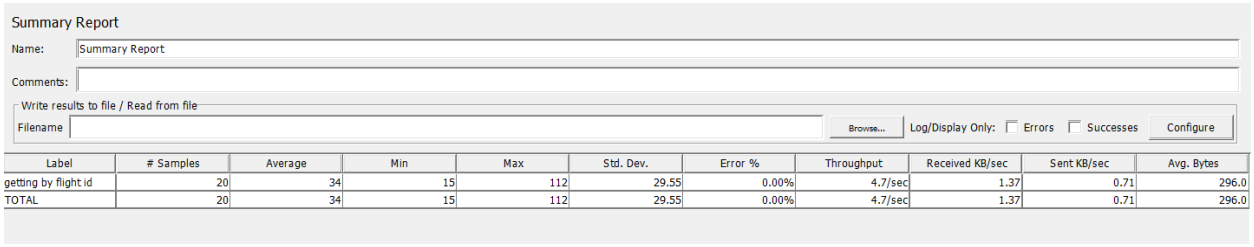
Messages logged when ticket booked

Jmeter:

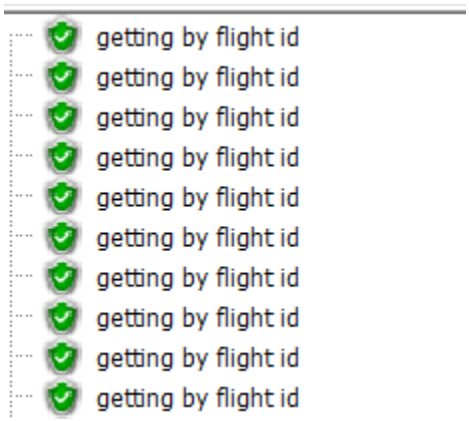
FlightService:

10 threads

Getting by flight id:



Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
getting by flight id	20	34	15	112	29.55	0.00%	4.7/sec	1.37	0.71	296.0
TOTAL	20	34	15	112	29.55	0.00%	4.7/sec	1.37	0.71	296.0



Registering a flight:(post request)

Summary Report

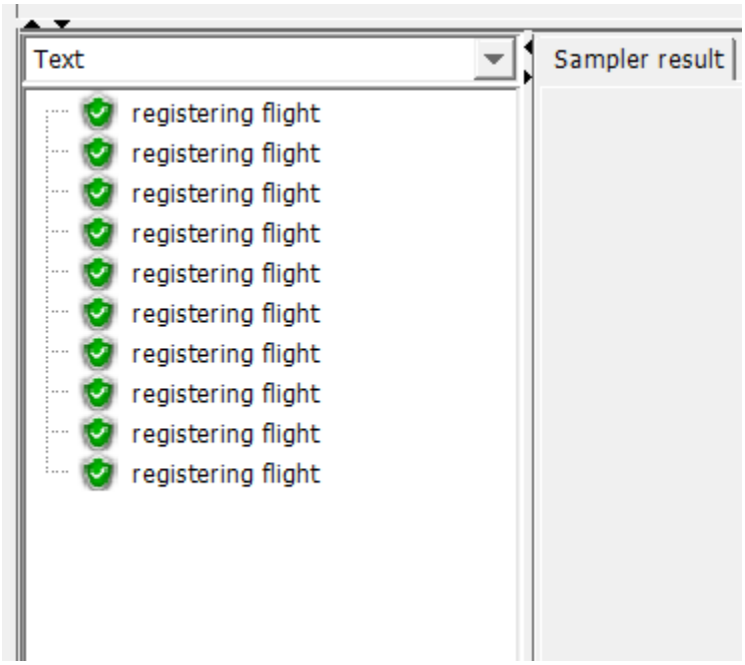
Name: Summary Report

Comments:

Write results to file / Read from file

Filename | Browse... | Log/Display Only: Errors Successes | Configure

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
HTTP Request	10	30	19	54	9.78	0.00%	10.6/sec	1.38	3.96	133.0
TOTAL	10	30	19	54	9.78	0.00%	10.6/sec	1.38	3.96	133.0



50 threads:

Get request

Summary Report

Name: Summary Report

Comments:

Write results to file / Read from file

Filename | Browse... | Log/Display Only: Errors Successes | Configure

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
getting by flight id	50	23	14	45	6.31	0.00%	50.3/sec	14.56	9.09	296.3
TOTAL	50	23	14	45	6.31	0.00%	50.3/sec	14.56	9.09	296.3

Post request:

Summary Report

Name: Summary Report

Comments:

Write results to file / Read from file

Filename | Browse... | Log/Display Only: Errors Successes | Configure

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
registering flight	50	26	14	49	8.15	0.00%	51.3/sec	6.68	19.18	133.5
TOTAL	50	26	14	49	8.15	0.00%	51.3/sec	6.68	19.18	133.5

Passenger Service:

10 threads

Registering a passenger

Summary Report

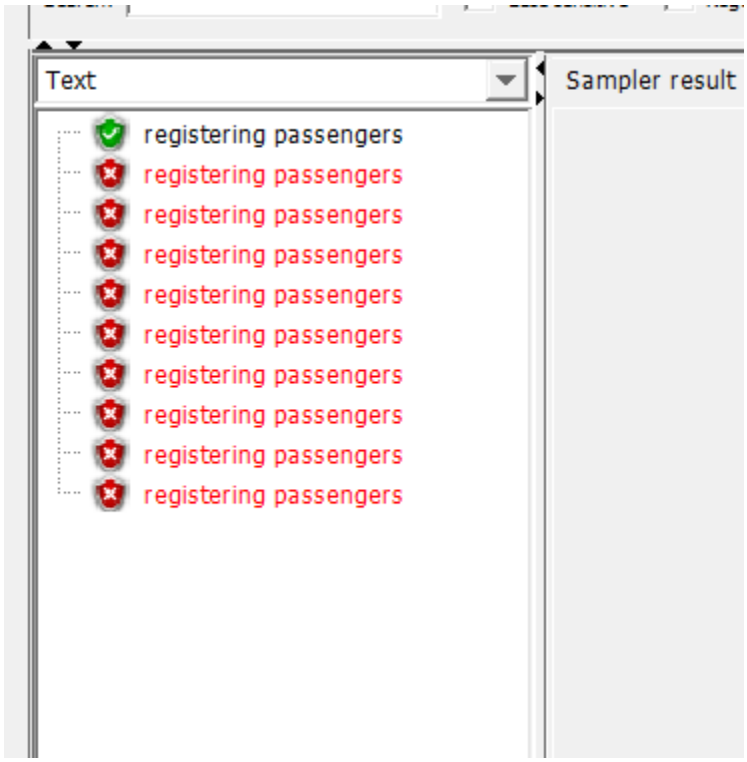
Name: Summary Report

Comments:

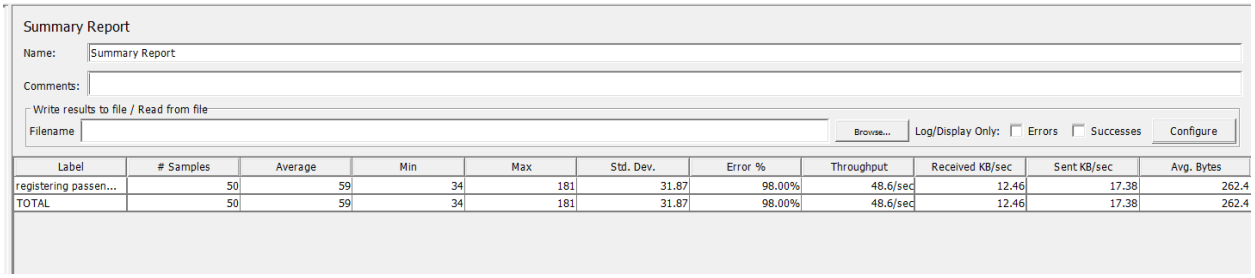
Write results to file / Read from file

Filename | Browse... | Log/Display Only: Errors Successes | Configure

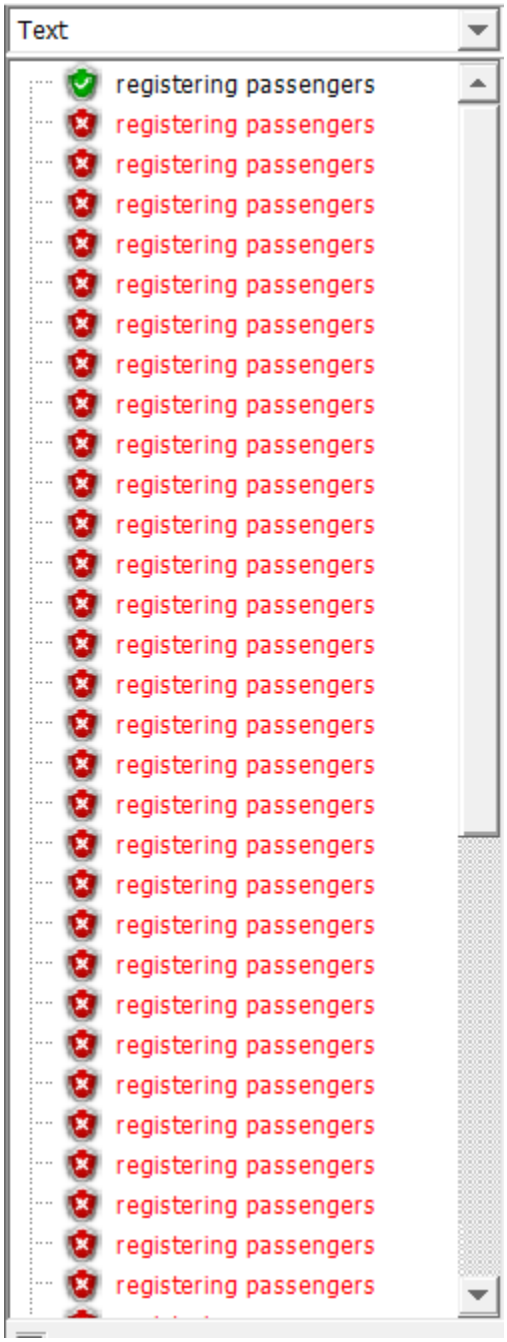
Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
registering passen...	10	129	34	391	117.17	90.00%	10.7/sec	2.63	3.85	251.8
TOTAL	10	129	34	391	117.17	90.00%	10.7/sec	2.63	3.85	251.8



50 threads:



Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
registering passen...	50	59	34	181	31.87	98.00%	48.6/sec	12.46	17.38	262.4
TOTAL	50	59	34	181	31.87	98.00%	48.6/sec	12.46	17.38	262.4



Ticket service:

10 threads

Booking ticket

Summary Report

Name: Summary Report

Comments:

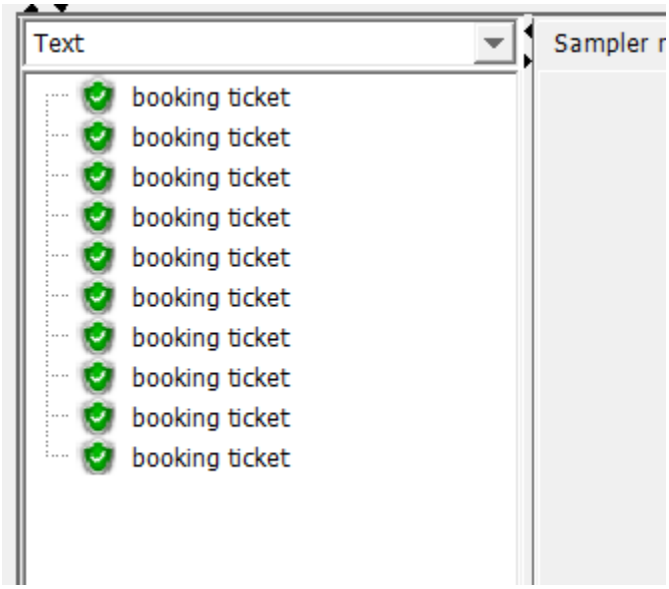
Write results to file / Read from file

Filename Browse... Log/Display Only: Errors Successes Configure

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
booking ticket	10	30	15	109	26.61	0.00%	10.9/sec	1.31	2.76	123.0
TOTAL	10	30	15	109	26.61	0.00%	10.9/sec	1.31	2.76	123.0

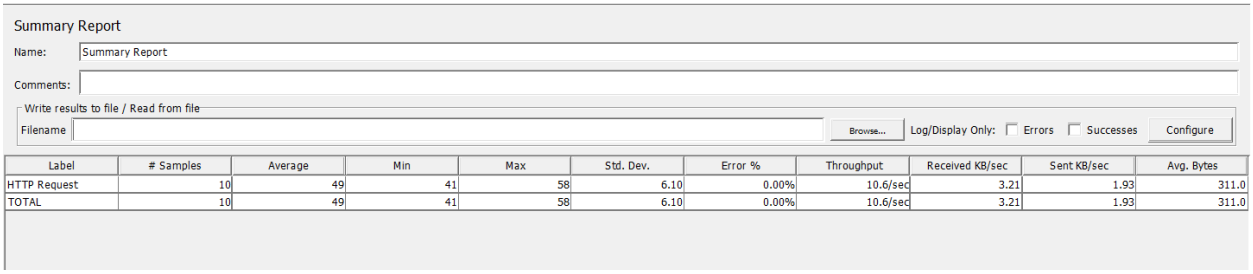
Kafka email-service

```
-group-1, groupId=email-group] Node -1 disconnected.
2025-12-01T15:42:07.587+05:30  INFO 24064 --- [email-service] [ntainer#0-0-C-1] c.example.demo.listener.EmailListener    : ? Email-service received: Ticket
booked for passengerId=53, flightId=1, pnr=5381d9d2
2025-12-01T15:42:07.651+05:30  INFO 24064 --- [email-service] [ntainer#0-0-C-1] c.example.demo.listener.EmailListener    : ? Email-service received: Ticket
booked for passengerId=53, flightId=1, pnr=8fbd768c
2025-12-01T15:42:07.653+05:30  INFO 24064 --- [email-service] [ntainer#0-0-C-1] c.example.demo.listener.EmailListener    : ? Email-service received: Ticket
booked for passengerId=53, flightId=1, pnr=9d1d1ad3
2025-12-01T15:42:07.666+05:30  INFO 24064 --- [email-service] [ntainer#0-0-C-1] c.example.demo.listener.EmailListener    : ? Email-service received: Ticket
booked for passengerId=53, flightId=1, pnr=e5d6b3fc
2025-12-01T15:42:07.728+05:30  INFO 24064 --- [email-service] [ntainer#0-0-C-1] c.example.demo.listener.EmailListener    : ? Email-service received: Ticket
booked for passengerId=53, flightId=1, pnr=380e342b
2025-12-01T15:42:07.831+05:30  INFO 24064 --- [email-service] [ntainer#0-0-C-1] c.example.demo.listener.EmailListener    : ? Email-service received: Ticket
booked for passengerId=53, flightId=1, pnr=98fcc235
2025-12-01T15:42:07.925+05:30  INFO 24064 --- [email-service] [ntainer#0-0-C-1] c.example.demo.listener.EmailListener    : ? Email-service received: Ticket
booked for passengerId=53, flightId=1, pnr=5c10b4b7
2025-12-01T15:42:08.023+05:30  INFO 24064 --- [email-service] [ntainer#0-0-C-1] c.example.demo.listener.EmailListener    : ? Email-service received: Ticket
booked for passengerId=53, flightId=1, pnr=49d2f0ba
2025-12-01T15:42:08.124+05:30  INFO 24064 --- [email-service] [ntainer#0-0-C-1] c.example.demo.listener.EmailListener    : ? Email-service received: Ticket
booked for passengerId=53, flightId=1, pnr=6f7d8339
2025-12-01T15:42:08.216+05:30  INFO 24064 --- [email-service] [ntainer#0-0-C-1] c.example.demo.listener.EmailListener    : ? Email-service received: Ticket
booked for passengerId=53, flightId=1, pnr=ebcf5a39
```

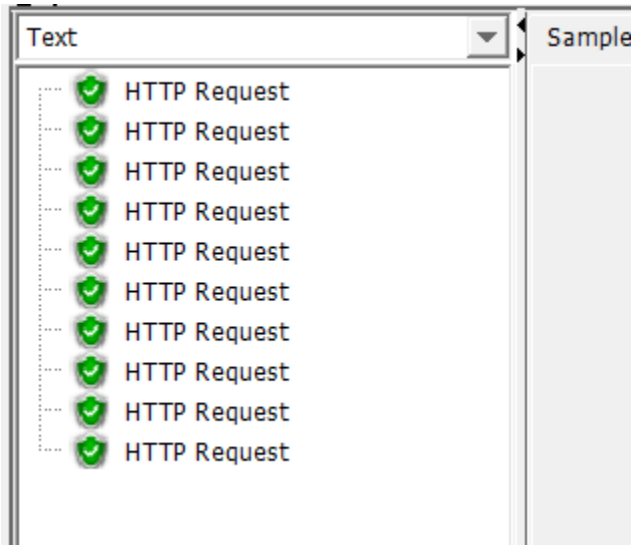


Get request:

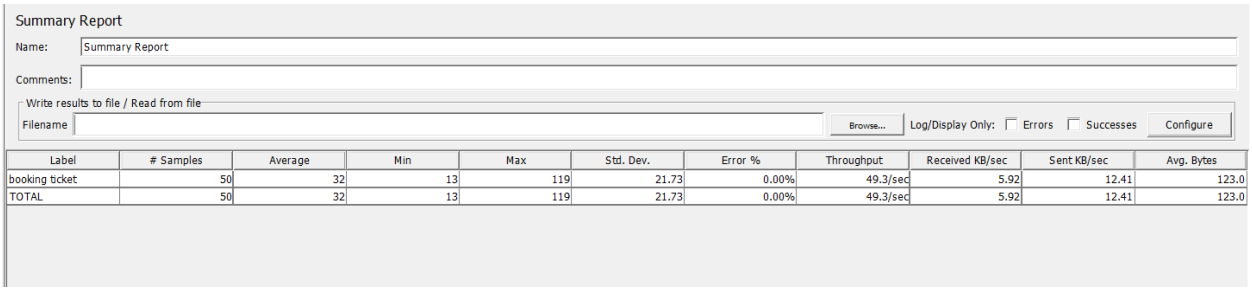
Get by pnr



Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
HTTP Request	10	49	41	58	6.10	0.00%	10.6/sec	3.21	1.93	311.0
TOTAL	10	49	41	58	6.10	0.00%	10.6/sec	3.21	1.93	311.0

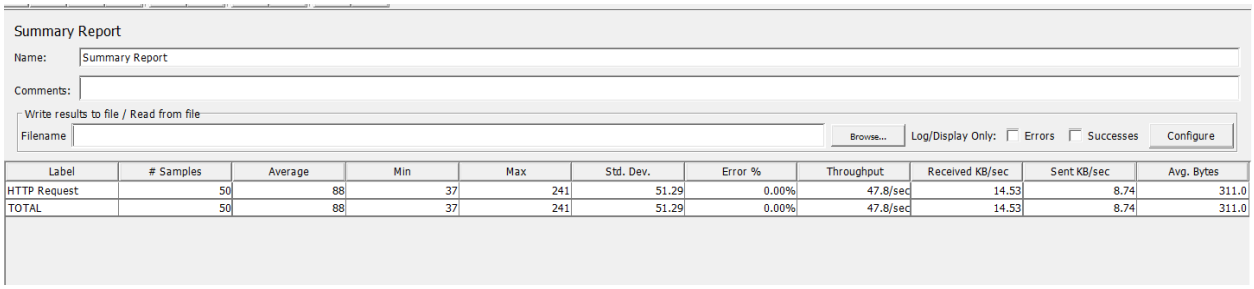


50 threads:
Post request



Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
booking ticket	50	32	13	119	21.73	0.00%	49.3/sec	5.92	12.41	123.0
TOTAL	50	32	13	119	21.73	0.00%	49.3/sec	5.92	12.41	123.0

Get request:



Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
HTTP Request	50	88	37	241	51.29	0.00%	47.8/sec	14.53	8.74	311.0
TOTAL	50	88	37	241	51.29	0.00%	47.8/sec	14.53	8.74	311.0