

DLT: fabric

Name: insert-data-hash-

benchmark

Description: Benchmarking the Hyperledger Fabric network with the InsertHistoricalDataHash

function

Benchmark Rounds: 8

Details

Benchmark results

Summary

insert-data-hash insert-data-hash-100 insert-data-hash-1000 insert-data-hash-4000 insert-data-hash-8000 insert-data-hash-16000 insert-data-hash-32000 insert-data-hash-64000

System under test

Details

Caliper report

Summary of performance metrics

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
insert-data-hash	1000	0	14.7	5.76	0.20	1.40	14.1
insert-data-hash- 100	962	0	7.9	24.22	0.18	15.31	7.8
insert-data-hash- 1000	926	0	5.8	23.34	0.22	14.62	5.7
insert-data-hash- 4000	887	0	6.2	20.42	0.19	12.71	6.1
insert-data-hash- 8000	797	0	8.9	17.42	0.17	9.41	8.7
insert-data-hash- 16000	878	0	6.5	19.87	0.22	12.14	6.3
insert-data-hash- 32000	837	0	8.4	20.07	0.27	11.41	8.2
insert-data-hash- 64000	924	0	9.7	24.23	0.23	14.99	9.5

Benchmark round: insert-data-hash

Benchmarking the InsertHistoricalDataHash function with specific parameters.

txDuration: 60
rateControl: type: fixed-rate opts: tps: 15

Performance metrics for insert-data-hash

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
insert-data- hash	1000	0	14.7	5.76	0.20	1.40	14.1

Resource utilization for insert-data-hash

Metric	Prometheus Query	Name
Avg Memory (MB)	sum(container_memory_rss{name=~".+"}) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
CPU (%)	sum(rate(container_cpu_usage_seconds_total{name=~".+"} [1m])) by (name)	ca_orderer

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insert-data-hash-32000 insert-data-hash-64000

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	, ,	iper Report
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Write (MB)	sum(rate(container_fs_writes_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Read (MB)	sum(rate(container_fs_reads_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com

Benchmark round: insert-data-hash-100

 $Test\ Insert Historical Data Hash\ function\ with\ data\ hash\ size\ 100\ bytes$

txDuration: 60
rateControl:
 type: fixed-load
 opts:
 transactionLoad: 10
 startingTps: 1

Performance metrics for insert-data-hash-100

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
insert-data- hash-100	962	0	7.9	24.22	0.18	15.31	7.8

Resource utilization for insert-data-hash-100

Metric	Prometheus Query	Name
Avg Memory (MB)	sum(container_memory_rss{name=~".+"}) by (name)	ca_orderer
		couchdb0

Hyperledger Caliper Report



Basic information

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<u>Summary</u>

insert-data-hash

insert-data-hash-100

insert-data-hash-1000

insert-data-hash-4000 insert-data-hash-8000

insert-data-hash-16000

insert-data-hash-32000 insert-data-hash-64000

System under test

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	Hyperledger Cali	per Report
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
CPU (%)	sum(rate(container_cpu_usage_seconds_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Write (MB)	sum(rate(container_fs_writes_bytes_total {name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Read (MB)	sum(rate(container_fs_reads_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com

Benchmark round: insert-data-hash-1000

Test InsertHistoricalDataHash function with data hash size 1000 bytes

txDuration: 60
rateControl:
 type: fixed-load
 opts:
 transactionLoad: 20
 startingTps: 1

Performance metrics for insert-data-hash-1000

Name Succ Fail	Send Rate	Max	Min	Avg	Throughput
	(TPS)	Latency (s)	Latency (s)	Latency (s)	(TPS)



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<u>Summary</u> insert-data-hash insert-data-hash-100 insert-data-hash-1000 insert-data-hash-4000 insert-data-hash-8000 insert-data-hash-16000 insert-data-hash-32000

System under test

insert-data-hash-64000

<u>Details</u>

insert-data-hash-	926	0	5.8	23.34	0.22	14.62	5.7	
1000								

Resource utilization for insert-data-hash-1000

Metric	Prometheus Query	Name
Avg Memory (MB)	sum(container_memory_rss{name=~".+"}) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
CPU (%)	sum(rate(container_cpu_usage_seconds_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Write (MB)	sum(rate(container_fs_writes_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Read (MB)	sum(rate(container_fs_reads_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com



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System under test

<u>Details</u>

Benchmark round: insert-data-hash-4000

Test InsertHistoricalDataHash function with data hash size 4000 bytes

txDuration: 60
rateControl:
 type: fixed-load
 opts:

transactionLoad: 30 startingTps: 1

Performance metrics for insert-data-hash-4000

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
insert-data-hash- 4000	887	0	6.2	20.42	0.19	12.71	6.1

Resource utilization for insert-data-hash-4000

Metric	Prometheus Query	Name
Avg Memory (MB)	sum(container_memory_rss{name=~".+"}) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872657
		dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872657
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
CPU (%)	sum(rate(container_cpu_usage_seconds_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872657
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872657
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Write (MB)	sum(rate(container_fs_writes_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872657
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872657
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Read (MB)	sum(rate(container_fs_reads_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0



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System under test

insert-data-hash-64000

Details

 l .	1
	couchdb1
	dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
	dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
	orderer.example.com
	peer0.org1.example.com
	peer0.org2.example.com

Benchmark round: insert-data-hash-8000

Test InsertHistoricalDataHash function with data hash size 8000 bytes

txDuration: 60
rateControl:
 type: fixed-load
 opts:
 transactionLoad: 50

startingTps: 1

Performance metrics for insert-data-hash-8000

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
insert-data-hash- 8000	797	0	8.9	17.42	0.17	9.41	8.7

Resource utilization for insert-data-hash-8000

Metric	Prometheus Query	Name			
Avg Memory (MB)	sum(container_memory_rss{name=~".+"}) by (name)	ca_orderer			
		couchdb0			
		couchdb1			
		dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576			
		dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576			
		orderer.example.com			
		peer0.org1.example.com			
		peer0.org2.example.com			
CPU (%)	sum(rate(container_cpu_usage_seconds_total{name=~".+"} [1m])) by (name)	ca_orderer			
		couchdb0			
		couchdb1			
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576			
		dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576			
		orderer.example.com			
		peer0.org1.example.com			
		peer0.org2.example.com			
Disc Write (MB)	sum(rate(container_fs_writes_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer			
		couchdb0			
		couchdb1			



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Summary,
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insert-data-hash-8000
insert-data-hash-16000
insert-data-hash-32000
insert-data-hash-64000

System under test

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	Hyperledger Calij	ber Report
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Read (MB)	sum(rate(container_fs_reads_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com

Benchmark round: insert-data-hash-16000

Test InsertHistoricalDataHash function with data hash size 16000 bytes

txDuration: 60
rateControl:
 type: fixed-load
 opts:
 transactionLoad: 70
 startingTps: 1

startingips: 1

Performance metrics for insert-data-hash-16000

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
insert-data-hash- 16000	878	0	6.5	19.87	0.22	12.14	6.3

Resource utilization for insert-data-hash-16000

Metric	Prometheus Query	Name
Avg Memory (MB)	sum(container_memory_rss{name=~".+"}) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
CPU (%)	sum(rate(container_cpu_usage_seconds_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576



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System under test

insert-data-hash-64000

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	Hyperledger Cal	iper Report
		dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Write (MB)	sum(rate(container_fs_writes_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Read (MB)	sum(rate(container_fs_reads_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com

Benchmark round: insert-data-hash-32000

Test InsertHistoricalDataHash function with data hash size 32000 bytes

txDuration: 60 rateControl: type: fixed-load opts:

transactionLoad: 90 startingTps: 1

Performance metrics for insert-data-hash-32000

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
insert-data-hash- 32000	837	0	8.4	20.07	0.27	11.41	8.2

Resource utilization for insert-data-hash-32000

Metric	Prometheus Query	Name
Avg Memory (MB)	sum(container_memory_rss{name=~".+"}) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576



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Summary insert-data

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System under test

insert-data-hash-64000

Details

	nypenedger Canp	,
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
CPU (%)	sum(rate(container_cpu_usage_seconds_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Write (MB)	sum(rate(container_fs_writes_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Read (MB)	sum(rate(container_fs_reads_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com

Benchmark round: insert-data-hash-64000

Test InsertHistoricalDataHash function with data hash size 64000 bytes

txDuration: 60
rateControl:
 type: fixed-load
 opts:
 transactionLoad: 100
 startingTps: 1

Performance metrics for insert-data-hash-64000

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
insert-data-hash- 64000	924	0	9.7	24.23	0.23	14.99	9.5

Resource utilization for insert-data-hash-64000



DLT: fabric

Name: insert-data-hash-

benchmark

Description: Benchmarking the Hyperledger Fabric network with the InsertHistoricalDataHash

function

Benchmark Rounds: 8

Details

Benchmark results

<u>Summary</u> insert-data-hash insert-data-hash-100 insert-data-hash-1000 insert-data-hash-4000 insert-data-hash-8000 insert-data-hash-16000 insert-data-hash-32000 insert-data-hash-64000

System under test

Details

Resource monitor: prometheus

Metric	Prometheus Query	Name
Avg Memory (MB)	sum(container_memory_rss{name=~".+"}) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
CPU (%)	sum(rate(container_cpu_usage_seconds_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Write (MB)	sum(rate(container_fs_writes_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
Disc Read (MB)	sum(rate(container_fs_reads_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com

Test Environment

benchmark config

name: insert-data-hash-benchmark
description: >-



DLT: fabric

Name: insert-data-hash-

benchmark

Description: Benchmarking the Hyperledger Fabric network with the InsertHistoricalDataHash

function

Benchmark Rounds: 8

Details

Benchmark results

Summary

insert-data-hash

insert-data-hash-100

insert-data-hash-1000

insert-data-hash-4000

insert-data-hash-8000

insert-data-hash-16000

insert-data-hash-32000

System under test

Details

```
Benchmarking the Hyperledger Fabric network with the InsertHistoricalDataHash
  function
workers:
 number: 100
rounds:
    label: insert-data-hash
    description: >
      Benchmarking the InsertHistoricalDataHash function with specific
      parameters.
    chaincodeID: basic
    txDuration: 60
    rateControl:
      type: fixed-rate opts:
        tps: 15
    workload:
      module: benchmarks/datamanagement/workloads/insert-data-hash.js
      arguments:
         chaincodeID: basic
    label: insert-data-hash-100
    description: Test InsertHistoricalDataHash function with data hash size 100
bvtes
    chaincodeID: basic
    txDuration: 60
rateControl:
      type: fixed-load opts:
        transactionLoad: 10
        startingTps: 1
    workload:
      module: benchmarks/datamanagement/workloads/insert-data-hash.js
      arguments:
   chaincodeID: basic
byteSize: 100
label: insert-data-hash-1000
    description: Test InsertHistoricalDataHash function with data hash size 1000
    chaincodeID: basic txDuration: 60
    rateControl:
      type: fixed-load opts:
        transactionLoad: 20
         startingTps: 1
    workload:
      module: benchmarks/datamanagement/workloads/insert-data-hash.js
      arguments:
         chaincodeID: basic
   byteSize: 1000
label: insert-data-hash-4000
    description: Test InsertHistoricalDataHash function with data hash size 4000
bvtes
    chaincodeID: basic
    txDuration: 60
rateControl:
      type: fixed-load
opts:
        transactionLoad: 30
         startingTps: 1
      module: benchmarks/datamanagement/workloads/insert-data-hash.js
      arguments:
         chaincodeID: basic
        byteSize: 4000
    label: insert-data-hash-8000
    description: Test InsertHistoricalDataHash function with data hash size 8000
    chaincodeID: basic
    txDuration: 60
    rateControl:
type: fixed-load
opts:
        transactionLoad: 50
         startingTps: 1
    workload:
      module: benchmarks/datamanagement/workloads/insert-data-hash.js
      \hbox{arguments:} \\
        chaincodeID: basic
        byteSize: 8000
    label: insert-data-hash-16000
    description: Test InsertHistoricalDataHash function with data hash size 16000
bvtes
    chaincodeID: basic
    txDuration: 60
rateControl:
      type: fixed-load
opts:
        transactionLoad: 70
        startingTps: 1
      module: benchmarks/datamanagement/workloads/insert-data-hash.js
      arguments:
         chaincodeID: basic
   byteSize: 16000
label: insert-data-hash-32000
description: Test InsertHistoricalDataHash function with data hash size 32000
bytes
    chaincodeTD: basic
    txDuration: 60
    rateControl:
      type: fixed-load
      opts:
        transactionLoad: 90
         startingTps: 1
    workload:
      module: benchmarks/datamanagement/workloads/insert-data-hash.js
      arguments
         chaincodeID: basic
         byteSize: 32000
```



DLT: fabric

Name: insert-data-hash-

benchmark

Description: Benchmarking the Hyperledger Fabric network with the InsertHistoricalDataHash

function

Benchmark Rounds: 8

Details

Benchmark results

Summary

insert-data-hash

insert-data-hash-100

insert-data-hash-1000

insert-data-hash-4000

insert-data-hash-8000

insert-data-hash-16000

insert-data-hash-32000 insert-data-hash-64000

System under test

<u>Details</u>

```
- label: insert-data-hash-64000 description: Test InsertHistoricalDataHash function with data hash size 64000
description: lest inserts
bytes
    chaincodeID: basic
    txDuration: 60
    rateControl:
    type: fixed-load
    opts:
        transactionLoad: 100
    ctartingIns: 1
        startingTps: 1
workload:
module: benchmarks/datamanagement/workloads/insert-data-hash.js
            arguments:
chaincodeID: basic
byteSize: 64000
```

SUT

not provided