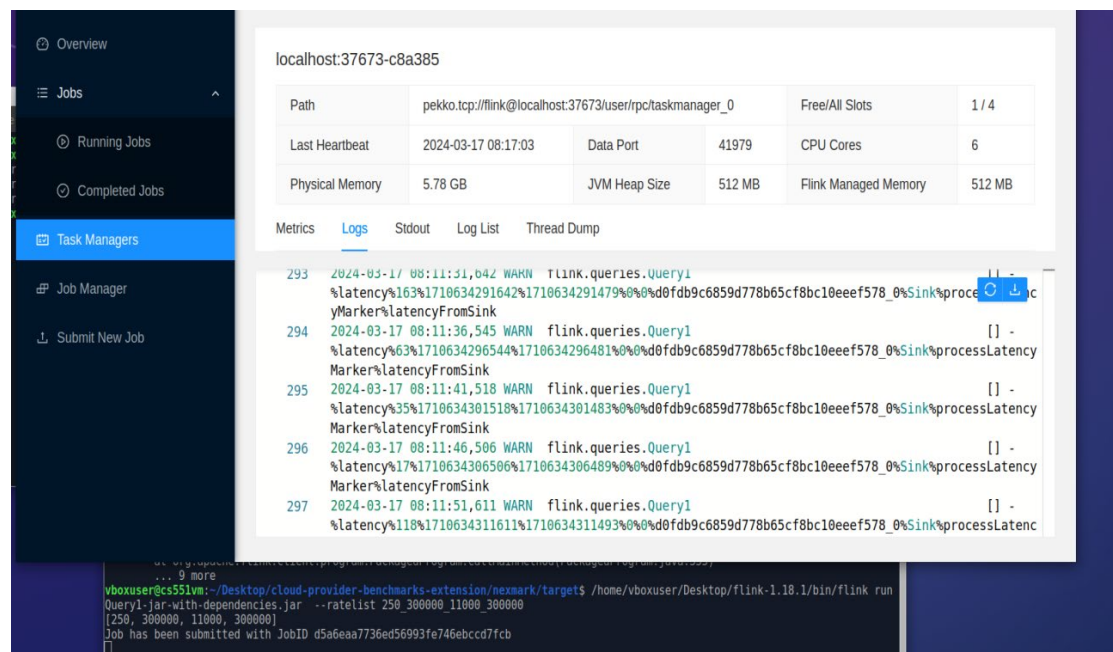
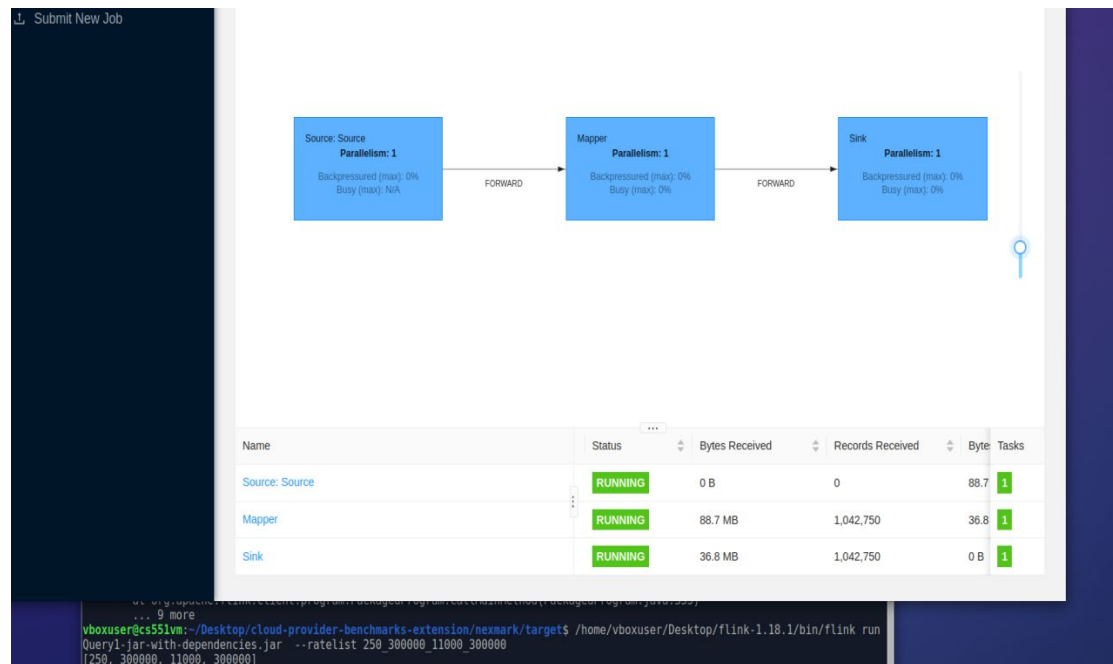


q1



q5

cs551sp24Lab2 - cs551sp24Lab2 X CS551 / Spring24 / Team9 / c X Apache Flink Web Dashboard X

localhost:8081/#/job/running/383e4b148c908552c84ec20ed87f06/overview

Overview Exceptions TimeLine Checkpoints Configuration

Source: Source -> Timestamps assigner
Parallelism: 1
Backpressured (max): 0%
Busy (max): N/A

HASH

SlidingWindow
Parallelism: 1
Backpressured (max): 0%
Busy (max): 0%
Low Watermark: 57501

FORWARD

Sink
Parallelism: 1
Backpressured (max): 0%
Busy (max): 0%
Low Watermark: 57501

Name Status Bytes Received Records Received Byte Tasks

Source: Custom Source: Persons -> Timestamps/Watermarks -> Map
Parallelism: 1
Backpressured (max): 0%
Busy (max): N/A

Source: Custom Source: Audio ns -> Timestamps/Watermarks -> Map
Parallelism: 1
Backpressured (max): 0%
Busy (max): N/A

HASH

TumblingEventTimeWindows
Parallelism: 4
Backpressured (max): 0%
Busy (max): 0%
Low Watermark: 1728841

REBALANCE

DummyLatencySink
Parallelism: 1
Backpressured (max): 0%
Busy (max): 0%
Low Watermark: 1728841

Name Status Bytes Received Records Received Byte Tasks

Source: Custom Source: Persons -> Timestamps/Watermarks -> Map RUNNING loading loading loading 1

Cancelled Job 383e4b148c908552c84ec20ed87f06.
vboxuser@cs551vm:~/Desktop/cloud-provider-benchmarks-extension/nexmark/target\$ /home/vboxuser/Desktop/flink-1.18.1/bin/flink run Query8-jar-with-dependencies.jar --ratelist 50000 300000 10000 300000 1000 600000 200 600000 [50000, 300000, 10000, 300000, 1000, 600000, 200, 600000]
Job has been submitted with JobID 18c8c4e1e3a85170d64ce2f385fb76be

q8

localhost:8081/#/job/running/18c8c4e1e3a85170d64ce2f385fb76be/overview

Overview Exceptions TimeLine Checkpoints Configuration

Source: Custom Source: Persons -> Timestamps/Watermarks -> Map
Parallelism: 1
Backpressured (max): 0%
Busy (max): N/A

Source: Custom Source: Audio ns -> Timestamps/Watermarks -> Map
Parallelism: 1
Backpressured (max): 0%
Busy (max): N/A

HASH

TumblingEventTimeWindows
Parallelism: 4
Backpressured (max): 0%
Busy (max): 0%
Low Watermark: 1728841

REBALANCE

DummyLatencySink
Parallelism: 1
Backpressured (max): 0%
Busy (max): 0%
Low Watermark: 1728841

Name Status Bytes Received Records Received Byte Tasks

Source: Custom Source: Persons -> Timestamps/Watermarks -> Map RUNNING loading loading loading 1

Cancelled Job 383e4b148c908552c84ec20ed87f06.
vboxuser@cs551vm:~/Desktop/cloud-provider-benchmarks-extension/nexmark/target\$ /home/vboxuser/Desktop/flink-1.18.1/bin/flink run Query8-jar-with-dependencies.jar --ratelist 50000 300000 10000 300000 1000 600000 200 600000 [50000, 300000, 10000, 300000, 1000, 600000, 200, 600000]
Job has been submitted with JobID 18c8c4e1e3a85170d64ce2f385fb76be

Completed Jobs

Task Managers

Job Manager

Submit New Job

Overview

Exceptions

TimeLine

Checkpoints

Configuration

Source: Custom Source: Persons -> Timestamps/Watermarks -> Map
Parallelism: 1
Backpressured (max): 0%
Busy (max): N/A

Source: Custom Source: Audiotns -> Timestamps/Watermarks -> Map
Parallelism: 1
Backpressured (max): 0%
Busy (max): N/A

TumblingEventTimeWindows
Parallelism: 4
Backpressured (max): 0%
Busy (max): 100%
Low Watermark: 1300000

DummyLatencySink
Parallelism: 1
Backpressured (max): 0%
Busy (max): 100%
Low Watermark: 1300000

WASH

WASH

REBALANCE

Name	Status	Bytes Received	Records Received	Byte	Tasks
Source: Custom Source: Persons -> Timestamps/Watermarks -> Map	RUNNING	0 B	0	4.16	1

Cancelled job: 383e4b146c9080552c84ec29ed0b7f06.
vboxuser@cs551vm:~/Desktop/cloud-provider-benchmarks-extension/tezmark/target\$ /home/vboxuser/Desktop/flink-1.18.1/bin/flink run Query8-jar-with-dependencies.jar --ratelimit 50000 300000 10000 300000 1000 600000 200 600000 [50000, 300000, 10000, 300000, 1000, 600000, 200, 600000]
Job has been submitted with JobID 18c8c4e1e3a85170d64ce2f385fb76be

q3

source=1, filter=1, env.enableCheckpointing(5000)

Job ID

c4aab813774940d0eb7195b3dd28c41

Job State

FINISHED

5

Actions

[Job Manager Log](#)

Start Time

2024-03-19 01:57:58

End Time

2024-03-19 01:59:45

Duration

1m 46s

Overview

Exceptions

TimeLine

Checkpoints

Configuration

Overview

History

Summary

Configuration

Refresh

Checkpoint Counts

Triggered: 22

In Progress: 0

Completed: 21

Failed: 1

Restored: 0

Latest Completed Checkpoint

ID: 21

Completion Time: 2024-03-19 01:59:45

End to End Duration: 21ms

Checkpointed Data Size: 420 KB

Full Checkpoint Data Size: 420 KB

Checkpoint Detail:

Path: <checkpoint-not-externally-addressable>

Discarded: true

Checkpoint Type: aligned checkpoint

Operators:

	Name	Acknowledged	Latest Acknowledgment	End to End Duration	Checkpointed Data Size	Full Checkpoint Data Size	Processed (persisted) in-flight data
+	Source: SourceAuctions	1/1 (100%)	2024-03-19 01:59:45	5ms	398 B	398 B	0 B (0 B)
+	Source: SourcePersons	1/1 (100%)	2024-03-19 01:59:45	8ms	397 B	397 B	0 B (0 B)
+	Filter	1/1 (100%)	2024-03-19 01:59:45	7ms	0 B	0 B	0 B (0 B)
+	IncrementalJoin	1/1 (100%)	2024-03-19 01:59:45	21ms	420 KB	420 KB	0 B (0 B)
+	Sink	1/1 (100%)	2024-03-19 01:59:45	8ms	0 B	0 B	0 B (0 B)

Latest Failed Checkpoint

None

localhost:8081/#/job/completed/c4aab813774940d0eb7195b3dd28c41/checkpoints

Overview

Exceptions

TimeLine

Checkpoints

Configuration

Overview

History

Summary

Configuration

Refresh

	ID	Status	Acknowledged	Trigger Time	Latest Acknowledgement	End to End Duration	Checkpointed Data Size	Full Checkpoint Data Size	Processed (persisted) in-flight data
+	21	COMPLETE	5/5	2024-03-19 01:59:45	2024-03-19 01:59:45	21ms	420 KB	420 KB	0 B (0 B)
+	20	COMPLETE	5/5	2024-03-19 01:59:44	2024-03-19 01:59:44	78ms	439 KB	439 KB	352 KB (0 B)
+	19	COMPLETE	5/5	2024-03-19 01:59:39	2024-03-19 01:59:39	36ms	414 KB	414 KB	200 KB (0 B)
+	18	COMPLETE	5/5	2024-03-19 01:59:34	2024-03-19 01:59:34	38ms	389 KB	389 KB	0 B (0 B)
+	17	COMPLETE	5/5	2024-03-19 01:59:29	2024-03-19 01:59:29	39ms	363 KB	363 KB	64.0 KB (0 B)
+	16	COMPLETE	5/5	2024-03-19 01:59:24	2024-03-19 01:59:24	72ms	356 KB	356 KB	256 KB (0 B)
+	15	COMPLETE	5/5	2024-03-19 01:59:19	2024-03-19 01:59:19	39ms	331 KB	331 KB	275 KB (0 B)
+	14	COMPLETE	5/5	2024-03-19 01:59:14	2024-03-19 01:59:14	50ms	306 KB	306 KB	307 KB (0 B)
+	13	COMPLETE	5/5	2024-03-19 01:59:09	2024-03-19 01:59:09	395ms	281 KB	281 KB	672 KB (0 B)
+	12	COMPLETE	5/5	2024-03-19 01:59:04	2024-03-19 01:59:04	420ms	274 KB	274 KB	267 KB (0 B)

Nexmark Query3 stateful

Job ID	c4aab813774940d0eb7f195b3dd28c41	Job State	FINISHED5	Actions	Job Manager Log
Start Time	2024-03-19 01:57:58	End Time	2024-03-19 01:59:45	Duration	1m 46s

OverviewExceptionsTimeLineCheckpointsConfiguration

OverviewHistorySummaryConfiguration

Refresh

	End to End Duration	Checkpointed Data Size ⓘ	Full Checkpoint Data Size	Processed (persisted) in-flight data
Minimum	21ms	37.1 KB	37.1 KB	0 B (0 B)
Average	119ms	246 KB	246 KB	156 KB (0 B)
Maximum	420ms	439 KB	439 KB	672 KB (0 B)

Percentiles

	End to End Duration	Checkpointed Data Size	Full Checkpoint Data Size	Processed (persisted) in-flight data
50% percentile	65ms	249 KB	249 KB	44.5 KB (0 B)
90% percentile	374.00000000000006ms	419 KB	419 KB	527 KB (0 B)
99% percentile	420ms	439 KB	439 KB	672 KB (0 B)
99.9% percentile	420ms	439 KB	439 KB	672 KB (0 B)

Job ID	c4aab813774940d0eb7f195b3dd28c41	Job State	FINISHED5	Actions	Job Manager Log
Start Time	2024-03-19 01:57:58	End Time	2024-03-19 01:59:45	Duration	1m 46s

OverviewExceptionsTimeLineCheckpointsConfiguration

OverviewHistorySummaryConfiguration

Refresh

Option	Value
Checkpointing Mode	At Least Once
Checkpoint Storage	JobManagerCheckpointStorage
State Backend	EmbeddedRocksDBStateBackend
Interval	5s
Timeout	10m 0s
Minimum Pause Between Checkpoints	0ms
Maximum Concurrent Checkpoints	1
Unaligned Checkpoints	Disabled
Persist Checkpoints Externally	Disabled
Tolerable Failed Checkpoints	0
Checkpoints With Finished Tasks	Enabled
State Changelog	Disabled

source=5

Job ID72ff861cf006d0fd2ae110685a1a956fJob StateFINISHED5ActionsJob Manager Log

Start Time2024-03-19 02:35:44End Time2024-03-19 02:37:25Duration1m 41s

OverviewExceptionsTimeLineCheckpointsConfiguration

OverviewHistorySummaryConfiguration

Refresh

Checkpoint CountsTriggered: 21In Progress: 0Completed: 21Failed: 0Restored: 0

Latest Completed CheckpointID: 21Completion Time: 2024-03-19 02:37:25End to End Duration: 32msCheckpointed Data Size: 428 KBFull Checkpoint Data Size: 428 KB

Checkpoint Detail:Path: <checkpoint-not-externally-addressable>Discarded: trueCheckpoint Type: aligned checkpoint

Operators:

	Name	Acknowledged	Latest Acknowledgment	End to End Duration	Checkpointed Data Size	Full Checkpoint Data Size	Processed (persisted) in-flight data
+	Source: SourceAuctions	5/5 (100%)	2024-03-19 02:37:25	6ms	1.94 KB	1.94 KB	0 B (0 B)
+	Source: SourcePersons	1/1 (100%)	2024-03-19 02:37:25	6ms	397 B	397 B	0 B (0 B)
+	Filter	1/1 (100%)	2024-03-19 02:37:25	6ms	0 B	0 B	0 B (0 B)
+	IncrementalJoin	1/1 (100%)	2024-03-19 02:37:25	32ms	426 KB	426 KB	0 B (0 B)
+	Sink	1/1 (100%)	2024-03-19 02:37:25	7ms	0 B	0 B	0 B (0 B)

Latest Failed CheckpointNone

version: 1.10.1Commit: 80c0d1c @ 2024-12-19 12:17:30+01:00message:

Nexmark Query3 stateful

Job ID72ff861cf006d0fd2ae110685a1a956fJob StateFINISHED5ActionsJob Manager Log

Start Time2024-03-19 02:35:44End Time2024-03-19 02:37:25Duration1m 41s

OverviewExceptionsTimeLineCheckpointsConfiguration

OverviewHistorySummaryConfiguration

Refresh

	End to End Duration	Checkpointed Data Size	Full Checkpoint Data Size	Processed (persisted) in-flight data
Minimum	32ms	33.9 KB	33.9 KB	0 B (0 B)
Average	64ms	247 KB	247 KB	1.62 MB (0 B)
Maximum	155ms	440 KB	440 KB	6.95 MB (0 B)

Percentiles

	End to End Duration	Checkpointed Data Size	Full Checkpoint Data Size	Processed (persisted) in-flight data
50% percentile	62ms	251 KB	251 KB	1.49 MB (0 B)
90% percentile	80.2ms	426 KB	426 KB	2.22 MB (0 B)
99% percentile	155ms	440 KB	440 KB	6.95 MB (0 B)
99.9% percentile	155ms	440 KB	440 KB	6.95 MB (0 B)

source=10

Checkpoint Counts

Triggered: 23 | In Progress: 0 | Completed: 23 | Failed: 0 | Restored: 0

Latest Completed Checkpoint

ID: 23 | Completion Time: 2024-03-19 02:57:12 | End to End Duration: 37ms | Checkpointed Data Size: 431 KB | Full Checkpoint Data Size: 431 KB

Checkpoint Detail:

Path: <checkpoint-not-externally-addressable> | Discarded: true | Checkpoint Type: aligned checkpoint

Operators:

	Name	Acknowledged	Latest Acknowledgment	End to End Duration	Checkpointed Data Size	Full Checkpoint Data Size	Processed (persisted) in-flight data
+	Source: SourceAuctions	10/10 (100%)	2024-03-19 02:57:11	7ms	3.89 KB	3.89 KB	0 B (0 B)
+	Source: SourcePersons	1/1 (100%)	2024-03-19 02:57:11	1ms	0 B	0 B	0 B (0 B)
+	Filter	1/1 (100%)	2024-03-19 02:57:11	1ms	0 B	0 B	0 B (0 B)
+	IncrementalJoin	1/1 (100%)	2024-03-19 02:57:12	37ms	427 KB	427 KB	0 B (0 B)
+	Sink	1/1 (100%)	2024-03-19 02:57:11	7ms	0 B	0 B	0 B (0 B)

Latest Failed Checkpoint

None

Latest Savepoint

None

Latest Restore

None

Nexmark Query3 stateful

Job ID	e4ae3aad833d1e76afb1f96559a74b7c	Job State	FINISHED 5	Actions	Job Manager Log
Start Time	2024-03-19 02:55:24	End Time	2024-03-19 02:57:12	Duration	1m 47s

Overview | Exceptions | TimeLine | Checkpoints | Configuration

Overview | History | Summary | Configuration

Refresh

	End to End Duration	Checkpointed Data Size ⓘ	Full Checkpoint Data Size	Processed (persisted) in-flight data
Minimum	37ms	26.0 KB	26.0 KB	0 B (0 B)
Average	168ms	257 KB	257 KB	6.72 MB (0 B)
Maximum	845ms	433 KB	433 KB	56.3 MB (0 B)

> Percentiles

filter=5

☰

Version: 1.18.1 Commit: a8c8b1c @ 2023-12-19T22:17:36+01:00 Message: 0

Nexmark Query3 stateful

Job ID	54518b6625ee881b157b3a2ded8d3d51	Job State	FINISHED 5	Actions	Job Manager Log
Start Time	2024-03-19 03:06:22	End Time	2024-03-19 03:08:03	Duration	1m 40s

Overview Exceptions TimeLine Checkpoints Configuration

Overview History Summary Configuration

Refresh

	End to End Duration	Checkpointed Data Size ⓘ	Full Checkpoint Data Size	Processed (persisted) in-flight data
Minimum	20ms	27.4 KB	27.4 KB	0 B (0 B)
Average	31ms	241 KB	241 KB	49.6 KB (0 B)
Maximum	52ms	434 KB	434 KB	255 KB (0 B)

▼ Percentiles

	End to End Duration	Checkpointed Data Size	Full Checkpoint Data Size	Processed (persisted) in-flight data
50% percentile	31ms	245 KB	245 KB	0 B (0 B)
90% percentile	41ms	423 KB	423 KB	225 KB (0 B)
99% percentile	52ms	434 KB	434 KB	255 KB (0 B)
99.9% percentile	52ms	434 KB	434 KB	255 KB (0 B)

filter=10

🔍 localhost:8081/#/job/completed/b5e7da09c24d9b3d5c077b736d9628bb/checkpoints

☰ Version: 1.18.1 Commit: a8c8b1c @ 2023-12-19T22:17:36+01:00 Message: 0

Nexmark Query3 stateful

Job ID	b5e7da09c24d9b3d5c077b736d9628bb	Job State	FINISHED 5	Actions	Job Manager Log
Start Time	2024-03-19 03:17:22	End Time	2024-03-19 03:19:03	Duration	1m 40s

Overview Exceptions TimeLine Checkpoints Configuration

Overview History Summary Configuration

Refresh

	End to End Duration	Checkpointed Data Size ⓘ	Full Checkpoint Data Size	Processed (persisted) in-flight data
Minimum	29ms	17.6 KB	17.6 KB	0 B (0 B)
Average	43ms	233 KB	233 KB	0 B (0 B)
Maximum	93ms	428 KB	428 KB	0 B (0 B)

> Percentiles

4000

1000 5000 10000 50000 100000
每个 30min

query8
rate--250_3000000000

localhost:8081/#/job/completed/c7b86bf0e7096eda01abf7b84b6951da/checkpoints

Version: 1.18.1 Commit: a8c8b1c @ 2023-12-19T22:17:36+01:00 Message: 0

Nexmark Query3 stateful

Job ID	c7b86bf0e7096eda01abf7b84b6951da	Job State	FINISHED 5	Actions	Job Manager Log
Start Time	2024-03-19 03:40:59	End Time	2024-03-19 03:42:39	Duration	1m 40s

Overview Exceptions TimeLine Checkpoints Configuration

Overview History Summary Configuration

Refresh

	End to End Duration	Checkpointed Data Size ⓘ	Full Checkpoint Data Size	Processed (persisted) in-flight data
Minimum	20ms	32.3 KB	32.3 KB	0 B (0 B)
Average	45ms	244 KB	244 KB	46.8 KB (0 B)
Maximum	108ms	429 KB	429 KB	208 KB (0 B)
> Percentiles				

3000

Version: 1.18.1 Commit: a8c8b1c @ 2023-12-19T22:17:36+01:00 Message: 0

Nexmark Query3 stateful

Job ID	3881ceac2876f5a5b82b685ed8c2b8fc	Job State	FINISHED 5	Actions	Job Manager Log
Start Time	2024-03-19 03:50:23	End Time	2024-03-19 03:52:04	Duration	1m 40s

Overview Exceptions TimeLine Checkpoints Configuration

Overview History Summary Configuration

Refresh

	End to End Duration	Checkpointed Data Size ⓘ	Full Checkpoint Data Size	Processed (persisted) in-flight data
Minimum	19ms	22.5 KB	22.5 KB	0 B (0 B)
Average	36ms	234 KB	234 KB	6.60 KB (0 B)
Maximum	74ms	432 KB	432 KB	224 KB (0 B)
> Percentiles				


2000


Nexmark Query3 stateful

Job ID	f4fd7c36100e7461b1fa5818003b0209	Job State	FINISHED 5	Actions	Job Manager Log
Start Time	2024-03-19 03:54:36	End Time	2024-03-19 03:56:17	Duration	1m 41s

Overview Exceptions TimeLine Checkpoints Configuration

Overview History Summary Configuration

 Refresh

	End to End Duration	Checkpointed Data Size 	Full Checkpoint Data Size	Processed (persisted) in-flight data
Minimum	17ms	17.6 KB	17.6 KB	0 B (0 B)
Average	39ms	231 KB	231 KB	0 B (0 B)
Maximum	100ms	436 KB	436 KB	0 B (0 B)

> Percentiles


1000


Nexmark Query3 stateful

Job ID	283588e442b187c01d756cf091d9b518	Job State	FINISHED 5	Actions	Job Manager Log
Start Time	2024-03-19 03:58:17	End Time	2024-03-19 03:59:57	Duration	1m 40s

Overview Exceptions TimeLine Checkpoints Configuration

Overview History Summary Configuration

 Refresh

	End to End Duration	Checkpointed Data Size 	Full Checkpoint Data Size	Processed (persisted) in-flight data
Minimum	17ms	17.6 KB	17.6 KB	0 B (0 B)
Average	39ms	233 KB	233 KB	1 B (0 B)
Maximum	131ms	443 KB	443 KB	33 B (0 B)

> Percentiles