



Basic information

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	905	0	15.1	2.38	0.21	0.53	14.5
insert-data-hash-100	894	0	15.0	2.36	0.15	0.63	14.5
insert-data-hash-1000	1139	0	19.0	2.42	0.25	0.77	18.8
insert-data-hash-4000	1252	0	20.9	2.29	0.18	0.98	20.2
insert-data-hash-8000	1391	0	23.1	3.41	0.21	1.48	22.2
insert-data-hash-16000	1301	0	21.5	3.90	0.30	1.95	20.7
insert-data-hash-32000	1359	0	22.3	5.03	0.21	2.55	21.9
insert-data-hash-64000	1435	0	23.3	6.14	0.21	3.02	23.2

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	905	0	15.1	2.38	0.21	0.53	14.5

Resource utilization for insert-data-hash

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



Basic information

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](#)

		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 InsertHistoricalDataHash 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	894	0	15.0	2.36	0.15	0.63	14.5

Resource utilization for insert-data-hash-100

Resource monitor: prometheus

Metric	Prometheus Query	Name
Avg Memory (MB)	sum(container_memory_rss{name=~".+"}) by (name)	ca_orderer
		couchdb0
		couchdb1



Basic information

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](#)

		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 (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
insert-data-hash-1000	1139	0	19.0	2.42	0.25	0.77	18.8



Resource utilization for insert-data-hash-1000

Resource monitor: prometheus

Basic information

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](#)

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

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

Basic information

DLT: fabric
Name: insert-data-hash-benchmark
Description: Benchmarking the Hyperledger Fabric network with the InsertHistoricalDataHash function
Benchmark Rounds: 8
[Details](#)

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	1252	0	20.9	2.29	0.18	0.98	20.2

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](#)

Resource utilization for insert-data-hash-4000

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



Basic information

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](#)

		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	1391	0	23.1	3.41	0.21	1.48	22.2

Resource utilization for insert-data-hash-8000

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



Basic information

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](#)

		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

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	1301	0	21.5	3.90	0.30	1.95	20.7

Resource utilization for insert-data-hash-16000

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



Basic information

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](#)

		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	1359	0	22.3	5.03	0.21	2.55	21.9

Resource utilization for insert-data-hash-32000

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



Basic information

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](#)

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	1435	0	23.3	6.14	0.21	3.02	23.2

Resource utilization for insert-data-hash-64000

Resource monitor: prometheus

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



Basic information

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](#)

		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: >-
  Benchmarking the Hyperledger Fabric network with the InsertHistoricalDataHash
  function
workers:
  number: 5
rounds:
  - label: insert-data-hash
    description: >-
      Benchmarking the InsertHistoricalDataHash function with specific
      parameters.
    chaincodeID: basic
```



Basic information

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](#)

```

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
bytes
  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
bytes
  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
bytes
  chaincodeID: basic
  txDuration: 60
  rateControl:
    type: fixed-load
    opts:
      transactionLoad: 30
      startingTps: 1
  workload:
    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
bytes
  chaincodeID: basic
  txDuration: 60
  rateControl:
    type: fixed-load
    opts:
      transactionLoad: 50
      startingTps: 1
  workload:
    module: benchmarks/datamanagement/workloads/insert-data-hash.js
    arguments:
      chaincodeID: basic
      byteSize: 8000
- label: insert-data-hash-16000
  description: Test InsertHistoricalDataHash function with data hash size 16000
bytes
  chaincodeID: basic
  txDuration: 60
  rateControl:
    type: fixed-load
    opts:
      transactionLoad: 70
      startingTps: 1
  workload:
    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
  chaincodeID: 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
- label: insert-data-hash-64000
  description: Test InsertHistoricalDataHash function with data hash size 64000
bytes
  chaincodeID: basic
  txDuration: 60
  rateControl:
    type: fixed-load
    opts:
      transactionLoad: 100
      startingTps: 1

```



workload:
module: benchmarks/datamanagement/workloads/insert-data-hash.js
arguments:
chaincodeID: basic
byteSize: 64000

Basic information

DLT: fabric
Name: insert-data-hash-benchmark
Description: Benchmarking the Hyperledger Fabric network with the InsertHistoricalDataHash function
Benchmark Rounds: 8
[Details](#)

SUT

not provided

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](#)