

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-historical-data-offer-1 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

**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-historical- data-offer-1	492	4013	15.0	2.97	0.18	0.62	14.9
insert-data-hash- 100	335	2309	8.8	1.90	0.24	0.82	8.7
insert-data-hash- 1000	237	1644	6.3	2.11	0.35	1.08	6.3
insert-data-hash- 4000	205	1486	5.6	2.48	0.43	1.26	5.6
insert-data-hash- 8000	202	1330	5.1	2.83	0.42	1.30	5.0
insert-data-hash- 16000	174	1249	4.7	2.77	0.45	1.45	4.7
insert-data-hash- 32000	179	1192	4.6	2.92	0.44	1.46	4.5
insert-data-hash- 64000	163	1088	4.2	3.30	0.39	1.58	4.2

# Benchmark round: insert-historical-data-offer-1

Benchmarking the InsertHistoricalDataHash function with specific parameters.

txDuration: 300
rateControl:
 type: fixed-rate
 opts:
 tps: 15

#### Performance metrics for insert-historical-data-offer-1

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
insert-historical- data-offer-1	492	4013	15.0	2.97	0.18	0.62	14.9

### Resource utilization for insert-historical-data-offer-1

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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
CPU	sum(rate(container_cpu_usage_seconds_total{name=~",+"}	ca_orderer



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#### System under test

insert-data-hash-64000

**Details** 

(%)	[1m])) by (name)	
		couchdb0
		couchdb1
		dev-peer0.org1.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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: 300
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	335	2309	8.8	1.90	0.24	0.82	8.7

### Resource utilization for insert-data-hash-100

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

#### Hyperledger Caliper Report



#### Basic information

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#### Benchmark results

#### Summary

insert-historical-data-offer-1 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

**Details** 

		camper Neport
		dev-peer0.org1.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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: 300
rateControl:
 type: fixed-load
 opts:
 transactionLoad: 10
 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	237	1644	6.3	2.11	0.35	1.08	6.3

Resource utilization for insert-data-hash-1000



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#### Benchmark results

#### Summary

insert-historical-data-offer-1 insert-data-hash-100 insert-data-hash-1000 insert-data-hash-4000 insert-data-hash-8000 insert-data-hash-16000

System under test

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

**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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0-f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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: 300
rateControl:
 type: fixed-load
 opts:
 transactionLoad: 10
 startingTps: 1



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function

Benchmark Rounds: 8

**Details** 

#### Benchmark results

#### Summary

insert-historical-data-offer-1 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

**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	205	1486	5.6	2.48	0.43	1.26	5.6

### 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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		orderer.example.com



	peer0.org1.example.com
	peer0.org2.example.com

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function

Benchmark Rounds: 8

**Details** 

# Benchmark round: insert-data-hash-8000

Test InsertHistoricalDataHash function with data hash size 8000 bytes

txDuration: 300
rateControl:
 type: fixed-load
 opts:
 transactionLoad: 10

transactionLoad: : startingTps: 1

#### Benchmark results

#### Summary

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

insert-historical-data-offer-1

# System under test

**Details** 

### 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	202	1330	5.1	2.83	0.42	1.30	5.0

#### 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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		orderer.example.com
		peer0.org1.example.com



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#### Benchmark results

#### Summary

insert-historical-data-offer-1 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 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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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: 300
rateControl:
 type: fixed-load
 opts:
 transactionLoad: 10
 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	174	1249	4.7	2.77	0.45	1.45	4.7

# 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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com

#### Hyperledger Caliper Report



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insert-historical-data-offer-1
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** 

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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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: 300
rateControl:
 type: fixed-load
 opts:
 transactionLoad: 10
 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	179	1192	4.6	2.92	0.44	1.46	4.5

# 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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com

#### Hyperledger Caliper Report



#### Basic information

DLT: fabric

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#### Benchmark results

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insert-historical-data-offer-1 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

**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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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: 300
rateControl:
 type: fixed-load
 opts:
 transactionLoad: 10
 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	163	1088	4.2	3.30	0.39	1.58	4.2

#### Resource utilization for insert-data-hash-64000

Me	tric	Prometheus Query	Name
----	------	------------------	------



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-historical-data-offer-1 insert-data-hash-100 insert-data-hash-1000 insert-data-hash-4000 insert-data-hash-8000 insert-data-hash-16000

System under test

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

**Details** 

Avg Memory	sum(container_memory_rss{name=~".+"}) by (name)	ca_orderer
(MB)		
		couchdb0
		couchdb1 dev-peer0.org1.example.com-basic_1.0-
		f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		dev-peer0.org2.example.com-basic_1.0- f5b65f0b22081e84e6e6529019ab2cefed8959be94de8d9c1159b80aa0cb9478
		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



DLT: fabric

Name: insert-data-hash-

benchmark

Description: Benchmarking the Hyperledger Fabric network with the InsertHistoricalDataHash function

Benchmark Rounds: 8

Details

#### Benchmark results

insert-historical-data-offer-1

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** 

```
number: 5
rounds
    label: insert-historical-data-offer-1
    description: >
       Benchmarking the InsertHistoricalDataHash function with specific
       parameters.
    chaincodeID: basic
txDuration: 300
    rateControl:
      type: fixed-rate
opts:
    tps: 15 workload:
       module: >
         benchmarks/api/fabric/datamanagement/workloads/historical-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: 300
    rateControl:
       type: fixed-load opts:
         transactionLoad: 10
         startingTps: 1
    workload:
       module: >
         benchmarks/api/fabric/datamanagement/workloads/historical-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: 300
    \verb"rateControl":
       type: fixed-load
opts:
         transactionLoad: 10
         startingTps: 1
    workload:
       module: >
         benchmarks/api/fabric/datamanagement/workloads/historical-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: basion txDuration: 300
    rateControl:
       type: fixed-load
opts:
         transactionLoad: 10
         startingTps: 1
    workload:
       module: >
         benchmarks/api/fabric/datamanagement/workloads/historical-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: 300
rateControl:
       type: fixed-load
opts:
         transactionLoad: 10
         startingTps: 1
    workload:
       module: >
         benchmarks/api/fabric/datamanagement/workloads/historical-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: 300
rateControl:
       type: fixed-load
opts:
         transactionLoad: 10
         startingTps: 1
       module: >
         benchmarks/api/fabric/datamanagement/workloads/historical-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: 300
```



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-historical-data-offer-1

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** 

```
rateControl:
       type: fixed-load
       opts:
        transactionLoad: 10
    startingTps: 1
workload:
      module: >
         benchmarks/api/fabric/datamanagement/workloads/historical-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: 300 rateControl:
      type: fixed-load opts:
        transactionLoad: 10
    startingTps: 1
workload:
      module: >
        benchmarks/api/fabric/datamanagement/workloads/historical-insert-data-
hash.js
      arguments:
chaincodeID: basic
         byteSize: 64000
```

### SUT

not provided